Addendum No. 2

For Project No. ENG2301725235 Electric Upgrade--Campground Clifty Falls State Park Jefferson County

ISSUED FROM: Engineering Division Dept. Natural Resources

ISSUE DATE: April 18th, 2024

BID DATE: Revised to May 2nd, 2024 at 1:31 PM

FOR AGENCY: Indiana Department of Natural Resources

The information contained in this Addendum shall become a part of the basic plans and specifications the same as if original incorporated therein. The original plans and specifications shall remain in their entirety, except as modified by this Addendum. The items herein shall supersede information in the specifications and on the plans.

ITEM No. 1: Bid date is revised to May 2nd, 2024 at 1:31 PM.

ITEM No. 2: State of Indiana front end bid documents including forms to submit bids are attached.

State Form 21208R4

DAPW-118

PROJECT MANUAL

ELECTRICAL DISTRIBUTION INSTALLATION AT CAMPGROUND-CLIFTY FALLS STATE PARK

Project Number - ENG2301725235

DEPARTMENT OF NATURAL RESOURCES



Owner:

Indiana Department of Natural Resources Division of State Parks Indiana Government Center South 402 W. Washington Street, Rm. W267 Indianapolis, IN 46204

Designed and Prepared By:

Indiana Department of Natural Resources Division of Facilities, Fleet, Asset Management And Engineering TABLE OF CONTENTS

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B. LIST OF DRAWINGS

C. SPECIFICATIONS



STATE OF INDIANA

ERIC J. HOLCOMB, Governor

DEPARTMENT OF ADMINISTRATION Public Works Division 402 West Washington Street, Room W462 Indiana Government Center – South Indianapolis, Indiana 46204-2746 PHONE: (317) 232-3001

NOTICE TO BIDDERS

BY STATE OF INDIANA DEPARTMENT OF ADMINISTRATION, PUBLIC WORKS DIVISION FOR A PUBLIC WORKS CONSTRUCTION PROJECT ESTIMATED AT ONE HUNDRED FIFTY THOUSAND DOLLARS OR ABOVE

SECURED ELECTRONIC BIDS FOR:

Public Works Project No. ENG2301725235 Electric Upgrade Campground Clifty Falls State Park

will be received from Contractors, holding a current Certificate of Qualification, at Department of Administration, Public Works Division Email Bid Box-<u>publicworksbids@idoa.in.gov</u> (note, do not cc: any other party) Subject line MUST contain "Bid- ENG2301725235; - (Electric Upgrade Campground) - (Your firm)"

Bid File (PDF) MUST be named-"(Bidding Firm name) Bid-ENG2301725235; - (Electric Upgrade Campground)" and not exceed 9Mb

Until 1:31 P.M (Indianapolis Time), May 2, 2024, after which all bids will be publicly opened and read online in a Microsoft Teams Live Event- <u>https://on.in.gov/1i5y9</u>

Minority Contractors are encouraged to submit bids on this project as a prime contractor or through a prime contractor.

Copies of the detailed Instructions to Bidders and Drawings and/or Specifications dated March 8, 2024 may be obtained from: Department of Natural Resources Division of Engineering Website http://www.in.gov/dnr/engineer/bidding for a nonrefundable fee of \$0.00. Contractors are responsible for checking this website for additional documents or addenda that may be added before the bid opening date.

Bids shall be taken from Prime Contractors pre-qualified by the Public Works Certification Board in the following classification(s): <u>1731.01 Electrical Work in excess of \$ 150,000.00, or 1731.00 Electrical</u> <u>Work in excess of \$ 1,000,000.00.</u>

The Specified construction period is through 04/01/2025. The State of Indiana reserves the right to reject any and all bids.

Project Goal of 7% MBE, 5% WBE and 3% IVOSB. Link: https://www.in.gov/idoa/mwbe/2494.htm

Director of Engineering DNR:	Greg Sorrels	
Greg Sorrels, Director, DNR Facilities, Fleet, As		
Director of Public Works:	Rolem Sta	_
Robert Grossman, Director, DAPW	0	-

Pre-Bid Information 04/092024 @ 11 AM (EST) at Project Site

> Project Manager: Kent Hopper KHopper@dnr.in.gov

PROJECT ESTIMATED BY DEPARTMENT OF ADMINISTRATION, PUBLIC WORKS DIVISION TO BE BID AT ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000) AND ABOVE

01 GENERAL

- A. This project is estimated by the Public Works Division, Indiana Department of Administration (the Owner), as stated in the <u>Notice to Bidders</u>, at One Hundred Fifty Thousand Dollars (\$150,000) and above.
- B. QUALIFICATION BY THE CERTIFICATION BOARD IS REQUIRED FOR THIS PROJECT PRIOR TO BID OPENING DATE.
 For information and procedure contact Executive Secretary, Certification Board, Indiana Department of Administration, 402
 W. Washington St., Room W462, Indianapolis, Indiana 46204, E-mail: ______ or phone (317) 232-3005.
- 02 PROJECT NUMBER, DESCRIPTION AND LOCATION is as stated in the Notice to Bidders.

03 TITLE AND DEFINITIONS

Said building and/or land upon which it stands is the property of the State of Indiana. All references to the title owner of said property hereinafter will be by the term "State" and all references to the person, firm, or corporation awarded the contract for the project will be by the term "Contractor". All references to Designer shall refer to the consulting person or firm employed to contract with the Public Works Division, Indiana Department of Administration to provide architectural, engineering or other consulting services for the project, or to the Public Works Division. The preparation and issuance of contracts for this project are the responsibility of the Commissioner of the Indiana Department of Administration acting with approval of the Governor.

Contract: A written agreement between two or more parties enforceable by law.

Contractor: A person who has entered into or seeks to enter into a contract with Public Works Division.

<u>Prime Contractor:</u> A person or business which is primarily responsible for providing goods and service or performing a specific service, etc. under contract. A prime contractor can also be a Minority Business Enterprise, a Women's Business Enterprise or an Indiana Veteran Owned Small Business Enterprise.

<u>Subcontractor</u>: A person or a business who has a direct contract with a prime contractor who is under contract to provide goods and services or perform a specific service.

<u>Joint Venture</u>: An association of two or more businesses to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills and knowledge.

Manufacturer: A supplier that produces goods from raw materials or substantially alters them before resale.

<u>Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE)</u>: A business concern which is certified as at least fifty-one percent (51%) owned and controlled by one or more of the individuals classified as a minority group which includes: African Americans, Hispanic Americans, Native Americans, Hispanic Americans, Asian Americans, and other racial minority groups as defined by 13 CFR 124.103, or at least fifty-one percent (51%) owned and controlled by a woman or women.

<u>Supplier</u>: Any person or entity engaged to furnish goods, materials and/or equipment, but no on-site labor, is capable of furnishing such goods, materials and/or equipment either <u>directly</u> from its own stock or by ordering materials and/or equipment <u>directly</u> from a manufacturer, and is engaged to furnish such goods, materials and/or equipment <u>directly</u> to a prime contractor or one of its subcontractors.

Indiana Veteran Owned Small Business Enterprise (IVOSB): means an Indiana small business enterprise which is certified as at least fifty-one percent (51%) owned and controlled by a veteran.

04 PRE-BIDDING, BIDDING AND POST BIDDING REQUIREMENTS

- A. The Director, Public Works Division, will authorize the Designer to issue bidding documents, construction documents and addenda to bidders.
- B. It is recommended that all Bidders visit the site prior to submitting bid and become thoroughly familiar with the existing site conditions and work to be performed, as indicated in the bidding documents, construction documents and addenda. Extra compensation or extension of time will not be allowed for failure to examine the site prior to bidding.
- C. During the bidding period, should questions arise as to the meaning of any part of the bidding documents, construction documents or addenda that may affect the Bidder, the Bidder shall contact the Designer and/or Public Works Division and

submit a written request for clarification. The Designer and/or Public Works Division will make such clarification only by written Addendum that will be emailed to each document holder or may be obtained at the office of the Designer and/or Public Works Division. By submitting a bid, the Bidder acknowledges procurement of all Addenda. No written request for clarification will be accepted by the Designer and/or Public Works Division later than fourteen (14) calendar days prior to the scheduled bid date.

- D. Bid as described in <u>Contractor's Bid</u> (DAPW 13) shall include Base Bid (in figures and in words) and Alternates as specified in Section entitled Alternates. In verifying bids, word amounts shall have precedence over figure amounts.
- E. Alternate amount(s) shall be listed where indicated. Add Alternates <u>are not</u> to be included in the Base Bid Scope of Work. Deduct Alternates <u>are</u> to be included in the Base Bid Scope of Work. The bid form must be signed. Note that by signing the bid document, the Bidder is acknowledging the procurement of all addenda and is a certifying that the bid recognizes all items in all addenda.
- F. A bid by a corporation shall be in the legal name of the corporation followed by the word "by" and the signature of the president. The secretary of the corporation shall sign indicating his/her authority to sign. A <u>Certificate of Corporate</u> <u>Resolution</u> (DAPW 41) is required with and as a part of the bid if anyone other than the president of the corporation is signing bid documents.
- G. The Form 96A-Questionnaire and Financial Statement is no longer required to be submitted. The Director, Public Works Division reserves the right to request additional financial information or contractor experience as a basis for rejection of bid or award of contract.
- H. Each Bidder must file with his bid a <u>Non-Collusion Statement</u> (DAPW-121) signed by the same authorized person(s) who signed the bid.
- I. Each Bidder must file with his bid a completely filled in and executed <u>Bid Bond</u> (DAPW 15A) in accordance with IC 4-13.6-7-5. The bid bond penal sum shall be the minimum amount of ten percent (10%) of the bid including all additive alternates.
- J. Each Bidder must file with his bid a completed <u>MBE/WBE/IVOSB Participation Plan</u> (DAPW 26) and <u>Good Faith Effort Work</u> <u>Sheet</u> (DAPW 26 SUP2). Refer to the Supplement to the <u>General Conditions</u> for MBE/WBE/IVOSB Participation Policy (DAPW 26 SUP1) for specific requirements.
- K. Each Bidder must file with his bid, the completed <u>Contractor's Affidavit of Subcontractors Employed</u> (DAPW 12) only if he proposes to perform any work with a subcontract amount of \$150,000.00 or more.
- L. Each bidder must file with his bid an Employee Drug Testing Plan (DAPW 150A) in accordance with IC 4-13-18 or evidence that the contractor is subject to a collective bargaining agreement containing drug testing requirements that comply with IC 4-13-18.
- M. Each Bidder must include his Federal ID number or Social Security number on page 1 of 3 of the Bid Form (DAPW 13). <u>All</u> required bid documents must contain original handwritten signatures.
- N. All documents required by statute, rule or these instructions to be included in the bid must be submitted together in a single email fie, plainly marked on the subject line and in the email file with the Name of Bidder, Project Identification, Project Number, Bid Time and Bid Date. Bids shall be rejected if all required documents are not in the single email file.
- O. A Bidder with proper identification may withdraw his bid at any time prior to the scheduled time for receipt of the bids; however, no bid may be withdrawn without written consent of the Director, Public Works Division for a *period of sixty (60) days after the date of the bid opening*, or unless extended in accordance with IC 4-13.6-6-4. Bids received after the designated due time for any reason, shall be rejected and returned unopened to the Bidder. The Director, Public Works Division, reserves the right to reject any or all bids.
- P. Subcontractors whose work will equal or exceed One Hundred Fifty Thousand Dollars (\$150,000.00) must attain a Certificate of Qualification by the Certification Board before commencing any work on this project. Note paragraph 01. (B) above.
- Q. All Bidders (corporations or other business entities) must be in good standing with the Indiana Secretary of State.
- 05 SIGNATURE AFFIDAVIT
- A. A <u>Signature Affidavit</u> (DAPW 14) containing the Bidder's authorized signature(s), properly notarized, may be submitted as a signature supplement to all other bid documents, except the bid bond, including:
 - 1. Contractor's Bid (DAPW 13)
 - 2. Non-Collusion Statement (DAPW121)
 - 3. Contractor's Affidavit of Subs Employed (DAPW 12)
 - 4. MBE/WBE/IVOSB Participation Plan and Good Faith Effort Worksheet (DAPW 26 SUP 2)

B. All documents herein before required with the bid may be unsigned if the signature affidavit is submitted, except for the BID BOND. BIDDER MUST SIGN THE BID BOND.

NOTE: SIGNING THE SIGNATURE AFFIDAVIT OR BID FORM IS ACKNOWLEDGMENT OF PROCUREMENT OF ALL ADDENDA AND CERTIFICATION BY BIDDER THAT THE BID RECOGNIZES ALL ITEMS IN ALL ADDENDA.

06 WORK BY CONTRACTOR

The Contractor shall perform a minimum of 15% of the value of work (measured in dollars of the total contract price) with his own forces, and not more than 85% of the value of work is to be subcontracted.

07 SUBSTITUTIONS

The materials, products, systems and equipment described in the bidding documents, construction documents and addenda establish a standard or required function, dimension, appearance and quality that shall also be met by any proposed substitution. No substitution by manufacturer, or trade name of product named, or of a quality specified will be considered unless written request for approval has been submitted by the Bidder and has been received by the Designer and/or Public Works Division at least fourteen (14) calendar days prior to the date for receipt of bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or work that incorporation of the substitute would require shall be included. The burden of proof of the merit of the proposed substitute is upon the proposer. The Designer and/or Public Works Division decision of approval or disapproval of the proposed substitution shall be final. Products, materials or systems not specified or approved prior to bidding, shall not be accepted for use in this project. All such substitutions accepted shall be acknowledged by addendum. See paragraph. 04 (C).

08 NONDISCRIMINATION

Pursuant to IC 22-9-1-10, the Contractor and subcontractors, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract. Pursuant to IC 5-16-6-1, the contractor agrees:

- A. that in the hiring of employees for the performance of work under this contract or any subcontract hereunder, no contractor, or subcontractor, nor any person acting on behalf of such contractor or subcontractor shall, by reason of race, religion, color, sex, disability, national origin or ancestry, discriminate against any citizen of the State of Indiana who is qualified and available to perform the work to which the employment relates; and
- B. that no contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this contract on account of race, religion, color, sex, national origin or ancestry; and
- C. that there may be deducted from the amount payable to the contractor by the State of Indiana or by any municipal corporation thereof, under this contract, a penalty of five dollars (\$5.00) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of the contract; and
- D. that this contract may be canceled or terminated by the State of Indiana or by any municipal corporation thereof, and all money due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this section of the contract.

09 EMPLOYMENT ELIGIBILITY VERIFICATION

The Contractor affirms under the penalties of perjury that he/she/it does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require his/her/its subcontractors, who perform work under this contract, to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.

The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

The contractor shall submit, before work begins the E-Verify case verification number for each individual who is required to be verified under IC 22-5-1.7. An individual who is required to be verified under IC 22-5-1.7 whose final case result is final non-confirmation may not be employed on the public works project.

A contractor may not pay cash to any individual employed by the contractor for work done by the individual on the public works project.

A contractor must follow the federal Fair Labor Standards Act of 1938, as amended (29 U.S.C. 201-209) and IC 22-2-2. A contractor must be in compliance with IC 22-3-5-1 and IC 22-3-7-34. A contractor must be in compliance with IC 22-4-1 through IC 22-4-39.5. A contractor must be in compliance with IC 4-13-18.

10 NOTICE OF AWARD

- A. Prior to execution of the Contract, in accordance with IC 4-13.6-5-2, the Director of Public Works may require additional submittals from Bidder/s to clarify contractor's experience and plans for performing the proposed work. Submittals which may be required include a critical path construction schedule which coordinates all significant tasks sequences and durations; schedule of values, and documentation of efforts to include minority, woman, and veteran owned businesses in the proposed work. The Director may require Bidder/s to provide a comprehensive list of subcontractors and suppliers within 24 hours of receipt of bids.
- B. Prior to execution of the Contract, the successful Bidder shall furnish a completed <u>Domestic Steel Affidavit</u> (DAPW 11) to Public Works Division, Indiana Department of Administration as part of the contract. The Domestic Steel Affidavit is included for Bidder's review but need not be submitted at the time of the bid opening. Definition of Steel Products:

"Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, or otherwise similarly processed, or processed by a combination of two (2) or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.

- C. Prior to execution of the Contract, the successful Bidder shall furnish a completed <u>Contractor's Bond for Construction</u> (DAPW 15) (combined performance and payment bond) to Public Works Division, Department of Administration as part of the contract. The Bond form is included for Bidder's review but need not be submitted at the time of the bid opening.
- D Prior to execution of the Contract, the successful Bidder shall furnish a completed <u>Contractor's Certificate of Insurance</u> (DAPW 16) to Public Works Division, Department of Administration as part of the contract. The Insurance form is included for Bidder's review but need not be submitted at the time of the bid opening.
- E. Prior to execution of the Contract, the State of Indiana will issue to the successful Bidder an email letter stating that its bid was the lowest responsible and responsive bid and that the attached electronic format contract document is submitted to Contractor for its consideration. If Contractor finds it in accordance with the bid documents, Contractor will electronically sign the contract within ten (10) calendar days after receipt. Further state agency approvals are required, and Contractor is cautioned that a contract is not binding on the State until it is approved by all signatories required. Failure to execute the proper contract and furnish the ancillary documents shall constitute reason to surrender the bid bond.
- F. Concurrent with execution of the Contract, the successful Bidder may be required to furnish executed copies of Contractor-Subcontractor agreements as required in Article 5 of the <u>General Conditions</u>.

11 SUMMARY

All required bid documents must contain original handwritten signatures. Complete documents to be submitted with this bid:

- A. The <u>Bid Bond</u> (DAPW 15A) must be signed by both the Bidder and Bonding Company. The Bonding Company must also attach a Power of Attorney. Bid bond information, may be on the Bonding Company's standard form.
- B. The <u>Contractor's Bid</u> (DAPW 13)
 - Page 1: State the amount of the bid in figures and words.
 - Page 2: State the amount of the alternate(s), indicate add, deduct or no change (READ CAREFULLY).
 - Page 3: Authorized signature of the Company. If the signature affidavit is completed and submitted with the bid, this page must be submitted but need not be signed or notarized.
- C. The <u>Signature Affidavit</u> (DAPW 14) must contain the completed authorized signatures properly notarized and submitted with the bid as a supplement.

This Signature Affidavit shall fulfill all of the signature requirements. <u>NOTE</u>: The Signature Affidavit does not apply to the Bid Bond (DAPW 15A). The Bid Bond document must be fully completed with all required signatures and submitted with the bid.

- D. The <u>Non-Collusion Statement</u> (DAPW 121) must be signed by the same authorized person(s) who signed the bid documents. If the signature affidavit is completed and submitted with bid, this form shall be submitted, but need not be signed.
- E. For corporations, if anyone other than the president of the corporation signs, a <u>Certificate of Corporate Resolution</u> (DAPW 41) giving signature authority for the signer must be included.
- F. <u>MBE/WBE/IVOSB Participation Plan</u> and <u>MBE/WBE/IVOSB Good Faith Effort Worksheet</u> (DAPW 26 SUP2) must be completed and signed by the same authorized person who signed the bid documents.
- G. The completed <u>Contractor's Affidavit of Subcontractors Employed</u> (DAPW 12) whose subcontract amount will be \$150,000.00 or more.
- H. The completed plan for Contractor's Employee Drug Testing Plan (or statement of collective bargaining agreement).
- I. One copy only of the Bid Documents is required. Bidders may remove and use the Documents included in the project specifications or use reproductions of the Documents.
- 12 INDIVIDUAL BIDS SHALL BE REJECTED BY THE DIRECTOR, PUBLIC WORKS DIVISION, FOR THE FOLLOWING REASONS (IC 4-13.6-5-2; IC 4-13.6-6-1; 25 IAC 2-6-5)
- A. If the bid email subject line and bid form heading does not clearly identify the project number and description; if the name of the Bidder is not clearly indicated in the email and/or if the email is not received and date stamped within the Public Works Division electronic bid receipt mailbox prior to the stated time for receipt of bids.
- B. If the estimated base bid cost exceeds \$150,000.00 and the bidding contractor is not certified by Public Works Certification Board to offer bids in one of the specified categories.
- C. If the bidding contractor is under suspension by the Director of Public Works or by the Public Works Certification Board.
- D. If the bidding contractor is a trust and does not identify all beneficiaries and empowered settlors of the trust.
- E. If the contractor's drug plan is not included in the bid documents pursuant to and complies with IC 4-13-18.
- 13 INDIVIDUAL BIDS MAY BE REJECTED BY THE DIRECTOR, PUBLIC WORKS DIVISION, FOR THE FOLLOWING REASONS (25 IAC 2-6-5)
- A. If the Contractor's Bid (DAPW 13), Non-Collusion Statement (DAPW 121), and/or Bid Bond (DAPW 15A) are not signed and notarized as required by these instructions, <u>or</u> the Signature Affidavit (DAPW 14) and the Bid Bond (DAPW 15A) are not signed and notarized as allowed as an alternative.
- B. If all required bid or alternate(s) amounts, or unit prices are not submitted with the bid when specifically called for by the specifications issued for the project.

- C. When the Bidder adds any provision reserving the right to accept or reject the award, or if the Bidder adds conditions or alternates to his bid not requested (voluntary alternates), or if there are unauthorized additions or irregularities of any kind which tend to make the proposal incomplete, indefinite or ambiguous as to its meaning or amount.
- D. When no bids received are under or within funds that can be appropriated, or within the Designer's estimate or when situations develop which make it impossible or not practical to proceed with the proposed work.
- E. If, subsequent to the opening of the bids, facts exist which would disqualify the Bidder, or that such Bidder is not deemed by the Director, Public Works Division, to be responsive or responsible.
- F. If an out-of-state contractor is not registered with the Indiana Secretary of State or if any bidding contractor is not in good standing with the Secretary of State.

CONTRACTOR'S AFFIDAVIT OF SUBS EMPLOYED

Public Works Project Number:	Date:
Project Description:	
Prime Contractor:	

Form Submitted for Bid: _____ Contract: _____ or Payment No.: _____

The following companies are subcontractors on this project for the amount indicated:

Subcontractor Name	Subcontract For	Subcontract Amount	Revised Amount	DAPW Certified Y/N	MBE WBE	On Site Y/N
				1	1	1
		-	duly sworn upor	_		
5						and is
amiliar with the affidavit	herewith and that these	e entries are comple	te and true.			
STATE OF	}					
	} SS:					
COUNTY OF	}					
	pers	onally appeared be	fore me, a Notar	y Public, in a	and for sa	id
County and State, this	day of,20, af	ter being duly swori	n upon his oath, s	says that the	facts alleg	ged in

the foregoing affidavit are true.

NOTARY PUBLIC - SIGNATURE

My Commission Expires:

NOTARY PUBLIC PRINTED NAME

(SEAL)

21243

REV 7/01

GENERAL BID FOR PUBLIC WORKS

CONTRACTOR'S BID

For		
	(Insert class of work)	
Project Number		
Project Description (Title)		
Date		
To: Department of Administra Room W467 402 West Washington Indianapolis, Indiana	Street	
Pursuant to notices given, the u in accordance with the constru	undersigned proposes to furnish and ins ction documents prepared by:	stall work
	gner Name, Address, Telephone)	
	(State amount in words)	
	(State amount in words)	
	\$	(State amount in figures)
If required add attachment for	all unit prices called for in the Specific	ations.
Fe	ederal I.D. Number or Social Security 1	Number
Contractor's Email address	Contract and Purchase Order will be sent to email addre	ess provided)
Bidder ID Number		
(If you do not have an Indiana http://www.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://www.in.gov/idoa/2464.http://www.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwww.in.gov/idoa/2464.http://wwwww.in.gov/idoa/2464.http://wwww		ID Number, please obtain one online at:
State Form 34894	Page 1 of 3	DAPW 13

DAPW 13 Rev. 10/13

ALTERNATE BIDS

Add Alternates Are Not to be included as part of the Base Bid Scope of Work.

Deduct Alternates are items of work that Are to be included in the Base Bid Scope of Work, and deducted from the project as described herein.

The work shall be as described in Section, <u>ALTERNATES</u>.

Bidder shall provide a response to each alternate specified. Response must indicate the amount to be ADDED to the base bid, DEDUCTED from the base bid, or that there is NO CHANGE.

Failure to respond to all alternates may cause the bid to be rejected.

BIDDER SHALL CHECK APPLICABLE BOX for each listed alternate.

Alternate No.	ADD	DEDUCT	NO CHANGE	AMOUNT \$
Alternate No	ADD	DEDUCT	NO CHANGE	AMOUNT \$
Alternate No	ADD	DEDUCT	NO CHANGE	AMOUNT \$
Alternate No	ADD	DEDUCT	NO CHANGE	AMOUNT \$
Alternate No.	ADD	DEDUCT	NO CHANGE	AMOUNT \$
Alternate No.	ADD	DEDUCT	NO CHANGE	AMOUNT \$

Pursuant to IC 22-9-1-10, the Contractor and subcontractors, if any, shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

IN TESTIMONY WHEREOF, the Bidder (a sole proprietor) has this day of, 20	hereunto set his hand
Proprie	etorship (Company Name)
(INDIVIDUAL)	
Bidder	(Owner)
IN TESTIMONY WHEREOF, the Bidder (a partnership) has here this day of, 20	reunto set their hands
	Company Name
	Partner
	Partner
IN TESTIMONY WHEREOF, the Bidder (a corporation) has President or other authorized signatory and Secretary this	
	Corporation Name
	By President or Other Authorized Signatory

Secretary

If the bid is signed by other than the President, a Corporation Resolution designating other authorized signatory shall be submitted with this bid unless already on file with the Certification Board of the Public Works Division.

BY SIGNING THIS BID THE BIDDER ACKNOWLEDGES PROCUREMENT OF ALL ADDENDA AND CERTIFIES THAT THIS BID RECOGNIZES ALL ITEMS IN ALL ADDENDA.

State Form 34894

Page 3 of 3

SIGNATURE AFFIDAVIT

PROJECT NO:				
STATE OF	} } SS:			
COUNTY OF	} 55.			
Before me, the	undersigned notary public, appeared	(name	of bidder)	_and being duly
sworn, on his o	ath says that he/she is	• • •		
	ά. Α		eral partner, owner)	
of	(name of company)	,	bidder on Project No	, and
Affirmed that: 1. 2.	This bid is submitted in good faith in according to the Contract Documents technical specification, drawings and The statements are true contained in th Contractor's Affidavit of Subs Emplo Plan and Good Faith Efforts Workshe	(contract, addenda tl ne Non-Co yed and th	general and supplemental nereto), if this bid is accep Illusion Statement, and as	conditions, pted; and applicable, the
		By:	(Signature)	
			(Signature)	
			(Printed name)	
			(Printed or typed name of	of company)
	(must be signed by prin	cipal of or	ganization)	
STATE OF COUNTY OF	} } SS: }			
County and Sta oath, says that	te, this day of the facts alleged in the foregoing affida	,	before me, a Notary Publ 20, after being duly e.	ic, in and for said sworn upon his
My Commissio	n Expires:		NOTARY PUBLIC – SI	GNATURE
(SEAL)			NOTARY PUBLIC PR	INTED NAME
State Form 3306	0R1			DAPW 14 Rev. 10/21

BID BOND

KNOW ALL MEN BY THESE PRESENTS, 1	that we	(Contractor's Name and Address)
as Principal, hereinafter called the Principal, an	nd the	
		(Bonding Company Name)
a corporation duly organized under the laws o as Surety, hereinafter called the Surety, are Administration, State of Indiana, as Obligee, h	held and firml	y bound unto Public Works Division/Department of
in the sum of	o be made, the sa s and assigns, joi	aid Principal and the said Surety, bind ourselves, intly and severally, firmly by these presents.
WHEREAS, the Principal has submitted a bid	for: (insert State Pr	oject Number, Description and Location)
Project No.		
Project Description:		
Project Location:		
with the Obligee in accordance with the term bidding or contract documents with good and the prompt payment of labor and material fur Principal to enter such contract and give such not to exceed the penalty hereof between the ar	s of such bid, an sufficient surety mished in the pro- bond or bonds, nount specified in to perform the v	e Principal and the Principal shall enter into a contract d give such bond or bonds as may be specified in the v for the faithful performance of such contract and for osecution thereof, or in the event of the failure of the if the Principal shall pay to the Obligee the difference n said bid and such larger amount for which the Obligee work covered by said bid, then this obligation shall be
Signed and sealed thisday of	,20	
(Witness)		(Principal)
	By:	
		(Title)

(Surety)

Witness)

(Attorney-in-fact)

Indiana Department of Administration MBE/WBE and IVOSB Participation Policy for Public Works Projects

I. Introduction

The Indiana Department of Administration ("IDOA") in its commitment to Minority, Women's and Indiana Veteran Owned Small Business participation in the state's procurement and contracting process, expects MBE, WBE and IVOSB participation in bids for construction services \$150,000 and over with subcontracting opportunities.

II. Definitions

"<u>Certification</u> for MBE and WBE" means certification by the Indiana Department of Administration, Minority and Women's Business Enterprises Division. ("MWBED").

"Certification for IVOSB" means certification by the Indiana Department of Administration.

"<u>Commercially useful function</u>" Determination that an enterprise performs a commercially useful function will be made based on the following considerations:

(1) An MBE or a WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE or WBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether an MBE or a WBE is performing a commercially useful function, one must evaluate the following:

- (A) The amount of work subcontracted.
- (B) Industry practices.
- (C) Whether the amount the enterprise is to be paid under the contract is commensurate

with the work it is actually performing.

(D) The credit claimed for its performance of the work.

(E) Other relevant factors.

(2) An MBE or a WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of MBE or WBE participation. In determining whether an MBE or a WBE is such an extra participant, one must examine similar transactions, particularly those in which MBEs or WBEs do not participate.

(3) In the case of construction contracts, if:

(A) an MBE or a WBE does not perform or exercise responsibility for at least the agency's requisite percent of the total cost of its contract with its own workforce; or

(B) the MBE or WBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved;

it is presumed that the enterprise is not performing a commercially useful function.

(4) IVOSB contractors and suppliers must perform a commercially useful function. A commercially useful function is generally deemed to be when an IVOSB contractor or supplier is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially

useful function, an IVOSB contractor or supplier must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. An IVOSB contractor or supplier does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of IVOSB participation.

"<u>Letter of Commitment</u>" means a letter obtained from the MBE, WBE and IVOSB by the Bidders. The Letter of Commitment is a signed letter(s), on company letterhead, from the minority, women's and/or Indiana Veteran Owned certified business. It must be produced no later than 24 hours after the bid due date and time. This letter(s) shall state and will serve as acknowledgement from the minority, women and/or Indiana Veteran Owned certified business of their level of participation in this solicitation, the dollar amount of the commitment, the scope of service or product to be provided and the anticipated dates of utilization.

"<u>Minority and Women Business Enterprises Division (MWBED)</u>" means the Division which acts on behalf of the State to actively promote, monitor, and enforce the MBE and WBE program. MWBED is the final authority on all matters pertaining to the maintenance and administration of the MBE and WBE program and compliance thereto.

"<u>Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE)</u>" means a business concern which is certified as at least fifty-one percent (51%) owned and controlled by a woman or women or one or more of the individuals classified as a minority group which includes: African Americans, Hispanic Americans, Asian Americans, American Indians and other racial minorities. The MBE and WBE must meet the eligibility requirements of 25 IAC 5.

"Indiana Veteran Owned Small Business Enterprise (IVOSB)" means an Indiana business which is certified as at least fifty-one percent (51%) owned and controlled by a veteran.

"<u>Participation Plan</u>" means the IDOA prescribed document that sets forth the MBE, WBE and IVOSB subcontractors that will perform work under the contract.

III. Minority and Women Business Enterprise Certification

MBE and WBEs must be listed on the IDOA directory of certified firms at the time the bid is submitted to be eligible to meet the contract goals. The bidder should verify that a firm is certified before the bid is submitted.

Questions regarding Certification should be addressed to the following:

Indiana Department of Administration Minority and Women's Business Enterprises Division 402 West Washington Street, Room W469 Indianapolis, IN 46204 (317) 232-3061 <u>mwbe@idoa.in.gov</u>

IV. Indiana Veteran Owned Small Business Enterprise

IVOSBs must be listed on the IDOA directory of certified firms at the time the bid is submitted to be eligible to meet the contract goals. The bidder should verify that a firm is certified before the bid is submitted.

Questions regarding Certification should be addressed to the following:

Indiana Department of Administration 402 W. Washington St., Room W478 Indianapolis, IN 46204 (317) 233-1494 Indianaveteranspreference@idoa.in.gov

V. Bidding Process

IDOA will review projects for viable subcontracting opportunities. All projects will be governed by this policy unless otherwise stated.

A representative from MWBED may attend most pre-bid meetings to discuss and answer questions related to the MBE, WBE and IVOSB participation goals. The MWBED will be available to assist Bidders in locating MBE, WBE or IVOSB firms to engage in the contract.

The 2018-2019 Contract Goals for construction projects are 7% for MBE's, 5% for WBE's and 3% for IVOSBs.

The following procedures will be implemented in the acceptance and evaluation of responsive and responsible bids.

Bidders are expected to submit a Participation Plan on the approved form listing the utilization of MBE, WBE and IVOSB subcontractors who will be providing a commercially useful function on the project and a Letter of Commitment from MBE, WBE and IVOSB firms they plan to engage in the contract, if successful on the bid.

By submission of a bid, a bidder thereby acknowledges and agrees to be bound by the regulatory process set forth in 25 IAC 5.

A bidder who knowingly or intentionally misrepresents the truth about either the status of a firm that is being proposed as an MBE and WBE or who misrepresents the level of the nature of the amount to be subcontracted to the MBE and WBE may suffer penalties pursuant to Indiana Code 5-16-6.5-5.

A Contractor who knowingly or intentionally misrepresents the truth about his/her status as an MBE and WBE or who misrepresents the level or the nature of the amount subcontracted to his/her firm may suffer penalties pursuant to Indiana Code 35-44.1-2-1.

VI. Compliance

Contractors shall contract with all MBE, WBE and IVOSB firms listed on the Participation Plan. The subcontract or purchase order shall be for an amount that is equal to, or greater than, the total dollar amount listed on the form.

Contractors shall notify MWBED immediately if any firm listed on the Participation Plan refuses to enter into a subcontract or fails to perform according to the requirements of the subcontract.

The Contractor's proposed MBE, WBE and IVOSB Contract Goals will become incorporated into and a requirement of the Contract. Contractors shall not substitute, replace or terminate any MBE, WBE and IVOSB firm without prior written authorization from MWBED and the Owner.

Contractors shall cooperate and participate in compliance reviews as determined necessary by MWBED. Contractors shall provide all necessary documentation to show proof of compliance with the requirements as requested by MWBED.

VII. Non Compliance

When a Respondent submits a Minority, Women and Indiana Veteran Owned Business Enterprises Participation Plan in accordance with IC 4-13-16.5, 25 IAC 5 and 25 IAC 9, (the "Plan"), Respondent will be held to those commitments.

After the bid is awarded, and if it is determined by MWBED that the Contractor is not in compliance with its Participation Plan, MWBED will notify the Contractor within ten (10) days after the initial compliance review or the site visit and will identify the deficiencies found and the required corrective action that should be taken to remedy the deficiencies within a specific time period.

If a Contractor is found non-compliant, the Contractor must submit, in writing, a specific commitment, in writing, to correct the deficiencies. The commitment must include the precise action to be taken and the date for completion.

If MWBED determines the Contractor has failed to comply with the provisions of this Participation Program, Contractor's Utilization Statement, 25 IAC 5, or 25 IAC 9, IDOA may impose any or all of the following sanctions:

- a. Withholding payment on the Contract until such time that satisfactory corrective measures are made.
- b. Adjustment to payments due or the permanent withholding of retainages of the Contract.
- c. Suspension or termination of the specific Contract in which the deficiency is known to exist. In the event this sanction is employed, the Contractor will be held liable for any consequential damages arising from the suspension or termination of the Contract, including damages caused as a result of the delay or from increased prices incurred in securing the performance of the balance of the work by other Contractors.
- d. Recommendation to the certification board to revoke the contractor's certification status with the Public Works Division of IDOA. This recommendation may result in the suspension or revocation of the contractor's ability to perform on future state contracts for a period no longer than thirty-six (36) months.
- e. Continued non-compliance may be deemed a material breach of the agreement between MWBED and Contractor, whereupon MWBED shall have all the rights and remedies available to it under the Contract or at law.
- f. Suspension, revocation, or denial of the MBE, WBE or IVOSB certification and eligibility to participate in the MBE, WBE or IVOSB program for a period of not more than thirty-six (36) months.

VIII. Forms and Attachments

Minority, Women's and Indiana Veteran Owned Business Enterprises Participation Plan

I. MINORITY, WOMEN'S AND INDIANA VETERAN OWNED BUSINESS ENTERPRISES PARTICIPATION PLAN

When a Respondent submits a Minority, Women's and Indiana Veteran Owned Business Enterprises Participation Plan in accordance with IC 4-13-16.5, 25 IAC 5 and 25 IAC 9, (the "Plan"), Respondent will be held to those commitments. The Plan must show that there are, participating in the proposed contract, Minority Business Enterprises (MBE), Women's Business Enterprises (WBE), and Indiana Veteran Owned Small Business Enterprises (IVOSB) listed in the Minority and Women's Business Enterprises Division (MWBED) directory and the IVOSB directory of certified firms. Respondents must indicate the name of the MBE, WBE and IVOSB with which it will work, the contact name and phone number at the firm(s), the service supplied by the firm(s), the specific dollar amount from this contract that will be directed toward each firm, and the approximate date these products and/or services will be utilized. If participation is met through use of vendors who supply products and/or services and/or services provided to the Respondent that are directly related to this proposal and the cost of direct supplies for this proposal. All prime contractors, including MBE, WBE and IVOSB prime contractors, are expected to meet the contract goals through use of subcontractors.

The Indiana Department of Administration ("IDOA") in its commitment to Minority, Women's and Indiana Veteran Owned Small Business participation in the state's procurement and contracting process, expects MBE, WBE and IVOSB participation in bids for public works projects with subcontracting opportunities. The Department reserves the right to verify all information included in the Plan.

Respondents may contact MWBED if they have any questions regarding their Participation Plan. A complete WBE's certified MBE's list of all currently and is located at this link: http://www.in.gov/idoa/mwbe/2743.htm. The complete list of certified IVOSBs can be found at this link http://www.in.gov/idoa/files/ivbe certification list.xls.

Minority, Women's and Indiana Veteran Owned Business Enterprises Participation Letter of Commitment

A signed letter(s), on company letterhead, from the MBE, WBE and/or IVOSB must accompany the Plan. This letter(s) shall state and will serve as acknowledgement from the MBE, WBE and/or IVOSB of its amount of participation, the scope of products and/or services, and approximate date these products and/or services will be utilized.

By submission of the Proposal, the Respondent acknowledges and agrees to be bound by the regulatory processes involving the State's MBE, WBE and IVOSB Programs. Questions involving the regulations governing the Plan should be directed to MWBED's Compliance Unit at 317/232-3061 or to IDOA at 317-233-1494.

MBE/WBE and IVOSB PARTICIPATION PLAN

RFP # / Bid # / Quote #	DUE DATE
(Circle One)	
RFP / BID / QUOTE NAME	_
(Circle One)	
RESPONDENT	
ADDRESS	
CITY/STATE/ZIP	_
PHONE ()	_

The following MBEs and/or WBEs listed in the MWBED directory will be participating in the contract:

MBE/W	<u>BE</u> <u>PHO</u>	<u>NE</u>	COMPANY	<u> NAME</u>	SCOPE OF	PRODUC	FS/SERVI	CES	UTILIZAT	TION DATE	<u> A</u>	MOUNT
The fol	lowing IV	VOSB	s listed in	n the IV	OSB direct	ory will be	e particip	ating	in the con	tract:		
<u>IVOSB</u>	<u>PHONE</u>	<u>COM</u>	IPANY NA	<u>ME</u> SC	COPE OF PR	ODUCTS/S	ERVICES	<u>U1</u>	<u>FILIZATIO</u>	N DAT	<u>E A</u>	MOUNT

Indiana Department of Administration Public Works and State Office Building Commission GOOD FAITH EFFORTS WORKSHEET

BIDDER

BID/PROJECT NUMBER

CONTRACT GOALS7% MBE5% WBE

List the M/WBEs contacted and complete the following information for each. Copies of all communications to and from each vendor should be maintained.

Company Name and Address	MBE	WBE	Type of Contact	Date of Contact	Date Response Due	Goods Or Services Requested	Result (Include Price Quote)

Indicate Good Faith Efforts made to utilize MWBEs. Check and explain all that apply or should be considered. Please provide evidence of the efforts that you want to be considered. A complete description of each criteria may be found in the Indiana Department of Administration Public Works and State Office Building Commission MWBE Participation Policy.

MBE and WBE Barrier Assistance	Describe
Advertisement	Describe
Agency Assistance	Describe
Other Criteria	Describe

Corporate Resolution Form Approved by Attorney General

CERTIFICATE OF CORPORATE RESOLUTION

I,		, do hereby certify that I am the Secretary
	Type Name	
of		, a corporation duly organized and

existing under and by virtue of the Laws of the State of Indiana;

I further certify that a regular/special meeting of the members of the Board of Directors of said corporation, duly called held and convened in conformity with the Charter and By Laws of said corporation, on the __day of_____, 20__, a quorum being present and voting thereon, the following resolution was duly adopted, to-wit:

I further certify that the foregoing resolution is a full, true, and complete copy as the same appears on record in the Minute Record Book of said corporation of which I am the legal custodian; that the same has not been altered, amended or repealed and is now in full force and effect.

In Witness Whereof, I have hereunto set my hand for said corporation this ______day of _____, 20____.

By:_____

(Signature)

		(must be signed by principal of organization)
STATE OF		}
		} SS:
COUNTY OF		}
		personally appeared before me, a Notary Public, in and for said County and State,
this	day of	, 20, after being duly sworn upon his oath, says that the facts
alleged in the	foregoing	affidavit are true.

My Commission Expires:

NOTARY PUBLIC - SIGNATURE

NOTARY PUBLIC PRINTED NAME

(SEAL)

STATE FORM 26481 DAPW 41 Rev 7/01

NON-COLLUSION STATEMENT

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.

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ompany	
ompany	



STATE OF INDIANA DRUG-FREE WORKPLACE CERTIFICATION

State Form 44260 (R2 / 12-22)

Pursuant to Executive Order No. 90-5, April 12, 1990, issued by Governor Evan Bayh, the Indiana Department of Administration requires the inclusion of this certification in all contracts with and grants from the State of Indiana in excess of \$25,000. No award of a contract or grant shall be made, and no contract, purchase order or agreement, the total amount of which exceeds \$25,000, shall be valid unless and until this certification has been fully executed by the Contractor or Grantee and attached to the contract or agreement as part of the contract documents. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract payments, termination of the contract or agreement and/or debarment of contracting opportunities with the State for up to three (3) years.

The Contractor/Grantee certifies and agrees that it will provide a drug-free workplace by:

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

(b) Establishing a drug-free awareness program to inform employees about (1) the dangers of drug abuse in the workplace; (2) the Contractor's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;

(c) Notifying all employees in the statement required by subparagraph (a) above that as a condition of continued employment the employee will (1) abide by the terms of the statement; and (2) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;

(d) Notifying in writing the contracting State Agency and the Indiana Department of Administration within ten (10) days after receiving notice from an employee under subdivision (c) (2) above, or otherwise receiving actual notice of such conviction;

(e) Within thirty (30) days after receiving notice under subdivision (c) (2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) take appropriate personnel action against the employee, up to and including termination; or (2) require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency; and

(f) Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (a) through (e) above.

THE UNDERSIGNED AFFIRMS, UNDER PENALTIES OF PERJURY, THAT HE OR SHE IS AUTHORIZED TO EXECUTE THIS CERTIFICATION ON BEHALF OF THE DESIGNATED ORGANIZATION.

THE UNDERSIGNED ALSO AGREES THAT BY TYPING THEIR NAME ONTO THIS FORM, THEY AGREE TO THE USE OF THEIR DIGITAL NAME AS A LEGAL SIGNATURE

Printed Name of Organization

Contract/Grant ID Number

Authorized Representative

Date

CONTRACTOR'S EMPLOYEE DRUG TESTING

IC 4-13-18	Chapter 18. Drug Testing of Employees of Public Works Contractors
4-13-18-1	Applicability
4-13-18-2	"Bid"
4-13-18-3	"Contractor"
4-13-18-4	"Public works contract"
4-13-18-5	Employee drug testing plan required in bid; collective bargaining agreements
4-13-18-6	Employee drug testing program requirements
4-13-18-7	Contract cancellation for noncompliance

IC 4-13-18-1 Applicability

Sec. 1. This chapter applies only to a public works contract awarded after June 30, 2006.

As added by P.L.160-2006, SEC.2.

IC 4-13-18-2 "Bid"

Sec. 2. As used in this chapter, "bid" includes a quotation.

As added by P.L.160-2006, SEC.2.

IC 4-13-18-3 "Contractor"

Sec. 3. (a) As used in this chapter, "contractor" refers to a person who:

(1) submits a bid to do work under a public works contract; or

(2) does any work under a public works contract.

(b) The term includes a subcontractor of a contractor.

As added by P.L.160-2006, SEC.2.

IC 4-13-18-4 "Public works contract"

Sec. 4. As used in this chapter, "public works contract" refers to:

(1) a public works contract covered by IC 4-13.6;

(2) a public works contract covered by IC 5-16 and entered into by a state agency; or

(3) a state highway contract covered by IC 8-23-9;

(4) a public works contract covered by IC 36-1-12;

when the estimated cost of the public works project is one hundred fifty thousand dollars (\$150,000) or more.

As added by P.L.160-2006, SEC.2. Amended by P.L.72-2018, SEC.10.

DAPW 150A 08-2019

IC 4-13-18-5 Employee drug testing plan required in bid; collective bargaining agreements

Sec. 5. (a) A solicitation for a public works contract must require each contractor that submits a bid for the work to submit with the bid a written plan for a program to test the contractor's employees for drugs.

(b) A public works contract may not be awarded to a contractor whose bid does not include a written plan for an employee drug testing program that complies with this chapter.

(c) A contractor that is subject to a collective bargaining agreement shall be treated as having an employee drug testing program that complies with this chapter if the collective bargaining agreement establishes an employee drug testing program that includes the following:

- (1) The program provides for the random testing of the contractor's employees.
- (2) The program contains a five (5) drug panel that tests for the substances identified in section 6(a)(3) of this chapter.
- (3) The program imposes disciplinary measures on an employee who fails a drug test. The disciplinary measures must include at a minimum, all the following:
 - (A) The employee is subject to suspension or immediate termination.
 - (B) The employee is not eligible for reinstatement until the employee tests negative on a five (5) drug panel test certified by a medical review officer.
 - (C) The employee is subject to unscheduled sporadic testing for at least one (1) year after reinstatement.
 - (D) The employee successfully completes a rehabilitation program recommended by a substance abuse professional if the employee fails more than one (1) drug test.

A copy of the relevant part of the collective bargaining agreement constitutes a written plan under this section.

As added by P.L.160-2006, SEC.2.

IC 4-13-18-6 Employee drug testing program requirements

Sec. 6. (a) A contractor's employee drug testing program must satisfy all of the following:

- (1) Each of the contractor's employees must be subject to a drug test at least one (1) time each year.
- (2) Subject to subdivision (1), the contractor's employees must be tested randomly. At least two percent (2%) of the contractor's employees must be randomly selected each month for testing.
- (3) The program must contain at least a five (5) drug panel that tests for the following:
 - (A) Amphetamines.
 - (B) Cocaine.
 - (C) Opiates (2000 ng/ml).
 - (D) PCP.
 - (E) THC.

(4) The program must impose progressive discipline on an employee who fails a drug test.

The discipline must have at least the following progression: (A) After the first positive test, an employee must be:

- (i) suspended from work for thirty (30) days;
- (ii) directed to a program of treatment or rehabilitation; and
- (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.
- (B) After a second positive test, an employee must be:
 - (i) suspended from work for ninety (90) days;
 - (ii) directed to a program of treatment or rehabilitation; and
 - (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.
- (C) After a third or subsequent positive test, an employee must be:
 - (i) suspended from work for one (1) year;
 - (ii) directed to a program of treatment or rehabilitation; and
 - (iii) subject to unannounced drug testing for one (1) year, beginning the day the employee returns to work.

The program may require dismissal of the employee after any positive drug test or other discipline more severe than is described in this subdivision.

(b) An employer complies with the requirement of subsection (a) to direct an employee to a program of treatment or rehabilitation if the employer does either of the following:

(1) Advises the employee of any program of treatment or rehabilitation covered by insurance provided by the employer.

(2) If the employer does not provide insurance that covers drug treatment or rehabilitation programs, the employer advises the employee of agencies known to the employer that provide drug treatment or rehabilitation programs.

As added by P.L.160-2006, SEC.2.

IC 4-13-18-7 Contract cancellation for noncompliance

Sec. 7. (a) The public works contract must provide for the following:

- (1) That the contractor implement the employee drug testing program described in the contractor's plan.
- (2) Cancellation of the contract by the agency awarding the contract if the contractor:
 - (A) fails to implement its employee drug testing program during the term of the contract;
 - (B) fails to provide information regarding implementation of the contractor's employee drug testing program at the request of the agency; or
 - (C) provides to the agency false information regarding the contractor's employee drug testing program.

(b) The provisions of the public works contract relating to cancellation of the contract by the agency awarding the contract apply to cancellation of the public works contract under this section.

As added by P.L.160-2006, SEC.2.

DAPW 150A 08-2019

DOMESTIC STEEL AFFIDAVIT

STATE OF	}	
	} SS:	
COUNTY OF	}	PROJECT NO:

I hereby swear, under penalties of perjury, that the steel products furnished for this project shall conform to the following Indiana Code Definitions and contract provisions:

5-16-8-1 Definitions:

"Steel products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, or otherwise similarly processed, or processed by a combination of two (2) or more of such operations, from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.

"United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.

5-16-8-2 Public agency contract provisions; rules for determining reasonable pricing.

Sec. 2. (a) Each public agency shall require that every contract for the construction, alteration, repair, improvement or maintenance of Public Works contain a provision that, if any steel products are to be used or supplied in the performance of the contract or subcontract, only steel products as defined by this chapter shall be used or supplied in the performance of the contract or any of the subcontracts unless the head of the public agency determines, in writing, that the cost of steel products is deemed to be unreasonable.

		(Signature)
		(Printed name)
(Attest) (Vice President/Secretary/Treasurer)		(Printed or typed name of company)
STATE OF	} } SS:	
COUNTY OF	} 55: }	
and State, this_day of,20, affidavit are true.		rsonally appeared before me, a Notary Public, in and for said County g duly sworn upon his oath, says that the facts alleged in the foregoing
My Commission Expires:		NOTARY PUBLIC - SIGNATURE
(SEAL)		NOTARY PUBLIC PRINTED NAME

STATE FORM 12125R3

CONTRACTOR'S BOND FOR CONSTRUCTION

KNOW ALL MEN BY THESE PRESENT.	, that		
		(Contractor)	
(Address)	of	(City, State)	
as principal and		(City, State)	
(Bonding Co	ompany)		
(Address) (City, S	State)	(Zip Cod	e)
as surety, are firmly bound unto the State of Indiana the payment of which, well and truly to be made, we several heirs, executors, administrators and assigns of, 20	e bind c	urselves, jointly and several	ly, and our joint and
THE CONDITIONS OF THE ABOVE OB			
of Indiana acting by and through the Commission certain written contract datedof			
			_
	1.5.		
(Project Number and	d Descrij	otion)	
situated in			
Indiana, in accordance with the construction docu	uments	approved and adopted by s	aid Commissioner,
Department of Administration, which are made a pa	art of th	is bond.	
NOW THEREFORE if the said			
NOW THEREFORE, if the said		(Contractor)	
, shall well and faithfully deplans and specifications adopted by said Commiss the time, terms and conditions specified in said co prosecution of said work, including labor, service ar otherwise to remain in full force, virtue and effect. 77-6 and IC 4-13.6-7-7.	o and p ioner, I ntract and mate	erform the same in all respe Department of Administratio and incurred by him or any stricts rials furnished, then this oblig	cts according to the n, and according to subcontractor in the gation shall be void;
IN WITNESS WHEREOF, we hereunto set	our ha	nds and seals this	day
of, 20			
	By:	(Contractor)	(Seal)
	By:	(Bonding Company)	(Seal)
	By:	(Attorney-in-fact)	

CONTRACTOR'S CERTIFICATE OF INSURANCE

This certifies to the addressee shown below that the following described policies, subject to their terms, conditions, and exclusions, have been issued to:

NAME AND ADDRESS OF INSURED:

COVERING (show State project number, name and location)

ADDRESSEE: PUBLIC WORKS DIVISION/DEPARTMENT OF ADMINISTRATION

DATE:

TYPE OF INSURANCE	POLICY NUMBER	EFFECTIVE DATE	EXPIRATION DATE	LIMITS	
 General Liability Bodily Injury Including Personal Injury 				Each Person - Premises and Operations Each Person - Elevators Each Person - Independent Contractor Each Person - Products Completed Including Operations Each Person - Contractual Each Occurrence - Aggregate - Products Completed Including Operations	\$ \$ \$ \$ \$ \$ \$ \$
b. Property Damage				Each Occurrence - Premises and Operations Each Occurrence - Elevators Each Occurrence - Independent Contractor Each Occurrence - Products Completed Including Operations Each Occurrence - Contractual Aggregate - Aggregate - Operations Protective Products and Contractual	S
 Automobile Liability a. Bodily Injury b. Property Damage 				Each Person Each Occurrence Each Accident	\$ \$ \$
3. Excess Liability Umbrella					\$
 a. Workmen s Compensation b. Employer s Liability 				Statutory Workmen s Compensation One Accident And Aggregate Disease	\$\$
5. Builder s Risk					\$
 Is Occurrence Basis Coverage pro Is Broad Form Property Damage Is Personal Injury Coverage inclu Is coverage provided for Contract UNDER AUTOMOBILE LIABILITY 	Insurance shown include ovided under Property Da Coverage provided for uded? tual Liability (including Y POLICY OR POLICI	amage Liability?. this Project? g indemnification ES	 <u>n provision</u>) assur		

2. Is Occurrence Basis Coverage provided under Property Damage Liability?..

In the event of cancellation, fifteen (15) days written notice shall be given to the party to whom this certificate is addressed.

NAME OF INSURANCE COMPANY

ADDRESS

SIGNATURE OF AUTHORIZED REPRESENTATIVE

Page 1 of 20



INDIANA DEPARTMENT OF ADMINISTRATION PUBLIC WORKS DIVISION

GENERAL CONDITIONS

Indiana Department of Administration Public Works Division 402 W. Washington Street, W462 Indianapolis, Indiana 46204

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STATE OF INDIANA

GENERAL CONDITIONS

ARTICLE 1 CONTRACT DOCUMENTS

- 1.1 Definitions
- 1.1.1 Contract Documents

The Contract Documents consist of the Contract, the Instructions to Bidders, the Contractor's Proposal (Bid), the Conditions of the Contract (General and Supplementary), Drawings, Specifications, and Addenda issued prior to bidding, Change Orders, any written interpretation issued as a field order by the Designer pursuant to Article 1.2, and all field orders for minor changes in the Work by the Designer pursuant to Article 12.3.

1.1.2 Contract

The Contract Documents form the Contract for construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral.

1.1.3 Work

All labor, material, equipment, systems and services necessary to produce the result called for in the Contract Documents.

1.1.4 Project

The Project is the total construction project designed by the Designer of which the Work performed under the Contract Documents may be the whole or a part of the whole Project.

1.2 Execution, Correlation, Intent and Interpretations

1.2.1 The Contract Documents shall be signed by the Owner and the Contractor. The signature process may be done electronically at the discretion of the Owner.

1.2.2 By executing the Contract, the Contractor represents that Contractor has visited the site and correlated its observations with the requirements of the Contract Documents and has no major question pertaining thereto.

1.2.3 The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the Contract Documents is to include all labor, equipment, supervision and materials, for the proper execution and completion of the Work, and also to include those things that may be reasonably inferable from the Contract Documents as being necessary to produce the intended results. Words that have a well-known technical or trade meaning are used herein, in accordance with such recognized meaning.

1.2.4 Written interpretations necessary for the proper execution of the Work, in the form of drawings or otherwise will be issued with reasonable promptness by the Designer. Such interpretations shall be consistent with and reasonably inferable from the Contract Documents, and may be issued by field order subject to Owner's approval.

1.3 Copies Furnished and Ownership

1.3.1 The Contractor will be furnished 5 copies of drawings and specifications and any other information necessary for the execution of the Work.

1.3.2 All drawings, specifications, and copies thereof furnished by the Designer are the Designer's property. They are not to be used on any other Project, and, with the exception of one Contract set for each party to the Contract, are to be returned on request to the Designer at the completion of the Work.

ARTICLE 2 DESIGNER

2.1 Definition

2.1.1. The Designer is the person or organization identified as Designer of the Project and is referred to throughout the Contract Documents as if singular in number and, in some places, masculine in gender. The terms Designer, Engineer, Architect, (and in certain projects Director, Public Works Division, or his/her authorized representative), shall mean the Designer.

2.2 Administration of the Contract

2.2.1 The Designer will provide general administration of the Contract, including the functions hereinafter described.

2.2.2 Unless stated otherwise, the Designer shall be the Owner's representative during the construction phase. Designer shall have authority to act on behalf of the Owner only to the extent expressly provided in the Contract Documents or otherwise in writing, which will be shown to the Contractor. The Designer will advise and consult with the Owner and all of the Owner's instructions to the Contractor shall be issued through the Designer.

2.2.3 The Designer shall have access to the Work at all times wherever it is in storage, preparation and progress. The Contractor shall provide facilities for such access so that the Designer and Owner's Site Representative may perform their functions under the Contract Documents.

2.2.4 The Designer will make no less than weekly visits to the site when work is in progress to familiarize itself generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. Designer will not be required to make exhaustive or continuous on-site inspection to check the quality or quantity of the Work. On the basis of Designer's on-site observations, Designer will keep the Owner informed of the progress of the Work and will endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.

2.2.5 Based on such observation and the Contractor's applications for payment, the Designer will determine the amount owed to the Contractor and will issue Certificates for Payment in such amounts.

2.2.6 The Designer will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder. Designer will promptly render such interpretations as Designer may deem necessary for the proper execution or progress of the Work.

2.2.7 All interpretations and decisions of the Designer will be consistent with the intent of the Contract Documents. Designer will exercise its best efforts to insure faithful performance by the Contractor.

2.2.8 Claims, disputes and other matters in question relating to the execution or progress of the Work or interpretation of the Contract Documents shall be referred initially to the Designer for decision and be subject to written appeal within fifteen (15) days by the Contractor. The Designer's decision shall be submitted promptly in writing to the Director, Public Works Division, who shall have full authority to render the final and binding decision.

2.2.9 The Designer will have responsibility to recommend to the Owner the rejection of work that does not conform to the Contract Documents. Whenever the Designer considers it necessary or advisable, Designer shall recommend to the Owner the stoppage of the Work or any portion thereof, and to recommend special examination or testing of the Work (whether or not fabricated, installed, or completed).

2.2.10 The Designer will review and approve or take other appropriate action upon the Contractor's submittals such as shop drawings, product data and samples, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Designer's approval of a specific item shall not indicate approval of all assembly of which the item is a component.

2.2.11 The Designer will prepare change orders in accordance with Article 12.

2.2.12 The Designer will conduct reviews to determine the dates of Substantial Completion and Final Completion, will receive and forward to the Owner for the Owner's review written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of Article 9.7.

2.2.13 The Designer, together with representatives from the Contractor and the Owner will conduct a review of the Work nine (9) months after the date of substantial completion to determine any work not in compliance with the Contract Documents at that time. A list of items to be corrected or completed will be forwarded to the Contractor for corrective action prior to the expiration of the one year warranty period.

2.2.14 The duties, responsibilities and limitations of authority of the Designer as the Owner's representative during construction as set forth in Articles 1 through 14 of these General Conditions shall not be modified or extended without written consent of the Owner.

2.2.15 The Designer will not be responsible for the acts or omissions of the Contractor, Subcontractor, or any of their superintendents, supervisory staffs, agents or employees, or any other persons performing any of the Work.

2.2.16 In case of the termination of the employment of the Designer, the Owner shall appoint a Designer against whom the Contractor makes no reasonable objections, whose status under the Contract shall be that of Designer.

ARTICLE 3 OWNER

3.1 Definition

3.1.1 The Owner is the State of Indiana, represented by the Commissioner, Department of Administration, acting through the Director, Public Works Division, and the Director's designated project manager.

3.2 Information and Service Required of the Owner

3.2.1 The Owner will furnish, through the Designer, surveys, describing known physical characteristics, legal limits and utility locations for the property on which the Project is to be erected, if in the Owner's possession.

3.2.2. Information or services under the Owner's control shall be furnished by the Owner with promptness to avoid delay in the orderly progress of the Work.

3.2.3 The Owner shall issue all instructions to the Contractor through the Designer unless specified elsewhere in these documents.

3.2.4 If the Contractor fails to correct defective work as required by Article 13 or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner, by a written order may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Article 6.1.

3.3 Owner's Site Representative

3.3.1 Notwithstanding the obligations of the Designer as Owner's representative during construction, the Owner may employ an on-site representative to observe the progress of the Work.

3.3.2 The Owner's Site Representative shall function as an observer only. Owner's Site Representative shall report his/her findings to the Designer for review and any required further action. The Owner's Site Representative is not authorized to make changes in the Work or to interpret the Contract Documents.

3.3.3 The Owner's Site Representative shall have at all times access to the Work wherever it is in storage, preparation and progress. Owner's Site Representative may attend meetings at the site and he/she may review and approve the Contractor payment requests.

ARTICLE 4 CONTRACTOR

4.1 Definition

4.1.1 The Contractor is the person or organization identified as such in the Contract. The Contractor is referred to throughout the Contract Documents as if singular in number and, in some places, masculine in gender. The term Contractor means the Contractor or its authorized representative.

4.2 Review of Contract Documents

4.2.1 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Designer and the Owner any error, inconsistency or omission Contractor may discover. The Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings, product data or samples for such portion of the Work.

4.3 Supervision and Construction Procedures

4.3.1 The Contractor shall supervise and direct the Work, using its best skill and attention. Contractor shall be solely responsible for the quality of the Work and for all construction techniques, sequences, and procedures, and for coordinating all portions of the Work.

4.3.2 The Contractor shall not be relieved from its obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Designer in administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.9 by persons other than the Contractor.

4.4 Labor and Materials

4.4.1 Unless otherwise specified in Division 1, the Contractor shall provide and pay for all labor, material, equipment, tools, construction equipment, machinery, transportation, and other facilities and services necessary for the proper execution of the Work.

4.4.2 Unless otherwise specified in Division 1, the Contractor shall provide and pay for all electric current, water, heat, and

telephone services and shall maintain necessary discipline to prevent waste.

4.4.3 If any item of work shall be the subject of a jurisdictional dispute as to the craft to be used for said work, the Contractor shall aid in such inter-craft resolution and if arbitrated, abide by the decision, holding the Owner free of involvement in the dispute, and if time is lost by the dispute, extra work days will only be considered through the provisions of Article 12.2. Contractor will endeavor to eliminate any embarrassment to the Owner caused by the dispute.

4.4.4. The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or any one employee unskilled in the Work assigned or unqualified as a tradesman in the trade involved.

4.5 Warranty and Guarantee

4.5.1 The Contractor warrants and guarantees that all materials and equipment incorporated in the Project shall be new unless otherwise specified, and all work will be of the highest quality, free from faults and defects, and in strict conformance with the Contract Documents for a period of one year from the date of substantial completion. All work not so conforming to the Contract Documents may be considered defective. If required by the Designer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The warranties and guarantees provided in this Article and elsewhere in the Contract Documents shall be in addition to and not in limitation of any other warranty or guarantee or remedy called for the Contract Documents or otherwise prescribed by law. The Contractor, together with the Designer and representatives from the Owner, shall review the Work nine (9) months after the date of substantial completion to determine any work not in compliance with the Contract Documents. The Contractor shall correct such non-complying work prior to the expiration of the one year warranty.

4.6 Permits, Fees and Notices

4.6.1 The Contractor shall secure and pay for all permits, fees and licenses necessary for the execution of the Work.

4.6.2 The Contractor and Subcontractors must submit an "Exemption Certificate for Construction Contractors" (Form ST-105) to each supplier in order to obtain exemption from the Indiana Gross Tax (i.e., sales and use tax).

4.6.3 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the conduct of the Work. If Contractor observes that any of the Contract Documents are at variance therewith in any respect, Contractor shall promptly notify the Designer in writing, and any necessary changes shall be adjusted by change order. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Designer, Contractor shall bear all cost arising from such non-conformance.

4.7 Cash Allowances

4.7.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. These allowances cover the net cost of the materials and equipment delivered and unloaded at the site which cost shall be determined by the Owner through proper procedures for receiving quotes or bids as required by law. The Contractor's handling costs on the site, labor, installation costs, overhead, profit, and other expenses shall be included in the Contract sum and not in the allowance. The Contractor shall cause the Work required by these allowances to be performed by such persons as the Designer may direct, but Contractor will not be required to employ persons against whom Contractor has a reasonable objection. If the net cost above, when determined, is more than or less than the allowance, the Contract Sum will be adjusted accordingly by change order.

4.8 Superintendent

4.8.1 The Contractor shall keep on the Project, during the entire contract time, a competent superintendent and necessary assistants, all satisfactory to the Designer, and the superintendent shall not be changed, except with the consent of the Owner, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in Contractor's employ. The superintendent shall represent the Contractor and shall have full authority to act on its behalf. All communications given the superintendent shall be as binding as if given by the Contractor. Important communications shall be confirmed in writing.

4.9 Responsibility for Those Performing the Work

4.9.1 The Contractor shall be responsible for the quality of the Work, for acts and omissions of all the Subcontractors, their superintendents, their supervisory staffs, agents, or employees and of all other persons performing any of the Work under a Contract with the Contractor.

4.10 Progress Schedule

4.10.1 Unless otherwise indicated in Division 1, the Contractor, immediately after being awarded the Contract, shall prepare and submit for the Designer's approval a progress schedule for the Work in relation to the entire Project. This schedule in bar graph form, or other form approved by the Owner, shall indicate the dates for the starting and completion of the various stages of construction, and in addition, will state the contractual completion date. The contract completion date, based on the construction period stated in the notice to bidders, shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by change order. A more detailed schedule may be required elsewhere in thedocuments.

4.11 Record Documents at the Site

4.11.1 The Contractor shall maintain for the Owner as part of the Contract one record copy of all drawings, specifications, addenda, shop drawings, change orders and other modifications at the site in good order, and marked to record all changes made during construction. These shall be available to the Designer and the Owner's Site Representative at all times while Work is in progress. All changes made during construction shall be recorded monthly and reviewed by the Designer before approval of each partial progress payment. The record documents shall be submitted to the Designer prior to the Contractor's final payment.

4.12 Shop Drawings and Samples

4.12.1 Shop drawings are all drawings, diagrams, illustrations, schedules, brochures, and other data, which are prepared by the Contractor, or any Subcontractor, manufacturer, supplier, or distributor, and which illustrate the Work.

4.12.2 The Contractor shall submit all shop drawings and samples required by the Contract or by the Designer in a timely manner, allowing sufficient time for the Designer's review so as not to cause any delay in the Work or in work by any other Contractor.

4.12.3 At the time of such submission, the Contractor shall furnish or verify all field measurements, field construction criteria, materials, catalog numbers, and the like and shall individually check, coordinate and stamp with its approval each submission, and shall in writing call the Designer's attention to any deviations in the shop drawings or samples from the requirements of the Contract Documents.

4.12.4 The Designer will check and approve, with reasonable promptness so as to cause no delay, these shop drawings and samples only for conformance with the design concept of the Project, and with the information given in the Contract Documents. The Designer's approval of a separate item will not indicate approval of the assembly in which the item functions.

4.12.5 The Designer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has in writing called the Designer's attention to such deviation at the time of submission and the Designer has given written approval to the specific deviation, nor shall this relieve the Contractor from errors or omissions in the shop drawings or samples.

4.12.6 No work requiring a shop drawing or sample submission shall be commenced until the submission has been approved by the Designer. All such work shall be in accordance with approved shop drawings and samples.

4.13 Use of Premises

4.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the premises with any materials or equipment.

4.14 Cutting and Patching

4.14.1 The Contractor shall do all cutting, fitting or patching of its work that may be required to make its several parts come together properly and shall not endanger any work by cutting, excavating, or otherwise altering the Work or any part of it. Costs caused by defective or ill-timed work shall be borne by the party responsible therefore.

4.15 Cleaning Up

4.15.1 The Contractor shall at all times keep the premises free from accumulation of waste materials or rubbish caused by its operations. At the completion of the Work, Contractor shall remove all waste material and rubbish from and about the building as well as all its tools, scaffolding and surplus materials. Contractor shall clean all glass surfaces, lights and fixtures, ceilings, walls and shall leave the Work dusted, swept and wet mopped clean, unless more exactly specified.

4.15.2 In case of dispute the Owner may remove the rubbish and charge the cost to the several Contractors as the Designer shall determine to be just.

ARTICLE 5 SUBCONTRACTORS

5.1 Definition

As used in this article "contractor tier" refers collectively to the following classes of contractors on a public works project:

- (1) "Tier 1 contractor" includes each person that has a contract with the public agency to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "prime contractor" or a "general contractor".
- (2) "Tier 2 contractor" includes each person that has a contract with a tier 1 contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "subcontractor".
- (3) "Tier 3 contractor" includes each person that has a contract with a tier 2 contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known asa "sub-subcontractor".
- (4) "Lower tier contractor" includes each person that has a contract with a tier 3 contractor or lower tier contractor to perform some part of the work on, supply some of the materials for, or supply a service for, a public works project. A person included in this tier is also known as a "lower tier subcontractor".

A Subcontractor is a person or entity who has a direct Contract with the Contractor to perform any of the Work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and, in some places, masculine in gender and means a Subcontractor or its authorized representative. The term Subcontractor does not include any separate Contractor or its Subcontractors.

5.2 Award of Subcontracts and Other Contracts for Portions of the Work

5.2.1 Unless otherwise required by the Contract, the Contractor shall furnish to the Owner, with its bid on the prescribed form, the names of all persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work with an installed value of \$150,000.00 or more. The Designer will promptly reply to the Contractor in writing stating whether or not the Owner or the Designer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Designer to reply within fourteen (14) days shall constitute notice of no reasonable objection.

5.2.2 The Contractor shall not subcontract with any such proposed person or entity to which the Owner or the Designer has made reasonable objection. The Contractor shall not be required to subcontract with anyone to whom Contractor has a reasonable objection.

5.2.3 If the Owner or the Designer has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Owner or the Designer has no reasonable objection.

5.2.4 The Contractor shall make no substitution of any Subcontractor, person or entity previously selected, if the Owner or Designer makes reasonable objection to such substitution.

5.2.5 The Contractor and its subcontractors shall employ only licensed plumbers and shall provide to the Owner the names and license numbers of all plumbers engaged in the Work. The Contractor shall submit this documentation with any monthly progress payment request that includes plumbing labor.

5.3 Sub Contractual Relations

5.3.1 By an appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Said agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Provisions of Article 9 for progress payments, retainage and payment for stored material shall be incorporated without modification in all Contractor-Subcontractors. Prior to execution of the Contractor-Subcontractor agreement, the Contractor shall provide all Subcontractors a complete copy of all proposed Contract Documents for the Project to which the Subcontractor will be bound by this Paragraph 5.3. Each Subcontractor shall similarly make available to its Sub-Subcontractors copies of such Documents. Executed copies of all

agreements shall remain on file with the Contractor and be available for review by the Owner at the Owner's discretion.

ARTICLE 6 SEPARATE CONTRACTS

6.1 Owner's Right to Let Separate Contracts

6.1.1 The Owner reserves the right to let other contracts in connection with other portions of the Project under these or similar General Conditions.

6.1.2 When separate contracts are awarded for different portions of the Project, the "Contractor" in the Contract Documents in each case shall be the Contractor who signs each separate contract with the Owner.

6.1.3 When separate contracts are awarded for portions of the Project, the General Construction Contractor shall be responsible for the overall coordination of all separate contracts for the Project.

6.2 Mutual Responsibility of Contractors

6.2.1 The Contractor shall afford each other Contractor reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and each shall properly connect and coordinate its work with all others as coordinated by the General Contractor.

6.2.2 If any part of the Contractor's work depends on proper execution or results upon the work of any other separate Contractor, the Contractor shall inspect and promptly report to the Designer any discrepancies or defects that shall cause its work to fail or be non-conforming. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of its work.

6.2.3 Should the Contractor cause damage to any separate Contractor on the Project, the General Contractor agrees, upon due notice, to settle with such other Contractor by agreement, if at all possible, without involving the Owner. The Owner will be involved only after evidence is presented that sureties cannot settle the problem.

6.2.4 Any costs caused by defective or ill-timed work shall be borne by the partyresponsible.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 Delinquent State Taxes (IC. 4-13-2-14.5). The Public Works Division may allow the Department of State Revenue access to the name of each person who is either:

- (1) Bidding on a Contract to be awarded under this chapter; or
- (2) A Contractor or Subcontractor under this chapter.

If the Public Works Division is notified by the Department of State Revenue that a bidder is on the most recent tax warrant list, a Contract may not be awarded to that bidder until the bidder provides a statement from the Department of State Revenue that the Bidder's delinquent tax liability has been satisfied. The Department of State Revenue may notify:

- (1) The Department of Administration; and
- (2) The Auditor of State;

that a Contractor or Subcontractor under this chapter is on the most recent tax warrant list, including the amount owed in delinquent taxes. The Auditor of State shall deduct from the Contractor's or Subcontractor's payment the amount owed in delinquent taxes. The Auditor of State shall remit this amount to the Department of State Revenue and pay the remaining balance to the Contractor or Subcontractor.

7.2 Choice of Law

7.2.1 The Contract shall be governed by the laws of the State of Indiana.

7.3 Assignment

7.3.1 The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any monies due or to become due to it hereunder, without the previous written consent of the Owner.

7.4 Written Notice

7.4.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or sent by electronic mail (email), or by registered or certified mail to the last business address known to the person who gives the notice.

7.5 Claims for Damages

7.5.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or any of its employees, agents or others for whose acts the party is legally liable, claim shall be made in writing to such other party within seven (7) days of the first observance of such injury or damage.

7.6 Performance Bond and Labor and Material Payment Bond

7.6.1 For projects advertised with an estimated base bid amount of One Hundred Fifty Thousand Dollars (\$150,000) or more, the Contractor shall furnish and pay for an approved one hundred percent (100%) combination performance and payment bond (Contractor's Bond for Construction, Public Works Division Form DAPW 15). This bond shall adhere to the requirements of IC. 4-13.6-7-6 and IC. 4-13.6-7-7 as amended and shall cover the faithful performance of the Contract and the payment of all obligations arising thereunder, including reimbursement for any stored materials paid for but returned to materialmen, with such sureties as the Owner may approve. The combination bond shall remain in effect throughout the entire construction period and in addition for a period of one year from the date of final acceptance. The Contractor shall deliver the required bonds to the Owner prior to execution of the Contract by the Owner unless authorized to the contrary in writing by the Owner. All bonds must be issued by bonding companies, which are licensed and approved by the Indiana Insurance Commission.

7.7 Owner's Right to Carry Out the Work

7.7.1 If the Contractor should default or neglect to carry out the Work properly or fail to perform any provision of the Contract, the Owner may, after giving seven (7) days written notice to the Contractor, without prejudice to any other remedy it may have, make good such deficiencies. In such case, an appropriate change order shall be issued deducting the cost thereof including the cost of the Designer's additional service made necessary by such default, neglect, or failure of the Contractor, from the payments then or thereafter due the Contractor, provided, however, that the Designer shall approve both such action and the amount charged to the Contractor. If such payments due to the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

7.8 Royalties and Patents

7.8.1 The Contractor shall pay all royalties and license fees. Contractor shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from liability of any nature or find including costs and expenses for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of this Contract, including its use by the Owner.

7.9 Tests & Substitution of Materials

7.9.1 If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any work to be inspected, tested, or approved, the Contractor will give the Designer timely notice of its readiness and of the date fixed for such inspection, testing, or approval so that the Designer may observe the same. The Contractor shall bear all cost of such inspections, tests, and approvals unless otherwise provided.

7.9.2 If, after the commencement of the Work, the Designer, with approval of the Owner in writing, determines that the Work requires special inspection, testing, or approval for which subparagraph 7.9.1 does not provide, Designer will, upon written authorization from the Owner, order such special inspection, testing or approval. If such special inspection or test reveals a failure of the Work to fulfill the requirements of the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof; otherwise, the Owner shall bear such costs. An appropriate change order shall be issued.

7.9.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by Contractor to the Designer.

7.9.4 Observations by the Designer of the inspections, tests, or approvals required by Article 7 will be promptly made, and where practicable at the source of supply at no additional cost to the Owner.

7.9.5 Neither the observations of the Designer in its administration of the Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.

7.9.6 All building construction and work, alterations, repairs, plumbing, mechanical, and electrical installations and appliances connected therewith, shall comply with the Rules and Regulations of the Indiana Department of Homeland Security, the Indiana Department of Health, local ordinances, Rules for Licensure of Building Trades, and other statutory provisions pertaining to this class of work; such rules and regulations and local ordinances to be considered as a part of these specifications.

7.9.7 Where in these specifications, one or more certain materials, trade names, or articles of certain manufacture are mentioned, it is done for the express purpose of establishing a basis of durability and efficiency and not for the purpose of limiting competition. Approval of other acceptable products for those specified may be obtained by requesting to the Designer no later than fourteen (14) days in advance of bid date with all documentation required for the Designer to evaluate any approval. If approval is granted, the subject product will be added by addendum.

7.9.8 Should there be a reason for change of materials after award of the Contract, the following criteria shallapply:

- a. Original material no longer manufactured,
- b. Delivery not possible within time specified for job, and/or
- c. Unavailability due to causes beyond the control of the Contractor.

7.9.9 After agreement by the Designer and the Owner that a change is necessary, the Contractor shall present a request for substitution to the Designer. The burden of proof of the merit of the proposed substitute is upon the proposing party. The decision of the Designer and the Owner regarding the substitution shall be final.

7.10 Certificate of Qualification

7.10.1 In accordance with IC. 4-13.6-4 as amended, all Contractors and Subcontractors performing work for the State of Indiana on projects estimated to be in excess of one hundred fifty thousand dollars (\$150,000.00), must hold a valid Certificate of Qualification issued by the Public Works Certification Board. The Instructions to Bidders define the procedure for certification and bidding.

7.10.2 The Contractor must perform at least fifteen (15) percent of the total Contract Sum of the Work with its own forces. The Contractor shall submit copies of its payroll records, if requested by the Owner, showing the hours, rates and total costs for all personnel on its payroll detailed to the degree to ensure compliance with this paragraph and any Wage Determination provisions, if required.

7.11 Appropriation

7.11.1 The Contract specifically limits payments to be made in accordance with appropriations made and funds made available under laws of the State of Indiana.

7.12 Federal Wage Determination, if required

7.12.1 If a Davis-Bacon wage determination is included in the Contract Documents, it shall be used as the minimum wage and benefits to be paid for the trades indicated.

7.12.2 Contractor shall submit a schedule of hourly wages to be paid to each employee (including those of its subcontractors) engaged in work on the site. This submittal shall be on Contractor's letterhead stationery and shall be signed by the Contractor and notarized. A copy of this submittal shall be conspicuously posted at the site.

7.12.3 Said rates shall in no case be less than those set out in the Davis-Bacon wage schedule a copy of which is herein bound or is on file with the Owner if it is required.

7.12.4 The Contractor shall provide (and require each Subcontractor to provide) weekly payroll records listing employees engaged in work on the site for the week and the hourly rates for base pay and benefits paid to each employee listed. The payroll record form shall include a statement by the Contractor/Subcontractor certifying the accuracy and completeness of the information provided. Payroll records shall be maintained by the Contractor during the course of the Work until the end of the required warranty period.

7.13 Out-of-State Contractors

7.13.1 Out-of-State business entities must be authorized to do business in the State, pursuant to Indiana Code Title 23, prior to submitting bids. Forms may be obtained by contacting the Secretary of State, State of Indiana, Indianapolis, Indiana.

7.14 Material Delivery

7.14.1 Shipments of material to be used by the Contractor or any Subcontractor under this Contract should be delivered to the job site only during the regular working hours of the Contractor or Subcontractor. If a delivery is made during other than the normal working hours of the Contractor or Subcontractor, its authorized agent must be on duty to receive such material. No employee of the Owner is authorized to receive any shipments designated for the Contractor or Subcontractor.

7.15 Weather

7.15.1 The Contractor shall at all times provide protection against weather, rain, wind, storms, frost or heat, so as to maintain all work, materials, apparatus and fixtures free from injury or damage. At the end of the day's work, all new work likely to be damaged shall be covered.

7.15.2 During cold weather, the Contractor shall protect all work from damage. If low temperature makes it impossible to continue operations safely, in spite of cold weather precaution, the Contractor shall cease work and shall so notify the Owner and Designer.

7.15.3 Any work damaged by failure to provide protection above required, shall be removed and replaced with new work at the Contractor's expense.

7.15.4 The Contractor shall provide and maintain on the premises, where directed, watertight storage shed (or sheds) for storage of all materials, which might be damaged by exposure to weather.

7.16 Fire Hazards

7.16.1 Wherever and whenever any burning, welding, cutting or soldering operation is in progress, or equipment is in use, or any work involving a fire hazard, is performed, the Contractor responsible for such operation shall have at all times acceptable fire extinguisher or protection within five (5) feet of the operation.

7.17 Dismissal

7.17.1 Any foreman or workman employed by the Contractor or by any Subcontractor who, in the opinion of the Director, Public Works Division and/or the Designer, does not perform his/her work in a proper and skillful manner, or is disrespectful, intemperate, disorderly, intoxicated or otherwise objectionable shall at the written request of either of the above, be forthwith discharged by the Contractor or Subcontractor employing such foreman or workman and said employee shall not be employed again on any portion of the Work without the written consent of the Director of the Division of Public Works and the Designer. Should the Contractor fail to furnish suitable and sufficient machinery, equipment or personnel for the proper prosecution of the Work, the Owner or Designer may withhold all payments that are or may become due, or may suspend the Work until such orders are upheld.

ARTICLE 8 TIME

8.1 Definitions

8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial Completion of the Work as defined herein, including authorized adjustments thereto.

8.1.2 The date of commencement of the Work is the date established in a notice to proceed. If there is no notice to proceed, it shall be the date of the approval by the final state approving agency on the Owner-Contractor Contract or such other date as may be established therein.

8.1.3 The Date of Substantial Completion of the Work, or designated portion thereof, is the date certified by the Director, Public Works Division, when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy or utilize the Work, or designated portion thereof, for the use for which it is intended.

8.1.4 The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

8.2 Progress and Completion

8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.

8.2.2 The Contractor shall begin the Work on the date of commencement as defined herein. Contractor shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

8.2.3 The Owner fully expects the Contractor to employ any and all means necessary to complete the Work within the Contract Time. Conduct of the Owner's affairs, such as unforeseen site conditions or delay in processing change orders, shall <u>not</u> be viewed as justification for delaying the Project unless the Owner can be shown to have breached the Contract. Contractor must employ all reasonable means to execute the Project in a timely manner and in conformance with the Contract Documents even if the Contractor or Designer seeks legal remedy against the Owner for claim of damage.

8.3 Delays and Extensions of Time

8.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner or the Designer, or by any employee of either, or by any separate Contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonable to anticipate, unavoidable casualties, or

any causes beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by any other cause which the Designer determines may justify the delay, then the Contract Time shall be extended by a Change Order for such reasonable time as the Designer may determine.

8.3.2 Claims for extension of time shall be made in writing to the Designer. In case of a continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the Work.

8.3.3 If no agreement is made stating the dates upon which interpretations as provided in Article 2.2 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until fifteen days after written request is made for them, and not unless such claim is reasonable.

8.3.4 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

9.1 Contract Sum

9.1.1 The Contract Sum is the total amount payable by the Owner for the performance of the Work under the Contract Documents.

9.2 Schedule of Values

9.2.1 Before the first application for payment, the Contractor shall submit to the Owner a schedule of various parts of the Work, including quantities if required by the Owner, aggregating the total Contract Sum, divided so as to facilitate payments to Subcontractors in accordance with Article 5.3, made out in such form as the Owner and the Contractor may agree upon, and supported by such data to substantiate its correctness as the Owner may require. Each item in the Schedule of Values shall include its proper share of overhead, profit, and other general charges. This schedule, when approved by the Owner, shall be used as a basis for the Contractor's Applications for Progress and Final Payments.

9.3 Progress Payments

9.3.1 Completed work: The Contractor shall submit to the Designer an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Designer may direct. The Owner shall make payments on account of the Contract, upon issuance of Certificates of Payment certified by the Designer and the Owner's Representative, for labor and materials incorporated into the Work at the rate of ninety-four (94%) percent of such value until fifty (50%) percent of the value of the Work is completed. After that fifty (50%) percent, no further retainage will be deducted. The Director, Public Works Division has the option to require that three (3%) percent of the value of the Work be retained throughout the duration of the entire Contract. The retainage schedule shall be determined prior to award of Contract. Retainage may be paid with final payment at the discretion of the Director, Public Works Division, but shall not be paid in any event until a minimum of sixty-one (61) days after all work is completed.

9.3.2 Materials Stored: Payments may be made on account for materials or equipment not incorporated in the Work, but delivered and suitably stored at the site. With written approval of the Owner, materials may be stored at another location other than the Work site if properly identified as the property of the Owner and properly protected. Storage of material at the place of business of the vendor is not acceptable (25 IAC 2-9-2). Such payments shall be conditional upon the submission by the Contractor of one of the following: 1) receipts marked by the supplier as paid; 2) supplier's final waiver of lien listing specific materials involved; 3) invoice with copy of canceled check showing payment; or 4) such other evidence of payment as the Owner may require in lieu thereof to establish ownership of all items except those listed as miscellaneous materials below. For the aggregate of miscellaneous stored materials for which payment is requested and above proof of payment is not available, a complete list will be provided along with the affidavit of payment. Upon certification by the Owner's representative that the listed materials are suitably stored, payment can be made. Miscellaneous materials are defined as pipe, fittings, wire, conduit, etc., normally stored as stock items in Contractor's warehouse. For materials stored other than at the construction site applicable insurance and transportation to the site shall be provided by the Contractor.

9.3.3 As stored materials are incorporated into the Work, the value shall be removed from the total value of stored materials requested in successive payments. Proof of ownership through one of the above methods will be required for additional materials. When, in the judgment of the Owner, retainage for completed work is not sufficient in relation to excessive amounts requested for stored materials or equipment, the Owner may elect to place the retainage for such materials or equipment in escrow. This retainage shall apply as a credit toward retainage due to be held for completed work on future payments.

9.3.4 The Contractor warrants that title to all work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt by the Contractor of payment, whichever occurs first, free and clear of all liens, claims, security interest or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest

therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

9.3.5 The Contractor shall accompany each application for payment request with a certification that all Subcontractors (fabricators) have been paid within ten (10) days of receipt of payment that pro rata amount of funds Contractor has received from the Owner for the value of work or services (fabricated materials or equipment) performed by the Subcontractor (supplied by fabricator) contained in previous progress payments. The Contractor's inclusion of a value of subcontract work in its progress pay estimate is prima facie evidence of acceptance of work having such a value; therefore, if the Owner receives a certification from a Subcontractor that Subcontractor has not been paid such amounts as were included in the Contractor's partial billing and subsequently paid to the Contractor by the Owner, then the Owner will hold all subsequent partial payment requests until satisfactory evidence is received from the Subcontractor that Subcontractor has been paid such amounts presented to the Owner by the Contractor, paid to the Contractor by the Owner, and not distributed by the Contractor to the Subcontractor. The making of an incorrect certification of either partial payment or final payment may be considered by the Owner to be a breach of contract, and Owner may exercise all of its prerogatives set out in the Contract in addition to the remedies for falsifying an affidavit. Such an action could result in a suspension of qualification with the State Certification Board for a period of up to two (2) years.

9.4 Certificates for Payment

9.4.1 When the Contractor has made application for payment as above, the Designer will issue a Certificate of Payment to the Owner for such amount as Designer determines to be properly due, or state in writing its reasons for withholding a certificate as provided in Articles 9.5.1.

9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Designer to the Owner, based on the Designer's observations at the site as provided in Article 2.2.4 and the data comprising the Application for Payment, that the Work has progressed to the point indicated, and that, to the best of its knowledge, information and belief, the quality of work is in accordance with the Contract Documents subject to an evaluation of the Work as a functioning whole upon substantial completion, to the results of any subsequent tests called for in the Contract documents, to minor deviations correctable prior to the next certificate for payment and to any specific qualifications stated in its certificate, and that the Contractor is entitled to payment in the amount certified.

9.4.3 The Designer's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Article 9.7 have been fulfilled. However, by issuing a Certificate, the Designer shall not thereby be deemed to represent that Designer has made any examination to ascertain how or for what purpose the Contractor has used the monies paid on account of the Contract Sum.

9.4.4 The Owner shall make payment as soon as the fiscal procedure of the State can process same after receipt from the Designer of the Certificate for Payment. The fiscal procedure by the State can include, but not be limited to, review by the Owner's using agency, verification of the Certificate by the Owner's Site Representative, review for accuracy of form and calculation by the Owner's accountant, review by the Owner's project management and execution by the Director, Public Works Division, and others.

9.4.5 No certificate for a progress payment or progress payment for partial or entire occupancy of the Project by the Owner shall constitute an acceptance of work not in accordance with the Contract Documents.

9.4.6 Pursuant to IC. 4-13.6-7-2 all Contract awards of One Million Dollars (\$1,000,000) or above, if elected by the Contractor, an escrow agent will be selected by the State with whom the retainage funds for this Contract will be deposited and held until receipt of notice from the Director, Public Works Division (Escrow Form DAPW 32A) and from all other necessary parties as specified in and in accordance with the procedures and provisions of said Act.

9.5 Payments Withheld

9.5.1 The Designer (or Owner) will not approve an application in whole or in part, if in Designer's opinion, Designer is unable to make representations to the Owner as provided in Article 9.4. The Designer (or Owner) will not approve Application for Payment or, because of subsequent inspections, may nullify the whole or any part of the Certificate for Payment previously issued to such extent as may be necessary in Designer's opinion to protect the Owner from loss because of:

- A. defective work not remedied,
- B. claim filed or reasonable evidence indicating probable filing of claims,
- C. failure of the Contractor to make payments properly to Subcontractors or for materials, equipment or labor,
- D. reasonable doubt that the Contract can be completed for the unpaid balance,
- E. damage to another Contractor,
- F. reasonable indication that the Owner may be damaged by delay in receiving use of the Work as scheduled, or,
- G. unsatisfactory prosecution of the Work by the Contractor.
- 9.5.2 When the above grounds are removed, payment shall be processed for amounts withheld.

9.6 Failure of Payment

9.6.1 If the Designer should fail to issue any Certificate for Payment, through no fault of the Contractor, or if the Owner should fail to pay the Contractor in a reasonable time considering the fiscal procedures of the State for processing same after receipt from the Designer the amount certified by the Designer, then the Contractor may, after seven (7) additional days, give written notice to the Owner and Designer, that work will stop until payment of the amount owing has been received.

9.7 Substantial Completion and Final Payment

9.7.1 When advised by the Contractor that the Work or a designated portion thereof is substantially complete, the Designer; the Director, Public Works Division, and the Contractor shall determine jointly by inspection that the Work is substantially complete. If they determine that the Work is substantially complete, the Contractor shall then prepare a Certificate of Substantial Completion with an accompanying list of incomplete items of work (punch list) and submit it to the Designer for its signature and subsequent forwarding for approval by the Director, Public Works Division. The Certificate shall fix the date of Substantial Completion and shall state the responsibilities of the Owner and the Contractor for maintenance, heat, utilities and insurance.

9.7.2 Upon approval of the above, and notice that the Work is ready for final acceptance, the Designer, the Contractor and Owner will promptly make final review, and when they find the Work acceptable under the Contract and the Contract fully performed, the Contractor shall promptly submit the final Certificate for Payment with all other required documents, showing that the Work has been completed in accordance with the terms and conditions of the Contract, and that the entire balance in said final certificate, is due and payable.

9.7.3 Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall submit to the Designer releases or waivers of all liens arising out of the Contract; an affidavit that the releases and waivers include all the labor, materials, and equipment for which a lien could be filed and that all payrolls, material bills, and other indebtedness connected with the Work for which the Owner or its property might in any way be responsible have been paid or otherwise satisfied; and such other data establishing payment or satisfaction of all such obligations as the Owner may require. If any such lien or claim remains unpaid, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such lien or claim, including all costs.

9.7.4 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor, and the Designer so confirms, the Owner shall, upon certification by the Designer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted, or such portion as may be available from funds not already released to an escrow agent pursuant to IC 4-13.6-7. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.7.5 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:

- A. unsettled liens,
- B. faulty work appearing after Substantial Completion,
- C. failure of the Work to comply with the requirements of the Contract Documents,
- D. terms of any special guarantees required by the Contract Documents.

9.7.6 If upon Substantial Completion of the Work there are any remaining uncompleted minor items, the Owner shall withhold, until those items are completed, an amount equal to two hundred percent (200%) of the value of each item as determined by the Designer or Owner.

9.7.7 The acceptance of final payment shall constitute a waiver of all claims by the Contractor, except those previously made in writing and still unsettled and covered by other agreed arrangements.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

10.1 Safety Precautions and Programs

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

10.2 Safety of Person and Property

10.2.1 The Contractor shall take all necessary precautions for the safety of, and will provide all necessary protection to prevent damage, injury, or loss to:

- A. all employees on the Project and all other persons who may be affected thereby,
- B. all the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, and,
- C. other property at the site or adjacent thereto, including trees, shrubs, lawns, pavements, roadways, structures and

utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. Contractor shall erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacentutilities.

10.2.3 All damage or loss to all property specified herein caused directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable solely to faulty Contract Documents or to the acts or omissions of the Owner, or Designer or their employees, or for those whose acts either of them may be liable.

10.2.4 The Contractor shall designate a responsible member of its organization on the Work whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent, unless otherwise designated in writing by the Contractor to the Owner and the Designer.

10.2.5 When the use or storage of explosives or other hazardous materials or equipment is necessary for the prosecution of the Work, the Contractor shall carry on such activities under the supervision of properly qualified personnel.

10.2.6 The Contractor shall not overload, or permit any part of the Work to be loaded so as to endanger its safety.

10.2.7 All excavations creating a trench of five (5) or more feet in depth shall strictly adhere to the shoring and other safety requirements called for and described under Indiana OSHA Regulation 29 C.F.R. 1926, Subpart "P", for trench safety systems.

10.3 Emergencies

10.3.1 In an emergency affecting the safety of persons or property, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor because of emergency work shall be determined as provided for in Article 12, Changes in the Work, and Contractor shall notify the Owner of such a decision within seven (7) days of the event giving rise to such claim.

ARTICLE 11 INSURANCE

11.1 General Requirements for Insurance

11.1.1 The Contractor will be required to furnish to the Owner, evidence of its compliance with all items of insurance listed herein and in the Contract. All insurance policies/certificates shall be on file with the Owner prior to release of the signed Contract and commencement of work.

11.1.2 The Contractor shall purchase and maintain, with a company or companies licensed to do business in Indiana, such insurance as will protect Contractor from claims set forth below, arising out of or resulting from the Contractor's operations under the Contract, whether such operations be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by any of them:

- A. claims under Workmen's Compensation Acts and other employee benefit acts;
- B. claims for damages because of bodily injury, personal injury, occupational sickness or disease, or death of its employees;
- C. claims for damages because of bodily injury, personal injury, sickness, disease or death of any person other than its employees;
- D. claims for damages to tangible property, including loss of use thereof.

11.1.3 This insurance shall be written for not less than any limits of liability specified herein, or required by law, whichever is greater. Policies or certificates of insurance, acceptable to the Owner, shall be filed with the Owner prior to execution of the Contract. These Certificates shall contain a provision that coverages afforded under the policies will be for the life of the Work.

11.1.4 Policies (certificates) shall show name and complete address of the Company, expiration date or dates, and policy number or numbers. Policies shall not be canceled until at least thirty (30) days prior written notice has been given to the Owner and acknowledged by the Owner in writing.

11.2 Property Insurance

11.2.1 The Contractor shall furnish and maintain, at the Contractor's expense, Fire, Extended Coverage, Vandalism, and Malicious Mischief Insurance (Builder's Risk), in the sum of 100% of the Contract amount. Builder's Risk insurance shall cover the structure on/in which the Work of this Contract is to be done including items of labor and material connected therewith, whether in or adjacent to the structure insured; material in place or to be used as part of the permanent construction, including surplus materials; shanties, protective fences, bridges, or temporary structures; miscellaneous materials and supplies incident to the Work; scaffolding, staging, towers, forms, and equipment, if included in the cost of the Work. This insurance need not cover any tools owned by mechanics, or any tools, equipment, scaffolding, staging, towers, and forms owned or rented by the Contractor, the capital value of which is not included in the cost of the Work.

11.2.3 Any loss under this Article 11.2 is to be adjusted with the Owner and made payable to the Owner as trustee for the insured, as their interests may appear.

11.3 Liability Insurance

11.3.1 The Contractor and their subcontractors (if any) shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which may in any manner arise out of or result from Contractor's performance under this Contract:

- A. Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than \$700,000 per person and \$5,000,000 per occurrence unless additional coverage is required by the State. The State is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.
- B. Automobile liability for owned, non-owned and hired autos with minimum liability limits of \$700,000 per person and \$5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.
- C. The Contractor shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the services provided under this Contract involve work outside of Indiana.
- D. The Contractor's insurance coverage must meet the following additional requirements:

1. The insurer must have a certificate of authority or other appropriateauthorization to operate in the state in which the policy was issued.

2. Any deductible or self-insured retention amount or other similar obligationunder the insurance policies shall be the sole obligation of the Contractor.

3. The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract.

4. The insurance required in this Contract, through a policy or endorsement(s),shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.

5. The Contractor waives and agrees to require their insurer to waive their rightsof subrogation against the State of Indiana.

- E. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.
- F. Boiler and Machinery Explosion Insurance shall be required when the Work includes boiler, otherpressure

vessels or steam piping installation or repair.

G. After June 30, 2015, this entire Article will apply to <u>any</u> contractor that will be on the construction site pursuant to IC 5-16-13 and an acceptable certificate of insurance will be provided by each and every contractor.

ARTICLE 12 CHANGES IN THE WORK

12.1 Change Orders

12.1.1 The Owner, without invalidating the Contract, may order changes in the Work consisting of additions, deletions, or modifications, with the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be executed under the applicable conditions of the Contract Documents.

12.1.2 A Change Order is a written order to the Contractor compiled and reviewed by the Designer, prepared by the Owner and then signed by the Owner and the Contractor. The order is issued after the execution of the Contract authorizing a change in the Work, and documenting any adjustment in the Contract Sum and/or the Contract Time. The Contract Sum may be changed only by change order.

12.1.3 The value of any work involved in a change in the Work shall be determined in one or more of the following ways, in order of priority listed:

- A. by mutual acceptance of a lump sum. For all amounts over \$500, the Contractor shall provide a complete listing of quantities and unit prices of materials, hours of labor with cost per hour, and separate agreed percentages for any overhead and profit. The maximum aggregate increase for overhead and profit (including all home office and field office overhead) for any Subcontractor or for the Contractor performing its own work is fifteen (15%) percent; the maximum increase for a Contractor on work performed by a Subcontractor is five (5%) percent. If the cost of performance and payment bond(s) is shown as a separate line item in the Contractor's schedule of values for the project, then an increase will be permitted to provide for the additional cost of the bond(s). If the cost of the bond(s) is not indicated on the Contractor's schedule of values for the Project, any increase in cost for bond(s) shall be included in the Contractor's allowed overhead. For listings under \$500, list lump sum for each item, or,
- B. by unit prices named in the Contract or subsequently agreed upon, or,
- C. by cost plus a mutually acceptable fixed or percentage fee.

12.1.4 Should conditions be encountered below the surface of the ground that are:

- A. at variance with the conditions indicated by the Contract Documents, and
- B. different than could be expected after a reasonable viewing of the site by the bidders, and
- C. not evident from available soil samples,

then the Contract sum may be equitably adjusted by Change Order upon claim by Contractor made within a reasonable time after the first observance of the conditions.

12.1.5 If the Contractor claims that a written interpretation issued pursuant to Article 1.2 or a written order for a minor change issued pursuant to Article 12.3 involves additional cost or time, the Contractor shall make such claim as provided inArticle 12.2.

12.2 Claims for Additional Cost or Time

12.2.1 If the Contractor wishes to make a claim under the provisions of the Contract Documents for an increase in the Contract Sum or an extension in the Contract Time, Contractor shall give the Designer written notice thereof within fifteen (15) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor and authority received in writing from the Owner before proceeding to execute the Work, except in an emergency endangering life or property. No such claim shall be valid unless so made. Any approved change in the Contract Sum or Contract Time resulting from such claim shall be incorporated in a Change Order, initiated by the Designer and executed by the Owner. If the Designer does not initiate or the Owner execute a Change Order within a reasonable time in response to the request, such lack of action shall be construed as prima facie evidence of rejection of the request. For the purpose of this section "reasonable time" is expected not to exceed 30 days after receipt by the Owner.

12.3 Minor Changes in the Work

12.3.1 The Designer shall have authority, with Owner's approval, to order minor changes in the Work not involving an increase in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such change may be affected by written field order, with copy transmitted to the Owner. Such minor changes need not be approved in writing by the Owner; however, the Owner may provide written approval of any substitution of significant materials or equipment.

12.4 Field Orders

12.4.1 The Designer may issue written field orders, which interpret the Contract Documents in accordance with Article 1.2.4 without change in Contract Sum or Contract Time. The Contractor shall carry out such field orders promptly. The Designer shall

transmit copies of field orders to the Owner.

ARTICLE 13 EXAMINATION AND CORRECTION OF WORK

13.1 Examination of Work

13.1.1 If any portion of the Work should be covered contrary to the request of the Designer or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Designer, be uncovered for Designer's observation and shall be replaced at the Contractor's expense.

13.1.2 Examination of questioned work may be ordered by the Designer with the approval of the Owner, and if so ordered the Work must be uncovered by the Contractor. If such work were found in accordance with the Contract Documents, the cost of re- examination and replacement shall, by appropriate change order, be charged to the Owner. If such work be found not in accordance with the Contract Documents, the Contractor shall pay such costs, unless it is found that the defect in the Work was caused by a separate Contractor employed as provided in Article 6 and in that event, the separate Contractor shall pay such costs.

13.2 Correction of Work before Substantial Completion

13.2.1 The Contractor shall promptly remove from the site all work rejected by the Designer as failing to conform to the Contract Documents, whether or not incorporated in the Project, and the Contractor shall promptly replace and re-execute its own work in accordance with the Contract Documents and without cost to the Owner and shall bear the cost of repair to or replacement of all work of separate Contractors destroyed or damaged by such removal or replacement.

13.2.2 If the Contractor does not remove such rejected work within a reasonable time, fixed by written notice from the Designer, the Owner may remove and store the material at the expense of the Contractor. If the Contractor does not agree to pay or credit the Contract with the cost of such removal within ten days thereafter, the Owner may acquire a lien upon such property and materials. If proceeds of lien foreclosure do not cover all costs, which the Owner has then borne, the difference shall be deducted from the amount to be paid to the Contractor.

13.3 Correction of Work after Substantial Completion

13.3.1 The Contractor shall correct all faults and deficiencies in the Work which appear within one year of the date of substantial completion or such longer period of time as may be prescribed by the terms of any special guarantees called for by the Contract Documents, and Contractor shall pay for all damage to other work caused thereby. The Contractor shall remove all defective work where necessary.

13.3.2 If the Contractor does not correct such faulty or defective work and remove defective work where necessary, within a reasonable time fixed by the Designer in writing, the Owner may do the corrective work and remove the defective work, as described in Article 13.2 above.

13.3.3 All costs attributable to correcting and removing faulty or defective work shall be borne by the Contractor.

13.3.4 The obligations of the Contractor under this Article 13.3 shall be in addition to and not a limitation of any obligations imposed upon Contractor by special guarantees called for by the Contract Documents or otherwise prescribed by law.

ARTICLE 14 TERMINATION OF THE CONTRACT

14.1 Termination by the Contractor

14.1.1 If the Work is stopped for a period of thirty days under an order of any court or other public authority through no act of fault of the Contractor or of anyone employed by the Contractor, or if the Work should be stopped for a period of thirty days by the Contractor for the Designer's failure to issue a Certificate for payment as provided in Article 9.6, or for the Owner's failure to make payment thereon as provided in said Article, then the Contractor may, upon seven days' written notice to the Owner and the Designer, terminate the Contract and recover from the Owner, in satisfaction of all claims of the Contractor, payment for all work executed, except those items involved in Designer's failure to issue Certificate, or Owner's failure to make payment.

14.2 Termination by the Owner

14.2.1 If the Contractor should be adjudged bankrupt, or if Contractor should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of Contractor's insolvency, or if Contractor should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if Contractor should fail to make prompt payment to Subcontractors for materials or labor, or persistently disregard laws, ordinances, rules, regulations or orders of any public authority or otherwise be guilty of a substantial violation of a provision of the Contract Documents, then the Owner, upon certification by the Designer that sufficient cause exists to justify such action, may without prejudice to any right or remedy against the Contractor or its surety and after giving the Contractor and its surety seven days written

notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and finish the Work by whatever method the Owner deems expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is completed, and an accounting made as set out below.

14.2.2 If the unpaid balance of the Contract sum exceeds the cost of finishing the Work, including compensation for the Designer's additional services such excess shall be paid to the Contractor. If such cost exceeds such unpaid balance, the Contractor shall pay the difference to the Owner. The Designer shall certify the cost incurred by the Owner as hereinprovided.

STATE OF INDIANA'S STANDARD CONTRACT FOR PUBLIC WORKS CONSTRUCTION PROJECT (For projects estimated more than \$150,000)

Contract #_____

THIS PUBLIC WORKS CONSTRUCTION CONTRACT ("Contract"), entered into by and between the Indiana Department of Administration's Public Works Division ("State") and <u>XXXXXXXXXX</u> ("Contractor"), is executed pursuant to the terms and conditions set forth herein and is governed by Indiana Code 4-13.6, *et seq*. In consideration of those mutual undertakings and covenants, the parties agree as follows for the following Public Works Project:

Project Number:	XXXXXXXXXX
Project Name:	XXXXXXXXXX
Designer (if applicable):	XXXXXXXXXX
Purchase Order Number:	XXXXXXXXXX
Institution/Department:	XXXXXXXXXX
Req. No:	XXXXXXXXXX

1. Definitions. The following definition of "Contract Documents" applies throughout this Contract for the State's Public Works Project Number XXXXX ("Project").

The term "Contract Documents" shall mean and include the following: this Contract and the Project Bid Package, which includes but is not limited to the Contractor's Application for Pre-Qualification, the Public Work's Solicitation for Quotation (DAPW 30), Bid Documentation, Pre-Contract Document, General Conditions (DAPW 26), Supplementary Conditions, Instructions to Bidders, Drawings, Specifications, and Addenda issued by the State in connection with the Project and prior to the submission of the Contractor's Proposal.

Subject to Section 39, Order of Precedence, Incorporation by Reference, of this Contract, Contract Documents shall also consist of the Contractor's Proposal and Response, as well as any other documentation submitted by it in response to the Project (hereinafter collectively referred to as "Contractor's Proposal").

Additionally, Contract Documents shall include any subsequent amendments, change orders and any written interpretations issued as field orders by the Designer pursuant to General Conditions, Article 1.2 (DAPW 26) and all field orders for minor changes by the Designer pursuant to General Conditions, Article 12.3 (DAPW 26). Change orders and amendments shall be executed in the manner authorized by Section 35, *Merger and Modification*, of this Contract.

When applicable, Contract Documents shall include the Performance Bond and/or the Labor and Materials Payment Bond, as required by IC 4-13.6-7-6 and IC 4-13.6-7-7, and fully described and captured in the General Conditions (DAPW 26).

The Contract Documents are specifically and collectively incorporated herein by reference.

2. Duties of Contractor. The Contractor shall furnish all labor and materials, perform all of the work, and otherwise fulfill all of its obligations in conformance with the Contract Documents. These duties are described and captured in the Contract Documents. The Contractor agrees that not less than fifteen percent (15%) of the work, measured in dollar volume, will be performed by its own forces. Any subcontractor

employed for any part of this Contract awarded in excess of One Hundred Fifty Thousand Dollars (\$150,000.00) shall be qualified with the State of Indiana's Public Works Division Certification Board and shall have a valid Certificate of Qualification in the prime classification of work for this Contract.

3. Consideration. All payments provided herein are subject to appropriations made and funds allocated as provided by laws of the State of Indiana. The State shall pay the Contractor for performance of this Contract in current funds as follows:

BASE BID: ALTERNATE(S): TOTAL CONTRACT PRICE: \$XXXXXX.XX \$XXXXXX.XX

4. Term. The term of this Contract is [X year(s) and/or xx month(s)] commencing on the date of the last state signatory to this Contract.

5. Licensing Standards. The Contractor and its employees and subcontractors shall comply with all applicable licensing standards, certification standards, accrediting standards and any other laws, rules or regulations governing services to be provided by the Contractor pursuant to this Contract. The State shall not be required to pay the Contractor for any services performed when the Contractor, its employees or subcontractors are not in compliance with such applicable standards, laws, rules or regulations. If licensure, certification or accreditation expires or is revoked, or if disciplinary action is taken against the applicable licensure, certification or accreditation, the Contractor shall notify the State immediately and the State, at its option, may immediately terminate this Contract.

6. Escrow Agreement. Contemporaneously with the execution of this Contract, the parties may provide for the escrow of retained portions of payments to the Contractor by entering into a separate Escrow Agreement, pursuant to IC 4-13.6-7, with an escrow agent described in IC 4-13.6-7-2(b). Should the Contractor elect to escrow retainage, the Escrow Agreement will become a part of this contract as if fully contained herein.

7. Contractor's Certification. The Contractor certifies that it has been pre-qualified by the State of Indiana's Public Works Division Certification Board to perform the work and furnish the services required by this Project. The Contractor further certifies that all information and documentation submitted by it in its Application for Prequalification Certification, the Contractor's Proposal and submitted in response to the Project, is true, accurate and complete as of the date of this Contract's effectiveness. The Contractor shall immediately notify the State of any material change to such information. The Contractor shall immediately notify the State if, during the course of performance of this Contract, it or any of its principals are proposed for debarment or ineligibility, or become debarred or declared ineligible, from entering into contracts with the federal government or any department, agency or political subdivision of the State.

8. Contractor Employee Drug Testing. Pursuant to IC 4-13-18, the Contractor shall implement the employee drug testing program submitted as part of its Contractor's Proposal. The State may cancel this Contract if it determines that the Contractor:

- A. Has failed to implement its employee drug testing program during the term of this Contract;
- B. Has failed to provide information regarding implementation of the Contractor's employee drug testing program at the request of the State; or

C. Has provided to the State false information regarding the Contractor's employee drug testing program.

9. Access to Records. The Contractor and its subcontractors, if any, shall maintain all books, documents, papers, accounting records, and other evidence pertaining to all costs incurred under this Contract. They shall make such materials available at their respective offices at all reasonable times during this Contract, and for three (3) years from the date of final payment under this Contract, for inspection by the State or its authorized designees. Copies shall be furnished at no cost to the State if requested.

10. Assignment; Successors.

A. The Contractor binds its successors and assignees to all the terms and conditions of this Contract. The Contractor may assign its right to receive payments to such third parties as the Contractor may desire without the prior written consent of the State, provided that the Contractor gives written notice (including evidence of such assignment) to the State thirty (30) days in advance of any payment so assigned. The assignment shall cover all unpaid amounts under this Contract and shall not be made to more than one party.

B. The Contractor shall not assign or subcontract the whole or any part of this Contract without the State's prior written consent. Additionally, the Contractor shall provide prompt written notice to the State of any change in the Contractor's legal name or legal status so that the changes may be documented and payments to the successor entity may be made.

11. Assignment of Antitrust Claims. As part of the consideration for the award of this Contract, the Contractor assigns to the State all right, title and interest in and to any claims the Contractor now has, or may acquire, under state or federal antitrust laws relating to the products or services which are the subject of this Contract.

12. Audits. The Contractor acknowledges that it may be required to submit to an audit of funds paid through this Contract. Any such audit shall be conducted in accordance with IC § 5-11-1, *et seq.*, and audit guidelines specified by the State.

The State considers the Contractor to be a "Contractor" under 2 C.F.R. 200.331 for purposes of this Contract. However, if it is determined that the Contractor is a "subrecipient" and if required by applicable provisions of 2 C.F.R. 200 (Uniform Administrative Requirements, Cost Principles, and Audit Requirements), Contractor shall arrange for a financial and compliance audit, which complies with 2 C.F.R. 200.500 *et seq.*

13. Authority to Bind Contractor. The signatory for the Contractor represents that he/she has been duly authorized to execute this Contract on behalf of the Contractor and has obtained all necessary or applicable approvals to make this Contract fully binding upon the Contractor when his/her signature is affixed, and accepted by the State.

14. Changes in Work. The Contractor shall not commence any additional work or change the scope of the work until authorized in writing by the State. The Contractor shall make no claim for additional compensation in the absence of a prior written approval and amendment executed by all signatories hereto. This Contract may only be amended, supplemented or modified by a written document executed in the same manner as this Contract.

15. Compliance with Laws.

A. The Contractor shall comply with all applicable federal, state, and local laws, rules, regulations, and ordinances, and all provisions required thereby to be included herein are hereby incorporated by reference. The enactment or modification of any applicable state or federal statute or the promulgation of rules or regulations thereunder after execution of this Contract shall be reviewed by the State and the Contractor to determine whether the provisions of this Contract require formal modification.

B. The Contractor and its agents shall abide by all ethical requirements that apply to persons who have a business relationship with the State as set forth in IC § 4-2-6, *et seq.*, IC § 4-2-7, *et seq.* and the regulations promulgated thereunder. If the Contractor has knowledge, or would have acquired knowledge with reasonable inquiry, that a state officer, employee, or special state appointee, as those terms are defined in IC § 4-2-6-1, has a financial interest in the Contract, the Contractor shall ensure compliance with the disclosure requirements in IC § 4-2-6-10.5 prior to the execution of this Contract. If the Contractor is not familiar with these ethical requirements, the Contractor should refer any questions to the Indiana State Ethics Commission, or visit the Inspector General's website at http://www.in.gov/ig/. If the Contractor or its agents violate any applicable ethical standards, the State may, in its sole discretion, terminate this Contract immediately upon notice to the Contractor. In addition, the Contractor may be subject to penalties under IC §§ 4-2-6, 4-2-7, 35-44.1-1-4, and under any other applicable laws.

C. The Contractor certifies by entering into this Contract that neither it nor its principal(s) is presently in arrears in payment of taxes, permit fees or other statutory, regulatory or judicially required payments to the State of Indiana. The Contractor agrees that any payments currently due to the State of Indiana may be withheld from payments due to the Contractor. Additionally, further work or payments may be withheld, delayed, or denied and/or this Contract suspended until the Contractor is current in its payments and has submitted proof of such payment to the State.

D. The Contractor warrants that it has no current, pending or outstanding criminal, civil, or enforcement actions initiated by the State, and agrees that it will immediately notify the State of any such actions. During the term of such actions, the Contractor agrees that the State may delay, withhold, or deny work under any supplement, amendment, change order or other contractual device issued pursuant to this Contract.

E. If a valid dispute exists as to the Contractor's liability or guilt in any action initiated by the State or its agencies, and the State decides to delay, withhold, or deny work to the Contractor, the Contractor may request that it be allowed to continue, or receive work, without delay. The Contractor must submit, in writing, a request for review to the Indiana Department of Administration (IDOA) following the procedures for disputes outlined herein. A determination by IDOA shall be binding on the parties. Any payments that the State may delay, withhold, deny, or apply under this section shall not be subject to penalty or interest, except as permitted by IC § 5-17-5.

F. The Contractor warrants that the Contractor and its subcontractors, if any, shall obtain and maintain all required permits, licenses, registrations, and approvals, and shall comply with all health, safety, and environmental statutes, rules, or regulations in the performance of work activities for the State. Failure to do so may be deemed a material breach of this Contract and grounds for immediate termination and denial of further work with the State.

G. The Contractor affirms that, if it is an entity described in IC Title 23, it is properly registered and owes no outstanding reports to the Indiana Secretary of State.

H. As required by IC § 5-22-3-7:

- (1) The Contractor and any principals of the Contractor certify that:
 - (A) the Contractor, except for de minimis and nonsystematic violations, has not violated the terms of:
 - (i) IC §24-4.7 [Telephone Solicitation Of Consumers];
 - (ii) IC §24-5-12 [Telephone Solicitations]; or
 - (iii) IC §24-5-14 [Regulation of Automatic Dialing Machines];

in the previous three hundred sixty-five (365) days, even if IC § 24-4.7 is preempted by federal law; and

(B) the Contractor will not violate the terms of IC § 24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.

- (2) The Contractor and any principals of the Contractor certify that an affiliate or principal of the Contractor and any agent acting on behalf of the Contractor or on behalf of an affiliate or principal of the Contractor, except for de minimis and nonsystematic violations,
 - (A) has not violated the terms of IC § 24-4.7 in the previous three hundred sixty-five (365) days, even if IC §24-4.7 is preempted by federal law; and
 - (B) will not violate the terms of IC § 24-4.7 for the duration of the Contract, even if IC §24-4.7 is preempted by federal law.

16. Condition of Payment. All services provided by the Contractor under this Contract must be performed to the State's reasonable satisfaction, as determined at the discretion of the undersigned State representative and in accordance with all applicable federal, state, local laws, ordinances, rules and regulations. The State shall not be required to pay for work found to be unsatisfactory, inconsistent with this Contract or performed in violation of and federal, state or local statute, ordinance, rule or regulation.

17. Confidentiality of State Information. The Contractor understands and agrees that data, materials, and information disclosed to the Contractor may contain confidential and protected information. The Contractor covenants that data, material, and information gathered, based upon or disclosed to the Contractor for the purpose of this Contract will not be disclosed to or discussed with third parties without the prior written consent of the State.

The parties acknowledge that the services to be performed by Contractor for the State under this Contract may require or allow access to data, materials, and information containing Social Security numbers maintained by the State in its computer system or other records. In addition to the covenant made above in this section and pursuant to 10 IAC 5-3-1(4), the Contractor and the State agree to comply with the provisions of IC § 4-1-10 and IC § 4-1-11. If any Social Security number(s) is/are disclosed by Contractor, Contractor agrees to pay the cost of the notice of disclosure of a breach of the security of the system in addition to any other claims and expenses for which it is liable under the terms of this contract.

18. Continuity of Services.

A. The Contractor recognizes that the service(s) to be performed under this Contract are vital to the State and must be continued without interruption and that, upon Contract expiration, a successor, either the State or another contractor, may continue them. The Contractor agrees to:

- 1. Furnish phase-in training; and
- 2. Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

- B. The Contractor shall, upon the State's written notice:
 - 1. Furnish phase-in, phase-out services for up to sixty (60) days after this Contract expires; and
 - 2. Negotiate in good faith a plan with a successor to determine the nature and extent of phasein, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the State's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this Contract are maintained at the required level of proficiency.

C. The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this Contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

D. The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (i.e., costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations).

19. Debarment and Suspension.

A. The Contractor certifies by entering into this Contract that neither it nor its principals nor any of its subcontractors are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from entering into this Contract by any federal agency or by any department, agency or political subdivision of the State of Indiana. The term "principal" for purposes of this Contract means an officer, director, owner, partner, key employee or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor.

B. The Contractor certifies that it has verified the state and federal suspension and debarment status for all subcontractors receiving funds under this Contract and shall be solely responsible for any recoupment, penalties or costs that might arise from use of a suspended or debarred subcontractor. The Contractor shall immediately notify the State if any subcontractor becomes debarred or suspended, and shall, at the State's request, take all steps required by the State to terminate its contractual relationship with the subcontractor for work to be performed under this Contract.

20. Default by State. If the State, sixty (60) days after receipt of written notice, fails to correct or cure any material breach of this Contract, the Contractor may cancel and terminate this Contract and institute measures to collect monies due up to and including the date of termination.

21. Disputes.

A. Should any disputes arise with respect to this Contract, the Contractor and the State agree to act immediately to resolve such disputes. Time is of the essence in the resolution of disputes.

B. The Contractor agrees that, the existence of a dispute notwithstanding, it will continue without delay to carry out all of its responsibilities under this Contract that are not affected by the dispute. Should the Contractor fail to continue to perform its responsibilities regarding all non-disputed work, without delay,

any additional costs incurred by the State or the Contractor as a result of such failure to proceed shall be borne by the Contractor, and the Contractor shall make no claim against the State for such costs.

C. If the parties are unable to resolve a contract dispute between them after good faith attempts to do so, a dissatisfied party shall submit the dispute to the Commissioner of the Indiana Department of Administration for resolution. The dissatisfied party shall give written notice to the Commissioner and the other party. The notice shall include: (1) a description of the disputed issues, (2) the efforts made to resolve the dispute, and (3) a proposed resolution. The Commissioner shall promptly issue a Notice setting out documents and materials to be submitted to the Commissioner in order to resolve the dispute; the Notice may also afford the parties the opportunity to make presentations and enter into further negotiations. Within thirty (30) business days of the conclusion of the final presentations, the Commissioner shall issue a written decision and furnish it to both parties. The Commissioner's decision shall be the final and conclusive administrative decision unless either party serves on the Commissioner and the other party, within ten (10) business days after receipt of the Commissioner's decision, a written request for reconsideration and modification of the written decision. If the Commissioner does not modify the written decision within thirty (30) business days, either party may take such other action helpful to resolving the dispute, including submitting the dispute to an Indiana court of competent jurisdiction. If the parties accept the Commissioner's decision, it may be memorialized as a written Amendment to this Contract if appropriate.

D. The State may withhold payments on disputed items pending resolution of the dispute. The unintentional nonpayment by the State to the Contractor of one or more invoices not in dispute in accordance with the terms of this Contract will not be cause for the Contractor to terminate this Contract, and the Contractor may bring suit to collect these amounts without following the disputes procedure contained herein.

E. With the written approval of the Commissioner of the Indiana Department of Administration, the parties may agree to forego the process described in subdivision C. relating to submission of the dispute to the Commissioner.

F. This paragraph shall not be construed to abrogate provisions of IC § 4-6-2-11 in situations where dispute resolution efforts lead to a compromise of claims in favor of the State as described in that statute. In particular, releases or settlement agreements involving releases of legal claims or potential legal claims of the state should be processed consistent with IC § 4-6-2-11, which requires approval of the Governor and Attorney General.

22. Drug-Free Workplace Certification. As required by Executive Order No. 90-5 dated April 12, 1990, issued by the Governor of Indiana, the Contractor hereby covenants and agrees to make a good faith effort to provide and maintain a drug-free workplace. The Contractor will give written notice to the State within ten (10) days after receiving actual notice that the Contractor, or an employee of the Contractor in the State of Indiana, has been convicted of a criminal drug violation occurring in the workplace. False certification or violation of this certification may result in sanctions including, but not limited to, suspension of contract payments, termination of this Contract and/or debarment of contracting opportunities with the State for up to three (3) years.

In addition to the provisions of the above paragraph, if the total amount set forth in this Contract is in excess of \$25,000.00, the Contractor certifies and agrees that it will provide a drug-free workplace by:

A. Publishing and providing to all of its employees a statement notifying them that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance

is prohibited in the Contractor's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

- B. Establishing a drug-free awareness program to inform its employees of (1) the dangers of drug abuse in the workplace; (2) the Contractor's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;
- C. Notifying all employees in the statement required by subparagraph (A) above that as a condition of continued employment, the employee will (1) abide by the terms of the statement; and (2) notify the Contractor of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- D. Notifying the State in writing within ten (10) days after receiving notice from an employee under subdivision (C)(2) above, or otherwise receiving actual notice of such conviction;
- E. Within thirty (30) days after receiving notice under subdivision (C)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) taking appropriate personnel action against the employee, up to and including termination; or (2) requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and
- F. Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (A) through (E) above.

23. Employment Eligibility Verification As required by IC § 22-5-1.7, the Contractor swears or affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien. The Contractor further agrees that:

A. The Contractor shall enroll in and verify the work eligibility status of all his/her/its newly hired employees through the E-Verify program as defined in IC § 22-5-1.7-3. The Contractor is not required to participate should the E-Verify program cease to exist. Additionally, the Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

B. The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

C. The Contractor shall require his/her/its subcontractors, who perform work under this Contract, to certify to the Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and that the subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification throughout the duration of the term of a contract with a subcontractor.

The State may terminate for default if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the State.

24. Employment Option. If the State determines that it would be in the State's best interest to hire an employee of the Contractor, the Contractor will release the selected employee from any non-competition agreements that may be in effect. This release will be at no cost to the State or the employee.

25. Force Majeure. In the event that either party is unable to perform any of its obligations under this Contract or to enjoy any of its benefits because of natural disaster or decrees of governmental bodies not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Contract shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so affected may, by giving written notice, terminate this Contract.

26. Funding Cancellation. As required by Financial Management Circular 3.3 and IC § 5-22-17-5, when the Director of the State Budget Agency makes a written determination that funds are not appropriated or otherwise available to support continuation of performance of this Contract, this Contract shall be canceled. A determination by the Director of State Budget Agency that funds are not appropriated or otherwise available to support continuation of performance shall be final and conclusive.

27. Governing Law. This Contract shall be governed, construed, and enforced in accordance with the laws of the State of Indiana, without regard to its conflict of laws rules. Suit, if any, must be brought in the State of Indiana.

28. HIPAA Compliance. If this Contract involves services, activities or products subject to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Contractor covenants that it will appropriately safeguard Protected Health Information (defined in 45 CFR 160.103), and agrees that it is subject to, and shall comply with, the provisions of 45 CFR 164 Subpart E regarding use and disclosure of Protected Health Information.

29. Indemnification. The Contractor agrees to indemnify, defend, and hold harmless the State, its agents, officials, and employees from all claims and suits including court costs, attorney's fees, and other expenses caused by any act or omission of the Contractor and/or its subcontractors, if any, in the performance of this Contract. The State shall <u>not</u> provide such indemnification to the Contractor.

30. Independent Contractor; Workers' Compensation Insurance. The Contractor is performing as an independent entity under this Contract. No part of this Contract shall be construed to represent the creation of an employment, agency, partnership or joint venture agreement between the parties. Neither party will assume liability for any injury (including death) to any persons, or damage to any property, arising out of the acts or omissions of the agents, employees or subcontractors of the other party. The Contractor shall provide all necessary unemployment and workers' compensation insurance for the Contractor's employees, and Contractor shall provide the State with a Certificate of Insurance evidencing such coverage prior to starting work under this Contract.

31. Indiana Veteran Owned Small Business Enterprise Compliance. Award of this Contract was based, in part, on the Indiana Veteran Owned Small Business Enterprise ("IVOSB") participation plan, as detailed in the IVOSB Subcontractor Commitment Form, commonly referred to as "Attachment A-1" in the procurement documentation and incorporated by reference herein. Therefore, any changes to this information during the Contract term must be approved by IDOA's Division of Supplier Diversity and may require an amendment. It is the State's expectation that the Contractor will meet the subcontractor

commitments during the Contract term. The following certified IVOSB subcontractor(s) will be participating in this Contract: [Add additional IVOSBs using the same format.]

IVOSB	COMPANY NAME	PHONE	EMAIL OF CONTACT PERSON	PERCENT

Briefly describe the IVOSB service(s)/product(s) to be provided under this Contract and include the estimated date(s) for utilization during the Contract term:

A copy of each subcontractor agreement must be submitted to the Division of Supplier Diversity within thirty (30) days of the effective date of this Contract. The subcontractor agreements may be uploaded into payment Pav Audit (Indiana's subcontractor auditing system), emailed to IndianaVeteransPreference@idoa.IN.gov, or mailed to IDOA, 402 W. Washington Street, Room W-462, Indianapolis, IN 46204. Failure to provide a copy of any subcontractor agreement may be deemed a violation of the rules governing IVOSB procurement and may result in sanctions allowable under 25 IAC 9-5-2. Requests for changes must be submitted to IndianaVeteransPreference@idoa.IN.gov for review and approval before changing the participation plan submitted in connection with this Contract.

The Contractor shall report payments made to certified IVOSB subcontractors under this Contract on a monthly basis using Pay Audit. The Contractor shall notify subcontractors that they must confirm payments received from the Contractor in Pay Audit. The Pay Audit system can be accessed on the IDOA webpage at: www.in.gov/idoa/mwbe/payaudit.htm. The Pay Audit system can be accessed on the IDOA webpage at: www.in.gov/idoa/mwbe/payaudit.htm. The Contractor may also be required to report IVOSB certified subcontractor payments directly to the Division of Supplier Diversity, as reasonably requested and in the format required by the Division of Supplier Diversity.

The Contractor's failure to comply with the provisions in this clause may be considered a material breach of the Contract.

32. Information Technology Enterprise Architecture Requirements. If this Contract involves information technology-related products or services, the Contractor agrees that all such products or services are compatible with any of the technology standards found at https://www.in.gov/iot/2394.htm that are applicable, including the assistive technology standard. The State may terminate this Contract for default if the terms of this paragraph are breached.

33. Insurance

- A. The Contractor and their subcontractors (if any) shall secure and keep in force during the term of this Contract the following insurance coverages (if applicable) covering the Contractor for any and all claims of any nature which may in any manner arise out of or result from Contractor's performance under this Contract. The required limits of liability can be obtained with a combination of primary and excess liability policies.
 - 1. Commercial general liability, including contractual coverage, and products or completed operations coverage (if applicable), with minimum liability limits not less than \$700,000 per person and \$5,000,000 per occurrence unless additional

coverage is required by the State. The State is to be named as an additional insured on a primary, non-contributory basis for any liability arising directly or indirectly under or in connection with this Contract.

- 2. Automobile liability for owned, non-owned and hired autos with minimum liability limits of \$700,000 per person and \$5,000,000 per occurrence. The State is to be named as an additional insured on a primary, non-contributory basis.
- 3. The Contractor shall secure the appropriate Surety or Fidelity Bond(s) as required by the state department served or by applicable statute.
- 4. The Contractor and their subcontractors shall provide proof of such insurance coverage by tendering to the undersigned State representative a certificate of insurance prior to the commencement of this Contract and proof of workers' compensation coverage meeting all statutory requirements of IC §22-3-2. In addition, proof of an "all states endorsement" covering claims occurring outside the State is required if any of the services provided under this Contract involve work outside of Indiana.
- B. The Contractor's insurance coverage must meet the following additional requirements:
 - 1. The insurer must have a certificate of authority or other appropriate authorization to operate in the state in which the policy was issued.
 - 2. Any deductible or self-insured retention amount or other similar obligation under the insurance policies shall be the sole obligation of the Contractor.
 - 3. The State will be defended, indemnified and held harmless to the full extent of any coverage actually secured by the Contractor in excess of the minimum requirements set forth above. The duty to indemnify the State under this Contract shall not be limited by the insurance required in this Contract.
 - 4. The insurance required in this Contract, through a policy or endorsement(s), shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State agency.
 - 5. The Contractor waives and agrees to require their insurer to waive their rights of subrogation against the State of Indiana.
- C. Failure to provide insurance as required in this Contract may be deemed a material breach of contract entitling the State to immediately terminate this Contract. The Contractor shall furnish a certificate of insurance and all endorsements to the State before the commencement of this Contract.

34. Key Person(s).

A. If both parties have designated that certain individual(s) are essential to the services offered, the parties agree that should such individual(s) leave their employment during the term of this Contract for whatever reason, the State shall have the right to terminate this Contract upon thirty (30) days' prior written notice.

B. In the event that the Contractor is an individual, that individual shall be considered a key person and, as such, essential to this Contract. Substitution of another for the Contractor shall not be permitted without express written consent of the State.

Nothing in Sections A and B, above shall be construed to prevent the Contractor from using the services of others to perform tasks ancillary to those tasks which directly require the expertise of the key person. Examples of such ancillary tasks include secretarial, clerical, and common labor duties. The Contractor shall, at all times, remain responsible for the performance of all necessary tasks, whether performed by a key person or others.

Key person(s) to this Contract is/are:

35. Merger & Modification. This Contract constitutes the entire agreement between the parties. No understandings, agreements, or representations, oral or written, not specified within this Contract will be valid provisions of this Contract. This Contract may not be modified, supplemented, or amended, except by written agreement signed by all necessary parties.

36. Minority and Women's Business Enterprises Compliance. Award of this Contract was based, in part, on the Minority and/or Women's Business Enterprise ("MBE" and/or "WBE") participation plan as detailed in the Minority and Women's Business Enterprises Subcontractor Commitment Form, commonly referred to as "Attachment A" in the procurement documentation and incorporated by reference herein. Therefore, any changes to this information during the Contract term must be approved by the Division of Supplier Diversity and may require an amendment. It is the State's expectation that the Contractor will meet the subcontractor commitments during the Contract term.

The following Division of Supplier Diversity certified MBE and/or WBE subcontractors will be participating in this Contract: [Add additional MBEs and WBEs using the same format.]

MBE or WBE	COMPANY NAME	PHONE	EMAIL OF CONTACT PERSON	PERCENT

Briefly describe the MBE and/or WBE service(s)/product(s) to be provided under this Contract and include the estimated date(s) for utilization during the Contract term:

A copy of each subcontractor agreement must be submitted to the Division of Supplier Diversity within thirty (30) days of the effective date of this Contract. The subcontractor agreements may be uploaded into Pay Audit (Indiana's subcontractor payment auditing system), emailed to MWBECompliance@idoa.IN.gov, or mailed to Division of Supplier Diversity, 402 W. Washington Street, Indianapolis IN 46204. Failure to provide a copy of any subcontractor agreement may be deemed a violation of the rules governing MBE/WBE procurement and may result in sanctions allowable under 25 IAC 5-7-8. Requests for changes must be submitted to MWBECompliance@idoa.IN.gov for review and approval before changing the participation plan submitted in connection with this Contract.

The Contractor shall report payments made to Division of Supplier Diversity certified subcontractors under this Contract on a monthly basis using Pay Audit. The Contractor shall notify subcontractors that

they must confirm payments received from the Contractor in Pay Audit. The Pay Audit system can be accessed on the IDOA webpage at: <u>www.in.gov/idoa/mwbe/payaudit.htm</u>. The Contractor may also be required to report Division of Supplier Diversity certified subcontractor payments directly to the Division of Supplier Diversity, as reasonably requested and in the format required by the Division of Supplier Diversity.

The Contractor's failure to comply with the provisions in this clause may be considered a material breach of the Contract.

37. Nondiscrimination. Pursuant to the Indiana Civil Rights Law, specifically including IC § 22-9-1-10, and in keeping with the purposes of the federal Civil Rights Act of 1964, the Age Discrimination in Employment Act, and the Americans with Disabilities Act, the Contractor covenants that it shall not discriminate against any employee or applicant for employment relating to this Contract with respect to the hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of the employee's or applicant's race, color, national origin, religion, sex, age, disability, ancestry, status as a veteran, or any other characteristic protected by federal, state, or local law ("Protected Characteristics"). Contractor certifies compliance with applicable federal laws, regulations, and executive orders prohibiting discrimination based on the Protected Characteristics in the provision of services. Breach of this paragraph may be regarded as a material breach of this Contract, but nothing in this paragraph shall be construed to imply or establish an employment relationship between the State and any applicant or employee of the Contractor or any subcontractor.

The State is a recipient of federal funds, and therefore, where applicable, Contractor and any subcontractors shall comply with requisite affirmative action requirements, including reporting, pursuant to 41 CFR Chapter 60, as amended, and Section 202 of Executive Order 11246 as amended by Executive Order 13672.

38. Notice to Parties. Whenever any notice, statement or other communication is required under this Contract, it will be sent by E-mail or first-class U.S. mail service to the following addresses, unless otherwise specifically advised. Such notice, statement or other communication shall include the Public Works Project Number in the subject line of the E-mail and the body of the notice or other communication.

A. Notices to the State shall be sent to:
Public Works Division, Director Indiana Department of Administration 402 W Washington St Room W462 Indianapolis, IN 46204 E-mail: <u>rgrossman@idoa.IN.gov</u>
B. Notices to the Contractor shall be sent to:
[INSERT CONTRACTOR NAME] [INSERT CONTRACTOR'S ADDRESS]

As required by IC § 4-13-2-14.8, payments to the Contractor shall be made via electronic funds transfer in accordance with instructions filed by the Contractor with the Indiana Auditor of State.

E-mail:

39. Order of Precedence; Incorporation by Reference. Any inconsistency or ambiguity in this Contract shall be resolved by giving precedence in the following order: (1) this Contract, (2) the Project Bid Package, (3) attachments prepared by the State; (4) Contractor's Proposal; and (5) attachments prepared by the

Contractor. All of the foregoing are incorporated fully by reference. All attachments, and all documents referred to in this paragraph are hereby incorporated fully by reference.

40. Ownership of Documents and Materials.

A. All documents, records, programs, applications, data, algorithms, film, tape, articles, memoranda, and other materials (the "Materials") not developed or licensed by the Contractor prior to execution of this Contract, but specifically developed under this Contract shall be considered "work for hire" and the Contractor hereby transfers and assigns any ownership claims to the State so that all Materials will be the property of the State. If ownership interest in the Materials cannot be assigned to the State, the Contractor grants the State a non-exclusive, non-cancelable, perpetual, worldwide royalty-free license to use the Materials and to use, modify, copy and create derivative works of the Materials.

B. Use of the Materials, other than related to contract performance by the Contractor, without the prior written consent of the State, is prohibited. During the performance of this Contract, the Contractor shall be responsible for any loss of or damage to the Materials developed for or supplied by the State and used to develop or assist in the services provided while the Materials are in the possession of the Contractor. Any loss or damage thereto shall be restored at the Contractor's expense. The Contractor shall provide the State full, immediate, and unrestricted access to the Materials and to Contractor's work product during the term of this Contract.

41. Payments.

A. All payments shall be made thirty five (35) days in arrears in conformance with State fiscal policies and procedures and, as required by IC §4-13-2-14.8, the direct deposit by electronic funds transfer to the financial institution designated by the Contractor in writing unless a specific waiver has been obtained from the Indiana Auditor of State. No payments will be made in advance of receipt of the goods or services that are the subject of this Contract except as permitted by IC § 4-13-2-20.

B. If the Contractor is being paid in advance for the maintenance of equipment, software or a service as a subscription, then pursuant to IC § 4-13-2-20(b)(14), the Contractor agrees that if it fails to fully provide or perform under this Contract, upon receipt of written notice from the State, it shall promptly refund the consideration paid, pro-rated through the date of non-performance.

42. Penalties/Interest/Attorney's Fees. The State will in good faith perform its required obligations hereunder and does not agree to pay any penalties, liquidated damages, interest or attorney's fees, except as permitted by Indiana law, in part, IC § 5-17-5, IC § 34-54-8, IC § 34-13-1 and IC § 34-52-2.

Notwithstanding the provisions contained in IC § 5-17-5, any liability resulting from the State's failure to make prompt payment shall be based solely on the amount of funding originating from the State and shall not be based on funding from federal or other sources.

43. Progress Reports. The Contractor shall submit progress reports to the State upon request. The report shall be oral, unless the State, upon receipt of the oral report, should deem it necessary to have it in written form. The progress reports shall serve the purpose of assuring the State that work is progressing in line with the schedule, and that completion can be reasonably assured on the scheduled date.

44. Public Record.

The Contractor acknowledges that the State will not treat this Contract as containing confidential information, and the State will post this Contract on the transparency portal as required by Executive

Order 05-07 and IC § 5-14-3.5-2. Use by the public of the information contained in this Contract shall not be considered an act of the State.

45. Renewal Option. This Contract may be renewed under the same terms and conditions, subject to the approval of the Commissioner of the Department of Administration and the State Budget Director in compliance with IC § 5-22-17-4. The term of the renewed contract may not be longer than the term of the original contract.

46. Severability. The invalidity of any section, subsection, clause or provision of this Contract shall not affect the validity of the remaining sections, subsections, clauses or provisions of this Contract.

47. Substantial Performance. This Contract shall be deemed to be substantially performed only when fully performed according to its terms and conditions and any written amendments or supplements.

48. Taxes. The State is exempt from most state and local taxes and many federal taxes. The State will not be responsible for any taxes levied on the Contractor as a result of this Contract.

49. Termination for Convenience. This Contract may be terminated, in whole or in part, by the State, which shall include and is not limited to the Indiana Department of Administration and the State Budget Agency whenever, for any reason, the State determines that such termination is in its best interest. Termination of services shall be effected by delivery to the Contractor of a Termination Notice at least thirty (30) days prior to the termination effective date, specifying the extent to which performance of services under such termination becomes effective. The Contractor shall be compensated for services properly rendered prior to the effective date of termination. The State will not be liable for services herein provided but in no case shall total payment made to the Contractor exceed the original contract price or shall any price increase be allowed on individual line items if canceled only in part prior to the original termination date. For the purposes of this paragraph, the parties stipulate and agree that the Indiana Department of Administration shall be deemed to be a party to this agreement with authority to terminate the same for convenience when such termination is determined by the Commissioner of IDOA to be in the best interests of the State.

50. Termination for Default.

- A. With the provision of thirty (30) days' notice to the Contractor, the State may terminate this Contract in whole or in part if the Contractor fails to:
 - 1. Correct or cure any breach of this Contract; the time to correct or cure the breach may be extended beyond thirty (30) days if the State determines progress is being made and the extension is agreed to by the parties;
 - 2. Deliver the supplies or perform the services within the time specified in this Contract or any extension;
 - 3. Make progress so as to endanger performance of this Contract; or
 - 4. Perform any of the other provisions of this Contract.
- B. If the State terminates this Contract in whole or in part, it may acquire, under the terms and in the manner the State considers appropriate, supplies or services similar to those terminated, and the Contractor will be liable to the State for any excess costs for those supplies or services. However, the Contractor shall continue the work not terminated.

- C. The State shall pay the contract price for completed supplies delivered and services accepted. The Contractor and the State shall agree on the amount of payment for manufacturing materials delivered and accepted and for the protection and preservation of the property. Failure to agree will be a dispute under the Disputes clause. The State may withhold from these amounts any sum the State determines to be necessary to protect the State against loss because of outstanding liens or claims of former lien holders.
- D. The rights and remedies of the State in this clause are in addition to any other rights and remedies provided by law or equity or under this Contract.

51. Travel. No expenses for travel will be reimbursed unless specifically authorized by this Contract. Permitted expenses will be reimbursed at the rate paid by the State and in accordance with the *Indiana Department of Administration's Travel Policies and Procedures* in effect at the time the expenditure is made. Out-of-state travel requests must be reviewed by the State for availability of funds and for conformance with *Travel Policy* guidelines.

52. Waiver of Rights. No right conferred on either party under this Contract shall be deemed waived, and no breach of this Contract excused, unless such waiver is in writing and signed by the party claimed to have waived such right. Neither the State's review, approval or acceptance of, nor payment for, the services required under this Contract shall be construed to operate as a waiver of any rights under this Contract or of any cause of action arising out of the performance of this Contract, and the Contractor shall be and remain liable to the State in accordance with applicable law for all damages to the State caused by the Contractor's negligent performance of any of the services furnished under this Contract.

53. Work Standards. The Contractor shall execute its responsibilities by following and applying at all times the highest professional and technical guidelines and standards. If the State becomes dissatisfied with the work product of or the working relationship with those individuals assigned to work on this Contract, the State may request in writing the replacement of any or all such individuals, and the Contractor shall grant such request.

THE REMAINDER OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

Non-Collusion and Acceptance

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Contract other than that which appears upon the face hereof. Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.

Agreement to Use Electronic Signatures

I agree, and it is my intent, to sign this Contract by accessing State of Indiana Supplier Portal using the secure password assigned to me and by electronically submitting this Contract to the State of Indiana. I understand that my signing and submitting this Contract in this fashion is the legal equivalent of having placed my handwritten signature on the submitted Contract and this affirmation. I understand and agree that by electronically signing and submitting this Contract in this fashion I am affirming to the truth of the information contained herein. I understand that this Contract will not become binding on the State until it has been approved by the Department of Administration, the State Budget Agency, and the Office of the Attorney General, which approvals will be posted on the Active Contracts Database: https://secure.in.gov/apps/idoa/contractsearch/

IN WITNESS WHEREOF, the Contractor and the State have, through their duly authorized representatives, entered into this Contract for Public Works Project Number <u>XXXXX</u>. The parties, having read and understood the foregoing terms of this Contract, do by their respective signatures dated below agree to the terms thereof.

<u>Contractor: XXXXXXXXX</u>	Department of Administration Public Works Division
By:	By:
Printed Name:	Robert Grossman, Director
Title:	<i>For IDOA Commissioner if less than \$10,000,000</i>
Date:	Date:
Approved by:	Approved by:
Department of Administration	State Budget Agency
By:(for)	By:(for)
Rebecca Holwerda, Commissioner	Zachary Q. Jackson, Director
Date:	Date:

Approved as to Form and Legality: Form approval has been granted by the Office of the Attorney General pursuant to IC 4-13-2-14.3(e) on October 5, 2022. FA 22-49

This document prepared and reviewed by:

Counsel, Indiana Department of Administration

STATE OF INDIANA'S PUBLIC WORKS CONSTRUCTION CONTRACT CHANGE ORDER/AMENDMENT #_ Contract #_____

THIS IS AMENDMENT #_ to the Public Works Construction Contract ("Contract") entered into by and between the Indiana Department of Administration's Public Works Division ("State") and <u>XXXXXXXXXX</u> ("Contractor"), executed pursuant to the terms and conditions set forth herein, governed by Indiana Code 4-13.6, *et seq.* and approved by the last State signatory on ______.

In consideration of the mutual undertakings and covenants hereinafter set forth, the parties agree to amend the Contract as follows:

1. A written change has been requested by the Contractor, as detailed in <u>Amendment # Exhibit A</u>, attached hereto and incorporated herein, in connection with the following Public Works Project:

Project Number:	XXXXXXXXXX
Project Name:	XXXXXXXXXX
Designer (if applicable):	XXXXXXXXXX
Purchase Order Number:	XXXXXXXXXX
Institution Department:	XXXXXXXXXX
Req. No:	XXXXXXXXXX
Change Order No:	XXXXXXXXXX

2. [] The Designer has recommended the Contractor's change in writing, as evidenced by <u>Amendment # Exhibit</u>, attached hereto and incorporated herein.
 [] No Designer has been contracted for this Project.

3. The State has approved the change request, as detailed in <u>Amendment # Exhibit B</u>, attached hereto and incorporated herein.

4. The consideration for this Amendment # is as follows:

ORIGINAL CONTRACT VALUE	\$
TOTAL PREVIOUS AMENDMENT VALUE	\$
PRE-AMENDMENT CONTRACT TOTAL	\$
[] INCREASE/ [] DECREASE THIS AMENDMENT	\$ <u> </u>
[] <u>INCREASE/[] DECREASE REMEDIATION ALLOWANCE</u>	\$

NEW CONTRACT TOTAL REMUNERATION

This change represents a **\$XX,XXX [**] increase/[] decrease in the original contract and a **\$XX,XXX [**] increase/[] decrease in remediation allowance, for a total **[**] increase/**[**] decrease of **\$XX,XXX**. Retainage **[**] will/**[**] will not be withheld on this change order amount.

5. The term of this Contract is hereby [] extended for an additional XXX days.
 [] decreased by XXX days.
 [] remains the same.

Therefore, the Contract shall terminate on _____

6. A. Minority and Women's Business Enterprises Compliance. *Include one of the options, as applicable;* delete the inapplicable option.

\$

<u>OPTION 1</u>-to be used if the MBE and/or WBE subcontractor(s) will continue to be utilized during the extension period.

As required by 25 IAC 5-6-2(b), the following Division of Supplier Diversity certified MBE or WBE subcontractor(s) will be participating in this Contract under this Change Order/Amendment. This participation represents [] the same percentage or [] an increase of _____% above the original MBE and/or WBE commitment. [Add additional MBEs and WBEs using the same format.]

MBE or WBE	COMPANY NAME	PHONE	EMAIL OF CONTACT PERSON	PERCENT
	be the MBE and/or WBE s lization during the extens	() 1	(s) to be provided under this Amendn	nent and include the estimated

A copy of each subcontractor agreement must be submitted to the Division of Supplier Diversity within thirty (30) days of the effective date of this Amendment. The subcontractor agreements may be uploaded into Pay Audit (Indiana's subcontractor payment auditing system), emailed to <u>MWBECompliance@idoa.IN.gov</u>, or mailed to Division of Supplier Diversity, 402 W. Washington Street, RoomW-462, Indianapolis IN 46204. Failure to provide a copy of any subcontractor agreement may be deemed a violation of the rules governing MBE/WBE procurement and may result in sanctions allowable under 25 IAC 5-7-8. Requests for changes must be submitted to <u>MWBECompliance@idoa.IN.gov</u> for review and approval before changing the participation plan submitted in connection with this Amendment.

The Contractor shall report payments made to Division of Supplier Diversity certified subcontractors under this Contract on a monthly basis using Pay Audit. The Contractor shall notify subcontractors that they must confirm payments received from Contractor in Pay Audit. The Pay Audit system can be accessed on the IDOA webpage at: www.in.gov/idoa/mwbe/payaudit.htm. Contractor may also be required to report Division of Supplier Diversity certified subcontractor payments directly to the Division of Supplier Diversity, as reasonably requested and in the format required by the Division of Supplier Diversity.

Contractor's failure to comply with the provisions in this clause may be considered a material breach of the Contract.

<u>OPTION 2</u> – to be used if the original Contract identified subcontractors in this clause, but the Contractor will not be utilizing the MBE and WBE subcontractors during the extension period.

No certified MBE or WBE subcontractors will be participating in this Contract under this Change Order/Amendment.

B. Indiana Veteran Owned Small Business Enterprises Compliance. *Include one of the options, as applicable; delete the inapplicable option.*

<u>OPTION 1</u>-to be used if the IVOSB subcontractor(s) will continue to be utilized during the extension period.

Rev 9/22

As required by 25 IAC 9-4-1(b), the following certified IVOSB subcontractors will be participating in this Contract under this Change Order/Amendment. This participation represents [] the same percentage or [] an increase of _____% above the original IVOSB commitment. [Add additional IVOSBs using the same format.]

IVOSB	COMPANY NAME	PHONE	EMAIL OF CONTACT PERSON	PERCENT

Page **2** of 7

Briefly describe the IVOSB service(s)/product(s) to be provided under this Amendment and include the estimated date(s) for utilization during the extension period:

A copy of each subcontractor agreement must be submitted to IDOA's Division of Supplier Diversity within thirty (30) days of the effective date of this Amendment. The subcontractor agreements may be uploaded into Pay Audit (Indiana's subcontractor payment auditing system), emailed to IndianaVeteransPreference@idoa.IN.gov, or mailed to IDOA, 402 W. Washington Street, Room W-462, Indianapolis, IN 46204. Failure to provide a copy of any subcontractor agreement may be deemed a violation of the rules governing IVOSB procurement and may result in sanctions allowable under 25 IAC 9-5-2. Requests for changes must be submitted to IndianaVeteransPreference@idoa.IN.gov for review and approval before changing the participation plan submitted in connection with this Amendment.

The Contractor shall report payments made to certified IVOSB subcontractors under this Contract on a monthly basis using Pay Audit. The Contractor shall notify subcontractors that they must confirm payments received from Contractor in Pay Audit. The Pay Audit system can be accessed on the IDOA webpage at: www.in.gov/idoa/mwbe/payaudit.htm. The Contractor may also be required to report IVOSB certified subcontractor payments directly to the Division of Supplier Diversity, as reasonably requested and in the format required by the Division of Supplier Diversity.

The Contractor's failure to comply with the provisions in this clause may be considered a material breach of the Contract.

<u>OPTION 2</u> – to be used if the original Contract identified subcontractors in this clause, but the Contractor will not be utilizing the IVOSB subcontractors during the extension period.

No certified IVOSB subcontractors will be participating in this Contract under this Change Order/Amendment.

All matters set forth in the original Contract and not affected by this Amendment shall remain in full force and effect.

Non-Collusion and Acceptance

The undersigned attests, subject to the penalties for perjury, that the undersigned is the Contractor, or that the undersigned is the properly authorized representative, agent, member or officer of the Contractor. Further, to the undersigned's knowledge, neither the undersigned nor any other member, employee, representative, agent or officer of the Contractor, directly or indirectly, has entered into or been offered any sum of money or other consideration for the execution of this Amendment other than that which appears upon the face hereof. Furthermore, if the undersigned has knowledge that a state officer, employee, or special state appointee, as those terms are defined in IC 4-2-6-1, has a financial interest in the Contract, the Contractor attests to compliance with the disclosure requirements in IC 4-2-6-10.5.

Agreement to Use Electronic Signatures

I agree, and it is my intent, to sign this Contract by accessing State of Indiana Supplier Portal using the secure password assigned to me and by electronically submitting this Contract to the State of Indiana. I understand that my signing and submitting this Contract in this fashion is the legal equivalent of having placed my handwritten signature on the submitted Contract and this affirmation. I understand and agree that by electronically signing and submitting this Contract in this fashion I am affirming to the truth of the information contained therein. I understand that this Contract will not become binding on the State until it has been approved by the Department of Administration, the State Budget Agency, and the Office of the Attorney General, which approvals will be posted on the Active Contracts Database: https://secure.in.gov/apps/idoa/contractsearch/

In Witness Whereof, the Contractor and the State have, through their duly authorized representatives, entered into this Amendment for Public Works Project Number **XXXXX**. The parties, having read and understood the foregoing terms of this Amendment, do by their respective signatures dated below agree to the terms thereof.

<u>Contractor: XXXXXXXXXX</u>	Department of Administration Public Works Division
By:	By:
Printed Name:	By: Robert Grossman, Director
Title:	<i>For IDOA Commissioner if less than \$10,000,000</i>
Date:	Date:
Approved by:	Approved by:
Department of Administration	State Budget Agency PURSUANT TO IC 4-13-2-14.1 APPROVAL OF THE BUDGET AGENCY IS NOT REQUIRED FOR CONTRACTS UNDER \$100,000.00
By:(for)	By:(for)
By: (for) Rebecca Holwerda, Commissioner	By:(for) Zachary Q. Jackson, Director
Date:	Date:
Approved as to Form and Legality: Form approval has been granted by the Office of the Attorney General pursuant to IC 4-13-2-14.3(e) on October 5, 2022. FA 22-48	

This document prepared and reviewed by:

Counsel, Indiana Department of Administration

CONSTRUCTION CONTRACT CHANGE ORDER/AMENDMENT #_

AMENDMENT #_ EXHIBIT A

See Documents to Follow for Exhibit

CONSTRUCTION CONTRACT CHANGE ORDER/AMENDMENT

AMENDMENT #_ EXHIBIT B

See Documents to Follow for Exhibit



CERTIFICATE OF SUBSTANTIAL COMPLETION

State Form 1084 (R / 10-22) / DAPW 5

INDIANA PUBI	IC WORKS PROJECT NUMBER:	
PROJECT NAM	E:	
TO:	Department of Administration State of Indiana	
THROUGH:	I: Director Public Works	
DESIGNER:		
CONTRACTOR	:	
CONTRACT FO	R:	
	(GENERAL, MECHANICAL, ELECTRICAL, OTHER)	
CONTRACT DA	ATE: CONTRACTOR P.O.NO:	
PROJECT OR D	ESIGNATED AREA SHALL INCLUDE:	
	eby certifies the Work of this project to be in complete conformance to the Contract Documents and complete, enabling the Owner to make use of the Work as intended.	

By his signature below the Contractor further requests Designer and Owner to inspect the Work and to concur in the Work's substantial completion by their signature and/or to provide in a timely manner to Contractor a listing of work items adjudged by them as remaining to be completed or corrected. Contractor agrees to complete and correct all work items representative of such listing within _____ days from date of receipt from designer.

Contractor Company Name

By (written) (typed or printed) (Shall be signed by same representative who signed Contract) Date

A list of items to be completed or corrected, verified by the Designer and Owner, is (is not) appended hereto. Failure to include any incomplete items on such list does not alter the responsibility of the Contractor to provide all Work in complete conformance with the Contract Documents.

By (written) (typed or printed) Date (Shall be signed by Designer of Record with Certification Responsibility to the State of Indiana)

The Work performed under this Contract has been reviewed and found to be substantially complete by the Director of Public Works who has hereby established the Date of Substantial Completion as ______ which is also the date of commencement of all warranties and guarantees required by the Contract Documents. The Date of Substantial Completion of the Work or designated portion thereof is the date established by the Director of Public Works when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner may occupy the Work, or designated portion thereof, for the use for which it is intended.

The Owner accepts the Work or designated portion thereof as substantially complete and assumes full possession thereof, in accordance with the contract documents.

|--|

Owner

By: Director Public Works (Shall be signed by Director of Public Works as Owner's representative) Date

The responsibilities of the Owner and the Contractor for maintenance, heat, utilities, and insurance shall be as set out in the Contract Documents.

SPECIFICATIONS FOR

ELECTRICAL DISTRIBUTION INSTALLATION AT CAMPGROUND CLIFTY FALLS STATE PARK, JEFFERSON COUNTY, INDIANA PROJECT NO. ENG2301725235

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SECTION 021700 – EROSION AND SEDIMENT CONTROL

SECTION 022210 – TRENCHING & BACKFILLING

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SECTION 029360 -- SEEDING

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PLANS:

- T-1 TITLE/GENERAL INFORMATION SHEET
- E-1 ELECTRICAL SITE PLAN
- E-2 CAMPGROUND ELECTRICAL DETAILS
- E-3 ELECTRICAL PANEL BOARD SCHEDULE
- F-1 CAMPSITE DETAILS
- F-2 PAVING PLAN

GENERAL REQUIREMENTS

PART I - GENERAL

1.01 DESCRIPTION

- A. This project consists of furnishing all labor, materials, and associated equipment necessary to complete the following work:
 - 1. <u>Base Bid</u>: Loop A (106 Campsites plus Amphitheater pedestal/wiring and two (2) Comfort Stations) --- coordination with new primary electrical work and transformer installation by Duke Energy, installation of new underground copper conductors and associated conduit, installation of new meter cabinets, new distribution panels with breakers, new 50/30/20-amp campsite power pedestals, and connection to existing panels in two (2) Comfort Stations. Provide two (2) spare campground pedestals complete with breakers.

Base Bid shall also include all pavement, site, and miscellaneous work in ADA-compliant sites for Loop A.

The installation of new underground copper conductors and conduit from the transformers to the new meters/distribution panels-Loop A.

Disconnecting branch circuits from existing panels (Loop A) to the camp sites receiving new pedestals and power from the new panels. Removal of all abandoned work to 12 inches below grade.

Demolition/disposal of existing pedestals and panels in Loop A.

\$10,000 Allowance as described in Section 010200 of these specifications.

2. <u>Alternate 1</u>: Loop B (63 Campsites plus one (1) Comfort Station) --- coordination with new primary electrical work and transformer installation by Duke Energy, installation of new underground copper conductors and associated conduit, installation of new meter cabinets, new distribution panels with breakers, new 50/30/20-amp campsite power pedestals, and connection to existing panel in one (1) Comfort Station. Provide two (2) spare campground pedestals complete with breakers.

<u>Alternate 1 shall also include all pavement, site, and miscellaneous work</u> <u>in ADA-compliant sites for Loop B.</u>

The installation of new underground copper conductors and conduit from the transformers to the new meters/distribution panels-Loop B.

- 3. <u>Alternate 2:</u> Paving of all non-ADA compliant sites in <u>Loop A</u> as described elsewhere in the drawings and specifications.
- 4. <u>Alternate 3</u>: Paving of all non-ADA compliant sites in <u>Loop B</u> as described elsewhere in the drawings and specifications.
- B. The project is located at Clifty Falls State Park--Jefferson County, Indiana.
- C. The Contractor shall perform all work required to complete the project in accordance with the contract documents and all applicable state/federal laws.

1.02 BID:

- A. Base Bid and Alternates 1, 2 and 3:
 - 1. The Contractor shall not be allowed extra compensation by reason of any matter which the Contractor could have fully informed himself of prior to bidding.
 - 2. No verbal agreement, understanding or conversation with an agent or employee of the Owner, either before or after the execution of this contract, shall affect or modify the terms or obligations herein contained.
 - 3. The Contractor shall not be allowed extra compensation for requirements imposed by the utility providing power. Such costs shall be considered part of the Bid.

1.03 COMMENCEMENT AND COMPLETION OF WORK:

- A. Work shall be commenced on/after Monday November 11,2024.
- B. All work required by the Contract Documents shall be completed within 120 calendar days after the commencement of the work. In no case shall the completion date extend beyond April 1, 2024.
- C. This project, or portion thereof, will not be ready for substantial completion review until test and performance evaluations are completed, all items are installed, and the area is clear of construction rubbish and debris.
- **1.04 SUBMISSION OF POST-BID INFORMATION:** Submit the following information within ten days of receipt of Notice to Proceed.
- A. Designation of the work to be performed by the Contractor with his own forces.
- B. A list of Subcontractors.
- C. A list of manufacturers and suppliers.
- D. Designation of location of disposal site for all project debris and excavated material.

E. Designation of the source of any fill material for the project.

1.05 WORKING HOURS:

- A. Contractor shall perform all construction activity on Monday thru Friday, excluding state holidays, between the hours of 7:30 a.m. and 5:00 p.m., unless previous arrangements are made with the Owner.
- B. All work performed at other times shall be only by approval from the Owner, confirmed in writing, and shall not constitute a change in the contract amount.

1.06 EXISTING SITE CONDITIONS:

- A. Data on the drawings pertaining to present conditions, dimensions, type of construction, obstructions on or near site, location of utilities, etc. have been obtained from sources believed reliable, but accuracy of such data is not guaranteed and is furnished solely for accommodation of the Contractor.
- B. The Contractor shall, prior to excavating, verify the location of all buried utilities, including buried power lines.

1.07 CONSTRUCTION AND STORAGE AREA:

A. The Contractor shall confine the construction operations and storage of materials within an area approved by the Owner.

1.08 PROTECTION OF FACILITIES AND PREMISES:

- A. The Contractor shall be responsible for the protection of all existing facilities during the entire period of construction. Any damage to the existing facilities caused by the Contractor shall be repaired by the Contractor at his expense and in a manner approved by the Owner.
- B. The Contractor shall confine his construction operations and storage of materials within an area approved by the Owner.
- C. The Contractor shall, always, keep the premises free from accumulation of waste materials or rubbish caused by his employees or work. At the completion of the work, he shall remove all accumulated rubbish, tools, and surplus materials from and about the job site, and shall leave the premises in a neat, clean, and orderly condition.

1.09 CODE REQUIREMENTS AND MANUFACTURER'S INSTRUCTIONS:

A. In case of conflicts between State and Local codes and regulations, State codes and regulations shall prevail. All required permits for compliance with building codes, health regulations, historic preservation, floodway construction, or state highway

crossings have already been obtained by the Owner.

- B. If the Contractor observes that any of the contract documents are at variance with the printed installation instructions of any manufacturer in any respect, he shall promptly notify the Owner in writing.
- C. If the Contractor performs any work contrary to such State Building Rules and Regulations, ordinances, or manufacturer's printed instructions without notice to the Owner, the Contractor shall bear the cost arising from such non-conformance.

1.10 PRE-CONSTRUCTION MEETING:

A. The Contractor and his sub-contractor (if any) shall attend a pre-service/preconstruction meeting with an Inspector from the Indiana Department of Natural Resources and the Property Representative. The date for this meeting shall be scheduled by the Inspector within 10 days after the contract is finalized.

1.11 ROADWAY PROTECTION:

- A. The Contractor shall, at his expense, be responsible for repairing all damage to the property's roads and drainage structures caused by his equipment and/or personnel.
- B. The ingress and egress to the project site shall be approved by the Designer.

1.12 ARCHEOLOGICAL AND HISTORICAL ARTIFACTS:

- A. If any objects are uncovered during construction which could possibly be of archeological or historical importance, this shall be immediately reported to the Owner. Work at that spot shall not proceed further until the Owner has evaluated the object and the area where it was found and approved continuation of the work.
- B. If any construction time is lost due to such objects being found, an equal number of calendar days will be added to the project completion time given in the specifications.

1.13 SALVAGE RIGHTS:

- A. Unless stated otherwise in these specifications or on the plans, all equipment and materials removed as part of this project and not being reused shall become the property of the Contractor and removed from the site.
- B. All locks and locksets in any area to be demolished or removed from the facility shall remain the property of the Owner. The contractor shall carefully remove all locks and locksets from their current location and turn them over to the owner.

1.14 SITE ACCESS PRIOR TO BIDDING:

A. Bidders may obtain access to the construction site for on-site inspection prior to bidding, by contacting the following Department of Natural Resources personnel.

Mr. Larry Brown-Property Manager 1501 Green Road Madison Indiana 47250 Ph. 765-251-3079 Email: <u>lbrown2@dnr.in.gov</u>

1.15 CONTRACT AWARD:

- A. Contract award shall be based on the Base Bid or combination of the Base Bid and Alternate(s) chosen to be accepted by the State.
- B. Add Alternates herein described are not to be included in the Base Bid Scope of Work.
- C. Bidder shall provide a response to each alternate specified. The response must indicate the amount to ADD to the Base Bid. Substitution of materials or methods of work other than as called for in the documents, i.e. "voluntary alternates" shall be cause for rejections of bid as non-conforming.

END OF SECTION

\$10,000 ALLOWANCE

PART 1 - GENERAL:

1.01 REMEDIATION ALLOWANCE

- A. Contractor shall include an allowance of <u>\$10,000.00</u> in the Base Bid for remediation of unforeseen constraints.
- B. If the allowance is not used in full, the remaining amount shall be deducted from the Contractor's final pay application and shall revert to the Owner.
- B. Such constraints may include but are not necessarily limited to unforeseen subsurface conditions particular to this construction site; improperly recorded or unrecorded physical properties and conditions at the site; obstruction of or delays to reasonable work sequences by the Owner; uncommon adverse weather or site conditions; and conflict within or omissions from the Contract Documents.
- C. All remediation work shall be proposed to and authorized by the Director of Public Works Division prior to execution, jointly documented by Contractor and Owner, and recorded in Contractor as-builts and project record documents.

END OF SECTION

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE:

- A. General Conditions
- B. Section 010100 General Requirements
- C. Section 017200 Project Record Documents

1.02 SHOP DRAWING, PRODUCT DATA & SAMPLE SUBMITTAL REQUIRED:

- A. Items listed for submittal are intended to be a minimum. Non-listing of an item does not relieve the Contractor of the responsibility to verify compliance with the specifications of all products and equipment. Contractor is encouraged to submit shop drawings, product data or samples on all such items prior to their use.
- B. Shop drawings, product data or samples shall be submitted for the following items:
 - 1. Name Plate
 - 2. Conduit
 - 3. Wire and Cable
 - 4. Campsite Pedestals
 - 5. Panelboards
 - 6. Grounding Test Results
 - 7. Insulation Test Results

1.03 SHOP DRAWINGS:

- A. Shop drawings shall:
 - 1. Identify details by reference to sheet and detail numbers shown on Contract Drawings and/or section number of the Specifications; and
 - 2. Be accompanied by installation instructions and all manufacturer's warranties that are required in the specifications.
- B. The cost for all shop drawing submissions shall be included in the Contractor's Bid Price for Base Bid and Alternates.

1.04 PROJECT DATA:

- A. If the Contractor uses the manufacturer's standard schematic drawings, it shall:
 - 1. Modify drawings to delete information which is not applicable to work; and
 - 2. Supplement standard information to provide additional information applicable to work.

END OF SECTION

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PROJECT RECORD DOCUMENTS

1.01 GENERAL: Related requirements specified elsewhere:

- A. General Conditions.
- B. Section 013400 Shop Drawings, Product Data and Samples

1.02 MAINTENANCE OF DOCUMENTS:

- A. The contractor shall maintain at the job site one copy of the project drawings and specifications, including all addenda, shop drawings and change orders, and shall make said documents available for inspection by the Owner.
- B. Maintain and submit to the Owner a set of the project drawings showing all changes made over the course of the work and any differences between the existing facilities encountered and those shown on the drawings. These drawings must be submitted in electronic format via the latest version of AutoCAD with accompanying PDF files and approved prior to final payment.
- **1.03** OPERATION AND MAINTENANCE MANUAL:
 - A. Submit to the Owner 3 copies of an "Operation and Maintenance Manual" specified equipment. The manual shall contain the following information in addition to shop drawings.
 - 1. Index of contents of manual and reference to use and location of item.
 - 2. Complete operation data and maintenance instructions.
 - 3. Parts lists and diagrams with component part numbers.
 - 4. Wiring Diagrams.
 - 5. Names and addresses of local distributors.
 - 6. Warranty documentation.
 - B. Contractor shall perform all maintenance and retain all responsibility for required maintenance prior to submittal of the "Operation and Maintenance Manuals" to the Designer.

END OF SECTION

ENG2301725235

EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor, materials and equipment required for erecting, maintaining and removing temporary erosion and sediment controls. Contractor is responsible for obtaining any permits needed for offsite stockpiling, borrow pits and waste disposal in compliance with all requirements of 327 IAC 15-3-2 and 327 IAC 15- 5-5 (Rule 5)or other local, state or federal requirements.
- B. Temporary erosion controls include, but are not limited to mulching, riprap check dams, seeding, watering, and reseeding on all disturbed surfaces including waste area surfaces `and stockpile and borrow area surfaces; scheduling work to minimize erosion and providing interceptor ditches at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits.
- C. Temporary sediment controls include, but are not limited to silt fences, staked straw bale diversions and appurtenances at the foot of sloped surfaces which will ensure that sedimentation pollution will be either eliminated or maintained within acceptable limits.
- D. Contractor is responsible for providing and maintaining effective temporary erosion and sediment control measures during construction or until final controls become effective.
- E. The erosion and sediment controls shown on the Drawings and specified herein are intended to provide the minimum measure necessary to prevent sediment runoff into storm water runoff. IDEM and/or the local Soil and Water District may request additional erosion control measures be installed for the project if the measures shown within the plans and specifications are determined to be insufficient. Contractor shall be responsible for providing and installing any additional measures needed to adequately prevent storm water runoff from the site and erosion of constructed or disturbed slopes as determined by IDEM and/or the local Soil and Water District at no additional cost to the Owner.

1.02 RELATED WORK

- A. Section 02923 LANDSCAPE GRADING
- B. Section 02936 SEEDING

PART 2 - PRODUCTS

- A. Mulch and fertilizer shall be as specified in Sections 02936.
- B. Erosion control blankets shall be excelsior blankets consisting of 100% weed free straw matrix stitched to a single or double net. The blanket shall be rated for channel
 ENG2301725235
 Clifty Falls State Park

applications for slopes up to 1.5:1 and shall be for extended term (15 to 24 months) use. The blanket shall be 100% biodegradable natural netting that is wildlife friendly. Photodegradable netting is NOT acceptable.

- C. Temporary silt fence fabric shall be in accordance with INDOT Specification 205.
- D. Concrete Washouts shall be provided per the plan details.

PART 3 - EXECUTION

3.01 GENERAL

- A. Erosion control practices shall be adequate to prevent erosion of disturbed and regraded areas.
- B. Earthwork procedures shall be as specified in Section 02160.
- C. Silt fences shall be located and staked as shown on the Drawings and/or as designated by the Engineer.
- D. The Contractor is solely responsible for and shall provide silt fence, check dams, erosion control blanket concrete washouts and other adequate erosion control protection as required.
- E. The Contractor shall maintain concrete washouts for washing of any concrete pouring or other equipment. Concrete shall not be washed into drainage or waterways or other areas other than the washouts themselves.
- F. The Contractor shall install all materials in accordance with the manufacturer's directives.
- G. The Contractor shall provide Erosion Control blanket on all areas disturbed by Linear Ditch Grading and on constructed slopes where the final slope is equal to or steeper that 3:1.

3.02 TEMPORARY SEEDING

- A. This item shall consist of seeding a temporary cover of grass, or grass and small grain, in areas disturbed on the construction site which will not be redisturbed within a 14-day period. All disturbed grass areas which will remain undisturbed for this 14-day period shall receive temporary seeding. Temporary stockpiles shall also be temporarily seeded if left undisturbed for 14 days or more.
- B. The seed mixtures to be used for temporary cover will be governed by the seeding specifications listed in Section 02936. The mixture of seeding shall be as follows:

C. Scientific Name	D. Common Name	E. Ounces/Acre
F. Avena sativa	G. Common Oat	Н. 360.00
I. Lolium multiflorum	J. Annual Rye	K. 100.00
L.	M. Total	N. 460.00:

- 1. Lime will not be required for temporary seeding.
- 2. Fertilize at the rate of 400 pounds per acre of 10/10/10 fertilizer, or equivalent, broadcast uniformly on the area to be seeded.

- 3. All seed shall be broadcast evenly over the area to be seeded and cult packed or otherwise pressed into the soil. Seed and fertilizer may be mixed and applied after the seed has been prepared.
- 4. Mulch for temporary seeding will not be required except on those areas, in the Engineer's opinion, that are too steep to hold the seed without protective cover.
- 5. Water and maintain until the seed growth is well established for temporary protection.

3.03 MAINTENANCE OF CONTROLS AND PERFORMANCE

- A. Erosion and sedimentation controls shall be inspected weekly and after significant rainstorms. Replace silt fencing, which is damaged, filter stone which is dislodged, erosion control blanket which is damaged, and make other necessary repairs.
- B. Should any of the temporary erosion and sediment control measures employed by the Contractor fail to produce results consistent with normal and acceptable standards of the industry, the Contractor shall immediately take whatever steps are necessary to correct the deficiency at his own expense.
- C. Remove all temporary erosion and sediment controls as final landscaping and grading is performed.

-END OF SECTION -

TRENCHING AND BACKFILLING

PART I - GENERAL

1.01 DESCRIPTION

- A. This work includes excavation, trenching and backfilling for all electrical and related items.
- **1.02** RELATED WORK SPECIFIED ELSEWHERE:
 - A. Cast-in-Place Concrete: Section 033000.
- **1.03** CARE OF EXISTING STRUCTURES AND PROPERTY
 - A. All existing structures, utilities, and property near any excavation shall be supported and protected from damage by the Contractor during construction.
 - B. When other utilities, such as sewer, gas, water, or other pipes or conduits cross the excavation, the Contractor shall support said pipes and conduits without damage to them and without interrupting service. The manner of support such pipes, etc. shall be subject to review by the Owner, and if the item(s) are the property of a utility, by the utility company.
 - C. All property shall be thoroughly cleaned of all surplus materials, earth and rubbish placed thereon by the Contractor.
 - D. Any damage to structures, utilities and property resulting from the Contractor's work shall be promptly repaired by the Contractor. The quality of repair work shall meet the approval of the Owner and affected utility company.

1.04 EXISTING UNDERGROUND STRUCTURES

- A. The Plans show the location of utilities based upon the best available information; however, the Owner does not accept any responsibility for the accuracy of this information, nor does he guarantee that all utilities within the work area are shown.
- B. The Contractor shall notify the Owner, the Property Manager and the utility companies at least seventy-two (72) hours prior to the start of construction.
 - 1. The utility companies are to locate existing underground utilities and structures within the site limits per directions from the Contractor.

2. The Contractor, prior to the start of construction, shall verify the location of existing underground utilities and structures within the site limits. It is the <u>responsibility of the Contractor</u> to make all exploratory investigation necessary to verify or locate the utility pipes, wires, structures, and appurtenances of others. The Contractor shall notify the Owner of any conflicts between the location of existing underground utilities or structures. Any conflicts found shall be recorded/documented by the Contractor.

PART II - PRODUCTS

Not Used.

PART III - EXECUTION

3.01 GENERAL TRENCHING

- A. Unless otherwise directed or permitted, not more than one hundred feet (100') of any trench shall be open at any time.
- B. During excavation, material satisfactory for backfilling shall be stockpiled at a safe distance from the banks of the trench to avoid overloading and to prevent cave-ins. Adequate drainage shall be provided by means of ditches, dikes, or other approved methods. Stockpiles shall be protected from contamination with unsatisfactory excavated material. If the Contractor fails to protect the stockpiles and the material becomes unsatisfactory, such material shall be removed and replaced with satisfactory on-site or imported material at no additional cost.
- C. Trench excavation may be accomplished either manually or with mechanical trenching equipment. The blades of road patrols or graders shall not be used to excavate the trenches. The depth of trenches shall be a minimum of 2'-6" to allow minimum cable depth of 2'-0". The bottoms of trenches shall be smooth and free from all aggregate larger than $\frac{1}{2}$ ". Bracing and sheathing shall be provided as necessary. If the excavation is below the required level, the excess excavated area shall be refilled with suitable backfill. The accumulation of water shall be prevented using pumps. When rocks or other granular material which might damage the cable are encountered, the excavation shall be backfilled with a 6-inch layer of sand or earth containing no particles that would be retained on a 1/4" sieve.

- D. All suitable materials removed from the trench shall be used in refilling cable and conduit trenches. The backfill for trenches shall be placed in layers not to exceed 6 inches, loose measurement. The first layer shall be sand or earth containing no particles that would be retained on a 1/4" sieve. The second layer shall contain no particles that would be retained on a 1" sieve. Subsequent layers shall contain no particles that would be retained on a 3" sieve. The second layer and each subsequent layer shall be compacted with pneumatic hand tamps to the satisfaction of the Owner to prevent any future settlement of the backfilled area. Finish grading of earthwork shall be accomplished in a satisfactory manner. Materials authorized to be wasted shall be disposed of.
- E. Dust conditions shall be kept to a minimum using water. Salt or calcium chloride shall not be permitted.

3.02 GENERAL EROSION CONTROL

- A. Plan and execute construction and earth work by methods to control surface drainage from cuts and fills to prevent erosion and sedimentation. Keep to a minimum, the area of bare soil exposed at one time.
- B. Seeding to protect disturbed areas shall occur as soon as reasonably possible following completion of earthwork activity.
- C. Provide methods to control surface water, runoff, subsurface water, and water from excavations to prevent damage to the Work, the site, or adjoining areas.
- D. The Contractor has full reasonability of inspecting the erosion control measures daily. At a minimum, practices need to be inspected weekly, within 24 hours after each storm event over ½ inch and daily during prolonged storm events. Failing practices shall be repaired or replaced immediately.
- E. Comply with all federal, state statutes, rules, and regulations associated with control of storm water run-off from construction activities.

3.03 ROCK EXCAVATION

- A. If encountered, the Contractor shall excavate rock as required for cable and conduit installation. He shall dispose of the excavated material and shall furnish suitable materials for backfill in place of the excavated rock. The cost of excavation and backfill shall be included in the contract bid amount.
- B. Rock in trenches shall be excavated at a minimum of 6" below the cable depth of 2'-0", after it has been laid. Before the cable is laid, the trench shall be backfilled to the correct sub-grade with thoroughly compacted sand.

3.04 REMOVING MATERIAL

- A. The Contractor shall remove all surplus material, re-grade and leave the site clear, free and in good order all roadways and sidewalks affected by the construction of the work. He shall maintain the surface over the trenches in good condition promptly fill all depressions during the warranty period.
- B. Surplus or unsatisfactory excavated materials shall be properly disposed of off the site.
- C. Excavated rock shall be disposed of off the site.

3.05 SEEDING

- A. Seed mixture shall be classified as Seed Mixture "RU" in accordance with INDOT section 621.05(a).
- Fertilizer shall be standard commercial fertilizer with an analysis of 12-12-12.
 Order in formula shall be 1) Total Nitrogen; 2) Available phosphoric acid; 3) Walter soluble potash.
- C. Mulch for seeding shall be free from noxious weed seeds.
- D. Installation
 - 1. All areas to be seeded and transition areas will be raked and leveled to a smooth and uniform grade matching original ground elevation. Loosen soil to a depth of one to two inches below finish grade.
 - 2. Install mulched seeding at a rate of 150 pounds per acre.
 - 3. Install seeding in areas inaccessible to mechanical equipment, and small areas with a hand operated cyclone seeder and cover by hand raking to a depth of 1/4 inch.
 - 4. Water seeded areas with a fine spray to a minimum penetration of 1 inch.
 - 5. Fertilizer shall be applied in accordance with INDOT Section 621.04.
 - 6. Mulch shall be applied to seeded areas at a rate to give a uniform blanket covering of 1/4 inch thick.
 - 7. The Contractor shall not destroy empty seed and fertilizer containers without the permission of the Owner but shall retain them for inspection by the Owner to verify quantities of the materials.

END OF SECTION

LANDSCAPE GRADING

PART 1 - GENERAL

1.01 WORK INCLUDED

Final grading of topsoil for finish landscaping.

1.02 RELATED SECTIONS

Section 02160 - EARTHWORK Section 02936 - SEEDING

PART 2 - PRODUCTS

A. Topsoil: Excavated Material free of rocks, roots larger than 1/2-inch, subsoil, debris and large weeds.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that trench backfilling has been inspected.
- B. Verify substrate base has been contoured and compacted.

3.02 SUBSTRATE PREPARATION

- A. Eliminate uneven areas and low spots.
- B. Remove debris, roots, branches, stones, more than 1/2-inch in size. Remove subsoil.
- C. Scarify subgrade to depth of 3-inches where topsoil is scheduled. Scarify areas where equipment is used for hauling and spreading topsoil and compacted subsoil.

3.03 PLACING TOPSOIL

A. Place topsoil in areas where seeding and planting are to occur to the thickness as scheduled. Place topsoil during dry weather.

B. Fine grade topsoil eliminating rough or low areas. Maintain profile and contour of subgrade.

C. Remove roots, weeds, rocks and foreign material while spreading.

D. Manually spread topsoil close to trees, plants and buildings to prevent damage.

E. Lightly compact placed topsoil.

F. Remove surplus subsoil and topsoil from site.

G. Leave stockpile area and site clean and raked, ready to receive landscaping.

3.04 TOLERANCES

A. Top of topsoil; Plus, or minus 1/2-inch.

3.05 PROTECTION

A. Protect landscaping and other features remaining as final work.

B. Protect utilities and paving.

3.06 SCHEDULES

- A. Compacted topsoil thickness at the following areas:
- 1. Seeded Grass: 3-inches.
- 2. Sod: 2-inches.

-END OF SECTION -

SEEDING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Seeding, mulching.

B. Maintenance.

1.02 RELATED SECTIONS

A. Section 02160 - EARTHWORK

B. Section 02923 - LANDSCAPE GRADING

1.03 DEFINITIONS

A. Weeds: Includes Dandelion, Jimsonweed, Quack grass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambs quarter, Chickweed, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimber Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.04 MAINTENANCE DATA

A. Includes maintenance instructions, cutting method and maximum grass height.

1.05 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.

1.06 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for herbicide composition.
- B. Provide certificate of compliance from authority having jurisdiction indicating approval of seed mixture.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Division I.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.08 MAINTENANCE SERVICE

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Maintain seeded areas immediately after placement until grass is well established and exhibits a vigorous growing condition for two cuttings.

PART 2 - PRODUCTS

2.01 SEED MIXTURES

A. Permanent Seed Mixture:

Shall be Mulch Seed Type of a cool season rye/bluegrass blend (150 lb. acre).

2.02 ACCESSORIES

Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.

Water: Clean, fresh and free of substance of water or matter which could inhibit vigorous growth of grass.

Erosion Fabric: Jute matting, open weave. Stakes: Softwood lumber, chisel pointed. String: Inorganic fiber. Fertilizer: 12-12-12 Commercial Mixture.

PART 3 - EXECUTION

3.01 PREPARATION

Lawn: Till soil thoroughly to a minimum depth of 2". Apply fertilizer to soil at rate of 20 pounds per 1000 square feet immediately prior to seeding. Rake or lightly till fertilizer into soil. When topsoil is exceedingly dry, moisten to a depth of 4", 48 to 72 hours prior to start of seeding.

Perform watering to prevent run off.

3.02 SEEDING:

Sow seed uniformly over entire area in 2 operations at rate of 150 lbs. per acre. Apply the second seeding at right angles over the first. Seeding operation may be by broadcast method or drill equipment. Lightly cover seed by hand raking or dragging lawn areas to depth of 1/4". Smooth and firm seeded areas with a 200# roller and water with a fine spray. Cover all sloped areas (greater than 3 to 1 slopes) and other areas where erosion may occur with burlap erosion mat. Anchor securely in place. Mulch all seeded areas at a minimum rate of 1 Ton/acre. Mulch shall be held in place as the contractor will be responsible for replacing mulch which has blown away prior to adequate seeding germination. Mulch shall be held in place by one of the following methods.

- 1. Tilling or punching mulch into the soil.
- 2. Commercially produced mulch binder.
- 3. Binder twine fastened down with pegs spaced 6 feet or less apart.

4. Commercially produced polymeric plastic net held in place with wire staples.

3.03 LAWN ESTABLISHMENT

Provide daily maintenance until the lawn is well established. Provide necessary lawn care including fertilizing, weed eradication, watering, mowing, and removal of excess clippings and replacement of unsuitable sod.

Establishment period for lawns:

Seeded Lawns: extend until uniform stand of grass established over entire area.

-END OF SECTION-

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 WORK INCLUDED:

A. All cast-in-place concrete.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

- A. Trenching and Backfilling: Section 022210.
- B. Concrete Reinforcement: Section 032000.

1.03 REFERENCE STANDARDS:

- A. ACI American Concrete Institute:
 - 1. ACI 301 Structural concrete for building.
 - 2. ACI 305 Hot weather concreting.
 - 3. ACI 306 Cold weather concreting.
 - 4. ACI 318 Building code requirements for reinforced concrete.
- B. ASTM -American Society for Testing and Materials.
- C. INDOT Indiana Department of Transportation Standard Specifications.
- D. All codes and specifications referenced herein shall refer to the current codes and specifications, including amendments, revisions, and addenda, in effect at the time of bid submittal.

1.04 SUBMITTALS:

- A. Concrete Delivery Tickets
 - 1. THE CONTRACTOR SHALL SAVE ALL CONCRETE DELIVERY TICKETS AND DELIVER SUCH TICKETS TO THE OWNER OR HIS REPRESENTATIVE WHEN REQUESTED. FAILURE TO PROVIDE DELIVERY TICKETS AS SPECIFIED BELOW SHALL BE CAUSE FOR REJECTION OF CONCRETE WORK.
 - 2. Concrete delivery tickets for each batch of delivered concrete shall include the following information in accordance with ASTM C-94. All quantities shall be the total quantity batched in the delivery vehicle.
 - a. Quantity of cement.
 - b. Quantity of fine aggregate.
 - c. Quantity of coarse aggregate.
 - d. Quantity of each admixture.
 - e. Initials of producer's representative.
 - f. Sufficient information to determine the total quantity of free water.
 - B. Concrete mix designs shall be submitted to the designer at least 15 days prior to planned use. Submittals shall include the following information:
 - 1. Source of cement
 - 2. Source of aggregates
 - 3. Brand of each admixture

- C. For concrete expected to be placed between May 1 and September 30, concrete mix designs shall be submitted for additional hot weather concreting. These shall outline any special provisions for controlling concrete temperature, aggregate moisture content, and set time. This shall be submitted 15 days prior to planned use for approval by the Designer.
- D. Submit concrete compression test results to Designer. Tests shall be as specified in Part 3 Execution.

1.05 ALLOWABLE TOLERANCES: MAXIMUM FLOOR SLOPE SHALL NOT EXCEED 2%.

- A. Plus, or minus 1/4 inch in 10 feet for all finishes and walls.
- B. Plus, or minus 1/4-inch maximum deviation from required elevations except as noted below:
 - 1. All transitions between adjacent slabs, pavements, and entries shall be smooth to prevent tripping hazards.
 - 2. Slabs that are to positively drain such as pitched floors, walks, and pavements shall not contain low spots which pond water.

1.06 PRODUCT DELIVERY AND STORAGE:

- A. Deliver all concrete in ready mix vehicles in accordance with ASTM C-94.
- B. Handle concrete rapidly from mixer to form.
- C. Use buckets, chutes, troughs, conveyors, and pipes to handle concrete without segregation. Concrete shall not be permitted to drop more than 12 inches.

1.07 CONTRACTOR'S OPTIONS

A. 6-inch-thick sidewalks and exterior slabs constructed on prepared subgrade may be substituted for 4-inch-thick sidewalks and exterior slabs constructed on 4 inches of granular fill.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Portland Cement: ASTM C-150, Type I or Type III.
- B. Air-entraining Admixture: ASTM C-260.
- C. Fine Aggregate
 - 1. ASTM C-33 or INDOT 903.02 Class A.
 - 2. Natural sand composed of clean, sound, hard, durable particles.
 - 3. Graded per INDOT 903.01(g) size #23.

- D. Coarse Aggregate:
 - 1. ASTM C-33 or INDOT 903.02 Class A.
 - 2. Crushed limestone, crushed dolomite, crushed gravel, or uncrushed gravel.
 - 3. 1-inch maximum aggregate size graded per INDOT 903.02 (e) size #8.
 - 4. 12-inch maximum aggregate size graded per INDOT 903.02 (e) size #5.
- E. Admixtures:
 - 1. ASTM C-494 or ASTM C-1017.
 - 2. All brands of admixtures shall be submitted for approval by the designer.
- F. Mixing Water: Clean, potable water free of oils, acids, vegetable matter, alkaline, and other harmful impurities.
- G. Expansion Joint Filler:
 - 1. Foam or sponge fillers:
 - a. Pre-molded, resilient, compressible, non-extruding and non-staining.
 - b. Polyethylene, polyurethane, neoprene, or polyvinyl chloride.
 - c. Closed-cell construction with 25% compressibility at 15 psi distributed pressure.
 - d. Compatible with joint sealant.
 - 2. Cane Fiber Filler:
 - a. Pre-molded board product.
 - b. Asphalt impregnated.
 - c. ASTM D-1751.
 - d. Non-extruding.
 - 3. Cork Filler:
 - a. ASTM D-1752.
 - b. Manufactured from granulated cork particles bonded in resin.
 - c. Non-extruding.
 - d. Compatible with joint sealant.
- H. Joint Sealant:
 - 1. One-part, neutral cure, low modules silicone.
 - 2. ASTM C-920 type S, NS, Class 25.
 - 3. Compatible with concrete and limestone substrates without primer.
 - 4. Complies with Federal Specification TT-S-00227E, Type 1, Class A, + 50%, -50% joint movement, minimum 15 shore A hardness.
 - 5. Color shall be gray-limestone tint.
- I. Concrete Curing Compound:
 - 1. Interior Concrete: ASTM C-309 Type 1, clear or translucent.
 - 2. Exterior Concrete: ASTM C-309 Type 1, clear or translucent.

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- J. Concrete Hardener and dust proofer:
 - 1. Shall be magnesium/zinc fluor silicate or sodium silicate liquid hardener which will chemically react with calcium carbonate and free lime in the concrete.
 - 2. Acceptable Products are as Follows:
 - a. Lapidolith by Sonneborn
 - b. Sciolith by Chem Masters
 - c. Permalith by L.M. Scofield Company
 - d. Other equal brands
- K. Vapor Barrier:
 - 1. 6 mil (0.006 inch) polyethylene sheeting.
 - 2. All punctures and holes shall be covered by additional sheets with at least 12" overlap on all edges. Tape all seams.
- L. Fibers:
 - 1. 100% virgin polypropylene, polyester or nylon fibers.
 - 2. Collated and fibrillated fiber bundles.
 - 3. 3/4" inch in length.
 - 4. Polyester fibers shall be coated to not react with cement.

2.02 CONCRETE MIX:

- A. Concrete shall be batched and delivered in accordance with ASTM C-94 and ACI-318 chapter 4 except as more detailed herein.
- B. Concrete shall be proportioned by a water/cement ratio method based upon requirements for a plastic and workable mix. The maximum water to cement ratio by weight shall equal 0.40 based upon saturated, surface dry aggregates.
- C. Minimum compressive strength at 28 days: 4000 psi.
- D. Permissible slumps are as follows:
 - 1. 4 inches to 7 inches where water reducing or super- plasticizing admixtures are used.
 - 2. 1 inch to 2 inches where water reducing or super- plasticizing admixture are <u>NOT</u> used.
- E. Minimum cement contents are as follows:
 - 1. 1-inch maximum aggregate size: 475 pounds of cement per cubic yard.
 - 2. 12-inch maximum aggregate size: 425 pounds of cement per cubic yard.
- F. Air Entrainment: 5% to 7% by volume.
- G. Concrete mix shall contain 12 pounds of polypropylene fibers, 1 pound of polyester fibers, or 1 pound of nylon fibers per cubic yard of concrete.

PART 3 - EXECUTION

3.01 PREPARATION:

- A. Notify Designer at least 48 hours before scheduled concrete placement.
- B. Tamp all trench bottoms and slab subbases until firm. Compaction shall be as shown on the drawings or otherwise shown in these specifications.
- C. In spec trench bottoms, slab subbases, and forms for proper expansion joints, and proper placement of embedded items.
- D. Do not place concrete until the bearing surfaces under wall or column footings have been inspected and approved by the Designer or his representative.
- E. Remove all ice, debris, and deleterious material from forms.
- F. Remove all oils, grease, ice, debris, and other deleterious matter from reinforcement.
- G. Remove all free water from the area of concrete placement unless tremie is used. The use of a tremie shall be approved in writing by the Designer prior to concrete placement.

3.02 CONCRETE PLACEMENT:

- A. Moisten all forms, including earth, until surfaces are moist, but not wet. Remove all free water.
- B. Conveying equipment, including scheduled truck deliveries, shall be capable of providing a supply of concrete at the site of placement without separation of ingredients and without interruptions sufficient to permit the loss of plasticity between successive placements.
- C. Concrete shall be deposited as nearly as practicable to its final position to avoid segregation due to re-handling or flowing.
- D. Concreting shall be always carried on at such a rate that the concrete is plastic and flows readily into the forms and around the reinforcement.
- E. No water shall be added to the concrete at the job site. Concrete which can not be placed and finished shall be removed from the project site at no cost to the Owner.
- F. After concreting is started, it shall be carried on as a continuous operation until placing of a panel or section as defined by its boundaries or predetermined joints is completed.
- G. All concrete shall be thoroughly consolidated by suitable means, such as spading, rodding and vibrating, during placement. Concrete shall be thoroughly worked around reinforcement, around embedded fixtures, and into corners of forms. Concrete shall not be over consolidated as to cause segregation or bleeding.

H. When placing concrete on sloped surfaces, placement shall begin at the lower end of the structure and proceed uphill with each successive placement thoroughly consolidated with the previous placement.

3.03 JOINTING:

- A. Concrete contraction joints shall be installed in all slabs of pavements, and walks.
- B. Concrete contraction joints shall be constructed to the following depths:
 - 1. 4-inch-thick slabs: 1 inch depth.
 - 2. 6-inch-thick slabs: 2-inch depth.
 - 3. 8-inch-thick slabs: 2-inch depth.
- C. Concrete contracting joints may be formed by tooling, sawing, insertion and removal of joint formers, or insertion of stay-in-place crack inducers.
 - 1. Tooled joints shall be formed with clean tools having a maximum 1/16-inch radius at the joint bottom.
 - 2. Sawn joints shall be 1/4"wide.
 - 3. Insertion devices shall be a maximum of 1/4" wide with a pointed bottom.
 - 4. Crack inducers shall be constructed of polyvinyl chloride with a maximum width of ¼-inch.
- D. Expansion joints shall be installed at all locations indicated on the drawings and at all columns, piers, posts, manholes and walls. The maximum spacing of expansion joints in concrete floors and slabs shall not exceed the maximum allowed in the Indiana Building Code and the American Concrete Institute Standards.
 - 1. All Expansion Joints in Concrete Walks and Connections of Concrete Walks and Entrance Slabs shall have a minimum of 3 evenly spaced 5/8" diameter by 8-inch-long dowels through the joint unless otherwise indicated. One end of the dowel shall be sleeved or wrapped to prevent the concrete from bonding to the dowel.
- E. Expansion joint widths shall be as indicated on the drawings with a minimum width of 2 inches.
- F. Expansion joints shall be sealed to prevent the intrusion of dirt and moisture. Sealant shall be compatible with joint filler, and all surfaces shall be primed according to manufacturer's recommendations.
- G. All construction joints shall be installed as expansion joints

3.04 CURING:

A. Start curing immediately after finishing and as soon as concrete is sufficiently stiff to not be damaged by curing covers.

- B. Cure concrete for a minimum of seven days.
- C. Protect concrete from heavy rain, mechanical injury, injurious action of sun, and injurious action of wind.
- D. Do not use dry sand or cement to take up excess free water.
- E. All concrete on this project shall be cured by either the wet method or with curing compounds.
- F. Wet Curing:
 - 1. Cover exposed concrete surfaces with clean, moist burlap sheets, with clean, moist blankets, or with clean plastic sheeting.
 - 2. Support edges of burlap, blankets, or plastic sheets to keep them from blowing for the entire curing period.
 - 3. Keep burlap or blankets continuously moist with the use of foggers, sprayers, misters, or sprinklers.
- G. Membrane Curing:
 - 1. Apply curing compound with pressure spraying equipment in sufficient thickness as recommended by the manufacturer to form an effective water seal.

3.05 HOT WEATHER CONCRETING:

- A. Hot weather concrete provisions shall be in effect whenever the air temperature is above 80° or above 75° F. and rising, or whenever the concrete temperature is above 80° F.
- B. Concrete mixes for hot weather concreting shall include set retarding admixtures, water reducing and set retarding admixtures, or high range water reducing and set retarding admixtures.
- C. In addition to the information required in 1.04 (A), delivery tickets shall include the following information:
 - 1. Time of batching.
 - 2. Time of arrival at the job site.
 - 3. Time of last concrete placement.
 - 4. Temperature at time of first delivery.
 - 5. Moisture contents of both coarse and fine aggregates.
- D. No concrete shall be accepted with a temperature over 99° F. at delivery to the job site.
- E. Concrete shall be placed in accordance with ACI-305.
- F. Protect concrete from rapid moisture evaporation before and after finishing by providing wind breaks, by covering it with polyethylene sheeting, or by water misting.

3.06 COLD WEATHER CONCRETING:

- A. Cold weather concrete provisions shall be in effect whenever the temperature is below 40° F. or below 50° F. and falling.
- B. Concrete shall be placed in accordance with ACI-306.
- C. Methods of heating materials and protecting concrete shall be approved by the Designer prior to placing concrete.
- D. The use of salts, chemicals or foreign materials mixed with concrete to prevent freezing is prohibited.
- E. The Contractor shall provide blankets, insulation and protective coverings to ensure concrete temperatures do not fall below 70° F. for 3 days after placing, or do not fall below 50° F. for 5 days after placing.

3.07 FIELD QUALITY CONTROL TESTS:

- A. Contractor shall have copies of ASTM C-31, ASTM C-39, and ASTM C-145 at the job site. Personnel shall be familiar with sampling and testing requirements of these standards.
- B. Concrete Compression Tests:
 - 1. Make test cylinders and test them in accordance with ASTM C- 31 and ASTM C-39.
 - 2. Testing shall be done by an independent laboratory approved by the Designer. Cylinders shall be delivered to the laboratory within 24 hours of sampling.
 - 3. Provide one set of three cylinders for each 27 cubic yards of concrete placed in one day. Provide a minimum of two sets of three cylinders for each day of concrete placement.
 - 4. One cylinder of each set shall be broken at 7 days, one cylinder broken at 28 days, and one cylinder reserved.
 - 5. Contractor shall be responsible for payment of such tests and shall furnish necessary equipment.
- C. Concrete Slump Tests:
 - 1. Make tests at the time and place of concrete placement and in accordance with ASTM C-143.
 - 2. Make tests periodically and as often in the opinion of the Designer or his representative when a change in consistency of the concrete is noted.
 - 3. During hot weather, each batch of concrete shall be tested.
 - 4. The Contractor shall provide slump cone, rods, and other necessary equipment to perform the test.
- D. Temperature Tests:
 - 1. The temperature of concrete for each slump test shall be required.

3.08 FINISHING:

- A. All concrete floor surfaces shall receive Concrete Hardener and Dust Proofing. Application shall be in accordance with the manufacturer's printed instructions.
- B. Interior slabs shall be finished with a wood float finish.
- C. Exterior walks and slabs shall be finished with a light broom finish, or a wood float finish.
- D. Brooming shall remove all tooling marks left by edgers or jointers.
- E. All exposed edges shall be tooled to a 3-inch radius.
- F. Curbs and exposed wall surfaces shall have all fine and irregular projections removed. Form tie holes and other cavities shall be saturated with water and filled with a mortar of fine aggregate, cement, and water.
- G. Ramps (slopes greater than 1:20 or 5% gradient) shall be tinned with 0.09 inch to 0.013inch-wide grooves 0.12 to 0.19 inches deep at approximate 3/4-inch centers. Grooves shall be transverse in the direction of the ramp.
- H. All areas which have a drain shall have the concrete surfaces sloped as indicated on the drawings, but not less than 1/8" per foot and not more than 1:50
- I. All areas with drains shall have positive drainage without ponding. All areas which have ponding shall be removed and replaced with new concrete.

FOOD COOKING EQUIPMENT - GRILL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Installation of ADA Swing-Away Grill Fire Ring Manufactured by Indiana Correctional Industries

1.2 RELATED REQUIREMENTS

A. 30" diameter ring with 20"x 18" cooking surface 18" high. Constructed of 3/16" steel.

1.3 SUBMITTALS

- A. Submittal Procedures: Section 013323, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Product Data:
 - 1. Manufacturer's data sheets on each product to be used.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Typical installation methods.

1.4 QUALITY ASSURANCE

- **A.** Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
- C. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

1.5 PRE-INSTALLATION CONFERENCE

A. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
- B. Protect from damage due to weather, excessive temperature, and construction operations.

1.7 PROJECT CONDITIONS

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A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 WARRANTY

A. Manufacturer's standard limited warranty unless indicated otherwise.

PART 2 - PRODUCTS 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Indiana Correctional Industries, which is located at: 1110 South Vestal Drive, Plainfield, IN 46168 Toll Free Tel: 800-736-2550 Website: <u>https://www.in.gov/idoc/indianacorrectionalindustries/files/JUN-2020-ICI-Product-Catalog.pdf</u>
- B. Substitutions: Not permitted.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine and verify substrate suitability for product installation.
 - 1. Protect existing construction and completed work from damage.
 - 2. Prevent damage from contact with fire brick and cement.
 - 3. Clean area and remove contaminants capable of affecting subsequently installed product's performance.

3.2 INSTALLATION - GENERAL

- A. Install products according to manufacturer's instructions and approved submittal drawings.
 - 1. Installation Tolerances:
 - a. Finished surface true to plane within 1 mm in 1000 mm (1/8 inch in 10 feet), non-cumulative.
 - b. Joint width deviation maximum 25 percent of dimension indicated.
- B. Cleaning
 - 1. Remove excess mortar before fully set.
 - 2. Clean exposed brick and mortar surfaces. Remove contaminants and stains.
- C. Protection
 - 1. Protect brick paving from traffic and construction operations.
 - 2. Cover brick paving with reinforced kraft paper, and plywood or hardboard.
 - 3. Remove protective materials immediately before acceptance.
 - 4. Repair damage.

BASIC ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.01 SCOPE:

- A. The Contractor shall furnish all supervision, labor, equipment, materials, tools and supplies to install electrical distribution panels, disconnect switches, pedestals and all U.G. conduit and conductors for a complete installation as shown on the Drawings and as specified herein. The work includes, but is not limited to the following:
 - 1. All Demolition and removal of existing equipment.
 - 2. Trenching and backfilling for installation of new U.G. conductors.
 - 3. Concrete work as shown.
 - 4. Installation of electrical distribution panels, disconnect switches, power panel outlets and U.G. conduits and conductors.
 - 5. Installation of pads, bases, and anchors; and all platforms and supporting stands for electrical equipment.
 - 6. Repair and return to original condition any existing facilities damaged in the process of completing this work.

Determine required location, arrangement and quantities of equipment and materials from Drawings. The Drawings are generally diagrammatic and indicate the general design and arrangement of the proposed work. The Contractor shall familiarize himself with the Drawings and shall be responsible for the final locations of his equipment to suit field conditions encountered and to avoid interference, without extra cost to the Owner. The Owner reserves the right to make minor changes in equipment location prior to roughing-in of the electrical work without any additional cost to the Owner.

1.02 GENERAL:

- A. The approximate location of existing utilities and other obstacles that might interfere with this work are shown on the Drawings. The locations are shown to the best of the Owner's knowledge, and it shall be the contractor's responsibility to determine the exact locations and plan the work accordingly.
- B. Certain portions of the work hereinafter described might necessarily be done by the utility company furnishing the power of the property affected. Any costs, whatsoever, that might be charged by the Utility Company for their work and/or materials shall be paid by the Contractor and the cost(s) shall be included as a part of this contract.
- C. It is recommended that the successful low bidder notify the affected utility company that this work shall begin upon the bidder's receipt of the contract so that scheduling can be made accordingly.
- D. Some of the installation to be performed by the Contractor will require moving machinery and/or inventory out of the way to make room to work. The property personnel will be responsible for providing clearance.

1.03 CODES AND STANDARDS:

A. All electrical work installed under this contract shall conform to current codes and standards listed

here and all applicable requirements of Federal, State and Local Authorities having jurisdiction, including the latest OSHA requirements.

- B. All installations shall conform to all requirements of the following:
 - 1. Indiana Electrical Code NFPA Electrical Code NEC (latest edition in effect at time of awarding contracts). Certify in writing, after completion of all punch list items, that all systems and workmanship conform to the named edition of the National Electrical Code.
 - 2. Indiana Fire Prevention Code International Fire Code IFC
 - 3. Indiana State Construction Industry Safety Code.
 - 4. All Laws, Ordinances, Rules and Regulations in effect in/or by the State of Indiana and as required by Indiana Administrative Building Council and Local Authority having jurisdiction.
 - 5. Respective utility providing electric and communication service.
- C. Certain portions of the work as shown on the drawings and hereinafter specified shall exceed NEC minimum requirements however, all other work, materials and methods shall be no less than NEC minimums. Anything less than the NEC requirements and these specifications shall be rejected work.
- D. Standards:
 - 1. Underwriter's Laboratories, Inc. Labeling shall be provided where specified for specific items.
 - 2. All materials shall be manufactured and tested in accordance with latest editions of U.L., NEMA, ANSI, ASA, AIEE and IPCIA Standards.
 - 3. Owner's Requirements and Regulations, pertaining to safety, fire, conduct, parking, sanitary conditions, smoking, etc. shall be strictly adhered to by Contractor and his employees and sub-Contractors on the job.

1.04 WORKMANSHIP:

- A. All materials and equipment shall be installed in accordance with the manufacturer's recommendations, as approved by the Engineer to conform with the Contract Documents.
- B. The finished product shall be complete and functional. Where the term "Provide" is used in these Specifications, it shall mean to furnish, install and connect, unless otherwise stated.
- C. All work under this section shall be performed by or under the direction of a <u>licensed</u> electrician.

1.05 PRODUCT STORAGE:

- A. Conduit, fittings and boxes shall be stored on job site in such manner as to prevent damage and keep dirt and foreign matter from getting into product.
- B. Equipment, apparatus, accessories and instruments shall be stored on job site, in original cartons or otherwise protected, in such a manner as to prevent weather damage or breakage, with openings covered to keep out dirt and foreign matter.
- C. Wire and cable shall be stored on job site; in factory cartons or on spools, protected in such a manner as to prevent weather, heat or mechanical damage.

1.06 SUBMITTALS:

A. Submit shop drawings for all equipment specified in conformance with Section 013400. The submittal must include a written statement of exceptions and deviations from these specifications.

- B. Shop drawings shall include complete data including physical dimensions and other information required for installation, performance capabilities and limitations, equipment wiring diagrams complete with sequence of operation, and schedules indicating locations when more than one type of an item is to be used. All shop drawings must be certified as being correct for the proposed work.
- C. Shop drawings, brochures or catalog cuts showing more than one size or model shall be marked to indicate the size or model proposed for the application.
- D. Prior to submittal, shop drawings shall be coordinated with the work of all other trades.
- E. Shop drawings shall be identified as to the specific equipment. Identification shall be by reference to equipment designations as shown on the Drawings or by reference to the appropriate Article of the Specifications in which the equipment is specified.

1.07 INSTRUCTION MANUALS:

- A. Three sets of Instruction Manuals shall be furnished to the Designer prior to acceptance with each set to include the following:
 - 1. Manufacturer s parts list identified with the make, model and serial number of the equipment furnished.
 - 2. Schematic control and wiring diagrams identifying the location and function of all system components and controls.
 - 3. Installation, operation, lubrication and maintenance instructions.
 - 4. Manufacturer s recommended spare parts list.
 - 5. Test data and performance curves where applicable.

1.08 WORK VERIFICATION AND FIELD MEASUREMENTS:

- A. All dimensions and clearances affecting the installation of work shall be verified in the field in relation to established datum, to building openings and to the work of other trades.
- B. Location of all equipment and systems shall be coordinated to preclude interferences with other construction.
- C. Should interferences occur which will necessitate deviations from layout or dimensions shown on the Drawings, the Designer shall be notified and any changes approved before proceeding with the work.
- 1.09 RECORD DRAWINGS:
- A. A record shall be kept of all deviations in location or elevation of any underground or concealed installation from that shown on the Contract Drawings. Records shall consist of marked shop or Contract Drawings and shall be submitted to the Designer at any time upon request during or after

completion of construction. No such deviations from the Contract Drawings or approved shop drawings shall be made without prior approval by the Designer.

1.10 ACCESSIBILITY:

A. All work shall be installed to be accessible for operation, maintenance and repair with particular attention given to locating valves, controls and equipment requiring periodic lubrication, cleaning, adjusting or servicing of any kind. Access panels shall be provided when work is built in or concealed.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT:

- A. All materials shall be new unless use of an existing item is indicated on Drawings or permitted in writing by Designer, best grade of each representative type. All conductors, raceways, devices, etc. shall be, as a minimum, of service class and capacity suitable for location and load for which they will be used. All materials shall be of domestic manufacture and shall comply with Codes and Standards as described herein.
- B. Materials and equipment shall be furnished as specified in this Section and shall be in strict accordance with applicable ANSI, NBS, ASTM, NESC, NEMA, IEEE, IPCEA, UL, NEC, OSHA and NFPA standards. Manufacturer's products referred to in this Division shall establish minimum requirements for materials and equipment furnished for this installation.

PART 3 - EXECUTION

- 3.01 FASTENING TO BUILDING STRUCTURES:
- A. The methods of attaching or fastening equipment or equipment supports or hangers to the building structure shall be approved by the Owner.
- B. Cutting, burning, drilling, welding or the use of explosive driven fasteners on building structures shall require prior approval by the Designer for each type of application unless specifically shown on the Drawings.

3.02 MISCELLANEOUS WORK:

- A. Excavation and backfilling for electrical work shall be the responsibility of the Electrical Contractor and shall meet the requirements of Section 022210: Trenching and Backfilling.
- B. The Electrical Contractor shall provide all pads, bases and anchors required to complete the electrical work.
- C. The Electrical Contractor shall provide all platforms and supporting stands for electrical equipment required to complete his work.
- 3.03 SERVICE TIE CONNECTIONS:
- A. Contractor shall check and verify all voltage and phasing of service tie connections at switchboards.

- B. Phasing to be maintained shall be A.B.C. top to bottom, east to west and north to south in all cases.
- 3.04 ELECTRICAL CONNECTIONS TO EQUIPMENT:
- A. All equipment shall be wired completely in each detail, including all interlocks, safety switches, control devices, starters and disconnects.
- B. Drawings include equipment anticipated to be furnished; however, in case other makes, etc., are furnished than shown, the furnished equipment shall be wired completely as required at no additional cost to the Owner. Any additional shall be borne by the Contractor furnishing the equipment.
- C. All connections and wiring diagrams where shown on the Contract Documents are for bidding purposes only and the Electrical Contractor shall obtain final wiring diagrams from the Contractor furnishing the equipment. Diagrams as supplied shall be specifically for this Project.
- D. Conduits and wires where shown on the Contract Documents are for bidding purposes. Electrical Contractor shall verify all wire sizes, number of wires required, and supply the proper number to each piece of equipment before installation.

3.05 NAMEPLATES:

- A. All equipment shall have factory applied permanent nameplates indicating the manufacturer's name, model and serial numbers, voltage, current, phase and any other data necessary to conform with specified requirements.
- B. In addition to the factory applied nameplate, the Contractor shall furnish and install identification plates on the exterior of all panels. For Example: Panel A Identification plates shall be laminated phenolic engraving stock a minimum of 1/16 inch thick, white background black letters. Letters shall be no smaller than 2 inches tall. Identification plates shall be attached with drive pins or rivets.

3.06 PAINTING AND FINISHING:

- A. All purchased equipment shall have a factory applied standard finish of the manufacturer's standard color unless otherwise specified.
- B. Equipment which will be subject to abnormal conditions of high temperature, corrosive environment, etc., shall have finishes and/or protective coatings suitable for the service as noted on the Drawings and/or in the Specifications.
- C. Finishes which are marred during shipping, handling or installation shall be touched up to match the original finish. Finish shall be satisfactory to the Owner or the unit shall be completely repainted.
- D. Field fabricated bare iron or steel items required in installation of work under this Division shall have rough or shape edges removed, be thoroughly cleaned of dirt, rust, weld slag, grease or oil and be painted with one coat of Red Oxide primer and two coats of Exterior Enamel. Color shall be selected by the Designer.
- E. All exposed galvanized surfaces, supports, panels, conduits, etc. shall be thoroughly cleaned of dirt and oil and be given a vinyl wash primer, then one coat of zinc dust primer and one coat of exterior enamel. Color as selected by the Owner.

3.07 IDENTIFICATION:

A. Underground-Type Plastic Line Markers: Manufacturers standard permanent, bright-colored, continuous-printed plastic tape, intended for direct-burial service; not less than 3" wise x 4 mils thick. Provide red tape with black printing reading: CAUTION ELECTRIC LINE BURIED BELOW.

B. Manufacturers:

- 1. Seton Name Plate Corp.
- 2. Allen Systems, Inc.
- 3. Emed Co., Inc.
- 4. Linetec, Inc.

LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Copper building wire rated 600 V or less.
 - 2. Connectors, splices, and terminations rated 600 V and less.
- B. Product Schedule: Indicate type, use, location, and termination locations.

1.2 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

PART 2 - PRODUCTS

All conductors shall be copper.

2.1 COPPER BUILDING WIRE

- A. Description: Flexible, insulated and uninsulated, drawn copper current-carrying conductor with an overall insulation layer or jacket, or both, rated 600 V or less.
- B. Standards:
 - 1. Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.
 - 2. Conductor and Cable Marking: Comply with wire and cable marking according to UL's "Wire and Cable Marking and Application Guide."
- C. Conductors: Copper, complying with ASTM B3 for bare annealed copper and with ASTM B8 for stranded conductors.
- D. Conductor Insulation:
 - 1. Type USE-2: Comply with UL 854. Use for all direct burial applications.
 - 2. Type THHN and Type THWN-2: Comply with UL 83. Use in conduit for all indoor applications.

E. Signaling Line Circuits: Twisted, shielded pair, size as recommended by system manufacturer.

2.2 CONNECTORS AND SPLICES

- A. Description: Factory-fabricated connectors, splices, and lugs of size, ampacity rating, material, type, and class for application and service indicated; listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.
- B. Jacketed Cable Connectors: For steel and aluminum jacketed cables, zinc die-cast with set screws, designed to connect conductors specified in this Section.
- C. Lugs: One piece, seamless, designed to terminate conductors specified in this Section.
 - 1. Material: Copper.
 - 2. Termination: Compression.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper; solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.
- B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

C. <u>Ground wires: #3 copper, or larger where required by NEC and application.</u>

- 3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS
 - A. Service Entrance: Type USE, single conductor in raceway.
 - B. Exposed Feeders: Type THHN/THWN-2, single conductors in raceway.
 - C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN/THWN-2, single conductors in raceway.
 - D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway OR Underground feeder cable, Type UF where allowed by code.
 - E. Exposed Branch Circuits, Including in Crawlspaces: Type THHN/THWN-2, single conductors in raceway.

- F. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Most applications--Type THHN/THWN-2, single conductors in raceway OR Metal-clad cable, Type MC; Residential only-- Nonmetallic-sheathed cable, Type NM.
- A. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN/THWN-2, single conductors in raceway OR Underground feeder cable, Type UF where allowed by code.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors unless otherwise indicated.
- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips that will not damage cables or raceway.
- D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members and follow surface contours where possible.

3.4

3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- B. Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.

3.5 IDENTIFICATION

- A. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."
- B. Identify each spare conductor at each end with identity number and location of other end of conductor and identify as spare conductor.

3.6 INSULATION TESTS

A. Test and record insulation resistance of all circuits. Megger readings must be taken before energizing a circuit. When the insulation resistance tests less than 5,000,000 ohm, the

Contractor shall investigate causes and take remedial action to prevent damage to circuits. The megger test set shall have voltage rating as indicated below.

- 1. 125 to 1000V insulation 500V test set
- B. All reports shall be certified and submitted to the Designer as shop drawings.

GROUNDING AND BONDING FOR CAMPGROUND ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes grounding and bonding systems and equipment as/where required by the Indiana Electrical Code in a manner compliant with Code and manufacturer's instructions, plus the following special applications:
 - 1. Underground electrical distribution including transformers.
 - 2. Campground pedestals and panels—minimum #3 bare copper throughout for each circuit; larger where specified or required by Code.
 - 3. Existing campground comfort stations.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product including conductors, ground rods and ground clamps.

1.3 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Plans showing locations/details of grounding features.
- B. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.
 - 1. Plans showing as-built, dimensioned locations of:
 - a. Ground rods.
 - b. Ground rings.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with UL 467 for grounding and bonding materials and equipment.

2.2 CONDUCTORS

- A. Bare Copper Conductors(minimum size #3—larger where required by code or shown elsewhere in contract documents):
 - 1. Stranded Conductors: ASTM B8.

2.3 CONNECTORS

- A. Conduit Hubs: Mechanical type, terminal with threaded hub.
- B. Ground Rod Clamps: Mechanical type, copper or copper alloy, terminal with hex head bolt.

2.4 GROUNDING ELECTRODES

- A. Ground Rods: Copper-clad steel, 3/4 inch by 10 feet.
- B. Ground Plates: 1/4 inch thick, hot-dipped galvanized.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install stranded conductors unless otherwise indicated.

3.2 GROUNDING AT THE SERVICE

A. Equipment grounding conductors and grounding electrode conductors shall be connected to the ground bus. Install a main bonding jumper between the neutral and ground buses.

3.3 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

- A. Comply with IEEE C2 grounding requirements.
- B. Grounding Manholes and Handholes: Install a driven ground rod through manhole or handhole floor, close to wall, and set rod depth so 4 inches will extend above finished floor. If necessary, install ground rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from ground rod into manhole through a waterproof sleeve in manhole wall. Protect ground rods passing through concrete floor with a double wrapping of pressure-sensitive insulating tape or heat-shrunk insulating sleeve from 2 inches above to 6 inches below concrete. Seal floor opening with waterproof, nonshrink grout.

C. Grounding Connections to Manhole Components: Bond exposed-metal parts such as inserts, cable racks, pulling irons, ladders, and cable shields within each manhole or handhole, to ground rod or grounding conductor. Make connections with No. 4 AWG minimum, stranded, hard-drawn copper bonding conductor. Train conductors level or plumb around corners and fasten to manhole walls. Connect to cable armor and cable shields according to written instructions by manufacturer of splicing and termination kits.

3.4 EQUIPMENT GROUNDING

- A. Install insulated equipment grounding conductors with all feeders and branch circuits.
- B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:
 - 1. Feeders and branch circuits.
 - 2. Lighting circuits.
 - 3. Receptacle circuits.
 - 4. Single-phase motor and appliance branch circuits.....
 - 5. Flexible raceway runs.
 - 6. Armored and metal-clad cable runs.
 - 7. Busway Supply Circuits: Install insulated equipment grounding conductor from grounding bus in the switchgear, switchboard, or distribution panel to equipment grounding bar terminal on busway.

3.5 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Ground Bonding Common with Lightning Protection System: Comply with NFPA 780 and UL 96 when interconnecting with lightning protection system. Bond electrical power system ground directly to lightning protection system grounding conductor at closest point to electrical service grounding electrode. Use bonding conductor sized same as system grounding electrode conductor, and install in conduit.
- C. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade unless otherwise indicated.
 - 1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
- D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
 - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.

- 2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
- 3. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.
- E. Grounding and Bonding for Piping:
 - 1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes; use a bolted clamp connector or bolt a lug-type connector to a pipe flange by using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.
 - 2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
 - 3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

3.6 FIELD QUALITY CONTROL

- A. Tests and Inspections:
 - 1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
 - 2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
 - 3. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal and at individual ground rods. Make tests at ground rods before any conductors are connected.
 - a. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
 - b. Perform tests by fall-of-potential method according to IEEE 81.
 - 4. Prepare dimensioned Drawings locating each ground rod and ground-rod assembly, and other grounding electrodes. Identify each by letter in alphabetical order, and key to the record of tests and observations. Include the number of rods driven and their depth at each location, and include observations of weather and other phenomena that may affect test results. Describe measures taken to improve test results.
- B. Grounding system will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Metal conduits and fittings.
 - 2. Metal wireways and auxiliary gutters.
 - 3. Surface raceways.
 - 4. Boxes, enclosures, and cabinets.
 - 5. Handholes and boxes for exterior underground cabling.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 METAL CONDUITS AND FITTINGS

- A. Metal Conduit: ALL ABOVE-GROUND CONDUIT SHALL BE METALLIC
 - 1. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - 2. GRC: Comply with ANSI C80.1 and UL 6.
 - 3. IMC: Comply with ANSI C80.6 and UL 1242.
 - 4. EMT: Comply with ANSI C80.3 and UL 797.
 - 5. FMC: Comply with UL 1; zinc-coated steel.
 - 6. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.
- B. Metal Fittings: Comply with NEMA FB 1 and UL 514B.
 - 1. Listing and Labeling: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - 2. Fittings, General: Listed and labeled for type of conduit, location, and use.
 - 3. Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 1203 and NFPA 70.

4. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.

2.2 BOXES, ENCLOSURES, AND CABINETS

- A. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.
- B. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.
- C. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.
- D. Metal Floor Boxes:
 - 1. Material: Cast metal.
 - 2. Type: Fully adjustable.
 - 3. Shape: Rectangular.
 - 4. Listing and Labeling: Metal floor boxes shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- E. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- F. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, cast aluminum with gasketed cover.
- G. Box extensions used to accommodate new building finishes shall be of same material as recessed box.
- H. Device Box Dimensions: 4 inches square by 2-1/8 inches deep.
- I. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, with continuous-hinge cover with flush latch unless otherwise indicated.
 - 1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
 - 2. Nonmetallic Enclosures: Plastic.
 - 3. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.
- J. Cabinets:
 - 1. NEMA 250, galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
 - 2. Hinged door in front cover with flush latch and concealed hinge.
 - 3. Key latch to match panelboards.
 - 4. Metal barriers to separate wiring of different systems and voltage.
 - 5. Accessory feet where required for freestanding equipment.
 - 6. Nonmetallic cabinets shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.3 HANDHOLES AND BOXES FOR EXTERIOR UNDERGROUND WIRING

- A. General Requirements for Handholes and Boxes:
 - 1. Boxes and handholes for use in underground systems shall be designed and identified as defined in NFPA 70, for intended location and application.
 - 2. Boxes installed in wet areas shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
 - 3. Configuration: Designed for flush burial.
 - 4. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure and handhole location.
 - 5. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
 - 6. Cover Legend: Molded lettering, "ELECTRIC."
 - 7. Conduit Entrance Provisions: Conduit-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

- A. Outdoors: Apply raceway products as specified below unless otherwise indicated:
 - 1. Exposed Conduit: GRC.
 - 2. Concealed Conduit, Aboveground: IMC.
 - 3. Underground Conduit: RNC, Type EPC-40-PVC, Type EPC-80-PVC.
 - 4. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.
- B. Indoors: Apply raceway products as specified below unless otherwise indicated.
 - 1. Exposed, Not Subject to Physical Damage: EMT.
 - 2. Exposed, Not Subject to Severe Physical Damage: EMT.
 - 3. Exposed and Subject to Severe Physical Damage: GRC Raceway locations include the following:
 - a. Loading dock.
 - b. Corridors used for traffic of mechanized carts, forklifts, and pallet-handling units.
 - c. Mechanical rooms.
 - d. Gymnasiums.
 - 4. Concealed in Ceilings and Interior Walls and Partitions: EMT.
 - 5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
 - 6. Damp or Wet Locations: GRC.
 - 7. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4 stainless steel in institutional and commercial kitchens and damp or wet locations.
- C. Minimum Raceway Size: 1/2-inch trade size.

- D. Raceway Fittings: Compatible with raceways and suitable for use and location.
 - 1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
 - 2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with this type of conduit. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer and apply in thickness and number of coats recommended by manufacturer.
 - 3. EMT: Use setscrew fittings. Comply with NEMA FB 2.10.
 - 4. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.

3.2 INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.
- B. Do not install raceways or electrical items on any "explosion-relief" walls or rotating equipment.
- C. Do not fasten conduits onto the bottom side of a metal deck roof.
- D. Keep raceways at least 6 inches from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
- E. Arrange stub-ups so curved portions of bends are not visible above finished slab.
- F. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of change in direction.
- G. Make bends in raceway using large-radius preformed ells. Field bending shall be according to NFPA 70 minimum radii requirements. Use only equipment specifically designed for material and size involved.
- H. Conceal conduit and EMT within finished walls, ceilings, and floors unless otherwise indicated. Install conduits parallel or perpendicular to building lines.
- I. Support conduit within 12 inches of enclosures to which attached.
- J. Raceways Embedded in Slabs:
 - 1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support. Secure raceways to reinforcement at maximum 10-foot intervals.
 - 2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
 - 3. Arrange raceways to keep a minimum of 1 inch of concrete cover in all directions.

- 4. Do not embed threadless fittings in concrete unless specifically approved by Architect for each specific location.
- K. Stub-ups to Above Recessed Ceilings:
 - 1. Use EMT, IMC, or RMC for raceways.
 - 2. Use a conduit bushing or insulated fitting to terminate stub-ups not terminated in hubs or in an enclosure.
- L. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.
- M. Coat field-cut threads on PVC-coated raceway with a corrosion-preventing conductive compound prior to assembly.
- N. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.
- O. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch trade size and insulated throat metal bushings on 1-1/2-inch trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.
- P. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.
- Q. Surface Raceways:
 - 1. Install surface raceway with a minimum 2-inch radius control at bend points.
 - 2. Secure surface raceway with screws or other anchor-type devices at intervals not exceeding 48 inches and with no less than two supports per straight raceway section. Support surface raceway according to manufacturer's written instructions. Tape and glue are not acceptable support methods.
- R. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces.
- S. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:
 - 1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
 - 2. Where an underground service raceway enters a building or structure.
 - 3. Conduit extending from interior to exterior of building.
 - 4. Conduit extending into pressurized duct and equipment.
 - 5. Conduit extending into pressurized zones that are automatically controlled to maintain different pressure set points.

- 6. Where otherwise required by NFPA 70.
- T. Expansion-Joint Fittings:
 - 1. Install in each run of aboveground RNC that is located where environmental temperature change may exceed 30 deg. F and that has straight-run length that exceeds 25 feet.
 - 2. Install type and quantity of fittings that accommodate temperature change listed for each of the following locations:
 - a. Outdoor Locations Not Exposed to Direct Sunlight: 125 deg F temperature change.
 - b. Outdoor Locations Exposed to Direct Sunlight: 155 deg F temperature change.
 - c. Indoor Spaces Connected with Outdoors without Physical Separation: 125 deg F temperature change.
 - d. Attics: 135 deg F temperature change.
 - 3. Install fitting(s) that provide expansion and contraction for at least 0.00041 inch per foot of length of straight run per degree F of temperature change for PVC conduits.
 - 4. Install expansion fittings at all locations where conduits cross building or structure expansion joints.
 - 5. Install each expansion-joint fitting with position, mounting, and piston setting selected according to manufacturer's written instructions for conditions at specific location at time of installation. Install conduit supports to allow for expansion movement.
- U. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 36 inches of flexible conduit for recessed and semi-recessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
 - 1. Use LFMC in damp or wet locations subject to severe physical damage.
 - 2. Use LFMC or LFNC in damp or wet locations not subject to severe physical damage.
- V. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.
- W. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between the box and cover plate or the supported equipment and box.
- X. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.
- Y. Locate boxes so that cover or plate will not span different building finishes.
- Z. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.
- AA. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.
- BB. Set metal floor boxes level and flush with finished floor surface.

CC. Set nonmetallic floor boxes level. Trim after installation to fit flush with finished floor surface.

3.3 INSTALLATION OF UNDERGROUND CONDUIT

- A. Direct-Buried Conduit:
 - 1. Excavate trench bottom to provide firm and uniform support for conduit.
 - 2. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction.
 - 3. Install manufactured duct elbows for stub-up at poles and equipment and at building entrances through floor unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
 - 4. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through floor.
 - a. Couple steel conduits to ducts with adapters designed for this purpose and encase coupling with 3 inches of concrete for a minimum of 12 inches on each side of the coupling.
 - b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.
 - 5. Underground Warning Tape: Comply with requirements in Section 260553 "Identification for Electrical Systems."

3.4 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES

- A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch above finished grade.
- D. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

3.5 SLEEVE AND SLEEVE-SEAL INSTALLAION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies.

3.6 FIRESTOPPING

A. Install firestopping at penetrations of fire-rated floor and wall assemblies.

3.7 **PROTECTION**

- A. Protect coatings, finishes, and cabinets from damage and deterioration.
 - 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Color and legend requirements for raceways, conductors, and warning labels and signs.
 - 2. Labels.
 - 3. Bands and tubes.
 - 4. Tapes and stencils.
 - 5. Tags.
 - 6. Signs.
 - 7. Cable ties.
 - 8. Paint for identification.
 - 9. Fasteners for labels and signs.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each type of label and sign to illustrate composition, size, colors, lettering style, mounting provisions, and graphic features of identification products.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Comply with ASME A13.1.
- B. Comply with NFPA 70.
- C. Comply with ANSI Z535.4 for safety signs and labels.
- D. Comply with NFPA 70E for arc-flash warning labels.

- E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.
- F. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg. F.

2.2 COLOR AND LEGEND REQUIREMENTS

- A. Raceways and Cables Carrying Circuits at 600 V or Less:
 - 1. Black letters on an orange field.
 - 2. Legend: Indicate voltage and system or service type.
- B. Color-Coding for Phase and Voltage-Level Identification, 600 V or Less: Use colors listed below for ungrounded service, feeder and branch-circuit conductors.
 - 1. Color shall be factory applied or field applied for sizes larger than No. 8 AWG.
 - 2. Colors for 208/120-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - c. Phase C: Blue.
 - 3. Colors for 240-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - 4. Colors for 480/277-V Circuits:
 - a. Phase A: Brown.
 - b. Phase B: Orange.
 - c. Phase C: Yellow.
 - 5. Color for Neutral: White.
 - 6. Color for Equipment Grounds: Bare copper or green.
 - 7. Colors for Isolated Grounds: Green with two or more yellow stripes.
- C. Warning Label Colors:
 - 1. Identify system voltage with black letters on an orange background.
- D. Warning labels and signs shall include, but are not limited to, the following legends:
 - 1. Multiple Power Source Warning: "DANGER ELECTRICAL SHOCK HAZARD EQUIPMENT HAS MULTIPLE POWER SOURCES."

- 2. Workspace Clearance Warning: "WARNING OSHA REGULATION AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."
- E. Equipment Identification Labels:
 - 1. Black letters on a white field.

2.3 LABELS

- A. Vinyl Wraparound Labels: Preprinted, flexible labels laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing label ends.
- B. Snap-around Labels: Slit, pre-tensioned, flexible, preprinted, color-coded acrylic sleeves, with diameters sized to suit diameter and that stay in place by gripping action.
- C. Self-Adhesive Wraparound Labels: Preprinted, 3-mil-thick, polyester flexible label with acrylic pressure-sensitive adhesive.
 - 1. Self-Lamination: Clear; UV- weather- and chemical-resistant; self-laminating, protective shield over the legend. Labels sized such that the clear shield overlaps the entire printed legend.
 - 2. Marker for Labels: Permanent, waterproof, black ink marker recommended by tag manufacturer.
 - 3. Marker for Labels: Machine-printed, permanent, waterproof, black ink recommended by printer manufacturer.
- D. Self-Adhesive Labels: Polyester transfer-printed, 3-mil-thick, multicolor, weather- and UV-resistant, pressure-sensitive adhesive labels, configured for intended use and location.
 - 1. Minimum Nominal Size:
 - a. 1-1/2 by 6 inches for raceway and conductors.
 - b. 3-1/2 by 5 inches or equipment.

2.4 BANDS AND TUBES

- A. Snap-around, Color-Coding Bands: Slit, pre-tensioned, flexible, solid-colored acrylic sleeves, 2 inches long, with diameters sized to suit diameter and that stay in place by gripping action.
- B. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tubes with machine-printed identification labels, sized to suit diameters of and shrunk to fit firmly around item being identified. Full shrink recovery occurs at a maximum of 200 deg. F. Comply with UL 224.

2.5 TAPES AND STENCILS

- A. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
- B. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; not less than 3 mils thick by 1 to 2 inches wide; compounded for outdoor use.
- C. Tape and Stencil: 4-inch-wide black stripes on 10-inch centers placed diagonally over orange background and is 12 inches wide. Stop stripes at legends.
- D. Floor Marking Tape: 2-inch-wide, 5-mil pressure-sensitive vinyl tape, with black and white stripes and clear vinyl overlay.
- E. Underground-Line Warning Tape:

Tape:

- a. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical utility lines.
- b. Printing on tape shall be permanent and shall not be damaged by burial operations.
- c. Tape material and ink shall be chemically inert and not subject to degradation when exposed to acids, alkalis, and other destructive substances commonly found in soils.
- F. Stenciled Legend: In nonfading, waterproof, black ink or paint. Minimum letter height shall be 1 inch.

2.6 TAGS

- A. Write-on Tags:
 - 1. Polyester Tags: 0.010 inch minimum thickness, with corrosion-resistant grommet and cable tie for attachment.
 - 2. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.
 - 3. Marker for Tags: Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.

2.7 SIGNS

- A. Baked-Enamel Signs:
 - 1. Preprinted aluminum signs, high-intensity reflective, punched or drilled for fasteners, with colors, legend, and size required for application.
 - 2. 1/4-inch grommets in corners for mounting.
 - 3. Nominal Size: 7 by 10 inches.

- B. Metal-Backed Butyrate Signs:
 - 1. Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs, with 0.0396inch galvanized-steel backing, punched and drilled for fasteners, and with colors, legend, and size required for application.
 - 2. 1/4-inch grommets in corners for mounting.
 - 3. Nominal Size: 10 by 14 inches.
- C. Laminated Acrylic or Melamine Plastic Signs:
 - 1. Engraved legend.
 - 2. Thickness:
 - a. For signs up to 20 sq. in., minimum 1/16 inch thick.
 - b. For signs larger than 20 sq. in., 1/8 inch thick.
 - c. Engraved legend with black letters on white face.
 - d. Punched or drilled for mechanical fasteners with 1/4-inch grommets in corners for mounting.
 - e. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

2.8 CABLE TIES

- A. General-Purpose Cable Ties: Fungus inert, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
 - 1. Minimum Width: 3/16 inch.
 - 2. Tensile Strength at 73 Deg F according to ASTM D638: 12,000 psi.
 - 3. Temperature Range: Minus 40 to plus 185 deg F.
 - 4. Color: Black, except where used for color-coding.
- B. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
 - 1. Minimum Width: 3/16 inch.
 - 2. Tensile Strength at 73 Deg F according to ASTM D638: 12,000 psi.
 - 3. Temperature Range: Minus 40 to plus 185 deg F.
 - 4. Color: Black.
- C. Plenum-Rated Cable Ties: Self-extinguishing, UV stabilized, one piece, and self-locking.
 - 1. Minimum Width: 3/16 inch.
 - 2. Tensile Strength at 73 Deg F according to ASTM D638: 7000 psi.
 - 3. UL 94 Flame Rating: 94V-0.
 - 4. Temperature Range: Minus 50 to plus 284 deg F.
 - 5. Color: Black.

2.9 MISCELLANEOUS IDENTIFICATION PRODUCTS

- A. Paint: Comply with requirements in painting Sections for paint materials and application requirements. Retain paint system applicable for surface material and location (exterior or interior).
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Verify and coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and operation and maintenance manual. Use consistent designations throughout Project.
- B. Install identifying devices before installing acoustical ceilings and similar concealment.
- C. Verify identity of each item before installing identification products.
- D. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and operation and maintenance manual.
- E. Apply identification devices to surfaces that require finish after completing finish work.
- F. Install signs with approved legend to facilitate proper identification, operation, and maintenance of electrical systems and connected items.
- G. Self-Adhesive Identification Products: Before applying electrical identification products, clean substrates of substances that could impair bond, using materials and methods recommended by manufacturer of identification product.
- H. System Identification for Raceways and Cables under 600 V: Identification shall completely encircle cable or conduit. Place identification of two-color markings in contact, side by side.
 - 1. Secure tight to surface of conductor, cable, or raceway.
- I. System Identification for Raceways and Cables over 600 V: Identification shall completely encircle cable or conduit. Place adjacent identification of two-color markings in contact, side by side.
 - 1. Secure tight to surface of conductor, cable, or raceway.
- J. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.

- K. Emergency Operating Instruction Signs: Install instruction signs with white legend on a red background with minimum 3/8-inch-high letters for emergency instructions at equipment used for power transfer.
- L. Elevated Components: Increase sizes of labels, signs, and letters to those appropriate for viewing from the floor.
- M. Accessible Fittings for Raceways: Identify the covers of each junction and pull box of the following systems with the wiring system legend and system voltage. System legends shall be as follows:
 - 1. "EMERGENCY POWER."
 - 2. "POWER."
 - 3. "UPS."
- N. Vinyl Wraparound Labels:
 - 1. Secure tight to surface at a location with high visibility and accessibility.
 - 2. Attach labels that are not self-adhesive type with clear vinyl tape, with adhesive appropriate to the location and substrate.
- O. Snap-around Labels: Secure tight to surface at a location with high visibility and accessibility.
- P. Self-Adhesive Wraparound Labels: Secure tight to surface of raceway or cable at a location with high visibility and accessibility.
- Q. Self-Adhesive Labels:
 - 1. On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and operation and maintenance manual.
 - 2. Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on 1-1/2-inch-high label; where two lines of text are required, use labels 2 inches high.
- R. Snap-around Color-Coding Bands: Secure tight to surface at a location with high visibility and accessibility.
- S. Heat-Shrink, Preprinted Tubes: Secure tight to surface at a location with high visibility and accessibility.
- T. Marker Tapes: Secure tight to surface at a location with high visibility and accessibility.
- U. Self-Adhesive Vinyl Tape: Secure tight to surface at a location with high visibility and accessibility.

Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding.

V. Tape and Stencil: Comply with requirements in painting Sections for surface preparation and paint application.

- W. Floor Marking Tape: Apply stripes to finished surfaces following manufacturer's written instructions.
- X. Underground Line Warning Tape:
 - 1. During backfilling of trenches, install continuous underground-line warning tape directly above cable or raceway at 6 to 8 inches below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches overall.
 - 2. Limit use of underground-line warning tape to direct-buried cables.
 - 3. Install underground-line warning tape for direct-buried cables and cables in raceways.
- Y. Write-on Tags:
 - 1. Place in a location with high visibility and accessibility.
 - 2. Secure using general-purpose cable ties.
- Z. Baked-Enamel Signs:
 - 1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
 - 2. Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on minimum 1-1/2-inch-high sign; where two lines of text are required, use signs minimum 2 inches high.
- AA. Metal-Backed Butyrate Signs:
 - 1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
 - 2. Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on minimum 1-1/2-inch-high sign; where two lines of text are required, use signs minimum 2 inches high.
- BB. Laminated Acrylic or Melamine Plastic Signs:
 - 1. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
 - 2. Unless otherwise indicated, provide a single line of text with 1/2-inch-high letters on minimum 1-1/2-inch-high sign; where two lines of text are required, use signs minimum 2 inches high.
- CC. Cable Ties: General purpose, for attaching tags, except as listed below:
 - 1. Outdoors: UV-stabilized nylon.
 - 2. In Spaces Handling Environmental Air: Plenum rated.

3.2 IDENTIFICATION SCHEDULE

A. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.

- B. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, pull points, and locations of high visibility. Identify by system and circuit designation.
- C. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits, More Than 30 A and 120 V to Ground: Identify with self-adhesive raceway labels.
 - 1. Locate identification at changes in direction, at penetrations of walls and floors, at 50foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- D. Locations of Underground Lines: Underground-line warning tape for power, lighting, communication, and control wiring and optical-fiber cable.
- E. Workspace Indication: Apply floor marking tape to finished surfaces. Show working clearances in the direction of access to live parts. Workspace shall comply with NFPA 70 and 29 CFR 1926.403 unless otherwise indicated. Do not install at flush-mounted panelboards and similar equipment in finished spaces.
- F. Instructional Signs: Self-adhesive labels, including the color code for grounded and ungrounded conductors.
- G. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Selfadhesive equipment labels.
 - 1. Apply to exterior of door, cover, or other access.
 - 2. For equipment with multiple power or control sources, apply to door or cover of equipment, including, but not limited to, the following:
 - a. Power-transfer switches.
 - b. Controls with external control power connections.
- H. Arc Flash Warning Labeling: Self-adhesive labels.
- I. Operating Instruction Signs: Self-adhesive labels.
- J. Emergency Operating Instruction Signs: Self-adhesive labels with white legend on a red background with minimum 3/8-inch- high letters for emergency instructions at equipment used for power transfer.
- K. Equipment Identification Labels:
 - 1. Indoor Equipment: Self-adhesive label.
 - 2. Outdoor Equipment: Laminated acrylic or melamine sign.

CAMPGROUND ELECTRICAL PEDESTALS

PART 1 - GENERAL

1.01 DESCRIPTION:

- A. The work required under this Section includes, but is not limited to, furnishing and installation of all power outlet panels shown on the drawings and required herein.
- 1.02 SUBMITTALS:
- A. Submit shop drawings and maintenance data for all equipment specified in this Section.

PART 2 - PRODUCTS

- 2.01 CAMPGROUND ELECTRICAL PEDESTALS:
- A. Campground electrical pedestals shall be specifically designed and manufactured for recreational vehicle parks. Unit shall have all copper conductor interiors.
- B. Unit shall be of all metal construction and shall be pedestal mounted. Pedestal shall be constructed of not less than 14-gauge steel. Pedestals shall be phosphate treated and finished with baked enamel. Unit shall be raintight when in use.
- C. Mains shall be rated at not less than 100 amps. Main lugs shall be provided for loop feed wiring and shall accept copper conductors from #6 to 250 KCMIL. Ground lugs shall accept #10 thru #2 copper conductors.
- Units shall be equipped with one 20 amp, 1 pole GFCI circuit breaker connected to one Duplex 20 amp receptacle NEMA 5-20R, one 30 amp, 1 pole circuit breaker connected to one single 30 amp receptacle NEMA 5-30R both 125 volt, 2 wire with grounding ANSI C73 13-1972 and, one 50 amp, 2 pole circuit breaker connected to one single 50 amp receptacle NEMA 14-50R 125/250 volt, 3 wire with grounding ANSI C73.12-1972. A 20 Amp GFCI receptacle is not an acceptable substitute for the GFCI circuit breaker required.
- E. The trip point for the GFCI circuit breaker shall be set at. Not less than 4 ma. nor more than 6 ma.
- F. Provide an auxiliary stabilizer foot for the pedestal.
- G. Panel door shall be equipped for padlock.
- H. All conductors inside unit shall be made from soft drawn lake copper.
- I. Units shall be equal in all respects to Midwest Electric Products, Inc. Model UO75GP6-Cu. Approved equals: Square D and Milbank.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Panels and pedestals shall be installed in complete accordance with manufacturers installation instructions, contract drawings, and the Indiana Electrical Code.
- B. Perform operational testing in accordance with manufacturer's directions and the Indiana Electrical Code. Verify ground connection and polarity of all receptacles.
- C. Identify each campsite pedestal with the campsite number by installing an identification label on the front side of the front cover. Use 2" black lettering w/silver reflective vinyl background by Hillman or Ky-Ko. Protect the numbers by installing a ¹/₄" Lexan 4"x7" clear U.V. resistant shield. Secure to lid using (4) pop rivets, one at each corner. Seal top of the shield using a clear RTV caulk.

PANELBOARDS

PART 1 - GENERAL

1.01 DESCRIPTION:

A. The work required under this Section includes, but is not limited to, the furnishing and installing of all panelboards shown on the drawings and specified herein.

PART 2 - PRODUCTS

2.01 CONSTRUCTION:

- A. Where indicated on the Drawings, provide a dead-front, panelboard incorporating switching and protective devices of the number, rating and type noted herein or shown on the Drawings.
- B. Cabinet shall be NEMA 3R rated, for surface mounting, constructed of heavy gauge steel in accordance with UL standard 50 for cabinets.
- C. All panelboards shall be rated for the intended voltage and shall be in accordance with the Underwriter's Laboratories, Inc. A "Standard for Panelboard's" and Standard for Cabinets and Boxes and shall be so labeled where procedures exist.
- D. All panelboards shall comply with NEMA Standards for Panelboards and National Electric Code.
- E. All interiors shall be completely factory assembled with switching and protective devices, wire connectors, etc. All wire connectors, except screw terminals, shall be of the antiturn solderless type and all shall be suitable for copper wire of the sizes indicated. Interiors shall be so designed that switching and protective devices can be replaced without disturbing adjacent units and without removing the main bus connectors and shall be so designed that circuits may be changed without machining, drilling or tapping.
- F. A nameplate shall be provided listing panel type and rating.
- G. Bus bars for the mains shall be of copper size in accordance with Underwriter's Laboratories standards. Unless otherwise noted, full size neutral bars shall be included. Bus bar taps for panels with single pole branches shall be arranged for sequence phasing of branch circuit devices.
- H. The short circuit rating of the assembled panelboard shall be in accordance with U.L. Inc.

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Standards and their test verification. Breakers shall be rated 65,000 AIC.

- I. All panelboards shall be fitted with an equipment ground bar.
- J. Boxes shall be made from <u>unpainted</u> galvanized code gauge steel having multiple knockouts except where noted. Boxes shall be of sufficient size to provide a minimum gutter space of 4" on all sides.
- K. Hinged doors covering all switching device handles shall be included in all panel trims.
- L. Doors in panelboard trims shall conform to the following:
 - 1. In making switching device handles accessible, doors shall not uncover any live parts.
 - 2. Doors shall have flush-type cylinder lock and catch, except that doors over 48" in height shall have auxiliary fasteners at top and bottom of door in addition to flush-type cylinder lock and catch. Door hinges shall be concealed. All locks shall be keyed alike. A directory frame and card having a transparent cover shall be furnished on each door.
 - 3. The trims shall be fabricated from code gauge sheet steel.
- M. All exterior and interior steel surfaces of the panelboard trims shall be properly cleaned and finished with ANSI-61 paint over a rust-inhibiting phosphatized coating.
- N. 1200 Amp panel shall be Square D "I-Line" style; Type "HCR-U", Catalog No. HCR548612U interior with Type 3R box Cat. No.HC4486WP, including 1200 amp main breaker with back-feed main lug kit, solid neutral assembly HCWM12SN, and equipment ground bar kit PK32DGTA.
- 800 Amp panels shall be Square D "I-Line" style; Type "HCM", Catalog No. HCM 18738M interior with Type 3R box Cat. No. HC3273WP, including 800 amp main breaker, solid neutral and ground bar kit.

2.02 PANELBOARD DIRECTORY:

A. Provide each panel with a typewritten circuit directory filled in completely listing equipment served and campsite numbers.

PART 3 - EXECUTION

3.01 INSTALLATION:

A. Support panel cabinets independently with no weight bearing on conduits.

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- B. Install panelboards so top breaker is not higher than 6'-0" above the floor or finish grade. All panels same height. Adjacent panel cabinets shall be same size and mounted in horizontal alignment.
- C. Protect panelboards and cabinets during construction to prevent damage and entry of dirt, paint, etc., Inspect and remove any debris, scrap wire, etc. from the cabinet interior before installing fronts.
- D. Distribute and arrange conductors neatly in the wiring gutters. The contractor shall maintain the largest practical bending radius of conductors.
- E. Connect ground electrode conductor to the equipment grounding terminal bar. Verify that the ground bar is securely bonded to the panelboard cabinet and that it is not connected to the neutral bar except at service equipment as permitted in the latest revision of NEC Article 250.

3.02 BALANCING ELECTRICAL LOAD:

Care shall be exercised in connecting various electrical loads to panelboards to arrive at a reasonable balance between loads on each phase at each panelboard. It shall be the responsibility of the Electrical Contractor to make tests and adjust loads at each panelboard to result in a reasonably balanced load condition, satisfactory to the Engineer.

BRICK UNIT PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Brick pavers set in mortar on a rigid base.

1.2 RELATED REQUIREMENTS

A. Gold Glazed Firebrick by Superior Clay Corporation, Split Size.

1.3 APPLICABLE PUBLICATIONS

- A. Comply with references to extent specified in this section.
- B. ASTM International (ASTM):
 - 1. C144-11 Aggregate for Masonry Mortar.
 - 2. C150/C150M-16 Portland Cement.
 - 3. C207-06(2011) Hydrated Lime for Masonry Purposes.
 - 4. C270-14a- Mortar for Unit Masonry.

1.4 SUBMITTALS

- A. Submittal Procedures: Section 013323, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Submittal Drawings:
 - 1. Show brick paving layout and patterns.
- C. Manufacturer's Literature and Data:
 - 1. Description of each product.
- D. Samples:
 - 1. Brick: Full size of type and color.
 - a. Minimum five individual samples to show full color and texture range.
 - 2. Mortar: Samples of brick with mortar joints of each color.

1.5 QUALITY ASSURANCE

A. Mockups: Provide mockup of size indicated on drawings to confirm paving materials and pattern and to establish workmanship quality.

1.6 **DELIVERY**

- A. Deliver products in manufacturer's original sealed packaging.
- B. Mark packaging, legibly. Indicate manufacturer's name or brand, type, color, production run number, and manufacture date.
- C. Before installation, return or dispose of products within distorted, damaged, or opened packaging.

1.7 STORAGE AND HANDLING

A. Store masonry materials under waterproof covers on planking clear of ground.

B. Protect products from damage during handling and construction operations.

1.8 FIELD CONDITIONS

- A. Environment:
 - 1. Product Temperature: Minimum 4 degrees C (40 degrees F) for minimum 48 hours before installation.

1.9 WARRANTY

A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

PART 2 - PRODUCTS

2.1 **PRODUCTS - GENERAL**

- A. Basis of Design: Section 090600, SCHEDULE FOR FINISHES.
- B. Provide each paving system component from one manufacturer and from one production run.

2.2 BRICK

- A. Firebrick: ASTM C902; Class SX, Type I.
 - 1. Manufacturing Tolerances: // Application PS // Application PX //.

2.3 MORTAR

- A. ASTM C270, Type S, cement-lime proportion specification mix. Admixtures and Type N lime are not acceptable.
- B. Hydrated Lime: ASTM C207 Type S.
- C. Sand: ASTM C144.
- D. Portland Cement: ASTM C150/C150M.

PART 3 - EXECUTION

3.1 **PREPARATION**

- A. Examine and verify substrate suitability for product installation.
 - 1. Verify substrate depth accommodates brick paving installation thickness.
- B. Protect existing construction and completed work from damage.
 - 1. Prevent damage from contact with mortar.
- C. Clean substrates. Remove contaminants capable of affecting subsequently installed product's performance.

3.2 INSTALLATION - GENERAL

A. Install products according to manufacturer's instructions and approved submittal drawings.

3.3 BRICK INSTALLATION

- A. Do not use bricks with chips, cracks, discoloration, or other visible defects.
- B. Layout brick paving according to pattern indicated on drawings.
- C. Installation with Portland Cement Mortar:

- 1. Install brick in full bed joint. Remove excess mortar. Strike joints flush with top surface of brick and tool slightly concave.
- 2. Cure mortar by maintaining damp condition for seven days.
- D. Installation Tolerances:
 - 1. Finished surface true to plane within 1 mm in 1000 mm (1/8 inch in 10 feet), non-cumulative.
 - 2. Joint width deviation maximum 25 percent of dimension indicated.

3.4 CLEANING

- A. Remove excess mortar before fully set.
- B. Clean exposed brick and mortar surfaces. Remove contaminants and stains.

3.5 **PROTECTION**

- A. Protect brick paving from traffic and construction operations.
- B. Cover brick paving with reinforced kraft paper, and plywood or hardboard.
- C. Remove protective materials immediately before acceptance.
- D. Repair damage.