

**KANKAKEE RIVER BASIN AND YELLOW RIVER BASIN
DEVELOPMENT COMMISSION**

Project Specifications

Phase II Yellow River Restoration

at CR 1100 E

Kankakee River Basin and Yellow River Basin Development Commission

460 Lincolnway,
Valparaiso, IN 46384
Phone: (219) 861-7999

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DIVISION 0

BIDDING AND CONTRACT
DOCUMENTS

SECTION 00010
INDIANA CODE 2020. CHAPTER 9

**Indiana Code 2020. Chapter 9. Kankakee River Basin and Yellow River Basin
Development Commission (KRBYRBDC)**

IC 14-13-9-33 Indiana business preference; criteria

Sec. 33. (a) As used in this section, "out-of-state business" refers to a business that is not an Indiana business.

(b) The commission may give a preference to an Indiana business that submits a bid under this article if all of the following apply:

- (1) An out-of-state business submits a bid.
- (2) The out-of-state business is a business from a state that gives public works preferences unfavorable to Indiana businesses.

(c) The commission shall establish criteria for determining the following:

- (1) Whether a bidder qualifies as an Indiana business under the rules.
- (2) When another state's preference is unfavorable to Indiana businesses.
- (3) The method by which the preference for Indiana businesses is to be computed.

(d) The commission may not give a preference to an Indiana business that is more favorable to the Indiana business than the other state's preference is to the other state's business.

As added by P.L.282-2019, SEC.8.

**IC 14-13-9-34 Indiana employment goal for public works projects awarded by the
commission**

Sec. 34. (a) As used in this section, "resident of Indiana" means a person who is at least eighteen (18) years of age and is one (1) of the following:

- (1) A person who has registered a motor vehicle in Indiana.
- (2) A person who is registered to vote in Indiana.
- (3) A person who has a child enrolled in an elementary or a secondary school located in Indiana.
- (4) A person who derives more than one-half (1/2) of the person's gross income (as defined in Section 61 of the Internal Revenue Code) from sources in Indiana, according to the

provisions applicable to determining the source of adjusted gross income that are set forth in IC 6-3-2-2. However, a person who would otherwise be considered a resident of Indiana under this subdivision is not a resident of Indiana if a preponderance of the evidence concerning the factors set forth in subdivisions (1) through (3) proves that the person is not a resident of Indiana.

(b) When entering a bid under this chapter for a public works project, each contractor shall provide the commission with information on the number of residents of Indiana who will be employed by the contractor and the number of residents of Indiana who will be employed by any subcontractor of the contractor.

(c) The goal for a contract awarded by the commission for a public works project is to award the contract to a contractor who:

(1) employs residents of Indiana as at least ninety percent (90%) of the employees who work on the contract; and

(2) enters into subcontracts only with subcontractors who employ residents of Indiana as at least ninety percent (90%) of the employees who work on the subcontract.

SECTION 00020
INVITATION TO BID
KRBYRBDC

PHASE II YELLOW RIVER RESTORATION AT CR 1100 E.

The Kankakee and Yellow River Basin Development Commission will be accepting sealed bids for the construction of **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E.** Bids will be received at the Starke County Annex at 53 E Mound Street, Knox, **between 12 and 2 p.m. CST** (local prevailing time), on **February 24, 2023.** Bids must be hand delivered to the Starke County Annex council chambers between 12pm and 2pm window that day. The bids will be opened and read aloud immediately following the submittal deadline time. For a copy of the bidding documents, please email the Project Engineer, Ross St.Clair, at ross.st.clair@stantec.com

This PHASE II Yellow River Restoration at **CR 1100 E** consists of stabilizing approximately **4,200** linear feet of the Yellow River in Starke County immediately west of the **CR 1100 E.** Construction activities will include clearing, tree removal and channel and bank grading, structure installation, planting, seeding, and erosion control blanket installation.

The Project Documents are available at no cost and may be requested electronically from Ross St.Clair of Stantec via email at ross.st.clair@stantec.com or by calling Ross St.Clair at (574) 586 4256.

A mandatory prebid meeting will be held at the site on Thursday, February 2, 2023 at 1 PM CST. Access and parking will be at CR 1100 E bridge on the east end of the project area. Final day for questions submitted to the Engineer will be end of day on February 17, 2023.

Proposals shall be completely executed and must be accompanied by an executed Modified Form 96, confirmation that copies of Addenda were received (if issued), and satisfactory bid security. A certified or cashier's check payable to the KRBYRBDC or a bid bond in an amount equal to five (5) percent of the bid amount must accompany each bid. All checks of unsuccessful bidders shall be returned to them by the Commission upon selection of successful bidder. The successful Bidder will be required to provide a Performance and Payment Bond each in the amount of one hundred (100) percent of the Contract amount.

Bidders must be experienced in the construction of the type of facilities to be built under the Contract(s) for which a bid is submitted.

In determining the lowest qualified, responsive and responsible bidder, the KRBYRBDC will consider the Total Base Bid made for the Contract. The KRBYRBDC will also consider all other relevant facts mentioned in the Project Documents such as experience in completing this type of work.

The KRBYRBDC reserves the right to reject any and all bids or to waive any informalities in the bidding, should the Board deem it to be in the public interest to do so.

Authorized and published by the authority of the KRBYRBDC.

Kankakee River Basin and Yellow River Basin Development Commission
/s/ Scott Pelath, Executive Director

SECTION 00100
INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 SUBMISSION OF BIDS

- A. Bids will be received at the Executive Director's Office at 460 Lincolnway, Valparaiso, 46384, up to the local prevailing time and date set forth in the Invitation to Bid. The bids will be opened and read aloud beginning at the local prevailing time and date set forth in the Invitation to Bid.
- B. Each Bid shall be enclosed in a sealed envelope, clearly identified with the name of the project, date of bid opening, name of bidder, and words **"Phase II Yellow River Restoration at CR 1100 E"**. The envelope shall be addressed to the KRBYRBDC.
- C. To be accepted, any Bid must be received by the Owner prior to the bid opening time referenced above. Bids received after the time and date specified herein will be returned to the Bidder unopened.
- D. The Owner may waive any informalities or minor defects or reject any and all Bids without incurring any liability should it deem it to be in the public interest to do so.
- E. A bidder may withdraw his Bid by letter with a notarized signature(s) or, with proper identification, by personally securing his Bid at any time prior to the time stated herein for the opening of Bids. A telephone request to withdraw a Bid will not be considered. No bidder may withdraw his Bid within 60 days after the actual time and date opening thereof. Should there be any reason why the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder.

1.2 CONDITIONS AFFECTING THE WORK

- A. Bidders shall attend the mandatory prebid meeting and thoroughly inform himself as to the actual conditions and requirements of the Work, including risks, means of access, ground and surface water levels, character of the soil and subsoil, restrictions, regulations, labor and materials required, and all other conditions and factors, local and otherwise, which affect the prosecution and completion of the Work and the cost thereof, including the availability and cost of labor, and available facilities for transportation, and handling and storage of materials and equipment. It must be understood and agreed that all such factors have been properly investigated and considered in the preparation of the Bid submitted, as there will be no subsequent financial adjustment to the Contract awarded hereunder, which is based on the lack of such prior information or its effect on the cost of the Work.

- B. Bidder shall also thoroughly examine and be familiar with the Project and by such other means as he prefers to determine exact nature and scope of the work and requirements of the Owner.
- C. Bidders are directed to “Specific Provisions” of this Project Document for requirements relative to the Contract which may affect the cost of the work.
- D. Bidder’s attention is directed to Senate Enrolled Act 520, Public Law 63-1987 which regulates the use of foreign steel.

1.3 PREPARATION OF BIDS

- A. The Project Manual includes a copy of the Bid Form which shall be used by the bidder in submitting his Bid. Bids shall not contain qualifications or recapitulation of the work to be done. Writing shall be legible.
- B. In general, Bids that contain omissions, erasures, alterations, or additions not called for, conditional or alternate bids not called for, or that are irregular in any way, or Bids otherwise regular which are not accompanied by the required bid bond specified herein may be rejected as informal or insufficient. No partial bids will be considered unless requested specifically.
- C. If the bidder is a corporation, the Bid shall be signed, in ink, in the name and under the seal of the corporation by a duly authorized officer of the corporation, with the designation of his official capacity, and properly attested. The Bid shall show the state in which the corporation is chartered. If it is a foreign corporation, the Bid shall show whether or not it is licensed to transact business in the State of Indiana.
- D. If the bidder is a partnership, the Bid shall be signed, in ink, in the name under which the organization is doing business, by a partner of the firm.
- E. If the bidder is a sole proprietorship, he shall sign the Bid, in ink, in person or by agent, stating the name, if any, under which he is doing business.
- F. In every case, the Bid shall show the present business address of the bidder, at which address communications will be received and service of notices accepted.
- G. When Bids are signed by an agent of the bidder, a power of attorney evidencing his authority to act as the bidder’s agent shall accompany the Bid.
- H. The name of each person signing the Bid shall be typed or printed below his signature.
- I. Bidders are advised that an improper execution of the Bid may result in the disallowance of the bid, therefore, extreme care should be used in executing their Bids.

- J. Materials or labor may not be directly noted in the Project Documents, but are necessary to the proper completion of the project for the obvious intent thereof, the bidder shall understand the same to be implied and shall provide for them in his bid price as fully as if they were noted and described.
- K. The Owner will cooperate with the contractor in providing the necessary documentation to exempt the project from taxes as permitted by law. The Contractor shall be responsible for the initiation of this exemption. The Contract price shall be based upon exemption from all taxes as allowed by law. The Contractor shall be responsible for paying all other taxes required by law.
- L. Bidder must complete and submit the following items as the “Bid Package”:**
 - 1) Itemized Bid on the furnished Bid Form**
 - 2) Contractor’s Bid for Work (Modified Form 96) on the furnished form.**
 - 3) Supporting information as required by Modified Form 96.**
 - 4) Financial Statement as required by Modified Form 96.**
 - 5) Bid Security (If bond, use form furnished)**
 - 6) Confirmation of Receipt of all Addenda (on Bid Form)**

1.4 MODIFICATION OF BIDS

- A. Written and telegraphic modifications of Bids will be considered only if received prior to the time stated for receipt of Bids. Submit written modifications in a sealed envelope, identified as required for Bids except that the Phrase “Modification of Bid” shall be used. Modifications made orally or by telephone will not be considered.
- B. Bidders are cautioned that, in case of modification involving an increase in the base bid sum, the bid deposit shall be ample or be increased to cover the new base bid sum or the entire Bid may be rejected.

1.5 RESPONSIVENESS AND RESPONSIBILITY

- A. Any bid determined to be non-responsive or any bid submitted by a bidder determined to be non-responsible will be rejected.
- B. Any bid which fails to conform to the essential requirements of the invitation for bids, such as specifications, or delivery schedule will be rejected as non-responsive.
- C. A bid may be rejected where the bidder imposes conditions which would modify requirements of the invitation for bids or limit his liability to the Owner so as to give him an advantage over other bidders. For example, bids may be rejected in which the bidder:
 - 1. Attempts to protect himself against future changes in conditions such as increased costs, if total price to the Owner cannot be determined for bid evaluation.

2. Fails to state a price and, in lieu thereof, states that price shall be “price in effect at the time of delivery”.
 3. States a price but qualifies such price as being subject to “price in effect at the time of delivery”.
 4. Where not authorized by the invitation, conditions or qualifies his bid by stipulating that the bid is to be considered only if, prior to date of award, bidder receives (or does not receive) award under a separate procurement.
 5. Limits rights of Owner under any clause of Project Documents. However, a low bidder may be requested to delete objectionable conditions from his bid if these conditions do not go to the substance, as distinguished from the form of the bid. A condition goes to the substance of a bid where it affects price, quantity, quality, or delivery of the items offered.
- D. Any bid may be rejected if the Owner determines that it is unreasonable as to price.
- E. Bids received from any person or concern debarred or ineligible shall be rejected if the period of debarment or ineligibility has not expired.
- F. Where bid security is required and a bidder fails to furnish it in accordance with the requirements of the invitation for bids, the bid may be rejected.
- G. After submitting a bid, if a bidder transfers all of his assets or that part of his assets related to the bid during the period between the bid opening and the award, the transferee may not take over the bid and the bid may be rejected.
- H. Low bids received from bidders determined to be non-responsible may be rejected. A responsible bidder is one who meets all of the following requirements.
1. Has adequate financial resources, or the ability to secure such resources.
 2. Has the necessary experience, organization, and technical qualifications, and has or can acquire, the necessary equipment to perform the proposed work.
 3. Is able to comply with the required performance schedule or completion date, taking into account all existing commitments.
 4. Has a satisfactory record of performance, integrity, judgment and skills.
 5. Is qualified and eligible to receive an award under all applicable laws and regulations.

1.6 AWARD OF CONTRACT

- A. The Owner shall make an award on each separate Contract to the responsive and responsible bidder with the lowest Total Base Bid and all other relevant facts which may be legally considered.
- B. The party to whom a Contract is awarded will be required to execute the Contract and provide the Performance and the Payment Bonds, all Certificates of Insurance, and a list of Subcontractors within ten (10) calendar days from the date when the Notice of Award is delivered to the Bidder. If Contract and/or Bond Forms other than those provided in the Project Manual are used they must contain the provisions called out in the forms provided. Any forms other than those provided in the Project Manual are subject to review and approval by the Owner's attorney.
- C. The Contract shall be executed in two (2) original documents. In case of failure of the Bidder to execute the Contract and provide the required Bonds and Certificates of Insurance, the Owner may, at his option, consider the Bidder in default, in which case the Bid Bond accompanying the bid shall become the property of the Owner.

1.7 ADDENDA AND INTERPRETATION OF PROJECT DOCUMENTS

- A. Bidder's attention is directed to the section "Addenda"

1.8 BIDDER'S QUALIFICATIONS

- A. Bidder's attention is directed to the section "General Conditions"

1.9 CONTRACT TIME AND LIQUIDATED DAMAGES

- A. Bidder's attention is directed to the sections "Bid", "Contract", and "General Conditions"

1.10 PREVAILING WAGE RATES

- A. Bidder's attention is directed to the Section "General Conditions"

END OF SECTION

SECTION 00300
BID

PART 1 -GENERAL

1.1 BID

A. To the KRBYSBDC, hereinafter called "Owner", for the:

Phase II Yellow River Restoration at CR 1100 E

B. The Undersigned, as Bidder, declares as follows:

1. The only parties interested in this Bid as Principals are named herein;
2. This Bid is made without collusion with any other person, firm, or corporation;
3. No officer, agent, or employee of the Owner is directly or indirectly interested in this Bid;
4. The Bidder has carefully examined the site of the proposed Work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed Work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and he has carefully read and examined the Project Documents comprised of the Project Manual and Plans, the proposed Contract, any and all addenda, and knows and understands the terms and provisions thereof;
5. The Bidder understands that information relative to subsurface and other conditions, natural phenomena, existing pipes and other structures (surface or subsurface) has been furnished only for his information and convenience without any warranty or guarantee, expressed or implied, that the subsurface and other conditions, natural phenomena, existing pipes and other structures (surface or subsurface) actually encountered will be the same as those shown on the Plans or in any of the Project Documents and he agrees that he shall not use or be entitled to use any such information made available to him through the Project Documents or otherwise obtained by him in his own examination of the site, as a basis of or ground for any claim against the Owner or the Engineer arising from or by reason of any variance which may exist between the aforesaid information made available to or acquired by him and the subsurface or other conditions, natural phenomena, existing pipes and other structures (surface or subsurface) actually encountered during the construction work, and he has made due allowance therefore in this bid and;
6. The Bidder understands that the quantities of work tabulated in this Bid or indicated in the Project Documents are only approximate and subject to increase or decrease as deemed necessary by the Engineer.

- C. The undersigned, as Bidder, agrees that, if this Bid is accepted, he will contract with the Owner, as provided in the Project Documents, this Bid Form being part of said Project Documents, and that he will perform all the work and furnish all the materials apparatus, appliances, tools, supplies and all other things required by the Project Documents in the manner and within the time therein prescribed and according to the requirements therein set forth, and that he will take in full payment therefore the lump sum or unit price applicable to each item of the Work as stated in the Itemized Bid Schedule.
- D. Bidders must bid on each item included in the Contract. All entries in the entire Bid must be made clearly and typed or hand-written in ink, prices must be written in figures. Bidders shall insert extended item prices obtained from quantities and unit prices. In the event that there is a discrepancy between the prices in words and figures, the bid price written in words shall govern. In the event of mathematical errors in the Bid, the Bid total will be the corrected sum of: 1) the lump sum -prices as bid, and 2) the product of the written unit prices as bid multiplied by the quantities stated.
- E. As a part of the Bid, the Bidder shall complete the following Itemized Bid Schedule, including in the appropriate item, all project costs associated with the item including equipment, materials, bonds, insurance policies, and other miscellaneous costs. A bid price for each item fairly reflecting the cost of that item must be provided such that the total of all items shall equal the total price bid.
- F. In submitting this Bid, it is understood that the Owner reserves the right to reject any and all bids. It is agreed that this Bid may not be withdrawn for a period of sixty (60) days.
- G. The Undersigned, as Bidder, further agrees that for extra work, if any, performed in accordance with the terms and provisions of the Project Documents, he will accept compensation as stipulated therein in full payment for such extra work.
- H. If the Bidder is awarded the Contract for this work, the undersigned agrees to substantially complete the work within the following number of working days measured after the date of the NOTICE TO PROCEED.

120 WORKING DAYS

Substantially complete shall mean fully functional for the intended purposes and final stabilization complete. Delays due to weather or high water (USGS gage height above 4.8' at County Line Road Bridge), as approved by the Engineer, would constitute approved extensions. The Notice to Proceed is anticipated to be issued early spring 2022.

Liquidated damages for each working day of delay shall be:

Five Hundred Dollars (\$500.00)

I. If the Owner shall accept this Bid by issuing a Notice of Award to the Bidder, the Bidder will duly execute and acknowledge the contract and furnish, duly executed and acknowledged, the required bonds and certificates of insurance and deliver same to the Owner within ten (10) days after Notice of Award is delivered to Bidder. The Owner within ten (10) days of receipt of same will execute the Contract and return to the Bidder a copy thereof.

J. Should the Bidder fail to fulfill any of his agreements as hereinabove set forth, the Owner shall have the right to retain the bid surety as liquidated damages.

K. Bidder acknowledges receipt of the following addenda (list numbers) _____ and _____ has incorporated the requirements of said addenda into the Bid.

L. The Bidder, by submittal of this Bid, agrees with the Owner that the amount of the bid security deposited with this Bid fairly and reasonably represents the amount of damages the Owner will suffer due to the failure of the Bidder to fulfill his agreements as above provided.

M. _____
(Name of Bidder)

(Signature of Authorized Representative)

(Title of Authorized Representative)

(Business Address)

Date _____

N. The Bidder is a [] sole proprietorship, [] partnership, or [] corporation incorporated in the State of _____.

If the Bidder is a corporation, affix corporate seal and give the names of its president, treasurer, and general manager if any; if a partnership, give full names and residential addresses of all partners; and if an individual, give residential address if different from business address.

O. Name and address of corporate officers, partners, or individual as required above:

Name	Address
------	---------

Name	Address
------	---------

Name	Address
------	---------

P. The names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class or all partners in the partnership who own a 10% or greater interest therein, are as follows:

Name	Address
------	---------

Name	Address
------	---------

Name	Address
------	---------

BASE BID for CR 1100 E

Line Item No.	Quantity	Unit	Description	Unit Price	Total Price
1	1	LS	MOBILIZATION AND DEMOBILIZATION		
2	1	LS	CLEARING, GRUBBING & OBSTRUCTION REMOVAL (includes trees <10" DBH)		
3	1	LS	TEMPORARY EROSION & SEDIMENT CONTROL		
4	110	EACH	TREE AND STUMP REMOVAL (10-17" DBH)		
5	56	EACH	TREE AND STUMP REMOVAL (18"+ DBH)		
6	1	LS	EARTHWORK		
7	2.5	ACRE	PERMANENT SEEDING		
8	350	EACH	TREE PLANTING		
9	5,300	SYS	COIR MATTING (700 gram coir)		
10	5,800	SYS	EROSION CONTROL BLANKET		
11	5,300	SYS	STRAW BLANKET		
12	1880	TN	INDOT REVETMENT RIPRAP		
13	1880	TN	INDOT CLASS I RIPRAP		
14	510	TN	LIMESTONE ARMOR STONE		
15	300	CY	CLEAN AGGREGATE FILL		
16	1000	CY	MINED BEDSTONE		
17	1	LS	BONDING & INSURANCE		
TOTAL BASE BID:					\$

(Modified Form 96)

BID OF

(Contractor)

(Address)

**FOR
KRBYRBDC**

Phase II Yellow River Restoration at CR 1100 E

Filed _____, 20____.

Action Taken _____

CONTRACTORS BID FOR WORK
(Modified Form 96)

PART I

(To be completed for all bids)
(Please type or print)

Date: _____

1. Owner: KRBYRBDC

2. County: STARKE

3. Bidder (Firm): _____

Address: _____

City/State: _____

4. Telephone: _____

5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the project of the KRBYRBDC in accordance with plans and specifications of said unit for the sum of

dollars

\$_____. The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, submit a proposal for each in accordance with the notice.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract. If the bid is to be awarded on a unit basis, the itemization of units shall be shown on a separate attachment. The Contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

NON -COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Dated at _____ this _____ day of _____, 20____.

(Name of Organization)

By _____

(Title of Person Signing)

ACKNOWLEDGMENT

STATE OF _____)
) SS:
COUNTY OF _____)

_____ being duly sworn, deposes and says
that he is (title)_____ of the above (organization)_____
_____ and that the statements contained in the foregoing bid,
certification and affidavit are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20__ .

Signature Notary Public

Printed Name

My Commission Expires: _____

County of Residence: _____

ACCEPTANCE

The above bid is accepted this _____ day of _____, 20__, subject to
the following conditions: _____

Contracting Authority Members:

(Complete sections I, II, III and IV for all state and local public works projects as required by statutes.)

Bidder (Firm): _____

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

1. What stream stabilization/restoration projects has your organization completed in the past 10 years?

2. What stream stabilization/restoration projects is your organization now in process of constructing?

[illegible]

3. Have you ever failed to complete any work awarded to you? If yes, where and why?

4. List references (atleast 3) from clients for which you have performed similar work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE
(Attach separate sheets as required)

1. Explain your plan or layout for performing proposed work.
2. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond.
3. What equipment do you intend to use for the proposed project?
4. Have you made contracts or received offers for all materials within prices used in preparing your proposal?

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the projected if awarded.

SECTION IV OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing bid for public works are true and correct to the best of my knowledge and belief.

Dated at _____ this _____ day of _____, 20____.

_____ By _____

(Name of Organization)

(Title of Person Signing)

ACKNOWLEDGMENT

STATE OF _____)
 _____)SS:
 COUNTY OF _____)

_____ being duly sworn, deposes and says that he

is (title)_____ of the above (organization_____

_____ and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct. Subscribed and sworn to before me this ____ day of _____, 20____

(Notary Public)

My Commission Expires: _____

County of Residence: _____

END OF SECTION

SECTION 00410
BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, _____
_____ as Principal, and _____
_____, as Surety, are hereby held and firmly bound unto the
KRBYRBDC, hereinafter called "Owner" in the penal sum of _____ for
the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves,
successors and assigns.

Signed this _____ day of _____, 20____. The Condition of the above
obligation is such that whereas the Principal has submitted to the Owner, certain Bid attached
hereto and made a part hereof to enter into a Contract in writing for the construction of:

PHASE II YELLOW RIVER RESTORATION AT CR 1100 E

NOW THEREFORE,

- a. If Said Bid shall be rejected, or
- b. If Said Bid shall be accepted and the Principal shall within ten (10) calendar days of receipt of Notice of Award execute and deliver a Contract in the form attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the Agreement created by the acceptance of said Bid;

then this obligation shall be void, otherwise the same remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by an extension of the time which the Owner may accept such Bid and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be assigned by their proper officers, the day and year first set forth above.

Principal

Surety

By: _____

IMPORTANT: Surety Companies executing bonds shall appear on the Treasury Department's most current list (circular 570 as amended) and be authorized to transact business in the State of Indiana.

END OF SECTION

SECTION 00460
NOTICE OF AWARD

To: _____

Owner: **KRBYRBDC**

Project: **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E**

The Owner has considered the Bid submitted by you for the above captioned Project Work in response to

its Invitation to Bid dated _____, 20__ and the Project Documents.

You are hereby notified that your Bid has been accepted for construction of the Work in the amount of
\$_____.

You are required by the Project Documents to execute the Contract **and then** furnish the required Contractor's Performance and Payment Bonds, Insurance Certificates, and List of Subcontractors, within ten calendar days from the receipt of this Notice to you and signing of Contract.

If you fail to execute said Agreement and to furnish said Bonds within ten days from the delivery of this Notice, the Owner will be entitled to consider all your rights arising out of its acceptance of your Bid as abandoned and as a forfeiture of your Bid security. The Owner will be entitled to such other rights as may be granted by law.

The Bidder is required to acknowledge receipt of this Notice of Award by returning a signed copy of this Notice to the Owner.

Dated this ____ day of _____, 20__.

KRBYRBDC

By_____

Title_____

ACKNOWLEDGED FOR BIDDER BY:

Signature

Typed or Printed Name and Title

END OF SECTION

SECTION 00500
CONTRACT

This Contract made this ____ day of _____, 20____, by and between The KRBYRBDC, hereinafter called "Owner" and _____, hereinafter called "Contractor".

WITNESSED: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The Contractor will commence and fully complete the: **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E**
2. The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the Project described herein.
3. The Contractor will commence the Work required by the Project Documents upon receipt of the Notice to Proceed and will complete the Contract work within **120 working days** unless the period for completion is extended by the Owner. Substantial completion, as defined in Section 00300 Bids, to be completed in **120 work days (Monday-Friday)**. Contractor agrees to pay as liquidated damages, and not as a penalty, the sum of Five Hundred Dollars (\$500.00) for each work day of delay in completing the Contract work and the remainder of the work under this Contract after expiration of the time herein limited for its completion including any approved extensions of time because of unavoidable delay. Delays due to weather, as approved by the Engineer, would constitute approved extensions. Live staking which requires planting during the dormant season, will not be required for substantial completion but will be required for final release of retainage.
4. The Contractor agrees to perform all of the Work described in the Project Documents and to comply with the terms therein for the sum of _____, dollars (\$ _____), as shown in the Bid dated _____, 20__.
5. The Term "Project Documents" means and includes the following:
 - Invitation to Bid
 - Instructions to Bidders
 - Bid
 - Contractor's Bid for Public Work (Form 96) including Non-Collusion Affidavit
 - Contractor's Financial Statement
 - Bid Security
 - Alternates (as requested)
 - Notice of Tentative Award (if used)
 - Notice of Award
 - Contract

Notice to Proceed
Bonds and Insurance
Performance Bond
Payment Bond
Guarantees
Insurance
General Conditions
Additional Articles
Project Manual, including Specifications
Plans

Addenda:

No. _____, dated _____, 20____.

No. _____, dated _____, 20____.

No. _____, dated _____, 20____.

Any and all other documents or papers included or referred to in the foregoing documents.

6. The Owner will pay the Contractor in the manner and at such times and in such amounts as required by the Project Documents.
7. In case any action at law or suit in equity is brought against the Owner, or any officer or agent thereof, including the Engineer, for or on account of the failure, negligent act, omission, or neglect of the Contractor to do and perform any of the covenants, acts, matters, or things by this Contract undertaken to be done or performed, or for the injury or damage caused by the negligence of the Contractor or his subcontractors, workmen, or suppliers or machinery and parts thereof, equipment, power, tools, and supplies incurred in the fulfillment of the Contract, the Contractor shall indemnify and hold harmless the Owner, and officers and agents of the Owner, including the Engineer, or and from all losses, damages, costs, expenses, judgments, or decrees whatever arising out of such action of suit that may be brought as aforesaid.
8. The Contractor (if a Corporation) hereby certifies that it is a [] Corporation chartered under the laws of the State of Indiana or [] Foreign Corporation registered to do business in the State of Indiana.
9. The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract. Neither party to the Contract shall assign, sublet or transfer the Contract in whole or in part without the written consent of the other, nor shall the Contractor assign any moneys due or to become due to him hereunder without

the prior written consent of Owner, and any attempted assignment hereunder without the previous written consent of Owner shall be void.

10. The Owner and Contractor acknowledge that this is a unit price based contract. The quantity amounts contained within the itemized bid form are estimated, and subject to increase or decrease throughout the construction of the project. Final payment will be made based upon field measured quantities of items installed and accepted.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized representatives, this Contract, in two copies, each of which shall be deemed an original on the date first above written.

OWNER

KRBYRBDC

460 Lincolnway
Valparaiso, IN 46384

By _____
Scott Pelath

CONTRACTOR:

By _____
(Signature of Authorized Representative)

Name _____
(Printed or Typed Name of authorized Rep.)

Title _____

Address _____

If the Contractor is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation; if Contractor is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner; and if Contractor is an individual, his signature shall be placed above. If signature is by an agent other than an officer of a corporation or a member of a partnership, a power-of-attorney must be attached hereto.

SECTION 00510
LIST OF SUBCONTRACTORS

The Bidder must complete and submit with the executed contract, the following list of all firms to be employed in performing the work on this Project. This list may not be altered or added to without the written consent of the Owner.

Project Title: **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E**

<u>Subcontractor</u>	<u>Address</u>	<u>Class of Work To be Performed</u>	<u>Estimated Dollar Volume of Work to be Performed by Subcontract</u>

(Name of Contractor)

By: _____
(Signature of Authorized Representative)

(Title of Authorized Representative)

Date: _____

END OF SECTION

SECTION 00521
INSTRUCTION SHEET

FOR A1A DOCUMENT A312, PERFORMANCE BOND AND PAYMENT BOND

A. GENERAL INFORMATION

A1A Document A312 is a new document which combines two separate bonds into one for. This is not a single combined Performance and Payment Bond. It is customary to issue these two bonds simultaneously and to pay one premium for both. The separate procurement of one bond without the other will normally not reduce the premium.

B. COMPLETING THE A312 FORM

1. Modifications

Users are encouraged to consult with their professional advisor (attorney or bond specialist) with respect to completing or modifying the form. Legal counsel should also be sought concerning the effect of federal, state and local laws on the terms of this Document.

Generally, modifications to the Performance Bond and Payment Bond may be made by filling in the box on the title page of each bond and stating any deletion or addition on the last page of each bond or on an additional page. Any such modifications are subject to review and approval by the KRB YRBDC.

2. General

These instructions apply equally to the Performance Bond and to the Payment Bond. Both bonds require identical information on them, but each bond form must be executed separately. Even though the A312 Document contains both bonds, they are still very separate bonds. The completion of one bond (e.g., the Performance Bond) is not sufficient to bind the parties to the other (e.g., the Payment Bond). Users should be careful not to mix one bond with the other. A common mistake is to fill in the cover page of the Performance Bond and to sign the signature page of the Payment Bond. In such a case, it is likely that neither bond will become binding.

3. Title Page of Each Bond (Pages 1 and 4)

Identification of Parties: The Contractor and Surety should be identified along with the Agent or Broker. It is especially important that the Contractor and Surety be identified by using their full legal names and addresses, including the legal status of the parties; sole

proprietorship, general partnership, joint venture, unincorporated association, limited partnership, corporation (general or professional), etc. The identification of the Owner's Representative and the Agent or Broker is for information only, since they are not parties to the bond agreement.

Description of the Construction Contract: The Construction Contract should be described by date and amount and by the official name and location of the Project as used in the Construction Contract. The amount of the Construction Contract should be in both written and numerical form.

Bond Amount: The dollar amount of the bonds should be in both written and numerical form in the amount specified in the Section "Owners Instructions for Bid Security, Bonds and Insurance".

Bond Date: This date should not be earlier than the date of the Construction Contract which is adopted by reference.

C. EXECUTION OF THE BONDS

Each bond must be separately signed by the Contractor and the Surety on the title page of each bond (pages 1 and 4). Additional space is provided on the last page of each bond (pages 3 and 6) for the signatures of additional parties. The parties executing (signing) the bond should indicate their company, print their name and title, and impress the corporate seal, if any. Where appropriate, attach a copy of the resolution or bylaw authorizing the individual to act on behalf of the firm or entity. Evidence of authority to sign on behalf of each party should be obtained. As to the Surety, this usually takes the form of a power of attorney issued by the surety company to the agent who signs on its behalf.

END OF SECTION

SECTION 00550
NOTICE TO PROCEED

PART 1 - GENERAL

1.1 ISSUANCE

The Notice to Proceed with construction will be issued within ten days of the execution of the Contract by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within this period, the time may be extended by mutual agreement between the Owner and the Contractor. If the Notice to Proceed with construction has not been issued within the ten-day period or within the period mutually agreed upon, the Contractor may terminate the Contract without further liability on the part of either part.

1.2 NOTICE TO PROCEED FORM

To:

Date:

Project: **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E**

You are hereby notified to commence Work in accordance with the Contract dated

_____, 20____.

KRBYRBDC,

By _____

Title _____

END OF SECTION

SECTION 00600
BID SECURITY, BONDS AND INSURANCE

PART 1 - BID SECURITY

1.1 GENERAL

Each Bid must be accompanied by bid security in the form of a certified check, or bid bond payable to the KRBYRBDC in the amount stipulated in Owner's Instructions for Bid Security, Bonds and Insurance as a guarantee that the bidder, if the Bid is accepted, will execute and file the proposed Contract, and Bonds, and Certificates of Insurance within ten days after receipt of Notice of Award. No interest will accrue or be payable on any form of bid security.

1.2 SIGNATURES AND SURETY LICENSE

Attorney's-in-fact who execute Bid Bonds must file with each bond a certified and effective dated copy of their power of attorney.

All bonds shall be issued by sureties licensed to conduct business in the State of Indiana.

1.3 BID BOND FORM

A Bid Bond form is provided in the Project Manual for the convenience of the Bidder. If a form other than that provided is used it must contain all of the provisions of the form provided, and will be subject to the review and approval of the Owner's attorney.

PART 2 - BONDS

2.1 CONTRACT SECURITY

The Contractor shall within ten (10) days after delivery of the Notice of Award, furnish the Owner with a Performance Bond and a Payment Bond, each in penal sums in the amount stipulated in the Section "Owner's Instructions for Bid Security, Bonds and Insurance", conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the Project Documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the Work provided by the Project Documents. Such Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the state in which the Work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these Bonds shall be borne by the Contractor. If at any time a surety on any such Bond is declared bankrupt or loses its right to do business in the state in which the Work is to be performed or is removed from

the list of Surety Companies accepted on Federal Bonds, the Contractor shall within ten (10) days after notice from the Owner to do so, substitute an acceptable Bond (or Bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such Bond shall be paid by the contractor. No further payments will be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable Bond to the Owner.

The Performance bond shall remain in full force and effect through the guarantee period.

2.2 SIGNATURES AND SURETY LICENSE

Attorneys-in-fact who sign Performance and/or Payment Bonds must file with each bond a certified and effective dated copy of their power of attorney

All bonds shall be issued by sureties licensed to conduct business in the State of Indiana.

2.3 BOND FORMS

The Performance and Payment Bond forms included herein shall be used by the Bidder to whom award is given. If other forms are used, or if modifications are made to the forms then said forms and/or modifications are subject to approval by the Owner's attorney.

PART 3 - INSURANCE

3.1 INDEMNIFICATION

A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Engineer and their agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by the negligent act or omission of a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this subsection.

B. In any and all claims against the Owner or the Engineer or any of their agents or employees by any employee of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this subsection shall not be limited in any

way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

- C. The acceptance by the Owner or his representative of any certification of insurance providing for coverage other than is required by the Project Documents to be furnished by the Contractor shall in no event be deemed a waiver of any of the requirements for this indemnification.

3.2 INSURANCE

- A. Prior to execution of the Contract by the Owner and until final completion and acceptance of the Work and expiration of the guarantee period provided for in this Contract, the Contractor shall procure and maintain insurance of the types specified and to the limits specified. All insurance shall be obtained from companies licensed to do business in the State of Indiana or having at least a Best and Company rating of A-VI for 1989 (or latest edition), and shall, at no cost to the Owner or Engineer, name the Owner and the Engineer as additional insureds on all of the insurance coverages specified.
- B. Insurance shall be in such forms as will protect the Contractor, his subcontractors, or anyone directly or indirectly employed or engaged by him, from all claims and liability for damages for bodily and personal injury, including accidental death, and for property damage, which may arise from operations under the Contract, whether such operations be by the Contractor, his subcontractors, or by anyone directly or indirectly employed by him.

3.3 REQUIRED INSURANCE

The following types of insurance shall be provided by the Contractor in the coverages indicated in the section "OWNER'S INSTRUCTIONS FOR BID SECURITY, BONDS AND INSURANCE."

- A. Workmen's Compensation covering the statutory requirements where the work is to be performed and including Employers Liability.
- B. Comprehensive General Liability occurrence form to cover bodily injury, personal injury, property damage including Broad Form Property Damage, Broad Form Blanket Contractual Liability to cover the liability assumed by the Contractor for indemnification, Products/Completed Operations insurance for two (2) years after the completion of the project, Premises and Operations, Contractor's Protective Liability and Personal Injury Liability.

The Comprehensive general liability policy will not contain any exclusions for blasting, explosion, collapse or underground, commonly referred to as the XCU

exclusion and any deductibles or self-insured retentions shall be for the account of the Contractor.

Contractor shall provide Owner with ISO Endorsement CG 25031185 Amendment - Aggregate Limits of Insurance per Project for the limits required.

- C. Owners and Contractor's Protective Liability Insurance to protect the Owner against claims for injury and damage arising out of the operations of the Contractor or subcontractors during the performance of the Work.
- D. Comprehensive Automobile Liability Insurance covering bodily injury and property damage for owned, non-owned, and hired vehicles. The coverage shall also contain ISO Endorsement CA 0029 (1/88) edition or its equivalent.
- E. All Risk Builders Risk Insurance including the perils of flood, earthquake collapse, and theft coverage in an amount equal to the full contract value. Insurance shall protect the insurable interest of the Owner, Contractor and Subcontractors for materials and supplies in transit, off-site storage and site storage as well as the constructed improvements at the site.

No blasting is anticipated to be required to complete the Work under this Contract. Should a need arise for blasting, the Contractor, shall, prior to any blasting, justify in writing such need to the Engineer and obtain the Engineer's written permission, if granted, for specific blasting. In addition, upon receipt of such permission from the Engineer, the Contractor shall, prior to any blasting, present current certificates of insurance acceptable to the Engineer attesting to the blasting and explosion coverage to the limits of the excess (umbrella) liability insurance then in effect, obtain blast survey, results of which shall be provided to the Engineer who may withdraw his permission on the basis of such survey, and obtain such approvals as necessary, including but not limited to the fee owner of pertinent right-of-way and appropriate federal, state, and local agencies. Any permitted blasting shall comply with applicable federal, state and local laws.

No policies may contain deductibles or retentions larger than \$25,000 without the expressed consent of the Owner.

All policies shall contain an endorsement that the Owner will be notified in writing of any cancellation or restrictive amendments at least 90 days prior to the effective date of such cancellation or change.

Certificates from the Contractor's insurance carriers stating the coverages provided, the limits of liability, and expiration dates shall be filed in triplicate with the Owner prior to Owner's execution of the Contract.

Renewal certificates must be furnished by the Contractor to the Owner prior to the expiration date of any of the initial insurances.

No insurance required or furnished hereunder shall in any way relieve the Contractor of or diminish any of his responsibilities, obligations and liabilities under the Contract.

Insurance costs will not be paid for separately, but shall be considered incidental to each and every item of the Bid and the Contract.

3.4 OWNER AND ENGINEER AS CO-INSURED

All insurance covering the Owner and the Engineer as described in this Section shall list the KRBYRBDC, Indiana with all authorized personnel and agents as Co-Insured. Policies, or riders to policies, listing the Owner and the Engineer as co-insured, shall be provided by the Contractor prior to the Notice to Proceed and shall remain in force for the duration of the Contract.

END OF SECTION

SECTION 00610
OWNER'S INSTRUCTIONS
FOR
BID SECURITY, BONDS AND INSURANCE

The Owner in consultation with legal counsel and insurance advisors hereby instructs the Bidders and Contractors for this project of the following required bid security to be provided with the Bid and insurances to be provided and the Contract. Any insurance coverages can be arranged using a combination of primary, umbrella, buffer and excess policies, so that in total the following requirements are met.

1. SURETY

A. BID SECURITY

Required in the amount of five (5%) percent of the total bid.

B. PERFORMANCE BOND AND PAYMENT BOND

Performance Bond required in the amount of one hundred (100%) percent of the Contract Price

Payment Bond required in the amount of one hundred (100%) percent of the Contract Price.

2. INSURANCE

During the term of this Contract, Contractor shall maintain the following insurance coverage:

A. Workers Compensation

Contractor shall secure and maintain, with an insurance company having an A.M. Best Rating of A VII or better, such insurance as will protect it from claims as may arise in the performance of Contractor's services as identified in this Agreement under the Workers Compensation Statute for State of Indiana. Such coverage is to be equal to or greater than the following limits:

Part One Statutory Coverage

Part Two Employers Liability
\$1,000,000 Each Accident
\$1,000,000 Policy Limit for Disease
\$1,000,000 Each Employee for Disease

A Waiver of Subrogation in favor of the KRBYRBDC is to be provided and attached to the Contractor's Workers Compensation policy.

B. General Liability

Contractor shall secure and maintain, with an insurance company having an A.M. Best Rating of A VII or better, such insurance as will protect it from claims for bodily injury, death, or property damage as may arise in the performance of Contractor's services as identified in this Agreement. Such coverage is to be equal to or greater than the following limits:

\$1,000,000	General Aggregate
\$1,000,000	Products-Completed Operations Aggregate
\$1,000,000	Personal Injury and Advertising Injury
\$1,000,000	Each Occurrence
\$50,000	Damage to Premises Rented to You (Fire Legal)
\$10,000	Medical Payments

Contractor's General Liability coverage is to be Primary and non-contributory. A Waiver of Subrogation to the benefit of the KRBYRBDC is to be provided. The General Liability policy is to be endorsed to include the KRBYRBDC as an additional insured for On-Going and Completed Operations for a period of 2 years after completion of the job.

C. Commercial Automobile

Contractor shall secure and maintain, with an insurance company having an A.M. Best Rating of A VII or better, such insurance as will protect it from claims for bodily injury, death, or property damage as may arise in the performance of Contractor's services as identified in this Agreement. Such coverage is to be equal to or greater than a Combined Single Limit of \$1,000,000. The Contractor's Commercial Automobile coverage is to be Primary and non-contributory.

Coverage for Hired and Non-Owned autos is to be included.

Coverage should apply to "Any Auto."

Contractor's Automobile coverage is to be Primary and non-contributory. A Waiver of Subrogation to the benefit of the KRBYRBDC is to be provided. The Automobile policy is to be endorsed to include the KRBYRBDC as an additional insured.

D. Commercial Umbrella Liability

Contractor shall secure and maintain, with an insurance company having an A.M. Best Rating of A VII or better, such insurance as will protect it from claims for bodily injury, death, or property damage as may arise in the performance of Contractor's services as identified in this Agreement. Such coverage is to be equal to or greater than the following limits:

\$4,000,000 Each Occurrence

The umbrella coverage should provide coverage in excess of the primary coverage and, at a minimum, should follow the form of the underlying insurance policies as outlined above. In addition, this coverage shall be Primary and non-contributory.

E. General Insurance Conditions

Contractor shall furnish evidence satisfactory to the Commission that insurance is in force that complies with insurance and indemnification specifications as contained herein. Such evidence shall be in the form of certificates of insurance to be on file prior to the commencement of work under this Agreement and prior to any payments for work performed under this Agreement. With respects to certificates, since they do not extend or alter coverage afforded by the policies, it is important and incumbent upon the Contractor or its insurance representative to ensure that the policies provide coverage for the specifications as expressed in the Agreement and that such policies are modified to do so if necessary.

All insurance required of Contractor pursuant to this Agreement shall be primary to any other insurance purchased by or to the benefit of City and all subsidiaries and affiliated companies.

Any insurance purchased by or to the benefit of the Commission and all subsidiaries and affiliated companies is secondary and non-contributory to the insurance required of Contactor as outlined in this Agreement. Providing the insurance described herein does not limit or relieve the Contractor's responsibility or liability under this Agreement.

Any failure to comply with reporting or other provisions of the policies including breaches of warranties, shall not affect coverage provided to the Commission, its officers and officials.

Each insurance policy required by this clause shall be endorsed to state that "It is agreed that these policies shall not be cancelled nor the coverage reduced until thirty (30) days after the KRB YRBDC has been notified in writing of such changes, reductions or cancellations." Said notice shall be made in the form of a certified letter.

END OF SECTION

SECTION 00620 GUARANTEES

PART 1 - GENERAL

1.1 CONTRACTOR AND SURETY RESPONSIBILITY

Contractor and his Surety will be held responsible to the Owner that all items of equipment purchased and installed under this Contract fully meet the type, quality, design and the performance guarantees defined the Project Documents, and in actual operations satisfactorily perform the functions for which installed. Further, the Owner may withhold final payment until such performance and operation are demonstrated.

The Performance Bond shall remain in full force and effect through the guarantee period.

1.2 GUARANTEE PERIOD

The Contractor guarantees that the Work and services to be performed under the Contract, and all workmanship, structures, materials and equipment performed, furnished, used or installed under the Contract, shall be free from defects and flaws, and shall be performed and furnished in strict accordance with the Project Documents, that the strength of all parts of all manufactured equipment shall be adequate and specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of substantial completion, except as may be required by special guarantees or prescribed by law. If the Owner takes possession of or uses any completed or partially completed part of the Work, the guarantee for that part of the Work shall be for a period of one year from the date of substantial completion.

1.3 NOTIFICATION BY OWNER

If at any time within the said period of guarantee, any part of the Work requires repair, correction, or replacement, the Owner may notify the Contractor in writing to make the required repair, correction, or replacement.

1.4 CONTRACTOR'S RESPONSE

The Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the project resulting from such defects. If the Contractor neglects to commence making such repairs, corrections, or replacements to the satisfaction of the Owner within fourteen (14) days from the date of receipt of such notice, or having commenced, fails to prosecute such Work with diligence, the Owner may employ other persons to make the same, and all direct and indirect costs of making said repairs, corrections or replacements, including compensation for additional professional services, shall be paid by the Contractor.

1.5 SPECIAL GUARANTEES

Whenever in the Project Documents a guarantee is required to be furnished for any item of equipment, material or portion of the Work, such guarantee shall be submitted to the Engineer and a written approval will be issued to the Contractor before any such equipment, material or construction is ordered and incorporated in the Work by the Contractor.

END OF SECTION

SECTION 00630 ALTERNATES

PART 1 - GENERAL

1.1 STANDARDS OF DESIGN

In order to establish standards of quality, the Engineer, in the Project Documents, may have referred to certain products by name, model, catalog number or similar fashion. Unless noted otherwise, whenever in any of the Project Documents an article, material or equipment is defined by a described proprietary product, or by using the name of a manufacturer or vendor, the term "or approved equal", if not inserted, shall be implied. This procedure is not to be construed as eliminating from competition other products of equal or better quality which are fully suitable in design. The specific article, material or equipment mentioned shall be understood as indicating the type, function, minimum standard of design, efficiency and quality desired and shall not be construed in such a manner as to exclude manufacturer's products of comparable quality, design, and efficiency. The Contractor shall comply with the requirements of the Project Documents relative to the Engineer's approval of materials and equipment before they are incorporated in the Project.

1.2 PROCEDURE FOR PROPOSAL OF ALTERNATES

If the Contractor proposes to use materials other than those specified:

1. He shall furnish with Shop Drawings the engineering and catalog data for review as the Engineer may require.
2. He shall defer to the Engineer's judgment when proposed alternate materials or items of equipment are judged to be unacceptable and shall furnish the specified material or item of equipment in such case.

The attention of all Bidders is directed to the Condition that the Contractor and his Surety will be held responsible to the Owner that all items of equipment purchased and installed under this Contract fully meet the type, quality, design and the performance guarantees defined in the Project Documents, and in actual operations satisfactorily perform the functions for which installed. Further, that the Owner may withhold final payment until such performance and operation are demonstrated.

It is required that the successful Contractor purchase all items of equipment under adequate guarantees or bonds from the manufacturers or suppliers to protect the obligation of the Contractor to the Owner on items of equipment. It should be noted that the shop drawings and details will not be reviewed by the Engineer until a form of guarantee acceptable to the Owner is submitted to the Engineer by each manufacturer or supplier through the Contractor.

All proposals for alternates shall be submitted as Shop Drawings by the Contractor and not by individual trades or material suppliers.

1.3. GUARANTEE BOND IN LIEU OF EXPERIENCE

Wherever it is written that an equipment manufacturer must have a specified period of experience with his product, equipment which does not meet the specified experience period can be considered during shop drawing review if the equipment supplier or manufacturer is willing to provide a bond payable to the Owner for the specified time period which will guarantee replacement of the equipment, including all removal and installation cost, in the event of failure. The bond shall be in the amount of 150% of the installed cost as documented for the Engineer's approval. A signed and sealed letter from an approved bonding company stating its intent to provide the required bond shall be submitted along with the equipment engineering and application data.

END OF SECTION

SECTION 00700
GENERAL CONDITIONS

PART 1 - GENERAL

1.1 DEFINITIONS

Wherever used in the Project Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof.

Addenda: Written and/or graphic instruments issued prior to bidding which clarify, modify or interpret the Project Documents.

Bid: The offer or proposal of the Bidder submitted on the prescribed forms setting forth the prices for the work to be performed.

Bidder: Any person, firm or corporation submitting a Bid for the Work.

Bonds: Bid, Performance, Labor and Material Bond, and other instruments of security, furnished by the Bidder or Contractor and his Surety in accordance with the Project Documents.

Change Order: A written order to the Contractor authorizing an addition, deletion or revision in the Work within the general scope of the Project Documents, or authorizing an adjustment in the Contract Price and/or Contract Time.

Contract Price: The total moneys payable to the Contractor under the terms and conditions of the Project Documents.

Contract Time: The number of working days stated in the Project Documents for the completion or substantial completion of the Work.

Contractor: The person, firm or corporation with whom the Owner has executed the Contract, and is referred to throughout the Project Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

Date of Award: Date of Award of Contract shall mean the date formal notice of such award, signed by the Owner, has been delivered to the intended awardee, or mailed to

him at the main business address shown in his Bid by the Owner or his authorized representative.

Day or Days: Unless herein otherwise expressly defined, shall mean calendar day or days. Calendar day is a 24-hour day shown on the calendar, beginning at midnight, including Saturdays, Sundays and holidays. Working day is a calendar day; exclusive of Saturdays, Sundays, or holidays; when weather or other conditions beyond the Contractor's control do not prevent completion of at least 7 hours of work on the principal unit of work underway between the hours of 6:00 AM and 8:00 PM.

Engineer: The Commission Engineer for the KRB YRBDC or any other authorized personnel to act as such and designated to observe the work, acting directly or through duly authorized representatives. Wherever reference is made to "agents" of the Owner, the word "agents" shall be taken to include, among other agents, the Engineer or Engineers as herein defined.

Field Order: A written order effecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the Owner or an Agent for the Owner, to the Contractor during construction.

Furnish: Furnish means supply and deliver to the Project Limits, ready for unloading, unpacking, assembly, installation, and similar operations.

Install: Install means the actual unloading, packing, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.

Modification: A Modification is (1) a written amendment to the Agreement signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Engineer, or (4) a written order for a minor change in the Work, issued by the Engineer, which does not involve a change in the Contract sum or an extension of contract time. A Modification may be made only after execution of the Contract.

Notice of Award: The written notice of the acceptance of the Bid from the Owner to the successful Bidder.

Notice to Proceed: Written communication issued by the Owner to the Contractor authorizing him to proceed with the Work.

Owner: The KRB YRBDC referred to throughout the Project Documents as if singular in number and masculine in gender.

Plans: The part of the Project Documents which shows the characteristics and scope of the work to be performed and which have been prepared and approved by the Engineer.

Product Data: Illustrations, standards schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

Project: The total construction described by the Project Documents of which the whole or a part may be constructed under the Contract.

Project Documents: The Project Manual and the Plans which completely describe the technical requirements of the Project including Bid, Contract, and construction procedures.

Project Manual: Comprised of the Invitation to Bid, Instructions to Bidders, Bid Forms including Bid, Bid Bond, Non-Collusion Affidavit, Notice of Award, Contract, Notice to Proceed, Performance Bond, Payment Bond, Guarantees, Insurance, General Conditions, Addenda, Specific Provisions, and Specifications.

Provide: Furnish and Install as required.

Resident Project Representative and Inspector: The authorized representative of the Owner who is assigned to the Project Limits or any part thereof and reports to the Engineer.

Samples: Physical examples which illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged.

Shop Drawings: All drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the Contractor, a Subcontractor, Manufacturer, supplier, or distributor, which illustrate how specific portions of the Work are proposed to be fabricated or installed.

Site: The lands and other places on, under, in, or through which the Work is to be executed or carried out and any other lands or places provided by the Owner for the purposes of the Contract together with such other places as may be specifically designated in the Project Documents as forming part of the site.

Specifications: A part of the Project Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

Subcontractor: An individual, firm or corporation having a direct contract with the Contractor for the performance of a part of the Work at the site. The term Subcontractor is referred to throughout the Project Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative.

Sub-subcontractor: An individual, firm or corporation having a direct or indirect contract with a Subcontractor for the performance of part of the Work at the site. The term Sub-

subcontractor is referred to throughout the Project Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.

Surety: The corporate bonding company that provides the Contractor's Bonds.

Date of Substantial Completion: That date as certified by the Owner when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Project Documents, so that the Project or specified part can be utilized by the Owner for the purposes for which it is intended.

Suppliers: Any person, supplier or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site. A supplier is not a Subcontractor who purchases an item or equipment from a manufacturer.

Work: All labor necessary to produce the construction required by the Project Documents, and all materials and equipment incorporated or to be incorporated in such construction. Work is also used to mean the same as Project.

Written Notice: Any notice to any party of the Contract relative to any part of the Contract in writing and considered delivered and the service thereof completed when posted by certified or registered mail to the said part at his last given address or delivered in person to said party of his authorized representative on the site.

Form of Specification: Where "as shown," "as indicated," and "as detailed," or words of similar import are used, it shall be understood that reference to the Plans is made unless stated otherwise. Where "as directed," "as permitted," "approved," or words of similar import are used, it shall be understood that the direction, requirements, permission, approval, or acceptance of the Owner is intended unless stated otherwise.

1.2 PROJECT DOCUMENTS (PROJECT MANUAL AND PLANS)

- A. The intent of the Project Documents is that the Contractor shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the Work in accordance therewith and all incidental work necessary to complete the Project in an acceptable manner, ready for use, occupancy or operation by the Owner.
- B. By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Project Documents.

- C. The Project Documents are complementary, and what is required by any one shall be as binding as if required by all. A complete and fully functional project is the intent of the Project Documents and all work shown, specified, or reasonably inferable from the Project Documents to produce a complete, functional project shall be included. Words and abbreviations which have well-known technical or trade meanings are used in accordance with such recognized meanings.
- D. The organization of the Project Manual into divisions, sections and articles, and the arrangement of Plans shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.
- E. Written interpretations necessary for the proper execution or progress of the Work, in the form of Plans or otherwise, will be issued with reasonable promptness by the Engineer and in accordance with any schedule agreed upon. Either party to the Contract may make written request to the Engineer for such interpretations. Such interpretations shall be consistent with and reasonably inferable from the Project Documents and may be effected by Field Order.
- F. The Contractor, by proceeding with any work, acknowledges that the Project Documents relating thereto are sufficient for their intended purpose, i.e., the complete construction of the Work, or portion of the Work, to which they may relate.
- G. If work is required in a manner to make it impossible to produce first class work, or should discrepancies appear among the Project Documents, or, if the Contractor has a question regarding the meaning of the Project Documents, the Contractor shall request the Engineer's interpretation and clarification before proceeding with work. If the Contractor fails to make such request, no excuse will thereafter be entertained for failure to carry out work in a satisfactory manner. Should conflict occur in or between Project Manual and Plans, the Contractor will be deemed to have estimated on, and agreed to provide, the greater quantity or better quality of materials and work.
- H. When a provision of the Project Manual conflicts with agreements or regulations in force among members of trade associations, unions, or councils which regulate or distinguish what work shall or shall not be included in the work of a particular trade, the Contractor shall make all necessary arrangements to reconcile such conflict without delay, damage, or cost to the Owner, and without recourse to the Engineer or the Owner. In case progress of the Work is affected by undue delay in furnishing or installing items or material or equipment required under the Contract because of a conflict involving such agreement or regulation, the Engineer may require that other material or equipment of equal kind and quality be provided at no additional cost to the Owner.
- I. In case of conflict between the Project Manual and Plans, the Plans shall govern. In case of conflict between the General Conditions, Specific Provisions, and

Specifications, the Specifications shall govern. Figure dimensions on Plans shall govern over scale dimensions, and detailed Plans will govern over general Plans.

1.3 ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

- A. The Contractor may be furnished additional instructions and plan details, by the Engineer, as necessary to carry out the Work required by the Project Documents. All additional instructions and detail drawings shall be issued to the Contractor by the Owner or the authorized agent of the Owner or the Engineer.
- B. The additional plans and instructions thus supplied will become a part of the Project Documents. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.

1.4 LUMP SUM BREAKDOWN

- A. If requested by the Engineer, the Contractor shall submit, if applicable, a breakdown of a Lump Sum Bid as described in the section "Bid". The Contractor shall also submit such other information relating to the bid prices as may be required, and shall revise the bid breakdown as directed. Thereafter, the breakdown may be used to assist the Engineer in estimating the approximate value of the work performed, but shall not be binding upon the Owner or the Engineer for any purpose whatsoever. The bid breakdown must be approved before the first estimate becomes due.

1.5 RESPONSIBILITIES OF CONTRACTOR

- A. Unless otherwise specifically noted, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- B. The Contractor shall be responsible for all the Work under this Contract until completion and final acceptance thereof, except that the Contractor shall not be responsible for the damages or losses of any nature and from whatever cause that may occur to the Work that are caused by excepted risks; which are war hostilities, (whether declared or not), invasions, usurpation of the national power, civil wars, revolutions, insurrections, or commotions, disorders or tumults foreign to the persons who are under the control of the Contractor.
- C. The Contractor shall carefully study and compare the Project Documents and shall at once report to the Engineer any error, inconsistency or omission he may discover. Neither the Owner nor the Engineer shall be liable to the Contractor for any damage resulting from any such errors, inconsistencies or omissions in the Project Documents. The Contractor shall do no work without Plans, Specifications,

Modifications or, where required, approved Shop Drawings, Product Data, or Samples.

- D. The Contractor shall supervise and direct the Work. He shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor shall employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The superintendent shall be satisfactory to the Owner and 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 his employ. The superintendent shall have full authority to act on behalf of the Contractor and all communications given to the superintendent will be as binding as if given to the Contractor. Important communications will be confirmed in writing. Other communications will be so confirmed on written request in each case. The superintendent shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.
- E. The Contractor shall employ on the Work only such persons who are competent and skilled in their assignments. Any employee who obstructs the progress of the Work through incompetence or other means or conducts himself improperly shall be discharged or removed from the Work when so requested by the Owner.
- F. All equipment used on the Work shall be of such type, size and amount, and in such mechanical condition as to meet the requirements of the Work and produce a satisfactory quality of Work. The Contractor shall replace unsatisfactory equipment and furnish additional equipment when deemed necessary and as ordered by the Engineer.
- G. Upon completion and before final acceptance of the Work, the Contractor shall remove from the site of the Work and property of the Owner, all machinery, equipment, surplus, materials, rubbish, barricades, signs and temporary structures and shall leave the premises in a condition which is satisfactory to the Owner.
- H. The Contractor shall keep on the site one record set of the Project Documents annotated to show all Addenda and changes made during construction.
- I. The Contractor shall be responsible for the acts and omissions of all of his employees and all subcontractors, their agents and employees and all other persons performing any of the Work under a contract with the Contractor.
- J. The Contractor shall provide access and facilities for such access to the project work at all times for the Owner, Engineer and federal, state, and local agency representatives having a need to visit the Project Limits.
- K. The Project Documents contain the provisions required for the construction of the Project. Information obtained from any officer, agent, or employee of the Owner or

any other person shall not affect the risks or obligations assumed by the Contractor to relieve him from fulfilling any of the conditions of the Contract.

- L. It is the intent of the Project Documents that all Work on the Project shall be completed on or before the stipulated contract completion dates. If applicable, each Contractor shall be required to schedule his work to permit the work of other contractors to be performed concurrently and within the contract completion time.
- M. The Contractor or the plumbing subcontractor shall provide the Owner evidence that the Contractor is a licensed plumbing contractor under IC25-28.5-1.

1.6 CHANGES IN THE WORK

- A. The Owner may at any time, as the need arises, order changes within the scope of the Work without invalidating the Contract. If such changes increase or decrease the amount due under the Contract, or in the time required for performance of the Work, an equitable adjustment will be authorized by Change Order. The Contract Price and the Contract Time may be changed only by a Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including in the adjustment in the Contract Price or the Contract Time.
- B. The Engineer shall have authority to order minor changes in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time and not inconsistent with the intent of the Project Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.
- C. It is agreed and understood that any changes made in the Project Documents, (whether such changes increase or decrease the amount thereof or the time required for its performance) or any changes in the manner of time of payments made by the Owner to the Contractor, or any other modifications of the Project Documents, shall in no way annul, release, diminish, or affect the liability of the Surety on the Contract Bonds given by the Contractor, it being the intent hereof that notwithstanding such changes the liability of the Surety on said bonds continues and remains in full force and effect.

1.7 TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- A. The date of beginning and the time for completion of the Work for each Contract are essential conditions of the Contract and the Work embraced shall be commenced on a date specified in the Notice to Proceed.
- B. The Contractor shall proceed with the Work at such rate of progress to insure full completion with the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner that the Contract Time for the completion of the Contracts described herein is a reasonable time, taking into consideration the

average climatic and economic conditions and other factors prevailing in the locality of the Work during the period such Work is to be performed.

- C. The date or time of completion stipulated in the Contract, is the Date of Substantial Completion, including authorized extensions thereto, unless otherwise provided.
- D. If the Contractor shall fail to complete his Work within the Contract Time, or extension of time granted by the Owner, then the Contractor shall pay to the Owner the amount of liquidated damages, and not as penalty, as specified in the Agreement for each working day that the Contractor shall be in default after the times stipulated in the Project Documents.
- E. The Owner will charge the Contractor, and may deduct from partial and final payments for the Work, all engineering and inspection expenses incurred by the Owner in connection with any Work accomplished after the specified completion dates.
- F. The Contractor will not be charged with liquidated damages or any excess cost when the delay or delays of subcontractors in completion of the Work is due to the following, and the Contractor has promptly given Written Notice of such delay to the Owner.
 - 1. To any preference, priority, or allocation order duly issued by the Owner.
 - 2. To unforeseeable causes beyond the control and without the faulty or negligence of the Contractor, including but not restricted to: acts of God, acts of the public enemy, acts of the Owner, acts of another Contractor in the performance of Contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather.
- G. Except as otherwise specified, all work under the Contract shall be carried forward during regular working hours only, except as the Contractor elects of his own volition. Cost involved in overtime work shall be included in the Contract Price. Sufficient forces and hours of work shall be provided as may be necessary to ensure completion of the work under the conditions herein specified and within the times stated in the Contract. If the project falls behind schedule, the Contractor shall perform the Work by extra shifts or on an overtime basis as may be necessary to complete the Work on time, the cost of which shall be at the Contractor's expense. The Contractor will not be entitled to additional compensation for extra shifts or overtime work except as otherwise expressly stated in writing by the Owner.
- H. Should the Contractor be ordered by the Owner to work overtime for the purpose of completing the project Work ahead of schedule and for the Owner's behalf, the Owner will be required to pay only an amount equal to the portion of wages which is in excess of the regular rate paid by the Contractor by reason of such required overtime, and the liability insurance and social security tax paid in respect of such

excess increment of wages. The Contractor shall make no charge for regular-rate wage payments, rental of equipment, use of tools and plant, overhead expense, and other costs and profit.

1.8 UNCOVERING WORK

- A. If any Work is covered contrary to the request of the Engineer or requirements specifically expressed in the Project Documents, that Work must, if required by the Engineer, be uncovered for his observation and/or testing and, if found lacking or defective, replaced, at the Contractor's expense. All costs of the work associated with uncovering the Work shall be borne by the Contractor.
- B. If the Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor shall bear all the expenses of such uncovering exposure, observation, inspection and testing and of satisfactory reconstruction. If however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate Change Order will be issued.

1.9 CORRECTION OF WORK

- A. The Contractor shall promptly correct all work rejected by the Engineer as defective or as failing to conform to the Project Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all cost of correcting such rejected Work, including the cost of the Engineer's additional services thereby made necessary.
- B. If, within one year after the Date of Final Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Project Documents, any of the Work is found to be defective or not in accordance with the Project Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. The Owner shall give such notice promptly after discovery of the condition. In the case of work performed by Subcontractors and where guarantees are required, the Contractor shall secure guarantees from said Subcontractors. Copies of all such guarantees shall be delivered to the Engineer upon completion of the work. Delivery of said guarantees shall not relieve the Contractor from obligations assumed under the provisions of the Contract.

- C. All such defective or non-conforming Work shall be removed from the site, if necessary and the Work shall be corrected to comply with the Project Documents without cost to the Owner.
- D. The Contractor shall bear the cost of making good all work of separate contractors destroyed or damaged by such removal or correction.
- E. If the Contractor does not remove such defective or nonconforming Work within a reasonable time fixed by written notice from the Engineer, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor including compensation for the Engineer's additional services made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

1.10 ACCEPTANCE OF DEFECTIVE OR NONCONFORMING WORK

- A. If the Owner prefers to accept defective or nonconforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect an appropriate reduction in the Contract Price, or, if the amount is determined after final payment, it shall be paid by the Contractor.

1.11 UNEXPECTED CONDITIONS

- A. The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner by Written Notice of:
 - 1. Physical, including subsurface, conditions at the site differing materially from those indicated in the Contract Documents; or
 - 2. Unknown physical conditions at the site, of unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work of the character provided for in the Project Documents.
- B. The Owner will promptly investigate the conditions and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the Work, an equitable adjustment will be made and the Contract will be modified by a Change Order.

1.12 PROTESTS

- A. The Contractor shall proceed without delay to perform all work as directed, instructed, determined or decided by the Engineer and shall comply promptly with such directions, instructions, determinations or decisions. If the Contractor has any objection thereto he may, within ten (10) days of having received any such direction, instruction, determination or decision, require that any such direction, instruction, determination or decision be put in writing and within ten (10) days after receipt of any such writing he may file a written protest with the Owner stating clearly and in detail his objections, the reasons therefore, and the nature and amount of additional compensation, if any, to which he claims he will be entitled thereby. A copy of such protest shall be filed with the Engineer at the same time it is filed with the Owner. Unless the Contractor requires that any such direction, instruction, determination or decision be put in writing within ten (10) days of having received such direction, instruction, determination or decision and unless the Contractor files such written protest with the Owner and Engineer within such ten (10) day period, he shall be deemed to have waived all grounds for protest of such direction, instruction, determination or decision and all claims for additional compensation or damages occasioned thereby, and shall further be deemed to have accepted such direction, instruction, determination, or decision as being fair, reasonable, and finally determinative of his obligations and rights under the contract.

1.13 CLAIMS FOR DAMAGES

- A. If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, he shall, within ten (10) days after occurrence of the alleged breach or within ten (10) days after such damages are alleged to have been sustained, whichever date is the earlier, file with the Engineer a written, itemized statement in triplicate of the details of the alleged breach and the details and amount of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, his claim for damages shall be deemed waived, invalid and unenforceable, and that he shall not be entitled to any compensation for any such alleged damages. Within ten (10) days after the timely filing of such statement, the Engineer shall file with the Owner one copy of the statement, together with his recommendations for action by the Owner.
- B. The Contractor shall not be entitled to claim any additional compensation for damages by reason of any direction, instruction, determination or decision of the Engineer, nor shall any such claims be considered, unless the Contractor shall have complied in all respects with the subsection above this section titled "Protests" including, but not limited to the filing of a written protest in the manner and within the time therein provided.
- C. Any claim of the Contractor for adjustment hereunder will not be allowed unless he has given the required Written Notice; provided that the Owner may, if he determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

1.14 SUSPENSION OF WORK, TERMINATION AND DELAY

A. Suspension for Convenience: Dependent on bid pricing and contract value for the 1100 E Project Site, the Owner may choose to suspend part of the site work until winter or spring 2024.

1. The Owner, for his convenience, may suspend the Contract in whole or in part at any time by written notice to the Contractor. Such notice shall state the extent and the effective date of such suspension, and on the effective date thereof Contractor shall promptly suspend such work to the extent specified, and during the period of such suspension shall properly care for and protect all work and materials, housing and equipment on hand for construction under the Contract. Contractor also shall promptly supply the Owner copies of all outstanding orders for materials, equipment and services, and shall take such action relative to such orders as may be directed by Owner.
2. If the performance of the work is thus suspended, Contractor shall be entitled to be compensated for additional expense incurred by reason of such suspension.
3. Unless otherwise agreed upon between the Contractor and the Owner, the contractor will be compensated an additional 5% for all work items suspended by the Owner.
4. For bidding purposes, one mobilization/demobilization should be assumed. Should a suspension be requested by the Owner, additional compensation equal to 100% of the original bid mobilization/demobilization shall be paid. Should this suspension be requested, additional compensation for mobilization/demobilization shall not exceed 5% of the original contract value.

B. Termination for Convenience

1. The Owner may, for his convenience, terminate work under the Contract in whole or in part at any time by written notice to the Contractor. Such notice shall state the extent and effect date of such termination and on the effective date thereof the Contractor will, as and to the extent directed, stop work under the Contract and the placement of further orders or Subcontracts under the Contract, terminate work already under order and Subcontracts under the Contract, and take any necessary action to protect property in the Contractor's possession in which the Owner has or may acquire an interest.
2. In the event of such termination for convenience, the Owner shall pay the Contractor's (1) direct costs (excluding overhead) for all work done in conformity with the Contract to the effective date of such termination and (2) other costs pertaining to the Work which Contract may incur as a result of such termination, all as approved by Owner, plus 10% of such costs (excluding costs under (2) above) for overhead and profit, provided, however, that in no event shall the total

amount of these payments plus payments previously made, exceed the lesser of (a) the total aggregate Contract Price specified in the Contract, (b) that portion of the work actually performed hereunder to the date of termination. Any such payment shall be made upon the expiration of the period within which liens may be filed under the laws of the state in which the Work is performed, subject, however, to withholding by the Owner for the reasons and in the manner provided in those provisions pertaining to withholding of payments.

3. If the Contractor is or becomes insolvent, or if he makes a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he persistently, or repeatedly refuses or fails, except in case for which extension of time is provided, to supply enough properly skilled workmen or proper material, or if he fails to make prompt payment to Subcontractors or for materials, or labor, or persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Project Documents, then the Owner, upon certification by the Engineer that sufficient cause exists to justify such action, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven days written notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished.
4. In the event of such termination, the Owner shall immediately serve notice thereof upon the surety. The surety shall have the right to take over and perform the Contract. However, if the surety does not commence performance thereof within ten (10) days from date of the mailing to such surety of notice of termination, the Owner may, upon written notice to the surety, take over the Work and prosecute same to completion at expense of the Contract. If the unpaid balance of the Contract Price exceeds the costs of finishing the work, including compensation for the Engineer's additional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Owner. If the Contractor fails to provide said payment within 30 days, the Owner may make a claim of default on the surety for said payment and said surety shall be liable for said payment. The costs incurred by the Owner as herein provided shall be certified by the Engineer.

C. Delays and Extensions:

1. If the Contractor is delayed at any time in the progress of the Work by any act of neglect of the Owner or the Engineer, or by any employee of either, or by any separate contractor employed by the Owner, or changes ordered in the Work, or by labor disputes, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the Owner,

or by any cause which the Engineer determines may justify the delay, then the Contract Time may be extended by Change Order for such reasonable time as the Engineer may determine.

2. All claims for extension of time shall be made in writing, with essential supporting data, to the Engineer no more than twenty days after the commencement of the delay; otherwise they shall be waived. In the case of a continuing cause of delay only one claim is necessary.
3. Engineer shall review the data so submitted and shall take into account such information as is within the knowledge of Engineers, and if approved by Owner, a written extension of time for completing the work shall be granted for the period reasonably justified and not otherwise. The Contractor shall not be entitled to, and does hereby waive any and all damages which it may suffer by reason of the Owner hindering or delaying Contractor in the progress of the work or any portion thereof.

1.15 SIMULTANEOUS WORK BY OTHERS

- A. The Owner reserves the right to perform, or have performed, in and about the work during the time when Contractor is performing his work hereunder such other work as Owner may desire and has made known to the Contractor prior to the execution of the Contract. Contractor shall make all reasonable effort to perform his work hereunder in such manner as will enable such other work to be performed without hindrance from Contractor and will make no claim for damage against Owner arising out of such other work or interference therefrom.

1.16 SUBCONTRACTING

- A. The Contractor may utilize the services of specialty Subcontractors on those parts of the Work which, under normal contracting practices, are performed by specialty Subcontractors.
- B. The Contractor shall not contract with any Subcontractor or supplier without submitting the subcontractor's or supplier's name and such other information as may be requested to the Engineer for approval two weeks prior to such contracting. The Contractor will not be required to contract with any Subcontractor or person or organization against whom he has a reasonable objection.
- C. The Contractor shall not make any substitution for any Subcontractor or person or organization who has been accepted by the Owner and the Engineer, unless the substitution is acceptable to the Owner and the Engineer.
- D. The Contractor shall be fully responsible to the Owner for the acts and omission of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

E. Nothing contained in this Contract will create any contractual relation between any Subcontractor and the Owner.

F. Subcontractual Relations.

1. All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors) which shall contain provisions that:
 - (a) preserve and protect the rights of the Owner and the Engineer under the Contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
 - (b) require that such Work be performed in accordance with the requirements of the Project Documents;
 - (c) require submission to the Contractor of applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment;
 - (d) require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the Work shall be submitted to the Contractor (via any Subcontractor or Sub-subcontractor where appropriate) in sufficient time so that the Contractor may comply in the manner provided in the Project Documents for like claims by the Contractor upon the Owner.

1.17 ENGINEER'S AUTHORITY

- A. Nothing contained in the Project Documents shall create any contractual relationship between the Engineer and the Contractor, except as the Engineer serves as the Engineer.
- B. The Engineer shall at all times have access to the work in progress. Upon request the Contractor shall provide such facilities as are required for safe and convenient access by the Engineer pursuant to his functions as described in the Project Documents.
- C. The Engineer will be the interpreter of the requirements of the Project Documents. The Engineer will, within a reasonable time, render such interpretations as necessary for the proper execution of the progress of the Work.
- D. All interpretations of the Engineer shall be consistent with the intent of and reasonably inferable from the Project Documents and will be in writing or in the form of drawings. All requests for interpretations shall be directed through the Owner. The

Engineer shall not be liable to the Contractor for the result of any interpretation or decision rendered in good faith in such capacity.

- E. The Engineer's decisions in matters relating to artistic effect will be final if consistent with the intent of the Project Documents.
- F. The Engineer will have the authority to reject Work which does not conform to the Project Documents. Whenever, in his opinion, he considers it necessary or advisable for the proper implementation of the intent of the Project Documents, he will have authority to require special testing or inspection of the Work whether or not such Work is then fabricated, installed or completed. However, neither the Engineer's authority to act, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.
- G. The Engineer will prepare Change Orders and will have authority to order minor changes in the Work.
- H. Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the Work or the interpretation of the Project Documents shall be referred initially to the Engineer for decision which he will render in writing within a reasonable time.
- I. The Engineer, along with the Owner, will conduct inspections to determine the dates of Substantial Completion and Final Acceptance, and will receive and review written warranties and related documents required by the Contract and assembled by the Contractor.

1.18 LAND AND RIGHTS-OF-WAY

- A. Prior to issuance of Notice to Proceed, the Owner will obtain all easements necessary for carrying out and for completion of the Work to be performed pursuant to the Project Documents and will have made initial correspondence with landowners related to right of entry agreements.
- B. The Owner, if requested, will provide to the Contractor information which delineates and describes the land owned and rights-of-way acquired.
- C. The Contractor shall provide at his own expense and without liability to the Owner, with the approval of the Owner, any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials. The Contractor will ultimately be responsible for landowner contact and securing all necessary right of entry agreements for site entry and/or stockpiling outside of the Commission's easement.

1.19 USE OF SITE

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

1.20 MISCELLANEOUS PROVISIONS

- A. If the Contractor fails to correct defective Work or persistently fails to supply materials or equipment in accordance with the Project Documents, the Owner may order the Contractor to stop the Work or any portion thereof, until the cause for such order has been eliminated.
- B. If the Contractor defaults or neglects to carry out the Work in accordance with the Project Documents or fails to perform any provision of the Contract, the Owner may, after seven days written notice to the Contractor and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including the cost of the Engineer's additional services made necessary by such default, neglect or failure. The Engineer must approve both such action and the amount charged to the Contractor. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.
- C. In addition to the rights provided above, the Owner may exercise any other rights or remedies provided by law or in equity for any default or breach by the Contractor, and the Contractor shall be liable for and shall pay any losses or damages suffered by Owner arising out of any such breach or default by the Contractor in the performance of the Contract.
- D. The Contract is to be executed and performed in Indiana and shall be governed by the laws of the State of Indiana.

1.21 COMMUNICATIONS

- A. The Contractor shall forward all communications to the Owner through the Engineer.
- B. The Contractor's business address and his office at or near the site of the Work are both hereby designated as places to which communications may be delivered. The depositing of any letter, notice, or other communication in a postpaid wrapper directed to the Contractor's business address in a post office box regularly maintained by the U. S. Postal Service or the delivery at either designated address of any letter, notice, or other communication by mail or otherwise shall also be deemed sufficient service thereof upon the Contractor, and the date of such service shall be the date of receipt. The first-named address may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the Engineer.

Service of any notice, letter, or other communication upon the Contractor personally shall likewise be deemed sufficient service.

1.22 ARBITRATION

- A. All claims, disputes, and other matters in question arising out of, or relating to, the Project Documents or the breach thereof, except for claims which have been waived by the making and acceptance of final payment as provided for herein will be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. This agreement to arbitrate will be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators will be final, and judgment may be entered upon it in any court having jurisdiction thereof.
- B. Notice of the demand for arbitration will be filed in writing with the other party to the Contract and with the American Arbitration Association, and a copy will be filed with the Owner and the Engineer. Demand for arbitration will in no event be made after institution of legal or equitable proceedings based on any claim, dispute or other matter in question which would be barred by the applicable statute of limitations.
- C. The Contractor shall carry on the Work and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed to in writing.

1.23 POSSESSION OR USE PRIOR TO COMPLETION

- A. The Owner will have the right to take possession of or use any completed or partially completed part of the Work prior to final completion. Such possession or use shall not be deemed an acceptance of any Work not completed in accordance with the Project Documents. If such prior possession or use delays the progress of the Work or causes additional expenses to the Contractor, an equitable adjustment for the Contract Price and the time of completion will be made, and the Contract modified in writing accordingly.
- B. The Owner will have the right to operate all permanent equipment as soon and as long as it is in operating condition, whether or not such equipment has been accepted as complete and satisfactory, except that this shall not be construed to permit operation of any equipment which may be damaged by such operation before any required alterations or repairs have been made. All repairs or alterations required of the Contractor shall be made at such times as directed and in such a manner as will cause the minimum interruption in the use of the equipment by the Owner.

1.24 COMPLIANCE WITH LAWS AND REGULATIONS

- A. The Contractor will be required to comply with all Federal, State and local laws, regulations, and codes which apply to the Work to be done and bidders shall ascertain

before bidding on the Work as to what laws, regulations, and codes will affect his Work.

- B. In the construction of the Work under this Contract, the Contractor shall comply with all applicable provisions of Federal and State Labor and Safety Laws.
- C. The Contractor shall comply with all current requirements of the Federal Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54).
- D. This Project is subject to the Safety and Health regulations of the U. S. Department of Labor set forth in 29 CFR Part 1926, and to the applicable regulations of the State of Indiana. Contractors shall be familiar with the requirements of these regulations.
- E. If the Contractor observes that the Project Documents are at variance with applicable laws, regulations, and/or codes, he shall promptly notify the Engineer and Owner in writing to permit necessary changes in the Work to be made. If the Contractor performs any Work knowing it to be contrary to such laws, regulations, and codes, and without such notice to the Engineer and Owner, he shall assume full responsibility therefore and shall bear all costs attributable thereto.
- F. The Contractor shall protect, indemnify and save harmless the Owner, his agents, servants and employees from and against any and all claims, demands, suits, proceedings, liabilities, judgments, penalties, losses, damages, costs and expenses, including attorneys fees, arising from or based on any violation or claimed violation of any ordinance rule regulation, order, decree or other requirement whether committed by the Contractor, or any of his agents, servants, employees or subcontractors.
- G. Caution shall be exercised by the Contractor at all times for the protection of persons and property.

Any and all safety regulations and other provisions of applicable Federal, State and local laws and building, construction and environmental codes shall be observed by the Contractor. The Contractor will be solely responsible for the adequacy and safety for all construction methods and safe prosecution of the work including trench protection, protective barricades and warning lights. In the event the Commission, its authorized representatives or the Consultant are held by a Court or administrative body to be liable for personal injuries or damages to persons or property arising from deficiencies in job-site safety, the Contractor shall promptly indemnify and hold them harmless therefrom as provided hereinafter.

To the fullest extent permitted by law, the Contractor shall be responsible for any injury to person or damage to property due to activities of the Contractor, its subcontractor(s) and their agents and employees with respect to the work or in connection therewith, and the Contractor shall indemnify and save harmless the

Commission, its officers, employees and its consultants from any and all claims, suits, actions and costs, fees and expenses of every nature, arising from or connected with the Work, or on account of or in consequence of any act or omission in safeguarding the Work.

1.25 BIDDER QUALIFICATIONS

- A. The Owner may make such investigations as it deems necessary to determine the ability of the bidder to perform the Work, and the Bidder shall furnish to the Owner, as requested, all such information and data for this purpose as the Owner may request. Bidders must, as a minimum, present satisfactory evidence of being engaged in the business of construction of the type of work entailed by the Project Documents on which they submit Bids and of being fully qualified with the necessary capital, materials, and equipment to conduct and complete the Work. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is capable of carrying out the obligations of the Contract and to complete the Work contemplated therein.

END OF SECTION

SECTION 00800
SPECIFIC PROVISIONS

PART 1 - GENERAL

1.1 SCOPE OF WORK

The Work includes all labor, material and equipment to construct/install the

PHASE II YELLOW RIVER RESTORATION AT CR 1100 E .

1.2 CONTRACTOR'S ON-SITE WORKING HOURS

- A. The Contractor shall not start work prior to 7:00 A.M. local time and shall complete all operations at the construction site by 7:00 P.M. local time, unless otherwise specified on the Plans and specifications. No work on Sunday shall be permitted without approval from the nearest impacted landowner.
- B. The requirements specified in subparagraph A above shall be strictly adhered to unless the Contractor has prior approval of the Engineer to vary these working hours, or unless an emergency arises.

1.3 SITE SECURITY

- A. The Contractor shall be solely responsible for selecting the means for preventing unauthorized entry to the work site from the time work begins on the site until the work is 1) accepted by the Owner, and 2) the Contractor has removed his equipment, materials, tools, debris and similar items from the site. The Contractor shall fully inform himself of the existing uses of the construction sites and adjacent areas and accordingly shall assume full responsibility for appropriately protecting the public from all hazards associated with the work, including but not limited to stored materials, construction machinery, temporary buildings, temporary services, temporary utilities and excavations.

1.5 PERMITS

- A. The Owner has or will secure the permit(s) for the Work under this Project as detailed in Appendix A. The Contractor shall adhere to all conditions of these permits. The Contractor shall pay for and obtain all other federal, state or local permits (ie Construction Stormwater General Permit) and/or registrations required prior to initiating construction of this Work.

END OF SECTION

SECTION 00900
ADDENDA

PART 1 - GENERAL

1.1 ADDENDA AND INTERPRETATION OF PROJECT DOCUMENTS

- A. Addenda to the Project Documents may be issued prior to the opening of Bids to clarify or modify the Project Documents. If any prospective Bidder is in doubt as to the true meaning of any part of the Project Documents, he may submit a written request for clarification to the Engineer. The individual submitting the request shall be responsible for prompt delivery to the Engineer. To be given consideration, written requests must be received by the Engineer at least seven (7) days prior to the date fixed for the opening of Bids.
- B. Any clarification, modification, or interpretation of the Project documents will be made only by a written Addendum. The Owner and the Engineer will not be responsible for any other explanations or interpretations of the Project Documents. Each Addendum issued will be mailed or emailed to purchasers of record on file with the Owner to whom the Project Documents have been issued, not later than three (3) days prior to the date fixed for the opening of Bids. All Addenda issued become a part of the Project Documents. Failure of a bidder to receive such addenda shall not relieve the bidder from any obligation under his Bid as submitted.
- C. It is suggested that Bidders confirm the number of Addenda issued, not later than three (3) days prior to the date of the Bid Opening.

END OF SECTION

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01040
PROJECT COORDINATION

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. In performing any and all work under this Contract, the Contractor shall coordinate his work with that of any adjacent Contractors and/or utilities for the Owner, and others, and cooperate with them in every reasonable way, to the end that there shall be the minimum practicable interference with operations.
- B. The Contractors shall perform his work in such a manner as will enable work by other contractors and/or utilities to be performed without hindrance and will make no claim for damage against the Owner arising out of such work or interference thereof.

1.2 MUTUAL RESPONSIBILITY OF CONTRACTORS

- A. The Contractor shall afford the Owner, and other contractors, reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and shall properly connect and coordinate his Work with theirs.
- B. If any part of the Contractor's Work depends, for proper execution or results, upon the work of the Owner or any other separate contractor, the Contractor shall, prior to proceeding with the Work, inspect and promptly report to the Engineer any apparent discrepancies or defects in such work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper to receive his work, except as to defects which may develop in the other separate contractor's work after the execution of the Contractor's work.
- C. Should the Contractor cause damage to the work or property of any separate contractor on the site, the Contractor shall, upon due notice, settle with such other contract by agreement or arbitration.

1.3 OWNER'S RIGHT TO CLEAN UP

- A. If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up, the Owner may clean up and charge the cost thereof to the several contractors as the Engineer shall determine to be just.

1.4 INTERFERENCE WITH EXISTING WORKS

- A. The Contractor shall make such minor modifications in the work relating to existing structures as may be necessary, without additional compensation.

END OF SECTION

SECTION 01050 FIELD ENGINEERING

PART 1 - GENERAL

1.1 CONSTRUCTION LAYOUT AND STAKING

The Work is to be constructed to the elevations and lines required by the Project Documents, except as may be modified by specific order of the Engineer. The Engineer may furnish basic survey control only; consisting of (1) bench mark with description and elevation, and a minimum of (1) horizontal survey control points. (See Specific Provisions). The Contractor will be responsible for providing all detailed construction staking and layout. The cost of such detailed construction staking and layout shall be incidental to the work items involved. The Contractor shall provide qualified and competent personnel to set the required elevations and lines. The Engineer/Owner to confirm construction layout and staking.

1.2 PRESERVATION OF BENCH MARKS

The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance. In the event of any destruction or disturbance of bench marks, reference points, and stakes, the Contractor shall promptly notify the Owner of any such destruction or disturbance. In the event that bench marks or reference points will be destroyed in the course of the Work, the Contractor shall first establish a new bench mark or reference point at a location suitable to the Owner before destroying said mark or point.

1.3 VERIFICATION OF DIMENSIONS, LINES, AND GRADES

All dimensions and grades shown on the Plans are believed to be correct, but the Contractor shall verify them at the site and notify the Engineer of any discrepancies found before proceeding with the work; similarly as to final lines and grades established by official surveys, the Contractor shall check the Plans against such established lines and grades and notify the Engineer of any discrepancies found. In the absence of such notifications, extra work caused by discrepancies shall not entitle the Contractor to extra compensation.

1.4 ASSIST ENGINEER

Contractor shall provide such ordinary labor as may be required to assist the Engineer in checking lines and grades, making measurements for payment purposes, and making any other necessary measurements.

END OF SECTION

SECTION 01060
REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 STANDARDS AND CODES

- A. Contractor shall perform all Work, design and install all materials in accordance with the best present day installation and manufacturing practices.
- B. Contractor shall comply with all applicable laws, building and construction codes and requirements of governmental agencies under whose jurisdiction work is being performed. Fees for permits and licenses shall be paid by the Contractor.
- C. Contractor shall, unless specifically noted to the contrary, conform with and test in accordance with applicable sections of latest revisions of codes and standards designated in the specifications.
- D. For Conflicts:
 - 1. Between referenced codes and standards: codes or standards establishing more stringent requirements shall be followed.
 - 2. Between referenced codes and standards and specifications and/or plans: the one establishing more stringent requirements shall be followed.
- E. All Work included under this Contract shall be done in strict accordance with the Occupational Safety and Health Act of 1970 (Williams-Steiger Act) as amended and enforced by the governmental authority responsible for fulfilling this provision of the specifications. Responsibility shall rest solely with the Contractor, his superintendents and his foremen, and in no way shall rest with the Owner or Engineer.
- F. All manufactured equipment furnished for incorporation into this project shall conform to the requirements of the Occupational Safety and Health Act of 1970 (Williams-Steiger Act) as amended and enforced by the governmental authority responsible for the enforcement of the Act. Enforcement and responsibility for fulfilling this provision of the specifications shall rest solely with the equipment manufacturer and in no way shall rest with the Owner or Engineer.

END OF SECTION

SECTION 01151
BASIS OF PAYMENT

PART 1 - GENERAL

1.1 ITEMIZED BID SCHEDULE

- A. The Basis of payment made under this Contract for Lump Sum Items shall be the percentage of the individual lump sum items completed.
- B. For Unit Price Items the basis for payment shall be made on the actual portion of the work completed.

END OF SECTION

SECTION 01152

APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.1 PROGRESS ESTIMATES

A. Once a month on a schedule agreed to by the Contractor and Engineer and consistent with regular meetings of the Owner, except as hereinafter provided, the Contractor shall make an estimate in writing of the total amount and value of the Work completed to date (schedule of value). This estimate shall be submitted to the Engineer for his review and recommendation of appropriate payment. The recommendation will be presented to the Owner within ten days of receipt of the estimate and all required documentation. The Owner will meet on an at least monthly basis to approve payment requests and upon approval will issue a check within 30 days after its approval of the Engineer's recommendation for payment. From the value of work done to date, the Owner shall deduct (1) retainage of five (5) percent of the amount claimed for work completed as part security for fulfillment of the Contract by the Contractor, (2) all previous payments made to the Contractor, (3) all sums chargeable against the Contractor, and (4) all other sums which may be retained under provisions of the Contract. The Owner shall pay monthly to the Contractor the balance not deducted and/or retained as aforesaid, except that payment in whole or in part may be withheld at any time if, in the judgment of the Engineer it is necessary to protect the Owner from loss because of:

1. Defective work not remedied;
2. Third party claims filed or reasonable evidence indicating probable filing of such claims;
3. Failure of the Contractor to make payment properly to Subcontractors or for labor, materials, or equipment;
4. Reasonable doubt that the Work can be completed for the unpaid balance of the Contract Sum;
5. Damage to the Owner or another contractor;
6. Reasonable indication that the Work will not be completed within the Contract Time; or
7. Unsatisfactory protection of the Work in accordance with the Project Documents by the Contractor.

B. If the Owner deems it expedient, he may allow estimates and payments to be made more frequently than once in each month. However, no progress estimate or payment need be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amounts to less than one thousand dollars (\$1,000).

- C. The contractor warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, will pass to the Owner upon the receipt of such payments by the Contractor, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to 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 the 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.

1.3 SUBSTANTIAL COMPLETION AND FINAL PAYMENT

- A. When the Contractor determines that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete, the Contractor shall prepare for submission to the Engineer a list of items yet to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Project Documents. When the Engineer, on the basis of an inspection determines that the Work is substantially complete, he shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and Contractor for maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. These shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them.
- B. Upon the receipt of written notice that the Work is ready for final inspection and acceptance, and upon receipt of a final Application for Payment, the Engineer will promptly make such inspection, and when he finds the Work acceptable under the Project Documents and the Contract fully performed, he will promptly approve the Application for Payment stating that to the best of his knowledge, information and belief, and on the basis of his observations and inspections, the work has been completed in accordance with the terms and conditions of the Project Documents and that the entire balance found to be due the Contractor is due and payable.
- C. Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Engineer (1) an Affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3) other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.

- D. If after Substantial Completion of the Work, the final completion thereof is materially delayed through no fault of the Contractor, and the Engineer so confirms, the Owner shall, upon certification by the Engineer, and without termination of the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract, and if bonds have been furnished, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Engineer prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.
- E. The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:
1. Unsettled liens;
 2. Faulty or defective work appearing after Substantial Completion;
 3. Failure of the Work to comply with the requirements of the Project Documents; or
 4. Terms of any special guarantees required by the Project Documents.

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

1.4 WAIVERS OF LIEN

- A. The Contractor shall submit to the Engineer with each payment request the Contractor's partial waiver of lien for the full amount of the requested payment. Beginning with the second payment request, and with each succeeding payment request, the Contractor shall submit to the Engineer partial waivers of lien for each subcontractor and supplier showing that the amount paid to date to each is at least equivalent to the total value his work, less retainage, included on the previous payment request.
- B. The Contractor's request for final payment shall include the Contractor's final waiver of lien, which shall be for the full amount of his Contract including all Change Orders thereto, and final waivers of lien from all Subcontractors and suppliers for which final waivers of lien have not previously been submitted.
- C. The Contractor will include this provision in any contracts he enters and will require his Subcontractors and Suppliers to include this provision in any contracts they enter into.
- D. If at any time any notices of lien are filed for labor performed or materials or equipment manufactured, furnished, or delivered to or for the Work, the Contractor shall, at his own cost and expense, promptly discharge, remove or otherwise dispose

of the same, and until such discharge, removal or disposition, the Owner shall have the right to retain from any moneys payable hereunder an amount which, in his sole judgment, he deems necessary to satisfy such liens and pay the costs and expenses, including attorney's fees, of defending any actions brought to enforce the same, or incurred in connection therewith or any reason thereof.

1.5 CLAIMS

- A. If at any time there be any evidence of any claims for which the Contractor is or may be liable or responsible hereunder, the Contractor shall promptly settle or otherwise dispose of the same, and until such claims are settled or disposed of, the Owner may retain from any moneys which would otherwise be payable hereunder so much therefore as, in his sole judgment, he may deem necessary to settle or otherwise dispose of such claims and to pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce such claims, or incurred in connection therewith or by reason thereof.

1.6 APPLICATION OF MONEYS RETAINED

- A. The Owner may apply any moneys retained hereunder to reimburse himself for any and all costs, expenses, losses, damage and damages, liabilities, suits, judgments and awards incurred, suffered or sustained by the Owner and chargeable to the Contractor hereunder or as determined hereunder.

SECTION 01153
CHANGE ORDERS

PART 1 - GENERAL

1.1 CHANGES IN CONTRACT PRICE

- A. The Contract Price may be changed only by a Change Order.

1.2 CHANGE ORDERS

- A. For each Change Order the Contractor shall submit sufficient cost and pricing data as described in this subsection, to enable the Engineer to ascertain the reasonableness of costs proposed.
1. If directed by the Engineer, the Contractor shall promptly submit an offer to accomplish the desired change(s), in writing, on a lump sum or unit price basis as specified or as directed by the Engineer. The stated price shall be divided so as to show that it is the sum of: (1) the estimated cost for direct labor, material, and use of equipment; (2) indirect labor costs; (3) plus a maximum of 15% of the total of (1) and (2) for overhead and profit which includes the cost of surety bonds. The Contractor shall also submit in the offer the increased or decreased number of working days (if any) to accomplish the desired changes in addition to the contract completion time.
 2. Unless an agreed upon sum and/or unit price is obtained from above and is so stated in a Change Order, the Contractor shall accept as full payment for work or materials for which no price agreement is contained in the Contract an amount equal to the following: (1) the actual cost of direct labor, material, and use of equipment; (2) indirect labor costs; (3) plus 15% of the total of (1) and (2) for overhead and profit which includes the proportionate cost of surety bonds. Changes in contract completion time shall be adjusted as described above. The Contractor shall furnish itemized statements of these costs and give the Engineer access to all accounts, bills and vouchers; he shall not be entitled to payment for providing such information to the Engineer.
 3. For work performed by a Subcontractor, the Contractor shall accept as full payment therefore an amount equal to the actual cost to the Contractor of such work as determined by the Engineer plus a maximum of 5% of such cost.
 4. No cost shall be allowed for general superintendence and the use of small tools and manual equipment.

CHANGE ORDER

Contract Number _____

Change Order Number _____

Owner: _____ **KRBYRBDC**
460 Lincolnway
Valparaiso, IN 46384

Project: **PHASE II YELLOW RIVER RESTORATION AT CR 1100 E**

Contractor: _____

DESCRIPTION OF CHANGE:

REASON FOR CHANGE:

Increase to Contract Amount
Due to Item No. _____ Change: \$ _____

Contract Number _____

Change Order Number _____

ORIGINAL CONTRACT PRICE \$ _____

CURRENT CONTRACT PRICE ADJUSTED BY \$ _____

PREVIOUS CHANGE ORDER(S) \$ _____

NET INCREASE/DECREASE IN CONTRACT
PRICE THIS CHANGE ORDER \$ _____

TOTAL ADJUSTED CONTRACT PRICE
INCLUDING THIS CHANGE ORDER \$ _____

This change order extends the time to complete the work by _____ calendar days, the revised time for completion is _____ days.

This change order prepared by: _____

(Engineer) (Date)

The undersigned agree to the terms of the change order.

(Name of Contractor)

(Contractor's Authorized Representative) Date

(Owner's Authorized Representative)

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1- GENERAL

1.1 PRE-CONSTRUCTION CONFERENCE

- A. Unless agreed otherwise by Owner and Contractor, a pre-construction conference will be held at a mutually agreeable date and time but prior to the actual start of any Work.
- B. The Owner, Engineer, and Contractor shall attend the pre-construction conference at a location to be determined.

1.2 PROGRESS MEETINGS

- A. The Contractor and the Engineer shall jointly schedule regular periodic meetings to be attended by the Contractor, Engineer, and Owner or their authorized representatives. The progress meeting schedule shall be established at the pre-construction conference.

END OF SECTION

SECTION 01310
CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. It is understood and agreed that time is of the essence in this contract, and the actual construction necessary for the work covered by this contract shall begin with all due diligence so as to complete the work to the extent specified within the time or times stated in the Agreement.
- B. When required by the Special Provisions, within seven calendar days after execution of the Agreement, Contractor shall submit to the Engineer one electronic copy of a detailed work schedule in the form of a schedule of values. This schedule shall clearly indicate the operational procedure proposed to complete performance under the Contract within the specified time limit. The work schedule must be submitted prior to beginning actual work.
- C. Contractor shall prepare the work schedule to include the following information:
 - 1. All work components which will clearly depict and describe all essential activities including subcontractors and essential material suppliers.
 - 2. All significant activities, if any, including shop drawing preparation and review, related to performance that must be reviewed, approved, or executed by the Owner in conjunction with this contract. Such items shall be specially marked so as to be immediately identifiable.
 - 3. The time required for the completion of each of said activities.
- D. Contractor shall maintain the schedule of values throughout the course of the project and provide any necessary updates to the schedule of values at each pay application submittal.
- E. In the event the work falls behind schedule as established, except when a delay occurs due to unforeseeable causes beyond control and without fault as defined in the Project Documents, bring work into compliance with the schedule by extending normal working hours and/or working Saturdays and/or Sundays in accordance with the Project Documents and at no additional expense to the Owner. An option may be to revise the work schedule to reflect a plan which will accomplish the contract requirements within the specified time limit. Any such revised plan must be submitted to the Engineer for review and approval.

F. Preparing and maintaining said schedule of values is included as part of the Agreement contract price and will not be paid for separately.

END OF SECTION

SECTION 01340
SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

- A. The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in orderly sequence so as to cause no delay in the Work or in the work of any other contractor, one electronic copy of Shop or Setting Drawings, Product Data, and Samples for the Work. Shop Drawings, Product Data, and Samples shall be properly identified, including the specifications section and subsection, as specified, or as the Engineer may require. At the time of submission the Contractor shall inform the Engineer in writing of any deviation in the Shop Drawings, Product Data, and Samples from the requirements of the Project Documents.
 - 1. The Contractor and/or manufacturer making the shop drawing submittal shall include as the first section of the submittal a copy of the appropriate specification section or subsection, including all addenda, for which the submittal is being made.
- B. By approving and submitting Shop Drawings, Product Data, and Samples the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and the Project Documents.
- C. The Engineer will review and approve Shop Drawings, Product Data, and Samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the Project and with the information given in the Project Documents. The Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions.
- D. The Engineer's approval of Shop Drawings, Product Data, or Samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Project Documents unless the Contractor has informed the Engineer in writing of such deviation at the time of submission and the Engineer has given written approval to relieve the Contractor from responsibility for errors or omissions in the Shop Drawings, Product Data, or Samples. The approval of any Shop Drawing, Product Data, or Sample which substantially deviates from the requirements of the Project Documents will be evidenced by a change order.

- E. The Contractor shall also submit to the Engineer, Shop Drawings showing details of all materials and items necessary for proper installation of this work.
- F. The Contractor shall make any corrections required by the Engineer and shall resubmit the required number of corrected copies of Shop Drawings, Product Data, and Samples until approved. The Contractor shall direct specific attention in writing or on resubmitted Shop drawings, Product Data, and Samples to revisions other than the corrections requested by the Engineer on previous submissions.
- G. The Contractor shall have no claims for damages or extension of time on account of any delay in the Work resulting from the rejection of material or from review, revision, and re-submittal of drawings and other data for approval by the Engineer.
- H. Each Shop Drawing, Product Data, or Sample shall be dated and shall be identified with the name of the Project, the division, and the name of the Contractor.
- I. Portions of the Work requiring a Shop Drawing, Product Data or Sample submission shall not begin until the submission has been approved by the Engineer. A copy of each approved Shop Drawing, Project Data and Sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer.
- J. Shop Drawings for manufactured products shall be certified in writing by the proposed manufacturer as to the accuracy of the information being submitted.
- K. All shop drawings shall be clear, legible originals or first generation copies.
FACSIMILE COPIES WILL NOT BE ACCEPTED.

PART 2 - EXECUTION

2.1 REPETITIVE REVIEW

- A. Cost of Subsequent Reviews: Shop Drawings and Operation and Maintenance Manuals submitted for each item will be reviewed no more than twice at the Owner's expense. All subsequent reviews will be performed at times convenient to the ENGINEER and at the Contractor's expense based on the Engineer's then prevailing rates including all direct and indirect costs and fees. Reimburse the Owner for all fees invoiced to the Owner by the Engineer.
- B. Time Extension: Any need for more than one resubmission, or any other delay in Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time.

END OF SECTION

SECTION 01545

PROTECTION OF WORK AND PROPERTY

PART 1 - GENERAL

1.1 PROTECTION OF WORK AND PROPERTY

- A. In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions in, on or near the job site, including safety of all persons and property affected directly or indirectly by his operations during performance of the work. This requirement will apply continuously 24 hours a day until acceptance of the work by the Owner and shall not be limited to normal working hours.
- B. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees on the Work who may be affected thereby; all the Work and all the materials or equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors, or Sub-subcontractors; and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- C. Until such time as the Work is completed and accepted by the Owner, Contractor shall assume all liability for damage to, or loss or destruction of the Work or such materials, or equipment, and Contractor shall, at his expense, repair or replace to the Owner's satisfaction, all damage to, or loss or destruction of, the Work or such materials or equipment which results from any cause whatsoever.
- D. The Contractor shall at all times consult with and obtain the approval of the Owner or his representative for the storage of material, operation of equipment, placing of temporary structures or dispositions of any surplus or waste materials upon property of the Owner anywhere outside the limits of construction. Considerations of subsurface conditions should be made in selecting appropriate equipment to both access the site and complete all necessary work.
- E. Neither the materials excavated nor the materials or plans used in the construction of the Work shall be so placed as to prevent free access to all fire hydrants, valves, or manholes.
- F. The Contractor shall so conduct the Work that no equipment, material, or debris will be placed or allowed to fall upon private property outside of any easement in the

vicinity of the Work unless he shall have obtained the Owner's written consent thereto and shall have shown his written consent to the Engineer.

- G. The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.
- H. When the use of hazardous materials or equipment is necessary for the prosecution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- I. The Contractor shall designate, in writing, to the Owner and the Engineer, a responsible member of his organization at the site whose duty shall be the prevention of accidents.
- J. Earth Supporting Structures shall be provided as necessary to protect the Work and nearby property. Such Earth Supporting Structures shall be considered incidental to the Work and no additional payment made therefore.

1.2 PROTECTION OF GENERAL PUBLIC

- A. The Contractor shall at all times conduct and work in such a manner as to cause the least inconvenience and greatest protection to the general public. The Contractor shall furnish and maintain barricades, warning signs, red flags, lights, and temporary passageways as may be necessary to protect the Work and to safeguard the public. The cost of furnishing and maintaining the above facilities shall be incidental to the Contract and no extra compensation for it will be allowed.
- B. Throughout the performance of the Work or in connection with this Contract, the Contractor shall construct and adequately maintain suitable and safe crossings over trenches and such detours as are necessary to care for public and private traffic. The material excavated from trenches shall be compactly deposited along the sides of the trench or elsewhere in such a manner as shall give as little inconvenience as possible to the traveling public, to adjoining property owners, to the Contractors, or to the Owner.
- C. Provide barriers, fencing safety barricades and lights. Open trenches or other excavation shall be protected at all times.

1.3 EMERGENCIES

- A. In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization, from the Engineer or Owner, shall act to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided for Claims for Damages.

1.4 APPLICABLE LAWS AND REGULATIONS

- A. The contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or their protection from damage, injury or loss. He shall erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, including posting of danger signs and other warnings against hazards and promulgating safety regulations. He shall notify owners and users of adjacent utilities when prosecution of the Work may affect them. The Contractor shall remedy at his expense, all damage, injury, or loss to any property or person caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, or anyone for whose acts any of them may be liable, except damage or loss attributable the fault of the Project Documents or to the act or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.
- B. The Contractor shall observe all rules and regulations of the health department having jurisdiction and shall take precautions to avoid creating unsanitary conditions.
- C. Construction observation and/or resident construction inspection by the Owner or Engineer to ensure that the construction conforms to the Project Documents and such observation and/or inspection does not include review of the adequacy of the Contractor's safety measures in, on or near the construction site, nor shall the Owner and the Engineer be responsible in any manner for the safety of the Contractor's operations.

1.5 BASIS OF PAYMENT

- A. Work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

SECTION 01560
TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 DUST AND MUD CONTROL

- A. The Contractor shall control mud and dust conditions during phases of construction and restoration, and shall control such conditions in such a way that will not contaminate any river, creek, pond, lake, stream, or other body of water.
- B. It will be the Contractor's responsibility to determine the frequency and limit of such mud and dust control, subject to review and approval of the Engineer.
- C. Special efforts shall be made to minimize tracking of mud onto the adjacent streets. Contractor shall regularly clean any mud off the adjacent pavements.
- D. All control measures shall be in accordance with Federal, State, and local pollution regulations.

1.2 FIRE PROTECTION

- A. All work done by each Contractor on or about the premises shall be done in a careful manner with full consideration to fire protection, using fire-resistant materials where necessary for temporary enclosures.
- B. Portable fire extinguishers shall be provided by the Contractor, where and as required by the local Fire Department.
- C. Open fires on the site or in construction areas are prohibited. Each Contractor shall abide by safety directives regarding storage of flammable materials on the site.

1.4 POLLUTION CONTROL

- A. The Contractor shall use energy efficient fuel for heating equipment. Strict compliance with ordinances regulating the production and emission of smoke must be observed.
- B. The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing equipment shall be equipped with silencers and the exhausts of all power equipment shall be provided with mufflers. In the vicinity of hospitals and schools special care shall be used to avoid noise or other nuisance, and the Contractor shall strictly observe all local regulations and ordinances covering such locations.

1.5 BASIS OF PAYMENT

- A. Work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

SECTION 01570
TRAFFIC REGULATION

PART 1 - GENERAL

1.1 TRAFFIC REGULATION

- A. The Contractor shall arrange his work so that traffic is obstructed as little as possible. The Work shall be done with the least possible inconvenience to the public.
- B. During the prosecution of the Work, the Contractor shall put up and maintain such barriers and lights as will effectually prevent accidents. As necessary, the Contractor shall provide suitable barricades, warning lights and warning signs at all places where the Work causes obstructions to the public. Such barriers and signs shall be in accordance with Part 6 of the "Manual on Uniform Traffic Control Devices for Streets and Highways, DOT (FHWA)", most current edition, or with other applicable city, county and state regulations.
- C. In accepting this Contract, the Contractor assumes full responsibility for sufficiency and safety of all such temporary Work or bridges and for any damage which may result from their failure or their improper construction, maintenance or operation and will indemnify and save harmless the Owner and the Engineer from all claims, suits, or actions and damages, or costs of every description arising by reason of failure to comply with the above provisions.
- D. The Contractor shall notify all affected police, fire, and emergency services at least 24 hours prior to occupying any roadway for construction purposes other than routine travel or transport and once per week for continued occupation of roadway. The Contractor shall coordinate each partial and total road closure no less than 48 hours in advance with all police, fire, and emergency services.
- E. The Contractor shall provide flagmen for traffic control as necessary, in accordance with city, county, and state regulation.

1.2 BASIS OF PAYMENT

- A. The work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

SECTION 01580
CONSTRUCTION ENGINEERING

PART 1 - GENERAL

1.1 CONSTRUCTION ENGINEERING

- A. Construction Engineering shall include but not limited to re-establishing the survey control points, all layout construction staking including layout of all structures and boundaries.

Original survey was completed by the below firm:

Territorial Engineering LLC

7908 IN-23

Walkerton, IN 46574

(p) 574-586-3448

(e) bob@te-llc.com

- B. The Owner or Engineer may check all or any portion of the work, and the Contractor shall afford all necessary assistance to carrying out such checks. The Contractor shall immediately make any necessary corrections to the work.
- C. This information shall be used to verify that the planned alignment and elevations will match existing conditions. Required alignments and elevations will be shown on the Plans. Prior to incorporating established grades, the Contractor will be required to determine that all other planned elevations are in accordance with field conditions. All discrepancies shall be brought to the immediate attention of the Engineer. All changes in the design due to major discrepancies shall be brought to the attention of the Owner or Engineer. Field adjustments that do not affect the design shall be made by the Contractor and the Engineer shall be notified.
- D. Field notes shall be kept in field note books in a clear, orderly, and neat manner consistent with standard engineering practices, including titles, number, and indexes. Such notebooks shall adequately document all survey information.

1.5 BASIS OF PAYMENT

- A. Work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

SECTION 01590

AS-BUILT REPORTING

PART 1 - GENERAL

1.1 AS-BUILT REPORTING

- A. As-built information shall be compiled and submitted by the Contractor for all deviations from the original construction drawings.

1. General Requirements:

- a. All deviations from the original construction drawings shall be shown on the applicable plan sheets in a color which highlights the change. Red color is preferred.
- b. The Plans should be continuously updated by hand markings during construction and available for inspection by the Owner or the Engineer.
- c. Surveyed elevation of all structure inverts and bank intercepts along with general topographic survey of toe of slope and top of bank.
- d. All as-built markups shall be compiled and added to one final computer-generated as-built drawing.
- e. The Owner reserves the right to retain some or all of the retainage until the as-built drawings are approved and all work covered under the 1 year warranty period are satisfied.

1.5 BASIS OF PAYMENT

- A. Work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

SECTION 01710
CLEANING UP

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. During its progress, the Work and the adjacent areas affected thereby shall be kept cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and property owners will be inconvenienced as little as possible.
- B. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, or structures during work done under this contract, or elsewhere during the course of the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and Work, etc., shall upon completion of the Work, be left in a clean and neat condition.
- C. On or before the completion of the Work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools and machinery or other construction equipment furnished by him; shall remove, acceptably disinfect, and cover all organic matter and material containing organic matter in, under, and around privies, houses, and other buildings used by him; shall remove all rubbish from any grounds which he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations in a neat and satisfactory condition.

1.2 BASIS OF PAYMENT

- A. Work performed under this section shall be considered as incidental to the Work and no additional payment shall be made.

END OF SECTION

DIVISION 2

TECHNICAL
SPECIFICATIONS

SECTION 02000

MOBILIZATION AND DEMOBILIZATION

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes requirements of a general nature related to the Contractor's mobilization and demobilization to and from the site in accordance with the Contract Documents.
- B. Prevailing Specifications: INDOT 2020 – Section 110
- C. Related Requirements
 - 1. Section 02030 – Erosion and Sedimentation Controls

1.2 QUALITY ASSURANCE

- A. The Contractor shall notify the Owner and Engineer 7 days prior to each mobilization and 3 days prior to each demobilization.

PART 2 – PRODUCTS

2.1 NONE REQUIRED

PART 3 – EXECUTION

3.1 PROCEDURE

- A. Mobilization or demobilization shall not begin until the Owner/Engineer have been notified per Part 1.2 above and approval has been granted.

3.2 BASIS OF MEASUREMENT AND PAYMENT

- A. Payment for all costs of providing Mobilization and Demobilization including all necessary equipment, material, and labor to accomplish the work shall be paid on a lump sum basis per the accepted Bid price.

END OF SECTION

SECTION 02020
CLEARING, GRUBBING AND OBSTRUCTION REMOVAL

PART 1 – GENERAL

1.1 SUMMARY

A. This work shall consist of clearing, grubbing, removing, and repurposing/disposing of vegetation, including trees less than 10" Diameter at Breast Height (DBH) and debris within the project limits and/or staging/stockpile areas as required for designated grading, structure installation, seeding, planting and blanketing. All vegetation not required to be removed or cut for completion of this project shall remain. This work shall include the prevention of injury or defacement of all vegetation or other objects designated to remain.

B. Prevailing Specifications: INDOT 2020 – Section 201

C. Related Requirements: Section 02030 – Erosion and Sedimentation Controls

1.2 QUALITY ASSURANCE

A. All potential bat roost trees must be removed between October 1 and March 31.

B. Tree removal typically includes rootball, tree trunk and branches. All removed trees shall be salvaged on site and repurposed for Rock and Wood Toe Stabilization as outlined below.

C. All vegetation and/or trees not repurposed shall be disposed of and chipped in high ground outside of the Floodway as first option and as approved by Owner. Logs to be cut to maximum 10' lengths and tree tops to be chipped and spread on-site.. Logs not accepted by the adjacent landowners post-project or able to be spread in high grounds as agreed upon by the adjacent landowners, will be burned in a hole and buried on-site at the Contractor's expense.

PART 2 – PRODUCTS

2.1 None

PART 3 – EXECUTION

3.1 EXAMINATION

A. The Contractor and Engineer/Owner shall review and confirm the limits of clearing prior to commencement to ensure that no unnecessary trees are removed during Work.

- B. Request underground utilities to be located and marked within and surrounding construction areas.

3.3 PROCEDURES

- A. Locate, identify, and protect utilities from damage.
- B. Protect trees, plant growth, and features designated to remain.
- C. Protect benchmarks, survey control points, and existing structures from damage or displacement.
- D. Clear trees, shrubs, undergrowth, fallen trees and debris within the Project Limits as needed for the successful completion of Work.
- E. Stockpile trees for later use during Rock and Wood Toe Stabilization.
- F. All vegetation and/or trees not repurposed shall be disposed of and/or chipped in high ground outside of the Floodway as first option and as approved by Owner. Logs to be cut to maximum 10' lengths. Logs not accepted by the adjacent landowners post-project or able to be spread in high grounds as agreed upon by the adjacent landowners, will be burned in a hole and buried on-site at the Contractor's expense.
- G. Protect Staging/Stockpile Area from excess erosion.

3.7 BASIS OF MEASUREMENT AND PAYMENT

- A. Payment for all costs of providing Clearing, Grubbing, and Obstruction Removal including all necessary equipment, material, and labor to accomplish the work shall be paid for on a lump sum basis.

END OF SECTION

SECTION 02030
EROSION AND SEDIMENTATION CONTROLS

PART 1 – GENERAL

1.1 SUMMARY

- A. This work shall include equipment, materials and labor related to the acquisition and compliance with the Indiana Construction Stormwater General Permit (CSGP) and installation of temporary erosion and sedimentation controls in accordance with the Storm Water Pollution Prevention Plan (SWPPP), Project Plans, and these Specifications.
- B. Prevailing Specifications: INDOT 2020 – Section 205
- C. Related Requirements
 - 1. Section 02040 – Control of Water
 - 2. Section 02120 – Permanent Seeding and Planting
 - 3. Section 02130 – Erosion Control Blanket

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data: Submit data on products used.

1.3 QUALITY ASSURANCE

- A. The Contractor shall comply with 327 IAC 15-5 (CSGP) by submitting the Notice of Intent (NOI) to IDEM. This NOI process requires a \$100.00 fee, notice of publication, and verification of a SWPPP plan review by the local SWCD office.
- B. The Contractor shall regularly monitor and maintain all erosion and sedimentation control measures as described in the CSGP related documents.

PART 2 – PRODUCTS

2.1 CONTROL OF WATER

- A. Reference Section 02040 – Control of Water. Contractor shall utilize an appropriate system during earthwork, wood and rock placement below existing water line in order to maintain non-flowing water conditions within the portions of stream embankment being worked on during a given time period.

2.2 STAGING/STOCKPILE AREA

- A. All excavated material not immediately reused shall be placed within identified temporary stockpile areas or upland areas away from direct flow of water. The Contractor shall ensure that silt fence is properly installed between the stockpile area and the existing stream channel. Additional staging/stockpile areas may be utilized with approval of the Engineer and Owner.

2.3 SILT FENCE

- A. The Contractor shall utilize silt fence as required to prevent loose sediment from leaving overbank areas and entering the creek. Silt fence should not be placed in locations of concentrated flow.

2.4 CONSTRUCTION ENTRANCES

- A. Construction entrances will be required as necessary to prevent excess soil from exiting the site onto local roads or as necessary to facilitate truck access for material delivery. All costs of bonds required with the County for temporary driveways will be considered incidental to this work and completed at no additional cost to the Owner.

2.5 OTHER PRODUCTS NEEDED FOR EROSION CONTROL

- A. The Contractor shall implement Best Management Practices (BMPs) and maintain installed practices to reduce erosion of soils and inhibit sediment from exiting site.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. The project Contract Documents and permits shall be available at the construction site in either a field office or the Contractor's vehicle for inspection by federal, state, and local officials as required by the permit for the duration of the Project.
- B. The Contractor shall maintain a record of any and all inspections of the site as required by the permit. Records shall include date and time of inspection, findings of inspections, corrective actions taken (including date and time), documentation of changes to the SWPPP made during construction, and date of all rainfall events (include total precipitation from nearest National Weather Service gauging station).

3.2 PROCEDURES

- A. Install erosion and sedimentation control measures specified in the approved SWPPP or as directed by Engineer prior to commencing activities related to clearing, grubbing or excavation.
- B. Clean and maintain erosion and sediment controls in accordance with the SWPPP.

- C. Do not permit sediment to erode into the river or off site.
- D. Limit the tracking of dirt on to public roadways. Contractor shall remove (by shovel and sweeping if necessary) any visible material tracked onto the road from the project site.

3.3 PROTECTION

- A. Protect and repair installed Erosion and Sedimentation Control Measures as necessary throughout the project.

3.4 BASIS OF MEASUREMENT AND PAYMENT

- A. No specific measurement will be made for acquiring the Indiana Construction Stormwater General Permit and assured compliance with SWPPP.
- B. Payment for all costs of providing Erosion and Sediment Control including all necessary equipment, material, and labor to accomplish the work shall be paid for on a lump sum basis.

END OF SECTION

SECTION 02040 CONTROL OF WATER

PART 1: GENERAL

3.1 SUMMARY

- A. The Work included in this Section includes furnishing all labor, equipment, materials, and performing all operations necessary to control water during installation of structures below the water line as shown on the Plans. This work shall include the provision, operation and maintenance of pumps and/or diversion systems along with any temporary barriers, water plugs, or temporary piping necessary to allow the safe and proper construction of the Work.
- B. Related Requirements
 - 1. Section 02030 – Erosion and Sedimentation Controls
 - 2. The SWPPP for the Work, to be developed by OWNER or ENGINEER prior to construction.

PART 2 – EXECUTION

1.1 SEQUENCING AND SCHEDULING

- A. Water control operations shall be coordinated with the Engineer.
- B. Contractor shall place erosion and sediment control measures before placing any barriers, berming or runoff diversion in accordance with Section the Erosion and Sedimentation Control of the Specifications.

2.2 PROCEDURES

- A. Contractor is required to manage the work during construction to account for fluctuations in water flow and water levels as necessary to protect the Work and Contractor's equipment, material, and personnel according to all applicable laws and regulations.
- B. Contractor shall be responsible for detailed development of sequencing and staging of construction, demolition, and control of water in the work area.
- C. Contractor must be aware that significant changes in flow and water level can occur in the project area at any given time. Contractor is responsible for any impacts that could result from changing water flow/level conditions.

- D. Water levels and flow volumes shall be controlled in the work area by pumping or diverting flow to an extent that the permanent work being performed is not adversely affected.
- E. Contractor shall provide energy dissipation measures where pumped water re-enters the river.
- F. Contractor shall include adequate costs in the Contract Price to assure that the water in the work areas can be controlled and the work completed.
- G. Contractor shall maintain all systems for controlling water for the period required to complete the Work.
- H. Contractor shall be solely responsible for means and methods, integrity of any cofferdams or dewatering methods, and maintaining integrity of the river.
- I. Contractor shall be responsible for re-grading, filling or otherwise removing temporary water control features upon completion of that portion of the water control Work. The areas shall be permanently restored as shown on the Drawings.

PART 3 – BASIS OF MEASUREMENT AND PAYMENT

- A. No measurement will be made for Control of Water.
- B. There will be no separate payment for Control of Water. All necessary equipment, material, and labor to accomplish the work for Control of Water shall be included in the accepted Bid price for Erosion and Sediment Control.

END OF SECTION

SECTION 02050
TREE AND STUMP REMOVAL

PART 1 – GENERAL

1.1 SUMMARY

- A. This work shall consist of removing trees 10” or greater DBH. This work shall include the prevention of injury or defacement of all vegetation or other objects designated to remain.
- B. Prevailing Specifications: INDOT 2020 – Section 201
- C. Related Requirements: Section 02030 – Erosion and Sedimentation Controls

1.2 QUALITY ASSURANCE

- A. All potential bat roost trees must be felled prior to March 31, 2023. All potential bat roost trees are marked on the construction plans. Trees must be felled/cut and temporarily left on site to be repurposed for Rock and Wood Toe Stabilization. Felled trees may not be left in the river.
- B. Tree removal typically includes rootball, tree trunk and branches. All removed trees shall be salvaged on site and repurposed for Rock and Wood Toe Stabilization as outlined below.
- C. Exceptions to typical rootball removal with the trunk may be made upon approval from Engineer should safety concerns arise during tree removal.
- D. All vegetation and/or trees not repurposed shall be disposed of and chipped in high ground outside of the Floodway as first option and as approved by Owner. Logs to be cut to maximum 10’ lengths and tree tops to be chipped and spread on-site. If disposal in high grounds is not acceptable, then burning woody debris material on-site will be coordinated with the Owner as second option.

PART 2 – PRODUCTS

- 2.1 None

PART 3 – EXECUTION

3.1 EXAMINATION

- A. The Contractor and Owner shall review and confirm the tree removal plan prior to commencement to ensure that no unnecessary trees are removed during Work.

- B. Request underground utilities to be located and marked within and surrounding construction areas.

3.3 PROCEDURES

- A. Locate, identify, and protect utilities from damage.
- B. Contractor to locate and identify trees proposed for removal based on the tree removal plan. Contractor to indicate tree diameter category (10-17" or 18"+) for each tree identified. Contractor to review identified trees and confirm quantity.
- C. Protect trees, plant growth, and features designated to remain.
- D. Protect bench marks, survey control points, and existing structures from damage or displacement.
- E. Remove trees, typically with rootball and trunk intact (12'+), as marked and needed for the successful completion of Work.
- F. Stockpile trees for later use during Rock and Wood Toe Stabilization.
- G. All vegetation and/or trees not repurposed shall be disposed of and chipped in high ground outside of the Floodway as first option and as approved by Owner. Logs to be cut to maximum 10' lengths and tree tops to be chipped and spread on-site. If disposal in high grounds is not acceptable, then burning woody debris material on-site will be coordinated with the Owner as second option.

3.7 BASIS OF MEASUREMENT AND PAYMENT

- A. Prior to removal, the Contractor shall mark with flagging and note diameter class (10-17" or 18"+ DBH) of the trees proposed for removal. The Engineer will review marked trees, make adjustments as necessary, and record quantity of trees and respective DBH before Contractor removes.
- B. Payment for all costs of providing Tree and Stump Removal for trees 10" to 17" DBH including all necessary equipment, material, and labor to accomplish the work shall be paid for on a per unit basis.
- C. Payment for all costs of providing Tree and Stump Removal for trees 18" or greater DBH including all necessary equipment, material, and labor to accomplish the work shall be paid for on a per unit basis.

END OF SECTION

SECTION 02100
EARTHWORK

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes furnishing all supervision, labor, materials, and equipment required to complete general or miscellaneous earthwork and site grading as shown on the Plans including, but not limited to:
 - 1. Excavation of riverbed materials for reconfiguration of channel bottom to match channel cross sections.
 - 2. Excavation, loading, and transportation of soil within the site to achieve the specified grades and sections on the Plans.
 - 3. Temporary soil stockpiling onsite as needed during construction.
 - 4. Transportation and disposal of unused material in adjacent or upland areas including adjacent agricultural field as agreed upon by landowners.
 - 5. Filling, grading, and compacting soil to the lines and grades shown on the Plans and/or as directed by the Engineer on riverbed, floodplains, and embankments.
 - 6. Mined Bedstone, with quantities agreed upon by the Contractor and Engineer, that is transported for the purpose of rock structure foundation is not included in earthwork but rather covered in the Miscellaneous Stone section.
- B. Prevailing Specifications: INDOT 2020 – Section 203
- C. Related Requirements:
 - 1. Section 02030 – Erosion and Sedimentation Controls
 - 2. Section 02120 – Permanent Seeding and Planting

1.2 SUBMITTALS

- A. None

1.3 QUALITY ASSURANCE

- A. The Contractor shall verify that all design grades have been achieved per the Plans to a tolerance of \pm 3 inches.

PART 2 – PRODUCTS

2.1 COMMON EXCAVATION

- A. All earthen materials shall be considered common excavation. All excavation under this section will be considered unclassified regardless of the nature of material encountered.
- B. No additional compensation will be provided for handling, removal, and disposal of non-soil debris including concrete, concrete block, brick, stone, metal, plastic, wood material or other debris encountered during work. Stone, concrete and brick may be repurposed on site as underlayment where stone is shown on the plans if it otherwise meets size requirements. Any metal or plastic debris encountered during excavation shall be removed from the site and disposed of properly in accordance with State and Federal laws and regulations.

2.2 BANK GRADING

- A. Bank grading, typical 2H:1V, shall be completed in areas identified by green hatch on the plans. These areas are approximate but utilized to distinguish between typical bank grading versus inside floodplain grading.
- B. Bank grading typically starts from toe of proposed slope and continues to top of proposed bank.
- C. In channel grading is considered incidental to Earthwork and structure installation.

2.2 INSIDE FLOODPLAIN GRADING

- A. Inside floodplain grading, typically 4H:1V but as much as 10H:1V or flatter, shall be completed in areas identified by violet hatch on the plans. These areas are approximate but utilized to distinguish between typical bank grading versus inside floodplain grading.
- B. Inside floodplain areas typically are present on the inside of meander bends but not exclusively.
- C. In channel grading is considered incidental to Earthwork and structure installation.

PART 3 – EXECUTION

3.1 PROCEDURES

- A. All temporary erosion and sedimentation control measures shall be in place prior to the start of Work in this Section.
- B. Contractor shall complete all clearing, grubbing and obstruction removal operations in the area of immediate work per Section 02010 prior to earthwork operations.

- C. The Contractor shall perform grading and compacting of soils to the grades and lines shown on the Plans and as directed by the Engineer. All grading work shall be contained within the limits of disturbance. Final grades shall be as indicated on the Plans within a tolerance of +/- 3 inches. Field conditions may dictate necessary adjustments to grading plans. In such cases, the Engineer shall indicate adjustments to the Contractor.
- D. Bank grading will primarily consist of the outside bank of meander bends and straightaway sections of the stream. Typical bank grading slope is 2H:1V or shown on the plans.
- E. Inside floodplain grading will typically consist of the inside floodplain areas of meander bends. Typical inside floodplain grading slopes range from 4H:1V to up to 10H:1V or flatter according to the plans.
- F. As soon as practical but not more than one week following grading activities, graded areas shall be seeded according to the Section 02120, Permanent Seeding and Planting. Contractor shall not be compensated for extra grading work directed by Engineer or Owner due to the erosion of embankments between final grading and seeding or seeding and erosion control work.
- G. All excavated material not immediately reused shall be placed within previously identified temporary stockpile areas. The Contractor shall ensure that silt fence is properly installed between the stockpile area and the existing stream channel.
- H. All soil material for site earthwork shall be obtained on site.
- I. The Owner and/or the Engineer may adjust the design grades based on field conditions at the time of construction to facilitate spreading of excess soil. No additional compensation will be made for these adjustments.
- J. All excess grading material not otherwise incorporated into site grading or structure installation, to be spread in adjacent upland areas and seeded with stabilization seed mix or annual oats if in adjacent agricultural fields as approved by the Owner/Engineer.

3.2 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Control.

3.3 PROTECTION

- A. Protect structures, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that may be created by earthwork operations.

3.4 BASIS OF MEASUREMENT AND PAYMENT

- A. Quantities listed on the bid sheet are to be considered estimates based on volume analysis completed in Civil3d comparing existing contour surface to proposed grading plan above bankfull elevation. Deviations less than 15% from the estimated quantities will not be eligible for additional payment.
- B. No additional payment will be made for in-channel grading and this grading shall be considered incidental to this Section and structure installations.
- C. Payment for all costs of providing Bank Grading and Inside Floodplain Grading including all necessary equipment, material, and labor to accomplish the work shall be paid for on a lump sum basis for Excavation as identified on the Bid Sheet.

END OF SECTION

SECTION 02110
STONE

PART 1 – GENERAL

1.1 SUMMARY

- A. This work shall include equipment, materials and labor required for the acquisition, and installation of stone, including salvage of on-site materials, and clean fill in accordance with these Specifications and the Plans.
- B. Prevailing Specifications: INDOT 2020 – Section 904
- C. Related Requirements
 - 1. Section 02030 – Erosion and Sedimentation Controls

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data:
 - 1. Product samples via photograph with measurement reference, shall be submitted to the Engineer in advance of the project. Source of stone should also be listed.

1.3 QUALITY ASSURANCE

- A. All stone detailed in this section is intended to be material installed as directed by the Engineer for installation of the various rock structures such as Boulder Glide Structure, J-hook, Rock Vane, and Rock and Wood Toe Stabilization.

1.4 QUALIFICATIONS

- A. For Engineer's Cost Estimate, stone material was sourced from the below location.
 - i. US Aggregates
14530 W 700 S, Francisville, IN 47964
(p) 219-567-2587
jmasterson@usagg.com
- B. For Engineer's Cost Estimate, trucking services were sourced from the below companies:
 - i. Loehmer Ag Products
5477 County Road N 200 E, Monterey, IN 4690
(p) 574-542-4019
loehmeragproducts@yahoo.com

- ii. Knepp Sand & Stone
70765 CR 23, New Paris, IN 46553
(p) 574-831-4949

- C. All stone material types to be approved by Engineer prior to placement.
- D. Use equipment adequate in size, capacity and numbers to accomplish the work of this Section in a timely manner.
- E. Stone shall be placed at locations and minimum thickness shown on the Plans. It shall be placed to produce a surface of approximate regularity.

PART 2 – PRODUCTS

2.1 INDOT REVETMENT RIPRAP

- A. INDOT Revetment Riprap (well graded material sized 3 inches to 12inches).
- B. INDOT Revetment Riprap will be utilized in areas of the stream where the subgrade does not support the proper placement of Limestone Armor Stone for the various rock structures detailed in these plans such as Boulder Glide Structure, J-hook, Rock Vane. In these areas, revetment riprap will be used to fill void space in the river bottom to establish a subgrade at a suitable level and elevation for placement of Limestone Armor Stone.
- C. Application of INDOT Revetment Riprap as detailed in 2.1.B or other application of this material beyond those detailed in the plans shall be agreed upon and directed by the Engineer in writing.

2.2 INDOT CLASS I RIPRAP

- A. INDOT Class I Riprap (well graded material sized 3 inches to 24 inches).
- B. INDOT Class I Riprap will be utilized in the installation of rock structures such as Boulder Glide Structure, J-hook, Rock Vane and Rock and Wood Toe Stabilization.
- C. Application of INDOT Class I Riprap as detailed in 2.2.B or other application of this material beyond those detailed in the plans shall be agreed upon (in-writing) by the Engineer.

2.3 LIMESTONE ARMOR STONE

- A. Limestone Armor Stone or Native Rock sized with a minimum dimension of 30 inches in two of the three axis with one axis measuring at minimum 36”.
- B. Application of Limestone Armor Stone beyond those detailed in the plans shall be agreed upon (in-writing) by the Engineer.

2.4 MINED BEDSTONE

- A. As directed by the Engineer, suitable on-site bedstone may be mined from the river bottom and repurposed in areas as directed by the Engineer (primarily under rock structure to elevate river bottom).. The on-site bedstone will generally be composed of sand, gravel and cobble with an approximate D50 of 2.25” and D85 of 4.25” or as approved by the Engineer.

2.5 CLEAN AGGREGATE FILL

- A. As directed by the Engineer, suitable clean aggregate fill (including clean concrete and bricks) may obtained from off-site sources and repurposed in areas as directed by the Engineer (primarily under rock structure to elevate river bottom). Clean aggregate fill may only be utilized when directed by the Engineer.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Stone shall be installed as directed by the Engineer.

3.2 PROTECTION

- A. Protect structures, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that may be created by earthwork operations.

3.3 BASIS OF MEASUREMENT AND PAYMENT

- A. Payment for INDOT Revetment Riprap including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per ton basis as identified on the Bid Sheet and directed by the Engineer. Material tickets for all INDOT Revetment Riprap applied will need to be provided to the Engineer along with respective pay applications.
- B. Payment for INDOT Class I Riprap including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per ton basis as identified on the Bid Sheet and directed by the Engineer. Material tickets for all

INDOT Class I Riprap applied will need to be provided to the Engineer along with respective pay applications.

- C. Payment for Limestone Armor Stone including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per ton basis as identified on the Bid Sheet and directed by the Engineer. Material tickets for all Limestone Armor Stone applied will need to be provided to the Engineer along with respective pay applications.
- D. Payment for Mined Bedstone including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per cubic yard basis as identified on the Bid Sheet and directed by the Engineer. In advance of Mined Bedstone being used, the Contractor and Engineer will agree in writing upon an estimated volume of mined material based on area and depth mined.
- E. Payment for Clean Aggregate Fill including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per cubic yard basis as identified on the Bid Sheet and directed by the Engineer. In advance of Clean Aggregate Fill being used, the Contractor and Engineer will agree in writing upon an estimated volume of material needed and then the Contractor will be responsible for producing material tickets for the Clean Aggregate Fill trucked on-site.

END OF SECTION

SECTION 02120
PERMANENT SEEDING AND PLANTING

PART 1 – GENERAL

1.1 SUMMARY

- A. This work shall include equipment, materials and labor related to installation of Permanent Seeding and Plantings in accordance with these Specifications and in conformance with the Plans
- B. Prevailing Specifications: INDOT 2020 – Section 621 & 622
- C. Related Requirements
 - 1. Section 02030 – Erosion and Sedimentation Controls
 - 2. Section 02130 – Coir Matting, Erosion Control Blanket, Straw Blanket and Mulch

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data:
 - 1. Certification of seed mixes identifying source, including name and telephone number of supplier.
 - 2. Listing and source details of all plants.
 - 3. Product data for all products installed.
- C. Documentation of the seed mix and plantings shall be submitted to the Owner and Engineer for review and approval 10 or more days prior to proposed installation.
- D. Material tickets for all seeding and planting installed on the site shall be submitted with the payment request.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified contractor whose work has resulted in successful native grass and forb establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced fulltime supervisor on Project Site when seeding or planting is in progress.

1.4 SCHEDULING

- A. Planting Restrictions: Restrictions shall be in accordance with the provisions of INDOT 2020 – Section 621
- B. Weather Limitations: Proceed with seeding and planting only when existing and forecasted weather is appropriate for seeding and planting.

PART 2 – PRODUCTS

2.1 TOPSOIL

- A. Contractor should repurpose topsoil whenever logistically feasible. Topsoil shall be clean of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.

2.2 PERMANENT SEEDING

- A. Permanent Seeding shall consist of Stabilization Seed Mix placed in all graded embankments, graded floodplains, disturbed access lanes, and disturbed material storage areas. The seed mix shall be per the following table. Per Section 1.2 above all seed mixes for the project shall be submitted and approved by the Engineer and Owner. Substitutions to this list shall not be allowed unless approved by the Engineer. The seed mix shall be applied at a minimum weight of 826 ounces per acre (51.63 lbs/acre) or greater.

Stabilization Seed Mix		
Botanic Name	Common Name	PLS oz/ac
Avena sativa	Common Oats	640
Bromus latiglumis	Early-leaf Brome	1
Carex brevior	Plains Oval Sedge	1.5
Cinna arundinacea	Common Wood Reed	1
Elymus canadensis	Canada Wild Rye	80
Elymus virginicus	Virginia Wild Rye	80
Glyceria striata	Fowl Manna Grass	2
Leersia oryzoides	Rice Cut Grass	2.5
Monarda fistulosa	Wild Bergamot	1.5
Panicum virgatum	Switch Grass	8
Rudbeckia hirta	Black-Eyed Susan	3.5
Rudbeckia laciniata	Wild Golden Glow	1.5
Verbesina alternifolia	Wingstem	2.5
Verbena urticifolia	Hairy White Vervain	1
826 oz/acre		

2.3 TREES

- A. Contractor shall acquire the species and size of trees from the list below for planting in the Bank Grading Areas shown on the plans. All substitutions, additions, or deletions of plantings shall be approved by the Owner or Engineer prior to

acquisition. The number and diversity of tree and shrub species planted shall be relatively consistent throughout the required planting zones so that no one species makes up more than 20% of the plantings in any of the defined planting areas.

- B. Bank grading areas to be planted with single row of trees 12 to 14 foot on center spacing and planted 5 feet beyond the top of graded bank. Trees to be protected with minimum 4' tall tree tubes and stakes.
- C. Tree list to correspond with that shown on the plans. Species substitutions to be approved by the Engineer.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. All seed shall be Pure Live Seed (PLS) at the amounts specified. A label shall be affixed to each seed lot specifying the PLS content. Seed amounts shall be adjusted to meet 100% PLS. Delivery of seed shall be timed to coordinate closely with the planting time. If the seed needs to be held for more than one day, the Contractor shall store the seed in a cool, dry place until the seed can be applied. Seed shall be shipped, stored and handled in a manner that will ensure protection from damage and to maintain dormancy until planted.
- B. The common oats within the Slope Stabilization Mix shall be guaranteed by the Contractor to germinate within two weeks of seeding during the growing season or in the first available growing season and produce a minimum of 75 percent surface coverage after two months. If the growth of the vegetation does not produce an aerial coverage of 80 percent during the first two months of growth than the Contractor shall be required to reseed and mat/blanket the areas lacking the required cover again until such time as the 80 percent coverage is obtained using the same seed mix specified herein. If there is a disagreement as to the existing aerial coverage a botanist from a reputable consulting firm, resource agency, or university shall determine the coverage based on standard botanical survey methods and their determination shall be final.
- C. Minimum 80% vegetated cover shall be present at the end of the 1-year warranty period. Re seeding may be required to achieve this requirement. The Contractor will not be awarded the final 5% retainage placed on the project until after the 1-year monitoring and this vegetation coverage requirement is satisfied.
- D. All trees shall be purchased from a reputable nursery in the state of Indiana, Illinois or Michigan. Species tags shall be affixed to each individual plant. Delivery of trees shall be timed to coordinate closely with the planting time. The Contractor shall store the trees in a shaded or air conditioned area and keep the potted soil or plant root mass moist until planted.

- E. Prior to the end of the 1-year project warranty period, the Engineer will determine the percent survival of the trees planted. The Contractor is required to achieve 70% survival of all trees at this 1-year time period. Should the Contractor not achieve 70% survival, the Contractor will be required to replant trees equal to the amount of the original quantity of trees minus those that have survived (effectively achieving 100% survival after the first year). The Contractor will not be awarded the final 5% retainage placed on the project until after the 1-year monitoring and any required replanting are completed.

3.2 INSTALLATION

- A. For areas seeded, soil shall be loose friable soil (salvaged from site) for a minimum of 1" over other soils. The soil surface shall be free of roots, rocks and other debris over 2" in diameter. The soil surface on the graded banks shall be uniform before seed application without depressions or protrusions exceeding 2".
- B. For all areas planted with trees, soil shall be loose friable native soils salvaged from site for the required planting depth of 12-16 inches. Fertilizer is not required.
- C. Moisten seeded and planted areas before planting if soil is dry. Water thoroughly and allow surface to dry before seeding/planting. Do not create muddy soil.
- D. Seed can be applied directly to the soil surface and shall not be covered with more than ¼ inch of soil.
- E. Seed prior to applying coir matting, erosion control blanket or mulch. The specified seed mixture shall be a uniform blend of the designated seeds and shall be uniformly spread and sown by means of a hand operated mechanical spreader or hydroseeder. Seeding shall be done before the soil prepared for seeding becomes eroded, crusted over, or dried out. Any Seeding activity is subject to suspension or alteration by Engineer when soil conditions become excessively wet or dry or seed distribution is deemed inadequate. Contractor will be responsible for any notable damage to graded slopes caused by seeding activity and will be required to repair prior to continuing seeding activity.
- F. Install matting/blanket in accordance with Section 02130 and the Manufacturer's recommendations after seeding has occurred. Trees to be planted after Permanent Seeding and matting/blanket are applied.
- G. All seeded surfaces not covered by matting/blanket shall be mulched with straw the same day seed is applied.
- H. All areas disturbed to receive seeding. Areas beyond the limits of bank grading and inside floodplain grading that are otherwise disturbed as a result of access, staging,

or spreading of spoils shall be seeded with Stabilization Seed Mix and straw mulched at a rate of approximately 2 tons per acre.

3.2 BASIS OF MEASUREMENT AND PAYMENT

- A. Payment for Permanent Seeding including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per acre basis as identified on the Bid Sheet. Areas of Bank Grading and Inside Floodplain Grading as indicated on the plans or otherwise requested by the Engineer in writing will be paid for under this item. All other permanent seeding as a result of other activities and land disturbance will be considered incidental to this work and completed at no additional cost to the Owner. Note final 5% retainage will not be released until the percent vegetation is satisfied as detailed in this Section.
- B Payment for Tree Planting including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per unit basis as identified on the Bid Sheet. Note final 5% retainage will not be released until the percent survival requirements of trees are satisfied as detailed in this Section.

END OF SECTION

SECTION 02130
COIR MATTING, EROSION CONTROL BLANKET, STRAW BLANKET AND MULCH

PART 1 – GENERAL

1.1 SUMMARY

- A. This work shall include equipment, materials and labor related to installation of Coir Matting, Erosion Control Blanket, Straw Blanket and Hydraulically Applied Mulch in accordance with these Specifications and in conformance with the Plans
- B. Prevailing Specifications: INDOT 2020 – Section 621
- C. Related Requirements
 - 1. Section 02030 - Erosion and Sedimentation Controls.
 - 2. Section 02120 - Permanent Seeding and Planting

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data: Submit data on products used.
- C. Material tickets for all coir matting, erosion control blanket, straw blanket and hydraulically applied mulch installed on the site shall be submitted with the payment request.

1.3 QUALITY ASSURANCE

- A. A manufacturer's representative that is knowledgeable in the placement of the matting/blanket and hydraulically applied mulch shall be onsite during the first day of placement.

PART 2 - PRODUCTS

2.1 COIR MATTING

- A. Coir Matting shall consist of 700 gram/m² woven coir such as Dekowe 700 or approved equal. Install per Manufacturer's recommendations.
- B. 2x4 Wood Shim Wedges measuring minimum 18 inches long shall be used to anchor Coir Matting in accordance with the plans.
- C. Edges and overlap areas all to be staked 3' on center and a single row of wood wedges 6' on center through the middle of each coir roll.

2.2 EROSION CONTROL BLANKET

- A. Erosion Control Blanket shall consist of North American Green SC150BN or approved equal. Install per Manufacturer's recommendations.
- B. Wood stakes measuring minimum 12 inches long shall be used to anchor Erosion Control Blanket in accordance with the plans. Stakes must either be wedge shaped or notched at the top in order to effectively hold down the blanket.
- C. Edges and overlap areas all to be staked 3' on center and a single row of wood wedges 6' on center through the middle of each blanket.

2.3 STRAW BLANKET

- A. Straw blanket shall consist of North American Green Single Bio Net Straw Blanket (S75BN or Equivalent).
- B. Straw blanket to be installed underneath of all coir mat and as directed by the Engineer in inside floodplain areas or other select disturbed areas.

2.4 HYDRAULICALLY APPLIED MULCH

- A. Hydraulically Applied Mulch (Hydromulch) specified on the plans for installation above the erosion control blanket limits shall be a High Performance-Flexible Growth Medium (HP-FGM) applied at 4000 pounds per acre having the following components:
 - 1. 80% Thermally Processed Virgin Wood Fibers
 - 2. 10% Wetting agents (including high-viscosity colloidal polysaccharides, cross-linked biopolymers, and water absorbents)
 - 3. 5% Crimped Biodegradable Interlocking Fibers derived from regenerated plant sources
 - 4. 5% Micro-Pore Granules
 - 5. A product meeting the specification is Flexterra HP-FGM manufactured by Profile Products www.profileproducts.com
- B. Hydromulch not detailed in the plans or included with the bid tab. Should hydromulch be required for stabilization of select banks, the Engineer will request a unit price and issue a change order to establish payment.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive matting/blanket for compliance with requirements and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. The matting/blanket shall be installed at the locations, elevations and lengths as indicated on the Plans.
- B. Provide a smooth soil surface free from stones, clods, or debris that will prevent the contact of the matting with the soil.
- C. After seeding, 2 rolls (6.67 feet or 2 meters wide each) coir matting underlaid with straw blanket shall be installed starting from the toe of slope with matting installed parallel to the stream channel.

- D. Begin installation at the upstream end of the matted area and install matting in the direction of flow. Install matting loosely and in full contact with the soil such that there are no creases in the matting.
- E. Extend matting/blanket a minimum of 3 feet beyond top of bank and trench at upslope edge.
- F. The edges of the parallel matting must be staked with a minimum 6 inches of overlap such that the edge of the down-slope matting is under the one just up-slope utilizing minimum wood shim wedges on 3 foot centers. When matting must be spliced along the slope, install matting end-over-end (shingle style) with a minimum of 6 inches of overlap having the upstream matting overlay the downstream matting. Three wood wedges stakes shall be installed at each end joint.
- G. Wood shim wedges shall be installed around the entire perimeter on 3 foot centers.
- H. At the lower edge of the slope matting shall be secured by anchoring under toe of slope placed rock, or by burying, staking, backfilling, and compacting the bottom edge in an anchor trench a minimum of 12 inches deep by 12 inches wide.
- I. Interior sections of matting may be secured with wood shim wedges on 6 foot centers.
- J. After minimum 2 rolls of coir matting underlaid with straw blanket are applied to bank grading areas, erosion control blanket shall be installed to secure the remainder of the embankment.
- K. All installation specifications above will apply unless specified differently by the manufacturer and also approved by the Owner or Engineer.

3.4 BASIS OF MEASUREMENT AND PAYMENT

- A. Payment for Coir Matting, Erosion Control Blanket and Straw Blanket including the cost of all necessary equipment, materials, and labor to accomplish the work shall be paid for on a per square yard basis as identified on the Bid Sheet.
- B. Hydromulch not detailed in the plans or included with the bid tab. Should hydromulch be required for stabilization of select banks, the Engineer will request a unit price and issue a change order to establish payment.

END OF SECTION

SECTION 02300
BOULDER GLIDE STRUCTURE

PART 1 – GENERAL

1.1 SUMMARY

- A. The work for this section includes providing labor, equipment and materials to install Boulder Glide Structure as shown on the Plans and specified herein. The Boulder Glide Structure stabilizes the water surface elevation in the pool immediately upstream and sets the elevation of the downstream riffle.
- B. Related Requirements
 - 1. Section 02100 – Earthwork
 - 1. Section 02110 – Stone
 - 2. Section 02030 – Erosion and Sedimentation Control

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data: Submit data on products used.

1.3 QUALITY ASSURANCE

- A. Use adequately sized and appropriate equipment and skilled operator(s) who are thoroughly trained and experienced in the necessary crafts and who are familiar with the specified methods needed for proper installation of the work.
- B. Engineer to be present during initial Boulder Glide Structure installations and approve each structure installed as completed.

PART 2 – PRODUCTS

- 2.1 INDOT REVETMENT RIPRAP (3 inches to 12 inches in diameter”) shall be used as detailed in the plans on the upstream face of the structure.
- 2.2 INDOT CLASS I RIPRAP (3 inches to 24 inches in diameter”) shall be used as detailed in the plans on the downstream face of the structure.

- 2.3 Limestone Armor Stone (Limestone Armor Stone or Native Rock sized with a minimum dimension of 30 inches in two of the three axis with one axis measuring at minimum 36" when being utilized as a footer stone). Shall be used for footer and surface stones.

PART 3 – EXECUTION

3.1 GENERAL

- A. Placement shall conform to the angles, slopes and dimensions indicated on the Plans and as directed by the Engineer.

3.2 EXECUTION

- A. Flow from the stream shall be temporarily diverted away from portions of the work area as the work progresses across the stream.
- B. Excavate into the stream bank to the limits/extents shown on the Plans and to a minimum 2' depth below stream bed elevation.
- C. In areas of the stream where the subgrade does not support the proper placement of Limestone Armor Stone due to deep sections of the river, Mined Bedstone, Clean Aggregate Fill or INDOT Revetment Riprap (in that priority order) will be used to fill void space in the river bottom to establish a subgrade at a suitable level and elevation for placement of Limestone Armor Stone. This placement of material will need to be agreed to and/or directed by the Engineer in writing and will be paid in accordance with the Stone specification.
- D. Install Armor Stone into the trench in a continuous line from the limits/extents shown on the Plans into the channel on an angle moving approximately 20 feet upstream to a point approximately 1/5 of the channel width (20-25') and then continue perpendicular to the bank for approximately 55-60 feet or 3/5 of the channel width before angling back downstream to form an arm about 25-30 feet in length extending beyond inner berm feet as shown on the Plan for the final 1/5 channel width. The structure should be near symmetrical from a plan view perspective.
- E. Armor Stone shall contact adjacent Armor Stone within the upper 1/10 of the rock's height and attempt to maximize contact between stones. Armor Stone at the contact points between stones shall determine if structure meets elevations identified in the Plans. The lowest elevation shall be in the center of the channel and shall match the elevation shown in the Plan structure tables. Top of Armor Stone shall with successive stones form a relatively uniform surface having the lowest elevation in the center of the channel matching elevations shown on the Plan structure tables. No more than 1' of rise is allowable for the Armor Stone bottom elevation between

the channel center to the bankfull limit. Armor Stone to extend minimum 24” below proposed bed surface elevation across the entire bankfull width.

- F. Multiple Armor Stones will need to be stacked as the structure approaches the bank limits in order to achieve the ½ bankfull tie in elevation of the structure as detailed in the plans.
- G. INDOT Revetment Riprap shall be placed on the upstream side of the Armor Stone within the trench and channel to fill the voids between boulders. This riprap should extend for a minimum 5’ upstream of the surface stones. The individual placement of larger pieces may be required to fill larger voids so that the pieces will not migrate through the voids. Fill voids to the top elevation of the Armor Stone. Maximum 2:1 slope up the riprap face.
- H. As needed, Place additional bed material upstream of the riprap to further decrease slope coming into boulder glide structures.
- I. INDOT Class I Riprap shall be placed on the downstream side of the Armor Stone ARMOR STONE to support boulders. This INDOT Class I should extend for a minimum 5’ downstream of the footer stones. Additional placement of Revetment Riprap or Bedstone may be required, as directed by the Engineer, downstream of INDOT Class I to match grade and guard against a scour pool forming. The individual placement of larger pieces may be required to fill larger voids or to provide additional strength to the structure and prevent migration of material. Fill voids to the top elevation of the surface stones.

3.3 BASIS OF MEASUREMENT AND PAYMENT

- A. Stone (INDOT Revetment Riprap, INDOT Class I Riprap and Limestone Armor Stone) required for the completion of each Boulder Glide Structure will be paid for on a per ton unit basis as detailed in the Stone section and shall include costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the boulder glide structure for the duration of the Work, all complete as specified.

END OF SECTION

SECTION 02330 J-HOOK

PART 1 – GENERAL

1.1 SUMMARY

- A. The work for this section includes providing labor, equipment and materials to install J-Hook structures as shown on the Plans and specified herein.
- B. Related Requirements
 - 1. Section 02100 – Earthwork
 - 2. Section 02110 – Stone
 - 3. Section 02030 – Erosion and Sedimentation Control

1.2 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data, and Samples.
- B. Product Data: Submit data on products used.

1.3 QUALITY ASSURANCE

- A. Use adequately sized and appropriate equipment and skilled operator(s) who are thoroughly trained and experienced in the necessary crafts and who are familiar with the specified methods needed for proper installation of the work.
- B. Engineer to be present during J-Hook installations. Engineer to approve each Structure installed as completed.

PART 2 – PRODUCTS

- 2.1 Limestone ARMOR STONE (Limestone ARMOR STONE or Native Rock sized with a minimum dimension of 30 inches in two of the three axis with one axis measuring at minimum 36” when being utilized as a footer stone). Shall be used for footer and surface stones

PART 3 – EXECUTION

3.1 GENERAL

- A. Placement shall conform to the slopes and dimensions indicated on the Plans and as directed by the Engineer.

3.2 PROCEDURES

- A. Flow from the stream shall be temporarily diverted away from portions of the work area as the work progresses across the stream.
- B. Excavate into the stream bank to the limits/extents shown on the plans and to a minimum depth equal to that of the footer stone diameter.
- C. In areas of the stream where the subgrade does not support the proper placement of Limestone Armor Stone due to deep sections of the river, Mined Bedstone, Clean Aggregate Fill or INDOT Revetment Riprap (in that priority order) will be used to fill void space in the river bottom to establish a subgrade at a suitable level and elevation for placement of Limestone Armor Stone. This placement of material will need to be agreed to and/or directed by the Engineer in writing and will be paid in accordance with the Stone specification.
- D. Install Armor Stone into the trench in a continuous line from the limits shown on the Plans into the channel on a 25 to 30 degree angle of departure, moving upstream to a point approximately 1/3 of the channel width (30-35'), and then begin an arch that gradually angles back toward the opposite embankment and ties into the bank limit at the ½ bankfull elevation as shown on the Plans. Top of Armor Stone shall match or protrude slightly above proposed bed surface. Top of Armor Stone shall with successive stones form a relatively uniform surface having the lowest elevation in the center of the channel matching elevations shown on the Plan structure tables. No more than 1' of rise is allowable for the Armor Stone bottom elevation between the channel center to the bankfull limit. Footer stones to extend minimum 24" below proposed bed surface across the entire bankfull width.
- E. Armor Stone shall contact adjacent Armor Stone within the upper 1/10 of the rock's height and attempt to maximize contact between stones. Armor Stone at the contact points between stones shall determine if structure meets elevations identified in the Plans. The lowest elevation shall be in the center of the channel and shall match the elevation shown in the Plan structure tables. Top of Armor Stone shall with successive stones form a relatively uniform surface having the lowest elevation in the center of the channel matching elevations shown on the Plan structure tables. No more than 1' of rise is allowable for the Armor Stone bottom elevation between the channel center to the bankfull limit. Armor Stone to extend minimum 24" below proposed bed surface elevation across the entire bankfull width.
- F. Multiple Armor Stones will need to be stacked as the structure approaches the outside bank limits (long arm) in order to achieve the 3/4 bankfull tie in elevation of the structure as detailed in the plans.
- G. Install an approximately 3' width of INDOT Revetment Riprap upstream of the J-hook arch to fill the voids between boulders (exclude upstream of vane arm).

Backfill vane arm with on-site bed material (any size). Fill voids to the top elevation of the surface stones.

- H. INDOT Class I Riprap shall be placed on the downstream side of the Armor Stone to support boulders. This INDOT Class I should extend for a minimum 5' downstream of the Armor Stone. The individual placement of larger pieces may be required to fill larger voids or to provide additional strength to the structure and prevent migration of material. Fill voids to the top elevation of the surface stones.
- I. Bed material shall be excavated from the center of the channel downstream of the arch in the J-Hook structure to form a pool as shown in the Plan details. The excavated pool shall be no deeper than $\frac{1}{2}$ the depth of installed footer stone.

3.3 BASIS OF MEASUREMENT AND PAYMENT

- A. Stone (INDOT Revetment Riprap, INDOT Class I Riprap and Limestone Armor Stone) required for the completion of each J-hook will be paid for on a per ton unit basis as detailed in the Stone section and shall include costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the j-hook structure for the duration of the Work, all complete as specified.

END OF SECTION

SECTION 02340
ROCK VANE

PART 1 – GENERAL

1.4 SUMMARY

A. The work for this section includes providing labor, equipment and materials to install Rock Vane structures as shown on the Plans and specified herein. Rock Vanes are detailed on the Plans.

B. Related Requirements

1. Section 02100 – Earthwork
2. Section 02110 – Stone
3. Section 02030 – Erosion and Sedimentation Control

1.5 SUBMITTALS

A. Section 01340 – Shop Drawings, Product Data, and Samples.

B. Product Data: Submit data on products used.

1.6 QUALITY ASSURANCE

A. Use adequately sized and appropriate equipment and skilled operator(s) who are thoroughly trained and experienced in the necessary crafts and who are familiar with the specified methods needed for proper installation of the work.

B. Engineer to be present during Rock Vane installations. Engineer to approve each Structure installed as completed.

PART 2 – PRODUCTS

- 2.1 Limestone Armor Stone (Limestone Armor Stone or Native Rock sized with a minimum dimension of 30 inches in two of the three axis with one axis measuring at minimum 36” when being utilized as a footer stone). Shall be used for footer and surface stones

PART 3 – EXECUTION

3.1 GENERAL

A. Placement shall conform to the slopes and dimensions indicated on the Plans and as directed by the Engineer.

3.2 PROCEDURES

- A. Flow from the stream shall be temporarily diverted away from portions of the work area as the work progresses across the stream.
- B. Excavate into the stream bank to the limits/extents shown on the plans and to a minimum depth equal to that of the footer stone diameter.
- C. In areas of the stream where the subgrade does not support the proper placement of Limestone Armor Stone due to deep sections of the river, Mined Bedstone, Clean Aggregate Fill or INDOT Revetment Riprap (in that priority order) will be used to fill void space in the river bottom to establish a subgrade at a suitable level and elevation for placement of Limestone Armor Stone. This placement of material will need to be agreed to and/or directed by the Engineer in writing and will be paid in accordance with the Stone specification.
- D. Install Armor Stone into the trench in a continuous line from the limits shown on the Plans into the channel on a 25 to 30 degree angle of departure, moving upstream to a point approximately 1/3 of the channel width (30-35'), Top of Armor Stone shall match or protrude slightly above proposed bed surface. Top of Armor Stone shall with successive stones form a relatively uniform surface having the lowest elevation in the center of the channel matching elevations shown on the Plan structure tables. No more than 1' of rise is allowable for the Armor Stone bottom elevation between the channel center to the bankfull limit. Footer stones to extend minimum 24" below proposed bed surface across the entire bankfull width.
- E. Armor Stone shall contact adjacent Armor Stone within the upper 1/10 of the rock's height and attempt to maximize contact between stones. Armor Stone at the contact points between stones shall determine if structure meets elevations identified in the Plans. The lowest elevation shall be in the center of the channel and shall match the elevation shown in the Plan structure tables. Top of Armor Stone shall with successive stones form a relatively uniform surface having the lowest elevation in the center of the channel matching elevations shown on the Plan structure tables. No more than 1' of rise is allowable for the Armor Stone bottom elevation between the channel center to the bankfull limit. Armor Stone to extend minimum 24" below proposed bed surface elevation across the entire bankfull width.
- F. Multiple Armor Stones will need to be stacked as the structure approaches the outside bank limits in order to achieve the 3/4 bankfull tie in elevation of the structure as detailed in the plans.
- G. INDOT Class I Riprap shall be placed on the downstream side of the Armor Stone to support boulders. This INDOT Class I should extend for a minimum 5' downstream of the Armor Stone. Fill voids to the top elevation of the Armor Stone.

- H. Bed material shall be excavated from the center of the channel downstream of the vane arm structure to form a pool as shown in the Plan details. The excavated pool shall be no deeper than $\frac{1}{2}$ the depth of installed footer stone
- I. Backfill the upstream face of the vane arm with on-site bed material, ideally excavated from downstream of the vane arm.

3.3 BASIS OF MEASUREMENT AND PAYMENT

- A. Stone (INDOT Revetment Riprap, INDOT Class I Riprap and Limestone Armor Stone) required for the completion of each Rock Vane will be paid for on a per ton unit basis as detailed in the Stone section and shall include costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the rock vane structure for the duration of the Work, all complete as specified.

END OF SECTION

SECTION 02370

ROCK & WOOD TOE STABILIZATION

PART 1 - GENERAL

1.1 SUMMARY

A. Work included: Provide and install rock & wood toe stabilization as shown on the Plans, specified herein, and needed for a complete and proper installation.

B. Related Requirements

1. Section 02020 – Clearing, Grubbing, and Obstruction Removal
2. Section 02100 – Earthwork
3. Section 02110 – Stone
4. Section 02030 – Temporary Erosion and Sediment Control

1.2 SUBMITTALS

A. Section 01340 – Shop Drawings, Product Data, and Samples.

B. Product Data: Submit data on products used.

1.3 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Engineer to be present at beginning of Rock & wood toe stabilization installation. Engineer to approve of materials prior to construction and installed work following construction.

PART 2 – PRODUCTS

2.1 INDOT REVETMENT RIPRAP

A. INDOT Revetment Riprap to be installed at the existing channel toe of slope as shown in the Rock & Wood toe stabilization detail in the plans. The stone footer shall be keyed into the stream bed if a solid soil/aggregate base is not present and extend up to the an elevation which allows for at least $\frac{3}{4}$ of the overtop root collar to be below the normal water level and so the rootwad fan and collar may rest on the stone footer. Max slope on the face of the Stone Toe is 1.5H:1V.

2.2 INDOT CLASS I RIPRAP

- A. INDOT Class I Riprap (well graded material sized 3-24”) shall be used as anchor rock, between, and overtop of rootwad logs.

2.3 ROOTWAD FAN

- A. Logs greater than 8” in diameter and with a minimum trunk length of 12 to 15 feet shall be harvested from within the approved limits of disturbance. Logs should be free from any visible decay or rotting. The size of the root ball and fan shall be no smaller than 3 feet in diameter. The length of the rootwad and log shall be at least 15 feet.

PART 3 – EXECUTION

3.1 GENERAL

- A. Placement shall conform to the slopes and dimensions indicated on the plans and as directed by the Engineer.

3.2 CONSTRUCTION

- A. Flow from the stream should be diverted away from the work area.
- B. Excavate or reshape the channel to accommodate the area where INDOT Revetment Riprap is to be placed as footer stone under the rootwad collar.
- C. Excavate the horizontal trench adjacent to the channel to accommodate the rootwad fan and rootwad trunk. Set spoils to the side for later embankment reconstruction. Top of root collar elevation is approximately 4’ below bankfull elevation or at the preproject normal water elevation.
- D. Interlock tree trunks as indicated on the plan view detail.
- E. Place the INDOT Class I Riprap (sized 3-24”) layered with branches between the root collars and to the elevation as indicated on the plans. INDOT Class I Riprap will typically extend 2’ above preproject normal water elevation.
- F. Place bottom row of straw blanket and coir mat as detailed in Section 02130 so that embankment soil and Class I Riprap can anchor the bottom edge of the coir mat.
- G. Backfill coir matting with soil overtop INDOT Class I Riprap (may backfill soil concurrently with placement of Class I Riprap and branch layering). Final grade a 2:1 embankment from the backside of the INDOT Class I Riprap to the top of bank.

- H. Seed embankment with slope stabilization mix and coir mat or erosion control blanket as detailed in Section 02130.

3.3 BASIS OF PAYMENT

- A. Stone (INDOT Revetment Riprap, INDOT Class I Riprap) required for the completion of each Rock & Wood Toe Stabilization will be paid for on a per ton unit basis as detailed in the Stone section and shall include costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the structure for the duration of the Work, all complete as specified.
- B. No additional payment will be made for the Wood processing, handling or installation as required under this section. Rather all cost incurred for Wood shall be considered incidental to the price bid for Tree Removal.

END OF SECTION

APPENDIX A

PERMITS



United States Department of the Interior

Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

October 25, 2022

Ms. Shannon Flannigan
Indiana Department of Environmental Management
Office of Water Quality
MC65-42 WQS IGCN 1255
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Project: IDEM ID: 2022-919-75-SCF-A
Applicant: Kankakee River Basin and Yellow River Basin Development Commission
Agent: Cardno/Stantec
Yellow River Bank Stabilization
Starke County

Dear Ms. Flannigan:

The U.S. Fish and Wildlife Service has reviewed the above referenced Public Notice for Section 401 Water Quality Certification, dated October 6, 2022.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The applicant proposes the restoration of two sections of the Yellow River, one near CR 1100 East upstream from Uber and one near CR 500 East upstream from Knox. At CR 1100 East, approximately 2,232 feet of wood and rock revetment, two constructed riffles, two boulder glide structures, and two boulder j-hook structures are proposed within a river reach of about 4,650 feet. At CR 500 East, approximately 1,755 feet of wood and rock revetment and a single boulder vane arm are proposed over a length of about 2,200 feet. Bank grading and stabilization using blankets and native plantings will be implemented at both sites.

The proposed project is a continuation of efforts to reduce sediment loading from sections of the Yellow River suffering from significant erosion and log jams while maintaining a natural channel that supports fish and wildlife habitat and recreational activities. Therefore, the U.S. and Wildlife Service supports the issuance of this proposed permit.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*) and the threatened/proposed endangered northern long-eared bat (*Myotis septentrionalis*). Although we do not have specific data on the presence or absence of these species within the two project locations, potential summer nursery habitat is present. Therefore, tree removal will need to occur when the species would not be present, which is between 1 October and 31 March. With this tree clearing time restriction in place, we concur that the proposed project is not likely to adversely affect these endangered and threatened/proposed endangered species.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans, or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

Thank you for the opportunity to review this Public Notice. For further discussion, please contact Elizabeth McCloskey at elizabeth_mccloskey@fws.gov.

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Scott E. Pruitt
Supervisor

Sent via email October 25, 2022; no hard copy to follow.

cc: Christie Stanifer, Environmental Coordinator, Division of Fish and Wildlife, Indianapolis, IN
Scott Pelath, KRBYRBDC, Portage, IN



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT, MICHIANA SECTION
2422 VIRIDIAN DRIVE SUITE #200
SOUTH BEND, INDIANA 46628-3561

December 06, 2022

Regulatory Branch
File Number LRE-2020-02661-100-N22

Scott Pelath
Kankakee River Basin and Yellow River Basin Development Commission
6100 Southport Road
Portage, Indiana 46368

Dear Mr. Pelath,

Please refer to your application for a Department of the Army (DA) permit to discharge fill material and re-grade banks along approximately 7,215 linear feet of the Yellow River associated with the Yellow River Phase II Stream Design project located upstream of North 500 East and downstream of South 1100 East in Starke County, Indiana (North 500 East Latitude 41.302528 and Longitude -86.594670; South 1100 East Latitude 41.273299 and Longitude -86.485962). We have verified that the project is authorized by Nationwide Permit 27 as published in the Federal Register.

You may proceed with the work per the following project description, attached drawings, and attached general and special conditions:

North 500 East: Discharge a total of approximately 1,168 cubic yards of material (Class 1 riprap, revetment riprap, repurposed wood, sand, and gravel) waterward the Ordinary High Water Mark of the Yellow River to construct toe-wood reaches and one (1) rock vane.

South 1100 East: Discharge a total of approximately 2,440 cubic yards of material (Class 1 riprap, revetment riprap, repurposed wood, sand, and gravel) waterward the Ordinary High Water Mark of the Yellow River to construct toe-wood reaches, two (2) boulder glide structures, two (2) J-hook structures, and two (2) constructed riffles.

Specific locations and dimensions for structures listed above are located on the attached plans.

Special Conditions:

1. If you discover any unknown historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately stop work in that area and notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

2. Compliance with the conditions in the attached Section 401 Water Quality Certification (401 WQC), dated November 22, 2022, from the Indiana Department of Environmental Management (IDEM), is required for the DA permit to remain valid. Contact the IDEM with questions regarding the 401 WQC or its conditions.
3. Tree clearing is prohibited during the period of April 01 – September 30, unless you provide negative results of a survey for northern long-eared bat and Indiana bat conducted under the appropriate U.S. Fish and Wildlife Service summer survey protocol and receive approval from this office prior to initiating any tree clearing.
4. All dredged and/or excavated materials will be disposed of in upland location(s) with no placement in, or return to, any waterway or wetland. Liability for proper placement of all materials, including those disposed of off-site by any party, notwithstanding ownership, remains with the permittee.
5. All fill shall consist of clean, inert materials from an upland source. The fill material must be free from toxic substances, fines, oil and grease, debris, wood, general refuse, plaster, and other pollutants, and shall contain no broken asphalt, oil-based material, or metal.
6. Erosion controls, such as silt fencing, shall be placed to prevent unauthorized discharge material from entering wetlands or waterways. These must be erected prior to starting work, and their effectiveness must be maintained until all work at the site is completed and the area has been stabilized against erosion.
7. After completion of construction, all disturbed areas shall be permanently stabilized by seeding with native plants and/or by the planting of trees or shrubs native to the area and, if possible, already represented on the site.

Any construction activities other than those shown on the plans may not qualify for the authorization. If you contemplate any changes or additional activities from those depicted on the plans, please submit them to this office for authorization review prior to any construction. On completion of the work, you must fill in and return the enclosed COMPLETION REPORT.

We are obligated to provide recipients of permit verifications with a jurisdictional determination (JD) when requested to do so. The Corps of Engineers has the following options with respect to JDs: (1) Approved Jurisdictional Determinations (AJD), which are considered "official" JDs and can be administratively appealed; (2) Preliminary Jurisdictional Determinations (PJD), which are non-binding JDs and advise an affected party that the Corps of Engineers believes there may be waters of the United States on the property that fall under the Corps' regulatory authority and enables the Corps and a permit applicant or other affected party to resolve certain jurisdiction and permit issues without expending time on making an official determination of the Corps' jurisdiction; and (3) No Jurisdiction Determination (NJD), which is used in situations where issuance

of a JD is deemed unnecessary by a permit applicant or other affected party because Corps' jurisdiction is undisputed (e.g., work is in a navigable water of the United States) or not subject to question. The NJD option requires less documentation than a PJD and likewise enables the Corps and a permit applicant or other affected party to resolve jurisdiction and permit issues without expending time on an official determination of the Corps' jurisdiction.

Per the information in your application and information gained during our inspection of the project site, we believe the work described in this permit verification will occur in waters of the United States subject to the Detroit District, U.S. Army Corps of Engineers' regulatory authority under Section 404 of the Clean Water Act. A PJD for this permit verification is enclosed.

Our intended use of a PJD in this instance does not preclude an applicant or other affected party from requesting an AJD, which would provide an official determination of jurisdictional waters on a site. As noted above, an AJD can be administratively appealed. Information regarding the appeals process can be found in the enclosed form entitled Notification of Administrative Appeals Options and Process and Request for Appeal. If use of a PJD satisfies your needs with respect to the above-discussed activity, please sign and return a copy of the PJD to our office within 30 days of the date of this letter. As stated in paragraph 2 of the enclosed PJD, undertaking the work subject to this permit verification, even if you do not return a signed copy of the PJD, constitutes acceptance of the use of the PJD and agreement that all wetlands and waterbodies on the site affected in any way by the work in question are jurisdictional waters of the United States. Please contact us if you have questions on our appeals process.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 14, 2026. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this nationwide permit.

As per 33 CFR 325, Appendix A, representatives from this office are allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of the Nationwide Permit.

Should you have any questions, please contact me at the above address, by E-Mail at Scott.C.Girardi@usace.army.mil, or by telephone at (574) 232-1952 ext. 21968. In all communications, please refer to File Number LRE-2020-02661-100-N22.

We are interested in your thoughts and opinions concerning your experience with the

Detroit District, Corps of Engineers Regulatory Program. If you are interested in letting us know how we are doing, you can complete an electronic Customer Service Survey from our web site at: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Alternatively, you may contact us and request a paper copy of the survey that you may complete and return to us by mail or fax. Thank you for taking the time to complete the survey, we appreciate your feedback.

Sincerely,

A handwritten signature in black ink, appearing to be 'SG' or similar, written in a cursive style.

Scott C. Girardi
Regulatory Project Manager
Michiana Section

Copy Furnished

Cardno now Stantec, St. Clair, Meert, w/encl.
IDEM, Office of Water Quality, Flannigan, 2022-919-75-SCF-A, w/encl.
IDNR, Division of Water, Smithers, FW-31840, w/encl.
IDNR, Division of Fish and Wildlife, Haunert, w/encl.

A. Nationwide Permit General Conditions:

To qualify for NWP authorization, the permittee must comply with the following general conditions, as appropriate. These conditions are selected from those published in the Federal Register that are particularly relevant to the construction and/or operation of this particular authorized activity. The complete text is available at our website <https://www.lre.usace.army.mil/Missions/Regulatory-Program-and-Permits/> under "Detroit Regulatory Quick" select "Detroit District General Permit Types" and then choose "Nationwide Permits with Michigan Regional Conditions" OR "Nationwide Permits with Indiana Regional Conditions"; or, you may contact the Detroit District directly for the information. We have done our best to verify that your project complies with the others, where applicable.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must

not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action"

for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on

or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including

any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(i)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

B. Further Information

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.



**State of Indiana
Department of Natural Resources**



CERTIFICATE OF APPROVAL

Application #: FW-31841-0

This Certificate of Approval is a Permit for Construction under the authority of the Indiana Flood Control Act, IC 14-28-1 with 312 IAC 10 as administered by the Department of Natural Resources.

Approval Issued To: Kankakee River Basin and Yellow River Basin Development Commission, Scott Pelath, 6100 Southport Road, Portage, IN 46368

Approval Issued By:

Mail Date: 12/7/2022

Jordan Smithers, CFM, Division of Water

Permit Effective Date: 12/25/2022

Permit Expiration Date: 12/06/2024

Pursuant to IC 4-21.5-3-5(f), this Permit becomes Effective eighteen (18) days from the Mail Date to provide a stay period for a Petition for Administrative Review with the Indiana Natural Resources Commission, Division of Hearings. Initiating construction authorized in this Permit prior to the Permit Effective Date constitutes a violation. This Permit is only valid until the Permit Expiration Date.

This Permit may be renewed one (1) time if a written request is received at the DNR, Division of Water, prior to the Permit Expiration Date.

PROJECT INFORMATION:

Waterbody: Yellow River

County: Starke, Starke

Project Description Narrative: The Kankakee and Yellow River Basin Development Commission and Starke County Surveyor proposed a stream restoration project on the Yellow River. Large amounts of sediment from the Yellow River are entering the Kankakee River. The additional sediment has been attributed primarily to bank instability. Restoration of the Yellow River's geomorphic functions will occur by modifying stream channel cross section geometry, stream pattern, and stream bed profile. To reduce bank erosion, the banks slopes will be regraded to allow for vegetation establishment. All disturbed areas and banks will be reseeded with native herbaceous vegetation and tree/shrub plantings. In-stream structures will be constructed to stabilize the channel bed and further enhance floodplain connection.

Project Location: Downstream of the of South 1100 East stream crossing near Knox

PERMIT CONDITIONS:

This Certificate of Approval is valid only if the construction project is in compliance with all Conditions in this Permit.

DNR PROJECT SPECIFIC PERMIT CONDITIONS

- 1) Revegetate all bare and disturbed areas, except for land that will be used for crop production in the next growing season, with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion. Low endophyte tall fescue may be used in the ditch bottom and side slopes only.
- 2) Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife's Environmental Unit.
- 3) Do not cut any trees suitable for Indiana bat and Northern Long Eared bat roosting (greater than 5 inches in diameter, living or dead, with loose hanging bark, or with cracks crevices or cavities) from April 1 through September 30.
- 4) Do not excavate or place fill in any riparian wetland.
- 5) Stabilize banks as work progresses so that no more than 200 lineal feet are left disturbed at the completion the workday.
- 6) Revegetate all spoil materials deposited in areas not used for crop production.
- 7) A representative of the Surveyor's Office or their contractor shall inspect erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.
- 8) Install appropriate sediment control measures to prevent the flow of sediment laden water, resulting from dredging operations, back into the watercourse.
- 9) Except for trees cabled in-place for bank protection, do not leave felled trees, brush, or other debris in the floodway.
- 10) Place all excavated materials at least 10 feet landward of the top of the ditch bank; spread all excavated materials evenly to a thickness not to exceed 6 inches and slope landward from the channel or completely remove from the floodway.
- 11) Provide a mitigation plan and tree species list to the Statewide Environmental Biologist prior to beginning work on the project.

DNR PROJECT GENERAL PERMIT CONDITIONS

- 1) Any modifications or additional construction beyond what was shown on plans received at the Division of Water shall require an additional review and approval from the Department of Natural Resources.
- 2) This Permit must be posted and maintained at the project site until the project is completed.
- 3) This Permit shall not be assigned or transferred without the prior written approval of the Department of Natural Resources.
- 4) If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (IC 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days.
- 5) This Permit may be revoked by the Department of Natural Resources for violation of any condition or applicable statute or rule.
- 6) The Department of Natural Resources shall have the right to enter upon the site of the permitted activity for the purpose of inspecting the work authorized under this Permit.

Certificate of Approval Attachments: FW_31841_FloodplainMap.pdf

RIGHT TO ADMINISTRATIVE REVIEW:

A party may appeal this Department of Natural Resources Action through the administrative review procedures found in the Administrative Orders and Procedures Act, IC 4-21.5, and the rules promulgated thereunder 312 IAC 3-1. If an appeal is filed, the final agency determination will be made by the Natural Resources Commission following a legal proceeding conducted before an Administrative Law Judge. The Department of Natural Resources will be represented by legal counsel at all stages of administrative review.

In order to obtain an administrative review, a written petition must be filed with the Division of Hearings within 18 days of the Mail Date of the Action. The petition must contain specific reasons for the appeal and indicate the portion or portions of the project to which the appeal pertains. The petition must be addressed to the Division of Hearings, Indiana Government Center North, Room N103, 100 North Senate Avenue, Indianapolis, Indiana 46204

SERVICE LIST:

Applicant(s):

Kankakee River Basin and Yellow River Basin Development Commission, Scott Pelath, 6100 Southport Road, Portage, IN 46368

Agent(s):

Cardno now Stantec, Ross St. Clair, 708 Roosevelt Road, Walkerton, IN 46574
Cardno now Stantec, Jenna Meert 708 Roosevelt Road, Walkerton, IN 46574

Adjacent Landowners and Interested Parties:

Neva J Bailey, 10 South Starke Street PO Box 181, Hamlet, IN 46532
E Lucas and Sons LLC, 105 Lincolnway, Valparaiso, IN 46383
Tim Hildebrand II, 12312 Duttlinger Lane, Wheatfield, IN 46392
Hewlett Ray W Trust, 2535 South State Road 23, Knox, IN 46534
Lucas Guy E Trust, 5092 Saint Patrick's Drive, Rensselaer, IN 47978
Eric W Denny, 10495 East 150 South, Culver, IN 46511
Raquel G Martinez, 10495 East 150 South, Culver, IN 46511
David Jay and Janet Thompson, 2156 South State Road 23, Knox, IN 46534
Justin and Jennifer Chambers, 725 Maple Avenue, Plymouth, IN 46563
Marcia J Vasquez, 10820 East 250 South, Culver, IN 46511
Janet O Reyes, 10820 East 250 South, Culver, IN 46511
Wayne A Thomas, 10341 Serenity Drive, Demotte, IN 46310
Eugene and Jeanetta Rogers, 10655 East 150 South, Culver, IN 46511
Eric G and Caitlin R Fier, 10715 East 150 South, Culver, IN 46511
David R Fazzini, 269 Walnut Street, Flagstaff, IL 60126

Courtesy Notification:

US Army Corps of Engineers, Detroit District, Michiana Branch 2422 Viridian Drive, Suite 200, South Bend, IN 46628
Starke County SWCD, Andrea Surma, 1406 South Heaton Street, Knox, IN 46534
Starke County Drainage Board, Dennis Estok, 53 East Mound Street, Knox, IN 46534
Indiana Department of Natural Resources, Division of Law Enforcement District 10 Headquarters 100 West Water Street, Michigan City, IN 46360

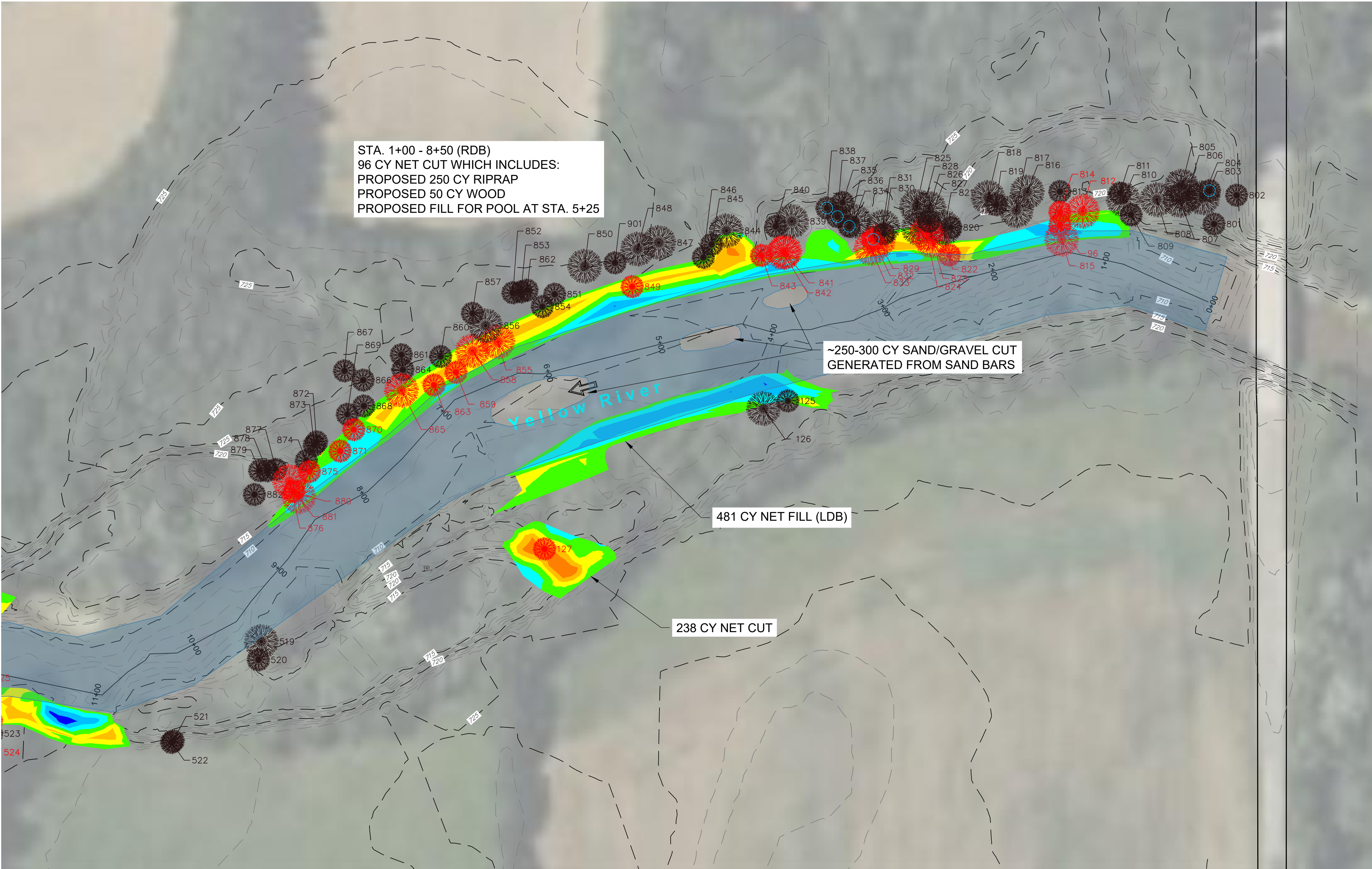
ADDITIONAL PERMITTING AGENCIES:

This is not a waiver of any local ordinance or other state or federal law and does not relieve the permittee of any liability for the effects which the project may have upon the safety of the life or property of others.

This does not relieve the permittee of the responsibility of obtaining permits, approvals, easements, etc. under other regulatory programs administered by, but not limited to, the U.S. Army Corps of Engineers, County Drainage Board, Indiana Department of Environmental Management and local, city, or county floodplain management, planning or zoning commissions.

APPENDIX B

GRADING EXHIBIT



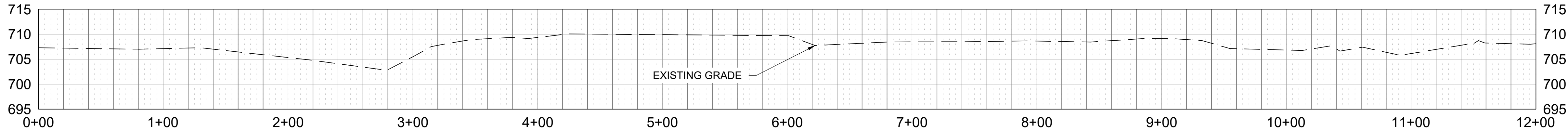
PLAN VIEW
SCALE: 1" = 50'
0 25 50 Feet

1100 E Restoration

CUT / FILL ANALYSIS	
COLOR	CUT / FILL
Red	7 - 9 FT CUT
Orange	5 - 6.99 FT CUT
Yellow	3 - 4.99 FT CUT
Light Green	1 - 2.99 FT CUT
Green	0.99 FT CUT - 1 FT FILL
Cyan	1.01 - 3 FT FILL
Blue	3.01 - 5 FT FILL
Dark Blue	5.01 - 7 FT FILL

RIGHT DOWNSTREAM BANK (RDB)
LEFT DOWNSTREAM BANK (LDB)

NOTE:
1. GRADING PLAN EXHIBIT COMPARES EXISTING SURVEYED SURFACE VERSUS PROPOSED SURFACE. PROPOSED SURFACE INCLUDES ALL SOIL, RIPRAP AND WOOD UTILIZED TO ESTABLISHED PROPOSED CONTOURS.



PROFILE VIEW
SCALE: 1" = 50'
1H : 4V
0 25 50 Feet

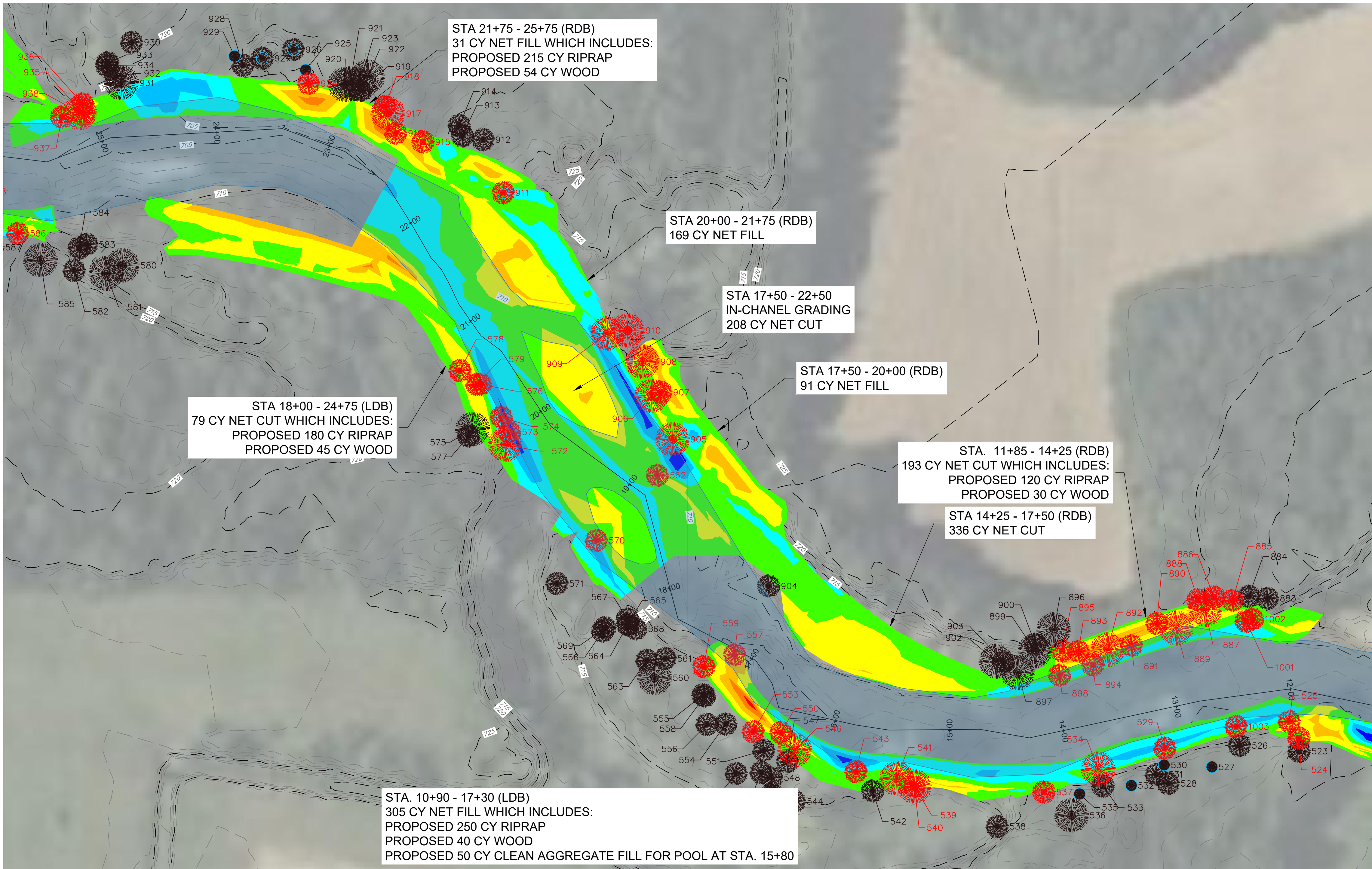
FINAL



GRADING PLAN
Yelow River Phase II Restoration: 1100 E. Site
Kankakee River Basin and Yellow River Basin Development Commission
Starke County, Indiana

DATE	DESCRIPTION	BY

DATE	JANUARY 2023
DRAWN	JTC
DESIGNED	RAS
CHECKED	
PROJECT #	J192500501
SHEET TITLE	GRADING
SHEET NUMBER	4
LAND USE #	



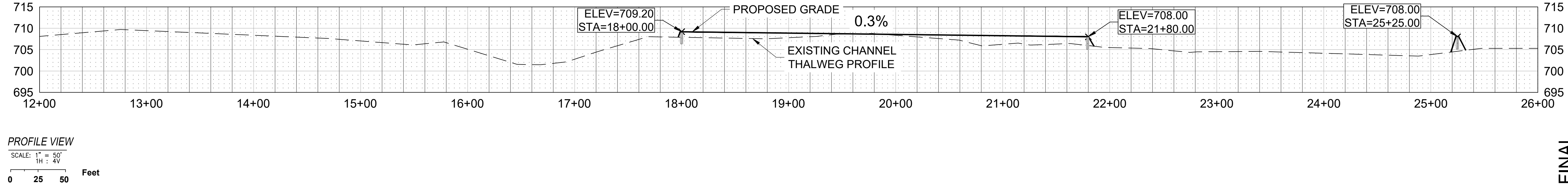
PLAN VIEW
SCALE: 1" = 50'
0 25 50 Feet

1100 E Restoration

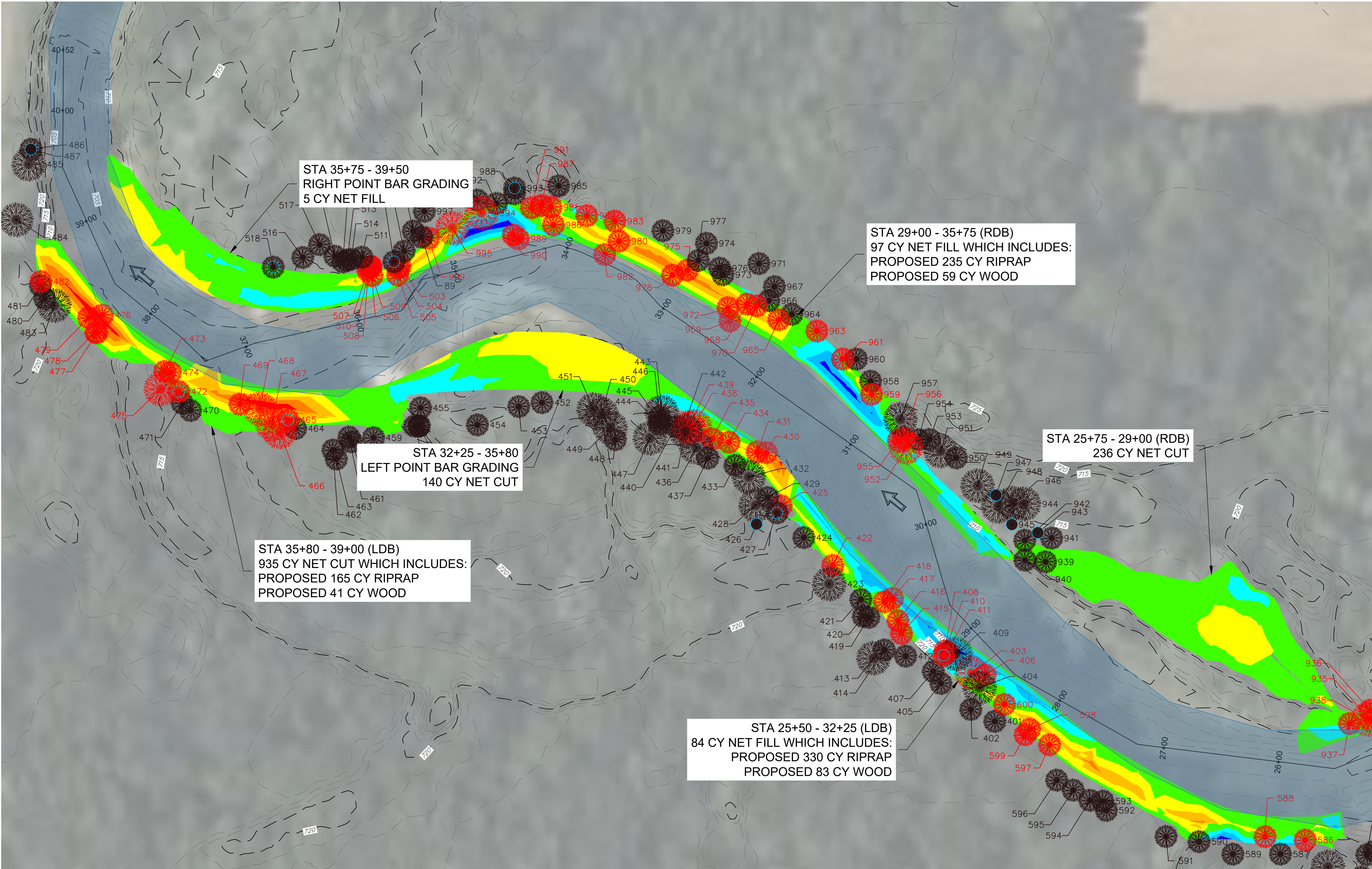
CUT / FILL ANALYSIS	
COLOR	CUT / FILL
Red	7 - 9 FT CUT
Orange	5 - 6.99 FT CUT
Yellow	3 - 4.99 FT CUT
Light Green	1 - 2.99 FT CUT
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Cyan	1.01 - 3 FT FILL
Blue	3.01 - 5 FT FILL
Dark Blue	5.01 - 7 FT FILL

RIGHT DOWNSTREAM BANK (RDB)
LEFT DOWNSTREAM BANK (LDB)

NOTE:
1. GRADING PLAN EXHIBIT COMPARES EXISTING SURVEYED SURFACE VERSUS PROPOSED SURFACE. PROPOSED SURFACE INCLUDES ALL SOIL, RIPRAP AND WOOD UTILIZED TO ESTABLISHED PROPOSED CONTOURS.



BY	
DATE	
DESCRIPTION	



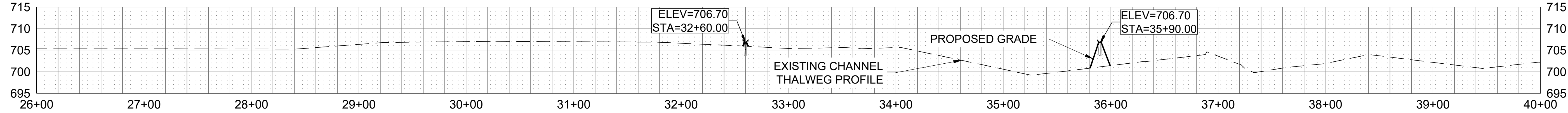
PLAN VIEW
SCALE: 1" = 50'
0 25 50 Feet

1100 E Restoration

CUT / FILL ANALYSIS	
COLOR	CUT / FILL
	7 - 9 FT CUT
	5 - 6.99 FT CUT
	3 - 4.99 FT CUT
	1 - 2.99 FT CUT
	0.99 FT CUT - 1 FT FILL
	1.01 - 3 FT FILL
	3.01 - 5 FT FILL
	5.01 - 7 FT FILL

RIGHT DOWNSTREAM BANK (RDB)
LEFT DOWNSTREAM BANK (LDB)

NOTE:
1. GRADING PLAN EXHIBIT COMPARES EXISTING SURVEYED SURFACE VERSUS PROPOSED SURFACE. PROPOSED SURFACE INCLUDES ALL SOIL, RIPRAP AND WOOD UTILIZED TO ESTABLISHED PROPOSED CONTOURS.



PROFILE VIEW
SCALE: 1" = 50'
1" = 4V
0 25 50 Feet

FINAL



now



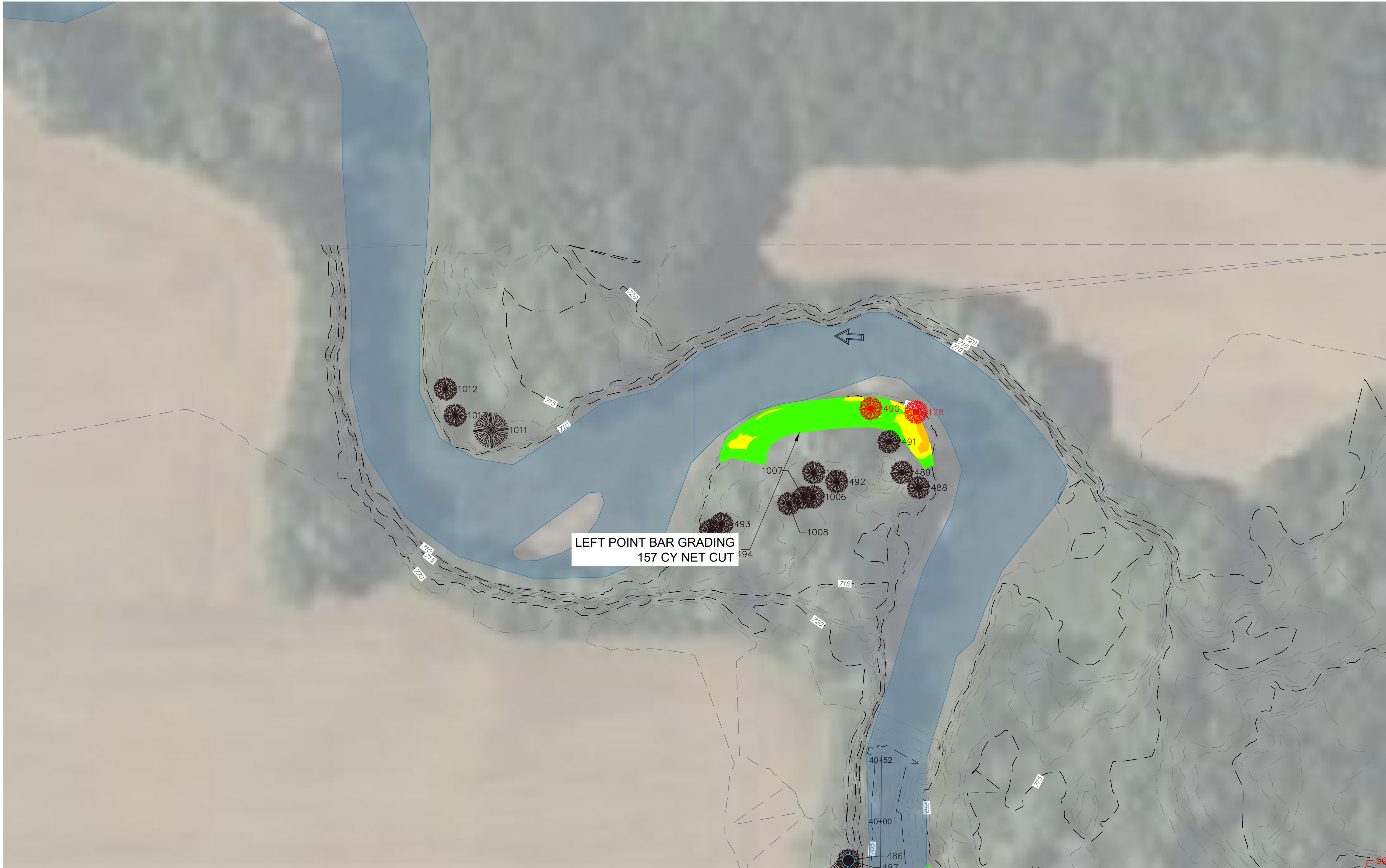
GRADING PLAN

Yellow River Phase II Restoration: 1100 E. Site
Kankakee River Basin and Yellow River Basin Development Commission
Starke County, Indiana

DATE	DESCRIPTION	BY

DATE	JANUARY 2023
DRAWN	JTC
DESIGNED	RAS
CHECKED	
PROJECT #	J192500501
SHEET TITLE	GRADING
SHEET NUMBER	6

LAND USE #



PLAN VIEW
SCALE: 1" = 50'
0 25 50 Feet

1100 E Restoration

CUT / FILL ANALYSIS	
COLOR	CUT / FILL
	7 - 9 FT CUT
	5 - 6.99 FT CUT
	3 - 4.99 FT CUT
	1 - 2.99 FT CUT
	0.99 FT CUT - 1 FT FILL
	1.01 - 3 FT FILL
	3.01 - 5 FT FILL
	5.01 - 7 FT FILL

RIGHT DOWNSTREAM BANK (RDB)
LEFT DOWNSTREAM BANK (LDB)

NOTE:
1. GRADING PLAN EXHIBIT COMPARES EXISTING SURVEYED SURFACE VERSUS PROPOSED SURFACE. PROPOSED SURFACE INCLUDES ALL SOIL, RIPRAP AND WOOD UTILIZED TO ESTABLISHED PROPOSED CONTOURS.

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GRADING PLAN

Yellow River Phase II Restoration: 1100 E. Site
Kankakee River Basin and Yellow River Basin Development Commission
Starke County, Indiana

DATE	DESCRIPTION	BY

DRAWN	JTC
DESIGNED	RAS
CHECKED	
PROJECT #	J192500501

SHEET TITLE	GRADING
SHEET NUMBER	7
LAND USE #	

FINAL