

ADDENDUM NO. 1 TO THE PROJECT MANUAL

NEW RIVER CHANNEL IMPROVEMENTS (RE-BID 2021)
ASCENSION PARISH, LOUISIANA

PARISH PROJECT NO. EAD 15-004
HDCA PROJECT 2017-14

Prepared For:

EAST ASCENSION CONSOLIDATED GRAVITY DRAINAGE DISTRICT NO.1
42077 CHURCHPOINT ROAD
GONZALES, LOUISIANA 70737

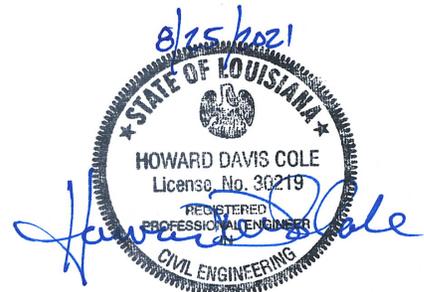


Prepared by:



H. DAVIS COLE & ASSOCIATES, LLC
1340 POYDRAS STREET, SUITE 1840
NEW ORLEANS, LA 70112
Phone (504) 836-2020
Fax (504) 836-2010
www.hdaviscole.com

AUGUST 25, 2021



**ADDENDUM NO. 1 TO THE
PROJECT MANUAL**

FOR

**NEW RIVER CHANNEL IMPROVEMENTS (RE-BID 2021)
ASCENSION PARISH, LOUISIANA**

**PARISH PROJECT NO. EAD 15-004
HDCA PROJECT 2017-14**

H. DAVIS COLE & ASSOCIATES, LLC (HDCA)
1340 POYDRAS STREET, SUITE 1850
NEW ORLEANS, LOUISIANA
(504) 836 - 2020

This addendum forms a part of the Contract Documents and modifies Specification sections and Drawings as denoted below. Acknowledge receipt of this addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. Bidder is responsible to disseminate this addendum to all subcontractors and material suppliers concerned.

This Addendum No. 1 supersedes any contrary or conflicting information in any previously-issued addenda. This Addendum shall be part of the Contract Documents. The following items are issued to add, delete, modify, and clarify the Contract Documents. These items shall be part of and shall have full force and effect as the Contract Documents and the cost involved shall be included in the bid price.

SEALED BIDS will be received by Ascension Parish Purchasing Department, Ascension Parish Governmental Complex, 615 E. Worthey Road, Gonzales, Louisiana, **10:00 a.m., on Thursday, September 2, 2021** for the above referenced project, for Ascension Parish, Louisiana. Bids will be publicly opened and read aloud. Any bid received after closing time will be returned unopened.

The Contractor shall hold a Louisiana Contractor's license in Municipal and Public Works and/or Heavy Construction and/or Highway, Street, and Bridge Construction.

ATTACHMENTS

- A1. A copy of the sign-in sheet from the Mandatory Pre-Bid Conference held on August 17, 2021 at 10:00am.
- A2. REVISED Louisiana Uniform Public Bid Works Form.
- A3. REVISED Section 01025 – Measurement and Payment

CLARIFICATIONS

- C1. The Contractor shall hold a Louisiana Contractor's license in Municipal and Public Works and/or Heavy Construction, and/or Highway, Street, and Bridge Construction.
- C2. **Question:** *In the pre-bid meeting, it was mentioned that the contractor will need to hydroseed the areas where the Parish has already performed earthwork. It appears*

these areas already have significant vegetative growth. Will hydroseeding still be required? **Answer:** The hydroseeding pay quantity takes into account the potential for hydroseeding in the areas where the Parish has already performed earthwork. Should the Parish and Engineer deem hydroseeding is not necessary in those areas by the time the contractor is mobilized on the site, that pay quantity may not be used in full.

- C3. **Question:** *There is a pay item for “Timber Pile Bulkhead”. Can a detail be provided for this work?* **Answer:** This item has been removed. See attached revised bid form and Section 01025.
- C4. **Question:** *The Parish previously used an arborist on the project. Can this person’s contact information be provided?* **Answer:** The arborist previously used was Bayou Tree Service out of Baton Rouge, 2982 Varsity St., Baton Rouge, LA 70807, Phone: (225) 399-4356.
- C5. **Question:** *Previously it had been mentioned that a valve system was to be installed at the existing weir. Have these valves been installed? If not, is the Parish planning to install these valves before or during construction of the project?* **Answer:** The valve system has been installed at the Smith Bayou Weir but not at the Wal Mart Weir (New River Weir). The Parish does not anticipate installing these valves at the Wal Mart Weir (New River Weir) before or during construction. The Smith Bayou weir can be utilized to dewater but will only drain to the normal pool levels.
- C6. **Question:** *Is there a limit on how much area can be drained at one given time?* **Answer:** No.
- C7. **Question:** *When does the Parish intend on starting the project?* **Answer:** Assuming suitable bids are received on September 2, 2021, we anticipate award of the contract in September 2021 and NTP to be issued by mid-October, 2021.
- C8. **Question:** *Can recycled concrete be used for rip-rap?* **Answer:** Recycled concrete may be utilized for rap-rap per Section 02711, Paragraph 2.1.B.
- C9. **Question:** *Will the Contractor be responsible for regrading the areas that have already been excavated by the Parish prior to hydro seeding if erosion occurs prior to the project being started?* **Answer:** The Contractor will be responsible for light grading of the areas excavated by the Parish to prepare the banks for hydro seeding.

CHANGES TO CONTRACT SPECIFICATIONS

- SP1. Replace “Louisiana Uniform Public Work Bid Form” with attached, revised “Louisiana Uniform Public Work Bid Form”.
- SP2. Replace Section 01025 “Measurement and Payment” with attached, revised Section 01025 “Measurement and Payment”.
- SP3. Revise Section 15250 “Hydraulic Gates”, Paragraph 2.5.G to read:

- G. Manufacturers, or Equal:
1. Whipps, Series 452
 2. Orbinox Series RR
 3. Golden Harvest Series GH 39

CHANGES TO CONTRACT DRAWINGS

D1. NOT USED

- END OF ADDENDUM 1 -



New River Channel Improvements RE-BID 2021

August 17, 2021 @ 10:00 am

Project No: EAD-15-004

Pre-Mandatory Bid Conference

Name	Company	Telephone	Email
H. DAVIS COLE	HDCA	(225) 636-1014	hdcole@hdaviscole.com
Liz Breaux	AP GOV	(225) 450-1303	Liz.Breaux@apgov.us
Jade Robin	AP GOV	(225) 315-4729	jade.robin@apgov.us
Ron Savoy	AP Gov	225-450-1335	rsavoy@apgov.us
TREY GINE	GLOBAL CONSTRUCTION GROUP LLC.	225 3339003	TREY@DOMINIONGP.COM
John Deville	CSSI	225-206-4223	JDeville@chamSpraySouth.com
Sean Weick	Cycle Marine Group Inc	504-467-1444	estimating@cycleconstruction.com
Dustin Boone	Boone Services LLC	225-752-0325	dustin@booneservices.com
Curtis Randy Crawford	Bridging the Gap, L.L.C.	361-337-0543	rcrawford@BTGSolutions.com
Deanna Mannino	Bridging the GAP	225-445-0810	D.Mannino@BTGSolutions.com
Roger Williams	Bridging the Gap	225 210-9565	williamsr@BTGSolutions.com



Division 3 – Article 1
LOUISIANA UNIFORM
PUBLIC WORKS BID FORM

TO: *Ascension Parish Government* **BID FOR:** **NEW RIVER CHANNEL IMPROVEMENTS (RE-BID 2021)**
P.O. Box 2392 *EAD-15-004*
Gonzales, Louisiana 70707

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: H. Davis Cole & Associates, LLC (HDCA) and dated: July, 2021.
(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging)
_____.

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" but not alternates) the sum of:

_____ Dollars (\$ _____)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ N/A _____ Dollars (\$ _____ N/A _____)

Alternate No. 2 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ N/A _____ Dollars (\$ _____ N/A _____)

Alternate No. 3 *(Owner to provide description of alternate and state whether add or deduct)* for the lump sum of:

_____ N/A _____ Dollars (\$ _____ N/A _____)

NAME OF BIDDER: _____

ADDRESS OF BIDDER: _____

LOUISIANA CONTRACTOR'S LICENSE NUMBER: _____

NAME OF AUTHORIZED SIGNATORY OF BIDDER: _____

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: _____

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER ** : _____

DATE: _____

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BIDFORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:2218.A is attached to and made a part of this bid.



LOUISIANA UNIFORM PUBLIC WORKS BID FORM
UNIT PRICE FORM

TO: Ascension Parish Government
P.O. Box 2392
Gonzales, Louisiana 70707

BID FOR: NEW RIVER CHANNEL IMPROVEMENTS
(RE-BID 2021), EAD-15-004

UNIT PRICES: This form shall be used for any and all work required by the Bidding Documents and described as unit prices. Amounts shall be stated in figures and only in figures.

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# MOBILIZATION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
1	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# TEMPORARY ENVIRONMENTAL CONTROLS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
2	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# TEMPORARY TRAFFIC CONTROL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
3	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# CONSTRUCTION LAYOUT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
4	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# SITE PREPARATION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
5	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# REMOVAL OF STRUCTURES AND OBSTRUCTIONS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
6	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# DRAINAGE EXCAVATION			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
7	52,000	CUBIC YARD		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# EMBANKMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
8	12,000	CUBIC YARD		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# ARBORIST SERVICES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
9	1	LUMP SUM		



DESCRIPTION:	☒ Base Bid or ☐ Alt.# TREE TRIMMING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
10	1	LUMP SUM		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 15" PLASTIC PIPE STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
11	360	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 18" PLASTIC PIPE STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
12	240	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 24" PLASTIC PIPE STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
13	260	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 36" PLASTIC PIPE, STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
14	20	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 48" PLASTIC PIPE STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
15	40	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# 48" REINFORCED CONCRETE PIPE STORM DRAIN, OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
16	40	LINEAR FOOT		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# MODIFIED CB-01 DRAINAGE STRUCTURE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
17	25	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# MODIFIED CB-02 DRAINAGE STRUCTURE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
18	4	EACH		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# BEDDING MATERIAL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
19	200	CUBIC YARD		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# OUTFALL PROTECTION, 30 LB RIP – RAP			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
20	900	SQUARE YARD		

DESCRIPTION:	☒ Base Bid or ☐ Alt.# RIP-RAP (30 LB), BRIDGES			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
21	4200	SQUARE YARD		



DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# RIP-RAP (10 LB) (RAILROAD BRIDGE)			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
22	350	SQUARE YARD		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# GEOTEXTILE FABRIC			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
23	5800	SQUARE YARD		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# TYPE 3 OBJECT MARKERS AND POSTS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
24	58	EACJ		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# NO PARKING SIGNS AND POSTS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
25	2	EACJ		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# INITIAL INSTALLATION AND FINAL REMOVAL OF TEMPORARY DAMS			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
26	1	LUMP SUM		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# TEMPORARY DEWATERING DAM REMOVAL AND REPLACEMENT			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
27	1	EACH		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# FURNISH AND INSTALL 18" FLAP GATE FOR DRAIN PIPE OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
28	2	EACH		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# FURNISH AND INSTALL 24" FLAP GATE FOR DRAIN PIPE OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
29	1	EACH		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# REMOVE AND RE-INSTALL 48" FLAP GATE FOR DRAIN PIPE OUTFALL			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
30	2	EACH		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# AGGREGATE SURFACE COURSE			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
31	50	CUBIC YARD		

DESCRIPTION:	<input checked="" type="checkbox"/> Base Bid or <input type="checkbox"/> Alt.# HYDRO-SEEDING			
REF. NO.	QUANTITY:	UNIT OF MEASURE:	UNIT PRICE	UNIT PRICE EXTENSION (<i>Quantity times Unit Price</i>)
32	1	LUMP SUM		

SECTION 01025 - MEASUREMENT AND PAYMENT (REVISED)

PART 1 -- GENERAL

1.1 THE REQUIREMENT

- A. Payment for the various items on the Bid Form, as further specified herein, shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs therefor shall be included in the prices named in the Bid Schedule for the various appurtenant items of work.

1.2 ACCURACY

- A. The ENGINEER will be the judge of the accuracy of measurements, or approximations made in lieu of accurate determinations and these decisions shall be binding upon both the CONTRACTOR and the OWNER.
- B. The ENGINEER will utilize the accepted Schedule of Values for the purpose of estimating the value of WORK completed for the evaluation of requests for payment.
- C. In computing volumes of excavation, the average end area method or other acceptable methods will be used.
- D. When United States standard units are used, the pound or the ton will be the standard units of weight. The term "ton," in the United States standard, will mean the short ton of 2,000 pounds avoirdupois. Materials measured or proportioned by weight shall be weighed on approved scales by qualified personnel at designated locations. If material is shipped by rail, the car weight may be accepted provided the weight of material only will be paid for; however, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid by measured weight shall be weighed empty at such times as directed; and each truck shall bear a plainly legible identification mark.
- E. Materials specified to be measured by volume in hauling vehicles shall be hauled in approved vehicles and will be measured therein at the point of delivery on the project. Vehicles may be of any acceptable size or type, provided the body is of such shape that the volume can be readily and accurately determined. Vehicles shall be loaded to at least a predetermined permanently fixed mark, which defines a known volume, upon arrival at the point of delivery. Vehicles will be measured in increments of 0.5 cubic yard, except that when tailgate spreader-boxes are used to place aggregate materials for asphaltic surface treatment, the volume of the spreader-ox will be added to the volume of the vehicle. When materials are measured by weight and converted to volume for payment, conversion will be made to the nearest 0.1 cubic yard

- F. The terms "lump sum, each, or unit" when used as a unit of measure for payment will mean complete payment for the work described in the contract.

1.3 **MOBILIZATION (Ref. No. 1)**

- A. **Measurement:** No measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at the lump sum price on the Bid Form, or in portions thereof in accordance with the following table, which price shall constitute full payment for mobilization, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

Percent of Total Contract Amount Earned	Allowable Percent of Lump Sum Price for Mobilization
1 st Application for Payment	25
10	50
25	75
50	100

1.4 **TEMPORARY ENVIRONMENTAL CONTROLS (Ref. No. 2)**

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for temporary environmental controls will be made at the lump sum price named in the Bid Form, or portions thereof, in accordance with the following table, which price shall constitute full payment for temporary environmental controls, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

Percent of Total Contract Amount Earned:	Allowable Percent of Lump Sum Price for Temporary Environmental Controls:
First Estimate	40
25	60
50	80
75	95
100	100

1.5 **TEMPORARY TRAFFIC CONTROL (Ref. No. 3)**

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for temporary traffic control will be made at the lump sum price named in the Bid Form, or portions thereof, in accordance with the following table, which price shall constitute full payment for temporary traffic control, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

Percent of Total Contract Amount Earned	Allowable Percent of Lump Sum Price for Temporary Traffic Control
Initial Erection of Temporary Traffic Controls	40
25	60
50	80
75	95
100	100

1.6 **CONSTRUCTION LAYOUT (Ref. No. 4)**

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at the lump sum price named in the Bid Form, or portions thereof, in accordance with the following table, which shall constitute full payment for construction layout, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

Percent of Total Contract Amount Earned:	Allowable Percent of Lump Sum Price for Construction Layout:
First Estimate	40
25	60
50	80
75	95
100	100

1.7 SITE PREPARATION (Ref. No. 5)

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at, or in portions thereof based upon the estimated amount of the WORK completed, of the lump sum bid price named on the bid form which price shall constitute full payment for clearing and grubbing and site preparation including removal and disposal of grubbed material, and including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.8 REMOVAL OF STRUCTURES AND OBSTRUCTIONS (Ref. No. 6)

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at, or in portions thereof based upon the estimated amount of the WORK completed, of the lump sum bid price named on the bid form which price shall constitute full payment for all required removal of structures and obstructions, inclusive of existing storm drain pipes to be removed and structures to be removed, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.9 DRAINAGE EXCAVATION (Ref. No. 7)

- A. **Measurement:** Drainage excavation includes the excavation for drainage beyond the limits of the roadway section. Drainage excavation also includes inlet and outlet ditches to structures or roadways; changes in or deepening of channels of streams, berm ditches, ditches parallel or adjacent to the roadway beyond the limits of the roadway section; and material excavated from areas under bridges. The measurement of quantities will be computed by the average end area method and will be that area bound by the original ground line based on original cross sections obtained by the CONTRACTOR, and final field cross sections obtained by the CONTRACTOR. After clearing and grubbing operations, the CONTRACTOR will take original cross sections for the entire length of the project. All original cross sections shall be taken in the presence of the ENGINEER or his representative. Cross sections shall be taken at sufficient intervals to accurately determine earthwork quantities, not

to exceed 100 linear feet. Final cross sections will be taken after stabilization of the excavations. The cross sections shall be taken by methods acceptable to the ENGINEER, and results must be furnished to the ENGINEER in a format satisfactory to the ENGINEER. The ENGINEER reserves the right to take additional cross sections as needed to verify the CONTRACTOR's cross sections. In the event the cross sections do not verify, the CONTRACTOR will investigate and reconcile any differences.

- B. **Payment:** Payment for the accepted quantities will be made at the unit price named in the bid form which price shall constitute full payment for drainage excavation, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.10 EMBANKMENT (Ref. No. 8)

- A. **Measurement:** The measurement of quantities will be computed by the average end area method and will be that area bound by the original ground line based on original cross sections obtained by the CONTRACTOR, and final field cross sections obtained by the CONTRACTOR. After clearing and grubbing operations, the contractor will take original cross sections for the entire length of the project. All original cross sections shall be taken at sufficient intervals to accurately determine earthwork quantities, not to exceed 100 linear feet. Final cross sections will be taken after stabilization of the excavations. The cross sections shall be taken by methods acceptable to the ENGINEER, and results must be furnished to the ENGINEER in a format satisfactory to the ENGINEER. The ENGINEER reserves the right to take additional cross sections as needed to verify the CONTRACTOR's cross sections. In the event the cross sections do not verify, the CONTRACTOR will investigate and reconcile any differences.
- B. **Payment:** Payment for this item will be made at the unit price per named in the Bid Form which price shall constitute full compensation for embankment, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.11 ARBORIST SERVICES (Ref. No. 9)

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at, or in portions thereof based upon the estimated amount of the WORK completed, of the lump sum bid price named on the bid form which price shall constitute full payment for all arborist services in accordance with the Contract Documents, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.12 TREE TRIMMING (Ref. No. 10)

- A. **Measurement:** No Measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at, or in portions thereof based upon the estimated amount of the WORK completed, of the lump sum bid price named on the bid form which price shall constitute full payment for all tree trimming in accordance with the Contract Documents, including furnishing all equipment, labor and materials

necessary for the completion of this WORK in accordance with the Contract Documents.

1.13 15" PLASTIC PIPE STORM DRAIN, OUTFALL (Ref. No. 11)

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, and all including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.14 18" PLASTIC PIPE STORM DRAIN, OUTFALL (Ref. No. 12)

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, and all including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.15 24" PLASTIC PIPE STORM DRAIN, OUTFALL (Ref. No. 13)

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, and including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.16 **36" PLASTIC PIPE STORM DRAIN, OUTFALL (Ref. No. 14)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.17 **48" PLASTIC PIPE STORM DRAIN, OUTFALL (Ref. No. 15)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.18 **48" REINFORCED CONCRETE PIPE STORM DRAIN, OUTFALL (Ref. No. 16)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of linear feet of such pipe actually placed as determined by measurement along the centerline of such pipe. Excavation required for installation of pipes will not be measured for payment. Furnishing and placing backfill material for pipes will not be measured for payment. Backfill material needed to complete backfill above natural ground and around pipes that extend above natural ground will be measured and payment will be made under applicable earthwork items.
- B. **Payment:** Payment for this item will be made at the contract unit price per linear foot, which includes connections to existing structures, concrete, reinforcing steel, excavation, backfill, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.19 **MODIFIED CB – 01 DRAINAGE STRUCTURE (Ref. No. 17)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such structures completed. Excavation and backfill for installation of these structures will not be measured for payment.

- B. **Payment:** Payment for this item will be made at the unit price named in the Bid Form, which price shall constitute full payment for construction of such drainage structures, including excavation, shoring, backfill, concrete, reinforcement, grates, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.20 **MODIFIED CB – 02 DRAINAGE STRUCTURE (Ref. No. 18)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such structures completed. Excavation and backfill for installation of these structures will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the unit price named in the Bid Form, which price shall constitute full payment for construction of such drainage structures, including excavation, shoring, backfill, concrete, reinforcement, grates, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.21 **BEDDING MATERIAL (Ref. No. 19)**

- A. **Measurement:** Bedding material, including plastic soil material, completed and accepted, will be measured by the cubic yard (net section). The length and width will be measured horizontally to the theoretical points established by the plans for bedding material. The depth will be as shown on the plans or established by the ENGINEER. Geotextile fabric will not be measured for payment. Necessary excavation and disposal of excess excavated materials will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the unit price named in the Bid Form which price shall constitute full compensation for placement and compaction of bedding material, including provision of material, placement, and compaction of the material, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.22 **OUTFALL PROTECTION, 30 – LB RIP RAP (Ref. No. 20)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of square yards of such rip rap actually placed. Excavation required for installation of rip rap will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the unit price named in the Bid Form which price shall constitute full compensation for placement and compaction of bedding material, including provision of material, placement, and compaction of the material, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.23 **RIP RAP (30 LB), BRIDGES (Ref. No. 21)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of square yards of such rip rap actually placed. Excavation required for installation of rip rap will not be measured for payment.

- B. **Payment:** Payment for this item will be made at the contract unit price per square yard, which includes delivery and installation of rip rap, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.24 **RIP RAP (10 LB) (RAILROAD BRIDGE) (Ref. No. 22)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of square yards of such rip rap actually placed. Excavation required for installation of rip rap will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the contract unit price per square yard, which includes delivery and installation of rip rap, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.25 **GEOTEXTILE FABRIC (Ref. No. 23)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of square yards of such geotextile fabric actually placed. Excavation required for installation of geotextile fabric will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the contract unit price per square yard, which includes delivery and installation of geotextile fabric, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.26 **TYPE 3 OBJECT MARKERS AND POSTS (Ref. No. 24)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such signs actually placed. Excavation required for installation of signs will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the contract unit price per each, which includes delivery and installation of type 3 object markers and posts, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.27 **NO PARKING SIGNS AND POSTS (Ref. No. 25)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such signs actually placed. Excavation required for installation of signs will not be measured for payment.
- B. **Payment:** Payment for this item will be made at the contract unit price per each, which includes delivery and installation of no parking signs and posts, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.28 **INITIAL INSTALLATION AND FINAL REMOVAL OF TEMPORARY DAMS (Ref. No. 26)**

- A. **Measurement:** No measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at the lump sum price listed in the Bid Form, which price shall constitute full compensation for initial installation and final removal of temporary dams (inclusive of disposal) including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents. Costs associated with furnishing, installing and operating the accepted dry weather flow by-pass system shall be included in this item.

1.29 **TEMPORARY DEWATERING DAM REMOVAL AND REPLACEMENT (Ref. No. 27)**

- A. **Measurement:** Measurement for this item will be made based upon the number of occurrences for dam removal and replacement as ordered by the OWNER or ENGINEER.
- B. **Payment:** Payment for this item will be made at price per each listed in the Bid Form, which price shall constitute full compensation for removal, disposal of, and re – installation of temporary dams where ordered by the ENGINEER including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.30 **FURNISH AND INSTALL 18” FLAP GATE FOR DRAIN PIPE OUTFALL (Ref. No. 28)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such flap gates actually placed.
- B. **Payment:** Payment for this item will be made at the contract unit price per each, which includes delivery and installation of flap gates, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.31 **FURNISH AND INSTALL 24” FLAP GATE FOR DRAIN PIPE OUTFALL (Ref. No. 29)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such flap gates actually placed.
- B. **Payment:** Payment for this item will be made at the contract unit price per each, which includes delivery and installation of flap gates, and all other items of material, labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.32 **REMOVE AND RE-INSTALL 48” FLAP GATE FOR DRAIN PIPE OUTFALL (Ref. No. 30)**

- A. **Measurement:** Measurement for payment for this item will be based upon the number of such flap gates actually removed and reinstalled.
- B. **Payment:** Payment for this item will be made at the contract unit price per each, which includes removal and reinstallation of flap gates, and all other items of material,

labor, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.33 AGGREGATE SURFACE COURSE (Ref. No. 31)

- A. **Measurement:** Measurement for this item will be made based upon the number of cubic yards of material delivered and placed as determined by adjusted vehicular measure. The CONTRACTOR, with approval of the ENGINEER and OWNER, may elect to measure material deliveries by the ton. Should the CONTRACTOR elect to measure deliveries by the ton, the CONTRACTOR shall provide certified haul tickets with weights measured by scales acceptable to the ENGINEER. Materials delivered by volume will be measured by the cubic yard in hauling vehicles and divided by the following factors to determine pay volume:

Material	Factor
Stone or Crushed Slag	1.30
Lime Treated Sand – Clay – Gravel	1.30
Recycled Portland Cement Concrete	1.30
Reclaimed Asphalt Pavement	1.50

Materials delivered by weight will be measured by the ton in hauling vehicles and divided by the following factors to determine the pay volume:

Material	Tons to Cubic Yards Factor
Limestone	1.95
Sandstone	1.82
Porous Limestone	1.76
Lime Treated Sand Clay Gravel	1.89
Recycled Portland Cement Concrete	1.82
Reclaimed Asphalt Pavement	1.80

- B. **Payment:** Payment for this item will be made at price per each listed in the Bid Form, which price shall constitute full compensation for furnishing, placing, and satisfactorily compacting material for aggregate surface course, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

1.34 **HYDRO-SEEDING (Ref. No. 32)**

- A. **Measurement:** No measurement will be made for this item.
- B. **Payment:** Payment for this item will be made at the lump sum price named in the Bid Form which price shall constitute full payment for labor, materials, tools, and equipment required for hydro-seeding including surface preparation, fertilization, placement of seed, establishment, including furnishing all equipment, labor and materials necessary for the completion of this WORK in accordance with the Contract Documents.

PART 2 -- PRODUCTS (NOT USED)

PART 3 -- EXECUTION (NOT USED)

- END OF SECTION -