

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE Secretary

April 05, 2022

# Addendum No. 1

RE: Contract # C204572 WBS # 47145.3.1 STATE FUNDED Alamance County (U-6010) US-70 AT SR-1226/SR-1311 IN BURLINGTON.

# April 19, 2022 Letting

To Whom It May Concern:

Reference is made to the proposal form furnished to you on this project.

The following revisions have been made to the proposal.

Page No.	Revision	
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 4-05-2022".	
Table of Contents	Project Special Provision entitled <b>STEEL PRICE</b> <b>ADJUSTMENT</b> added. Page numbers updated.	
G-32	Project Special Provision entitled STEEL PRICE ADJUSTMENT added.	
G-33 to G-43	Project Special Provision entitled STEEL PRICE	
(NEW)	ADJUSTMENT added.	

Please void the above listed existing Pages in your proposal and staple the revised Pages thereto.

Staple New Pages G-33 to G-43 after revised G-32 in your proposal.

Website: www.ncdot.gov

The contract will be prepared accordingly.

Sincerely,

DocuSigned by: Konald Elton Davenport, Jr. —F81B6038A47A442...

Ronald E. Davenport, Jr., PE State Contract Officer

RED/cms Attachments

- cc: Mr. Lamar Sylvester, PE Wright R. Archer, III, PE Mr. Boyd Tharrington, PE Mr. Jon Weathersbee, PE Mr. Ken Kennedy, PE Project File (2)
- Mr. Forrest Dungan, PE Ms. Jaci Kincaid Mr. Kyle Kempf Ms. Lori Strickland Mr. Mike Gwyn Ms. Penny Higgins

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH, N.C.

# PROPOSAL

# **INCLUDES ADDENDUM No. 1 DATED 4-05-2022**

## DATE AND TIME OF BID OPENING:

# APRIL 19, 2022 AT 2:00 PM

CONTRACT ID C204572 WBS 47145.3.1

FEDERAL-AID NO.	STATE FUNDED
COUNTY	ALAMANCE
T.I.P. NO.	U-6010
MILES	0.884
ROUTE NO.	US 70
LOCATION	US-70 AT SR-1226/SR-1311 IN BURLINGTON.

#### TYPE OF WORK GRADING, DRAINAGE, PAVING, SIGNALS, AND CULVERT.

#### NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

#### BIDS WILL BE RECEIVED AS SHOWN BELOW:

#### THIS IS A ROADWAY & CULVERT PROPOSAL

#### 5% BID BOND OR BID DEPOSIT REQUIRED

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# PROPOSAL ITEM SHEET

ITEM SHEET(S) (TAN SHEETS)

exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

# **STEEL PRICE ADJUSTMENT:**

(4-19-22)

SP1 G47

# **Description and Purpose**

Steel price adjustments will be made to the payments due the Contractor for items as defined herein that are permanently incorporated into the work, when the price of raw steel mill products utilized on the contract have fluctuated. The Department will adjust monthly progress payments up or down as appropriate for cost changes in steel according to this provision.

# **Eligible Items**

The list of eligible bid items for steel price adjustment can be found on the Departments website at the following address:

https://connect.ncdot.gov/letting/LetCentral/Eligible%20Bid%20Items%20for%20Steel%20Price%20Adjustment.xlsx

Nuts, bolts, anchor bolts, rebar chairs, connecting bands and other miscellaneous hardware associated with these items shall not be included in the price adjustment.

Adjustments will only be made for fluctuations in the cost of the steel used in the above products as specified in the Product Relationship Table below. The producing mill is defined as the source of steel product before any fabrication has occurred (e.g., coil, plate, rebar, hot rolled shapes, etc.). No adjustment will be made for changes in the cost of fabrication, coating, shipping, storage, etc.

No steel price adjustments will be made for any products manufactured from steel having an adjustment date, as defined by the Product Relationship Table below, prior to the letting date.

# **Bid Submittal Requirements**

The successful bidder, within 14 calendar days after the notice of award is received by him, shall provide the completed Form SPA-1 to the Department. Form SPA-1 can be found on the Departments website at the following address:

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https://connect.ncdot.gov/letting/LetCentral/Form%20SPA-1.xlsm

The Contractor shall provide Form SPA-1 listing the Contract Line Number, (with corresponding Item Number, Item Description, and Category) for the steel products they wish to have an adjustment calculated. Only the contract items corresponding to the list of eligible item numbers for steel price adjustment may be entered on Form SPA-1. The Contractor may choose to have steel price adjustment applied to any, all, or none of the eligible items. However, the Contractor's selection of items for steel price adjustment or non-selection (non-participation) may not be changed once Form SPA-1 has been received by the Department. Items the Bidder chooses for steel price adjustment must be designated by writing the word "Yes" in the column titled "Option" by each Pay Item chosen for adjustment. The Bidder's designations on Form SPA-1 must be written in ink or typed and signed by the Bidder to be considered complete. Items not properly designated, designated with "No", or left blank on the Bidder's Form SPA-1 will automatically be removed from consideration for adjustment. No steel items will be eligible for steel price adjustment on this Project if the Bidder fails to return Form SPA-1 in accordance with this provision.

## **Establishing the Base Price**

The Department will use a blend of monthly average prices as reported from the Fastmarkets platform to calculate the monthly adjustment indices (BI and MI). This data is typically available on the first day of the month for the preceding month. The indices will be calculated by the Department for the different categories found on the Product Relationship Table below. For item numbers that include multiple types of steel products, the category listed for that item number will be used for adjusting each steel component.

The bidding index for Category 1 Steel items is \$50.50 per hundredweight. The bidding index for Category 2 Steel items is \$86.16 per hundredweight. The bidding index for Category 3 Steel items is \$68.60 per hundredweight. The bidding index for Category 4 Steel items is \$55.78 per hundredweight. The bidding index for Category 5 Steel items is \$62.81 per hundredweight. The bidding index for Category 6 Steel items is \$90.16 per hundredweight. The bidding index for Category 7 Steel items is \$56.30 per hundredweight.

The bidding index represents a selling price of steel based on Fastmarkets data for the month of February 2022.

- MI = Monthly Index. in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill, received on the project, or member cast as defined in the Product Relationship Table.
- BI = Bidding Index. in Dollars (\$) per hundredweight (CWT). Use the adjustment indices as listed in the proposal.

	Product Relationship Table				
Steel Product (Title)	BI, MI*	Adjustment Date for MI	Category		
Reinforcing Steel, Bridge	Based on one or more	Delivery Date from	1		
Deck, and SIP Forms	Fastmarkets indices	Producing Mill			
Structural Steel and	Based on one or more	Delivery Date from	2		
Encasement Pipe	Fastmarkets indices	Producing Mill			
Steel H-Piles, Soldier Pile	Based on one or more	Delivery Date from	3		
Walls	Fastmarkets indices	Producing Mill			
Guardrail and Pipe Piles	Based on one or more	Material Received	4		
Items	Fastmarkets indices	Date**			
Fence Items	Based on one or more	Material Received	5		
	Fastmarkets indices	Date**			
Overhead Sign Assembly,	Based on one or more	Material Received	6		
Signal Poles, High Mount	Fastmarkets indices	Date**			
Standards					
Prestressed Concrete	Based on one or more	Cast Date of Member	7		
Members	Fastmarkets indices				
* BI and MI are in converte	ed units of Dollars per Hune	dredweight (\$/CWT)	·		
		naterials are received on the p	roject site.		

If a material prepayment is made for a Category 4-6 item, the Adjustment Date to be used will be the date of the prepayment request instead of the Materials Received Date.

Submit documentation to the Engineer for all items listed in the Contract for which the Contractor is requesting a steel price adjustment.

## **Submittal Requirements**

The items in categories 1,2, and 3, shall be specifically stored, labeled, or tagged, recognizable by color marking, and identifiable by Project for inspection and audit verification immediately upon arrival at the fabricator.

Furnish the following documentation for all steel products to be incorporated into the work and documented on Form SPA-2, found on the Departments website at the following address:

https://connect.ncdot.gov/projects/construction/Construction%20Form%20SPA-2.xlsx

Submit all documentation to the Engineer prior to incorporation of the steel into the completed work. The Department will withhold progress payments for the affected contract line item if the documentation is not provided and at the discretion of the Engineer the work is allowed to proceed. Progress payments will be made upon receipt of the delinquent documentation.

Step 1 (Form SPA -2)

Utilizing Form SPA-2, submit separate documentation packages for each line item from Form SPA-1 for which the Contractor opted for a steel price adjustment. For line items with multiple components of steel, each component should be listed separately. Label each SPA-2 documentation package with a unique number as described below.

a. Documentation package number: (Insert the contract line-item) - (Insert sequential package number beginning with "1").

Example: 412 - 1,

- 412 2,
- 424 1,
- 424 2,
- 424 3, etc.
- b. The steel product quantity in pounds
  - i. The following sources should be used, in declining order of precedence, to determine the weight of steel/iron, based on the Engineers decision:
    - 1. Department established weights of steel/iron by contract pay item per pay unit;
    - 2. Approved Shop Drawings;
    - 3. Verified Shipping Documents;
    - 4. Contract Plans;
    - 5. Standard Drawing Sheets;
    - 6. Industry Standards (i.e., AISC Manual of Steel Construction, AWWA Standards, etc.); and
    - 7. Manufacture's data.
  - ii. Any item requiring approved shop drawings shall have the weights of steel calculated and shown on the shop drawings or submitted and certified separately by the fabricator.
- c. The date the steel product, subject to adjustment, was shipped from the producing mill (Categories 1-3), received on the project (Categories 4-6), or casting date (Category 7).

Step 2 (Monthly Calculator Spreadsheet)

For each month, upon the incorporation of the steel product into the work, provide the Engineer the following:

- 1) Completed NCDOT Steel Price Adjustment Calculator Spreadsheet, summarizing all the steel submittal packages (Form SPA-2) actually incorporated into the completed work in the given month.
  - a. Contract Number
  - b. Bidding Index Reference Month
  - c. Contract Completion Date or Revised Completion Date
  - d. County, Route, and Project TIP information
  - e. Item Number
  - f. Line-Item Description
  - g. Submittal Number from Form SPA-2
  - h. Adjustment date
  - i. Pounds of Steel
- 2) An affidavit signed by the Contractor stating the documentation provided in the NCDOT Steel Price Adjustment Calculator Spreadsheet is true and accurate.

## **Price Adjustment Conditions**

Download the Monthly Steel Adjustment Spreadsheet with the most current reference data from the Department's website each month at the following address:

https://connect.ncdot.gov/projects/construction/Construction%20Form%20SPA-3%20NCDOT%20Steel%20Price%20Adjustment%20Calculator.xlsx

If the monthly Fastmarkets data is not available, the data for the most recent immediately preceding month will be used as the basis for adjustment.

# **Price Adjustment Calculations**

The price adjustment will be determined by comparing the percentage of change in index value listed in the proposal (BI) to the monthly index value (MI). (See included sample examples). Weights and date of shipment must be documented as required herein. The final price adjustment dollar value will be determined by multiplying this percentage increase or decrease in the index by the represented quantity of steel incorporated into the work, and the established bidding index (BI) subject to the limitations herein.

# Price increase/decrease will be computed as follows:

SPA = ((MI/BI) - 1) \* BI \* (Q/100)

Where;

SPA = Steel price adjustment in dollars

- MI = Monthly Shipping Index. in Dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill, received on the project, or member cast as defined in the Product Relationship Table.
- BI = Bidding Index. in Dollars (\$) per hundredweight (CWT). Use the adjustment indices as listed in the proposal.
- Q = Quantity of steel, product, pounds actually incorporated into the work as documented by the Contractor, or Design Build Team and verified by the Engineer.

Calculations for price adjustment shall be shown separate from the monthly progress estimate and will not be included in the total cost of work for determination of progress or for extension of Contract time in accordance with Subarticle 108-10(B)(1).

Any apparent attempt to unbalance bids in favor of items subject to price adjustment may result in rejection of the bid proposal.

Adjustments will be paid or charged to the Contractor only. Any Contractor receiving an adjustment under this provision shall distribute the proper proportional part of such adjustments to the subcontractor who performed the applicable work.

Delays to the work caused by steel shortages may be justification for a Contract time extension but will not constitute grounds for claims for standby equipment, extended office overhead, or other costs associated with such delays.

If an increase in the steel material price is anticipated to exceed 50% of the original quoted price, the contractor must notify the Department within 7 days prior to purchasing the material. Upon receipt of such notification, the Department will direct the Contractor to either (1) proceed with the work or (2) suspend the work and explore the use of alternate options.

If the decrease in the steel material exceeds 50% of the original quoted price, the contractor may submit to the Department additional market index information specific to the item in question to dispute the decrease. The Department will review this information and determine if the decrease is warranted.

When the steel product adjustment date, as defined in the Product Relationship Table, is after the approved contract completion date, the steel price adjustments will be based on the lesser value of either the MI for the month of the approved contract completion date or the MI for the actual adjustment date.

If the price adjustment is based on estimated material quantities for that time, and a revision to the total material quantity is made in a subsequent or final estimate, an appropriate adjustment will be made to the price adjustment previously calculated. The adjustment will be based on the same indices used to calculate the price adjustment which is being revised. If the adjustment date of the revised material quantity cannot be determined, the adjustment for the quantity in question, will be based on the indices utilized to calculate the steel price adjustment for the last initial documentation package submission, for the steel product subject to adjustment, that was incorporated into the particular item of work, for which quantities are being finalized. Example: Structural steel for a particular bridge was provided for in three different shipments with each having a different mill shipping date. The quantity of structural steel actually used for the bridge was calculated and a steel price adjustment was made in a progress payment. At the conclusion of the work an error was found in the plans of the final quantity of structural steel used for the bridge. The quantity to be adjusted cannot be directly related to any one of the three mill shipping dates. The steel price adjustment for the quantity in question would be calculated using the indices that were utilized to calculate the steel price adjustment for the quantity of structural steel represented by the last initial structural steel documentation package submission. The package used will be the one with the greatest sequential number.

## **Extra Work/Force Account:**

When steel products, as specified herein, are added to the contract as extra work, in accordance with the provisions of Article 104-7 or 104-3, the Engineer will determine and specify in the supplemental agreement, the need for application of steel price adjustments on a case-by-case basis. No steel price adjustments will be made for any products manufactured from steel having an adjustment date prior to the supplemental agreement execution date. Price adjustments will be made as provided herein, except the Bidding Index will be based on the month in which the supplemental agreement pricing was executed.

For work performed on force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel and no steel price adjustments will be made.

**G-39** 

Examples F	orm SPA	-2 Steel Price Adjustme	nt Submission Form	
		······································		
Contract Number		C203394	Bid Reference Month	January 2019
Submittal Date		8/31/2019		
Contract Line Iten	n	237	_	
Line Item Descrip	otion	APPROXLBS Structura	al Steel	
Sequential Submit Number	ttal	2	-	

Supplier	Description of material	Location information	Quantity in lbs.	Adjustment Date
XYZ mill	Structural Steel	Structure 3, Spans A-C	1,200,000	May 4, 2020
ABC distributing	Various channel & angle shapes	Structure 3 Spans A-C	35,000	July 14, 2020
		Total Pounds of Steel	1,235,000	

Note: Attach the following supporting documentation to this form.

- Bill of Lading to support the shipping dates
- Supporting information for weight documentation (e.g., Pay item reference, Shop drawings, shipping documents, Standards Sheets, industry standards, or manufacturer's data)

By providing this data under my signature, I attest to the accuracy of and validity of the data on this form and certify that no deliberate misrepresentation in any manner has occurred.

Printed Name

Signature

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Examples Form	SPA-2 Steel Price Adjustment Submission Form
Contract Number	C203394 Bid Reference Month January 2019
Submittal Date	<u>August 31, 2019</u>
Contract Line Item	<u>237</u>
Line Item Description	<u>SUPPORT, OVRHD SIGN STR -DFEB – STA 36+00</u>
Sequential Submittal Number	2

Supplier	Description of material	Location information	Quantity in lbs.	Adjustment Date
XYZ mill	Tubular Steel (Vertical legs)	<u>-DFEB – STA 36+00</u>	12000	December 11, 2021
PDQ Mill	4" Tubular steel (Horizontal legs)	<u>-DFEB – STA 36+00</u>	5900	December 11, 2021
ABC distributing	Various channel & angle shapes (see quote)	<u>-DFEB – STA 36+00</u>	1300	December 11, 2021
	Catwalk assembly	<u>-DFEB – STA 36+00</u>	2000	December 11, 2021
Nucor	Flat plate	<u>-DFEB – STA 36+00</u>	650	December 11, 2021
		Total Pounds of Steel	21,850	

Note: Attach the following supporting documentation to this form.

- Bill of Lading to support the shipping dates
- Supporting information for weight documentation (e.g., Pay item reference, Shop drawings, shipping documents, Standards Sheets, industry standards, or manufacturer's data)

By providing this data under my signature, I attest to the accuracy of and validity of the data on this form and certify that no deliberate misrepresentation in any manner has occurred.

Printed Name

Signature

**Price Adjustment Sample Calculation (increase)** 

Project bid on September 17, 2019

Line Item 635 "Structural Steel" has a plan quantity of 2,717,000 lbs.

Bidding Index for Structural Steel (Category 2) in the proposal was \$36.12/CWT = BI

450,000 lbs. of Structural Steel for Structure 2 at Station 44+08.60 were shipped to fabricator from the producing mill in same month, May 2021.

Monthly Index for Structural Steel (Category 2) for May 2021 was \$64.89/CWT = MI

The Steel Price Adjustment formula is as follows:

SPA = 
$$((MI/BI) - 1) * BI * (Q/100)$$

Where;

SPA = Steel price adjustment in dollars

- BI = Bidding Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices as listed in the proposal.
- MI = Mill Shipping Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill, received on the project, or member cast as defined in the Product Relationship Table.
- Q = Quantity of steel product, in pounds (lbs.) actually incorporated into the work as documented by the Contractor, or Design Build Team and verified by the Engineer.
- BI = \$36.12/ CWT
- MI = \$64.89 / CWT

% change = ((MI/BI)-1) = (\$64.89 / \$36.12 - 1) = (1.79651 - 1) = 0.79651162791

Q = 450,000 lbs.

SPA = 0.79651162791x \$36.12 x (450,000/100)

- SPA = 0.79651162791\* \$36.12 \*4,500
- SPA = \$129,465 pay adjustment to Contractor for Structural Steel (Structure 2 at Station 44+08.60)

**Price Adjustment Sample Calculation (decrease)** 

Project bid on December 18, 2018

Line Item 635 Structural Steel has a plan quantity of 2,717,000 lbs.

Bidding Index for Structural Steel (Category 2) in the proposal was \$46.72/CWT = BI

600,000 lbs. of Structural Steel for Structure 1 at Station 22+57.68 were shipped to fabricator from the producing mill in same month, August 2020.

Monthly Index for Structural Steel (Category 2) for August 2020 was \$27.03/CWT = MI

The Steel Price Adjustment formula is as follows:

SPA = 
$$((MI/BI) - 1) * BI * (Q/100)$$

Where;

SPA = Steel price adjustment in dollars

- BI = Bidding Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices as listed in the proposal.
- MI = Mill Shipping Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill, received on the project, or member cast as defined in the Product Relationship Table.
- Q = Quantity of steel product, in pounds (lbs.) actually incorporated into the work as documented by the Contractor, or Design Build Team and verified by the Engineer.
- BI = \$46.72/ CWT
- MI = \$27.03 / CWT

% change = ((MI/BI)-1) = (\$27.03/\$46.72-1) = (0.57855-1) = -0.421446917808

Q = 600,000 lbs.

SPA = -0.421446917808 \* \$46.72 \* (600,000/100)

SPA = -0.421446917808 \* \$46.72 \*6,000

SPA = \$118,140.00 Credit to the Department for Structural Steel (Structure 1 at Station 22+57.68)

**Price Adjustment Sample Calculation (increase)** 

Project bid on July 16, 2020

Line Item 614 Reinforced Concrete Deck Slab has a plan quantity of 241974 lbs.

Bidding Index Reference Month was May 2020. Bidding Index for Reinforced Concrete Deck Slab (Category 1) in the proposal was \$29.21/CWT = BI

51,621 lbs. of reinforcing steel and 52,311 lbs. of epoxy coated reinforcing steel for Structure 2 at Station 107+45.55 -L- was shipped to fabricator from the producing mill in same month, May 2021.

Monthly Index for Reinforced Concrete Deck Slab (Category 1) for May 2021 was \$43.13/CWT = MI

The Steel Price Adjustment formula is as follows:

SPA = 
$$((MI/BI) - 1) * BI * (Q/100)$$

Where;

SPA = Steel price adjustment in dollars

- BI = Bidding Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices as listed in the proposal.
- MI = Mill Shipping Index in dollars (\$) per hundredweight (CWT). Use the adjustment indices from the month the steel was shipped from the producing mill, received on the project, or member cast as defined in the Product Relationship Table.
- Q = Quantity of steel product, in pounds (lbs.) actually incorporated into the work as documented by the Contractor, or Design Build Team and verified by the Engineer.
- BI = \$29.21/CWT
- MI = \$43.13 / CWT

% change = ((MI/BI)-1) = (\$43.13 / \$29.21 - 1) = (1.47655 - 1) = 0.47654912701

Q = 103932 lbs.

SPA = 0. 47654912701 \* \$29.21 \* (103,932/100)

SPA = 0. 47654912701 \* \$29.21 \*1,039.32

SPA = \$14,467.33 Pay Adjustment to Contractor for Reinforced Concrete Deck Slab (Category 1) at Station 107+45.55 -L-