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Public Works

City Transit

263-8152

MEMORANDUM

Equipment Maintenance

Roadway Maintenance

Collection & Drainage

Building & Grounds

Engineering

To: Kristy Korpi, Interim Public Works Director
FROM: Jim Edgmond, City Engineer
CC: Nancy Lueck, Finance
DATE: December 30, 2015
RE: Diana Queen Drive Extension

INTRODUCTION:

The construction of Diana Queen Drive is complete and the punch list items identified have been addressed satisfactorily by the contractor. The City has completed final inspection of the project and the project is ready to start the close out process.

BACKGROUND:

The contract was awarded to Heuer Construction in the amount of \$277,679.78 at the August 6, 2015 City Council meeting. Three contract modifications were written for the contract that totaled \$7,517.72. The final contract amount for the project is \$295,272.69 which is 106% of the original contract value. The difference between the awarded amount and the final amount is the value of the contract modifications and value of contract quantity overruns. The contract modifications are as follows:

1. This is for additional sawed jointing and pavement reinforcing, total cost is \$3,501.50.
2. Coring done to prove the asphalt was the design thickness, total cost is \$550.00.
3. Change to winter seeding and add erosion blanket, total cost \$3,460.22.

RECOMMENDATION/RATIONALE:

Recommend City Council approves the attached resolution for acceptance of this completed project. This action starts the 30 day waiting period before the retainage can be released to the contractor. This approval also starts the warranty period for the project.

BACKUP INFORMATION:

Resolution Accepting Completed Work Performed under the Diana Queen Drive Extension Project and Authorize Final Payment.

RESOLUTION NO. _____

**RESOLUTION ACCEPTING COMPLETED WORK PERFORMED UNDER
DIANA QUEEN DRIVE EXTENSION PROJECT
AND AUTHORIZING FINAL PAYMENT**

WHEREAS, the City of Muscatine approved the Plans, Specifications, and Form of Contract for the Diana Queen Drive Extension Project; and

WHEREAS, the City of Muscatine entered into a contract for said project with Heuer Construction, Inc. for \$277,679.68 with three change orders totaling \$7,517.72 and quantity adjustments totaling \$10,075.29, for a total contract amount of \$295,272.69; and

WHEREAS, all work under the contract has been completed by Heuer Construction, Inc. and approved and accepted by the City Engineer and appears to meet the requirements of the Plans and Specifications heretofore adopted by this Council, as evidenced by the Project Engineer's Certificate; and

WHEREAS, the amount of \$268,461.23 has been previously paid to Heuer Construction, Inc. and a balance of \$26,811.46 including 5% retainage remains due and payable;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MUSCATINE, that the City of Muscatine make immediate payment of \$12,047.82 to Heuer Construction, Inc. for completed and accepted work under the Diana Queen Extension Project, thereafter make an additional payment of \$14,763.63 which represents the 5% retainage thirty (30) days from the date of this acceptance.

PASSED, APPROVED, ADOPTED THIS 7th DAY OF JANUARY, 2016.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

BY: _____
Diana Broderson, Mayor

Gregg Mandsager , City Clerk



Form 830240 (11-15)

CONTRACT MODIFICATION

No: 8002-2015

		Non-
	Part	Part
Non-Substantial	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial	<input type="checkbox"/>	<input type="checkbox"/>

Concurrence Date _____

Contract ID: Not Applicable County: Muscatine
 Accounting ID: M&W 7912.15 Project No: Diana Queen Drive Extension
 Kind of Work: New PCC Street Construction Date Prepared: December 16, 2015
 Contractor: Heuer Construction, Inc.

You are hereby authorized to make the following changes to the contract documents.

A – Description of changes to be made or extra work to be done:

Thickness Verification on the HMA Trail. The subcontractor (Illowa Investment, Inc.) took 2 random location cores to verify that the design/bid document minimum thickness of HMA Paving was achieved. Refer to Change Order Request Form DQD CO#3 dated 12/4/15.

B – Reason for change or extra work:

The City of Muscatine staff had expressed concerns regarding thickness for the HMA pavement placed for the trail. As there was NOT any requirement in the Contract documents for the Contractor (Heuer Construction, Inc.), or subcontractor (Illowa Investment, Inc.) to take core samples; the agreement was reached that if the HMA pavement thickness was non-compliant, then the subcontractor would be responsible for the cost of the cores and the necessary actions for remediation would be at the subcontractor's expense, but if the HMA pavement thickness was compliant, then the City of Muscatine would pay for the cost of the 2 cores taken.

Contract Time Adjustment: No Time Added Time Added _____ To be determined later

When authorized, contractor agrees to perform the work outlined above in accordance with provisions of the contract documents.

Agreed: [Signature] Contractor 12-18-15 Date Recommended: [Signature] Project Engineer 12-18-2015 Date

Approved: [Signature] District Staff 12-16-15 Date Approved: _____ Date
Central Office (when Applicable)

Federal Participation Approved Not Eligible ~~FHWA~~ Concurrence: NOT APPLICABLE Date _____
FHWA (if required)

C-1 – Settlement for cost of work to be made as follows:

Contract Modification No: 8002-2015

Since the bid documents did NOT identify HMA Samples, the cost for taken the cores was on the basis of the +HMA Pavement thickness being determined to be compliant or non-compliant. The cores indicated the HMA pavement to be compliant, thus the cost incurred to be the City of Muscatine's to cover. The time to locate and take the 2 cores plus travel time and the equipment used was estimated to be approximately \$ 500.00. This plus the Contractor's 10% mark-up brings this total to \$ 550.00.

C-2 – Justification for cost(s):

HMA Pavement Samples as compared to both the recently completed Cedar Street Reconstruction and the Colorado Street Reconstruction construction Projects for an IowaDOT bid item for HMA Pavement Samples in each of this Projects shows this to be a fraction of the cost.

D – ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number – Description	Unit Price .xxx	Quantity .xxx	Amount .xx
7				
7				
7				
7				
7				
7				
7				
7				
7				
TOTAL				\$ 0.00

E – ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	Quantity .xxx	Amount .xx
8002-2015	HMA Pavement Thickness Cores			\$ 550.000	1.000	\$ 550.00
8						
8						
8						
8						
8						
8						
8						
TOTAL						\$ 550.00



Form 830240 (11-15)

CONTRACT MODIFICATION

	Part	Non-
Non-Substantial	<input type="checkbox"/>	Part
Substantial	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No: 8001-2015

Concurrence Date

Contract ID: <u>Not Applicable</u>	County: <u>Muscatine</u>
Accounting ID: <u>M&W 7912.15</u>	Project No: <u>Diana Queen Drive Extension</u>
Kind of Work: <u>New PCC Street Construction</u>	Date Prepared: <u>December 16, 2015</u>
Contractor: <u>Heuer Construction, Inc.</u>	

You are hereby authorized to make the following changes to the contract documents.

A – Description of changes to be made or extra work to be done:

To add an additional longitudinal joint with deformed bars and supports, plus saw cuts. Change the optional joint shown on the plans to a required joint. Refer to Change Order Request Form DQD CO#2 dated 10/1/15.

B – Reason for change or extra work:

The Contractor had expressed a concern about panel sizes and the potential for diagonal cracking on uncut panel size of 15.5' wide by 15.0' long panel. The City staff concurred and noted a preference for a City Standard street to have the longitudinal joint at the curb line. The price of \$2.30 per lineal foot is the same price as used late last year for the similar joint added to the then Forest Parkway construction Project. The approximate total length of this joint is 1525 feet.

Contract Time Adjustment: No Time Added Time Added 1 Day To be determined later

When authorized, contractor agrees to perform the work outlined above in accordance with provisions of the contract documents.

Agreed: <u>[Signature]</u>	<u>12-18-15</u>	Recommended: <u>[Signature]</u>	<u>12-18-2015</u>
Contractor	Date	City Project Engineer	Date

Approved: <u>[Signature]</u>	<u>12-16-15</u>	Approved: _____	_____
District Staff	Date	Central Office (when Applicable)	Date

Federal Participation <input type="radio"/> Approved <input checked="" type="radio"/> Not Eligible	FHWA Concurrence: <u>NOT APPLICABLE</u>	_____
	FHWA (if required)	Date

C-1 – Settlement for cost of work to be made as follows:

Contract Modification No: 8001-2015

The bid documents show an optional joint parallel to the curb line along with a deformed bar tie joint. The Contractor was going to pour the street in halves, thus NOT needing the optional joint. However, the City staff has determined that this joint should NOT have been shown as a optional item and in the future this should be a required joint; regardless is saw cut in after the concrete was cast, or as a poured separately construction joint. This installation will require deformed reinforcing bars, p-stakes to hold the deformed bars in place and then the longitudinal saw cut. The total cost for this Work is included in the unit price of \$ 2.30 per lineal feet. With the total length being 1525', the total cost to the Project is equal to \$ 3,507.50.

C-2 – Justification for cost(s):

The unit price of \$ 2.30 per lineal foot is the exact same price paid for this same type of joint in the Forest Project construction Project completed late in the year of 2014 for the City of Muscatine.

D – ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number – Description	Unit Price .xxx	Quantity .xxx	Amount .xx
7				
7				
7				
7				
7				
7				
7				
7				
7				
TOTAL				\$ 0.00

E – ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	Quantity .xxx	Amount .xx
8001-2015	Add Longitudinal Joint			\$ 2.300	1,525.000	\$ 3,507.50
8						
8						
8						
8						
8						
8						
8						
TOTAL						\$ 3,507.50



Form 830240 (11-15)

CONTRACT MODIFICATION

No: 8003-2015

	Part	Non-
Non-Substantial	<input type="checkbox"/>	Part
Substantial	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Concurrence Date _____

Contract ID: <u>Not Applicable</u>	County: <u>Muscatine</u>
Accounting ID: <u>M&W 7912.15</u>	Project No: <u>Diana Queen Drive Extension</u>
Kind of Work: <u>New PCC Street Construction</u>	Date Prepared: <u>December 16, 2015</u>
Contractor: <u>Heuer Construction, Inc.</u>	

You are hereby authorized to make the following changes to the contract documents.

A – Description of changes to be made or extra work to be done:

Erosion Control Elements that were needing to be added:

1. Based on the time of year, and the requested appropriate increase in seed cost to switch from the SUDAS specified IowaDOT Fall Seed Mix to go to the IowaDOT Winter Seed Mix because the Winter Seed has larger quantities of seed per acre.
2. Erosion Control Blanket for additional slope protection near the northern side of the intersection of Steamboat Way and Diana Queen Drive was needed to stay off of the IowaDOT Bypass ROW.

B – Reason for change or extra work:

The City of Muscatine staff determined that in the area of the sidewalk parallel to and on the north side of Steamboat Way that there was NOT sufficient space to grade back the slope to avoid erosion without encroaching onto the State of Iowa ROW for the US 61 Bypass. Since permission to do this may take an extended period of time, it was determined the same slope stabilization benefit could be accomplished with the use of some erosion control blanket on the slightly steeper slope.

With the Contract dates allowed for completion of this Project, the end date was past the last date for the IowaDOT Fall seeding date. However, the IowaDOT has added the option for a winter seeding with mulch cover. This option does have a requirement for more seed per acre than the Fall seeding application. Since the Project was completed in December, the ground was still open and unfrozen; the City of Muscatine staff chose to use the winter seed rates and have this operation completed. The City of Muscatine will compensate the subcontractor for the extra amount of seed used to accomplish this. The Contractor and subcontractor have provided pricing documentation from their suppliers to establish the rates used herein.

Contract Time Adjustment: No Time Added Time Added _____ To be determined later

When authorized, contractor agrees to perform the work outlined above in accordance with provisions of the contract documents.

Agreed: [Signature] Contractor 12-23-15 Date Recommended: [Signature] Project Engineer 12-23-2015 Date

Approved: [Signature] District Staff 12-23-15 Date Approved: _____ Central Office (when Applicable) Date

Federal Participation Approved Not Eligible FHWA Concurrence: NOT APPLICABLE FHWA (if required) _____ Date



C-1 – Settlement for cost of work to be made as follows:

Contract Modification No: 8003-2015

Because the bid documents did not have a unit price for erosion control blanket; a price from the subcontractor was required. The measured area of erosion control blanket was 1352 SF (one location of 12' x 108'; and a second small area of 7' x 8'), or 13.52 square. The subcontractor provided a price of \$37.40 per square. This equals a subcontractor cost of \$505.65; plus the Contractor's 10% mark-up of \$50.57; for a total of \$ 556.22.

Additionally because the Contract did NOT specify what to do when the Contract end date was past the end date for the SUDAS Fall Seeding date, and the Work could be completed after the IowaDOT Fall seeding dates; the City of Muscatine staff decided that the Winter Seeding application with mulching was the best method and practice to use to minimize erosion. The total area to be seeded scales off of the drawings as approximately 0.69 Acres. The Subcontractor has requested 264 squares (or 0.606 Acres). Pay the 264 squares at a rate of 10.00 per square (\$ 2,640.00). This plus the Contractor's 10% mark-up brings this total to \$ 2904.00.

C-2 – Justification for cost(s):

Costs for erosion control blanket used on a previous City of Muscatine Project (Cedar Street Reconstruction) shows the unit price rate under \$ 15.00 per square (compared to the requested \$37.40 per square, on a total cost of \$505.65); wherein the total difference in cost can be attributed to the very small quantity needed on this Project with a reasonable mobilization easily making up the difference in total cost. The seeding price to be under \$ 6.00 per square foot (compared to the requested 11.00 per square), however on a much larger open area and without the much, much higher seed content. Both of these numbers appear reasonable.

D – ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number – Description	Unit Price .xxx	Quantity .xxx	Amount .xx
7				
7				
7				
7				
7				
7				
7				
7				
7				
TOTAL				\$ 0.00

E – ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	Quantity .xxx	Amount .xx
8003-2015A	Winter Seeding Application			\$ 11.000	264.000	\$ 2,904.00
8003-2015B	Erosion Control Blanket			\$ 41.141	13.520	\$ 556.22
8						
8						
8						
8						
8						
8						
TOTAL						\$ 3,460.22