



1459 Washington St.
Muscatine, IA 52761-5040
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Public Works

City Transit
263-8152

MEMORANDUM

Equipment Maintenance
Roadway Maintenance
Collection & Drainage
Building & Grounds
Engineering

To: Randy Hill, Public Works Director
FROM: Jon Lutz, City Engineer
DATE: July 1, 2011
RE: Hershey Ave. Reconstruction Project

INTRODUCTION:

Hershey Avenue Reconstruction work began on Thursday, May 5th 2011. Thus far there are 3 conditions encountered on the project that require change orders.

BACKGROUND:

The project is under contract with Sulzberger Excavating for an amount of \$1,078,751.93 with \$380,999.99 funded via the Surface Transportation Program. Original engineer's estimate was \$1,400,000. The project corridor includes Hershey Avenue from Clinton Street to Newcomb Blvd and includes widening Hershey Ave., installing roadway embankment, storm sewer, sidewalks, curbs and gutters. This project is expected to be completed in the 2011 construction season.

Change order 1 is required for additional storm sewer pipe, aprons and inlets necessary to: A) convey discharge from an existing storm sewer pipe at the cemetery steps; B) to add a storm sewer manhole east of Fletcher where existing storm sewer also discharges to Hershey Ave.; C) install 2 RCP pipe aprons to reduce erosion where storm sewer discharges to Mulford Church and the Soccer Complex. Cost of these items is \$22,562.00. Revised construction plan sheets M08, M09 and M10 show the work to be performed. Related storm sewer items at Station 36+20 were deleted for a deduct of \$17,173 resulting in a net increase of \$5,389.00.

Change order 2 is required to address poor existing pavement conditions discovered from station 47+98 to 54+51 (653 feet in the Grover to Pond Street area). After asphalt was milled from the roadway, the remaining concrete base was deemed unsuitable to overlay with asphalt as intended. Therefore the length of roadway shall be totally removed and replaced with an 8" concrete surface with dowel bars. The adjacent parking area will be 7" concrete surfacing with integral curb. "Special backfill place only" will be used under this repair area. This change results in a net increase of \$55,186.25. The actual change order document amount of \$140,534.90 does not account for quantity reductions on other items.

Change order 3 is required for adding a bid item for "special backfill, place only." The contract documents directed for crushed recycled pavement at the Public Works yard to be placed as

“modified subbase” material under pavement patch areas. Iowa DOT test results on the intended material did not meet IDOT freeze thaw durability standards for “modified subbase.” The material does meet the IDOT requirements for “special backfill.” Therefore the same material as intended will be placed but identified differently under a new bid item. In various locations, IDOT has allowed this material to be placed at locations originally planned for granular subbase purchased by the contractor. This change allows the city to efficiently use recycled material where appropriate on this project. This change results in a net deduct of approximately \$15,369.25.

RECOMMENDATION/RATIONALE:

I recommend city council approve change orders 1, 2 and 3 as necessary to complete this project.

BACKUP INFORMATION:

1. Change orders 1, 2 & 3.
2. Net effect spreadsheet of change orders 1, 2 & 3.



Change Order

Non-Substantial:



Non-Part

No. 1

Substantial:



Concurrence Date

Contract

Accounting ID No.: 28678

County Muscatine

Project No: STP-U-5330(618)--70-70

Kind of Work: HMA Pavement Widening

Date Prepared: 6 June 11

Contractor: Sulzberger Excavating Company (SU061)

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

A - Description of change to be made or extra work to be done:

- 7001 - Item 0200, Intake, SW-507. Extend the item quantity from 11 EA to 13 EA.
7002 - Item 0290, Storm Sewer Gravity Main, Trenched, 12 IN. Extend the item quantity from 200 LF to 400 LF.
8001 - Adds an item to the contract, 2416-0100015 Aprons, Concrete, 15 IN. Dia.
8002 - Adds an item to the contract, 2416-0100036 Aprons, Concrete, 36 IN. Dia.
8003 - Adds an item to the contract, 2435-0140148 Manhole, Storm Sewer, SW-401, 48 IN.

The number of contract work days to be added to the contract is 5.

B - Reason for change or extra work:

- 7001-2 : The inlet at Sta. 58+85 LT will capture surface flows near the existing cemetery steps as well as the discharge from an existing 12" diameter storm drain outlet located immediately west of the steps. Diagrams of the proposed changes are attached (M.08, M.09, M.10). Extends item quantity.
8001-2 : Enhances erosion control at storm sewer collection system discharges at Sta. 39+88 RT. and Sta. 36+19 RT.
8003 : Adds a structure at Sta. 47+25, 20' L. Structure is located at the point where diameters change from existing 10" to new 12". This method conforms to current municipal standards for connecting pipes of different diameters.

(Continued on reverse side)

Approved

[Signature]
District Construction Engineer

7/5/2011
Date

[Signature]
Project Engineer

6/21/11
Date

Receipt is acknowledged of this change or extra work and terms of settlement are hereby agreed to.

Approved contingent upon funds being available under the existing project agreement or upon additional Federal-aid funds being made available by a modified project agreement.

Sulzberger Excavating Co. (SU061)

Contractor

By

[Signature]

6-21-11
Date

Date

For the Division Administrator
Federal Highway Administration

Approved

Assistant Construction Engineer

Date

DISTRIBUTION: Project Engineer - Forward original to District.
District - Nonsubstantial - Forward original and one copy to the Office of Construction and two copies back to the Project Engineer.
- Substantial - Forward original and two copies to the Office of Construction.

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

Change Order No. 1

7001 and 7002 - Payment per unit cost in the contract.
8001 - Payment per cost data submitted for consideration. Negotiated unit cost per EA.
8002 - Payment per cost data submitted for consideration. Negotiated unit cost per EA.
8003 - Payment per cost data submitted for consideration. Negotiated unit cost per EA.

C-2 - Justification for cost(s) *7001 - 7002 - Contract unit prices*
8001 - 8003 - Prices within Awarded summary prices 2010.

D - ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number	Unit Price .xxx	If Credit Add "CR"	Amount .xx
			Quantity .xxx	
7 001	0200, Intake, SW-507	2,750.000	2.000	5,500.00 ✓
7 002	0290, Storm Sewer Gravity Main, Trenched, 12 IN.	60.310	200.000	12,062.00 ✓
7				
7				
7				
7				
7				
TOTAL				17,562.00 ✓

E - ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	If Credit Add "CR"	Amount .xx
					Quantity .xxx	
8001	Aprons, Concrete, 15 IN, EA.	2416-0100015		750.00 ✓	1.000	750.00 ✓
8002	Aprons, Concrete, 36 IN, EA.	2416-0100036		1250.00 ✓	1.000	1250.00 ✓
8003	Manhole, Storm Sewer, SW-401, 48 IN, EA	2435-0140148		3000.00 ✓	1.000	3000.00 ✓
8						
8						
8						
8						
TOTAL						5000.00 ✓



Iowa Department of Transportation

Change Order

Non-Substantial:

Part
☐

Non-Part
☐

No. 2

Substantial:

☒

☐

Concurrence Date

Contract

Accounting ID No.: 28678

County Muscatine

Project No: STP-U-5330(618)--70-70

Kind of Work: HMA Pavement Widening

Date Prepared: 20 June 11

Contractor: Sulzberger Excavating Company (SU061)

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

A - Description of change to be made or extra work to be done:

7003 - Item 0080, Std/SF PCC Pavement, CL C, CL 3, 8 IN. Extend the item quantity from 236 SY to 2159 SY.

8003 - Adds an item to the contract, PCC Pavement, CL C, CL 3, 7 IN.

The number of contract work days to be added to the contract is . 10 days are added for allowing all other work in vicinity to be completed before power mobilization. Initial patch work could have been performed during other work.

B - Reason for change or extra work:

7003 : Extends or reduces plan quantity item. 7003 : Due to hidden pc pavement deteriorated condition it is necessary to replace full width pavement from Sta. 47+98 to Sta. 54+51.

8003 : Adds an item to pave the parking lane full width in 7" thick PCC in lieu of the planned HMA with PCC Curb and Gutter section.

(Continued on reverse side)

Approved

[Signature]
District Construction Engineer
Local Systems

7/5/2011

Date

[Signature]
Project Engineer

6/21/11
Date

Receipt is acknowledged of this change or extra work and terms of settlement are hereby agreed to.

Approved contingent upon funds being available under the existing project agreement or upon additional Federal-aid funds being made available by a modified project agreement.

Sulzberger Excavating Co. (SU061)

Contractor

By

[Signature]

6-21-11
Date

Date

For the Division Administrator
Federal Highway Administration

Approved

Assistant Construction Engineer

Date

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- Substantial - Forward original and two copies to the Office of Construction.

DW
7/5/11

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

Change Order No. 2

7003 - Payment per unit cost, data submitted for consideration. Negotiated unit cost per SY due to substantial increase in quantity.
8003 - Payment per unit cost data submitted for consideration. Negotiated unit cost per SY.

C-2 - Justification for cost(s) 7003- See: 58-C058-032, (5) \$42.25 to \$51.95/SY, 29-C029-045, (4) \$48 to \$51.53/SY, 13-7130-006, (10) \$42 to \$52.54/SY. The Contractor proposed \$53.00/SY is judged to be reasonable due to slipform paver required mobilization cost.
8003- See: 49-4742-616, (6) \$33.50 to \$63/SY, 77-2352-467, (4) \$40, \$43, \$50/SY. The Contractor proposed \$43.00/SY is judged to be fair in comparison to recent bid history.

D - ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number	Unit Price .xxx	If Credit Add "CR"	Amount .xx
			Quantity .xxx	
7 003	0080, Std/S-F PCC Pavement, CL C, CL 3, 8 IN	53.000	2,159.000	114,427.00
7				
7				
7				
7				
7				
7				
TOTAL				114,427.00

E - ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	If Credit, Add "CR"	Amount .xx
					Quantity .xxx	
8003	Std/S-F PCC Pavement, CL C, CL 3, 7 IN, SY	2301-1033070		43.000	616.000	26,488.00
8						
8						
8						
8						
8						
8						
TOTAL						26,488.00



Iowa Department of Transportation

Change Order

Non-Substantial:

☒ Part

Non-Part

☐

No. 3

Substantial:

☒

☐

Concurrence Date

Contract
Accounting ID No.: 28678

County Muscatine

Project No: STP-IJ-5330(618)--70-70

Kind of Work: HMA Pavement Widening Date Prepared: 20 June 11

Contractor: Sulzberger Excavating Company (SU061)

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

A - Description of change to be made or extra work to be done:

7004 - Item 0050, Modified Subbase, Place Only. Delete the item from the contract.

8005 - Adds an item to the contract, 2102-0425220, Special Backfill Material, Place Only, 855 CY. The new item is non-participating.

The number of contract work days to be added to the contract is 0. No work is added, only material substitution.

B - Reason for change or extra work:

7005 : Deletes the item for modified subbase, place only from the contract.

8005 : Adds an item to substitute special backfill material for modified and some granular subbases under new and repaired pavements.

(Continued on reverse side)

Approved

[Signature]
District Construction Engineer

7/5/11

Date

[Signature]
Project Engineer

6/21/11
Date

Receipt is acknowledged of this change or extra work and terms of settlement are hereby agreed to.

Approved contingent upon funds being available under the existing project agreement or upon additional Federal-aid funds being made available by a modified project agreement.

Sulzberger Excavating Co. (SU061)

Contractor

By

[Signature] [Signature]

6-21-11
Date

Date

For the Division Administrator
Federal Highway Administration

Approved

Assistant Construction Engineer

Date

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[Signature]
7/5/11

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

Change Order No. 3

7004 - Payment per unit cost in the contract. The item is deleted.

8005 - Payment per unit cost data submitted for consideration. Negotiated unit cost per CY.

C-2 – Justification for cost(s)

8005- See: 70-5330-618 (Modified Subbase), average of the 4 low bids was \$15.84/CY, 29-0977-632 (Special Backfill), low bid \$15.00/CY, 51-0348-143, low of 2 bids was \$10.00/CY, 58-C058-040 (Gran SB), converting SY to CY, low bid = \$15/CY, avg. bid = \$24/CY. The Contractors proposed unit cost of \$15.50/CY is judged to be in line with recent bid history.

D – ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number	Unit Price .xxx	If Credit Add "CR"	Amount .xx
			Quantity .xxx	
7 004	0050, Modified Subbase, Place Only, CY	18.100	160.000 CR	CR (2,896.00) ✓
7				
7				
7				
7				
7				
7				
TOTAL				CR (2,896.00)

E – ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	If Credit, Add "CR"	Amount .xx
					Quantity .xxx	
8005	Special Backfill, Place Only, CY	2102-0425220		15.500	855.000	13,252.50 ✓
8						
8						
8						
8						
8						
8						
TOTAL						13,252.50 ✓