



**ST. CHARLES**  
SINCE 1834

## AGENDA ITEM EXECUTIVE SUMMARY

**Title:** Recommendation to Approve Change Orders 1 – 7 for the Red Gate Bridge Main Contract Project

**Presenter:** James Bernahl

*Please check appropriate box:*

	Government Operations	X	Government Services 11-26-12
	Planning & Development		City Council
	Public Hearing		

Estimated Cost:	\$(-146,865.38)	Budgeted:	YES	X	NO	
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If NO, please explain how item will be funded:

**Executive Summary:**

These change orders are part of the Red Gate Bridge main construction contract which began at the conclusion of the Red Gate Bridge advanced work contract that concluded in April 2012. This main contract involves the construction of the Red Gate Bridge which includes the pedestrian bridge and boardwalk, intersection and roadway improvements on IL Route 31 and 25, and the installation on new city infrastructure such as water, storm and electric.

- Change order request number 1 is for the increase length of the bridge piles. Due to soil conditions there was a need for increased length of the piles for piers 7 and 6. This change resulted in a net increase of \$8,978.
- Change order request number 2 is for the need for additional lengths of 12-inch water main due to utility conflicts encountered near the intersection of IL 31 and Red Gate Road. This change resulted in a cost savings of (-\$4,640).
- Change order request number 3 is for the change in electrical conduit materials. This modification to a lighter more resilient material resulted in a net savings of (-\$155,880).
- Change order number 4 is for the change in materials from precast concrete piles to cast in place piles. These materials will be used for the pedestrian bridge on the east side of the river. Due to soils conditions not anticipated this modification resulted in a net savings of (-\$1,548.08).
- Change order number 5 is for the modification to the contract for embedding the proposed traffic signal interconnects conduits into the bridge decking versus suspending the conduits from the bridge. This modification resulted in a savings of (-\$7,675).
- Change order number 6 is for the modification the design for the concrete material to be placed on the pedestrian bridge. The modification allows for a small aggregate which will allow for more uniform protection of the reinforcement. This change resulted in a net increase of \$2,500.
- Change order number 7 is for the addition of two land marker pylons to be placed at the western and eastern approaches to the pedestrian bridge. This change resulted in a net increase of \$11,400.

**Attachments:** *(please list)*

- Copy of Change Orders Numbers 1-7
- Copy of IDOT Change Order Tracking Sheet

**Recommendation / Suggested Action** *(briefly explain):*

Recommend approval of change orders numbers 1-7 for the Red Gate Bridge Main Contract for a total amount not to exceed \$(-146,865.38).

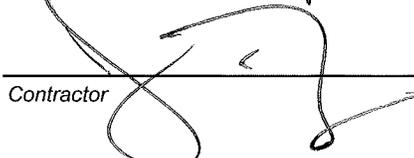
*For office use only:*

*Agenda Item Number: 5.j*

**City of St. Charles Public Works Engineering Division**

<b>CHANGE ORDER</b>	
<b>PROJECT:</b> Red Gate Bridge	<b>NO. 1 (IDOT Auth #1)</b> <b>DATE:</b> <u>5/7/2012</u>
<b>CONTRACTOR:</b> James McHugh	
<b>CONTRACT FOR:</b>	
<b>P.O. :</b>	<b>Budget Account :</b>
<b>You are directed to make the following changes:</b>	
<b>DESCRIPTION:</b>	In accordance with Article 512.18(h) of the Standard Specification for Road and Bridge Construction, Adopted January 1, 2012, the required pile lengths exceeded the length specified in the contract plans by greater than 10 ft. Additional splicing was required to provide the lengths specified.
<b>PURPOSE OF CHANGE:</b>	The contract plans called for furnished pile lengths of 30' at the East Abutment; 40' at Pier 7 and 54' at Pier 6. Due to the reduced bearing resistance by the subsurface soils, the actual furnished length at the East Abutment was 55', Pier 7 was 65' and Pier 6 was 65'. Additionally, it was determined that due to the "easy" driving conditions, greater pile bearing could be gained by removing the pile shoes. For this reason, the structural designers directed that the pile shoes be removed.
<b>ATTACHMENTS:</b>	
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME
Original Contract price: <u>\$21,024,825.54</u>	Original Contract deadline:
Previous Change Orders: <u>\$ -</u>	Previous Change Orders:
Contract Price prior to this Change Order: <u>\$21,024,825.54</u>	Contract deadline prior to this Change Order:
Net Increase (Decrease) of this Change Order: <u>\$ 8,978.00</u>	Net Increase (Decrease) of this Change Order:
Contract price with all approved Change Order: <u>\$21,033,803.54</u>	Contract deadline with all approved Change Order:

**RECOMMENDED:**  
  
 Resident Engineer                      Date 10.18.12

**APPROVED:**  
                      Date 10-29-12  
 Owner  
                      Date 10-18-12  
 Contractor

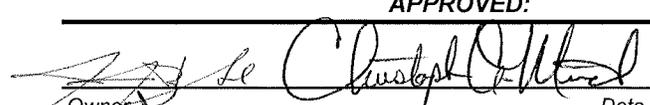
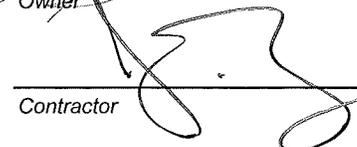
It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.



**City of St. Charles Public Works Engineering Division**

<b>CHANGE ORDER</b>	
<b>PROJECT:</b>	Red Gate Bridge
<b>CONTRACTOR:</b>	James McHugh
<b>CONTRACT FOR:</b>	
<b>NO. 3 (IDOT Auth #6)</b>	
<b>DATE: 6/20/2012</b>	
<b>P.O. :</b>	<b>Budget Account :</b>
<b>You are directed to make the following changes:</b>	
<b>DESCRIPTION:</b>	Furnish the labor, equipment and materials necessary to install Fiberglass Reinforced Epoxy Conduits to the underside of the Red Gate Road Roadway Bridge in lieu of the contract specified PVC Coated Galvanized Conduit.
<b>PURPOSE OF CHANGE:</b>	Due to the potential long term maintenance requirements of 6" PVC Coated Galvanized Conduits, the City of St. Charles requested the change to a lighter and more durable product. The City of St. Charles has approved the conduit for use.
<b>ATTACHMENTS:</b>	
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME
Original Contract price: <b>\$21,024,825.54</b>	Original Contract deadline:
Previous Change Orders: <b>\$ 4,338.00</b>	Previous Change Orders:
Contract Price prior to this Change Order: <b>\$21,029,163.54</b>	Contract deadline prior to this Change Order:
<b>Net Increase (Decrease) of this Change Order</b> <b>\$ (155,880.30)</b>	<b>Net Increase (Decrease) of this Change Order</b>
Contract price with all approved Change Order: <b>\$20,873,283.24</b>	Contract deadline with all approved Change Order:

**RECOMMENDED:**  
  
 Resident Engineer      Date 10-18-12

**APPROVED:**  
  
 Owner      Date 10/24/12  
  
 Contractor      Date 10-18-12

It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.

**City of St. Charles Public Works Engineering Division**

**CHANGE ORDER**

**PROJECT:** Red Gate Bridge

**NO. 4 (IDOT Auth #11)**  
**DATE:** 8/7/2012

**CONTRACTOR:** James McHugh  
**CONTRACT FOR:**

**P.O. :**

**Budget Account :**

**You are directed to make the following changes:**

**DESCRIPTION:** Red Gate Road, IL 31 to IL 25. Furnish the labor, equipment and materials necessary to install 12" diameter drilled shaft with cast in place concrete columns in lieu of the contract specified precast concrete piles. These drilled shafts will support the Boardwalk Structure (Special) item on the east side of the river.

**PURPOSE OF CHANGE:** Installing precast concrete piles is not feasible in the area that they were to be installed because of the subsurface soil conditions. Large amounts of basketball sized river stone is present and could have damaged the concrete piles during installation. Utilizing drilled shafts (and cast in place columns) will allow easy removal of any rock that is encountered during the auguring process.

**ATTACHMENTS:**

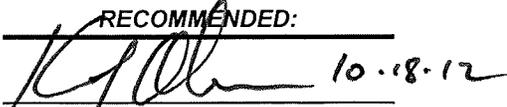
**CHANGE IN CONTRACT PRICE**

**CHANGE IN CONTRACT TIME**

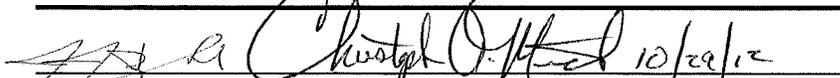
Original Contract price:	\$21,024,825.54
Previous Change Orders:	\$ (151,542.30)
Contract Price prior to this Change Order:	\$20,873,283.24
<b>Net Increase (Decrease) of this Change Order</b>	<b>\$ (1,548.08)</b>
Contract price with all approved Change Order:	\$20,871,735.16

Original Contract deadline:	
Previous Change Orders:	
Contract deadline prior to this Change Order:	
Net Increase (Decrease) of this Change Order	
Contract deadline with all approved Change Order:	

**RECOMMENDED:**

  
Resident Engineer Date 10-18-12

**APPROVED:**

  
Owner Date 10/29/12

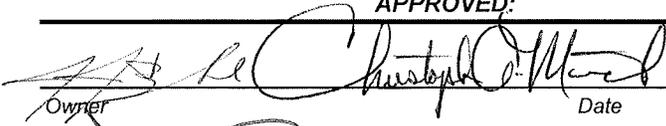
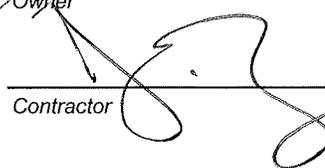
  
Contractor Date 10-18-12

It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.

**City of St. Charles Public Works Engineering Division**

<b>CHANGE ORDER</b>	
<b>PROJECT:</b>	Red Gate Bridge
<b>CONTRACTOR:</b>	James McHugh
<b>CONTRACT FOR:</b>	
<b>NO. 5 (IDOT Auth #14)</b>	
<b>DATE: 8/15/2012</b>	
<b>P.O. :</b>	<b>Budget Account :</b>
<b>You are directed to make the following changes:</b>	
<b>DESCRIPTION:</b>	Red Gate Road, IL 31 to IL 25. Provide labor, material and equipment necessary to embed, within the roadway bridge deck, two (2) 2" PVC conduits that are to be used for the bridge lighting and traffic signal interconnect. The embedment is in lieu of attaching the conduit to underneath the bridge deck. Additional splicing was required to provide the lengths specified.
<b>PURPOSE OF CHANGE:</b>	The plans called for attaching the conduits for the traffic signal interconnect and the bridge lighting to the bottom of the bridge deck. Due to the framing plan for the structural steel, it is not possible to do this. Embedding the conduits in the deck will allow for these items to be installed without extensive modifications to the structural steel framing and will result in a cost savings without impacting quality.
<b>ATTACHMENTS:</b>	
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME
Original Contract price: <u>\$21,024,825.54</u>	Original Contract deadline:
Previous Change Orders: <u>\$ (153,090.38)</u>	Previous Change Orders:
Contract Price prior to this Change Order: <u>\$20,871,735.16</u>	Contract deadline prior to this Change Order:
Net Increase (Decrease) of this Change Order: <u>\$ (7,675.00)</u>	Net Increase (Decrease) of this Change Order:
Contract price with all approved Change Order: <u>\$20,864,060.16</u>	Contract deadline with all approved Change Order:

**RECOMMENDED:**  
  
 Resident Engineer      Date 10-18-12

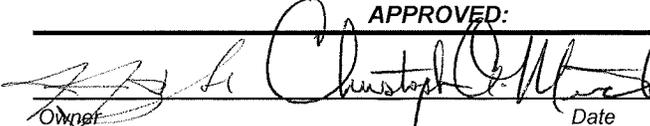
**APPROVED:**  
  
 Owner      Date 10/29/12  
  
 Contractor      Date 10-18-12

It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.

**City of St. Charles Public Works Engineering Division**

<b>CHANGE ORDER</b>	
<b>PROJECT:</b> Red Gate Bridge	<b>NO. 6 (IDOT Auth #17)</b> <b>DATE:</b> 9/19/2012
<b>CONTRACTOR:</b> James McHugh <b>CONTRACT FOR:</b>	
<b>P.O. :</b>	<b>Budget Account :</b>
<b>You are directed to make the following changes:</b>	
<b>DESCRIPTION:</b>	Red Gate Road, IL 31 to IL 25. This change is to compensate the Contractor to provide Class DS mix for the Superstructure concrete for Structure # 045-6020 in lieu of Class BS superstructure concrete.
<b>PURPOSE OF CHANGE:</b>	The deck thickness for Structure # 045-6020 is only 7.5" thick. There is also a ribbed "stay in place" metal decking for this structure. At the high point of the rib, the deck thickness is only 5.75" thick. With two layers of #5 reinforcing rods, there is the possibility of the ¾" aggregate found in the BS mix not being able to consolidate fully around the rebar. Using a DS mix, which contains pea gravel sized aggregate, will ensure that aggregate is consolidated fully around the rebar and throughout the entire deck.
<b>ATTACHMENTS:</b>	
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME
Original Contract price: <u>\$21,024,825.54</u>	Original Contract deadline:
Previous Change Orders: <u>\$ (160,765.38)</u>	Previous Change Orders:
Contract Price prior to this Change Order: \$20,864,060.16	Contract deadline prior to this Change Order:
Net Increase (Decrease) of this Change Order \$ 2,500.00	Net Increase (Decrease) of this Change Order
Contract price with all approved Change Order: \$20,866,560.16	Contract deadline with all approved Change Order:

**RECOMMENDED:**  
  
 Resident Engineer                      Date 10-18-12

**APPROVED:**  
  
 Owner    Date 10/29/12  
  
 Contractor    Date 10-18-12

It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.

**City of St. Charles Public Works Engineering Division**

**CHANGE ORDER**

**PROJECT:** Red Gate Bridge

**NO. 7 (IDOT Auth #18)**  
**DATE:** 10/11/2012

**CONTRACTOR:** James McHugh  
**CONTRACT FOR:**

**P.O. :**

**Budget Account :**

**You are directed to make the following changes:**

**DESCRIPTION:** Red Gate Road, IL 31 to IL 25. Provide an additional two(2) Precast Concrete Pylon, Type A, Item XX008621, to be placed at the west end of the Pedestrian Bridge and at the intersection of the Fox River Trail and the Boardwalk.

**PURPOSE OF CHANGE:** To commemorate the opening of the Red Gate Bridge, they City has asked for two additional Pylons to be fabricated for placement as descibed above.

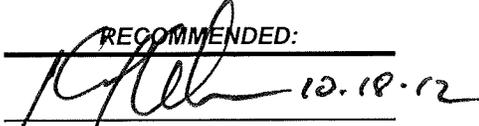
**ATTACHMENTS:**

**CHANGE IN CONTRACT PRICE**

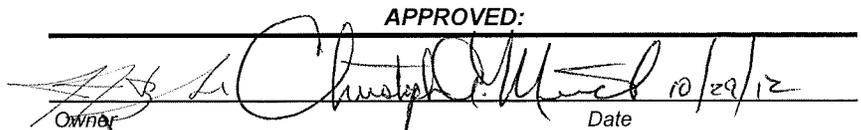
**CHANGE IN CONTRACT TIME**

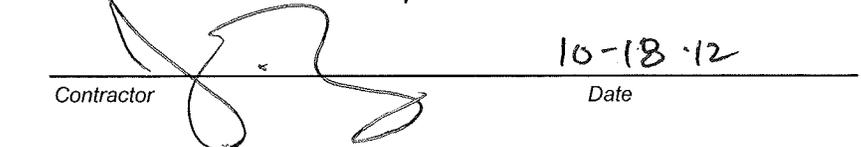
Original Contract price:	\$21,024,825.54	Original Contract deadline:	
Previous Change Orders:	\$ (158,265.38)	Previous Change Orders:	
Contract Price prior to this Change Order:	\$20,866,560.16	Contract deadline prior to this Change Order:	
Net Increase (Decrease) of this Change Order	\$ 11,400.00	Net Increase (Decrease) of this Change Order	
Contract price with all approved Change Order:	\$20,877,960.16	Contract deadline with all approved Change Order:	

**RECOMMENDED:**

  
Resident Engineer Date 10.18.12

**APPROVED:**

  
Owner Date 10/29/12

  
Contractor Date 10-18-12

It is determined that the circumstances necessitating this change order were not foreseeable at the time the original contract was signed, the change order is germane to the original contract as signed, and the change order is in the best interest of the City and authorized by law.

BC 2256 BC 22

No.	Description	Add	Deduct	Net Change	Payment Method	FUND	A.U.P. Received	Prepared By	Local Agency Area Engineer	Engineer of Construction	Director of Highways	Resident Engineer	In Office	For Signature	To Springfield
1	Piling Extras	\$ 71,450.00	\$ 26,560.00	\$44,890.00 \$0.00	FRC	STE		05/07/12	6/13/12			06/21/12	08/13/12	08/13/12	08/23/12
2	Tree Removal	\$ 23,932.60	\$ 5,088.00	\$18,844.60 \$0.00	LIC	SRF		05/04/12				06/14/12	06/22/12	06/22/12	07/12/12
3	Erosion Control Maintenance	\$ 6,300.00	\$ 6,300.00	\$0.00 \$0.00	FRC	SRF		05/07/12				06/21/12	08/07/12	08/07/12	08/13/12
4	Watermain Extras	\$ 15,500.00	\$ 20,140.00	(\$4,640.00) \$0.00	FRC/LIC	BAL		06/13/12				06/14/12	06/22/12	06/22/12	07/12/12
5	East Haul Road Maintenance	\$ 8,000.00		\$8,000.00 \$0.00	FRC	SRF		06/13/12				06/14/12	06/22/12	06/22/12	07/25/12
6	FRE Conduit	\$ 510,509.70	\$ 666,390.00	(\$155,880.30) \$0.00	AUP	BAL	6/20/2012	06/20/12	7/30/12			08/09/12	09/06/12	09/10/12	09/29/12
7	Temp Seed	\$ 15,368.84		\$15,368.84 \$0.00	AUP	SRF	6/20/2012	06/20/12	7/30/12			08/09/12	08/20/12		
8	Pavement Patching	\$ 15,770.00 \$ 11,210.00	\$ 15,770.00 \$ 11,210.00	\$0.00 \$0.00	AUP AUP	SRF BAL		06/26/12 06/26/12				07/20/12	07/31/12		
9	IL 25 Culvert Repair	\$ 180,000.00		\$180,000.00 \$0.00	FRC	SRF		07/16/12	7/16/12			07/17/12	07/23/12	07/23/12	08/14/12
10	Fiber Optic Cable Change	\$ 1,202.60		\$1,202.60 \$0.00	AUP	SRF	7/29/2012	07/29/12	7/30/12			08/09/12	08/20/12	09/05/12	09/10/12
11	Boardwalk SPL Pile Change	\$ 248,529.60	\$ 256,270.00	(\$7,740.40) \$0.00	AUP	STE		08/07/12	8/9/12			08/23/12	09/06/12	09/10/12	09/27/12
12	CLSM for IL 25 Abandoned Pipe	\$ 2,000.00		\$2,000.00 \$0.00	FRC	SRF		07/26/12	8/13/12			08/23/12	09/06/12	09/06/12	10/10/12
13	N70 Binder Substitution	\$ 61,039.00	\$ 58,652.00	\$2,387.00 \$0.00	AUP	SRF		08/15/12	8/17/12						
14	Embedded Conduits	\$ 24,644.00 \$ 24,644.00	\$ 31,423.00 \$ 32,319.00	(\$6,779.00) (\$7,675.00)	AUP AUP	SRF BAL		08/15/12	8/17/12						
15	IL 25 C&G and Guardrail	\$ 30,000.00		\$30,000.00 \$0.00	FRC	SRF		08/27/12	9/14/12			10/11/12			
16	IL 25 Sewer & HMA Extras	\$ 15,000.00		\$15,000.00 \$0.00		SRF		08/27/12	8/27/12			10/11/12			
17	DS Mix for Ped Bridge	\$ 2,500.00		\$2,500.00 \$0.00	FRC	BAL		09/19/12	9/27/12			10/11/12			
18	Extra Precast Pylons	\$ 11,400.00		\$11,400.00 \$0.00	LIC	BAL		10/11/12							
19	HMA N50 Polymer	\$ 43,312.50	\$ 38,700.00	\$4,612.50 \$0.00	AUP	SRF		10/11/12							
20	Hevy Duty Erosion Blanket	\$ 2,000.00		\$2,000.00 \$0.00	AUP	SRF		10/11/12							
21	Rip Rap Under Bridge	\$ 105,280.00	\$ 4,725.00	\$100,555.00 \$0.00	LIC	SRF		10/11/12							
22				\$0.00 \$0.00											

Subtotal	\$ 1,429,592.84	\$ 1,173,547.00
Total	\$ 256,045.84	
<b>Awarded Contract Value</b>	<b>\$ 21,024,825.54</b>	
<b>Net change (% of Contract)</b>	<b>1.22%</b>	
<b>Net cost</b>	<b>\$ 21,280,871.38</b>	

**Awarded Contract Value**

	Award Amount	Added by Authorizations	Invoiced Amount	Remaining Amount
SEC	\$ 260,463.00	\$ -	\$ -	\$ 260,463.00
STE	\$ 870,375.00	\$ 37,149.60	\$ -	\$ 907,524.60
STU	\$ 3,568,898.00	\$ -	\$ -	\$ 3,568,898.00
STA	\$ 2,400,000.00	\$ -	\$ -	\$ 2,400,000.00
TCS	\$ 565,337.00	\$ -	\$ -	\$ 565,337.00
SRF	\$ 11,557,012.00	\$ 373,191.54	\$ -	\$ 11,930,203.54
St. Charles	\$ 2,865,563.00	\$ (154,295.30)	\$ -	\$ 2,711,267.70
<b>TOTAL</b>	<b>\$ 22,087,648.00</b>	<b>\$ 256,045.84</b>	<b>\$ -</b>	<b>\$ 22,343,693.84</b>

