Ivins City Staff Report
City Council Meeting 4/6/2017

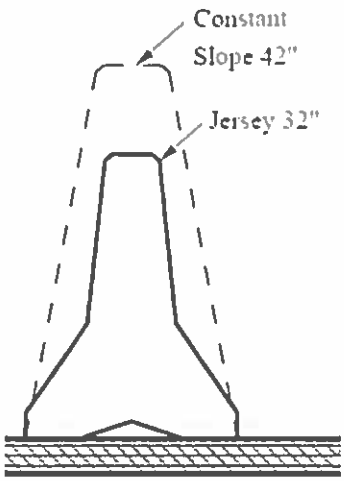
Agenda Item: Approval of expenditure for change order for Tuacahn Drive Trail

Submitted by: Thomas J. Jorgensen, P.E., Assistant Public Works Director

Recommended City Council Action:
Approve expenditure for change order for the Tuacahn Drive Trail of $14,000.

BACKGROUND:
Ivins City is currently in the process of building a trail along Tuacahn Drive from Snow Canyon Parkway to the property boundary of Sentierre.

As part of the project a barrier was to be installed along the sharp curve, approximately 300 feet south of the property boundary of Sentierre, between the existing roadway and the new trail. The purpose of the barrier is to help differentiate the roadway from the trail and help prevent cars on the road from accidentally entering the trail and users of the trail from accidentally entering the roadway. The project was initially bid to include a cast-in-place "jersey" type barrier, but staff's intent was to bid the project using a cast-in-place "constant slope" type barrier (see picture below for the difference). Staff had determined that the constant slope barrier would produce a more aesthetically pleasing finished look to the roadway, because jersey type barriers are usually associated with temporary applications. This change increases the cost by approximately **$6,300**.



Staff has also decided, during the construction of the project, that the barrier should be located further off the roadway to allow more space for a bike lane within the road. Whereas the design before called for the barrier to be located on the asphalt shoulder. This change requires additional base preparation for the barrier, for instance, removal of material and application of base course. This change increases the cost by approximately **$4,900**.

Another addition, was to extend the barrier another ten feet on each end to allow for a sloped end treatment and maximize the area where the barrier is at full height. This change increases the cost by approximately **$1,900**.

The final addition was to add an integral color to the concrete. This change increases the cost by approximately **$1,700**.

All these changes come to a total of approximately $14,800. The total project budget is approximately $324,000 and the project appears to be about $6,800 over budget. During the project there were two fairly significant changes to the original bid quantities. The first quantity was the landscape cover. This was reduced somewhat, **decreasing** the project price by approximately $5,600. The second quantity was the street signage. It was determined after the project had started that all the signage along the roadway needed to be replaced since they were old and didn't meet the retro-reflectivity standard. This **increased** the project price by approximately $7,800. Along with several other smaller change orders, we ended up at our current price of $5,000 over budget.

With that being said, Staff has the ability to help alleviate some of the budget stress on this project by paying for all the replaced signs out of the yearly sign replacement budget. This intervention would bring the project approximately $3,700 under budget, but with the above change order the project would be about $12,000 over budget still.

Staff have reviewed the price and recommend that council approve the change order and increase the project budget for the Tuacahn Drive Trail project by $12,000 plus an additional $2,000 in contingency, for a total of $14,000.

FINDINGS AND ANALYSIS:
The following change order quote was received:

	Total
Sunroc Change Order – Cast In Place Barrier Changes	$14,784.56

SUPPORT MATERIALS:

- CAST IN PLACE BARRIER CHANGES – Sunroc Change Order Work Report

FINANCIAL IMPACT:
GL 49-40-699: $14,000

Respectfully Submitted:

Thomas J. Jorgensen, P.E., Assistant Public Works Director

Content Review:

Dale Coulam, City Manager

SUNROC CORPORATION

3657 South River Road St. George City, Utah 84790

DAILY EXTRA WORK REPORT

WORK PERFORMED FOR

Name TUACAHN DRIVE TRAIL PROJECT
Company IVINS CITY
Address
Address
City, ST, Zip

NAME OF CHANGE ORDER

Name CAST IN PLACE BARRIER CHANGES

Report No. # 9
Date 3/22/2017
Job No. 7200
Cost Code No.

DESCRIPTION OF WORK

The 32" Jersey Barrier has been changed to 42" Constant Slope Barrier w/ an addition 20 ft. end treatment
The Barrier placement has been shifted off the existing asphalt and placed on Road Base
The Barrier will have "Scupper" openings every 40 feet and a road base ditch constructed for flow
The Barrier will be changed to "Colored Concrete" - Desert Rose 2 lbs per yard
Ditch Construction is required between the trail and barrier, this will done with 8" inches of Road Base
Warning Chevron Signs have been added to both ends of the barriere

Check One:

- Force Acct. Work ☐
- Material or Sub. ☐
- Outside Work or Sales ☐

LABOR

PR NO.	NAME	HOURS	HOURLY RATE	EXTENDED AMOUNTS
	Grade Checker	1.00	$40.00	$ 40.00
	Supervision	4.00	$60.00	$ 240.00
	2 ea. Laborers	6.00	$40.00	$ 240.00
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
SUBTOTAL				$ 520.00
	Burden Labor X .5			$0.00
Subsistence		NO. @	$	
Travel Expense		NO. @	$	
and Overhead 15%				$ 78.00
		TOTAL COST OF		$ 598.00

FULLY OPERATED EQUIPMENT

EQ. NO.	DESCRIPTION	HOURS	HOURLY RATE	EXTENDED AMOUNTS
	Huber Grader	1.50	$ 80.00	$ 120.00
	Roller Compactor	1.00	$ 80.00	$ 80.00
	Backhoe	6.00	$ 85.00	$ 510.00
	Loader	6.00	$ 115.00	$ 690.00
	Truck	1.00	$ 95.00	$ 95.00
	Water Truck	1.00	$ 95.00	$ 95.00
				$ -
				$ -
				$ -
				$ -
SUBTOTAL				$ 1,590.00
	Equipment Mark up 15%			$ 238.50
	TOTAL COST OF EQ			$ 1,828.50

MATERIALS

AND/OR WORK DONE BY SPECIALISTS

DESCRIPTION	QTY	UM	UNIT PRICE	TOTAL AMOUNT
Road Base	106.00	TON	$ 13.69	$ 1,451.14
Colored Concrete	320.00	FT.	$ 4.50	$ 1,440.00
Warning Chevrons	2.00	EA.	$ 350.00	$ 700.00
Sloped End Treatments	20.00	Ft.	$ 80.00	$ 1,600.00
Constant Slope Barrier	320.00	FT.	$ 17.00	$ 5,440.00
Scupper Install- No Cost	0.00	EA.	$ -	$ -
Bonding Increase	1.00	LS	$ 115.00	$ 115.00
				$ -
				$ -
				$ -
				$ -
SUBTOTAL				$ 10,746.14
6.35% Tax				$ -
15% Markup				$ 1,611.92
		TOTAL COST OF MA		$ 12,358.06

GRAND TOTAL (LABOR, EQUIPMENT, MAT $ 14,784.56