



Engineering Division

DATE: September 24, 2021

TO: Eden Freeman, Deputy City Manager

FROM: Clinton Link, Interim Engineering Services Manager *Clinton Link*  
Nick De Palma, Engineering Projects Manager *Nick De Palma*

CC: Calin Owens, Mobility Coordinator  
Rod Gray, Purchasing Administrator  
Matt Efird, Director - Office of Management & Budget  
Dave Derrick, Interim Public Works Director  
Angie Prosser, Director of Parks, Recreation, and Tourism

RE: Swamp Rabbit Trail Pedestrian Bridges

On August 20, 2021, Engineering submitted a memo with our recommendation regarding the intent to award for Greenville County's RFP #21084, Prisma Health Swamp Rabbit Trail Pedestrian Bridges. In the memo, we outlined our negotiation process with the highest rated contractor, Palmetto Infrastructure. Through our initial negotiations, Palmetto identified various value engineering cost savings that could be achieved through a redesign of the proposed MSE walls. Engineering's concerns with a recommendation to move forward with a redesign were associated with the cost and time it would take the original design firm, TRC, to complete the redesign without jeopardizing the project schedule. Additionally, even with the redesign, the total cost of the project would have been approximately \$585,000 more than the original price from the second rated firm, IPC. For these reasons, we were prepared to end negotiations with Palmetto and begin negotiations with second rated contractor, IPC.

After informing Palmetto of our concerns and intent to begin negotiations with IPC, they requested further opportunity to address the concerns with the redesign and project budget.

Since our initial negotiations, Palmetto has consulted with a design engineer and has identified further design changes that can be made to reduce their cost. After further review and estimating, Palmetto has submitted an updated cost which includes the cost for the engineering design changes. As noted in the previous memo, the proposed redesign includes changes to the type of handrail and replacing several MSE walls with additional cored slab spans. The revised proposal now also includes a redesign of the substructure and foundations from standard H-piles to composite concrete and H-piles

with caps for each of the interior bridge bents. The following table summarizes Palmetto’s original and updated price.

<b>Contractor</b>	<b>Construction Price</b>	<b>Prefab Bridge (Laurens)</b>	<b>Prefab Bridge (Haywood)</b>	<b>Redesign Fee</b>	<b>Total Contract Price</b>
Palmetto Infrastructure	\$6,000,376.66	\$268,768.80	\$151,095.24	\$0.00	\$6,420,240.70
Palmetto Infrastructure (Negotiated)	\$4,219,858.19	\$268,768.80	\$151,095.24	\$355,033.00	\$4,994,755.23

By assuming responsibility for the redesign, Palmetto has addressed Engineering’s concerns with the City contracting with TRC for the redesign and being able to complete the redesign without delaying the contractor’s schedule.

The additional value engineering realized through a redesign of the foundations has resulted in a revised price that is \$1.4 million lower than their original proposal. The revised cost assumes the City to be responsible for all quality control inspections and to waive all permit and license fees.

Engineering has discussed the proposed design changes with Palmetto, and we believe the redesign results in a more efficient design with less risk of unforeseen construction issues and a quicker project construction schedule. As currently proposed, the construction of the MSE walls requires additional earthwork to be performed and specifically at Laurens Road, the project requires a substantial amount of removal and replacement of unsuitable soils. This “undercutting” of poor soils requires temporary shoring to be installed due to the limited right of way available to work in. Eliminating the MSE walls reduces the additional work involved with installing temporary shoring, removing the poor soils and bringing in select fill. The change in foundation design to composite concrete and H-piles results in a more streamlined construction process by virtue of requiring fewer piles to be installed for the bridges. The improved efficiency created by these changes results in savings in mobilization cost, less potential for unforeseen subgrade issues, and a faster construction schedule.

The total cost above also includes an updated cost for the prefabricated bridges at Laurens Road and Haywood Road. During our negotiations with Palmetto, we learned that Wheeler, the company awarded by the County to provide the prefabricated bridges, will not honor their 2019 proposal to the County. The cost represented above includes Palmetto subcontracting with Bridge Brothers to provide the prefabricated bridges for Haywood Road and Laurens Road. Allowing Palmetto to handle the prefabricated bridges affords many benefits by giving them complete control of the project schedule and eliminating unnecessary coordination issues.

Based on Palmetto’s revised proposed cost, we have estimated the total project cost for the project which includes construction engineering & inspection, the cost of TRC’s original design and a 10% contingency as summarized below.

<b>Contractor</b>	<b>Total Contract Price</b>	<b>Initial Design Fee</b>	<b>CEI</b>	<b>Total Project Cost</b>	<b>Total Project Cost with 10% Contingency</b>
Palmetto Infrastructure	\$6,420,240.70	\$659,969.00	\$170,000.00	\$7,250,209.70	\$7,975,230.67
<b>Palmetto Infrastructure (Negotiated)</b>	<b>\$4,994,755.23</b>	<b>\$659,969.00</b>	<b>\$170,000.00</b>	<b>\$5,824,724.23</b>	<b>\$6,407,196.65</b>

As shown in the table above, Engineering is recommending including third party assistance for construction testing and inspection totaling an estimated \$170,000 for this project. In addition to the testing & inspection costs, the City has the option to include third party project management for an additional estimated fee of \$330,000, increasing the total third-party fee to approximately \$500,000. While Engineering can perform the project management in house, we are prepared to include the additional costs for a third-party project management if desired by Council. If third-party project management is utilized, the total cost with contingency would increase to a grand total of \$6,770,197.

Palmetto Infrastructure was rated as the highest scoring firm to submit a proposal using the County’s procurement process. The procurement process selected for this project only allows for negotiations to be conducted with the highest rated contractor. To negotiate with another contractor would require that we first terminate our negotiations with Palmetto.

Engineering has reviewed Palmetto’s revised proposal and we believe they have submitted a fair negotiated price within our budget. Based on the procurement process chosen for this project and the success of our negotiations with Palmetto, Engineering does not see a reason to enter in negotiations with the second rated firm.

We have worked with Palmetto on past projects and are confident in their ability to perform this project. Based on their revised price, Engineering recommends contracting with Palmetto to construct the bridge crossings at Haywood Road and Laurens Road, to include the bridge redesign and the cost for the prefabricated bridges.