



Abbotts Creek Engineering

1008 Curry Road
High Point, NC 27265
(m) 336.906.7566

January 31, 2024

To: Mr. Stevie Cox, Trinity City Manager

From: Rick Austin, PE, Abbotts Creek Engineering

Subject: **City owned parking lots**

I was given the task of resurfacing the two City owned lots some time ago. This work was delayed because of the conflict with the renovations at the Annex Complex. The Pod and the Christmas tree has been removed and I have now started on this project.

I focused first on the City Hall lot, and found technical issues with resurfacing. The drainage is design to go to the middle of the lot and be removed by grated structures. The curb and guttering is typically sloped with the front edge lower than the elevation at the curb with slope on the pavement to continue positive drainage to the collection points. This is spill guttering and I thought edge grinding with a milling machine would allow me to adjust for the additional height of the resurfacing asphalt. The designer of the lot favored the ease of opening car doors to drainage in the extreme and the guttering and parking stalls are flat to the midway of the stalls. This means that I would need to remove most or all of the parking stalls to tie to existing pavement. The building edge presents the same type issues because of the weep holes and the reduction in curb height.

The typical solution to this, out on less visible locations would be to pave into the gutter plate. This is not acceptable at an important building like City Hall. To remove enough asphalt to resurface with a milling machine would be expensive. The milling component of patching is roughly thirty-five dollars per square yard. After discussing this with contractors, other owners faced with this situation have removed the pavement completely and reconstructed the lot as it exists. There are several advantages to this approach.

Total removal of the asphalt can be done with a loader which is much cheaper than using a milling machine, about half the costs. There would be no need for patching or the stone mat. The subgrade could be proof-rolled to find any soft locations. The drainage structures would not need to be adjusted upwards.

The replacement would take 7 to 10 days. With the difficulties associated with trying to resurface the lot the costs are probably about the same.

The original lot has lasted for a long-time and functioned well except for small drainage issues. The amount of required patching is small indicating the lot is basically sound. I would think that with the lower traffic than the bank, a replaced lot would last longer than the original.

This opens the possibility of several alternatives:

Do nothing until the lots are in much worst shape and the contractors are not so busy.

Do minor drainage improvements and patching to extend the life of the lot with replacement postponed. \$ 20k

Wait until days are long, dry and hot and replace the lot's pavement in the next decade. \$115K

I would recommend that until construction activity slows, that this work be put on hold. I would wait until pothole(s) develop, and repair them and the drainage corrections at that time in a small contract, possible including patching of the worst cracked areas. Within a couple of years of this, I would replace the pavement in July or August.



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To: Mr. Stevie Cox, Trinity City Manager

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Proposed 2024 Repair and Resurfacing Program

I propose the resurfacing of Carriage House Circle (1500 lf) and the Stones Throw Subdivision (2671 lf) for this calendar year paving. The estimated cost of these two projects is approximately \$205, 000 which is very close to the amount received annually into the Powell Bill Fund.

Carriage House Circle has never been resurfaced and was built by petition between twelve and fifteen years ago. (If my memory serves me correctly.) The street is generally in good shape with the wearing surfaced oxidized and some cracking. An application of 1 1/2" of asphalt will restore it to like new.

Stones Throw Subdivision was the first streets resurfaced outside of Steeplegate Subdivision, with one of the streets paved under petition. I believe that this work is fifteen years old. All the streets in the subdivision have numerous cracks poured which detracts from the look and ride of the streets. With the cracking shown, a resurfacing of 1 1/2" and a stone mat to reduce reflective cracking is recommended.

Any needed patching on these streets or identified citywide will be included in the contract. I have not marked the repair limits or prepared a patching list yet, but I have inspected the streets and there is patching needed. A good budgeting number would be 300 sy or approximately \$15,000 city-wide.

I am always concerned that the account balance will be too high and keep the City from receiving the full funds that they are due. It makes sense to spend the received amount annually as a way to manage the fund.

I request authorization to prepare contract documents and solicit bids for this work