



TOWN OF KILL DEVIL HILLS
Land Where Flight Began

MEMORANDUM

August 12, 2019

TO: Mayor and Board of Commissioners

FROM: Debora P. Díaz, Town Manager 

REF: New Business

1. Recommendations on Capital Improvements

A. Recommendation for Bid Acceptance for 2019-2020 Street, Drainage, and Right-of-Way Improvement Project (Attached NB-1A)

Plans, specifications, and authorization to bid the 2019-2020 street, drainage, and right-of-way improvements project were approved by the Board of Commissioners at the September 10, 2018, meeting. The overall plan includes drainage, paving, and related work, split into two parts:

- Project 1: West Hayman Boulevard
- Project 2: Sixth Avenue and Town Hall Drive

Assistant Public Services Director Derek Dail's attached memorandum details the actual list of streets that will receive improvements in the two projects.

Bids were received on August 1, 2019, and have since been reviewed by Staff and the Town's engineer, Pete Burkhimer, on behalf of American Engineering. Staff and Mr. Burkhimer recommend award of the contract for the entire project to the lowest responsible bidder, Barnhill Contracting Company, Inc. The bid tabulation sheet is included with the packet materials for this item. A breakdown of associated costs for this project is as follows:

2019-2020 Street, Drainage and Right-Of-Way Improvements Project	Base Bid		
	Streets & Drainage	Water	Total
Barnhill Contracting Company, Inc. – Base Bid + Unit Price Items	\$812,600	\$10,980	\$823,580
Contingency	\$40,630		\$40,630
Engineering	\$59,000	\$6,600	\$65,600
Grand Totals	\$912,230	\$17,580	\$929,810

Construction will begin in autumn, with substantial completion scheduled by December 31, 2019, for Project 1 (West Hayman Boulevard), and by April 29, 2020, for Project 2 (Sixth Avenue and Town Hall Drive).

Staff recommends the Board of Commissioners accept the bid from Barnhill Contracting Company, Inc., and authorize the 2019-2020 Street, Drainage, and Right-of-Way Improvement Project, base bid including unit price items, by:

- Approving the contract with Barnhill Contracting Company, Inc. for 2019-2020 Street, Drainage, and Right-Of-Way Improvements Project in the amount of \$823,580.00 and authorize its execution by the Town Manager;
- Approving the engineering services agreement with American Engineering in the total amount of \$65,600 for construction oversight services;
- Approving a 5% not-to-exceed contingency for the streets and drainage portions of the project in the amount of \$40,630;
- Authorizing expenditures of \$694,230 from the Street Capital Reserve Fund; \$17,580 from Water Fund; \$218,000 from the Powell Bill Fund, for a total of \$929,810; and
- Approving budget amendment #4 to appropriate funds from the Streets Construction Reserve Fund for the 2019-2020 street, drainage, and right-of-way improvements project.

A motion will be in order.



TOWN OF KILL DEVIL HILLS PUBLIC SERVICES

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Water Plant (252) 480-4090
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STEPHEN F. ALBRIGHT
Director

August 12, 2019

DEREK A. DAIL
Assistant Director

Memorandum

MARCIA K. OLLIS
Administrative Services

To: Debora P. Diaz, Town Manager

ALFRED BURTON
Water Plant

From: Derek A. Dail, Assistant Public Services Director

WILLIAM H. WATERFIELD
Water Systems

L. RANDOLPH TURNER
Streets

Subject: **Recommendation for Bid Acceptance for 2019-2020
Street, Drainage and Right-Of-Way Improvements Project**

LYNN E. LINDSEY
Solid Waste

At the September 10, 2018 meeting, the Board of Commissioners approved the design of the street, drainage and right-of-way improvements project for 2019-2020. The project includes paving, drainage, and related work split into two projects and bid as outlined below:

Project #1 - West Hayman Boulevard- Improvements will include paving, drainage, and related work as follows:

- **Bay Drive to Circle** (*approximately 0.31 miles*): Work will include new drainage with trunk line on north side and cross drains to south, roadway asphalt 2 ¼ inch overlay and some driveway work.
- **Ocean Park Circle** (*approximately 0.23 miles*): Work will include new drainage swales, roadway asphalt 2 ¼ inch overlay, paved parking and some driveway work.
- **W. Archdale and W. Sothel Street Connectors**: Work will include surface paving of gravel roadways.
- **Plymouth Avenue** (*approximately 140'*): Work will include roadway asphalt 2 ¼ inch overlay.

Project #2 - Sixth Avenue and Town Hall Drive- Improvements will include paving, drainage, and related work as follows:

- **Sixth Avenue from W. Airstrip Road to W. Baum Street** (*approximately 0.24 miles*): Work will include some drainage with connections to the Harding Street ditch and Baum Street, roadway asphalt 2 ¼ inch overlay and some driveway work.
- **W. Baum Street:** Work will include drainage connection to existing drain inlet at the intersection of W. Baum and Swan Street.
- **Town Hall Drive** (*approximately 0.21 miles*): Work will include some drainage with connections to the Frog Pond and Mustian Street, roadway asphalt 2 ¼ inch overlay and associated work.

On August 1, 2019 bids were received for this project and reviewed by the Town’s engineer, Pete Burkheimer and staff. Please find the attached recommendation of award from Mr. Burkheimer along with the bid tabulation for the project. Staff concurs with Mr. Burkheimer’s recommendation that the low bidder, Barnhill Contracting Company, Inc. is awarded the contract. A breakdown of the construction related costs is included below:

2019-2020 Street, Drainage and Right-Of-Way Improvements Project	Base Bid		
	Streets & Drainage	Water	Total
Barnhill Contracting Company, Inc. – Base Bid + Unit Price Items	\$812,600	\$10,980	\$823,580
Contingency	\$40,630		\$40,630
Engineering	\$59,000	\$6,600	\$65,600
Grand Totals	\$912,230	\$17,580	\$929,810

If the Board of Commissioners agrees with these recommendations, a motion will be in order to:

- Approve the contract with Barnhill Contracting Company, Inc. for 2019-2020 Street, Drainage, and Right-Of-Way Improvements Project in the amount of \$823,580.00 and authorize its execution by the Town Manager;
- Approve the engineering services agreement with American Engineering in the total amount of \$65,600 for construction oversight services;
- Approve an 5% not-to-exceed contingency for the streets and drainage portions of the project in the amount of \$40,630; and
- Authorize expenditures of \$694,230 from the Street Capital Reserve Fund; \$17,580 from Water Fund; \$218,000 from the Powell Bill Fund, for a total of \$929,810.



August 1, 2019

Mr. Steve Albright, Director of Public Services
Town of Kill Devil Hills
P. O. Box 1719
Kill Devil Hills, NC 27948

By e-mail

Subject: **V18100 – Kill Devil Hills 2019-20 Project: Hayman Avenue – Town Hall Drive – Sixth Avenue, RECOMMENDATION OF AWARD**

Dear Mr. Albright:

At 11:00 a.m. on Thursday, August 1, 2019, American Engineering, as Town Engineer, received and opened bids for the referenced project. This letter includes our tabulation and analysis of the bids received for the project, and our recommendation to you and to the Town.

To facilitate the use of this letter in discussions, we have numbered the remaining paragraphs.

1. Due to the size of the project, we followed formal bidding procedures. We had only two (2) prospective bidders attend the July 18, 2019 mandatory pre-bid meeting. So, we re-advertised the project in an effort to attract more bidders. We also scheduled a second pre-bid meeting, on July 25, for any additional bidders; but none attended. Thus, two prospective bidders met the requirement of having attended a mandatory pre-bid meeting: RPC Contracting, Inc. and Barnhill Contracting Company.
2. At the August 1 bid opening, two bids were received, one from each of the firms having attended the pre-bid meeting. Both bids appeared at the time to be in conformity with the requirements of the Contract documents in terms of format, bid bond, license number, etc. There were no apparent irregularities, numeric reversals, etc. noted. The bids were opened and read aloud.
3. In an effort to reduce the total time a neighborhood or area is subjected to the disturbance and inconvenience of the construction process, we broke this work into Project Group 1, Hayman Avenue and the short half-block of Plymouth Street, and Project Group 2, Town Hall Drive and Sixth Avenue. The Contract Documents set up the possibility of award of each Project Group to a separate contractor, with each having 120 days to bring the work to Substantial Completion, or award of both to one contractor, who would do one Group and then move to the other.

Subject: **V18100 – Kill Devil Hills 2019-20 Project: Hayman Avenue – Town Hall Drive – Sixth Avenue, RECOMMENDATION OF AWARD**

August 1, 2019
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4. Based on comments from bidders on recent projects, and other factors, we broke out three items from the Base Bid of each Project Group, to be paid on a Unit Price basis, with stipulated quantities for bidding purposes:
 - a. Sod installed around Drop Inlets (150/200 square yards)
 - b. Silt Fence (1,000 linear feet)
 - c. Watering (25 days)

For Project Group 1, we also broke out a separate lump-sum price to widen Plymouth Street—now really acting like a driveway and averaging about 14-15' wide—up to 20' to meet our minimum street width standard. For Project Group 2, we had three more items broken out; two had to do with the 2" water main in Sixth Avenue (new valves and a better offset under the Harding Street Ditch) and the third, if accepted, would apply a pavement reinforcing fabric material over the entire length of Sixth Avenue. Sixth Avenue currently has over 100 transverse "block cracks" in the pavement, and the pavement overlay fabric is designed to reduce and delay the "reflecting" of these cracks up through the new asphalt overlay.

5. The Low Bidder for the project is **Barnhill Contracting Company**, whose Bid was as follows:

a. Base Bid, PG1 (Hayman & Plymouth)	\$356,440.00
b. PG1 Sod (\$8.50/sy)	\$1,275.00
c. PG1 Silt Fence (\$4.25/lf).....	\$ 4,250.00
d. PG1 Watering (\$725.00/day)	\$ 18,125.00
e. PG1 Plymouth Avenue Widening (lump sum)	<u>\$ 9,900.00</u>
f. Total Base Bid, Project Group 1	\$ 389,990.00
g. Base Bid, PG2 (Town Hall & Sixth)	\$ 391,044.30
h. PG2 Sod (\$8.50/sy)	\$1,700.00
i. PG2 Silt Fence (\$4.25/lf).....	\$ 4,250.00
j. PG2 Watering (\$725.00/day)	\$ 18,125.00
k. PG2 Replace 2" Valves (\$1,480.00/each).....	\$8,880.00
l. PG2 Offset 2" Water Line (lump sum)	\$2,100.00
m. PG2 Pavement Overlay Fabric (\$2.61/sy)	<u>\$ 7,490.70</u>
n. Total Base Bid, Project Group 2	\$ 433,590.00
o. Discount if Awarded Both Groups	\$ 0.00
p. Total Bid, Both Groups	<u>\$ 823,580.00</u>

6. We are very pleased with these bids. The low bidder, Barnhill, was 9% lower than our Engineer's Estimate of \$904,900.00, using the Total Base Bid, Both Groups, with all Unit Price Items as the basis for comparison. The other bidder, RPC Contracting, Inc., was \$1,100,345.00, or 21.6% above the Engineer's Estimate and 33.6% above the low bid. We have noted in previous award recommendation letters that the improved overall economic climate is pressing prices upward versus the recession years and we have now seen it on several projects in a row. In this instance, we appeared to find Barnhill with a slight lull in their schedule, while RPC appears to have plenty of work at this time. Overall, we feel the bidding accurately reflects the 2019 construction market situation.
7. Therefore, we recommend award of the contract for **Hayman Avenue – Town Hall Drive – Sixth Avenue** to **Barnhill Contracting Company** in amount of **\$823,580.00**. For funding purposes, this is split **\$812,600.00** for street and drainage work and **\$10,980.00** for water system work.
8. Our recommendation includes the optional items for widening the little 180' section of Plymouth Street up to our 20' standard and the pavement overlay fabric on Sixth Avenue. The bid prices on these were favorable, and we feel they represent good value to the Town.
9. This is primarily a lump sum contract, except for the unit price items noted above. The work is fairly simple; we believe that a 5% contingency is appropriate for the streets and drainage work. We typically use less than half the contingency allowance on our projects, but it is there for the times when unforeseen conditions require it. 5% of the street and drainage portion of the recommended award results in a proposed contingency allowance amount of **\$40,630.00**, all of which is for streets and drainage. Any contingencies associated with the relatively small amount of water work in this project will be handled from the funding allotted to Public Services for water line adjustments associated with capital projects.
10. We are separately furnishing our proposal for this project, dated August 1, 2019 for construction phase services in the amount of **\$65,600.00**. This is split \$59,000.00 for street and drainage work and \$6,600.00 for water system work. This amount is consistent with the size of this project, and the fact that is in some respects two projects instead of one. We recommend and request that the Board of Commissioners approve this proposal for professional services.
11. The resulting total amount of funding required for the total project is thus **\$929,810.00** (\$912,230.00 streets and drainage, \$17,580.00 water).



August 1, 2019

Mr. Steve Albright, Director of Public Services
 Town of Kill Devil Hills
 P. O. Box 1719
 Kill Devil Hills, NC 27948

By e-mail

Subject: **V18100 – Kill Devil Hills 2019-20 Project: Hayman Avenue – Town Hall Drive – Sixth Avenue, CONSTRUCTION PHASE SERVICES**

Dear Mr. Albright:

American Engineering is pleased to provide this proposal for services during the Construction Phase of this project, for which bids are to be opened this week.

For the **Construction Phase** work, our scope of services shall be as follows:

Assist with contract execution; set survey control and provide survey stakeout, field engineering oversight, review contractors' applications for payment, as-built surveys of storm drainage structures and other key elevations.

Field oversight will not constitute Construction Management, nor full-time inspection, but frequent oversight to assist in assuring construction complies with Contract Documents.

The program we propose will include:

- An average of 1 hour per day (1-2 brief visits)
- An average of one 3 to 4-hour visit for some major meeting, walk-through, issue or effort, about twice per month.
- Approximately five days during the project for an event needing full-time oversight, such as observing paving.

We see a total project life of 9 months, or about 37 weeks. The program above will average out to about 8 hours per week, with a few skipped weeks for holiday or bad weather periods. Also included in this effort is overall project management tasks such as pay application processing, change order processing, weekly updates, etc.

2019/20 Project: HAYMAN – TOWN HALL - SIXTH				
Staff Classification		Rate	Hours	Extension
Principal @ ___/hr		\$175.00	280	\$49,000.00
Senior Engineer @___/hr		\$145.00	40	\$5,800.00
Survey Party @___/h		\$105.00	80	\$8,400.00
CADD Operator @ ___/hr		\$75.00	32	\$2,400.00
Subtotals, Estimated Fees by Hours:				\$65,600.00
Lump Sum Fees:				\$65,600.00
Water Portion: \$6,600.00		Street & Drainage Portion: \$59,000.00		

Work not covered within the scope outlined above shall be performed at our hourly rates, which are the same as presented in our General Services proposal of April 15, 2019. The following hourly rates will govern all work through the period of this proposal (through June 30, 2020, unless otherwise mutually agreed.)

Additional Services

Our hourly rates for the term of this proposal, which will be the basis for calculating lump sum fees and the basis of billing hourly work, are set forth below (increased rates are noted in **bold**):

<u>Staff Categories</u>	<u>Hourly Rates</u>
Principal Professional /Engineer	\$175.00
Senior Consultant (W. P. Burkheimer, Jr.)	\$175.00
Senior Professional /Engineer	\$145.00
Project Engineer	\$110.00
Engineering or Surveying Technician	\$75.00
4 Person Survey Party	\$145.00
3 Person Survey Party	\$125.00
2 Person Survey Party/Party Chief w/Robotic Instrument	\$110.00
CADD Operator	\$75.00
Other Project Representative	\$50.00
Clerical	\$45.00

Reimbursable Expenses

Reimbursable expenses are those which are associated with professional services performed on a time and materials basis and include out-of-pocket expenditures advanced in the interest of the project. Almost all printing and copying are done in-house and are invoiced at the unit rates specified, except they are included in lump-sum project fees. Our rates for any reimbursable expenses incurred will be:

Copies of maps, plats, deeds, plans, data, etc.	cost +10%
Long distance/Conference phone calls	cost +10%
Overnight delivery (UPS, FedEx)	cost +10%
Mileage (not charged for travel to KDH from office, & back)	\$0.54 / mile
Prints/Copies on:	
Bond	\$0.20/square foot
Vellum	\$1.50/square foot
Mylar	\$3.00/square foot
Color Prints on Bond	
Letter	\$1.00/copy
Legal	\$2.00/copy
12" x 24"	\$3.00/copy
Large Scale	\$1.50/square foot
Specialty Printing/Plotting/Mounting	cost +10%
Printing/copying/mounting by others	cost +10%

Electronic copies of drawing files prepared at our hourly rates; requires recipient to sign release form

Subject: **V18100 – Kill Devil Hills 2019-20 Project: Hayman Avenue – Town Hall Drive – Sixth Avenue, CONSTRUCTION PHASE SERVICES**

August 1, 2019

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We propose to perform this work subject to the terms and conditions set forth in our General Services proposal to the Town of Kill Devil Hills, also dated April 15, 2019.

We appreciate the opportunity to offer this information to you. If you find this proposal acceptable, please indicate by the signature, name, title and date of the appropriate official in the space provided below. This will serve as our authorization to proceed.

AMERICAN ENGINEERING ASSOCIATES—SOUTHEAST, PA



W. P. Burkheimer, Jr., P. E.
Chief Engineer, Virginia Beach

WPBjr:pb:v:\2018\V18100 - KDH Hayman-TH-Sixth\Construction\07 **Proposal** - Construction Admin\KDH Hayman-TH-Sixth - Construction Phase Services - August 1, 2019.docx

Cc: Ms. Mary E. Quidley, Town Clerk, 252-441-7946

We accept this proposal and agree to its provisions, as set forth above.

TOWN OF KILL DEVIL HILLS

By:

Auth. Signature _____

Name: _____

Title: _____

Date: _____

Subject: **V18100 – Kill Devil Hills 2019-20 Project: Hayman Avenue – Town Hall Drive – Sixth Avenue, RECOMMENDATION OF AWARD**

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12.If the Board sees fit to award the project, we contemplate a First Day of the Contract Time of Tuesday, **September 3, 2019**. With the Contract Time being 120 days, this would set the Required Date of Substantial Completion at Tuesday, **December 31, 2019** for the first Project Group commenced and, if they are done consecutively, another 120 days for the second Project Group, ending on **April 29, 2020**.

We appreciate the continuing opportunity to be of service to Kill Devil Hills. Please let me know if there are any questions regarding this information.

Sincerely,



Walton P. Burkheimer, Jr., P. E.

Senior Consultant

American Engineering Associates – Southeast, PA

WPBjr:pb:v:\2018\V18100 - KDH Hayman-TH-Sixth\Construction\06 Bid Tabulation Award NTP\Albright WPB Recommend Award.doc

Cc: Ms. Mary E. Quidley, Town Clerk, 252-441-7946

TOWN OF KILL DEVIL HILLS

BUDGET AMENDMENT REQUEST



Finance Department Use Only

Budget Amendment Number: 4

Finance Officer:

INCREASE (DECREASE)			INCREASE (DECREASE)		
CODE	ACCOUNT DESCRIPTION	AMOUNT	CODE	ACCOUNT DESCRIPTION	AMOUNT
5600 577010	C/O Street Construction CRF	55,230.00	10 499191	Fund Balance Appropriated – Streets Capital Reserve Fund	55,230.00
TOTAL		55,230.00	TOTAL		55,230.00

JUSTIFICATION: To appropriate funds from Streets CRF for 2019-20 Street, Drainage and Right of Way Improvements project.

RECOMMENDED: _____ APPROVED: _____

DATE: August 12, 2019