



CITY OF DURHAM | NORTH CAROLINA

Date: February 10, 2016

To: Thomas J. Bonfield, City Manager
Through: W. Bowman Ferguson, Deputy City Manager
From: Marvin G. Williams, Director of Public Works
Subject: Staff Response to Utility Provider's Alternate Utility Fee Proposal

Public Works staff have reviewed the Alternate Utility Fee Proposal and Executive Summary that were submitted by the utility providers (AT&T, Duke Energy, Frontier Communications, Level3 Communications, PSNC Energy, Time Warner Cable) on February 2, 2016. In response to the eleven justifications, copied inline for ease of reference, that were stated in the executive summary document (copy attached), and in response to additional questions of City Council during the February 4, 2016, City Council Work Session, Public Works offers the following:

- 1) ***Justification for reducing Total Inspector time needed.*** *Based on the City's time estimates, the 921 permits the City received in 2014 would require each of the two inspectors to work 3,116 hours that calendar year. However, there are only 1950 regular work hours in a year, according to the City. 40 regular hours + 10 overtime hours each week for 48 of the 52 weeks in a year is only 2,430 hours.*

RESPONSE: After review of the calculations provided by the private utility companies in their Alternate Utility Fee Proposal, Public Works has several concerns with the underlying assumptions. The information presented by the private utility companies assumes that all permits issued can be grouped based on length alone into these four types of permits and that all of the time associated with each permit is the same including travel time. The utility companies then multiplied the time associated with each permit by the number of permits assigned to the category producing an aggregate time for the 2014 timeline.

The primary concerns that Public Works has with the calculations are the permits chosen by the City to represent common types of permits that occur in the program and do not define every inspection condition of every permit type by length alone. It is therefore unrealistic to group permits into the categories as done. In addition to this, the travel time associated with the permits is a best estimate for permits within a medium range of travel. Without looking at each individual permit, its required inspections and its specific location it would be extremely difficult to establish a realistic time assumption for all inspections associated with the year.

Following is an explanation of the types of inspections performed for scenarios A-D below.

Scenario A: In this scenario the Public Works inspector would inspect the following items at 4 different times typically with 3 different contractors. The inspections are as follows: 1) Road Cut and compaction of subgrade check and temporary road repair (flowable fill), 2) Compaction and check for curb and gutter and/or sidewalk (prior to pouring concrete), 3) milling and repaving for permanent road repair, 4) Removal of forms, grading and final restoration of surrounding ground.

Scenario B: In this scenario the Public Works inspector would inspect the following items at 3 different times typically with 2 different contractors present. The inspections are as follows: 1) Compaction of subgrade check and review of backfill conditions and material, 2) Final repair grading and restoration of surrounding ground, 3) Final check of surrounding grounds for settling associated with bore and jack process.

Scenario C: In this scenario the Public Works inspector would inspect the following items at 4 different inspection times typically with 2 different contractors present. The inspections are as follows: 1) Compaction of subgrade check and review of backfill conditions and material (typically this requires multiple inspections in 200 foot lengths), 2) Final repair grading and restoration of surrounding ground, 3) Final check of surrounding grounds for settling associated with bore and jack process and trenching.

Scenario D: In this scenario the Public Works inspector would inspect the following items at 4 different inspection times typically with 2 different contractors present. The inspections are as follows: 1) Compaction of subgrade check and review of backfill conditions and material (typically this requires multiple inspections over 200 foot lengths), 2) Final repair grading and restoration of surrounding ground (typically this requires multiple inspections over 200 foot lengths), 3) Final check of surrounding grounds for settling associated with bore and jack process and trenching.

Please note that inspectors and contractors work under all types of conditions and in all types of weather and coordination between the two is difficult under the best of circumstances. Inspectors and contractors will not always be able to be present at the same time in all cases due to workloads, time constraints, etc.

- 2) ***Justification for reducing number of trips Inspectors make.*** *The City stated that some of the trips inspectors make to a job site are for asphalt temperature testing; however, none of our employees, nor our contractors installing asphalt, have seen City employees measuring the temperature of asphalt. The providers reduced the City's estimate of 4 trips for scenarios A, B, and C, and 20 trips for scenario D, to 1 trip and 3 trips, respectively.*

RESPONSE: It was stated during the December 15, 2015 meeting with the utility providers that some of the tasks associated with this particular inspection include: checking compaction prior to asphalt placement, verifying work quality, and checking the asphalt temperature. The providers state that no one has seen City employees measuring the temperature of asphalt, which they cite as the only justification.

Department standard practice is that an Inspector will be present for all asphalt operations. Thus, the number of inspections should not be adjusted for scenario A. Also, because no asphalt work is associated with scenarios B, C, or D, this proposed justification, cannot be applied to those scenarios.

- 3) ***Justification for reducing number of trips Inspectors make.*** *The City stated that some of the trips inspectors make to a job site are for compaction testing; however, the City requires us to use “flowable fill,” which is basically concrete, for which there is no compaction test. Additionally, City Inspectors have requested and are now receiving pictures of utility crews installing flowable fill to prevent them making a trip to the job site. The providers reduced the City’s estimate of 4 trips for scenarios A, B, and C, and 20 trips for scenario D, to 1 trip and 3 trips, respectively.*

RESPONSE: Compaction testing occurs at different phases for different types of utility installation methods. For cuts within the roadway or sidewalk, the standard practice is to check the backfill materials and compaction of the ground prior to the use of flowable fill. Also, the number of permits received is beginning to exceed staff capacity. In the interest of partnership with the utilities, so that they can continue working and not be held up by the unavailability of an inspector, they are allowed to provide images. However, the use of these images does not prevent staff from the need to perform inspection follow up, which may occur at other times.

Also, compaction testing is performed when a shoulder or grassy area has been disturbed and regraded. Utility installations outside of the roadway do not typically require open cuts or the use of flowable fill.

The number of inspections should not be adjusted for any of the scenarios.

- 4) ***Justification for reducing number of trips Inspectors make.*** *The City stated in a meeting on December 15, 2015, during a discussion of scenario B, that 3 of those 4 trips were to verify restoration. The providers do not believe this number of trips is necessary, and we do not believe it reflects what is actually occurring. On an average project, one trip is sufficient.*

RESPONSE: It was stated during the December 3, 2015 meeting with the utility providers that the final inspection is to verify restoration. Further, based on conversations with several utility representatives on December 15, 2015, during additional review of the methodology and spreadsheets, it was discovered that the number of inspections for scenario B was found to be in error.

The number of inspections for scenario B has already been adjusted in the calculations from 4 inspections to 3 inspections. This change had an insignificant impact on the overall City cost to process this type of permit and did not alter the fee proposal. No other numbers should be adjusted as a result of this proposed justification.

- 5) ***Justification for reducing Inspector travel time.*** *The City’s time estimates include 40 minutes round trip to each job site; however, according to Google Maps, from City Hall to Southpoint Mall, an example of a worst case trip to the outskirts of the Durham City Limits, a round trip is only 34 minutes. Additionally, this does not take*

into consideration synergies gained when Inspectors visit more than one job site per trip. The providers used 20 minutes, which we believe reflects more accurately the average travel time for an Inspector.

RESPONSE: The travel time proposed by the City also includes the time to walk to and from the City vehicle, located on the upper floors of a parking deck almost 3 blocks away from City Hall, and to perform pre- and post-trip vehicle inspections. This time is estimated to be approximately 15 minutes total for each round trip. Adding the utility provider's number of 34 minutes per round trip, in combination with the walk time, required vehicle inspections, and time to exit the upper level of the parking deck, for a total of 54 minutes, the Department's number of 40 minutes total is actually more favorable to the utilities. While it is not always possible to schedule the inspections to do multiple inspections per trip, the difference between 40 minutes and 54 minutes also accounts for any efficiencies or synergies that could be gained by visiting multiple sites per trip.

The length of travel time should not be adjusted.

- 6) ***Justification for reducing Inspection Time per Inspection.*** *The City estimates between 10 and 50 minutes per inspection. Our experience is an inspector spends on average 10 minutes per inspection on the job site. The providers changed the estimates to better reflect this experience.*

RESPONSE: The time to perform inspections proposed by the City includes information from the inspectors as they have processed these types of permits. Times vary for the types of inspections provided (it takes longer to inspect paving work than it does to look at redressing work or checking compaction areas). These items are also broken down into different time periods in the examples provided. These times have been broken down inside the cell of the spreadsheet. It should be noted that in various types of inspections the contractor is not always present with the inspector.

We believe these statements by the utility representatives are inconclusive and that these assumptions should not be applied to City performed calculations.

- 7) ***Justification for reducing permitting time.*** *The contract between the City and Kimley-Horn states that permitting should take 4 hours per mile of fiber. The providers reduced the City's time estimates to better reflect this estimate, with a minimum time of 15 minutes.*

RESPONSE: The assumption is that the consultant contract should only be applied to the work performed by the consultant. The utilities have not agreed to submit their permits in electronic format so each permit processed by Department staff must be redrawn in a GIS layer. This is the reason why it takes City staff longer to process the permits. The GIS information is critical to minimizing damage by future projects or utility installations by others, and the information is beneficial to the city and to others wishing to work within the rights-of-way.

These assumptions should not be applied to City performed calculations.

- 8) ***Justification for reducing Management time for Scenario D.*** *Four and one-half hours for every one mile permit seems excessive. The providers reduced this to one and one-half hours to reflect what we believe is a more accurate average amount of time per one mile permit.*

RESPONSE: The assumptions used to develop the time for management standard responsibilities include assigning work, working with customers, resolving standard issues associated with construction as well as all paperwork, monitoring, and record keeping associated with the private utility programs. The tasks also include database management and system improvements.

Additionally, this is not a per mile number but rather a per permit number, as each permit type typically requires a baseline of management responsibilities regardless of length.

We believe these statements are inconclusive and this proposed assumption should not be applied. This proposed change has no supporting documentation.

- 9) ***The providers made no changes to administrative time. However, 5.67 hours for billing, front desk customer service, and taking phone calls and complaints related to these projects, seems excessive for every project.***

RESPONSE: Administrative time is broken down into each of the scenarios by the City. The time stated of 5.67 hours is for a mile long permit inside a subdivision which impacts a property owner on average every 60 to 75 feet over that length, each with driveways, landscaping and City water and sewer services. The City believes its estimate to be reasonable to handle billing, paperwork, inspection call ins, as well as standard customer call ins in these situations.

The City considers the administrative time shown to be reasonable and no revisions need to be made.

- 10) ***Scenarios E & F have been changed to reflect the amount of inspections and time per inspections as mentioned above.***

RESPONSE: Assumptions for City staff should not be applied to consultant work, nor should the consultant proposal be used to develop staff assumptions. The two processes, while similar, function differently based on a different type of permit submittal process and different permit needs. The utility providers for the longer permits have agreed to different submission requirements, which help with permit review times. However, with consideration given to anecdotal analysis of the documented trends to date, the permits greater than one mile generally require more inspection and a higher level of management, problem solving, and community engagement on behalf of the City to resolve constructability issues and citizen complaints.

The proposed assumptions should not be applied to consultant performed work.

11) **Scenarios E & F** have also been changed and the numbers have been input into the City of Durham's spreadsheet to show the cost of permitting with City Staff vs. the Kimley-Horn contract.

RESPONSE: Similarly to item 10, assumptions for the consultant proposal should not be used to develop City staff estimates for item 11. The two processes, while similar, function with very different costs based on a different type of permit submittal process and different permit needs. Large scale fiber contracts are required to provide a higher level of information and must produce that information in specific GIS based file formats in order to be permitted. These costs are absorbed completely and voluntarily by the companies submitting these types of permits (Scenarios E & F).

In scenarios A, B, C, and D, the City Staff perform these types of GIS CAD drawings and linking of permits for the customer which increases the time associated with processing each permit. This level of documentation is necessary when customer complaints are registered so that the complaint can be keyed quickly and efficiently to a location and vendor performing work. This greatly enhances the City's ability to effectively respond to complaints and obtain resolutions. This information also serves as a benefit to other utilities who do work in the public rights-of-way.

This proposed justification is invalid and these assumptions should not be applied.

12) **City Council Question** What is the estimated delta between monthly permit revenues and internal and external monthly costs please provide the analysis.

Internal Delta:

<u>PRIVATE UTILITY PROGRAM</u>		
<u>Core/Internal</u>	<u>2015</u>	<u>2014</u>
Staff Costs	\$362,794	\$350,526
Actual Revenues	128,910	106,380
Total Annual Unrecovered Cost	(\$233,884)	(\$244,146)
Total % Unrecovered Cost	-57.50%	-69.65%
Unrecovered Cost Per Month	(\$19,490)	(\$20,346)
% of Unrecovered Cost Per Month	-4.79%	-5.80%

External Delta:

<u>Contract (Based on revenue collected and permits submitted as of 12/31/15)</u>	
Contract cost @404.5 miles submitted (based on 100% recovery)	(\$920,304)
Revenue Collected from AT&T and Google to-date @404.5 miles	204,060
Net Loss (Google & AT&T) @ 404.5 Miles	(\$716,244)
% Loss projected for 2016	-77.83%
% Loss monthly projected for 2016	-6.49%
Number of Miles of Fiber Build (ATT and Google)	1,589
% of miles permitted to date	25.5%
Expected cost to City for Consultant Contract	\$3,615,236
Projected total loss of revenue	(\$2,813,626)
Projected loss of revenue per month assuming remaining miles are permitted in 2016	(\$234,469)

Staff remains confident in the methodology, assumptions and variables used to develop the Revised Utility Fee Proposal. No changes are recommended to the City's proposed fee changes based upon the justifications outlined by the utility representatives in their Executive Summary. The variables used by staff are based on the amount of time necessary to process routine permit types, and does not account for any outliers or atypical work. Based on feedback from the utility representatives, gained from two separate meetings in December 2015, some adjustments have already been made to the calculations.

Great care has been taken by staff to remain transparent and fair with the development of this fee proposal. When necessary to use an average number, staff was conscious not to err to the favor of increasing the fee, as is evident based on the utility provider proposals in items 1 and 5 above.

The City's proposal is developed on the cost to process a specific representative sample of permit types. This methodology is very granular and does not seek to recover costs that are not directly associated with the performance of specific tasks associated with the processing of these permits.

Attached below are the estimated costs for each of the companies that typically generate permits in the internal or “core” program.

**CITY OF DURHAM
PRIVATE UTILITY PRICING ANALYSIS
BASED ON FULL YEAR 2015 ACTUAL**

Company Name	LF	Current Fee	Proposed (\$300/\$0.16)	Proposed vs. Current	
				\$	%
AT&T NC Drop	105,776	\$20,580	\$43,924	\$23,344	113.4%
CenturyLINK	18,415	2,300	3,846	1,546	67.2%
Crown Castle Inc	616	220	999	779	353.9%
Duke Energy	50,257	9,020	21,241	12,221	135.5%
Duke University	190	150	930	780	520.3%
EarthLink BTI Communications	200	50	332	282	564.0%
Frontier Communications	61,280	8,870	20,305	11,435	128.9%
Level 3 Communications, Inc.	30,928	4,390	10,048	5,658	128.9%
MCNC	15,325	1,500	2,752	1,252	83.5%
PNI for TWC	200	50	332	282	564.0%
PSNC	100,792	46,260	173,327	127,067	274.7%
PSNC CH	20	50	303	253	506.4%
PSNC Energy	11,208	8,420	42,293	33,873	402.3%
Time Warner Cable	27,138	5,040	10,942	5,902	117.1%
TWC - A&A Trenching Inc.	812	600	3,730	3,130	521.7%
TWC / Knight Enterprises	2,169	760	3,647	2,887	379.9%
TWC / NC Communications	7,721	2,400	11,435	9,035	376.5%
TWC / TRC Construction	83,978	17,860	54,536	36,676	205.4%
TWC/Graycliff Ent.	150	50	324	274	548.0%
TWC-Kennedy Network Services	1,862	340	1,498	1,158	340.6%
Grand Total	519,037	\$128,910	\$406,746	\$277,836	215.5%