



**MOORE COUNTY BOARD OF COMMISSIONERS
SPECIAL MEETING
THURSDAY, JUNE 23, 2022, 4:00 P.M.**

The Moore County Board of Commissioners convened for a Special Meeting at 4:00pm, Thursday, June 23, 2022, in the Commissioners' Meeting Room of the Historic Courthouse, 1 Courthouse Sq., Carthage, NC.

Commissioners Present:

Chairman Frank Quis, Vice Chair Catherine Graham, Jerry Daeke, Otis Ritter, Nick Picerno

Chairman Quis called the meeting to order at 4:10pm. The purpose of the meeting was for adoption of the FY23 budget ordinance, approval of the Classification and Pay Plan, approval of the State Salary Reporting Form, and to continue a quasi-judicial hearing regarding a request by Tri South Builders, Inc. for a Special Use Permit for a Major Conservation Subdivision Preliminary Plat approval for 53 lots on 73.77 acres, ParID 00034394, located on Union Church Road, Carthage, owned by James and Carolyn Ring, per Deed Book 2368, Page 240. The hearing was originally opened on May 16, 2022, and was continued to June 2, 2022, and then to this day, June 23, 2022.

ITEMS OF BUSINESS:

FY23 Budget Ordinance Adoption

Chairman Quis read a statement as follows:

Today we are where we are with the finances of Moore County Government because of good fortune and conservative budgeting. Our local economy performed far better than expected during the pandemic. Sales tax and property tax revenue grew with new residents and visitors coming to Moore County. While we control our budget, we can't count on a healthy economy going forward. Conservative budgeting has helped produce a credit rating just one notch from the very best AAA rating resulting in lower borrowing costs. Our fund balances are strong and help prepare us to meet future capital needs. But these "savings" don't buy what they did just a couple of years ago. What we do know is that inflation is at a level we haven't seen in 40 years and interest rates have risen and will continue to rise. Now is the time to use a "pay as you go strategy," to the extent possible, to fund the capital needs of the Moore Co. Schools and the County. For example, a new elementary school in Carthage has been proposed and could be funded without borrowing. If a future bond issue is necessary, this strategy will only bolster the possibility of achieving the highest AAA rating and thus further reduce future borrowing costs. Our manager, working with the budget team, has produced a very sound budget for the next fiscal year. A year from now we will have completed the revaluation process. We will better

know the state of our local economy, property values, and sales tax receipts. We will better understand the toll that inflation and higher interest rates have taken. With this information, continuing our conservative fiscal policies, Moore County will remain financially strong.

Commissioner Graham also read a statement as follows, noting while reading her statement Moore County's rapid development and all the services required by its citizens, which would increase in cost:

I have served five years on the Budget Team for the Moore County budget. The current Budget Team for establishing our County budget was established before my tenure but for the past almost eight years that I have served as a commissioner, our Board has adhered to that budget formula process which consists of the County Manager, department heads, and two commissioners appointed by the Board of Commissioners to serve on the Budget Team. After several meetings with the County Manager, department heads, separate one-on-one discussions with other commissioners, and follow up budget work sessions, Moore County citizens have benefited from a sound, conservative budget. As a result of years of conservative budgeting, we now find Moore County to be on sound financial ground with adequate services to our citizens and increased funding to our schools. However, we also face continued challenges for capital school needs and important school safety capital needs. I have for many years of service agreed with what I sometimes refer to as the "Nick Picerno pay-as-you-go plan," for school construction. With our current available funds and a continued successful economy, that is now a possibility for some school construction. However, we have enjoyed a robust sales tax revenue for the past two years and with inflation, interest rates increasing, and a looming recession, that has the potential to decrease. I also strongly support the plan the Moore County Schools may present for funding of additional School Resource Officers on an emergency disbursement pending federal or state funding. With these comments, I move we enter into discussion of a possible one cent tax reduction for the upcoming budget year.

Commissioner Graham made a motion, seconded by Chairman Quis, to approve a one cent tax reduction. Commissioner Ritter offered comments and said Mr. Vest's recommended budget made a lot of sense but did not give money back to the people. He recommended a 2.5 cent rate reduction. Commissioner Picerno respectfully asked for Commissioners Graham and Quis to withdraw their motion and second and do the right thing for the voters. Commissioner Graham restated that her motion was to pass a reduction in the tax revenue rate of one cent. County Attorney Misty Leland offered clarification of the motion which would be to adopt the budget ordinance with a .50 cent tax rate. Commissioner Graham and Chairman Quis stood by their motion and second and upon vote the motion failed 2-3 (*Graham, Quis – for; Picerno, Ritter, Daeke – opposed*). Upon motion made by Commissioner Picerno, seconded by Commissioner Daeke, the Board voted 3-2 (*Picerno, Daeke, Ritter – for; Quis, Graham – opposed*) to pass the proposed budget ordinance that was presented to the Board by County Manager Wayne Vest with the following amendments: cut the tax rate to 48.5 cents per \$100 valuation, use Article 46 to supplement that revenue by \$2,939,412, set the Sandhills Community College expense at \$5,015,653, set the Schools' current expense at \$34.5 million, and the Schools' capital outlay at \$800,000. The budget ordinance is hereby incorporated as a part of these minutes by attachment as Appendix A.

Mr. Vest offered comment regarding implication by Commissioner Picerno that the taxpayers had been misled. He reviewed that there was a strategy for the quarter cent sales tax and Commissioner Picerno's comments made him feel his integrity was called in to question. Commissioner Picerno offered apology and said he would never call Mr. Vest's integrity into question. He offered clarification and indicated his comments were not meant to be taken the way they were. Commissioner Graham commented that the commissioners all had their own understanding of what was best for the citizens.

Position Classification and Pay Plan

Human Resources Director Dawn Gilbert presented the classification and pay plan for the Board's consideration. Upon motion made by Commissioner Picerno, seconded by Commissioner Graham, the Board voted 5-0 to adopt the Position Classification and Pay Plan for Moore County, effective July 1, 2022. The plan is hereby incorporated as a part of these minutes by attachment as Appendix B.

State Salary Reporting Form

Human Resources Director Dawn Gilbert asked for the Board's approval of the Salary Plan Reporting Form from the Office of State Human Resources. Upon motion made by Commissioner Graham, seconded by Commissioner Ritter, the Board voted 5-0 to approve the Office of State Human Resources Salary Report Form for FY 22-23. The form is hereby incorporated as a part of these minutes by attachment as Appendix C.

Chairman Quis called for a recess of the meeting until 5:00pm.

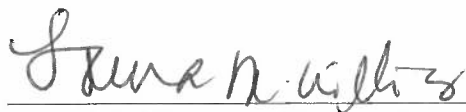
Quasi-Judicial Hearing/Planning –Special Use Permit Request: Major Conservation Subdivision Preliminary Plat Approval (Union Church Rd)

Upon reconvening the meeting at 5:00pm, Chairman Quis gave the floor to County Attorney Misty Leland. Ms. Leland reviewed the proceedings and witnesses were sworn by the Clerk. County Attorney Misty Leland restated the request and then witnesses were sworn in by the Clerk. The hearing proceeded over approximately four hours and it was determined that it should be continued. Upon motion made by Commissioner Graham, seconded by Commissioner Picerno, the Board voted 5-0 to continue the hearing to July 18, 2022, at 4:00pm.

A transcript and documents for the record are hereby incorporated as a part of these minutes by attachment as Appendix D.

Adjournment

There being no further business, upon motion made by Commissioner Graham, seconded by Commissioner Picerno, the Board voted 5-0 to adjourn the June 23, 2022, Special Meeting of the Moore County Board of Commissioners at 9:10pm.



Laura M. Williams, Clerk to the Board



~~Francis R. Quis, Jr., Chair~~

Catherine Graham
Vice chair



Appendix A

06/23/2022

Special Meeting



COUNTY OF MOORE BUDGET ORDINANCE FY 2022/2023

Final

BUDGET ORDINANCE

AN ORDINANCE ADOPTING THE ANNUAL BUDGET AND SETTING THE TAX RATE FOR THE COUNTY OF MOORE FOR FISCAL YEAR 2022-2023.

WHEREAS Article 3 of Chapter 159 of the North Carolina General Statutes (NCGS) requires local governments in North Carolina to adopt ordinances establishing an annual budget, in accordance with procedures established in said Article 3, and

WHEREAS the Moore County Board of Commissioners, following a public hearing as required by law has considered the proposed annual budget for Moore County for the 2022-2023 Fiscal Year,

NOW, THEREFORE BE IT ORDAINED BY THE COUNTY OF MOORE BOARD OF COMMISSIONERS THAT:

SECTION 1 REVENUES

The following revenues are hereby appropriated for operating the County government for the Fiscal Year beginning July 1, 2022, and ending June 30, 2023:

GENERAL FUND BUDGET SUMMARY

Revenues:

Property Taxes	\$71,362,884
Rental Vehicle Tax	\$100,000
Sales Tax (Art 39, 40 and 42)	\$22,000,000
Sales Tax (Article 46)	\$5,100,000
Medicaid Hold Harmless	\$3,349,587
ABC Revenues/Video Franchise Tax	\$693,000
Interest income	\$150,000
Transfer In from Bond Interest	\$150,000
Transfer in from Fund 251 CR for Debt Service MCS	\$2,000,000
Transfer In from Fund 254 SCC Debt Service	\$157,992
Transfer in from Fund 256 MCS Debt Service	\$1,221,397
Transfer in from Fund 255 Article 46 Capital Projects	\$2,939,412
Transfer in from Fund 253 SCC 6% Debt Service	\$182,089
Transfer In from Court Fund 432 for Debt Service	\$1,110,194
Reappropriate Fund Balance-CRF Funding	\$496,095
Departmental Revenues and Fees	\$14,049,415
Child Support Enforcement	\$847,950
Social Services	\$6,317,605
Public Health	\$786,599
Other Grants	\$1,047,406
Aging/Senior Center	\$906,000
Appropriated Restricted Fund Balance-Tax Reval	<u>\$166,274</u>

TOTAL REVENUES

\$135,133,899

SECTION 2 EXPENDITURES

The following expenditures are appropriated to the General Fund and other funds as described in sections 6 through 18 for the Fiscal Year beginning July 1, 2022, and ending June 30, 2023:

Expenditures

General Government

Governing Body	\$233,360
Administration	\$679,369
Human Resources	\$400,032
Finance	\$749,869
County Attorney	\$951,743
Tax	\$2,923,364
Board of Elections	\$944,822
Register of Deeds	\$1,896,430
Information Technology/GIS	\$2,764,005
Property Management	\$6,144,323
TOTAL	\$17,687,317

Public Safety

Sheriff	\$8,648,123
Sheriff-Detention Center	\$6,330,798
Sheriff-Animal Center	\$915,458
Day Reporting Center	\$119,486
Youth Services/JCPC	\$103,536
Emergency Management/E-911/Fire Marshal	\$1,736,096
TOTAL	\$17,853,497

Environmental and Community Development

Solid Waste	\$6,953,775
Planning and Community Development	\$482,304
Planning Code Enforcement	\$971,884
Cooperative Extension Service	\$304,699
Soil and Water Conservation Service	\$180,348
TOTAL	\$8,893,010

Human Services

Child Support Enforcement	\$837,972
Veterans Services	\$234,265
Aging/Senior Center	\$1,652,310
Social Services	\$10,586,455
Public Health	\$4,796,767
TOTAL	\$18,107,769

Cultural Development

Library	\$688,234
Parks and Recreation	<u>\$789,024</u>
TOTAL	\$1,477,258

Education

Public School Current Expense	\$34,500,000
Public School Capital	\$800,000
Public School Digital Equipment	\$0
Public Schools Debt Service-Principal	\$11,098,925
Public School Debt Service-Interest	\$5,218,600
Community College Current Expense	\$5,015,653
Community College Debt Service-Principal	\$2,032,076
Community College Debt Service-Interest	<u>\$788,540</u>
TOTAL	\$59,453,794

Non-Departmental	<u>\$4,441,325</u>
TOTAL	\$4,441,325

Transfers

Transfer to Fund 200 Emergency Services	\$500,000
Transfer to EMS Fund 200 CRF Balance	\$496,095
Transfer to CR for Solid Waste New Fund	\$400,000
Transfer to CR Fund 250 for Governmental Projects	<u>\$0</u>
TOTAL	\$1,396,095

Debt Service – County P&I (excluding Education)	<u>\$5,823,834</u>
TOTAL	\$5,823,834

<u>TOTAL EXPENDITURES</u>	<u>\$135,133,899</u>
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SECTION 3 AD VALOREM TAX LEVY

A. There is hereby levied for Fiscal Year 2022-2023, an ad valorem tax on all property having a situs in Moore County as listed for taxes as of January 1, 2022, at a rate of forty-eight and one half (\$.485) cents per \$100 dollars of assessed value of such property, pursuant to and in accordance with the Machinery Act, Chapter 105 of the NC General Statutes, and other applicable laws.

B. There is hereby levied for Fiscal Year 2022-2023, a unified fire tax rate on all property having a situs in the Moore County Fire Protection Service District at a rate of ten and a half (\$.105) cents per \$100 dollars of assessed value of such property in Moore County which is attached to and made a part of this ordinance.

C. There is hereby levied for Fiscal Year 2022-2023, an Emergency Medical Service Advanced Life Support Tax on all property within such emergency service district, as listed for property taxes as of January 1, 2022, at a rate of four (\$.04) cents per \$100 dollars of assessed value of such property, pursuant to and in accordance with the Machinery Act found in Chapter 105 of the North Carolina General Statutes and other applicable laws. Such tax can be used solely for the purpose of providing Emergency Medical Services.

D. Tax revaluation was last calculated during the FY2020 budget which reflected the results of the 2019 County-wide revaluation. As required by North Carolina General Statutes, the Revenue Neutral Tax Rate has been calculated and determined to be \$.4423 cents per \$100 dollars of assessed valuation.

SECTION 4 LEVY OF OTHER TAXES

There is hereby levied, all County Rental Vehicle Taxes as authorized by the NCGS, and other such taxes, as provided in the ordinances and resolutions duly adopted by the Board of Commissioners.

SECTION 5 AUTHORIZED TRANSFER OF APPROPRIATIONS, CONTRACTING LIMITATION, AND OTHER MATTERS:

A. AUTHORIZED TRANSFER OF APPROPRIATIONS

The Budget is adopted at the Fund level and the County Manager or Assistant County Manager, or his/her designee is hereby authorized to transfer appropriations between all County Funds under the conditions listed below:

1. The County Manager, Assistant County Manager, or his/her designee may transfer amounts by budget transfer between departments within a fund without limitation, but they shall be reported to the Board of Commissioners by the Finance Office.
2. The County Manager, Assistant County Manager, or his/her designee may transfer amounts by budget amendment between funds and these budget amendments must be reported and approved by the Board of Commissioners in an itemized report.
3. The Finance Director or his/her designee can approve budget transfers up to and including \$10,000 within the same fund.

B. CONTRACTING LIMITATION

1. Any appropriations for land and new buildings included in this ordinance may be obligated only after approval of the Board of Commissioners.
2. The County Manager, Assistant County Manager, or his/her designee is authorized to obligate through the necessary agreements, contracts, grant agreements, purchase orders or other such documents, funds included in this budget ordinance up to and including \$100,000 for the following purposes:

- a. Initiate grant agreements to public and non-profit agencies,
 - b. Leases of routine business equipment,
 - c. Financing Agreements for purchases not including land or buildings:
 - d. Consultant, professional, and/or maintenance service agreements,
 - e. Purchase of apparatus, supplies, construction, repair work, and materials including where formal bids are required by state law or county policies as long as the Board of Commissioners makes the bid award as required by law;
 - f. Agreements for the acceptance of State and Federal grant funds.
3. The County Manager, Assistant County Manager, or his/her designee is authorized to obligate funds through the necessary agreements, contracts, grant agreements, purchase orders or other such documents, included in this budget ordinance at any amount so long as the Board of Commissioners approves/authorizes by majority vote the County Manager, Assistant County Manager, or his/her designee signing said document.
 4. The Finance Director, Assistant Finance Director, or his/her designees is authorized to accept and obligate funds through grant agreements included in this budget ordinance at any amount so long as the Board of Commissioners approves/authorizes by majority vote the Finance Director, Assistant Finance Director, or his/her designee signing said document.
 5. During a State of Emergency situation, the County Manager, Assistant County Manager, or his/her designee is authorized to obligate funds through the necessary agreements, contracts, grant agreements, purchase orders, listed in item 2e and 2f above, or other such documents, included in this budget ordinance at any amount as designated in the State of Emergency Declaration.
 6. The Health Director is hereby authorized to execute necessary agreements within the Health Operational Fund up to and including \$50,000 in accordance with State law and County policies. The Health Director is to notify the County Manager and Assistant County Manager or his/her designee and provide a copy of any such agreements authorized in this paragraph no later than the next workday. Any amount above \$50,000 must have the approval of the Board of Commissioners unless the Board of Commissioners authorizes the Health Director to approve the necessary agreements.
 7. Department Directors are hereby authorized to execute contracts up to \$30,000 for their respective departments only.
 8. For federal procurement, in accordance with 2 C.F.R. § 200.320(a)(1)(iv) and the applicable provisions of North Carolina law, the County of Moore hereby self-certifies the following micro-purchase thresholds, each of which is a "higher threshold consistent with State law" under 2 C.F.R. § 200.320(a)(1)(iv)(C):
 - a. \$30,000, for the purchase of "apparatus, supplies, materials, or equipment"; and
 - b. \$30,000, for the purchase of "construction or repair work"; and

c. 50,000, for the purchase of services not subject to competitive bidding under North Carolina law; and

d. \$50,000, for the purchase of services subject to the qualifications-based selection process in the Mini-Brooks Act; provided that such threshold shall apply to a contract only if the Unit has exercised an exemption to the Mini-Brooks Act, in writing, for a particular project pursuant to G.S. 143-64.32. If the exemption is not authorized, the micro-purchase threshold shall be \$10,000.00.

C. OTHER MATTERS

1. All fees, commissions, and sums paid to or collected by any County official, officer, or agent for any service performed by said official, officer or agent in his/her official capacity shall inure to the benefit of the County and are considered County funds.
2. A Designee of the Finance Director is hereby designated as a Deputy Finance Director for purposes of pre-audit functions pursuant to Chapter 159 of the NC General Statutes.
3. In accordance with Article V of the North Carolina Constitution, the County Manager and Assistant County Manager shall require the following prior to releasing public funds to other governmental agencies or private groups:
 - a. The activity to be funded is for a public purpose.
 - b. The activity to be funded is one the County is authorized to undertake or for which the County has specific statutory authorization to fund.
 - c. Through appropriate means, the County maintains some degree of control over the funds provided through this ordinance to a governmental agency or private group.
4. The County Manager, Assistant County Manager, or his/her designee is authorized to disburse the Moore County Fire Protection Service District tax revenues up to and including the amount approved in this ordinance by the Board of Commissioners. The balance, in this fund, if any, will be held by the County as an apparatus and building reserve for future purchases for the Rural Fire Protection Service Districts upon approval of the Fire Commission.

SECTION 6 ENTERPRISE FUNDS

The following funds are designated as Enterprise Funds and are to be accounted for as such:

Water Pollution Control Plant Fund 600	\$6,829,657
Public Utilities Fund 610	\$15,001,583

Note: The East Moore Water District Fund 620 will be accounted for in a separate Budget Ordinance approved by the East Moore Water District Board.

SECTION 7 INTERNAL SERVICE FUNDS

The following funds are designated as Internal Service Funds, and will be accounted for as such:

Self-Insurance/Risk Management Fund 810	\$10,400,236
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SECTION 8 SPECIAL REVENUE FUNDS

Annual Special Revenue Funds:

A. EMERGENCY MEDICAL SERVICES / ALS FUND

Emergency Medical Services Fund 200	\$11,175,524
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B. EMERGENCY TELEPHONE SYSTEM FUND

Emergency Telephone System Fund 210	\$389,189
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C. TRANSPORTATION SERVICES FUND

Transportation Services Fund 230	\$1,266,634
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D. SOIL & WATER CONSERVATION DISTRICT FUND

Soil & Water Conservation District Fund 220	\$19,891
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E. Fire Protection Service District - The County accounts for the collection and distribution of property taxes on the assessed valuation of taxable property, as listed for taxes as of January 1, 2022, for special districts as listed attached hereto and made a part of this ordinance. The tax rate and appropriations shown on the Fire Protection Service District have been determined by the Fire Commission in conjunction with the various fire department representatives, and the County as necessary for the operation of their fire departments for FY 2023.

Fire Protection Service District Fund 215	\$5,903,211
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F. SOCIAL SERVICES CHARITABLE FUND

The Social Services Charitable Fund accounts for funds donated to the department for specific needs.

Social Services Charitable Fund 280	\$15,000
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G. SOCIAL SERVICES REPRESENTATIVE PAYEE

The Social Services Representative Payee Fund accounts for funds belonging to individuals who are unable to maintain those funds themselves.

Social Services Representative Payee Fund 281	\$420,000
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H. OPIOID SPECIAL REVENUE FUND

Opioid Special Revenue Fund 290	\$6,258,160
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I. MULTI-YEAR SPECIAL REVENUE GRANTS FUND

1. Multi –Year Grant Fund 240

J. MULTI-YEAR CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS

1. To track Coronavirus State and Local Fiscal Recovery Funds under the American Rescue Plan Act of 2021. These funds expire December 31, 2026.

- Multi-Year Coronavirus State and Local Fiscal Recovery Fund (CSLFRF) 241 \$19,594,757

SECTION 9 COMPONENT UNIT FUNDS

The County maintains funds for the Convention and Visitors Bureau, and Moore County Airport Authority, as component units, and shall incorporate the budgets as adopted by the respective boards into the County Accounting records.

Convention and Visitors Bureau Fund 260	\$2,408,150
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Airport Authority Fund 640	\$6,704,705
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SECTION 10 TRUST and CUSTODIAL FUNDS

The County maintains various trust funds. Trust and Custodial Funds are identified as:

A. Sheriff Department Trust Funds-This department must maintain certain funds for daily operation. The following funds are authorized:

1. Sheriff's Department-Civil Fund-accounts for funds used in the legal aspects of docketing and collection of judgments.

2. Sheriff's Department Inmate Trust Fund-accounts for commissary and inmate services.

3. Special Tax District Municipal Funds-account for the collection and disbursement for special taxing districts and municipalities.

NCGS require individuals who sign checks in Trust and Custodial Funds to be designated Special Deputy Finance Officer for this purpose only. On a monthly basis, each Special Deputy Finance Officer listed below will provide the County Finance Officer with a copy of the reconciled bank statement and a statement of receipts and disbursements. The following individuals are hereby authorized:

Ronnie Fields – Sheriff
Richard Maness – Chief Deputy
Andy Conway - Major
James Furr - Captain
William Flint - Captain
Lydia Craven – Administrative Assistant II
Vonda Purvis - Administrative Assistant II

SECTION 11A CAPITAL PROJECTS BUDGETS

The County uses Capital Project Budgets and has incorporated these budgets into the financial and accounting systems. Capital Project Funds are used to account for capital projects that span fiscal years and/or may take more than one fiscal year to complete. The following categories of projects are accounted for in such manner:

MCPU ARP Capital Project (Linden Rd Wells)– Fund 412
WPCP ARP Capital Project – Fund 602
Moore County Capital Projects – Fund 437
Vass Phase II Sewer System Improvements Capital Project – Fund 411

Emergency Communication Narrow Banding Project – Fund 431
New Courthouse Building Capital Project – Fund 432
Parks and Recreation Capital Project – Fund 433

Solid Waste Improvement Capital Project – Fund 435

2013 Water Sources Project – Fund 447
Airport County Capital Projects – Fund 450
School and College Capital Projects – Fund 470, 480, 481, 482, 483 and 490

SECTION 11B CAPITAL RESERVE FUNDS

The County will maintain seven (8) Capital Reserve Funds as multi-year Capital Project Funds for the purpose of paying for future non-enterprise fund governmental projects, future non-enterprise fund debt service, future enterprise fund capital projects, future school and college projects as listed below:

1. Capital Reserve for Governmental Projects (Fund 250)
2. Capital Reserve for Debt Service – Consolidated with General Fund (Fund 251)
3. Capital Reserve for Enterprise Projects – Consists of 3 separate capital reserve enterprise fund transfers from Water Pollution Control Plant, Public Utilities and

East Moore Water Districts funds into this Capital Reserve for Enterprise Projects. (Fund 252)

4. Capital Reserve for Capital Projects for Sandhills Community College (Fund 253)
5. Capital Reserve for Debt Service for Sandhills Community College (Fund 254)
6. Capital Reserve for Capital Construction Projects for Moore County Schools (Fund 255)
7. Capital Reserve for Debt Service for Moore County Schools (Fund 256)
8. Capital Reserve for Solid Waste (Fund 257)

SECTION 12 TEN YEAR CAPITAL PROJECT PLAN

The County Manager has prepared a ten-year capital forecast. It is included as a part of the budget document for planning purposes only. The ten-year capital plan does not authorize the expenditure of funds.

SECTION 13 MOORE COUNTY PUBLIC SCHOOLS

The Moore County School Board may not adjust the County appropriation in any manner without prior approval of the Board of Commissioners in accordance with NCGS 159-13.

SECTION 14 SANDHILLS COMMUNITY COLLEGE

The County has provided funding to the Community College for Current Expense and Plant Fund expenditures in accordance with NCGS 115D-55. The Community College may not adjust County appropriations in any manner without the prior approval of the Board of Commissioners.

SECTION 15 DUAL SIGNATURES ON CHECKS AND ELECTRONIC AND FACSIMILE SIGNATURES

The County will use dual signatures on checks and drafts made on County funds in accordance with NCGS 159-25(b). The signatures of the County Manager or Assistant County Manager and the Finance Director or the Deputy or Assistant Finance Director, following proof of warrant, are the authorized signatures of Moore County.

Pursuant to NCGS 159-28.1, the County authorizes the use of electronic signatures, facsimile signature machines, signature stamps, or similar devices in signing checks and drafts and in signing the pre-audit certificate on contracts or purchase orders. The Finance Officer or his/her designee will be responsible for the custody of their electronic signature, facsimile machines, stamps, plates, and other devices.

Pursuant to NCGS 66-58.4, the County is authorized to use and accept electronic signatures in the execution of contracts. Any individual authorized to execute contracts on behalf of the County is authorized to do so using an electronic signature. All electronic signatures must be in compliance with NCGS 66-58.5.

SECTION 16 FINANCIAL REPORTING

The Finance Director, Assistant Finance Director or designee, will submit a monthly financial report for the County Manager, Assistant County Manager and the Board of Commissioners and, from time to time, other reports as required by the County Manager, Assistant County Manager and/or the Board of Commissioners.

SECTION 17 RESERVES FOR ENCUMBRANCES

The reserves for encumbrances on June 30, 2022; and carry over appropriations representing prior commitments as of that date shall be re-appropriated pursuant to NCGS 159-13 to the departments within the various funds unless excluded by the County Manager or Assistant County Manager. Expenditures against these encumbrances may be made during fiscal year 2022-2023 as the previous commitments are satisfied.

SECTION 18 FEE SCHEDULE

The Annual Fee Schedule, which is attached to this ordinance, sets all fees authorized to be charged by the County for County goods, services or other functions provided by County personnel, equipment, including consultation and other such activities; and, is hereby approved.

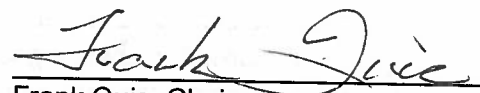
SECTION 19 INVALID OR UNCONSTITUTIONAL PORTIONS OF THIS ORDINANCE

Should any section, paragraph, sentence, clause, or phrase of this ordinance be declared unconstitutional or invalid for any reason, the remainder of said ordinance shall not be affected thereby.

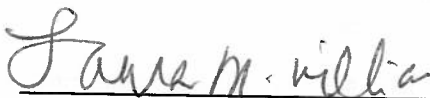
SECTION 20 EFFECTIVE DATE

That this ordinance shall be in full force and effect on July 1, 2022.

Adopted the 23 day of June 2022.



Frank Quis, Chairman
Moore County Board of Commissioners



Laura M. Williams, Clerk to the Board



Rural Fire Protection Service Tax Fund 215
FY2022-2023 - Unified Tax Rate @.105/\$100 Value

Total 2022-2023 Tax Base
\$5,207,383,204

Property Tax Revenue generated by tax base

FY22/23 Budget
@98.5%-Discounts
\$5,381,211

Revenue Generated by .105 Rate \$5,381,211
Appropriated Fund Balance from FY22 (Audits) \$22,000
Appropriated Fund Balance \$0
Fire Districts - ALS - Rescue - 100% \$500,000
FY2022-2023 Total Budget Fund 215 **\$5,903,211**

<u>Rural Fire Service District</u>	<u>Total Manager Recommendation</u> <u>@ 98.5%</u>	<u>Subtotal Distribution</u>	<u>Subtotal Reserve</u>	<u>Operations Distribution</u>	<u>Capital Distribution- Allowance</u>	<u>Apparatus Reserve</u> <u>21555500 56281</u>	<u>Building Reserve</u> <u>21555500 56282</u>
Aberdeen	\$253,472	\$253,472	\$0	\$224,520	\$28,952	\$0	\$0
Carthage	\$393,729	\$356,018	\$37,711	\$293,978	\$62,040	\$27,371	\$10,340
Crains Creek	\$313,058	\$297,380	\$15,678	\$234,162	\$63,218	\$15,357	\$321
Cypress Pointe	\$983,269	\$741,801	\$241,468	\$734,286	\$7,515	\$190,824	\$50,644
Eagle Springs	\$324,728	\$307,786	\$16,942	\$239,191	\$68,595	\$0	\$16,942
Eastwood	\$265,070	\$210,335	\$54,735	\$175,734	\$34,601	\$54,735	\$0
High Falls	\$300,408	\$240,732	\$59,676	\$217,298	\$23,434	\$42,821	\$16,855
Pinebluff	\$355,521	\$355,521	\$0	\$292,372	\$63,149	\$0	\$0
Pinehurst	\$299,863	\$274,314	\$25,549	\$274,314	\$0	\$21,258	\$4,291
Robbins	\$384,600	\$342,747	\$41,853	\$289,548	\$53,199	\$41,853	\$0
Seven Lakes	\$375,817	\$275,914	\$99,903	\$275,914	\$0	\$81,563	\$18,340
Southern Pines	\$509,688	\$468,150	\$41,538	\$460,641	\$7,509	\$41,538	\$0
West End	\$544,160	\$523,564	\$20,596	\$415,847	\$107,717	\$13,791	\$6,805
Westmoore	\$271,013	\$230,222	\$40,791	\$191,702	\$38,520	\$24,810	\$15,981
Whispering Pines	\$263,385	\$263,385	\$0	\$221,892	\$41,493	\$0	\$0
Station X	\$43,430	\$0	\$43,430	\$0	\$0	\$31,205	\$12,225
	\$5,881,211	\$5,141,341	\$739,870	\$4,541,399	\$599,942	\$587,126	\$152,744
Audit - Professional Services	\$22,000						
Grand Total Fund 215	\$5,903,211						

Total Revenue Budget Fund 215 **\$5,903,211**
Property Tax Budget Amt **\$5,381,211**
Penny on Fire Tax Rate @ .105 **\$512,496**

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc TBC amount)	TBD Amount	Funded By:
	Public Works/ Water Pollution Control Plant													
Public Works/ Water Pollution Control Plant	Interceptor Rehab and Repair	\$676,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$2,026,000		
Public Works/ Water Pollution Control Plant	Sand filter Shelter / Canopy	\$280,000										\$280,000		
Public Works/ Water Pollution Control Plant	RSPS/VFD / PLC Replacement	\$315,000										\$315,000		
Public Works/ Water Pollution Control Plant	RSPS Sluice Gate Replacement	\$430,000										\$430,000		
Public Works/ Water Pollution Control Plant	Clarifier Covers (6) IC's/ FC's	\$120,000										\$120,000		
Public Works/ Water Pollution Control Plant	Upgrade to Biosolids Storage Canopy & New SHU Canopy	\$500,000										\$500,000		
Public Works/ Water Pollution Control Plant	Sand Filter Skimmer System	\$100,000										\$100,000		
Public Works/ Water Pollution Control Plant	Replacement Vehicles: Operations, Maintenance, Solids Handling, Operations	\$60,000			\$85,000			\$100,000			\$80,000	\$305,000		
Public Works/ Water Pollution Control Plant	Press Rehab #1 & #2		\$115,000									\$115,000		
Public Works/ Water Pollution Control Plant	Sand Filter Carriage Rehab		\$360,000									\$360,000		
Public Works/ Water Pollution Control Plant	Wier Replacement on Clarifiers (9)		\$100,000									\$100,000		
Public Works/ Water Pollution Control Plant	RSPS Bar Screen Replacement (2)			\$700,000								\$700,000		
Public Works/ Water Pollution Control Plant	Engineering Study Plant Expansion				\$200,000	\$200,000						\$400,000		
Public Works/ Water Pollution Control Plant	Plant Expansion Design						\$3,000,000					\$3,000,000		
Public Works/ Water Pollution Control Plant	RSPS Pump #1 & #2 Replacement					\$450,000						\$450,000		
Public Works/ Water Pollution Control Plant	RSPS Pump #3 & #4 Replacement						\$450,000					\$450,000		
Public Works/ Water Pollution Control Plant	WPCP Roof Replace/ Repair							\$200,000				\$200,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc Tbc amount)	TBD Amount	Funded By:
Public Works/Water Pollution Control Plant	WPCP Expansion - Construction							\$15,000,000	\$20,000,000			\$35,000,000		
Public Works/Water Pollution Control Plant	Southern Pines #4 Station Upgrade								\$1,500,000			\$1,500,000		
Public Works/Water Pollution Control Plant	Southern Pines #4 Force Main Replacement									\$1,500,000		\$1,500,000		
Public Works/Water Pollution Control Plant	Structural Coating Basins / Structures										\$750,000	\$750,000		
	TOTAL WPCP Fund 600	\$2,481,000	\$715,000	\$550,000	\$435,000	\$800,000	\$3,800,000	\$15,450,000	\$21,850,000	\$1,650,000	\$980,000	\$48,591,000	\$0	
	Public Works/Utilities													
Public Works/Utilities	Vehicles	\$200,000	\$240,000	\$130,000	\$170,000	\$330,000	\$100,000	\$150,000	\$100,000	\$250,000		\$1,670,000		
Public Works/Utilities	Vac-Truck Replacement			\$550,000								\$550,000		
Public Works/Utilities	Sewer Rehabilitation(CCTV Detection and Replacement/Repairs)	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,500,000		
Public Works/Utilities	General Extensions of Service	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,000,000		
Public Works/Utilities	Water Main Replacement	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,000,000		
Public Works/Utilities	Fire Hydrant Replacement	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,500,000		
Public Works/Utilities	Paint Elevated Tanks (Seven Lakes North)					\$300,000						\$300,000		
Public Works/Utilities	Paint Elevated Tanks (Cannon Park)						\$300,000					\$300,000		
Public Works/Utilities	Paint Elevated Tanks(Monticello)								\$300,000			\$300,000		
Public Works/Utilities	Deep River Water Source Project	\$70,000	\$3,000,000	\$9,166,666	\$9,166,667	\$9,166,667						\$30,570,000		
Public Works/Utilities	Chloramines Booster Station for Hwy. 211 Booster Pump Station											\$107,834		
Public Works/Utilities	Lift Station 3-2 Replacement	\$358,000					107,834					\$358,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc TBC amount)	TBD Amount	Funded By:
Public Works/Utilities	Lift Station 8-1 Replacement		\$366,000									\$366,000		
Public Works/Utilities	Lift Station 4-2 Replacement			\$360,000								\$360,000		
Public Works/Utilities	Mini Excavator			\$111,883								\$111,883		
	TOTAL WATER & SEWER FUND 610	\$1,128,000	\$4,108,000	\$10,818,549	\$9,838,687	\$10,298,967	\$1,007,834	\$850,000	\$900,000	\$750,000	\$500,000	\$39,983,717	\$0	
	East Moore Water District													
EMWD	Paint EMWD Tank				\$300,000							\$300,000		
EMWD	Water Main Extensions		\$160,000									\$160,000		
	TOTAL EMWD FUND 620	\$0	\$160,000	\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$460,000	\$0	
	Solid Waste													
Solid Waste/Landfill	Replace REX Compactor	\$750,000										\$750,000		
Solid Waste/Landfill	Collection Site Compactors	\$27,000	\$28,000	\$28,000	\$29,000	\$29,000	\$29,000	\$29,000	\$31,000	\$31,000	\$31,000	\$292,000		
Solid Waste/Landfill	Roll Off Replacement		\$190,000		\$200,000		\$200,000		\$200,000		\$200,000	\$990,000		
Solid Waste/Landfill	Relocate Cartage Site	\$1,500,000										\$1,500,000		
Solid Waste/Landfill	Replace Pan			\$250,000								\$250,000		
Solid Waste/Landfill	Replace Motor Grader		\$300,000									\$300,000		
Solid Waste/Landfill	Replace Back hoe	\$50,000										\$50,000		
Solid Waste/Landfill	Replace Scale House			\$100,000								\$100,000		
Solid Waste/Landfill	New Landfill Location (no quotes- need study)				\$1,000,000	\$1,000,000	\$750,000					\$2,750,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc Tbc amount)	TBD Amount	Funded By:
Solid Waste/Landfill	New Transfer Station (no quote-need study)	\$100,000	\$1,500,000									\$1,600,000		
	Total Solid Waste Fund 630	\$2,427,000	\$2,018,000	\$378,000	\$1,229,000	\$1,029,000	\$979,000	\$29,000	\$231,000	\$31,000	\$231,000	\$8,882,000	\$0	
	Airport Enterprise Fund - Component Unit of Moore County													
Airport Enterprise Fund	Corporate Hangar Development	\$2,117,000										\$2,117,000		Local Funds
Airport Enterprise Fund	Pavement Strength (Runway)		\$9,948,000									\$9,948,000		10% Local Match
Airport Enterprise Fund	Hangar Development			\$3,281,000								\$3,281,000		Local Funds
Airport Enterprise Fund	T-Hangar Taxiways - Phase III				\$1,525,000							\$1,525,000		10% Local Match
Airport Enterprise Fund	Wildlife Hazard Fencing					\$1,230,000						\$1,230,000		10% Local Match
Airport Enterprise Fund	Terminal Expansion Phase 1						\$2,750,000					\$2,750,000		10% Local Match
Airport Enterprise Fund	Access Road/Auto Parking Reconfiguration							\$1,048,000				\$1,048,000		10% Local Match
Airport Enterprise Fund	RPZ/Approach Land Acquisition RWY 23								\$279,000			\$279,000		10% Local Match
Airport Enterprise Fund	RPZ - Runway 23 Fee Simple								\$884,000			\$884,000		10% Local Match
Airport Enterprise Fund	RPZ - Runway 23 Fee Simple								\$884,000			\$884,000		10% Local Match
Airport Enterprise Fund	RPZ - Runway 23 Fee Simple								\$884,000			\$884,000		10% Local Match
Airport Enterprise Fund	RPZ - Runway 23 Fee Simple								\$884,000			\$884,000		10% Local Match
Airport Enterprise Fund	Terminal Expansion									\$2,042,000		\$2,042,000		10% Local Match
Airport Enterprise Fund	Terminal Expansion							\$2,000,000				\$2,000,000		10% Local Match
	Total Airport Enterprise Fund	\$2,117,000	\$9,948,000	\$3,281,000	\$1,525,000	\$1,230,000	\$2,750,000	\$3,048,000	\$3,815,000	\$2,042,000	\$0	\$28,738,000	\$0	

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc. TBC amount)	TBD Amount	Funded By:
Emergency Medical Services	Emergency Medical Services													
	Replacement Ambulance - 2 per year	\$470,000	\$500,000	\$500,000	\$500,000	\$525,000	\$525,000	\$525,000	\$550,000	\$550,000	\$550,000	\$5,195,000		EMS
Emergency Medical Services	Pinehurst EMS Facilities/Bus - Currently working to develop potential land swap and establish long-term lease option on the site plan for Pinehurst Station #1	\$450,000										\$450,000		EMS
Public Safety - 911	VIPER Upgrades at 2 Remote Tower Site Locations & Paging Upgrades at 1 New Tower Site Location (work out lease options with American Towers at Same Place Tower and NCHWY 705 Robbins) 911 - Wired Line Console upgrades to comply with the VIPER 2025 TDMA upgrades which will include the replacement of Public Safety Mobiles and Portables	\$750,000	\$1,000,000									\$1,750,000		Funded by EMS/PSA/P/GF
	Total Fund 200 EMS/ALS Fund	\$1,570,000	\$1,500,000	\$500,000	\$500,000	\$525,000	\$525,000	\$525,000	\$550,000	\$550,000	\$550,000	\$7,395,000	\$0	
	Moore County Transportation Services													
Transportation/Vans	53'1 Community Transportation-Capital Grant	\$161,000	\$0	\$425,500	\$501,500	\$62,500	\$65,000	\$130,000	\$0	\$117,500	\$270,000	\$1,734,000		90% from Federal/State
	Total MCTS	\$161,000	\$0	\$425,500	\$501,500	\$62,500	\$65,000	\$130,000	\$0	\$117,500	\$270,000	\$1,734,000	\$0	
	General Fund													
Property Management	Historic Courthouse HVAC Replacement	\$1,500,000										\$1,500,000		
Property Management	Re-Paving County Facility Parking Lots	\$150,000	\$150,000	\$150,000								\$450,000		
Property Management	Library Removal Asbestos Ceiling Area			\$115,000								\$115,000		
Property Management	Demolition of Child Support		\$150,000									\$150,000		
Property Management	Davis Center Renovation - New roof, painting, windows, floor and new HVAC		\$250,000									\$250,000		
Property Management	Vehicle Fleet Replacement	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$2,500,000		
Property Management	Court Facility-Chiller and pump station replacement	\$165,000										\$165,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc TBc amount)	TBD Amount	Funded By:
Property Management	Property Management-Backhoe		\$115,000									\$115,000		
Property Management	Rick Rhyme Public Safety Center-Hot water boiler and pump replacement			\$120,000								\$120,000		
Property Management	Rick Rhyme Public Safety Center-Aaon unit replacement				\$100,000							\$100,000		
Property Management	Rick Rhyme Public Safety Center-Water source heat pump replacement					\$800,000						\$800,000		
Property Management	Health Department-HVAC replacement with economizer		\$150,000									\$150,000		
Property Management	Health/AG Departments-Paving						\$800,000					\$800,000		
Property Management	Historic Courthouse-Roof replacement							\$120,000				\$120,000		
Property Management	Rick Rhyme Public Safety Center-Generator Replacement								\$600,000			\$600,000		
Property Management	AG Facility-HVAC Replacement with economizer									\$180,000		\$180,000		
Information Technology	Firewall									\$100,000		\$100,000		
Information Technology	SAN Replacement	\$300,000										\$600,000		
Information Technology	Phone System Refresh									\$100,000		\$100,000		
Library	New Library Location in County or Renovation of Current Bldg. in Carthage											\$0	\$2,784,000	
Library	New Bookmobile (current vehicle was purchased in 2007 for \$125,000)						\$200,000					\$200,000		
	TOTAL COUNTY GENERAL FUND	\$2,385,000	\$1,065,000	\$635,000	\$350,000	\$1,350,000	\$1,250,000	\$370,000	\$850,000	\$630,000	\$250,000	\$9,115,000	\$2,784,000	
	General Fund - Moore County Schools													
Moore County Schools	Advanced Career Center	\$47,250,000										\$47,250,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not Inc TBc amount)	TBD Amount	Funded By:
Moore County Schools	Increase Capacity at PHS		\$78,700,000									\$78,700,000		
Moore County Schools	Increase Capacity at UPHS			\$40,000,000								\$40,000,000		
Moore County Schools	Area III Middle School				\$61,000,000							\$61,000,000		
Moore County Schools	Increase Capacity at West Pine ES					\$2,000,000						\$2,000,000		
Moore County Schools	Large Project Capital Need at Existing Schools	\$32,400,000										\$32,400,000		
Moore County Schools	Capital Needs at Existing Schools	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$19,000,000		
Moore County Schools	Digital Learning Initiative	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$12,000,000		
	TOTAL MOORE COUNTY SCHOOLS	\$52,750,000	\$51,800,000	\$43,100,000	\$54,100,000	\$5,100,000	\$3,100,000	\$3,100,000	\$3,100,000	\$3,100,000	\$1,100,000	\$292,350,000	\$0	
	General Fund - Sandhills Community College													
Sandhills Community College	Causey Hall Major Renovation	\$3,000,000										\$3,000,000		
Sandhills Community College	Original Palmer Trades Bldg. - New Roof	\$100,000										\$100,000		
Sandhills Community College	President's Residence Remodel	\$150,000										\$150,000		
Sandhills Community College	Stone and Meyer Hall Auditorium Renovations		\$150,000									\$150,000		
Sandhills Community College	Visual Arts Department Renovations including Dust Filtration System		\$155,000									\$155,000		
Sandhills Community College	Parking Lots Lighting		\$300,000									\$300,000		
Sandhills Community College	Meyer Hall Lab Renovations		\$1,600,000									\$1,600,000		
Sandhills Community College	Boyd Library Roof Replacement			\$500,000								\$500,000		
Sandhills Community College	Parking Lots Repair and Replacement			\$1,000,000								\$1,000,000		

DEPARTMENT	DESCRIPTION	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	TOTAL (not inc TBc amount)	TBD Amount	Funded By:
Sandhills Community College	Public Services Training Classroom and Apparatus Building				\$1,200,000							\$1,200,000		
Sandhills Community College	Sirotek Hall Renovations				\$1,200,000							\$1,200,000		
Sandhills Community College	Campus Wide Electrical Distribution Service					\$3,500,000						\$3,500,000		
Sandhills Community College	Owens & Stead Hall Chiller Replacements					\$300,000						\$300,000		
Sandhills Community College	Public Services Training Center (Phase 3)- Commercial Burn Bldg.						\$5,000,000					\$5,000,000		
Sandhills Community College	Van Dusen Hall Roof Replacement						\$500,000					\$500,000		
Sandhills Community College	Meyer/ Stone Fire Alarm Panel Replacement							\$500,000				\$500,000		
Sandhills Community College	Public Services Training Center (Phase 4)- Driving Track & Firing Range							\$4,000,000				\$4,000,000		
Sandhills Community College	Stone Hall Structural Concrete Repairs								\$1,000,000			\$1,000,000		
Sandhills Community College	Information Technology Renovation/ Infrastructure Uplift									\$500,000		\$500,000		
	TOTAL SANDHILLS COMMUNITY COLLEGE	\$3,250,000	\$2,205,000	\$1,500,000	\$2,400,000	\$3,800,000	\$5,500,000	\$4,500,000	\$1,000,000	\$500,000	\$0	\$24,655,000	\$0	
	TOTAL EDUCATION	\$86,000,000	\$84,005,000	\$44,600,000	\$86,500,000	\$8,900,000	\$8,600,000	\$7,600,000	\$4,100,000	\$3,800,000	\$3,100,000	\$317,005,000	\$0	
	Total GENERAL FUND (INCLUDING EDUCATION)	\$98,355,000	\$95,070,000	\$45,235,000	\$86,850,000	\$10,250,000	\$9,850,000	\$7,970,000	\$4,850,000	\$4,230,000	\$3,350,000	\$326,120,000	\$2,784,000	
	GRAND TOTAL - ALL SOURCES	\$98,349,000	\$103,517,000	\$61,469,049	\$81,177,167	\$24,193,167	\$18,776,834	\$27,802,000	\$32,096,000	\$9,370,500	\$5,851,000	\$462,611,717	\$2,784,000	

Moore County, NC

Adopted Departmental Fee Schedules FY 2022-2023

(Effective July 1, 2022)

Pursuant to North Carolina General Statute 12-3.1 (a,c) the Moore County Board of Commissioners has the authority to set fees. Following are the fee schedules for the departments that charge various fees.

Effective July 1, 2022 through June 30, 2023	Page #
County Wide Fees	1
Attorney	2
Tax	3
Elections	4
Register of Deeds	5-6
Sheriff's Office	7
Sheriff Detention Center	8
Sheriff Animal Services	9
Public Safety/Fire Marshal	10-13
Solid Waste	14-15
Planning and Inspections	16-18
Transportation Services	19
GIS	20
Cooperative Extension	21
Soil & Water Conservation	22
Child Support	23
Youth Services	24
Aging	25
Library	26
Parks & Recreation	27-28
Social Services	29
Health (Clinical)/Environmental Health	30-33
Water Pollution Control Plant	34
Water and Sewer-Public Utilities/East Moore Water District	35-38
Information Technology	39
Property Management	40
Emergency Medical Services	41
E-911 Telephone Fund	42
Human Resources/Risk Management	43

*Adopted with Budget Ordinance, Section 18.

Fee Schedule County-Wide	
Fee Schedule - Item	FY 2022/2023 Fee Amount
Photocopies 8x11, 8x14 or 11x17	\$.15/page, \$.50/page color
Existing data cards (PRC/FRD) and Parcel Data Map	\$1.00
Blue Line copies (small/large)	\$3.00/\$5.00
Copy of existing map: 8x11	\$2.00
Plot of deed description	\$5.00
Copy of existing map: 11x17	\$5.00
Copy of an existing map: 30 x 42, 36 x 48, 42 x 48	\$20.00
Requests for customized data reports or maps	\$50.00 per hour minimum of \$50.00
Chamber Map	Same charge as Chamber
Shipping and Handling	\$5.00
Blank CD/DVD/DVR	\$1.00
Returned check fees	\$25.00 Per NC General Statute
Conference Calls - per public participant and open meetings law	\$0.06 per minute
Local Fax- Customer provides the copies	\$0.50 per page
Local Fax- We provide copies to be faxed	\$1.00 per page
Long Distance Fax- Customer provides copies to be faxed	\$3.00-1st page \$1.00-each additional page
Long Distance Fax- We provide copies to be faxed	\$3.00 - 1st page \$2.00 each additional page
Convenience Fees will be passed on to the customer for any form of electronic payment or on-line payment	Convenience Fees may vary by Department
Fees are hereby waived for all General Fund departments for Solid Waste/Landfill Fees debris	

Fee Schedule County Attorney	
Fee Schedule - Item	FY 2022/2023 Fee Amount
CLE/CPE Annual Local Government Conference - Paralegal Fee	\$100.00
CLE/CPE Annual Local Government Conference - Attorney Fee	\$120.00
CLE/CPE Annual Local Government Conference Fee - Employee	\$65.00

Fee Schedule

Tax

Fee Schedule - Item	FY 2022/2023 Fee Amount
Collection Fees Determined by North Carolina General Statutes	
All fees associated with the collection of property taxes such as returned checks, advertisements, garnishments, foreclosures, etc. that are governed by NC General Statutes will be assessed according to the applicable Statutes.	Set by N.C.G.S.
Custom Programming for maps and data requests	
Set up time, programming time, and/or processing time of all requests	\$50 per hour minimum of \$50
Analyst/Programmer and/or processing - Custom copies of data or plot routine, programming for requested information, processing time on computers or printers	\$50 per hour minimum of \$50
Coverage conversion, special system request	\$50 per hour minimum of \$50
Media Charges	
Blank CD/DVD/DVR	\$1.00
Labels, \$11 per thousand plus set up time, programming time and processing time	
Existing Data Cards (Property Record/Field Review) Parcel Data Map	\$1.00
Parcel Data Map	\$1.00
Parcel Data Map from GIS/with structure	\$2.00
Ortho GIS maps	\$2.00
County Chamber Maps	Same as Chamber Charge
Plot Deed	\$5.00
Township plot map	\$10.00
Copy of an existing map: 30 x 42, 36 x 48	\$20.00
Convenience Fees will be passed on to the customer for all credit and debit card charges; if applicable	Convenience Fees may vary by Department
All requests must be filled out and signed by taxpayer and minimum upfront payment of \$10.00 must be paid for all requests requiring programming and processing time	

Fee Schedule Elections

Fee Schedule - Item	FY 2022/2023 Fee Amount
Printed Reports	.02 per page - \$2.00 minimum
Data on CD	\$25.00 flat fee - CD provided by BOE
Filing Fees	In accordance with G.S. 163-107
Municipal Elections	Fees are to be actual cost reimbursed to the County
Copies - Deposit required prior to copies being made with \$1.00 minimum	8 1/2 x 11 \$.15 each 8/1/2 x 14 \$.20 each and 11 x 17 \$.25 each
Conference Calls	As dictated by statute - Open Meetings Law
Labels	\$.02 per page for printing with a \$10.00 minimum - customer....add "must provide labels"
CD/Flash Drive (County provides the medium)	\$25.00
Data - small files, if possible, emailed with out charge	no charge

Fee Schedule

Register of Deeds - Page 1 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Certified copies of Births, Deaths and Marriages NCGS 161-10	\$10.00
Marriage License Fee NCGS 161-10	\$60.00
Clerk Certificates	\$5.00
Notary Oaths NCGS 161-10	\$10.00
Amendments and Legitimations NCGS 161-10	\$10.00
Delayed Birth - \$10.00 for ROD NCGS 161-10	\$10.00
Comparison of copies for certification NCGS 161-10	\$5.00
Subsequent Instrument NCGS 161-14.1(b) for one index reference. For each additional reference a fee of \$10.	\$10.00
Recording fee for Deeds of Trust and Mortgages NCGS 161-10 (1a) Effective 10/01/2016, HB 19	\$64.00 up to 35 pages then \$4.00 for each additional page
Recording fee for instruments in general NCGS 161-10 (1) Effective 10/01/2011	\$26.00 up to 15 pages then \$4.00 for each additional page
Any document that contains over 20 distinct parties that are required to be indexed, an additional \$2.00 per name is required effective October 1, 2015. S.L. 2015-227	\$2.00 per name
Recording Plats NCGS 161-10	\$21.00
Certified copies of documents NCGS 161-10	\$5.00 for 1st page \$2.00 for each additional page
Certified copies of plats NCGS 161-10	\$5.00
Recording Condominium Plans NCGS 161-10	\$21.00 - 1st page \$21.00 each additional page
Recording Right of Way Plans NCGS 161-10	\$21.00-1st page \$5.00 each additional page
Recording UCC-Fixture Filings NCGS 25 ARTICLE 9 PART 5	\$38.00-1 or 2 pages \$45.00 - 3-10 pages \$45.00 plus \$2.00 over ten
UCC 11 (this includes information on all UCC's filed before 7/1/2001) NCGS 25 ARTICLE 9 PART 5	\$30.00 per name searched
Excise Stamps NCGS 105-228-30	\$2.00 per \$1,000.00; \$1.00 for each \$500.00 or fraction thereof

Fee Schedule

Register of Deeds - Page 2 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Information copies of documents	\$0.25 per page
Local Fax- Customer provides the copies	\$0.50 per page
Local Fax- We provide copies to be faxed	\$1.00 per page
Long Distance Fax- Customer provides copies to be faxed	\$3.00-1st page \$1.00-each additional page
Long Distance Fax- We provide copies to be faxed	\$3.00 - 1st page \$2.00 each additional page
Map Scanner Copy Sizes 18x24, 21x30, & 24x36 Copies.	\$3.00, \$4.00 & \$5.00
CD Copy	\$5.00
Non Standard Document filing fee (in addition to recording fees) NCGS 161-10	\$25.00
Chamber map	\$4.00
Copies of Plats	\$1.00 per page
Postage Fees based on mailings of recorded documents	Rate Varies with Size
Fees are set by Statute and are subject to change by the General Assembly.	

Fee Schedule

Sheriff's Office

Fee Schedule - Item	FY 2022/2023 Fee Amount
In-State Civil Process Service Fee N.C. General Statute 7A-311 Currently \$30.00	Set by State
Out-of-State Civil Process Service Fee N.C. General Statute 7A-311	\$100.00
Concealed Handgun Permit N.C. General Statute 14-415.19 Currently \$90.00	Set by State
Document Notarization N.C. General Statute 10A-10 Currently \$5.00	Set by State
Storage fees for weapons and ammunition stored pursuant to a Domestic Violence Orders. A fee of \$35.00 will be charged for the storage of one weapon. A fee of \$10.00 will be charged for each additional weapon. If a weapon is stored, a fee of \$10.00 will be charge for the storage of any ammunition. If a weapon is not stored, a fee of \$30 will be charged for the storage of any ammunition.	\$35.00
The resident county of a person who is transported to a mental health facility by the Sheriff's Office will be billed for the mental transport at a rate of \$30 per hour per deputy and/or \$25 per hour per detention officer and the IRS mileage rate for the round trip distance to the facility. NC General Statute 122C-251(h)	\$30.00
Fingerprints - A fee of (\$15.00) will be charged for fingerprints.	\$15.00
Noise Ordinance Permit	\$25.00
ports for Insurance Companies	\$2.00
Change of Name or Address for a Concealed Carry Permit, NCGS 14-415.19	Set by Statute
Replacement of Access Cards (does not apply to normal wear and tear)	\$5.00 per card
Off Duty Special Assignments for Deputies	\$50.00/hour
Off Duty Special Assignments on Holidays for Deputies	\$70.00/hour
Reimbursement Rate per Inmate per Day to house an Inmate from another County in the Moore County Detention Center	\$55.00/Day

Fee Schedule

Sheriff - Detention Center

Fee Schedule - Item	FY 2022/2023 Fee Amount
Inmates Doctor Visit - non emergency	\$20.00 per visit
Dental Visits	\$20.00 per visit
EHA (Electronic House Arrest) Monitoring Fee \$10.00 per day monitoring fee for non-indigent pre-trial detainees (G.S. 7A-313.1)	\$10.00 per day
Statewide Misdemeanant Confinement Program (SMCP) reimbursement by NC Sheriff's Association (G.S. 148.10.4C) Transportation and supervision charges to deliver inmate to assigned facility	\$25.00 per hour plus the IRS Current Standard Approved Mileage Rate
Department of Juvenile Justice (DJJ) reimbursement by DPS for transportation and supervision of juvenile offenders to assigned facility	\$25 per hour plus the IRS Current Standard Approved Mileage Rate
Housing Fee for Work Release Inmates	\$40.00 per day
Department of Juvenile Justice (DJJ) daily housing fees for juveniles offenders (NCAC 143B-820) by DPS	\$122 for juveniles in county \$244 for juveniles out of county
Statewide Misdemeanant Confinement Program (SMCP) reimbursement by NC Sheriff's Association (G.S. 148.10.4C) daily housing fees for inmate confinement	\$40.00 per day
Inmate damage to Fire Suppression System (Sprinkler Head and Labor)	\$200.00
Inmate damage to issued Detention Center items to include: mattress	\$125.00
Inmate damage to issued Detention Center items to include: shower curtain	\$75.00
Inmate damage to issued Detention Center items to include: blanket	\$10.00
Inmate damage to issued Detention Center items to include: jumpsuit	\$20.00
Inmate damage to issued Detention Center property: food tray	\$20.00
Inmate damage to issued Detention Center items to include: storage bin/tote	\$10.00
Inmate damage to issued Detention Center items to include: sheets/flat sheet	\$5.00
Inmate damage to issued Detention Center items to include: shoes	\$5.00
Inmate damage to issued Detention Center items to include: handbook	\$5.00
Inmate damage to issued Detention Center items to include: towels	\$3.00
Inmate damage to issued Detention Center items to include: washcloth	\$1.00
Inmate damage to issued Detention Center items to include: spork	\$1.00
Inmate damage to issued Detention Center items to include: broom	\$8.00
Inmate damage to issued Detention Center items to include: mop	\$18.00
Inmate damage to issued Detention Center items to include: mop bucket	\$55.00
Inmate damage to issued Detention Center items to include: Sprayer & Bottle	\$1.00
Inmate damage to issued Detention Center items to include: Boxer/Panty/Bra	\$5.00
Inmate damage to issued Detention Center items to include: T-Shirt	\$5.00
Inmate damage to physical structure or fixed items	Cost + 10% + Labor
Cost to repaint the inmate dormitory	\$1,000.00
Cost to repaint single inmate cell	\$100.00
Cost to repair/paint inmate bunk	\$40.00
Cost to replace damage inmate desk	\$200.00
Cost to replace inmate toilet/sink	\$500.00
Cost to contain and cleanup intentional flooding by an inmate	\$60.00
Cost for Isolation/Suicide Cell Smock	\$100.00
Cost for Isolation/Suicide Blanket	\$94.00
Magnetic Privacy Blinds & Screens	\$53.00
Damage Tablet Fees	\$250.00
Damage Tablet Case Fees	\$50.00
Damage to Administrative Room Fee	\$1,995.00
Inmate Masks	\$2.00
Safety Helmets	\$137.00

Fee Schedule Sheriff - Animal Services

Fee Schedule - Item	FY 2022/2023 Fee Amount
Adoption - Dogs	\$85.00
Adoption - Cats	\$65.00
Adoption - Small Livestock, (goat, sheep, pig, etc)	AUCTION
Adoption - Pocket Pet (Fowl, Guinea Pigs, etc)	\$15.00
Adoption - Large Livestock, (Horse, Cow, etc.)	AUCTION
Military, Senior Citizens, State or Local Government Employees Discount (must show ID).	\$60/Dog, \$50/Cat
Fix'em Voucher Fee (effective January 24, 2018)	\$25.00
Rabies Vaccine	\$10.00/dog or cat being vaccinated
Rabies Vaccine - On Site One Time Convenience Fee to be paid per visit not per animal being vaccinated	\$15.00
Boarding Fee	\$10.00/per day or half day
Boarding Fee - Small Livestock (goat, sheep, pig, etc.)	\$25.00/day
Boarding Fee - Large Livestock (horse, cow, etc.)	\$50/day
Return to Owner: If Bordetella (Dogs), DA2 (Dogs) or RCPC (Cats) prior to owner reclaiming	\$8.00 per shot
Return to Owner: If FELV(Cats) or HWT(Dogs)	additional \$15.00 per test
Quarantine Fee	\$15.00/per day or half day
Cat Trap Deposit Fee - refundable	\$50.00
Dog Trap Deposit Fee - refundable	\$100.00
Citations- for any offense in violation of the Animal Control Ordinance:	
First Offense (Per Moore Co. Ordinance Sec. 4-5 initial warning required)	Warning (48 Hours)
Second Offense	Criminal Citation
Third Offense and thereafter	Criminal Citation
Redemption by Owner of animal found running at large and impounded:	
First Impound	Rabies (\$10.00), DHPP/Bordetella/RCPC (\$8.00 each), Impound ID Fee (\$20), FIV/FeLV/HWT
Second Impound	\$150 (plus boarding fees) OR spay/neuter at owner's expense PLUS any vaccinations required and Boarding Fees (\$10/day)
Third Impound and thereafter	\$250 (plus boarding fees) OR spay/neuter at owner's expense PLUS any vaccinations required and Boarding Fees (\$10/day)
Redemption after mandatory stray hold	1st, 2nd, or 3rd offense impound fees PLUS cost of spay/neuter
Special Events and Special Situations	Rate to be determined by the Sheriff
Special Needs Animals	Rate to be determined by the Sheriff

Fee Schedule

Department: Public Safety/Fire Marshal - Page 1 of 4

Fee Schedule - Item	FY 2022/2023 Fee Amount
Administrative Fees	
Use of Mobile Command other than by MCPS Staff	\$250.00/Hour
SOT Equipment Response	\$250.00/Hour
SOT Personnel Response	N/A
SOT Equipment or Supplies expended	Cost
ABC Permit Licensing Inspection	\$100.00
Permit Renewal:	Expired up to 12 Months=\$100 or cost of original permit, whichever is less. 12-24 Months = \$200 or cost of original permit, whichever is less. >24 Months = Full cost of original permit.
Failure to Obtain Permit	Double Permit Fee
County Projects: In House by Employees	Waive Fees
County Projects: Contracted by Outside Work Force	Per Fee Schedule
The following are exempt from Operational (mandatory) Permits fees but the agency must still complete the application for the permits: Churches, Schools, County Operations and Buildings, City Operations and Buildings, Emergency Services Organizations(Fire, Rescue, EMS, City-County-State and Federal Law Enforcement Agencies, City-State and Federal Jails/Detention Centers/Correction Facilities).	
All Operational (mandatory) Permits are to be valid until next inspection cycle as stated in the NC Fire Prevention Code newest version. At the time of the next inspection all operational (mandatory) permits for that occupancy will be renewed if they meet the requirements.	
For a category that requires an operational (mandatory) permit and a mandatory construction permit, both fees must be paid.	
No one is exempt from any construction permit fees or special use permits. The Moore County Board of Commissioners are the only ones who can reduce or exempt rates on construction permits.	

Fee Schedule

Department: Public Safety/Fire Marshal - Page 2 of 4

Fee Schedule - Item	FY 2022/2023 Fee Amount
Fire Permits /Inspections Fees	
Operational (mandatory) permits as required by the 2018 North Carolina Fire Prevention Code	
NCFC 105.6.2 - Amusement Buildings: To operate a special amusement building	\$100.00
NCFC 105.6.5 - Carnivals and Fairs: Required to conduct a carnival or fair	\$100.00
NCFC105.6.7 - Combustible Dust Producing Operations: Required to a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices, or sugar or other operations producing combustible dusts as defined by Chapter 2	\$100.00
NCFC105.6.10 - Covered Mall Buildings: Required for (1) Placement of retail fixtures and displays, concession equipment, displays of highly combustible goods, and similar items in the mall; (2) The display of liquid or gas-fired equipment in the mall (3) The use of open-flame or flame-producing equipment in the mall	\$100.00
NCFC 105.6.14 - Exhibits and Trade Shows: Required to operate exhibits or trade shows	\$100.00
NCFC 105.6.15 - Explosives: Required for the manufacture, storage, handling, sale or use of any quantity of explosives, explosive materials, fireworks, or pyrotechnic special effects within the scope of Chapter 56. Exceptions: (1)Fireworks allowed by NCGS 14-414; (2) Storage in Group R-3 occupancies of smokeless propellant, black powder, and small arms primers for personal use, not for resale in accordance with section 5606	\$300.00
NCFC 105.6.17 (6-11) - Flammable and Combustible Liquids: (6) To operate tank vehicles, equipment, tanks, plants, terminals wells fuel dispensing stations, refineries distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or use; (7) To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank; (8) To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed; (9) To manufacture, process or refine flammable or combustible liquids; 9100 To engage in the dispensing of liquid fuels into the fuel tank of motor vehicles at commercial, industrial, governmental or manufacturing establishments; (11) To utilize a site for the dispensing of liquid fuels from a tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment to a commercial, industrial, governmental or manufacturing establishment	\$150.00
NCFC 105.6.20 - Fumigation and Insecticidal Fogging: Required to operate a business of fumigation or insecticidal fogging, and to maintain a room, vault, or chamber in which a toxic or flammable fumigant is used	\$100.00
NCFC 105.6.27 - Liquid or Gas-Fueled Vehicles or Equipment in Assembly Buildings: Required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly building	\$100.00
NCFC 105.6.37 - Private Fire Hydrants: Required for the removal from service, use or operation of private hydrants. Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private fire hydrants	\$100.00
NCFC 105.6.38 - Pyrotechnic Special Effects Materials (Including Fireworks): Required for use and handling of pyrotechnics special effects materials	\$300.00
NCFC 105.6.43 - Spraying or Dipping: Required to conduct a spraying or dipping operation utilizing flammable or combustible liquids, or the application of combustible powders regulated by Chapter 24	\$100.00
NCFC 105.6.42 - Temporary Membrane Structures, Tents, and Canopies (each):	\$50.00

Fee Schedule

Department: Public Safety/Fire Marshal - Page 3 of 4

Fee Schedule - Item	FY 2022/2023 Fee Amount
Fire Permits /Inspections Fees	
Required Construction permits as required by the 2018 North Carolina Fire Prevention Code	
NCFC 105.7.1 Automatic Fire Extinguishing Systems: A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.	\$100.00 for the first 100 sprinkler heads, additional \$0.50 for each sprinkler head over 100
NCFC 105.7.2 Battery Systems: Required to install stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L).	\$100.00
NCFC 105.7.3 Compressed Gases: Where the compressed gases in use or storage exceed the amounts listed in Table 105.6.9, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close to substantially modify a compressed gas system. Exception: Routine Maintenance.	\$100.00
NCFC 105.7.4 Cryogenic Fluids: Required for installation of or alteration to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 106.6.11. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a construction permit.	\$100.00
NCFC 105.7.5 Emergency Responder Radio Coverage System: Required for installation of or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.	\$100.00
NCFC 102.7.6 Fire Alarm and Detection Systems and Related Equipment: Required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.	\$100.00 for the first 100 devices additional \$0.50 for each device over 100
NCFC 105.7.7 Fire Pumps and Related Equipment: Required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.	\$100.00
NCFC 105.7.8 Flammable and Combustible Liquids: Required (1) To install, repair or modify a pipeline for the transportation of flammable or combustible liquids; (2) To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells fuel-dispensing stations, refineries, distilleries, and similar facilities where flammable and combustible liquids are produced, processed, transported, stored dispensed or used. Maintenance performed in accordance with this code is not considered installation, construction or alternation and does not require a construction permit. (3) TO install, alter, remove, abandon, or otherwise dispose of a flammable or combustible liquid tank.	\$150.00
NCFC 105.7.9 Gates and Barricades across Fire Apparatus Access Roads: Required for the installation of or modification to a gate or barricade across a fire apparatus access road.	\$100.00
NCFC 105.7.10 Hazardous Materials: Required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 where the hazardous materials in use or storage exceed the amounts listed in Table 105.6.21; Exception Routine Maintenance.	\$200.00

Fee Schedule

Department: Public Safety/Fire Marshal - Page 4 of 4

Fee Schedule - Item	FY 2022/2023 Fee Amount
Fire Permits /Inspections Fees	
Required Construction permits as required by the 2018 North Carolina Fire Prevention Code	
NCFC 102.7.12 LP Gas: A construction permit for installation of or modification to an LP-Gas system may be required and approved by the North Carolina Department of Agriculture and Consumer Services. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.	NC Department of Ag and Consumer Services
NCFC105.7.13 Private Fire Hydrants: Required for the installation or modification of private fire hydrants. Maintenance performed in accordance with this code in not considered to be a modification and does not require a permit.	\$100.00
NCFC 105.7.14 Smoke Control or Smoke Exhaust Systems: Required for installation of or alteration to smoke control or smoke exhaust systems. Maintenance performed in accordance with this code in not considered to be an alteration and does not require a permit.	\$100.00
NCFC 102.7.15 Solar Photovoltaic Power Systems: Required to install or modify solar photovoltaic power systems. Maintenance performed in accordance with this code in not considered to be a modification and does not require a permit.	\$100.00
NCFC105.7.16 Spraying or Dipping: Required to install or modify a spray room, dip tank or booth. Maintenance performed in accordance with this code in not considered to be a modification and does not require a permit.	\$100.00
NCFC 105.7.17 Standpipe System: Required for the installation, modification or removal from service a standpipe system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.	\$100.00
NCFC 105.7.18 Temporary Membrane Structures, Tents, Canopies	\$50.00

Fee Schedule

Solid Waste Division - Page 1 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Construction & Demolition Materials; Land Clearing; Inert Debris (Includes \$2.00 NC Excise Tax)	\$61.00/ton
C&D Minimum Charge	\$5.00 minimum
Household Trash (MSW)	\$55.36/ton
Weigh Ticket (Truck wt. Only) certified	\$10.00 /per certified weight
In the unlikely event of scale malfunctions or loss of electrical power rendering the scale inoperable, the following rates will apply:	
MSW	\$10.57 per cubic yard
Recycling	\$16.38 per cubic yard
Construction Materials (Drywall, wood, etc.)	\$12.42/cubic yard
Demolition Materials ("clean" concrete, asphalt)	\$23.80 per cubic yard
Mixed Yard Waste Materials	\$3.62 per cubic yard
Yard Waste Materials	\$30.00/ton
Head and Limb minimum charge	\$5.00 minimum
Recycling Tipping Fee	\$100.00/ton
Mobile Home Disposal:	
Single Wide	\$500.00 / each
Double Wide	\$700.00 / each
Container Storage Fee: (Landfill Property)	
Equipment Rental Fee for Storage Containers	\$500.00/annually
0 - 30 Size Roll-off Containers	\$300.00/ month storage fee
Tires	
County Residents (Individuals) can drop off as many as 5 tires a day. Landfill accepts tires from County Businesses ONLY with a scrap tire certification (as required by G.S. 130A-309.58(f)). Greater than 5 Residential Tires or Uncertified Tires subject to charge see below.	Free
Uncertified Tires (Passenger and Off the Road)	\$.055 per pound
Fees	
Un-Tarped Loads	\$50.00 per Occurrence
Fees are hereby waived for all General Fund departments for Solid Waste/Landfill Fees debris	

Fee Schedule

Solid Waste Division - Page 2 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Equipment Rental: (Required by FEMA)	
953-B Caterpillar Loader	\$105.00 per hour
615 Scraper Pan	\$185.00 per hour
Motor Grader	\$90.00 per hour
Backhoe	\$45.00 per hour
Roll-off Truck (w/box)	\$60.00 per hour
Notes:	
* Moore County equipment shall only be rented in extreme emergencies and only with the approval of the County Manager	
* A one-hour minimum shall apply to each use	
* Rates do not include an operator. Operator time, if applicable will be billed at \$22.00 per hour with the same one (1) hour minimum requirement	
* All equipment must remain on site at the Moore County Landfill	
* The Moore County Solid Waste Director has the right to refuse rental or use of the equipment depending upon County's current demand for same, qualifications of operator and/or job conditions	
* Person renting equipment shall be liable for all damages and repairs to equipment	

Fee Schedule

Planning & Inspections Page 1 of 3

Fee Schedule - Item	FY 2022/2023 Fee Amount
General Use Rezoning	\$500 plus postage*
Text Amendment	\$400
Special Use Permit	\$400 plus postage*
Zoning Variance	\$200 plus postage*
Conditional Rezoning	\$600 plus postage*
Appeal from Administrative Decision	\$500 plus postage*
Special Nonresidential Intensity Allocation	\$300
Major Subdivision Preliminary Plat Conditional Use Permit Plat Revisions Final Plat Review Re-review	\$1,000 plus postage* \$100 per re-review \$50 double fees per review of final plat
Minor Plat Re-review	\$150 double fees per review
Exemption Plat Re-review	\$50 double fees per review
Major Plat Amendments (BOC review)	\$100
Improvement Guarantee Review	\$100
Zoning Sign Permit	\$50
Residential Zoning Permit	\$50
Commercial Zoning Permit Site Plan Revisions	\$150 \$100 per re-review
Zoning Verification Letter	\$30
Flood Damage Prevention Permit	\$50
ABC Permit (Zoning only)	\$30
*Postage--Certified, Receipt Requested mailing to each adjacent property owner. More than one mailing may be involved.	Current USPS pricing
Wireless Communications Facility Fees:	
Wireless Communications Facilities Biannual Operating Permit Fee	\$300
New Tower Application Review (per application submitted)	\$2,500
Co-location Application Review (per application submitted)	\$500

Fee Schedule

Planning & Inspections Page 2 of 3

Fee Schedule - Item	FY 2022/2023 Fee Amount
Building Permits:	
New Construction (Residential & Commercial)	
Up to \$40,000	\$100.00
Over \$40,000	\$3.00 per thousand
Additions/Alternations/Renovations	
Residential	\$50 plus \$3.00 per thousand
Commercial	\$100 plus \$3.00 per thousand
Building Permits based on min. \$60 per SF heated and \$15 per SF unheated:	
Modular Residential (Plumbing, Electrical, & Mechanical included) *Additions to modular not included in the base fee	\$500
Moving House Includes Plumbing, Electrical, & Mechanical *Additions to House not included in the base fee	\$500
Modular Commercial (Plumbing, Electrical & Mechanical Not Included)	\$500
Portable Carports, Portable Buildings, Etc.	\$100
Bulkheads, Piers, Docks, Retaining Walls Up to \$40,000	\$100
Over \$40,000	\$3.00 per thousand
Demolition Permit (Commercial & Residential)	\$100
Change of Use Permit	\$50
Insulation Permit	\$75
Mechanical Permits:	
Residential (wiring permits may apply) - Per new unit or per unit change	\$100 includes duct work or \$75 no duct work
Commercial - (wiring permits may apply) - Per new unit or per unit change out	\$100 includes duct work or \$75 no duct work
Duct work only	\$50
Boilers	\$100
Chillers - Commercial	\$100 each
Gas Packs (Includes Gas Piping/wiring permit may apply) Per new unit or per unit change out	\$100
Other (additional (bath vents, etc.))	\$50
Refrigeration: (base fee plus \$5 per case)	\$50
Hood Systems	\$100 each
Fuel/Gas Piping Residential	\$50
Fuel/Gas Piping Commercial	\$50 per service point
Plumbing Permits:	
Residential Each Bath or 1/2 Bath	\$50
Residential kitchen and/or laundry rooms	\$50
Additional fixture in restroom	\$5 each
Additional fixture not in restroom	\$5 each
Potable Water Connections Residential & Commercial	\$50
Water Heater Change Outs (additional wiring may apply)	\$75
Backflow Preventers, Irrigation and Sprinklers	\$50
Plumbing Other (installation of sewer lines, installation of water lines, re-piping, etc.)	\$50

Fee Schedule

Planning & Inspections Page 3 of 3

Fee Schedule - Item	FY 2022/2023 Fee Amount
Electrical Permits:	
Residential:	
UP to 200 Amps	\$75
Over 200 Amps	\$75 plus \$0.15 per amp over 200
Commercial	\$75 plus \$0.15 per amp
Panel Fee	\$50 each
Change of Service:	
Residential	\$75 plus \$0.15 per amp over 200
Commercial	\$75 plus \$0.15 per amp
Miscellaneous Permits:	
Manufactured Home Set Up* excludes Mechanical Permits	
Manufactured Home Set Up Permit (Singlewide)	\$100
Manufactured Home Set Up Permit (Doublewide)	\$130
Manufactured Home Set Up Permit (Tripewide)	\$160
DayCare/Group Home/Therapeutic Home	\$100
ABC/ATF Licensing Permit	\$100
Temporary Power Permit	\$100
Farm Pole/Permanent Services	\$75.00
Generator fuel gas not included	\$100
Other Electrical: (Temporary Pole, Add'l wiring, etc.)	\$60
Flood Plain Determination	\$25
Pools	\$100 (\$50 Structure/\$50 Electrical)
Signs	
Sign only	\$50 per sign
Sign with electric	\$100 per sign
Elevators	\$100
Other Services and Fees:	
Copy of Already Created Map from Plotter	\$20
Copy of Moore County Unified Development Ordinance	\$25
Copy of Plat	\$2 each
Photocopies (8.5x11 & 11x17)	.15 per page black & white, .50 per page color
Re-inspection Fees	1-5 violations \$100 6-10 violations \$150 11 or more violations \$200
If an inspection fails due to the need of manufacturer specifications, third party approval, fees will not be applied if the required information is provided by the contractor. Re-inspections fee will not apply to acts of God for example; weather related, unforeseen medical emergencies for example if an inspection is scheduled and the homeowner calls the same day due to sickness and the inspection cannot be completed.	
Penalty Fees	Not ready at time of inspections or same day cancellation \$500
Re-inspections fee will not apply to acts of God for example weather related, unforeseen medical emergencies; for example if an inspection is scheduled and the homeowner calls the same day due to sickness and the inspection cannot be completed.	
Agricultural Buildings: (Electrical, Plumbing, Fuel Piping permits required)	Per Fee Schedule
School Built House Construction (Built by students through high school classes)	Waive Fees
Permit Renewal (residential only):	Expired up to 12 Months=\$100 or cost of original permit, whichever is less. 12-24 Months = \$200 or cost of original permit, whichever is less. >24 Months = Full cost of original permit.
Failure to Obtain Permit	Double Permit Fee
Plan Review Fee (commercial) - charged for all plans submitted	\$50 + \$0.001 per sq. ft.
County Projects:	
In House by Employees	Waive Fees
Contracted by Outside Work Force	Per Fee Schedule
North Carolina Home Owners Recovery Fund	\$10.00

Fee Schedule

Transportation Services

Fee Schedule Item	FY 2022/2023 Fee Amount	
	Per Mile Rate	No Show Fee (equal to Per Mile Rate)
Department of Aging	\$1.90	Yes
Department of Social Services	\$2.16	No
Medicaid Broker fees		
ModivCare	Ambulatory Wheelchair	
0 to 3 miles flat rate	\$15.69 \$24.59	
4 to 6 miles flat rate	\$20.23 \$29.69	
7 to 10 miles flat rate	\$23.23 \$32.38	
Rate per miles over 10 miles	\$1.67 \$2.16	
One Call (flat rate and per mile)	Ambulatory Wheelchair	
	\$12 & \$1.70 \$30 & 2.25	
Elderly & Disabled Transportation Assistance Program (EDTAP) (In City Limits)	\$4.00 each way	Yes*
Elderly & Disabled Transportation Assistance Program (EDTAP) (Outside City Limits)	\$4.00 each way	Yes*
Elderly & Disabled Transportation Assistance Program (EDTAP) (Out of County - Border)	\$7.00 each way	Yes*
Elderly & Disabled Transportation Assistance Program (EDTAP) (Out of County - Wake, CH, Durham)	\$10.00 each way	Yes*
Moore County Schools	\$1.90	Yes
Knickerbocker Village	\$1.90	Yes
March Services (previously Pinetree Community Services)	\$1.90	Yes
Rural General Public (RGP) (In City Limits)	\$4.00 each way	Yes*
Rural General Public (RGP) (Outside City Limits)	\$4.00 each way	Yes*
Rural General Public (RGP) (Out of County (Border))	\$7.00 each way	Yes*
Rural General Public (RGP) (Out of County (Wake, CH, Durham))	\$10.00 each way	Yes*
A-Pines Line (Fixed Route)	\$2.00 each way	N/A
Sandhills Children's Center	\$1.90	Yes
Sandhills/Moore Coalition for Human Care	\$1.90	Yes
Daymark Recovery (previously Sandhills Mental Health)	\$1.90	Yes
Vocational Rehabilitation Services	\$1.90	Yes
Peak Resources Pinelake	\$1.90	Yes
Mailing of purchased tokens	Current USPS certified postage rate	
* EDTAP & RGP no show fees will be charged the same as a rider fee.		
Non-Client Transport Fee (back to place of residence)	\$50.00 one way	effective October 1, 2013 BOC Approval

Fee Schedule GIS

Fee Schedule - Item	FY 2022/2023 Fee Amount
Photocopies 8.5x11	\$0.15/page (black ink only) \$0.50/page (color ink)
Copy of Already Created Map up to 8.5 x 11	\$2
Copy of Already Created Map up to 11 x 17	\$5
Copy of Already Created Map up to 42 x 48 (no ortho)	\$20
Copy of Already Created Map up to 42 x 48 ortho	\$50
GIS Maps Custom Request	\$25 minimum
	\$25 per half-hour
	One custom request includes one printed map 8.5 x 11, 11 x 17, or up to 42 x 48 no ortho. Larger than 11 x 17 ortho will have the minimum \$50 charge applied.
Road Name Change	\$250
Road Name Removal	\$75
Shipping and handling	Actual Charges
GIS Training Fees per class day	\$350
Street Atlas	\$20
Acting to Add, Remove or Abandon NCDOT Roads (from Planning)	\$75
Returned Check Fee	Set By State Statute

Fee Schedule

Cooperative Extension

Fee Schedule - Item	FY 2022/2023 Fee Amount
Aerator Rental (Excludes Sales Tax)	\$100 First Day, \$75 Second Day, \$50 Third day and each additional day
Cattle Chute (Excludes Sales Tax)	\$35 per day/plus a late fee of \$25 if returned after 8:00 a.m. after due date. If not cleaned an additional fee of \$50 will be assessed
Portable Corral System (Excludes Sales Tax)	Minimum 2 day rental \$70. \$35 for each additional day/plus a late fee of \$25 if returned after 8:00 a.m. after due date
Master Gardener Training (Excludes Sales Tax)	\$80.00-\$100.00
Visit NC Farm Mobile App (Excludes Sales Tax)	\$72.00-\$90.00/Year/Participating Farms & Businesses
Family & Consumer Sciences Food Preservation & Cooking Skills Classes (Excludes Sales Tax)	\$10.00-\$50.00
Food Safety Classes for Food Service Industry (Excludes Sales Tax)	\$90.00-\$140.00
Farm-City Banquet Ticket	\$12.00-\$15.00 per ticket
Master Gardner Farm Tour	\$10.00/car
Family & Consumer Sciences Nutrition and Education Kits	\$110.00 per Kit (this includes shipping)

Fee Schedule

Soil & Water Conservation

Fee Schedule - Item	FY 2022/2023 Fee Amount
COUNTY REIMBURSED FEES:	
Topographical copies, historic aerial photo copies	\$1.00
8 x 11 GIS printed map - topos or orthos	\$2.00
11 x 17 GIS printed map - topo or orthos	\$5.00
Scanning maps	\$3.00
DISTRICT REIMBURSED FEES:	
Drill Rentals - acres - 30 days past due 1.5% per month (Excludes Sales Tax) \$100.00 minimum	\$15.00
Brillion Seeder (Excludes Sales Tax)	\$10
Trees (Excludes Sales Tax)	Varies/packet
Original USGS Topographical Maps	\$7.50

Fee Schedule

Child Support

Fee Schedule - Item	FY 2022/2023 Fee Amount
Application Fee- Amount set by the State Office of Child Support	Set by State
Court costs established by the Administrative Office of the Courts	Set by State
Paternity Testing Fees - Testing cost set through State level contract between State and the approved testing laboratory.	Set by State

Fee Schedule

Youth Services

Fee Schedule - Item	FY 2022/2023 Fee Amount
Teen Court Summit	\$25 per participant

Fee Schedule

Aging

Fee Schedule - Item	FY 2022/2023 Fee Amount
In Home Aide Services	Consumer contribution
Nutrition Services	Consumer contribution
Transportation Services	Consumer contribution
The Point Newsletter	\$5 for year subscription
Day trips and programs	varies (enough to cover costs)
Fitness Room	\$2 per visit, or \$20 for 11 visits, \$40 for 22 visits
Fitness Classes	\$2 per class
Event Table Rental, (Sales Tax Included in Cost)	\$25 per table
Craft Fair Concessions, (Sales Tax Included in Cost)	prices vary \$.50-\$5.00
T-Shirt Sales	prices vary \$10.00-\$12.00
Ensure Products	Prices vary by size \$17.00 - \$28.00
Local Fax- Customer provides the copies	\$0.50 per page
Local Fax- We provide copies to be faxed	\$1.00 per page
Long Distance Fax- Customer provides copies to be faxed	\$3.00-1st page \$1.00-each additional page
Long Distance Fax- We provide copies to be faxed	\$3.00 - 1st page \$2.00 each additional page
Copies	\$.15/page, \$.50/page color
Sponsorship Dollars from private enterprises - Donations for a specific purpose	Ranging from \$25.00 to \$1,000
Calendars	\$10.00

Fee Schedule

Library**

Fee Schedule - Item	FY 2022/2023 Fee Amount
Photocopies	\$0.15/page; COLOR \$0.50/page
Overdues	\$0.05/day books; \$2.00/day DVD's; \$5.00/day overhead projector; \$5.00/day DVD player; \$5.00/day slide projector; \$5.00/day projector screen \$2.00/day Nook e-readers; \$2/day Internet backpacks; \$2/day Internet Hotspots
Replacement for lost library cards	\$1.00
DVD Rental (two nights) (cost is reimbursed to Sandhills Regional Library System)	\$1.00
Temporary (non-resident) and non-resident library cards	\$10.00/year
Lost or damaged materials and equipment (Internet Backpack equipment costs reimbursed to the Sandhill Regional Library System)	Replacement cost
Faxes (reimbursed to the Sandhill Regional Library System)	\$1.00/copy
Returning Internet Backpacks to Book Drop (reimbursed to the Sandhill Regional Library System)	\$5.00 Fine
Returning Internet Hotspot to the Book Drop	\$5.00 Fine
Special Events and Items	Cost to be set by County Manager
**Fees are set by the Sandhill Regional Library System and are subject to change during the fiscal year.	

Fee Schedule

Parks & Recreation - Page 1 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Youth Athletics	\$20-\$100 plus \$10 -Late Fee after registration deadline
Senior Athletics	\$35-\$45 Out of County registration \$10- Late Fee after registration deadline
Adult Athletics	\$20-\$45 Out of County registration \$10- Late Fee after registration deadline
Hillcrest Park Baseball/Softball Fields Rental	Hourly \$20.00 per field no lights. Hourly \$40.00 per field w/lights. \$150.00 per day per field. \$20.00 additional per hour for lights-per field; \$25 per drag of additional field (plus \$50 Daily Clean Up Fee)
Pavillion at Hillcrest Park	Minimum Rental: \$30 for 2 hours, (\$10 each additional hour)
Parks and Recreation Tournament Admission	\$1.00 Age 13 and up & under Free 12
Davis Ball Field	\$100 Per Day
Multipurpose Room - Weekday rental - Sports Complex	\$100/ two hours
Multipurpose Room - Weekend rental - Sports Complex	\$100/ two hours
Multipurpose Room - Additional hours - Sports Complex	\$40/ hour
Gymnasium - Weekday rental - per court - Sports Complex	\$150/ two hours
Gymnasium - Weekend rental - per court - Sports Complex	\$200/ two hours
Gymnasium - Additional hours - Sports Complex	\$65/ hour
Multipurpose Room & Gymnasium combo - Weekday rental - Sports Complex-- 1 court	\$225/ two hours
Multipurpose Room & Gymnasium combo - Weekend rental - Sports Complex-- 1 court	\$280/ two hours
Multipurpose Room & Gymnasium combo - Weekday rental - Sports Complex-- 2 court	\$450/ two hours
Multipurpose Room & Gymnasium combo - Weekend rental - Sports Complex-- 2 court	\$560/ two hours
Multipurpose Room & Gymnasium combo - Additional Hours - Sports Complex	\$100/ hour
Tournament Rental - Gymnasium - Weekday rental - Sports Complex	\$680/ day
Tournament Rental - Gymnasium - Weekend rental - Sports Complex	\$850/ day

Fee Schedule

Parks & Recreation, Page 2 of 2

Fee Schedule - Item	FY 2022/2023 Fee Amount
Tournament Rental - Multi-purpose and Gymnasium combo- Weekday rental - Sports Complex	\$900/ day
Tournament Rental - Multi-purpose and Gymnasium combo- Weekend rental - Sports Complex	\$1125/ day
Deposit (required for ALL Renters) Multi-purpose room / 2 week turn around for deposit refund check to be issued	\$75/ day
Deposit (required for ALL Renters) Gymnasium / 2 week turn around for deposit refund check to be issued	\$75/ day
Deposit (required for ALL Renters) Tournament / Liability Insurance is REQUIRED / 2 week turn around for deposit refund check to	\$225/ event
Additional Fee (Required for ALL renters) Cleaning fee - fee when hosting tournaments	\$50/ day
Additional Fee (Required for ALL renters) Vendor/Exhibitor - per vendor- fee **No outside vendors will be allowed for concession sales**	\$25/ each
Sponsorship-Youth Basketball	\$150 Per Team
Sign Advertising	\$375/sign - Outfield (new) \$175/sign - Outfield (renewal) \$200 Outfield (recover) \$600/sign - Dugout (new) \$250/sign Dugout (renewal) \$350 Dugout (recover)
Processing Fee for Refunds	\$5
Concessions:	
Items vary (Sales Tax Included in Cost)	\$0.25-\$5.00

Fee Schedule

Social Services

Fee Schedule - Item	FY 2022/2023 Fee Amount
ADOPTION FEE SCHEDULE:	
Pre-Placement Assessment Fee for one child	\$1,600
Pre-Placement Assessment Fee for each additional child	\$50
Pre-Placement Assessment Update Fee	\$350
Fee for preparation of the Report to the Court on relative adoptions for a non DSS child	\$260
Fee for preparation of the Report to the Court (relative adoptions - each additional child)	\$75
Post Adoption Services Fee (Per Hour Fee)	\$75
CONFIDENTIAL INTERMEDIARY FEE SCHEDULE:	
Confidential Intermediary Agreement Initial Search Fee	\$250
Confidential Intermediary Search Fee for searches that exceed 90 days (Per Hour Fee)	\$75
HOME STUDY FEE:	\$250
REDUCED FEES: Applies to Adoption, Confidential Intermediary, & Home Study Fees	
Families who have a verified gross family income of \$25,000 - \$35,000	75% of Total Costs
Families who have a verified gross family income of \$20,000 - \$24,999	50% of Total Costs
Families who have a verified gross family income of \$15,000 - \$19,999	25% of Total Costs
Families with the Head of Household that is TANF eligible or a SSI recipient	Free of Charge
NORTH CAROLINA HEALTH CHOICE FEES:	\$50.00 Per Child - Not to Exceed \$100.00 Per Family

Fee Schedule

Health (Clinical Services)

Fee Schedule - Item	FY 2022/2023 Fee Amount
On August 12, 2000 the Board of Commissioners adopted a Resolution allowing the Moore County Health Department to adjust fee schedules based on cost effectiveness, service accessibility, and/or to compensate for changes in Federal, State and private insurance reimbursement. The detailed fee schedule will be posted on the Health Department website and available at the Health Department upon request.	See Health Department Website or Health Department for more information on Fees

Fee Schedule Environmental Health Page 1 of 3

Fee Schedule	FY2022/2023 Fee Amount			
	PRIVATE SYSTEM		OTHER SYSTEM	REVIS
I. SEWAGE DISPOSAL AND TREATMENT SYSTEMS:				
<u>System Classification</u>	<u>2-3 Bedrooms</u>	<u>4+ Bedroom</u>		
Type I System Permit	\$450.00	\$613.00	N/A	N/A
Type II System Permit	\$450.00	\$613.00	\$813.00	N/A
Type III System Permit	\$650.00	\$813.00	\$1,048.00	N/A
Type IV System Permit	\$1,172.00	\$1,172.00	\$1,391.00	\$100.00
Type V System Permit	\$1,172.00	\$1,172.00	\$1,391.00	\$100.00
Type VI System Permit	\$1,172.00	\$1,172.00	\$1,391.00	\$100.00

1. Additional Site Evaluation per acre/lot	\$100.00
2. Consultative Visit initiated by owner or representative in conjunction with valid improvement permit or issuance of a construction authorization.	\$100.00
3. Inspection of sewage treatment and disposal systems for relocation or modification of a mobile home or conventional home or installation of swimming pool.	\$100.00
4. Septic System Modification or Repair:	
a) Septic tank replacement only	\$200.00
b) Repair/Replacement nitrification lines	\$250.00
c) Total septic system replacement (site visit - required)	\$450.00
Re-Issue Permit (name change only)	No Charge
6. Re-Issue Permit (name change/redraw or engineered flow reduction)	\$50.00
7. Re-Issue Permit (redraw/site visit)	\$150.00
8. Grease trap or Interceptor inspection	\$25.00
9. Site revisit required when site not prepared per new application instructions	\$100.00
10. Septic system repair per State rule .1961 (including real estate inspection)	No Charge

Fee Schedule

Environmental Health Page 2 of 3

Fee Schedule - Item	FY 2022/2023 Fee Amount
II. PRIVATE WATER SUPPLIES:	
1. New Well Permit/well panel kit (Includes bacteriological, inorganic, nitrates and nitrites)	\$250.00
Sampling-Must be in conjunction with well inspection fees to be paid prior to visit:	
2. Inorganic Chemical analysis kit	\$125.00
3. Bacteriological analysis kit	\$50.00
4. Nitrate analysis kit	\$50.00
5. VOC/Petroleum kit	\$125.00
6. Existing well inspection and/or consultative visit	\$25.00
7. Pesticide	\$125.00
8. Petroleum	\$125.00
9. Other	cost of sample kit
10. Other wells not requiring testing (irrigation, agriculture and geothermal wells)	\$100.00
III. PUBLIC SWIMMING POOLS:	
1. Annual Permit Inspection Fee (Per pool, spa, hot tub, misting pool, wading pool,	\$200.00
2. New Pool Plan Review (Per pool, spa, hot tub, misting pool, and wading pool)	\$200.00
3. Consultative/Re-Inspection for permit	\$100.00
IV. FACILITIES INSPECTION:	
1. Inspection of facilities not mandated by the Department of Health and Human Services	\$100.00
2. Tattoo Artist	\$150.00
3. Restaurant plan review	\$200.00
4. Photocopies per copy	\$0.15
5. Temporary Food Establishments	\$75.00
6. Limited Food Service Establishments	\$75.00
V. OTHER:	
Return Check Fee	\$25.00

County of Moore

Environmental Health Department
1042 Carriage Oaks Drive • PO Box 279
Carthage, NC 28327



Permitting Pathway Options

Permit Paths	Permitting Authority	Responsibilities	County Fees	Turn Around Time (upon receipt by EHD)
1 Traditional County Permitting	Local Environmental Health Department	100% Local Environmental Health Department	Normal Permitting Fees	Varies from County to County but, contact local EHD to receive up-to-date timeframe.
2 Session Law 2018-114	Local Environmental Health Department	Local EHD is responsible for permitting, inspections, and record keeping. Soil Scientist is responsible for necessary soils and site information per Moore County submission requirements.	75% of Normal Permitting Fees (25% discount)	Often faster than traditional but, contact local EHD to receive up-to- date timeframe.
3 AOWE / Covid-19 LSS	Licensed Soil Scientist	Soil Scientist is responsible for all permitting aspects. Local EHD acts as record keeper only.	30% of Normal Permitting Fees (70% discount)	Within 5 Business Days
4 Engineered Option Permit (EOP)	Professional Engineer	Engineer is responsible for all permitting aspects. Local EHD acts as record keeper only.	30% of Normal Permitting Fees (70% discount)	Within 15 Business Days

Fee Schedule

Public Works (Water Pollution Control Plant)

Fee Schedule - Item	FY 2022/2023 Fee Amount
Flow Rates for Municipalities	\$3.24/1000 gallons
Flow Rates for Camp Mackall	\$6.08 per 1000 gal plus a Monthly fee of \$3,021.52
Flow Rates for Approved Out of County (Hoffman/ATF via Aberdeen)	\$6.48 per 1000 gallons
Septic Tank Haulers (Domestic)	\$50.00 per 1000 gal \$.050/gal over 1000
Septic Tank Haulers (Camp Mackall and Hoffman)	\$100.00 per 1000 gal \$0.10/gal over 1000
Septic Tank Haulers (Industrial)	\$130.00 per 1000 gal
Utility Right of Way Cleaning	\$60 per man hour
Clean Up Fee, Septic Hauler	\$75.00 per occurrence
Pretreatment	
Initial Permit Fee	\$100.00
Permit Renewal Fee	\$35.00
Annual inspection Fee	\$70.00
Permit Violation or Unpermitted Discharge. The Notice of Violation assessed penalty fee is subject to the Moore County Enforcement Response Plan (ERP).	\$0 to \$25,000 per day, per violation
Fats, Oil and Grease	
Annual inspection fee	\$75.00
Reporting, Paperwork or Maintenance Violation per the Sewer Use Ordinance (SUO). Penalties shall be assessed based on severity of the violation and/or any factors contributing to blockage or overflow of sanitary sewer.	\$0 to \$25,000 per day , per violation
Lab Sample Analyses	
Ammonia	\$22.00
BCOD (Biochemical Oxygen Demand)	\$42.00
Cadmium	\$25.00
Chromium	\$25.00
COD (Chemical Oxygen Demand)	\$30.00
Copper	\$25.00
Cyanide	\$46.00
Fecal Coliform	\$29.00
Lead	\$25.00
MBAs (Methylene Blue Active Substances)	\$55.00
Missed Sampling Event	\$30.00
Mercury 1631	\$325.00
Nickel	\$25.00
Nitrate/Nitrite	\$30.00
Nitrogen	\$55.00
Oil & Grease	\$50.00
pH	\$12.00
Total Phosphorous	\$26.00
Silver	\$25.00
TKN (Total Kjeldahl Nitrogen)	\$26.00
TSS (Total Suspended Solids)	\$15.00
Zinc	\$25.00
OCPSP (Organic Chemical, Plastics & Synthetic Fibers)	\$513.00
TTO (Total Toxic Organics)	\$763.00

Fee Schedule

Public Works - Public Utilities Division/East Moore Water District

Mission: The mission of the Public Utilities Division of Public Works is to preserve and enhance the quality of life in Moore County by providing an adequate supply of safe water to all customers; and to provide environmentally sound collection services for those communities connected to the County's sewer collection systems.

Fee Schedule - Item	FY 22/23 Fee Amount
Monthly Base Rates for Water	
3/4 inch meter	\$10.28
1 inch meter	\$12.67
1.5 inch meter	\$13.80
2 inch meter	\$21.64
3 inch meter	\$78.67
4 inch meter	\$99.72
6 inch meter	\$148.95
Monthly Base Rate for East Moore Water District (Including Irrigation)	
3/4 inch meter	\$26.62
1 inch meter	\$29.55
2 inch meter	\$43.45
4 inch meter	\$209.37
Sewer Rate EMWD 3/4 inch	\$26.62
Sewer Rate EMWD 1 inch	\$29.55
Sewer Rate EMWD 2 inch	\$43.45
*Water Residential Commodity Charges	
Charge per 1000 gallons (0 - 2000 gallons)	\$3.31
Charge per 1000 gallons (2001 - 4000 gallons)	\$4.33
Charge per 1000 gallons (4001 - 8000 gallons)	\$4.98
Charge per 1000 gallons (8001 - 12000 gallons)	\$5.41
Charge per 1000 gallons (12001 + gallons)	\$7.57
*Water Residential Commodity Charges (The Carolina)	
Charge per 1000 gallons (0 - 2000 gallons)	\$3.47
Charge per 1000 gallons (2001 - 4000 gallons)	\$4.53
Charge per 1000 gallons (4001 - 8000 gallons)	\$5.22
Charge per 1000 gallons (8001 - 12000 gallons)	\$5.67
Charge per 1000 gallons (12001 + gallons)	\$7.94
*Water Residential Commodity Charges (MCPU-High Falls, Robbins, West Moore)	
Charge per 1000 gallons (0 - 2000 gallons)	\$4.60
Charge per 1000 gallons (2001 - 4000 gallons)	\$5.67
Charge per 1000 gallons (4001 - 8000 gallons)	\$6.35
Charge per 1000 gallons (8001 - 12000 gallons)	\$6.80
Charge per 1000 gallons (12001 + gallons)	\$7.94
Sewer Residential Commodity Charges	
Charge per 1000 gallons (0 - 2000 gallons)	\$4.61
Charge per 1000 gallons (2001 - 4000 gallons)	\$5.64
Charge per 1000 gallons (4001 - 8000 gallons)	\$6.28
Charge per 1000 gallons (8001 - 12000 gallons)	\$6.72
Charge per 1000 gallons (12001 + gallons)	\$8.88
Monthly Base Rates for Sewer	
3/4 inch meter	\$12.02
1 inch meter	\$14.39
1.5 inch meter	\$15.63
2 inch meter	\$23.43
3 inch meter	\$80.45
4 inch meter	\$101.49
6 inch meter	\$150.73
Unmetered Residential Sewer Monthly Fee	\$73.85
Monthly Base Rates for Irrigation	
3/4 inch meter	\$10.28
1 inch meter	\$12.67
1.5 inch meter	\$13.80
2 inch meter	\$21.64
3 inch meter	\$78.67
4 inch meter	\$99.72
6 inch meter	\$148.95

Fee Schedule

Public Works - Public Utilities Division/East Moore Water District

Mission: The mission of the Public Utilities Division of Public Works is to preserve and enhance the quality of life in Moore County by providing an adequate supply of safe water to all customers, and to provide environmentally sound collection services for those communities connected to the County's sewer collection systems.

Fee Schedule - Item	FY22/23 Fee Amount				
**Water (Domestic & Irrigation) Connection Fees					
**Developer installed connections are not required to pay the Tap portion. The SDF, MSF and Admin Fee apply					
	Tap	SDF	MSF	Admin Fee	Total FCCF
Water Fee - 3/4 inch meter	\$1,114	\$1,027	\$300	\$50	\$2,491
Water Fee - 1 inch meter	\$1,117	\$2,568	\$390	\$50	\$4,125
Water Fee - 2 inch meter	\$1,407	\$8,216	\$2,820	\$50	\$12,493
Water Connection Fee - 3 inch meter	At Cost	\$16,432	At Cost	\$50	Cost + \$16,482
Water Fee - 4 inch meter	At Cost	\$25,675	At Cost	\$50	Cost + \$25,725
Water Fee - 6 inch meter	At Cost	\$51,350	At Cost	\$50	Cost + \$51,400
Irrigation Fee - 3/4 inch meter	\$1,114	\$1,027	\$300	\$50	\$2,491
Irrigation Fee - 1 inch meter	\$1,117	\$2,568	\$390	\$50	\$4,125
Irrigation Fee - 2 inch meter	\$1,407	\$8,216	\$2,820	\$50	\$12,493
Irrigation Fee - 3 inch meter	At Cost	\$16,432	At Cost	\$50	Cost + \$16,482
Irrigation Fee - 4 inch meter	At Cost	\$25,675	At Cost	\$50	Cost + \$25,725
Irrigation Fee - 6 inch meter	At Cost	\$51,350	At Cost	\$50	Cost + \$51,400
**Sewer Connection Fees					
**Developer installed connections are not required to pay the Tap portion. The SDF and Admin Fee apply					
	Tap	SDF		Admin Fee	Total FCCF
Sewer Fee - 3/4 inch meter	\$1,672	\$1,831		\$50	\$3,553
Sewer Fee - 1 inch meter	\$1,672	\$3,662		\$50	\$5,384
Sewer Fee - 2 inch meter	\$1,672	\$11,719		\$50	\$13,441
Sewer Fee - 4 inch meter	At Cost	\$36,620		\$50	Cost + \$36,670
Sewer Fee - 6 inch meter	At Cost	\$73,240		\$50	Cost + \$73,290
Sewer Fee - 8 inch meter	At Cost	\$117,184		\$50	Cost + \$117,234
Fire Main Connection- - all sizes					At Cost
**Repair Fees are Imposed If any additional work is required to provide a service connection					
Repair Fee 3/4" service				Min \$125	Max \$1114
Repair Fee 1" service				Min \$125	Max \$1117
Repair Fee 2" service				At Cost	Max \$1407
Repair Fee Sewer				At Cost	Max \$1672
**East Moore Water (Domestic & Irrigation) Connection Fees					
**Developer installed connections are not required to pay the Tap portion. The SDF, MSF and Admin Fee apply					
	Tap	SDF	MSF	Admin Fee	Total FCCF
Water Fee - 3/4 inch meter	\$1,114	\$656	\$300	\$50	\$2,120
Water Fee - 1 inch meter	\$1,117	\$1,640	\$390	\$50	\$3,197
Water Fee - 2 inch meter	\$1,407	\$5,248	\$2,820	\$50	\$9,525
Water Fee - 3 inch meter	At Cost	\$10,496	At Cost	\$50	Cost + \$10,546
Water Fee - 4 inch meter	At Cost	\$16,400	At Cost	\$50	Cost + \$16,450
Water Fee - 6 inch meter	At Cost	\$32,800	At Cost	\$50	Cost + \$32,850
Irrigation Fee - 3/4 inch meter	\$1,114	\$656	\$300	\$50	\$2,120
Irrigation Fee - 1 inch meter	\$1,117	\$1,640	\$390	\$50	\$3,197
Irrigation Fee - 2 inch meter	\$1,407	\$5,248	\$2,820	\$50	\$9,525
Irrigation Fee - 3 inch meter	At Cost	\$10,496	At Cost	\$50	Cost + \$10,546
Irrigation Fee - 4 inch meter	At Cost	\$16,400	At Cost	\$50	Cost + \$16,450
Irrigation Fee - 6 inch meter	At Cost	\$32,800	At Cost	\$50	Cost + \$32,850
**East Moore Sewer Connection Fees					
**Developer installed connections are not required to pay the Tap portion. The SDF and Admin Fee apply					
	Tap	SDF		Admin Fee	Total FCCF
Sewer Fee - 3/4 inch meter	\$2,022	\$1,119		\$50	\$3,191
Sewer Fee - 1 inch meter	\$2,022	\$3,557		\$50	\$5,629
Sewer Fee - 2 inch meter	\$2,022	\$10,672		\$50	\$12,744
Sewer Fee - 3 inch meter	At Cost	\$23,123		\$50	Cost + \$23,173
Sewer Fee - 4 inch meter	At Cost	\$35,573		\$50	Cost + \$35,623
Sewer Fee - 6 inch meter	At Cost	\$71,147		\$50	Cost + \$71,197
Sewer Fee - 8 inch meter	At Cost	\$113,835		\$50	Cost + \$113,885

Fee Schedule

Public Works - Public Utilities Division/East Moore Water District

Mission: The mission of the Public Utilities Division of Public Works is to preserve and enhance the quality of life in Moore County by providing an adequate supply of safe water to all customers; and to provide environmentally sound collection services for those communities connected to the County's sewer collection systems.

Fee Schedule - Item	FY22/23 Fee Amount
Irrigation Commodity Charges	
Charge per 1000 gallons (0 - 4000 gallons)	\$4.98
Charge per 1000 gallons (4001 + gallons)	\$7.57
Water Commercial Commodity Charges	
Charge per 1000 gallons (0 - 4000 gallons)	\$4.44
Charge per 1000 gallons (4001 - 8000 gallons)	\$5.20
Charge per 1000 gallons (8001 + gallons)	\$6.28
Water Commercial Commodity Charges (MCPU-High Falls, Robbins, West Moore)	
Charge per 1000 gallons (0 - 4000 gallons)	\$5.79
Charge per 1000 gallons (4001 - 8000 gallons)	\$6.58
Charge per 1000 gallons (8001 + gallons)	\$7.72
Sewer Commercial Commodity Charges	
Charge per 1000 gallons (0 - 4000 gallons)	\$5.74
Charge per 1000 gallons (4001 - 8000 gallons)	\$6.82
Charge per 1000 gallons (8001 + gallons)	\$7.57
Bulk Water Charge	
Monthly Base Charge Up to 15 units additional \$6.63 per unit per mo thereafter	\$149.54
Charge per 1000 gallons	\$6.18
Bulk Sewer Charge NEW ITEMS (BULK SEWER)	
Monthly Base Charge Up to 15 units additional \$6.63 per unit per mo thereafter	\$176.62
Charge per 1000 gallons	\$6.69
Service Charge (to establish account - new and transfers)	\$25.00
Meter Verification Request/Independent Testing	At Cost
Returned Check Fee	\$25.00
Late Fee (applied to any balance \$5.01 or greater)	\$5.00
Domestic Water Adjustment Charge (Per 1,000 gallons)	\$3.31
Commercial Water Adjustment Charge (Per 1,000 gallons)	\$4.44
Irrigation Water Adjustment Charge (per 1,000 gallons)	\$4.98
Domestic Sewer Adjustment Charge (Per 1,000 gallons)	\$4.61
Commercial Sewer Adjustment Charge (Per 1,000 gallons)	\$5.74
Fire Protection Fees (private - based on size of connection)	
4 inch	\$3.18/month
6 inch	\$4.83/month
8 inch	\$6.81/month
10 inch	\$9.12/month
Water Theft Charges	
Water or Sewer system equipment tampering	\$500.00
Meter Tampering/Water Theft/Cut Lock/Lock Removal	\$150.00
Meter Tampering/Water Theft/Busted Dial/Cut Transponder/Damaged Meter	\$300.00
Unmetered Water Connection Straight Piped	\$500.00
Unmetered Water Connection - Hydrant (Imminent cross connection)	\$1,500.00

Fee Schedule

Public Works - Public Utilities Division/East Moore Water District

Mission: The mission of the Public Utilities Division of Public Works is to preserve and enhance the quality of life in Moore County by providing an adequate supply of safe water to all customers; and to provide environmentally sound collection services for those communities connected to the County's sewer collection systems.

Fee Schedule - Item	FY2022/2023 Fee Amount
MCPU and EMWD Rates on other Services	
Non-Payment Fee	\$40.00
Disconnection/Reconnection (including inspections/service changes)	\$25.00
Property Owner Deposit Fee with Gov issued ID	\$100.00
Property Owner Deposit Fee without Gov issued ID	\$150.00
Tenant Deposit Fee with Gov issued ID	\$200.00
Tenant Deposit Fee without Gov issued ID	\$250.00
Meter Data Profiles (More than 2 per year) Extra Expense Required	\$30.00
Property/Equipment Damage	At Cost
Relocation of appurtenances	At Cost
Service Call	Minimum \$75.00
Installation of new appurtenances	At Cost
Street Cut Repair Fee	\$350.00
Vac Truck - Hourly Rate	\$300.00
Backhoe - Hourly Rate	\$100.00
Mini Excavator - Hourly Rate	\$100.00
Sewer Camera - Hourly Rate	\$100.00
Line Stop Equipment - Hourly Rate	\$100.00
Rodder/Jetter - Hourly Rate	\$50.00
Tapping Machine - Hourly Rate	\$100.00
Valve Exercise Machine - Hourly Rate	\$50.00
Pneumatic Boring Tool - Hourly Rate	\$50.00
Trailer Mounted Air Compressor - Hourly Rate	\$50.00
Crane Truck - Hourly Rate	\$125.00
"Small" Dump Truck, Flatbed - Hourly Rate	\$75.00
Large Dump Truck - Hourly Rate	\$100.00
Dump Trailer - Hourly Rate	\$75.00
Trailer - Hourly Rate	\$50.00
Hydrant Meter - Deposit	\$800.00
-Rental Fee (Weekly)	\$75.00
-Usage	Bulk Water Rates
-Relocation	\$50.00
Employee Labor - Hourly Rate (includes vehicle cost)	\$30.00
Employee Labor - Overtime Hourly Rate (includes vehicle cost)	\$45.00
Railroad Permit Annual Fee	\$300.00
Cross Connection Control Fees	
Imminent hazard	\$1000/day, not to exceed \$10,000
High hazard	\$500/day, not to exceed \$5,000
Failure to submit testing records/submitting false testing records	Up to \$500
Failure to maintain or test backflow assemblies	\$200 per day
Failure to comply to written notice regarding any potential cross connection	\$500.00
Disconnection of service for CC non-compliance	\$40.00
Disconnection of service for CC non-compliance 2nd offense	\$150.00
Engineering Fees	
Letter of Intent (projects of 10 or less Residential Equivalent Units)	\$70.00
Letter of Intent (projects greater than 10 Residential Equivalent Units)	\$135.00
Preliminary Plan Review	\$190.00
Construction Phase Review (per Residential Equivalent Unit)	\$35.00
Warranty Issues Fine	\$100.00/day
Deed of Dedication - Recordation	\$26.00
Recordation of plat	\$21.00
Modeling fee per scenario - Water	\$200.00
Modeling fee per scenario - Sewer	\$200.00
Hydrant Flow Test	\$150.00
Copier Costs	
Letter Size 8.5 x 11	\$.15 per Sheet, \$.50/Color
Legal Size 8.5 x 14	\$.25 per Sheet, \$.50/Color
Ledger Size 11 x 17 (plans or maps)	\$.50 per Sheet
Arch D Size 24 x 36 (plans or maps)	\$1.50 per Sheet

Fee Schedule

Information Technology

Fee Schedule - Item	FY2022/2023 Fee Amount
Custom Programming for Printing and Data Requests	
Set up time, programming time, and/or processing time of all requests	\$50 per hour minimum of \$50
Analysis, programming and/or processing - Custom copies of data or plot routine, programming for requested information, processing time on computers or printers	\$50 per hour minimum of \$50
Analyst/Programmer and/or processing - Custom copies of data or plot routine, programming for requested information, processing time on computers or printers	\$50 per hour minimum of \$50
Coverage conversion, special system request	\$50 per hour minimum of \$50
Custom Printing/Copying (up to 11" x 17" paper size) Paper Provided • Black & White • Color	\$.0279 per page \$.095 per page
Custom Printing/Copying (up to 11" x 17" paper size) Paper Not Provided • Black & White • Color	\$.03 per page \$.10 per page
Media Charges	
Blank CD/DVD/DVR	\$1.00
Labels. \$11 per thousand plus set up time, programming time, and processing time.	\$11 per thousand plus set up time, programming time and processing time
Electronic Records Requests • Per record (plus applicable custom programming charges)	\$0.01
Shipping and handling	Actual Charges
All requests must be filled out and signed by taxpayer and minimum upfront payment of \$10 must be paid for all requests requiring programming and processing time	*****

Fee Schedule

Property Management

Fee Schedule - Item	FY2022/2023 Fee Amount
Historic Courthouse	\$200 deposit; \$50 for 2 hours; \$20 each additional hour
Davis Community Center	\$200 deposit; \$50 for 2 hours; \$20 each additional hour
Davis Community Center Picnic Shelter	\$200 deposit; \$20 for 2 hours; \$10 each additional hour
Agriculture Center	\$200 deposit; \$40/room/2hours; \$40 each additional room; \$20 each additional hour per room; \$40 for kitchen/2 hours and \$20 for each additional hour
All other County Facilities	\$200 deposit; \$50 for 2 hours; \$20 each additional hour
Week Day Rental (Monday - Friday) only one deposit of \$200 is required when renting both weekdays and weekends together	\$200 deposit; \$100 per room for weekday (M-F) rental plus kitchen \$125
Weekend Rental (Saturday-Sunday) only one deposit of \$200 is required when renting both weekdays and weekends together	\$200 deposit; \$75 per room for weekend (Sat-Sun) rental plus kitchen \$100
**NOTE: Events that have been secured prior to the end of the fiscal year use the fee schedule at the time the deposit was secured.	

Fee Schedule

Emergency Medical Services

Fee Schedule - Item	FY2022/2023 Fee Amount
Basic Life Support (Non-emergent)	\$425.00
Basic Life Support (Emergent)	130% above Medicare Fee Schedule
Advanced Life Support (Non-emergent)	\$425.00
Advanced Life Support (Emergent)	130% above Medicare Fee Schedule
Advanced Life Support - Level 2	130% above Medicare Fee Schedule
Loaded Mileage	130% above Medicare Fee Schedule
Treatment with no Transport	\$100.00
Itemized Supply Charges	
ALS Disposables	\$100.00
BLS Disposables	\$60.00
Oxygen	\$50.00
IV Supplies	\$50.00
Road Sign Fees	
Road Signs - Single Blade Roadsign installation & supplies	\$200.00
Road Signs - Multiple Blade Roadsign installation & supplies	\$250.00

Fee Schedule

E-911 Telephone Fund

Fee Schedule - Item	FY2022/2023 Fee Amount
Fee Consistent with the rate as set by the State of North Carolina that the County receives through PSAP Revenues that consists of the telephone line cost	As set by State Ordinance

Fee Schedule

Human Resources/Risk Management

Fee Schedule - Item	FY2022/2023 Fee Amount
Employees in Motion Fitness Program Participation Fees	Varies based on Program

Appendix B
6/23/2022

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
	04		16,565	17,122	17,978	18,797	19,652	20,546	25,682
	05		17,393	17,978	18,877	19,737	20,634	21,573	26,966
	06		18,263	18,877	19,821	20,724	21,666	22,652	28,315
	07		19,176	19,821	20,812	21,760	22,749	23,784	29,730
Solid Waste Site Attendant	08	B	20,135	20,812	21,852	22,848	23,887	24,973	31,217
	09		21,142	21,852	22,945	23,990	25,081	26,222	32,778
Certified Nursing Assistant I	10	H	22,199	22,945	24,092	25,190	26,335	27,533	34,418
Nutrition Site Manager	10	A							
Certified Nursing Assistant II	11	H	23,310	24,092	25,298	26,448	27,651	28,910	36,138
Community Social Services Assistant	11	H							
Custodial Worker	11	B							
MCTS Driver	12	B	24,476	25,298	26,563	27,769	29,034	30,354	37,946
Office Assistant III	13	F	25,699	26,563	27,891	29,160	30,487	31,873	39,842
Processing Assistant III	13	F							
Secretary	13	F							
Billing & Collections Clerk I	14	C	26,984	27,891	29,285	30,617	32,009	33,467	41,834
Lead Custodial Worker	14	B							
Medical Office Assistant	14	F							
Tax Assistant I	14	F							
Accounting Clerk IV	15	F	28,333	29,285	30,748	32,148	33,609	35,140	43,926
Administrative Secretary	15	F							
Animal Shelter Attendant	15	G							
Library Technician	15	F							
Nutrition Coordinator	15	F							
Office Assistant IV	15	F							
Processing Assistant IV	15	F							
Transportation Fleet & Route Coordinator	15	F							
Transportation Office Coordinator	15	F							
Billing & Collections Clerk II	16	C	29,749	30,748	32,286	33,754	35,292	36,896	46,122
In-Home Services Supervisor	16	D							
Library Program Specialist	16	F							
Operation Specialist	16	B							
Utility Field Services Technician I	16	B							
Veterans Services Assistant	16	F							
Accounting Clerk V	17	F	31,235	32,286	33,900	35,443	37,056	38,742	48,429
Processing Assistant V	17	F							
Tax Assistant II	17	F							
Utility Field Services Technician II	17	B							
Utility Maintenance Technician I	17	B							
Water Maintenance Technician I	17	B							
Water Pollution Control Plant Operator Trainee	17	B							
Billing & Collections Clerk III	18	C	32,799	33,900	35,595	37,215	38,908	40,679	50,852
Equipment Operator	18	B							
Family Caregiver Advisor	18	H							
Human Resources Technician I	18	C							
Income Maintenance Caseworker I	18	H							
Maintenance Technician	18	B							
Master Control Room Operator	18	G							
Nutritionist I	18	E							
Personnel Technician I	18	C							
Property Assessment Specialist	18	F							
Public Health Educator I	18	E							
Tax Assistant III	18	F							
Tax Mapping Technician	18	E							

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Truck Driver/Equipment Operator	18	B							
Utility Maintenance Technician II	18	B							
Water Maintenance Technician II	18	B							
Water Pollution Control Lab Technician	18	E							
Water Pollution Control Plant Operator I	18	B							
Water System Operator I	18	B							
Weigh Master/Equipment Operator	18	B							
Administrative Assistant I	19	C	34,438	35,595	37,376	39,076	40,853	42,712	53,393
Case Manager	19	H							
Deputy Register of Deeds II	19	F							
EMT Basic	19	G							
Environmental Health Technician	19	B							
Human Resources Placement Specialist	19	H							
Human Services Coordinator I	19	H							
Licensed Practical Nurse	19	E							
Medical Laboratory Technician I	19	E							
Senior Insurance & Volunteer Services Advisor	19	F							
Social Worker I	19	H							
Utility Maintenance Technician III	19	B							
Veterans Services Officer	19	H							
Veterinary Health Care Technician	19	G							
Water Maintenance Technician III	19	B							
Water Pollution Control Plant Mechanic	19	B							
Water Pollution Control Plant Operator II	19	B							
Water System Operator II	19	B							
Backflow and Cross Connection Specialist	20	B	36,161	37,376	39,245	41,030	42,897	44,848	56,063
Billing & Collections Specialist	20	C							
Child Support Agent I	20	H							
Custodial Supervisor	20	B							
Deputy Register of Deeds III	20	E							
E911 Telecommunicator	20	G							
Fitness Coordinator	20	B							
Fleet Maintenance Mechanic	20	D							
Income Maintenance Caseworker II	20	H							
Income Maintenance Investigator I	20	H							
Nutrition/Transportation Manager	20	F							
Public Safety Administrative Assistant I	20	G							
SEC Program Coordinator	20	H							
Substance Abuse Counselor	20	H							
Telecommunicator	20	G							
Water Pollution Control Plant Operator III	20	B							
Water System Operator III	20	B							
Accounting Specialist I	21	E	37,968	39,245	41,206	43,080	45,041	47,090	58,866
Administrative Assistant II	21	C							
Business/Personal Property Appraiser	21	E							
Cognitive Behavior Intervention Specialist	21	H							
Delinquent Tax Collector	21	E							
Detention Officer	21	G							
Electrical/Maintenance Technician	21	B							
Engineering Technician I	21	E							
Evidence Technician	21	G							
Financial Specialist	21	E							
Human Resources Technician II	21	C							
HVAC/Maintenance Technician	21	B							

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Lead E911 Telecommunicator	21	G							
Lead Fleet Maintenance Mechanic	21	B							
Lead Telecommunicator	21	G							
Medical Laboratory Technician II	21	E							
Natural Resources Administrative Assistant	21	C							
Nutritionist II	21	E							
Permitting Technician	21	F							
Personnel Technician II	21	C							
Senior Maintenance Technician	21	B							
Tax Mapping Specialist	21	E							
Title Research & Foreclosure Specialist	21	E							
Water Pollution Control Plant Operator IV	21	B							
Advanced EMT	22	G	39,867	41,206	43,266	45,235	47,293	49,446	61,810
Athletics Programs Assistant	22	C							
Child Support Agent II	22	H							
Detention Deputy Sheriff	22	G							
Detention Sergeant	22	G							
E911 Communication Specialist	22	G							
E911 Training Specialist	22	G							
Human Resources Specialist	22	C							
Human Services Coordinator II	22	H							
Income Maintenance Caseworker III	22	H							
Income Maintenance Investigator II	22	H							
Landfill Operations Supervisor	22	D							
Program & Events Coordinator	22	C							
Public Health Educator II	22	E							
Public Safety Administrative Assistant II	22	G							
Records Classification Officer	22	G							
Register of Deeds Technology Support	22	E							
Solid Waste Collections Supervisor	22	D							
Utility Field Services Supervisor	22	D							
Administrative Officer I	23	D	41,860	43,266	45,430	47,497	49,657	51,917	64,899
Assistant Register of Deeds	23	C							
Computer Systems Administrator I	23	E							
Dental Hygienist I	23	E							
Deputy Sheriff	23	G							
Information Technology Support Specialist I	23	E							
Lead Child Support Agent	23	H							
Library Supervisor	23	D							
Maintenance Supervisor/Collections	23	D							
Maintenance Supervisor/Distribution	23	D							
Mechanical/Electrical Inspector	23	D							
Nutritionist III	23	E							
Real Property Appraiser	23	E							
Social Worker II	23	H							
Voter Registration Service Coordinator	23	C							
Water Pollution Control Plant Chief Mechanic	23	D							
Athletics Programs Supervisor	24	C	43,953	45,430	47,702	49,868	52,140	54,513	68,144
Deputy Sheriff Corporal	24	G							
Elections Training & Recruiting Specialist	24	C							
EMS Logistics Specialist	24	G							
EMT Paramedic	24	G							
Engineering Technician II	24	E							
Human Resources Analyst I	24	C							

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Human Services Coordinator III	24	H							
Income Maintenance Supervisor II	24	D							
Information Technology Support Specialist II	24	E							
Maintenance Supervisor/Water Quality	24	D							
Natural Resources Specialist	24	E							
Planner	24	E							
Public Safety Administrative Services Officer I	24	G							
Senior Real Property Appraiser	24	E							
Veterans Services Director	24	D							
Water Pollution Control Plant Chief Operator	24	D							
Water Pollution Control Plant Lab Chemist	24	E							
Youth Services/Day Reporting Center Supervisor	24	D							
Building Inspector I	25	D	46,151	47,702	50,086	52,366	54,749	57,240	71,552
Child Support Supervisor	25	D							
Dental Hygienist II	25	E							
Deputy Sheriff Sergeant	25	G							
Detective Sergeant	25	G							
Detention Lieutenant	25	G							
Housing Rehab Program Coordinator	25	E							
Human Services Planner/Evaluator I	25	H							
Information Technology Applications Analyst	25	E							
Paralegal	25	E							
Paramedic First Class	25	G							
Public Health Nurse I	25	E							
Records Sergeant	25	G							
Senior Tax Auditor	25	E							
Social Worker III	25	H							
Transport Sergeant	25	G							
Administrative Officer II	26	D	48,459	50,086	52,590	54,983	57,485	60,101	75,130
Appraisal Supervisor/Revaluation Analyst	26	E							
Deputy Fire Marshal	26	G							
Election Services Manager	26	D							
GIS Programmer Analyst	26	E							
Human Resources Analyst II	26	C							
Human Resources Recruitment & Retention Coordinator	26	C							
Landfill/Collections Superintendent	26	D							
Maintenance Supervisor	26	D							
Paramedic Corporal	26	G							
Public Information Officer	26	C							
Quality Assurance/In-Home Services Manager	26	D							
Social Work Supervisor II	26	D							
Social Worker-Investigative/Assessment & Treatment	26	H							
Tax Collection Supervisor	26	D							
Tax Customer Service Supervisor	26	D							
Tax Listing Supervisor	26	D							
Building Inspector II	27	D	50,882	52,590	55,221	57,732	60,359	63,106	78,885
EMS Captain	27	G							
Environmental Health Specialist	27	E							
Forensic Officer	27	G							
Human Services Planner/Evaluator II	27	H							
Information Technology Applications Specialist	27	E							
Information Technology Office/Communication Specialist	27	E							
Law Office Manager	27	C							
Public Health Nurse II	27	E							

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Public Safety Administrative Services Officer II	27	G							
Purchasing Manager	27	E							
Support Services Officer	27	G							
Accounting & Grants Manager	28	E	53,426	55,221	57,981	60,620	63,377	66,260	82,831
Administrative Services Manager	28	D							
Deputy Sheriff Lieutenant	28	G							
E911 Communications Manager	28	G							
Fleet Maintenance Supervisor	28	D							
Forensic Lieutenant	28	G							
Information Technology Network Engineer	28	E							
Lieutenant - Non LEO	28	G							
Natural Resources Administrator	28	D							
Planning Supervisor	28	D							
Public Health Nurse III	28	E							
Risk and Benefits Manager	28	D							
Utility Operations Manager	28	D							
Assistant Budget Manager/Internal Auditor	29	E	56,096	57,981	60,881	63,651	66,547	69,574	86,973
Assistant Finance Director	29	D							
Building Inspector III	29	D							
EMS Major	29	G							
Environmental Health Program Specialist	29	E							
Fire Marshal	29	G							
Income Maintenance Administrator I	29	D							
Information Technology Senior Systems Administrator	29	E							
Information Technology Server Administrator	29	E							
Logistics Training Chief	29	G							
Senior Planner	29	E							
Social Work Supervisor III	29	D							
Soil Scientist I	29	E							
Environmental Health Supervisor I	30	D	58,902	60,881	63,924	66,834	69,873	73,052	91,321
GIS Manager	30	E							
Information Security Officer	30	D							
Social Work Program Manager	30	D							
Tax Business Systems Analyst	30	E							
Transportation Director	30	D							
Water Pollution Control Plant Superintendent	30	D							
Deputy Sheriff Captain	31	G	61,847	63,924	67,120	70,175	73,367	76,706	95,886
Information Technology Applications Manager	31	D							
Information Technology Network Manager	31	D							
Inspections Supervisor	31	D							
Social Work Program Administrator I	31	D							
Tax Collection Division Manager	31	D							
Tax Listing/Assessing Division Manager	31	D							
Aging Services Director	32	D	64,938	67,120	70,477	73,684	77,036	80,540	100,680
Assistant Planning Director	32	D							
Budget Manager/Internal Auditor	32	E							
Child Support Director	32	D							
Director of Elections	32	D							
Parks & Recreation Director	32	D							
Public Health Nursing Director I	32	E							
Solid Waste Director	32	D							
EMS Chief	33	G	68,185	70,477	74,001	77,367	80,888	84,568	105,715
Property Management Director	33	E							
Public Safety Deputy Director	33	G							

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Assistant County Attorney	34	E	71,595	74,001	77,700	81,235	84,932	88,796	111,000
Capital Projects Manager	34	E							
Deputy Sheriff Major	34	G							
Human Resources Director	34	D							
County Engineer	35	E	75,175	77,700	81,585	85,297	89,179	93,236	116,550
Physician Extender II	36	E	78,934	81,585	85,664	89,562	93,637	97,899	122,379
Associate County Attorney	37	E	82,881	85,664	89,948	94,041	98,320	102,793	128,497
Chief Deputy	37	G							
Planning Director	37	D							
Public Safety Director	37	G							
	38		87,025	89,947	94,445	98,743	103,236	107,933	134,916
Deputy County Attorney	39	E	91,376	94,445	99,167	103,680	108,397	113,330	141,667
Finance Director	39	D							
Information Technology Director	39	D							
Public Works Director	39	E							
Health Director	40	D	95,945	99,167	104,125	108,864	113,817	118,995	148,751
Social Services Director	40	D							
	41		100,740	104,125	109,332	114,306	119,508	124,945	156,190
Assistant County Manager	42	D	105,779	109,332	114,798	120,021	125,483	131,193	163,997
	43		111,068	114,798	120,538	126,023	131,757	137,752	172,198
	44		116,621	120,539	126,567	132,325	138,346	144,640	180,807
	45		122,452	126,566	132,893	138,940	145,262	151,871	189,839

Appointed and Elected Officials

Clerk to the Board	60	D	60,672						121,344
Tax Administrator	61	D	81,631						163,262
County Attorney	62	E	123,550						247,100
County Manager	63	D	132,376						264,752
Register of Deeds	70	D	71,703						143,406
Sheriff	71	G	88,250						176,500

Special Non-Salaried Classifications

Groundskeeper	81	A		13.61	per hour
Seasonal Maintenance	82	A		10.14	per hour
Elections Worker - rate set by Elections Board	83	A			Rate set by Elections Board
Intern-rate set by Department	84	A			Rate set by Department
Grant Funded Position - Position Title and rate set by grant	85				Rate set by Grant
Public Safety Technician	86	A		20.30	per hour
Recreation - Basketball, Multiple Referees	87	A		18.09	per game
Recreation - Basketball, Single Referee	88	A		24.12	per game
Recreation - Football Referee	89	A		18.09	per game
Recreation - Soccer Referee	90	A		18.09	per game
Recreation - Adult Softball Umpire	91	A		21.70	per game
Recreation - Coach Pitch Umpire	92	A		18.09	per game
Recreation - Jr. League Umpire	93	A		36.18	per game
Recreation - Little League Umpire	94	A		21.70	per game
Recreation - Tee Ball Umpire	95	A		18.09	per game
Recreation - Youth Softball Umpire	96	A		21.70	per game
Recreation - Open/Close Facilities	97	A		18.09	per day
Recreation - Scorekeeper	98	A		12.06	per game
Recreation - Concession Worker	99	A		8.48	per hour
Recreation - Lead Concession Worker	100	A		9.33	per hour
Recreation - Concession Manager	101	A		10.28	per hour

Position Classification and Pay Plan

Effective July 1, 2022

Position Title	Grade	Band	Minimum	Step 1	Step 2	Step 3	Step 4	Step 5	Maximum
Recreation - Park Attendant	102	A		10.14	per hour				

On Call Pay

Non-Exempt Employees Only

Day	Rate Per Day
Monday thru Thursday	10.00
Friday, Saturday, and Sunday	20.00
County Observed Holiday	30.00

Shift Premium

E911 Telecommunicator and Telecommunicator	6:00 pm to 6:00 am work shift	75¢ per hour
Master Control Room Operator	6:00 pm to 6:00 am work shift	75¢ per hour
Solid Waste Site Attendant	Works on County recognized holiday	2 x hourly rate of pay

Appendix C
06/23/2022

NC Office of State Human Resources
2022 - 2023 Salary Plan Reporting Form
(for County DSS and Public Health)

Name of County Moore
Name of Individual Completing Form Dee Ann Purvis
Title HR Analyst II
Phone Number 910.947.4008
E-Mail Address of Pay Plan Contact Person dpurvis@moorecountync.gov
Effective Date of Pay Plan 1. 07/01/2022
Amount of Increase in Schedule 2. n/a
Amount of Increase given to Employees 3. n/a

4. Agencies covered by this salary plan: Social Services XX Total # DSS Employees 112
Public Health XX Total # PH Employees 51

5. With the exception of employees in trainee status, the salaries of all employees must be between the minimum and the maximum of the assigned range.
Does your jurisdiction meet this requirement? (x) Yes () No
If "No", please explain: _____

6. Are the salaries of all employees in trainee status below the minimum rate for the full class? (x) Yes () No

7. Has your Board of Commissioners approved the plan? (x) Yes () No

8. Do all pay rates reflected on your salary schedule meet the State minimum wage of \$7.25? (x) Yes () No

9. Have you attached a copy of your approved salary schedule? (x) Yes () No

You must answer "Yes" to questions 6, 7, 8 and 9, before submitting your form.

The following sections should be completed, listing salary grades (or minimum salary rates) assigned to your **County Social Services, Local Health and Human Services Deputy Director** positions:

Social Services Jurisdictions

10. Title of the highest level class supervised by County Social Services Director, excluding **Human Services Deputy Director and the Attorney series:** _____

Social Work Program Administrator I

11. Grade of highest level supervised 31 12. Minimum Rate \$61,847
13. Grade of County Social Services Director (if app) 40 14. Minimum Rate \$95,945
15. Subtract line 12 from line 14. 34098 16. Divide by line 12. 55.13%
17. Is the resulting answer between 20% and 60% (X) Yes () No
You must answer "Yes" to question 17 before submitting your form.

Single and Multi-County District Health Jurisdictions

18. Title of the highest level class supervised by Local Health Director, excluding **Physicians, Physician Extenders, Pharmacists, Dentists and Human Services Deputy Director:**

19. Grade of highest level supervised 32 20. Minimum Rate \$64,938
21. Grade of Local Health Director (if app) 40 22. Minimum Rate \$95,945
23. Subtract line 20 from line 22. 31007 24. Divide by line 20. 47.75%
25. Is the resulting answer between 20% and 60% (X) Yes () No
You must answer "Yes" to question 25 before submitting your form.

Social Services, Public Health and Area Mental Health Jurisdictions:

34. Title of the Director class under which Human Services Deputy Director serves:

35. Grade of highest level supervised by Director _____ 36. Minimum Rate _____
37. Grade of HSDD _____ 38. Minimum Rate _____
39. Subtract line 36 from line 38. _____ 40. Divide by line 36. _____ %
41. Is the resulting answer between 10% and 40% () Yes () No

You must answer "Yes" to question 41 before submitting your form.

CERTIFICATION OF SALARY PLAN

Single Reporting Jurisdictions

I hereby certify that the attached salary plan submitted for MOORE County, is complete and compliant with all the relevant provisions in NCGS 126, the State Human Resources Act. Furthermore, the salary plan was completed in accordance with the instructions that have been provided and is deemed accurate at the time of submission. I further certify that I am the authorized official.

(Electronic signatures are acceptable.)

Signature of Authorized Official _____

Title _____ Date _____

District Health Jurisdictions

42. Does your pay plan exceed the highest paying member county in your Area? ☐ Yes ☐ No

43. If "yes", have you received authorization from all counties in the area to exceed? ☐ Yes ☐ No

You must answer "Yes" to question 43 before submitting your form.

If you answered "No" to question 42, please complete as follows: I hereby certify that the attached salary plan submitted for _____ District Health, is complete and compliant with all the relevant provisions in NCGS 126, the State Human Resources Act. Furthermore, the salary plan was completed in accordance with the instructions that have been provided and is deemed accurate at the time of submission. (Electronic signatures are acceptable.)

Signature _____

Title _____ Date _____

If you answered "Yes" to questions 42 and 43, please complete as follows: We, the District Health Board Chairperson, and the Chairperson of the Board of County Commissioners of each member county; (acting on behalf of their respective Boards of County Commissioners in authorizing that the District Health pay plan may exceed that of the highest paying county); hereby certify that the attached salary plan submitted for _____ District Health is complete and compliant with all the relevant provisions in NCGS 126, the State Human Resources Act. Furthermore, the salary plan was completed in accordance with the instructions that have been provided and is deemed accurate at the time of submission. (Electronic signatures are acceptable.)

Jurisdiction _____	County _____
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Signature _____	Signature _____
-----------------	-----------------

Title <u>Board Chairperson</u>	Title _____
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Date _____	Date _____
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County _____	County _____
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Signature _____	Signature _____
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Title _____	Title _____
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Date _____	Date _____
------------	------------

County _____

Signature _____

Title _____

Date _____

County _____

Signature _____

Title _____

Date _____

County _____

Signature _____

Title _____

Date _____

County _____

Signature _____

Title _____

Date _____

If you need assistance, please contact your assigned HR Consultant (see LG Contacts Listing on OSHR website).

PLEASE ATTACH and SEND THIS COMPLETED REPORTING FORM WITH THE ELECTRONIC SIGNATURES BY JULY 22, 2022 VIA Smartsheet LINK HERE:

SmartSheet Salary Plan Submission Portal

North Carolina Local Government
2022 - 2023 Salary Plan

Step 4:

Enter County Grade, # of SPA Positions

& Average Salary: (See Instructions Steps 1- 3 on Salary Schedule Tables)

Min, Max & Average Salary
Standardized Among Jurisdictions
by Salary Schedule Tables

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
11	Communication Center Assistant Supervisor	0	59	0	-59		0	0	0	0
8	Communication Center Operator	0	57	0	-57		0	0	0	0
9	Communication Center Supervisor	0	61	0	-61		0	0	0	0
5	Telephone Operator	0	54	0	-54		0	0	0	0
6	Telephone Operator Supervisor I	0	57	0	-57		0	0	0	0
108	Data Entry Operator I	101	54	0	-54		0	0	0	0
109	Data Entry Operator II	101	57	0	-57		0	0	0	0
112	Data Entry Operator III	101	59	0	-59		0	0	0	0
116	Data Entry Specialist	101	58	0	-58		0	0	0	0
113	Data Entry Supervisor I	101	59	0	-59		0	0	0	0
126	Accounting Technician I	102	59	0	-59		0	0	0	0
127	Accounting Technician II	102	61	0	-61		0	0	0	0
128	Accounting Technician III	102	63	0	-63		0	0	0	0
129	Accounting Technician IV	102	65	0	-65		0	0	0	0
130	Accounting Technician V	102	67	0	-67		0	0	0	0
156	Patient Account Representative Supervisor	103	63	0	-63		0	0	0	0
9921	Income Maintenance Administrator I	200	72	29	-43	1	69574	56096	86973	69574
9922	Income Maintenance Administrator II	200	74		-74			0	0	0
9910	Income Maintenance Caseworker I	200	61	18	-43	0	0	32799	50852	0
9911	Income Maintenance Caseworker II	200	63	20	-43	35	43087	36161	56063	43087
9995	Income Maintenance Caseworker III	200	65	22	-43	11	49446	39867	61810	49446
9996	Income Maintenance Investigator I	200	63	20	-43	0	0	36161	56063	0
9997	Income Maintenance Investigator II	200	65	22	-43	1	49446	39867	61810	49446
9919	Income Maintenance Investigator Supervisor I	200	65	0	-65		0	0	0	0
9920	Income Maintenance Investigator Supervisor II	200	67	0	-67		0	0	0	0
9998	Income Maintenance Supervisor I	200	65	0	-65		0	0	0	0
9999	Income Maintenance Supervisor II	200	67	24	-43	5	54513	43953	68144	54513
9918	Income Maintenance Supervisor III	200	69	0	-69		0	0	0	0
9909	Income Maintenance Technician	200	59	0	-59		0	0	0	0
321	Stock Clerk I	300	52	0	-52		0	0	0	0
322	Stock Clerk II	300	55	0	-55		0	0	0	0
466	Accounting Clerk II	401	54	0	-54		0	0	0	0
467	Accounting Clerk III	401	57	0	-57		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
470	Accounting Clerk IV	401	59	15	-44	2	40431	28333	43926	40431
476	Accounting Clerk Supervisor IV	401	59	0	-59		0	0	0	0
477	Accounting Clerk Supervisor V	401	61	0	-61		0	0	0	0
471	Accounting Clerk V	401	61	0	-61		0	0	0	0
427	Administrative Secretary I	401	58	0	-58		0	0	0	0
428	Administrative Secretary II	401	60	0	-60		0	0	0	0
429	Administrative Secretary III	401	62	0	-62		0	0	0	0
409	Administrative Services Assistant V	401	61	0	-61		0	0	0	0
480	Data Control Clerk III	401	57	0	-57		0	0	0	0
481	Data Control Clerk IV	401	59	0	-59		0	0	0	0
482	Data Control Unit Supervisor IV	401	59	0	-59		0	0	0	0
486	Data Control Unit Supervisor V	401	61	0	-61		0	0	0	0
430	Executive Assistant I	401	64	0	-64		0	0	0	0
431	Executive Assistant II	401	66	0	-66		0	0	0	0
438	Information Processing Technician	401	63	0	-63		0	0	0	0
417	Lead Worker III	401	58	0	-58		0	0	0	0
419	Lead Worker IV	401	60	0	-60		0	0	0	0
426	Lead Worker V	401	62	0	-62		0	0	0	0
487	Library Clerk II	401	54	0	-54		0	0	0	0
490	Library Clerk III	401	57	0	-57		0	0	0	0
491	Medical Record Assistant III	401	57	0	-57		0	0	0	0
492	Medical Record Assistant IV	401	59	0	-59		0	0	0	0
496	Medical Record Assistant V	401	61	0	-61		0	0	0	0
497	Medical Record Unit Supervisor IV	401	59	0	-59		0	0	0	0
500	Medical Record Unit Supervisor V	401	61	0	-61		0	0	0	0
401	Office Aide	401	52	0	-52		0	0	0	0
402	Office Assistant II	401	54	0	-54		0	0	0	0
403	Office Assistant III	401	57	13	-44	0	0	25699	39842	0
404	Office Assistant IV	401	59	15	-44	1	38741	28333	43926	38741
400	Office Assistant V	401	61	0	-61		0	0	0	0
416	Office Work Unit Supervisor III	401	57	0	-57		0	0	0	0
418	Office Work Unit Supervisor IV	401	59	0	-59		0	0	0	0
420	Office Work Unit Supervisor V	401	61	0	-61		0	0	0	0
501	Patient Relations Representative III	401	57	0	-57		0	0	0	0
506	Patient Relations Representative IV	401	59	0	-59		0	0	0	0
509	Patient Relations Representative V	401	61	0	-61		0	0	0	0
510	Payroll Clerk III	401	57	0	-57		0	0	0	0
511	Payroll Clerk IV	401	59	0	-59		0	0	0	0
512	Payroll Clerk V	401	61	0	-61		0	0	0	0
529	Payroll Supervisor IV	401	59	0	-59		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
530	Payroll Supervisor V	401	61	0	-61		0	0	0	0
531	Personnel Assistant III	401	57	0	-57		0	0	0	0
537	Personnel Assistant IV	401	59	0	-59		0	0	0	0
540	Personnel Assistant V	401	61	0	-61		0	0	0	0
439	Processing Assistant II	401	54	0	-54		0	0	0	0
440	Processing Assistant III	401	57	13	-44	0	25699	39842	36881	36881
441	Processing Assistant IV	401	59	15	-44	3	28333	43926	36881	36881
442	Processing Assistant V	401	61	17	-44	13	31235	48429	38594	38594
449	Processing Unit Supervisor III	401	57	0	-57		0	0	0	0
450	Processing Unit Supervisor IV	401	59	0	-59		0	0	0	0
456	Processing Unit Supervisor V	401	61	0	-61		0	0	0	0
406	Program Assistant IV	401	59	0	-59		0	0	0	0
410	Program Assistant V	401	61	0	-61		0	0	0	0
434	Public Information Assistant II	401	54	0	-54		0	0	0	0
435	Public Information Assistant III	401	57	0	-57		0	0	0	0
436	Public Information Assistant IV	401	59	0	-59		0	0	0	0
437	Public Information Assistant V	401	61	0	-61		0	0	0	0
541	Statistical Assistant III	401	57	0	-57		0	0	0	0
550	Statistical Assistant IV	401	59	0	-59		0	0	0	0
551	Statistical Assistant V	401	61	0	-61		0	0	0	0
558	Statistical Unit Supervisor IV	401	59	0	-59		0	0	0	0
559	Statistical Unit Supervisor V	401	61	0	-61		0	0	0	0
408	Student Services Assistant IV	401	59	0	-59		0	0	0	0
415	Student Services Assistant V	401	61	0	-61		0	0	0	0
579	Word Processing Center Supervisor IV	401	59	0	-59		0	0	0	0
580	Word Processing Center Supervisor V	401	61	0	-61		0	0	0	0
560	Word Processor III	401	57	0	-57		0	0	0	0
561	Word Processor IV	401	59	0	-59		0	0	0	0
34747	Foreign Language Interpreter (T)	402	60	0	-60		0	0	0	0
35119	Foreign Language Interpreter II (T)	402	63	0	-63		0	0	0	0
701	Accountant I	700	72	0	-72		0	0	0	0
714	Accounting Specialist I	700	67	21	-46	2	45085	58866	45085	45085
715	Accounting Specialist II	700	69	0	-69		0	0	0	0
751	Internal Auditor I	700	72	0	-72		0	0	0	0
1422	Paralegal I	1401	67	0	-67		0	0	0	0
1411	Attorney I	1402	79	0	-79		0	0	0	0
1412	Attorney II	1402	82	0	-82		0	0	0	0
1541	Business Officer I	1500	73	0	-73		0	0	0	0
1542	Business Officer II	1500	75	0	-75		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
9818	County Social Services Business Officer I	1500	72	0	-72		0	0	0	0
9819	County Social Services Business Officer II	1500	74	0	-74		0	0	0	0
59978	Local Management Entity Finance Officer	1500	80	0	-80		0	0	0	0
1601	Administrative Assistant I	1601	63	19	-44	2	42767	34438	53393	42767
1602	Administrative Assistant II	1601	65	21	-44	1	47090	37968	58866	47090
1603	Administrative Assistant III	1601	67	0	-67		0	0	0	0
1605	Administrative Officer I	1601	67	23	-44	1	45430	41860	64899	45430
1606	Administrative Officer II	1601	70	26	-44	2	65985	48459	75130	65985
1631	Administrative Officer III	1601	72	0	-72		0	0	0	0
1611	Reimbursement Officer I	1601	65	0	-65		0	0	0	0
9825	Coordinator Health Services	1602	70	0	-70		0	0	0	0
9873	County Social Services Program Administrator I	1602	72	0	-72		0	0	0	0
9874	County Social Services Program Administrator II	1602	74	0	-74		0	0	0	0
9882	Local Mental Health Administrator I	1602	72	0	-72		0	0	0	0
9883	Local Mental Health Administrator II	1602	74	0	-74		0	0	0	0
9891	Local Mental Health Center Unit Coordinator	1602	70	0	-70		0	0	0	0
9887	Local Public Health Administrator I	1602	72	0	-72		0	0	0	0
34966	Human Services Deputy Director (T)	1604	NG	0			0	0	0	0
59976	Area Authority Director	1605	NG	0			0	0	0	0
59977	County Program Director	1605	NG	0			0	0	0	0
9929	County Social Services Director	1606	NG	40		1	121343	95945	148751	121343
9928	Local Health Director	1607	NG	40	40	1	0	95945	148751	0
9821	Administrative Assistant, Emergency Management	1608	60	0	-60		0	0	0	0
9823	Administrative Officer, Emergency Management	1608	63	0	-63		0	0	0	0
9971	Assistant Director, Local Emergency Management	1608	64	0	-64		0	0	0	0
1882	Day Care Training Specialist	1801	66	0	-66		0	0	0	0
9876	County Social Services Training Officer	1802	71	0	-71		0	0	0	0
1891	Staff Development Specialist I	1802	67	0	-67		0	0	0	0
1892	Staff Development Specialist II	1802	69	0	-69		0	0	0	0
1893	Staff Development Specialist III	1802	71	0	-71		0	0	0	0
1887	Staff Development Technician I	1802	61	0	-61		0	0	0	0
1888	Staff Development Technician II	1802	64	0	-64		0	0	0	0
1822	Personnel Analyst II	1803	72	0	-72		0	0	0	0
1831	Personnel Officer I	1803	70	0	-70		0	0	0	0
1832	Personnel Officer II	1803	74	0	-74		0	0	0	0
1833	Personnel Officer III	1803	76	0	-76		0	0	0	0
1811	Personnel Technician I	1803	63	18	-45	0	0	32799	50852	0
1812	Personnel Technician II	1803	66	21	-45	1	47090	37968	58866	47090
1813	Personnel Technician III	1803	68	0	-68		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
9895	Analyst Programmer I	2201	72	0	-72		0	0	0	0
2245	Analyst Programmer II	2201	74	0	-74		0	0	0	0
52215	Applications Analyst Programmer I	2201	76	0	-76		0	0	0	0
52216	Applications Analyst Programmer II	2201	78	0	-78		0	0	0	0
52209	Applications Programmer I	2201	69	0	-69		0	0	0	0
52214	Applications Programmer II	2201	74	0	-74		0	0	0	0
2241	Computer Programmer I	2201	67	0	-67		0	0	0	0
52268	Computer Systems Administrator I	2201	68	0	-68		0	0	0	0
52269	Computer Systems Administrator II	2201	70	0	-70		0	0	0	0
52270	Computer Systems Administrator III	2201	72	0	-72		0	0	0	0
52226	Computing Consultant I	2201	70	0	-70		0	0	0	0
52227	Computing Consultant II	2201	72	0	-72		0	0	0	0
52228	Computing Consultant III	2201	74	0	-74		0	0	0	0
2296	Computing Support Technician I	2201	61	0	-61		0	0	0	0
2297	Computing Support Technician II	2201	63	0	-63		0	0	0	0
34560	Computing Support Technician III (T)	2201	66	0	-66		0	0	0	0
52221	Help Desk Assistant I	2201	59	0	-59		0	0	0	0
52222	Help Desk Assistant II	2201	61	0	-61		0	0	0	0
52289	Information Systems Liaison I	2201	68	0	-68		0	0	0	0
52298	Information Systems Manager	2201	76	0	-76		0	0	0	0
52363	Telecommunications Equipment Technician I	2201	70	0	-70		0	0	0	0
52364	Telecommunications Equipment Technician II	2201	73	0	-73		0	0	0	0
52250	Computer Operator	2202	64	0	-64		0	0	0	0
52281	Computer Production Specialist I	2202	64	0	-64		0	0	0	0
52282	Computer Production Specialist II	2202	66	0	-66		0	0	0	0
2285	Information Processing Assistant I	2202	59	0	-59		0	0	0	0
2288	Information Processing Assistant II	2202	61	0	-61		0	0	0	0
9829	Public Health Statistician	2300	58	0	-58		0	0	0	0
2321	Statistical Research Assistant I	2300	63	0	-63		0	0	0	0
2322	Statistical Research Assistant II	2300	65	0	-65		0	0	0	0
2323	Statistical Research Assistant III	2300	68	0	-68		0	0	0	0
2411	Social Research Assistant I	2400	63	0	-63		0	0	0	0
2412	Social Research Assistant II	2400	65	0	-65		0	0	0	0
2415	Social Research Associate I	2400	68	0	-68		0	0	0	0
2416	Social Research Associate II	2400	70	0	-70		0	0	0	0
2802	Media Technician II	2800	63	0	-63		0	0	0	0
33708	Development Officer (T)	2901	68	0	-68		0	0	0	0
2911	Information and Communications Specialist I	2901	64	0	-64		0	0	0	0
2912	Information and Communications Specialist II	2901	69	0	-69		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
2913	Information and Communications Specialist III	2901	73	0	-73		0	0	0	0
33714	Public Health Education Specialist (T)	2901	65	0	-65		0	0	0	0
2961	Public Health Educator I	2901	63	0	-63		0	0	0	0
2962	Public Health Educator II	2901	67	0	-67		0	0	0	0
2963	Public Health Educator III	2901	71	0	-71		0	0	0	0
33401	Public Health Educator Supervisor (T)	2901	69	0	-69		0	0	0	0
2924	Substance Abuse Education Consultant	2901	66	0	-66		0	0	0	0
2923	Substance Abuse Education Specialist	2901	63	0	-63		0	0	0	0
9810	Substance Abuse Education Supervisor	2901	67	0	-67		0	0	0	0
9815	Substance Abuse Information Center Director	2901	64	0	-64		0	0	0	0
2931	Community Development Specialist I	2902	70	0	-70		0	0	0	0
2927	Community Services Consultant	2902	66	0	-66		0	0	0	0
3254	Medical Record Manager I	3200	66	0	-66		0	0	0	0
3255	Medical Record Manager II	3200	68	0	-68		0	0	0	0
3256	Medical Record Manager III	3200	70	0	-70		0	0	0	0
3250	Patient Review Coordinator	3200	66	0	-66		0	0	0	0
3405	Behavioral Programming Technician	3400	60	0	-60		0	0	0	0
3421	Day Care Director I	3400	64	0	-64		0	0	0	0
3422	Day Care Director II	3400	66	0	-66		0	0	0	0
3424	Day Care Teacher I	3400	61	0	-61		0	0	0	0
3425	Day Care Teacher II	3400	63	0	-63		0	0	0	0
9833	Developmental Day Director I	3400	67	0	-67		0	0	0	0
9834	Developmental Day Director II	3400	68	0	-68		0	0	0	0
9835	Developmental Day Director III	3400	70	0	-70		0	0	0	0
9831	Developmental Day Teacher I	3400	63	0	-63		0	0	0	0
9832	Developmental Day Teacher II	3400	66	0	-66		0	0	0	0
9837	Educational Program Coordinator	3400	68	0	-68		0	0	0	0
3419	Educational/Developmental Aide I	3400	54	0	-54		0	0	0	0
3441	Educational/Developmental Aide II	3400	56	0	-56		0	0	0	0
3420	Educational/Developmental Assistant	3400	58	0	-58		0	0	0	0
9902	Educational/Developmental Technician	3400	60	0	-60		0	0	0	0
9925	Home Economist	3400	63	0	-63		0	0	0	0
3438	Parent Trainer	3400	65	0	-65		0	0	0	0
9836	Therapeutic Preschool Teacher	3400	66	0	-66		0	0	0	0
4071	Teaching Parent	4000	63	0	-63		0	0	0	0
33227	Youth Home Manager (T)	4000	68	0	-68		0	0	0	0
33732	Youth Home Supervisor (T)	4000	67	0	-67		0	0	0	0
33628	Youth Program Assistant I (T)	4000	61	0	-61		0	0	0	0
33629	Youth Program Assistant II (T)	4000	63	0	-63		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
33630	Youth Program Assistant III (T)	4000	65	0	-65		0	0	0	0
33743	Youth Program Supervisor (T)	4000	70	0	-70		0	0	0	0
4129	Community Employment Program Coordinator I	4001	64	0	-64		0	0	0	0
4134	Community Employment Program Coordinator II	4001	67	0	-67		0	0	0	0
4175	Community Employment Program Director I	4001	67	0	-67		0	0	0	0
4176	Community Employment Program Director II	4001	70	0	-70		0	0	0	0
4177	Community Employment Program Director III	4001	73	0	-73		0	0	0	0
4125	Community Employment Program Manager	4001	66	0	-66		0	0	0	0
4174	Community Employment Services Representative	4001	66	0	-66		0	0	0	0
4122	Community Employment Specialist I	4001	60	0	-60		0	0	0	0
4123	Community Employment Specialist II	4001	63	0	-63		0	0	0	0
4120	Community Employment Technician I	4001	56	0	-56		0	0	0	0
4121	Community Employment Technician II	4001	58	0	-58		0	0	0	0
4161	Community Production Coordinator	4001	65	0	-65		0	0	0	0
4173	Community Production Manager	4001	67	0	-67		0	0	0	0
4159	Community Production Specialist I	4001	60	0	-60		0	0	0	0
4160	Community Production Specialist II	4001	63	0	-63		0	0	0	0
9906	Work Adjustment Coordinator	4001	64	0	-64		0	0	0	0
4086	Child Support Agent I	4003	63	0	-63		0	0	0	0
4087	Child Support Agent II	4003	65	0	-65		0	0	0	0
4089	Child Support Supervisor I	4003	67	0	-67		0	0	0	0
4090	Child Support Supervisor II	4003	68	0	-68		0	0	0	0
4091	Child Support Supervisor III	4003	69	0	-69		0	0	0	0
4092	Child Support Supervisor IV	4003	71	0	-71		0	0	0	0
4088	Lead Child Support Agent	4003	66	0	-66		0	0	0	0
4130	Volunteer Services Coordinator	4004	63	0	-63		0	0	0	0
4131	Volunteer Services Director I	4004	66	0	-66		0	0	0	0
4132	Volunteer Services Director II	4004	68	0	-68		0	0	0	0
4007	Quality Assurance Specialist I	4005	68	0	-68		0	0	0	0
4009	Quality Assurance Specialist II	4005	70	0	-70		0	0	0	0
4035	Quality Assurance Specialist III	4005	72	0	-72		0	0	0	0
9808	Area Occupational Program Specialist	4006	67	0	-67		0	0	0	0
4030	Employee Assistance Program Consultant	4006	70	0	-70		0	0	0	0
4001	Clinical Chaplain I	4007	68	0	-68		0	0	0	0
4002	Clinical Chaplain II	4007	70	0	-70		0	0	0	0
4046	Clinical Social Work Supervisor	4008	74	0	-74		0	0	0	0
4164	Clinical Social Worker	4008	72	0	-72		0	0	0	0
4040	Social Work Clinical Specialist	4008	74	0	-74		0	0	0	0
4059	Clinical Substance Abuse Counselor	4009	68	0	-68		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
34783	Clinical Substance Abuse Counselor - Certified (T)	4009	70	0	-70		0	0	0	0
4056	Substance Abuse Counselor I	4009	63	0	-63		0	0	0	0
34781	Substance Abuse Counselor I-Certified (T)	4009	64	0	-64		0	0	0	0
4058	Substance Abuse Counselor II	4009	66	0	-66		0	0	0	0
34782	Substance Abuse Counselor II - Certified (T)	4009	67	0	-67		0	0	0	0
9826	Substance Abuse DUI Specialist I	4009	60	0	-60		0	0	0	0
9827	Substance Abuse DUI Specialist II	4009	63	0	-63		0	0	0	0
9828	Substance Abuse DUI Supervisor	4009	65	0	-65		0	0	0	0
4061	Substance Abuse Program Director I	4009	72	0	-72		0	0	0	0
4063	Substance Abuse Program Director II	4009	74	0	-74		0	0	0	0
4060	Substance Abuse Program Supervisor	4009	69	0	-69		0	0	0	0
34784	Substance Abuse Program Supervisor I - Certified (T)	4009	70	0	-70		0	0	0	0
34785	Substance Abuse Program Supervisor II - Certified (T)	4009	71	0	-71		0	0	0	0
34786	Substance Abuse Program Supervisor II (T)	4009	70	0	-70		0	0	0	0
9856	Day Care Services Coordinator I	4010	68	0	-68		0	0	0	0
9857	Day Care Services Coordinator II	4010	72	0	-72		0	0	0	0
4048	Developmental Disabilities Clinical Services Supv I	4011	70	0	-70		0	0	0	0
4044	Developmental Disabilities Specialist	4011	66	0	-66		0	0	0	0
4049	Developmental Evaluation Center Assistant Director	4011	73	0	-73		0	0	0	0
4050	Developmental Evaluation Center Director	4011	75	0	-75		0	0	0	0
4312	Habilitation Program Coordinator	4012	69	0	-69		0	0	0	0
9830	Habilitation Program Director I	4012	72	0	-72		0	0	0	0
9842	Habilitation Program Director II	4012	74	0	-74		0	0	0	0
4313	Habilitation Program Supervisor	4012	70	0	-70		0	0	0	0
9804	Habilitation Specialist I	4012	63	0	-63		0	0	0	0
4309	Habilitation Specialist II	4012	66	0	-66		0	0	0	0
4311	Habilitation Specialist III	4012	68	0	-68		0	0	0	0
4069	Halfway House Manager	4013	60	0	-60		0	0	0	0
4068	Halfway House Worker	4013	55	0	-55		0	0	0	0
9809	Social Setting Detoxification Manager	4013	64	0	-64		0	0	0	0
4053	Substance Abuse Worker	4013	60	0	-60		0	0	0	0
35033	Community Employment Case Manager	4014	65	0	-65		0	0	0	0
4105	Human Resources Placement Specialist	4014	63	0	-63		0	0	0	0
4178	Human Services Clinical Counselor I	4015	66	0	-66		0	0	0	0
4179	Human Services Clinical Counselor II	4015	68	0	-68		0	0	0	0
4180	Human Services Clinical Counselor Specialist	4015	71	0	-71		0	0	0	0
4166	Human Services Counselor	4015	63	0	-63		0	0	0	0
4076	Human Services Program Specialist	4015	71	0	-71		0	0	0	0
31767	Outreach Specialist I (T)	4015	70	0	-70		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
4052	Human Services Coordinator I	4016	63	0	-63		0	0	0	0
4054	Human Services Coordinator II	4016	66	0	-66		0	0	0	0
4075	Human Services Coordinator III	4016	68	0	-68		0	0	0	0
9923	Social Work Program Administrator I	4016	75	31	-44	1	76706	61847	95886	76706
9924	Social Work Program Administrator II	4016	77	0	-77		0	0	0	0
4017	Social Work Program Manager	4016	74	0	-74		0	0	0	0
4083	Social Work Supervisor I	4016	67	0	-67		0	0	0	0
4016	Social Work Supervisor II	4016	70	26	-44	1	60101	48459	75130	60101
4085	Social Work Supervisor III	4016	73	29	-44	6	69574	56096	86973	69574
4011	Social Worker I	4016	63	19	-44	0	0	34438	53393	0
4012	Social Worker II	4016	67	23	-44	5	51917	41860	64899	51917
4033	Social Worker III	4016	69	25	-44	15	54357	46151	71552	54357
34775	Licensed Clinical Counselor (T)	4017	70	0	-70		0	0	0	0
34776	Licensed Clinical Counselor Specialist (T)	4017	72	0	-72		0	0	0	0
34777	Licensed Clinical Program Manager (T)	4017	73	0	-73		0	0	0	0
4155	Vocational Evaluation Assistant	4018	59	0	-59		0	0	0	0
4157	Vocational Evaluator I	4018	64	0	-64		0	0	0	0
4151	Work Evaluation Aide	4018	56	0	-56		0	0	0	0
4019	Advocate I	4019	68	0	-68		0	0	0	0
35074	Social Worker-Investigative/Assessment and Treatment (T)	4020	70	26	-44	18	56566	48459	75130	56566
4141	Interpreter for the Deaf I	4101	64	0	-64		0	0	0	0
4142	Interpreter for the Deaf II	4101	67	0	-67		0	0	0	0
4295	Educational Diagnostician I	4201	68	0	-68		0	0	0	0
4296	Educational Diagnostician II	4201	70	0	-70		0	0	0	0
4590	Behavioral Programming Specialist I	4501	62	0	-62		0	0	0	0
4550	Psychological Assistant	4501	62	0	-62		0	0	0	0
4525	Human Services Clinical Program Manager	4502	72	0	-72		0	0	0	0
4559	Psychological Program Coordinator I	4502	81	0	-81		0	0	0	0
4563	Psychological Program Coordinator II	4502	83	0	-83		0	0	0	0
4567	Psychological Program Director I	4502	80	0	-80		0	0	0	0
4569	Psychological Program Director II	4502	81	0	-81		0	0	0	0
4570	Psychological Program Director III	4502	83	0	-83		0	0	0	0
4558	Psychological Program Manager	4502	79	0	-79		0	0	0	0
4555	Senior Psychologist I	4502	78	0	-78		0	0	0	0
4556	Senior Psychologist II	4502	80	0	-80		0	0	0	0
4552	Staff Psychologist I	4502	71	0	-71		0	0	0	0
4553	Staff Psychologist II	4502	73	0	-73		0	0	0	0
4662	Laboratory Helper	4601	50	0	-50		0	0	0	0
4681	Laboratory Medical Specialist	4601	73	0	-73		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
4689	Medical Laboratory Assistant I	4601	54	0	-54			0	0	0
4690	Medical Laboratory Assistant II	4601	56	0	-56			0	0	0
4691	Medical Laboratory Assistant III	4601	58	0	-58			0	0	0
4692	Medical Laboratory Supervisor I	4601	73	0	-73			0	0	0
4693	Medical Laboratory Supervisor II	4601	75	0	-75			0	0	0
4696	Medical Laboratory Supervisor III	4601	77	0	-77			0	0	0
4699	Medical Laboratory Supervisor IV	4601	79	0	-79			0	0	0
4685	Medical Laboratory Technician I	4601	62	19	-43	1	42712	34438	53393	42712
4612	Medical Laboratory Technician II	4601	64	21	-43	1	47090	37968	58866	47090
4675	Medical Laboratory Technologist I	4601	68	0	-68			0	0	0
4678	Medical Laboratory Technologist II	4601	70	0	-70			0	0	0
4680	Medical Laboratory Technologist III	4601	72	0	-72			0	0	0
4666	Ultrasound Technician I	4602	69	0	-69			0	0	0
4670	X-Ray Machine Operator	4602	56	0	-56			0	0	0
4671	X-Ray Technician I	4602	61	0	-61			0	0	0
4672	X-Ray Technician II	4602	65	0	-65			0	0	0
4673	X-Ray Technician III	4602	67	0	-67			0	0	0
4704	Chemistry Technician III	4701	68	0	-68			0	0	0
4889	Physician Extender I	4801	79	0	-79			0	0	0
4890	Physician Extender II	4801	81	0	-81			0	0	0
4891	Physician Extender III	4801	83	0	-83			0	0	0
4854	Dental Assistant Supervisor	4802	61	0	-61			0	0	0
33866	Dental Assistant Supervisor II (T)	4802	63	0	-63			0	0	0
4872	Dental Hygienist I	4802	68	23	-45	0		41860	64899	0
4874	Dental Hygienist II	4802	70	25	-45	1	68394	46151	71552	68394
4823	Pharmacy Assistant	4803	54	0	-54			0	0	0
4829	Pharmacy Technician	4803	60	0	-60			0	0	0
4833	Pharmacy Technician Supervisor	4803	62	0	-62			0	0	0
4849	Dental Assistant	4804	59	0	-59			0	0	0
4939	Physician Director I	4901	8	0	-8			0	0	0
4942	Physician Director II-A	4901	10	0	-10			0	0	0
4943	Physician Director II-B	4901	12	0	-12			0	0	0
4944	Physician Director II-C	4901	13	0	-13			0	0	0
4905	Physician II	4901	5	0	-5			0	0	0
4906	Physician III-A	4901	9	0	-9			0	0	0
4907	Physician III-B	4901	11	0	-11			0	0	0
4908	Physician III-C	4901	12	0	-12			0	0	0
4935	Public Health Physician I	4901	2	0	-2			0	0	0
4936	Public Health Physician II	4901	5	0	-5			0	0	0

North Carolina Local Government

Schin Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
4937	Public Health Physician III	4901	9	0	-9		0	0	0	0
4938	Public Health Physician IV	4901	10	0	-10		0	0	0	0
21420	Dental Intern	4902	81	0	-81		0	0	0	0
4951	Dentist I	4902	84	0	-84		0	0	0	0
4952	Dentist II	4902	87	0	-87		0	0	0	0
4953	Dentist III	4902	89	0	-89		0	0	0	0
4928	Clinical Pharmacist	4903	84	0	-84		0	0	0	0
4920	Pharmacist	4903	82	0	-82		0	0	0	0
4971	Veterinarian	4904	78	0	-78		0	0	0	0
5059	Assistant Director of Nursing Services	5001	77	0	-77		0	0	0	0
5067	Director of Nursing Services I	5001	77	0	-77		0	0	0	0
5068	Director of Nursing Services II	5001	79	0	-79		0	0	0	0
5017	Lead Nurse	5001	71	0	-71		0	0	0	0
5018	Nurse Clinician I	5001	72	0	-72		0	0	0	0
5027	Nurse Supervisor I	5001	72	0	-72		0	0	0	0
5028	Nurse Supervisor II	5001	74	0	-74		0	0	0	0
5029	Nurse Supervisor III	5001	76	0	-76		0	0	0	0
5001	Staff Nurse	5001	70	0	-70		0	0	0	0
9926	Nurse Specialist-Public Health	5002	72	0	-72		0	0	0	0
5054	Nursing Education Director I	5002	74	0	-74		0	0	0	0
5052	Nursing Education Instructor	5002	72	0	-72		0	0	0	0
5007	Public Health Nurse I	5002	70	25	-45	0	0	46151	71552	0
5014	Public Health Nurse II	5002	72	27	-45	0	0	50882	78885	0
5016	Public Health Nurse III	5002	73	28	-45	5	69573	53426	82831	69573
34944	Public Health Nursing Consultant II (Bioterrorism) (T)	5002	77	0	-77		0	0	0	0
5087	Public Health Nursing Director I	5002	77	32	-45	1	85947	64938	100680	85947
5088	Public Health Nursing Director II	5002	79	0	-79		0	0	0	0
5089	Public Health Nursing Director III	5002	81	0	-81		0	0	0	0
5038	Public Health Nursing Supervisor I	5002	74	0	-74		0	0	0	0
5039	Public Health Nursing Supervisor II	5002	76	0	-76		0	0	0	0
9913	Mental Health Nurse I	5003	69	0	-69		0	0	0	0
9915	Mental Health Nurse II	5003	71	0	-71		0	0	0	0
9917	Mental Health Nurse Supervisor	5003	73	0	-73		0	0	0	0
5181	Physical Therapist Assistant I	5101	64	0	-64		0	0	0	0
5182	Physical Therapist Assistant II	5101	67	0	-67		0	0	0	0
5183	Physical Therapist I	5101	76	0	-76		0	0	0	0
5184	Physical Therapist II	5101	78	0	-78		0	0	0	0
5189	Physical Therapy Consultant	5101	81	0	-81		0	0	0	0
5185	Physical Therapy Supervisor I	5101	79	0	-79		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Df	# SPA Pos	Average Salary Based on Completed Salary Schedule	Min Salary	Max Salary	Average Salary
5186	Physical Therapy Supervisor II	5101	81	0	-81		0	0	0	0
5109	Physical Therapy Technician	5101	58	0	-58		0	0	0	0
5193	Occupational Therapist I	5102	76	0	-76		0	0	0	0
5194	Occupational Therapist II	5102	78	0	-78		0	0	0	0
5191	Occupational Therapy Assistant I	5102	64	0	-64		0	0	0	0
5195	Occupational Therapy Supervisor I	5102	79	0	-79		0	0	0	0
5142	Occupational Therapy Technician	5102	58	0	-58		0	0	0	0
5177	Creative/Expressive Arts Specialist I	5103	63	0	-63		0	0	0	0
5168	Creative/Expressive Arts Specialist II	5103	65	0	-65		0	0	0	0
5179	Creative/Expressive Arts Therapist	5103	68	0	-68		0	0	0	0
5163	Rehabilitation Therapist	5103	63	0	-63		0	0	0	0
5150	Rehabilitation Therapy Aide	5103	54	0	-54		0	0	0	0
5154	Rehabilitation Therapy Assistant	5103	60	0	-60		0	0	0	0
5167	Rehabilitation Therapy Coordinator	5103	66	0	-66		0	0	0	0
5164	Rehabilitation Therapy Supervisor	5103	68	0	-68		0	0	0	0
5153	Rehabilitation Therapy Technician	5103	58	0	-58		0	0	0	0
5156	Therapeutic Recreation Specialist I	5103	68	0	-68		0	0	0	0
5106	Audiologist	5104	73	0	-73		0	0	0	0
5118	Speech and Hearing Clinic Manager	5104	75	0	-75		0	0	0	0
5103	Speech and Language Pathologist I	5104	73	0	-73		0	0	0	0
5104	Speech and Language Pathologist II	5104	74	0	-74		0	0	0	0
5129	Speech and Language Therapist	5104	71	0	-71		0	0	0	0
5254	Clinical Dietitian I	5200	68	0	-68		0	0	0	0
59979	Dietetic Technician Registered - Local	5200	61	0	-61		0	0	0	0
5244	Nutrition Program Director I	5200	70	0	-70		0	0	0	0
5245	Nutrition Program Director II	5200	72	0	-72		0	0	0	0
5241	Nutritionist I	5200	63	0	-63		0	0	0	0
5242	Nutritionist II	5200	66	0	-66		0	0	0	0
5243	Nutritionist III	5200	68	0	-68		0	0	0	0
5223	Public Health Dietitian	5200	74	0	-74		0	0	0	0
5326	Practical Nurse I	5300	58	19	-39	1	43994	34438	53393	43994
5328	Practical Nurse II	5300	62	0	-62		0	0	0	0
9950	Chore Supervisor I	5301	56	0	-56		0	0	0	0
9952	Chore Supervisor II	5301	60	0	-60		0	0	0	0
5346	Community Health Assistant	5301	54	0	-54		0	0	0	0
5347	Community Health Technician	5301	56	0	-56		0	0	0	0
9935	Community Mental Health Assistant	5301	54	0	-54		0	0	0	0
4158	Community Mental Health Technician	5301	58	0	-58		0	0	0	0
5335	Community Social Services Assistant	5301	54	11	-43	1	28912	23310	36138	28912

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
4065	Community Social Services Technician	5301	58	0	-58		0	0	0	0
9949	Community Support Services Manager	5301	67	0	-67		0	0	0	0
9942	Community Support Services Supervisor	5301	60	0	-60		0	0	0	0
5361	Cottage Parent I	5301	54	0	-54		0	0	0	0
5362	Cottage Parent II	5301	56	0	-56		0	0	0	0
5364	Cottage Parent Supervisor I	5301	58	0	-58		0	0	0	0
5366	Cottage Parent Supervisor II	5301	60	0	-60		0	0	0	0
9806	Habilitation Assistant	5301	56	0	-56		0	0	0	0
9817	Habilitation Technician	5301	58	0	-58		0	0	0	0
5388	Health Care Assistant I	5301	51	0	-51		0	0	0	0
5389	Health Care Assistant II	5301	54	0	-54		0	0	0	0
5398	Health Care Supervisor I	5301	62	0	-62		0	0	0	0
5399	Health Care Supervisor II	5301	64	0	-64		0	0	0	0
5391	Health Care Technician I	5301	58	0	-58		0	0	0	0
5393	Health Care Technician II	5301	60	0	-60		0	0	0	0
5395	Health Care Technician III	5301	62	0	-62		0	0	0	0
5345	Human Resources Aide	5301	52	0	-52		0	0	0	0
562	Medical Office Assistant	5301	57	14	-43	3	33719	26984	41834	33719
4067	Teaching Parent Assistant	5301	58	0	-58		0	0	0	0
33846	Chore Provider (T)	5302	51	0	-51		0	0	0	0
9972	Community Disease Control Specialist I	5601	63	0	-63		0	0	0	0
9973	Community Disease Control Specialist II	5601	65	0	-65		0	0	0	0
4107	Migrant Health Technician	5602	60	0	-60		0	0	0	0
9965	Summer Helper (Sanitation)	5602	52	0	-52		0	0	0	0
5654	Environmental Health Program Specialist	5603	69	29	-40	1	75520	56096	86973	75520
9951	Environmental Health Programs Coordinator	5603	69	0	-69		0	0	0	0
5653	Environmental Health Specialist	5603	67	27	-40	10	63106	50882	78885	63106
5676	Environmental Health Supervisor I	5603	70	30	-40	1	83072	58902	91321	83072
5677	Environmental Health Supervisor II	5603	73	0	-73		0	0	0	0
9954	Environmental Health Supervisor III	5603	75	0	-75		0	0	0	0
5650	Environmental Health Technician	5603	59	19	-40	1	43500	34438	53393	43500
5767	Industrial Hygiene Consultant	5701	77	0	-77		0	0	0	0
9943	Air Hygienist I	5702	67	0	-67		0	0	0	0
9944	Air Hygienist II	5702	70	0	-70		0	0	0	0
9945	Air Hygienist III	5702	73	0	-73		0	0	0	0
9959	Environmental Health Director I	5703	77	0	-77		0	0	0	0
9960	Environmental Health Director II	5703	79	0	-79		0	0	0	0
5793	Public Health Epidemiologist	5704	70	0	-70		0	0	0	0
6004	Security Guard	6001	57	0	-57		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
6030	Security Officer I	6001	60	0	-60		0	0	0	0
33855	Animal Control Lead Officer (T)	6002	62	0	-62		0	0	0	0
33853	Animal Control Officer I (T)	6002	59	0	-59		0	0	0	0
33854	Animal Control Officer II (T)	6002	61	0	-61		0	0	0	0
33856	Animal Control Supervisor I (T)	6002	64	0	-64		0	0	0	0
33857	Animal Control Supervisor II (T)	6002	67	0	-67		0	0	0	0
6350	Emergency Management Planner I	6300	70	0	-70		0	0	0	0
6514	General Utility Worker	6501	53	0	-53		0	0	0	0
6516	Labor Crew Leader	6501	58	0	-58		0	0	0	0
6512	Laborer	6501	50	0	-50		0	0	0	0
33848	Landfill Attendant (T)	6502	55	0	-55		0	0	0	0
33852	Animal Shelter Attendant (T)	6503	56	0	-56		0	0	0	0
6622	Housekeeper	6600	50	0	-50		0	0	0	0
6624	Housekeeping Supervisor I	6600	54	0	-54		0	0	0	0
6623	Housekeeping Team Leader	6600	52	0	-52		0	0	0	0
6803	Cook I	6801	52	0	-52		0	0	0	0
6804	Cook II	6801	55	0	-55		0	0	0	0
6814	Cook Supervisor I	6801	57	0	-57		0	0	0	0
6831	Food Service Assistant I	6801	50	0	-50		0	0	0	0
6832	Food Service Assistant II	6801	52	0	-52		0	0	0	0
6834	Food Service Supervisor I	6801	54	0	-54		0	0	0	0
6836	Food Service Supervisor II	6801	57	0	-57		0	0	0	0
6838	Food Service Supervisor III	6801	62	0	-62		0	0	0	0
6839	Food Service Supervisor IV	6801	64	0	-64		0	0	0	0
9993	Nutrition Project Coordinator I	6802	63	0	-63		0	0	0	0
9994	Nutrition Project Coordinator II	6802	65	0	-65		0	0	0	0
9992	Nutrition Project Site Supervisor	6802	54	0	-54		0	0	0	0
7103	Courier Driver	7101	56	0	-56		0	0	0	0
7111	Machine Operator I	7101	54	0	-54		0	0	0	0
7112	Machine Operator II	7101	56	0	-56		0	0	0	0
7113	Machine Operator III	7101	57	0	-57		0	0	0	0
7102	Vehicle Operator I	7101	53	0	-53		0	0	0	0
7119	Vehicle Operator II	7101	55	0	-55		0	0	0	0
7104	Vehicle Operator III	7101	58	0	-58		0	0	0	0
33849	Landfill Assistant Manager (T)	7102	60	0	-60		0	0	0	0
33850	Landfill Manager I (T)	7102	66	0	-66		0	0	0	0
33851	Landfill Manager II (T)	7102	68	0	-68		0	0	0	0
33858	Vector Control Manager (T)	7103	66	0	-66		0	0	0	0
7353	HVAC Mechanic	7300	67	0	-67		0	0	0	0

North Carolina Local Government

Schm Code	Local Class	Occup Group	State Grade	County Grade	Rel Dif	# SPA Pos	Average Salary Based on Computed Salary Schedule	Min Salary	Max Salary	Average Salary
7303	Maintenance Mechanic I	7300	59	0	-59	0	0	0	0	0
7319	Maintenance Mechanic II	7300	61	0	-61	0	0	0	0	0
7304	Maintenance Mechanic III	7300	63	0	-63	0	0	0	0	0
7305	Maintenance Mechanic IV	7300	65	0	-65	0	0	0	0	0
7311	Mechanic I	7300	60	0	-60	0	0	0	0	0
7312	Mechanic II	7300	64	0	-64	0	0	0	0	0
7405	Facilities Maintenance Coordinator I	7400	63	0	-63	0	0	0	0	0
7561	Electronics Technician I	7500	65	0	-65	0	0	0	0	0
7562	Electronics Technician II	7500	68	0	-68	0	0	0	0	0
9981	Radiological Instrument Specialist	7500	60	0	-60	0	0	0	0	0
8460	Soil Scientist I	8400	73	29	-44	1	73052	56096	86973	73052
8462	Soils Specialist	8400	69	0	-69	0	0	0	0	0
9975	Shelter Project Officer	8500	64	0	-64	0	0	0	0	0
8654	Environmental Technician I	8601	61	0	-61	0	0	0	0	0
8651	Environmental Technician III	8601	65	0	-65	0	0	0	0	0
8652	Environmental Technician V	8601	69	0	-69	0	0	0	0	0
8665	Environmental Chemist I	8602	71	0	-71	0	0	0	0	0
8611	Environmental Engineer I	8602	74	0	-74	0	0	0	0	0
8612	Environmental Engineer II	8602	76	0	-76	0	0	0	0	0
34864	Solid Waste Enforcement Officer (T)	8603	61	0	-61	0	0	0	0	0
8881	Human Services Planner/Evaluator I	8800	68	25	-43	0	0	46151	71552	0
8882	Human Services Planner/Evaluator II	8800	70	27	-43	1	63106	50882	78885	63106
8883	Human Services Planner/Evaluator III	8800	72	0	-72	0	0	0	0	0
8884	Human Services Planner/Evaluator IV	8800	74	0	-74	0	0	0	0	0

Physician Disciplines:

A=Pediatrics, Family and Internal Medicine

B=General Psychiatry, Neurology, Radiology, General Surgery, and OB/Gyn

C=Child Psychiatry, Anesthesiology, Forensic Psychiatry

Appendix D
06/23/2022

BEFORE THE
MOORE COUNTY BOARD OF COMMISSIONERS

June 23, 2022

TRANSCRIPT OF QUASI-JUDICIAL HEARING/PLANNING
SPECIAL USE PERMIT REQUEST
MAJOR CONSERVATION SUBDIVISION PRELIMINARY PLAT APPROVAL
(UNION CHURCH ROAD)

Frank Quis, Board Chair

Catherine Graham, Vice Chair

Otis Ritter, Commissioner

Jerry Daeke, Commissioner

Nick Picerno, Commissioner

Debra Ensminger, Planning Director

Misty R. Leland, County Attorney

Nicolas P. Robinson, Attorney at Law

Michael Parker, Attorney at Law

I N D E X

OPPONENT'S WITNESSES

WITNESS	PAGE
---------	------

JAMES GREGORY

DIRECT EXAMINATION BY MR. PARKER	4
CROSS-EXAMINATION BY MR. ROBINSON	72
REDIRECT EXAMINATION BY MR. PARKER	94

BAOHONG WAN

DIRECT EXAMINATION BY MR. PARKER	99
CROSS-EXAMINATION BY MR. ROBINSON	136
REDIRECT EXAMINATION BY MR. PARKER	146
CROSS-EXAMINATION BY MR. ROBINSON	149

APPLICANT'S WITNESSES

WITNESS	PAGE
---------	------

TRAVIS FLUITT

DIRECT EXAMINATION BY MR. ROBINSON	151
CROSS-EXAMINATION BY MR. PARKER	159
REDIRECT EXAMINATION BY MR. ROBINSON	169
CROSS-EXAMINATION BY MR. PARKER	170

EXHIBITS

NO.		IDENTIFIED	OFFERED
27	Union Hills document	129	
28	Ring death certificate	66	66
29	Ring death certificate	66	66
33	Large print of preliminary plat	43	62
34	Moore Co. GIS map printout	63	64
35	Gregory report	67	68
100	Will	98	
101	Fluitt traffic assessment report, June 21, 2022	138	157

1 P R O C E E D I N G S

2 CHAIRMAN QUIS: Okay. We're here for a continuation
3 of a quasi-judicial hearing for a special use permit. Thank
4 you all for coming. I'm now going to turn it over to our
5 attorney, Ms. Leland.

6 MS. LELAND: Again, this is a continuation of the
7 quasi-judicial hearing for a request by Tri-Builders, Inc.
8 for a special use permit for a major conservation subdivision
9 preliminary plat approval for 53 lots located on Union Church
10 Road, Carthage.

11 Please, everyone who plans to testify tonight to
12 please go see our clerk to the board to be sworn in.

13 MR. ROBINSON: Even those who were previously sworn?

14 MS. LELAND: Absolutely.

15 MR. PARKER: Ms. Leland --

16 MS. LELAND: Yeah.

17 MR. PARKER: I think that so many of my people
18 thought it was at 5:30. I've got five of them here. So I'm
19 just letting you know that there may be some coming in late.

20 MS. LELAND: Okay. We can swear them in.

21 MR. PARKER: Yeah.

22 MS. LELAND: Excuse me. We can swear them in when
23 they come.

24 MR. PARKER: That will be fine.

25 MS. LELAND: Okay.

1 MR. PARKER: I just wanted you to be aware of that.

2 MS. LELAND: That's fine.

3 MR. PARKER: Thank you.

4 MS. LELAND: Okay. Madam Clerk, we have someone
5 that's in the restroom that's going to be sworn in so we
6 might just want to wait a second.

7 (Oath administered by the clerk to prospective
8 witnesses.)

9 MS. LELAND: Okay. So when we left off Mr. Parker
10 was presenting his evidence, and so we'll turn it over to
11 you.

12 MR. PARKER: Sorry. Thank you, Ms. Attorney. We
13 call Jim Gregory to the stand.

14 THE WITNESS: Test. Can everyone hear me?

15 MR. PARKER: May I proceed?

16 MS. LELAND: Uh-huh.

17 MR. PARKER: Okay. Thank you.

18 THE WITNESS: I am going to be standing up here at
19 this monitor to point out some things as we go along, if
20 that's all right with everyone?

21 JAMES GREGORY,
22 being first duly sworn, testified as follows on DIRECT
23 EXAMINATION BY MR. PARKER:

24 Q Can you state -- it's a little loud.

25 Sir, would you state your name and occupation for

1 the commissioners, please?

2 A My name is James Gregory. I am a professor emeritus
3 in the Department of Forestry and Environmental Resources at
4 NC State. I'm also a consultant in my retired years. I live
5 at 4314 Carrington Drive in Wilmington, North Carolina,
6 28412.

7 Q Now, Dr. Gregory, what does the emeritus mean after
8 you -- you say "professor emeritus." What's that mean?

9 A Professor emeritus is a rank awarded typically at NC
10 State to about 30 percent of faculty who retire each year
11 that recognizes a very, very long and highly productive
12 career at the university. It carries certain rights and
13 privileges, but it's basically an honorary rank.

14 Q Okay. And, sir, you have a lot of letters behind
15 your name. Can you tell me what they mean, and where you --
16 where you went to school?

17 A I have three degrees from NC State. I bleed Wolf
18 Pack red.

19 My original undergraduate degree was in forest
20 management. My Master of Science degree was in soil science,
21 and a few years for Uncle Sam, and I came back to NC State in
22 the forestry department but with a focus on forest and
23 watershed hydrology.

24 The CPSS stands for certified professional soil
25 scientist, and my certificate reads number 29. That's a

1 certification program developed by the Soil Science Society
2 of America in the early '80s that recognizes wide knowledge
3 on the chemical, physical and hydrologic characteristics of
4 soil.

5 Q Okay.

6 A The PWS stands for Certified Professional Wetland
7 Scientist, and that's a certification awarded by a national
8 scientific and professional organization called the Society
9 of Wetland Scientists. It recognizes a tremendous amount of
10 background and experience I have in wetlands.

11 Q Okay. And Dr. Gregory, could you tell us a little
12 bit about your work history, your work experience? Where did
13 you go, where did you work?

14 A Well, I spent three years on the faculty at Virginia
15 Tech and then back to NC State where I spent 30 years on the
16 faculty. And those three elements of my undergraduate and
17 graduate training led into a professional career that dealt
18 with forestry. I -- I taught, and we'll talk about it in a
19 few minutes, but I taught the first course in forest
20 management for the first ten years that I was on the faculty,
21 and I taught staff compass and chain survey, which we'll talk
22 about later.

23 Q Wait a minute. You were going -- I'm old, my ears
24 don't keep up. What is the -- you taught the first class in
25 what?

1 A In forest measurements.

2 Q Forest measurements.

3 A And I taught several other of our typical forestry
4 courses over the years. I also, during my first year at
5 Virginia Tech, so a total of 34 years, I taught a course
6 called watershed and wetlands hydrology. And in that course
7 I taught about general hydrology of watersheds. I spent a
8 good bit of time on -- on hydrology of urban systems, and of
9 course as the title implies, a lot of time on wetlands and
10 wetland hydrology.

11 My -- my research and extension activities dealt
12 with -- with -- with forestry, a lot of activity on impacts
13 of civil culture on water quality. A number of research
14 projects in eastern North Carolina on the hydrology of
15 drained forest systems. I have researched projects in all
16 eight of the wetland types that occur in North Carolina.

17 And there are two areas in which I claim special
18 expertise. One is wetland science and the Corps of Engineers
19 methodology of delineating wetlands. In 1995 or '96 there
20 was a need for training in the Corps of Engineers wetland
21 delineation methodology, so with a colleague in the botany
22 department who was an expert in wetland plants, we developed
23 a curriculum to teach that methodology, and we met with the
24 director of regulatory programs for the Wilmington district
25 of the Corps to get their approval on our curriculum.

1 So we did that in two phases. One was a five-day
2 short course, and then we incorporated that material also
3 into a new graduate course on wetland assessment, delineation
4 and regulation that we taught for about the last ten years of
5 my service.

6 So over a period of about 16 or 17 years I taught
7 wetland delineation methodology several times a year, number
8 of different locations around the state, in South Carolina,
9 in Georgia, in Virginia. So tremendous amount of experience
10 in different wetland types.

11 The other area in which I -- I claim to be one of
12 the North Carolina experts is in assessment and mapping of
13 stream systems. 1996-'97 timeframe the North Carolina
14 legislature passed a law mandating some new water pollution
15 control systems over the Neuse River Basin. There had been a
16 very substantial water quality issue in Pamlico Sound, and in
17 the estuary of the Neuse River.

18 One of the programs that the legislature mandated
19 was protection of riparian buffers, and these are the zones
20 adjacent to streams that if they remain with forest
21 vegetation they have a very, very high function in terms
22 of -- of eliminating or reducing water pollution of the water
23 that's flowing across them.

24 But an issue that came up was how do you apply those
25 to a small streams in the field? The legislation and then

1 the rules that were developed specified that the rules
2 applied to intermittent and perennial streams.

3 Intermittent streams are those that flow for part of
4 the year during the wettest season of the year. Perennial
5 streams are those that flow year round. But how do you
6 identify them in the field?

7 So starting in late '98 into '99, I worked with John
8 Dorney, who was the supervisor of what was then the wetland
9 401 unit in the division of environmental quality, and we
10 developed what is known as the DEQ methodology for
11 identification of the origins of intermittent and perennial
12 streams. This was a 29 factor field assessment methodology
13 that we developed and tested, and then we tested it around
14 the state with members of his staff and a couple of my
15 graduate students.

16 We ran in selected mile square, to a mile and a half
17 square, small catchments, and with one person using the data
18 sheet, the other person with the GPS unit, we mapped small
19 stream systems in a number of different areas throughout the
20 state.

21 We found two things with that mapping process. One,
22 that our methodology worked very well. And, secondly, that
23 U.S. Geological Survey maps were very poor indicators of the
24 presence of the small streams. And the follow along to that,
25 the last three grad students that I had, in particular the

1 last Ph.D. student, their focus was on developing GIS
2 methodology for better mapping of these small streams.

3 So I have a tremendous amount of experience in
4 assessing streams and understanding where small streams
5 should be on a landscape, and that expertise will be
6 discussed a little bit later in elements of the preliminary
7 plat that we're talking about.

8 Q Okay. Now, Dr. Gregory, do you have any experience
9 in surveying?

10 A Well, as I mentioned, I taught staff compass and
11 chain survey to our forestry students for a number of years.
12 I also have done work for a number of developers where we are
13 working with the actual total station surveying of
14 boundaries.

15 I've had a -- three different grad students during
16 the last ten years or so of my faculty service in which the
17 work that they were doing required very, very high perceived
18 total station survey. So I'm quite, quite familiar with the
19 general aspects of that kind of survey.

20 Q Okay. And do you -- have you had any experience
21 reviewing development plans?

22 A A lot of experience with reviewing development
23 plans.

24 Probably at least a dozen different jurisdictions
25 across North Carolina, both cities and counties, couple

1 jurisdictions in South Carolina, over the last 20 to 25 years
2 I have reviewed literally dozens of different development
3 ordinances and development plans. I have a really, really
4 good understanding of what I see when I look at a development
5 plan.

6 I am actually currently working for two developers
7 in Wilmington helping them to do a better job of developing
8 development plans, helping with storm management plans,
9 helping with hydrologic assessment. In one case a site has a
10 very, very large depressional wetland that I talked the
11 developer into saving and preserving as a site amenity.

12 So I've got a really good idea of what I'm looking
13 at when I review a development plan.

14 Q Okay.

15 MR. PARKER: At this time we would tender
16 Dr. Gregory to you as a expert in hydrology, soil science,
17 and also in wetlands.

18 MS. LELAND: Proceed.

19 MR. PARKER: All right. Thank you.

20 BY MR. PARKER:

21 Q So, Dr. Gregory, have you had an opportunity to
22 review the development plans and the plat in this -- in this
23 case?

24 A Yes, I have. And this slide presentation that I'm
25 going to be going through I'm going to go back to this --

1 this -- what's called a plat for several times, to me it's a
2 development plan. There are a number of shortcomings with
3 this plan. There are some shortcomings in terms of widely
4 accepted engineering standards that are not met. There are
5 shortcomings in terms of violations of the Moore County
6 Unified Development Ordinance. There are also some issues
7 with meeting certain elements of the North Carolina
8 Administrative Code.

9 MR. ROBINSON: Object to -- I'm sorry. I object to
10 all those statements. He's not admitted as an expert with
11 respect to interpretation of the UDO. He's not an engineer
12 to comment on an engineer plan. And I don't remember what
13 the other issues was that he raised, but he's not an expert
14 in any of those areas. He's an expert in hydrology, soils
15 and wetland, and he should confine his opinions to those
16 subject matters.

17 MS. LELAND: Mr. Parker, do you have a response?

18 MR. PARKER: If Your Honor -- if you please, I'll
19 be -- I can't get used to this. It's too close.

20 I will be happy to -- I'll be happy to go back and
21 requalify him as an expert in reviewing these and comparing
22 it to the UDO, if that's what you require.

23 Our position is, is that his expertise in those,
24 particularly in his consulting and his ability to review
25 these, his evaluation of the UDO puts him in the unique

1 position to be able to evaluate this plan in light of the law
2 of North Carolina, the wetlands law and UDO of Moore County.

3 MS. LELAND: Mr. Parker, I'm going to leave that up
4 to you. As you know, we're preserving the record for appeal
5 at this juncture. His objections are noted for the record.

6 MR. PARKER: Okay.

7 MS. LELAND: And it's just going to be questionable
8 later.

9 MR. PARKER: Okay.

10 MS. LELAND: So I would leave that up to you.

11 MR. PARKER: All right. Thank you.

12 BY MR. PARKER:

13 Q So could you tell me, please, are you an -- are you
14 an engineer for producing these preliminary plats?

15 A This is a question that I have been asked many a
16 time, Mr. Robinson, because when I start talking about
17 engineering methodology I always get the question, well,
18 you're not a PE so how can you discuss engineering
19 methodology?

20 It's because I have spent much of my career
21 assessing and teaching about some of this methodology. In my
22 watershed and wetland hydrology course I taught the models
23 that engineering hydrologists used in developing runoff
24 estimates.

25 I had a section in my course on erosion and sediment

1 control plans, took the students out to local development
2 project where we talked about and assessed the value and the
3 quality of the storm management plans and the erosion
4 sediment control plans.

5 So I submit that I'm not a PE, but I also submit
6 that I have a fairly high knowledge about what engineers do
7 and how to evaluate what they do.

8 Q Are you also, have you had experience in evaluating
9 storm water management systems in development plans?

10 A Yes, I have.

11 Q What qualifies you to be able to do that?

12 A Again, experience in teaching about these systems,
13 experience in doing research on these systems, experience in
14 helping developers plan and implement these systems.

15 MR. ROBINSON: I'd like to interject for the record
16 our official objection on that matter, and I will state it as
17 follows.

18 Mr. -- Dr. Gregory has admitted that he is not a
19 professional engineer, and therefore any opinion that he
20 offers with regard to any engineering aspect of this plan
21 would be as a lay witness and not as an expert. Thank you.

22 MS. LELAND: And that is noted for the record.

23 MR. PARKER: All right. Thank you.

24 BY MR. PARKER:

25 Q All right. So --

1 A Let me make -- let me make one comment about what
2 Mr. Robinson just said.

3 The North Carolina Board of Examiners for Engineers
4 and Surveyors has for many, many years tried to put very wide
5 sideboards around what is, quote, engineering practice,
6 unquote. But much of what I have done in my career, much of
7 what many, many, many people have done in their career that
8 do not have PE beside their name still qualifies as
9 engineering work. And I know what I'm doing. Period.

10 Q All right. Thank you. All right. So, Dr. Gregory,
11 I will -- I'm go ask again and direct you to this -- to this
12 plat.

13 Do you have an opinion based upon your experience
14 and your expertise as to whether or not this plat meets, or
15 this development plan meets widely accepted standards for a
16 preliminary plat like this?

17 MR. ROBINSON: Objection.

18 THE WITNESS: There are three different issues,
19 three different types of shortcomings, and I like to use the
20 term development plan. A plat is simply a survey that shows
21 the boundary and key elements of -- this is a development
22 plan rather than a simple plat.

23 But there are a number of shortcomings here, and
24 I'll be talking about this as we go along. There are some
25 shortcomings here that -- that do not meet many commonly

1 accepted engineering standards for this type of development
2 plan. There are also shortcomings that are violations of the
3 Moore County Unified Development Ordinance.

4 MR. ROBINSON: Objection.

5 THE WITNESS: And there are also some issues that
6 I'll talk about at the end with some issues of the North
7 Carolina Administrative Code.

8 BY MR. PARKER:

9 Q Okay. All right.

10 MS. LELAND: And just for the record, I need to
11 restate that this is a legal proceeding where the board is
12 charged by law to review a preliminary plat. So I don't want
13 them to be confused. They're not looking at a development
14 plan tonight. They're looking at a preliminary plat.

15 THE WITNESS: Yes, I understand that.

16 MS. LELAND: And that is two different things, sir.

17 THE WITNESS: Yes, I -- I understand --

18 MS. LELAND: Please don't mislead the board.

19 THE WITNESS: I understand that quite well. But I
20 will show you a paragraph in the unified development
21 ordinance later that addresses that very issue.

22 BY MR. PARKER:

23 Q Okay.

24 A So what's the first issue with this? There's no
25 legend.

1 Q There's no what?

2 A Engineering plans have a legend that describes the
3 different components, the different symbols that are used on
4 there. So in -- in assessing this plan I've had to make some
5 assumptions about what somebody's symbols indicate.

6 Next slide.

7 There's a second page. No legend.

8 Next slide.

9 Okay. Another shortcoming is the name of the owner
10 on this preliminary plat. The UDO requires that in a major
11 preliminary plat that the name of the property owner be on
12 that plat. And it is also a certificate of ownership and
13 dedication that is supposed to be on the preliminary plat.

14 Next slide.

15 Sorry that you folks can't read that. But the names
16 of the owners listed on this plat are James W. and Caroline
17 E. Ring. Caroline Ring died on September 20th, 2021, and
18 James died on October 23rd, 2021. This tract was then
19 transferred to Dennis F. Ring and John F. Ring by a deed
20 dated December 28th, 2021, and that deed was recorded on
21 January 26th, 2022. A required statement of ownership and
22 dedication is included on page 2, but not signed as required
23 by the UDO.

24 Q Can you -- can --

25 A This plat is invalid on that issue alone.

1 Q Can you tell me, Dr. Gregory, what that dedication,
2 ownership and dedication, do you have the quote that's on the
3 back of the plat?

4 A I can -- I can get a copy if you will give me just a
5 moment because it's not readable on this slide.

6 MS. LELAND: And I am repassing out to the board the
7 required findings of competent, relevant and substantial
8 evidence that the board may consider tonight, so we'll stay
9 on track, Mr. Parker.

10 MR. PARKER: That's fine.

11 THE WITNESS: Just putting it out. It's so small
12 I'm not sure I can read it, but the certificate of ownership
13 and dedication: I hearby certify that I am the owner of the
14 property shown in -- described thereon which is located
15 within the Subdivision Regulation Jurisdiction of Moore
16 County, North Carolina, that I hearby fairly adopt this plan
17 of subdivision and dedicate all streets, alleys, parks, open
18 space, and other sites and easements to public or private
19 as -- as noted, and that I will maintain all such areas until
20 the offer of dedication is accepted by the appropriate public
21 authority.

22 And that is supposed to be signed by the owner, so
23 this plat's not valid on this issue alone.

24 BY MR. PARKER:

25 Q Does it have a signature on it?

1 A No.

2 Q No signature?

3 A No signature, as required by the UDO.

4 Q Okay. All right. And did you show us where in the
5 UDO that's required?

6 A Next slide. Okay.

7 Well, you -- go back to slide four.

8 This is where the -- the UDO requires the name of
9 the current property owner and requires a certificate of
10 ownership and dedication, both of these required in a
11 preliminary plat.

12 Q Okay.

13 A And the name of the owner is listed as two folks
14 that have been deceased for over six months, and of course
15 they could not sign that -- that certificate of ownership and
16 dedication as required.

17 Q Okay. All right. Now, did you, in reviewing this
18 plat, did you attempt to obtain a legend for it?

19 A In the process of beginning my review I asked
20 Mr. Parker to request some additional information from
21 Mr. Robinson. I asked for additional information on the
22 boundary, and we'll get to that in just a moment, because the
23 plat just refers to GIS data.

24 I asked for a wetland delineation map. We'll get to
25 that a little bit later, and in terms of the wetland polygon

1 that is shown on this plat.

2 And the third thing was, what?

3 Q The legend?

4 A Oh, the legend, yeah. I asked for a legend so that
5 I could understand what the symbols were on the map, plus
6 more information about the parcel boundary, and then the
7 wetland delineation map.

8 Q Okay.

9 A We have not received that information.

10 Q All right. So, now, tell me about why are the
11 boundaries important on this plat?

12 A Okay. Let talk about the parcel boundary.

13 There is a very -- there's a note that says no
14 survey was performed, all bearings and distances are from GIS
15 data.

16 So what I would -- what I requested was what GIS
17 data is that? Where did it come from? What is its accuracy?
18 Standard information on a boundary that comes from GIS data.

19 Now, again, I want to talk about my experience in
20 reviewing development plans in many, many, many other
21 jurisdictions. Typically a multi sheet plan, and -- and this
22 is preliminary plans. This is referred to as a preliminary
23 plat, but the process in many, many jurisdictions is that a
24 complete plan is submitted as the preliminary plan. It's
25 then reviewed by the technical review committee. This is --

1 this is staff people from different functional sections of
2 the city staff. They make comments and suggestions for
3 changes, and the two developers that I've been working with
4 in Wilmington, there were very, very, very minor changes made
5 to that initial, initial complete plan.

6 And in all of these instances the first sheet of
7 that additional plan is a plat with a boundary survey by a
8 licensed surveyor, a very accurate survey boundary.

9 So, where did that come from? I suspect that it may
10 have come from the Moore County GIS website. And I'd like to
11 make a very positive comment about the Moore County online
12 GIS system. It's one of the best I've ever used. Very, very
13 well organized, but we don't know how accurate this boundary
14 is because it's not surveyed.

15 Another issue are the bearing and distances. A --
16 a, yeah. Go to the next one. All right. Stop there.

17 If this boundary came from the Moore County GIS,
18 there is a disclaimer on the Moore County GIS website about
19 the accuracy of this information, all information contained
20 in here was created for the county's internal use. Moore
21 County, its agents, employees, make no warranty as to the
22 correctness or accuracy.

23 So wherever this boundary came from, we don't know
24 it's origin, we don't know how it was developed, we don't
25 know what its accuracy is. And if it came from the Moore

1 County GIS, Moore County GIS staff says we don't give any
2 implied warranty about its accuracy.

3 So, again, I'm questioning why a plat with a
4 boundary that is totally unknown as to its origin and so
5 forth has been accepted.

6 Next slide.

7 Okay. So that disclaimer says that boundaries on
8 parcels, they make their best effort to use original data
9 from deeds.

10 Well, this is the deed from John -- Dennis and John
11 Ring's -- the boundary description from Dennis and John
12 Ring's deed. Now, those of you who are familiar with compass
13 and chain surveying, this was probably surveyed at least a
14 hundred years ago, would be my guess.

15 So we start at a stake by Jack Black Point. That
16 refers to a stake by a Blackjack oak by how close? Where is
17 it? An issue with accuracy.

18 Thirty feet from the center of Union Church Road.
19 Well, Union Church Road was probably an unpaved unimproved
20 road when the boundary description --

21 MR. ROBINSON: Objection. Speculation.

22 THE WITNESS: South 38 West 13.6 changed to an old
23 corner at the head of a small branch by a large black gum
24 tree.

25 So I'm very familiar with this type of old archaic

1 boundary descriptions because I've had three different
2 consulting projects over the last 15 years in which very,
3 very large amounts of money depended on accurately
4 determining whether a boundary like this actually exists on
5 the ground. And we spent a tremendous amount of time with a
6 GIS specialist who was a former grad student of mine, as a
7 matter of fact, walking a huge boundary, trying to find these
8 indicators of the boundary, and developing a GIS boundary
9 that finally got accepted by both sides in a lawsuit.

10 So the point, again, is how accurate -- how accurate
11 is that boundary? We don't know.

12 All right. Next slide.

13 Okay. I wanted to point out just one particular
14 example of a section of that boundary. This is the section
15 in the deed that says the original westerly line south 38
16 degrees west, 13.6 chains. Okay. A chain is 66 feet. So
17 13.6 chains is 897 feet.

18 If we convert south 38 degrees to its equivalent
19 northeasterly bearing, it should be north 38 degrees east, so
20 this line should be a straight line. If we're going by this
21 description in the deed it should be a straight line north 38
22 degrees east, and it should be 897 feet long.

23 But we have a number of different bearing and
24 distance indicators on this line, and I suspect these are
25 probably bearing and distances from these adjacent tracts.

1 So that's north 31. That's a long ways from north
2 38. North 37, a little closer. North 41, a little closer.
3 But when you add up these distances they don't add up to
4 897 feet.

5 So, again, an issue of the accuracy of this boundary
6 in relation the to the description in the original deed.

7 Next slide.

8 Okay. Where is it I wanted to -- I wanted to show
9 on here?

10 Oh. Certificate of survey accuracy. Not required
11 in a preliminary plat. I decry that. Any plat that is
12 submitted, and this is my personal opinion, should have an
13 accurately surveyed boundary.

14 Next slide.

15 Okay. Here's where I wanted to talk about an
16 apparent wetland. And let me tell you a little bit about my
17 background and why I have the expertise to evaluate what I
18 see on this plat.

19 As I said, I taught wetland delineation for about 16
20 to 17 years at a dozen different small stream flood plain
21 wetlands across the state, some in the coastal plains, some
22 in the Piedmont, some in the mountains that we took students
23 to, to actually teach them how to delineate these boundaries.

24 Also, several years ago I had a similar project on a
25 site about halfway between here and Southern Pines that was

1 extremely similar to this, same soil mapping units, same --
2 very, very close to the ridge top, small stream in a wetland.

3 So why do we have a wetland there? There are three
4 soil mapping units here. The highest elevation areas are
5 Candor sand. This area is -- is a mapping called Iley, and
6 then this wetland area is Bibb sand. This is very, very --
7 this is very poorly drained hydric soil, a wet soil.

8 BY MR. PARKER:

9 Q Dr. Gregory, let me stop you a second because you're
10 sort of trailing off. It's hard for me to hear you.

11 A Okay.

12 Q Did you say -- what were you saying about the soils
13 there based on the soil -- you were talking about the soil
14 map?

15 A Yeah.

16 Q Okay.

17 A Based on the -- the soils maps there are three
18 mapping units here. The upland area is mapped as candor
19 sand, this somewhat lower side slope elevation area is mapped
20 as Iley sand, and then this flood plain area which -- which
21 has very large wetland area, is mapped as Bibb Pine sand, and
22 Bibb is a poorly drained hydric soil. It is a wetland soil.

23 On May 28th with a local guide I did some
24 reconnaissance around the southern boundary, and also went up
25 here to verify something there. I'll get to that a little

1 bit later.

2 So starting on this tract, on this tract on the
3 Carol Parker, I used my soil logger to examine the soil
4 profile to confirm that that is Candor sand. And then I
5 started downslope looking for hydric soil indicators. And
6 that's the point where non-wetland soil transitions to
7 wetland soil. I found that wetland boundary somewhere up
8 here, much, much higher on the landscape than I had actually
9 anticipated.

10 Then we drove around and -- and -- and entered a
11 property, with the owner's permission, of course. This area
12 is forested, and, again, going downslope with my soil logger
13 to see where the wetland boundary was.

14 And I don't understand why this is shown as that
15 wetland abruptly cutting off. This entire area down through
16 here is wetland. There's an intermittent stream here that
17 probably extends somewhat up in this wetland polygon there.
18 I don't quite understand why the wetland polygon is shown
19 cutting off there. It extends, continues downward.

20 Here, this is a very large perennial stream. In low
21 gradient flood plain wetland systems like this, streams
22 typically have multi channels, that the main channel was
23 about six feet wide and about three feet deep, and there were
24 a couple of secondary channels.

25 Q Dr. Gregory, what is a perennial stream?

1 A All right. A perennial stream is one which has base
2 flow through out the year. An intermittent stream is one
3 which has base flow for part of the year, typically late
4 winter, early spring.

5 So this is a very large perennial spring at this
6 point.

7 Q And --

8 A Based on my experience in assessing streams and
9 these kind of systems, it's my opinion that it's perennial,
10 probably to somewhere up here, and intermittent in this
11 wetland section here.

12 This line is, I presume, indicates a -- a ephemeral
13 or storm ward channel. There is a culvert here. Rather
14 large amounts of storm water enter the site through this
15 culvert, so -- and I just went down into the edge of the
16 right-of-way there to verify that there is a channel, storm
17 water channel or ephemeral channel there, and it likely
18 transitions to a ephemeral stream, I mean, to intermittent
19 stream, and somewhere in here would be the transition to --
20 to perennial stream.

21 Q Now, when you're evaluating wetlands should the --
22 if there was a stream there should it be on this plat?

23 A Absolutely.

24 Q Why?

25 A Because streams and wetlands are waters of the U.S.

1 And these are pictures of the landscape that are subject to
2 the jurisdiction of the Environmental Protection Agency and
3 U.S. Army Corps of Engineers to apply sections of the Clean
4 Water Act.

5 Why this stream that is water of the U.S. that is
6 (indiscernible) stream was left off, I do not know.

7 Q Well, wait a minute. I mean, could it have been so
8 small they just missed it?

9 A No.

10 Q Did you see it?

11 A If any -- if anyone associated with the development
12 of this had walked across this area they would need at least
13 knee boots, probably hip boots to walk across that stream.
14 It's a big stream.

15 Q Thank you. For -- did you find it -- where did
16 you -- where did you cross it?

17 A We crossed it right here relatively close to the
18 boundary.

19 The local guide that I had had an application on his
20 phone, he had downloaded the parcel map from the county GIS,
21 and that's coupled with the GPS on the phone, so we knew
22 exactly where we were, following the blue dot in relation to
23 the partial boundaries that --

24 Q But -- but --

25 A -- we explored this area down here. We never did --

1 Q But --

2 A -- of course enter that tract because --

3 Q But, Dr. Gregory, where you're telling me it's at,
4 the wetlands on that plat doesn't even go there. Do you see
5 what I'm saying?

6 A Yeah, well, this is -- this is all wetland, and I
7 don't -- I don't quite understand why this is -- this is
8 shown as it ending, but there's a broad wetland all the way
9 across here. There is an intermittent stream here. This is
10 a -- a dug, an old dug irrigation pond right in here with the
11 intermittent stream draining from that. And where those two
12 come together there's a small perennial stream there that
13 discharges to the much, much larger perennial stream here.

14 Q Does that tell you anything about where those --
15 that plat showing those subdivision homes right there, I
16 mean, are they in the wetland according to what you saw?

17 A Well, that's a good question. As I indicated, I
18 have tremendous amount of experience in delineating these
19 small stream flood plain wetlands, and experience in
20 delineating one just like this south of here. And typically,
21 now, that -- there's a label there that says wetland typical.

22 Q It says what?

23 A It says wetland typical, small label. I don't know
24 what that means, because this is by far from a typical
25 wetland.

1 Okay. So here the wetland boundary is more or less
2 following the elevation contour. The contours on here are of
3 course lines of equal elevation, and they are two foot
4 elevation differences.

5 And then here it shows a wetland boundary going
6 downhill, two, four, six, eight, ten, 12, 14, 16, 18, 20 feet
7 downhill. Never happened in nature.

8 Here it shows the wetland boundary doing a 90-degree
9 turn, one back up hill, two, four, six, eight, ten, 12, 14,
10 16 feet, doing another 90-degree turn.

11 Q Wait. Wait.

12 A And then generally following --

13 Q Wait. The wetland on the plat, the wetland turns
14 and goes uphill?

15 A That's what it shows.

16 Q Okay.

17 A In nature that would never happen.

18 Q Have you -- have you ever seen that in real life?

19 A No. Well, I saw it once.

20 Q Where was that?

21 A On a small stream wetland in the mountains where
22 there was a huge outcrop in -- on the side of the slope like
23 that, but in the -- in the --

24 Q Is there outcrop here?

25 A -- a vertical boundary up slope would never occur.

1 Q Okay. All right.

2 A Let's continue on around. So generally more or less
3 following the elevation contour, which -- which is pretty
4 typical of small stream flood plain wetlands, oops, it does a
5 90-degree turn and goes downhill again, two, four, six,
6 eight, ten, 12, 14, 16, 18, 20, about 22, 24, 26, 28, going
7 downhill about 30 feet. It's never happened in nature.

8 So that wetland boundary's not real in my opinion,
9 and I have the very, very wide experience to make that
10 statement and believe that it's true.

11 Q Okay.

12 A I don't know how that wetland polygon was put there,
13 but it's not real. And the fact that Mr. Robinson could not
14 provide us with a wetland map where the delineation was done
15 by a -- a -- an experienced wetland control means to me that
16 that's not real.

17 Q Okay. Why is that important? What difference does
18 that make?

19 A These folks could not make an informed decision
20 about this with so many inaccuracies on here in terms of
21 wetlands and streams.

22 Q Can -- can they not just fill in those wetlands and
23 put them houses there anyway?

24 A Oh, yeah, right. And then the -- would be paying
25 big bucks in -- in -- to the Corps of Engineers.

1 No. The basic process where there is a large
2 wetland on a proposed development site like this would be to
3 have that wetland delineated and mapped by an experienced
4 wetland consultant.

5 What the consultant does is determine where the
6 boundaries are and marks them, and then the Wilmington
7 District Corps of Engineers requires that that -- that
8 boundary be mapped by a wetland science -- by a licensed
9 surveyor, so then you have a map, and then the next step is
10 to get a representative of the Corps of Engineers to come out
11 and confirm that that wetland boundary is accurate.

12 Now, if the developer wanted to infringe on this
13 wetland, that's possible. You get a jurisdictional
14 determination from the Corps, and then you submit a permit
15 application.

16 The Corps issues permits for (indiscernible), houses
17 on wetlands all the time. I live in New Hanover County,
18 believe me the Corps does issue permits, but there is a
19 standard process for reaching that point, and that hasn't
20 been done here, so far as I can tell at this point.

21 Q Okay. So if this were approved, based upon your
22 experience, and then they had the delineation, and it
23 extended those wetlands out, would that alter this plan?

24 A Absolutely.

25 Q Why?

1 A In my view if we had an accurate wetland map a
2 number of these lots would disappear, in my view. This storm
3 water feature, whatever it's meant to be, you know, we don't
4 have a description of it, is probably in the wetland. That
5 that one is probably partially in the wetland.

6 Q That was what?

7 A This one is probably partially in the wetland. And
8 according to USEPA and Corps of Engineers regulations, storm
9 water features cannot be constructed in wetlands.

10 So this -- this is a big issue here. An accurate
11 wetland boundary is essential to any development plan like
12 this to really understand where you can put houses, where you
13 can put streets, where you can put roads, and of course if --
14 and in this particular case this wetland area over here, you
15 might submit a permit application to the Corps and get
16 approval to fill this and put some more lots in there, but
17 there is a -- but there is a standard approach to doing that,
18 and that hasn't been done here.

19 Q So then if this were approved then what would be
20 built if they -- if we followed the -- the wetlands law would
21 be very different than what we see on here?

22 A Most likely, yes.

23 Q Okay. All right. Well, could you have missed --
24 could they just have missed the creek? I mean, is it on --
25 did you find any evidence of it anywhere else?

1 A I don't know why there's not an accurate wetland
2 boundary here. I mean, that's -- that's up to the folks in
3 the LKS Engineering to answer.

4 Q Okay.

5 A But to me this makes this invalid at this point.

6 Q Okay.

7 A Makes this plat invalid, because the folks charged
8 with making a decision about it do not have the information
9 needed to make an informed decision.

10 Q Okay. All right. So, now -- okay. All right.
11 Now, let's --

12 A Go to slide 11, Karen.

13 Q Okay.

14 A And this is a point I wanted to make here. Where is
15 it? (indiscernible) delineation of property is not even
16 required on a preliminary plat. That is a huge shortcoming
17 with the Moore County UDO. There is no way that these folks,
18 there's no way that the planning department, there's no way
19 that the subdivision review board, there's no way that these
20 folks can accurately assess whether this will work without an
21 accurate wetland map.

22 Q If -- if we want to follow the federal law?

23 A If you want to follow federal and state law.

24 Q Okay.

25 A But --

1 MR. ROBINSON: Objection. Lack of foundation on
2 that opinion.

3 BY MR. PARKER:

4 Q Okay. So let me ask you this. What -- let's talk
5 about storm water a little bit.

6 Do you -- that -- tell me what that is and what that
7 means.

8 A Okay. Go to the next slide here.

9 Okay. Let's stop here for just a moment. This is a
10 paragraph from the Moore County UDO. Minimum design
11 standards as shown on the preliminary plat. Storm management
12 plan should be required as part of the application submitted.
13 All structural storm water best management practices shall
14 meet the most current edition of the North Carolina
15 Department of (indiscernible) storm water best management
16 practices manual. I've got that manual in .pdf form on my
17 hard drive. I'm very familiar with it.

18 Q Okay.

19 A Residential subdivisions shall have systems designed
20 to protect (indiscernible) storm level (indiscernible)
21 commercial.

22 Q Wait a minute. You trailed off. I'm sorry.

23 A The UDO requires that for a prelim -- even for a
24 preliminary plat there must be a complete, well-designed
25 storm water management plan.

1 Q Okay.

2 A Next slide.

3 Q All right. Wait a minute. Back up. What is it --
4 I have questions.

5 What is a ten-year storm level? What's that mean?

6 A Okay. Ten-year refers to a statistical methodology
7 for predicting the amount of rain that will fall on average
8 every ten years. At Southern Pines airport the ten-year
9 storm drain is 5.69 inches in a 24-hour period.

10 Q Okay.

11 A So that's a fairly sizeable storm. Twenty-five I
12 think is 60 something.

13 Q Yeah. So, and of course you wouldn't -- you weren't
14 here when we got five inches of rain like two weeks ago,
15 so --

16 A I was here a little bit later.

17 Q Okay. Let -- actually you were here the day after
18 we got five inches of rain?

19 A Yeah.

20 Q So let me ask you this. So the storm water plan,
21 why is that -- what does that matter? Why is that important?

22 A Well, it begins with the 1972 amendments to the
23 Water Pollution Control Act, commonly known as the Clean
24 Water Act, because there is a section 301 in the Clean Water
25 Act and voluminous USEPA and state regulations that require

1 storm water management plans to control volume rate of flow
2 of storm water from developed areas, and also to treat water
3 pollution from developed areas. And, again, this requires a
4 well-developed storm water management plan for the
5 preliminary plat.

6 Q Now, let me ask you this. So do you, as a
7 hydrologist and a wetlands expert in wetlands, do you have
8 experience evaluating storm water plans?

9 A Absolutely.

10 Q What do you look for in those?

11 A Well, I look first of all for conveyances, and
12 whether based on the topography and the size of those
13 conveyances, and the -- the storm water manual refers to
14 vegetated conveyances, that is ditches, and --

15 Q What is a conveyance? I always thought that was a
16 car. What --

17 A C-O-N-V-E-Y-A-N-C-E.

18 Q Spell it slower, C-O-N --

19 A C-O-N-V-E-Y-A-N-C-E.

20 Q All right.

21 A In storm water speak that's basically a pipe or
22 ditch that transports storm water.

23 Q Water from one place to another?

24 A Yeah.

25 Q Okay. All right.

1 A Typically in the state storm water manual it's
2 referring to open trapezoidal ditches.

3 Q Okay.

4 A And vegetative conveyance means it must be vegetated
5 and be maintained in a vegetated state.

6 Q So --

7 A So what I'm looking for, is it a system of piping to
8 transport the water to the storm water control measures, or
9 is it open vegetative conveyance ditches.

10 And then I look for the types of storm water control
11 measures to which that storm water is designed to flow. Are
12 they adequate? And one of the things that I thought to ask
13 for and I decided not to because I knew I wouldn't get it,
14 was the storm water calculations. This requires a
15 well-developed storm water management plan.

16 Have the -- go back one, Karen. Go back another
17 one.

18 Okay. So we have these, and, again, I -- I don't
19 have the legend so I'm not sure what they're supposed to be,
20 but at least those closed lines indicate that that's some
21 kind of depressional feature.

22 Q Some kind of what?

23 A Depressional feature.

24 Q Okay.

25 A So is it a retention pond? Is it an infiltration

1 basin? Is it a treatment wetland? If -- there's nothing on
2 here to indicate the type of storm water control measures
3 that supposedly will be constructed here.

4 Q Are -- are those -- are those different, the things
5 you mentioned, the retention pond, and --

6 A Absolutely.

7 Q Why? What do you mean?

8 A Because they -- they're constructed differently and
9 they function differently.

10 Q Okay.

11 A Retention pond is one that maintains a water level
12 continuously. Infiltration basin is basically a dry pond.
13 It's one that where you have sandy soils, and these are sandy
14 soils where infiltration basins would work well. It's where
15 the storm water is accumulated, held, and infiltrates into
16 the soil over -- over a period of days. Typically 72 hours
17 is the criteria.

18 A treatment wetland is, as the name implies, it's
19 a -- it's a manmade wetland, and of the three types of
20 features I just mentioned treatment wetlands by far are
21 preferred because they do a much better job of treating water
22 quality than either retention pond or infiltration basin.

23 Q Okay. Well, now, look, if the water that falls on
24 all of these houses and on the driveways and on the street,
25 if it just runs into the -- the wetland over there, I mean,

1 that fixes a problem, that's going to stop the erosion;
2 right?

3 A No.

4 Q Okay. Well, why?

5 A Let's -- let's -- let's go on -- go forward there.
6 Well, let's just stop here for a moment.

7 What I wanted to talk about, the UDO requires
8 well-developed storm water management plan. This does not
9 have what the UDO requires. I've been trying to interpret
10 what these lines mean. I don't have a legend, so I'm not
11 sure if I'm interpreting them correctly.

12 On the second sheet there is a cross-section of --
13 typical cross-section of a street with a V-shaped ditch on
14 either side. So I think we can correctly assume that storm
15 water running off these lots will accumulate in these ditches
16 along the streets and flow downhill. Water flows downhill.
17 And this line shown here, this dark dashed line, I've been
18 trying to figure out what that's supposed to be.

19 I think it's vegetative conveyance because it seems
20 that it is designed to collect storm water runoff from the
21 lots and transport it to these storm water features. But,
22 again, the detailed storm water management system that is
23 required on a preliminary plat is not here.

24 Next slide.

25 Q Well, wait. Before you go there, let me ask this

1 question.

2 So what this -- what you think is that the water's
3 supposed to come off of these lots and go to the road and hit
4 those what may be ditches and then go there; is that right?

5 A In -- I'm interpreting with limited data.

6 Q Yeah.

7 A I'm assuming that this is the system that uses
8 vegetated conveyances, ditches that collect the storm water
9 running off impervious surface of the streets.

10 Oh, by the way, the UDO requires that a total
11 impervious surface be listed on the plat, and it's not.

12 Q UDO required what?

13 A Total impervious surface of -- of the subdivision.
14 What's listed here is the only, the impervious surface of the
15 street, so we don't know what the total will be when all the
16 houses and the driveways and so forth are built.

17 Q Where do impervious surfaces -- what are you trying
18 to add up? I mean, what are those?

19 A That's hard surfaces, pavement, concrete, house
20 roofs, driveways. It's hard surfaces that the water runs off
21 of very rapidly and hopefully accumulates in some kind of
22 conveyance and hopefully is transported to some kind of storm
23 water control measure.

24 Now, I want to -- I'm going to talk about a little
25 bit later what happens to the soil in a development like

1 this, because heavily compacted soil is also an impervious
2 surface in most cases. But --

3 Q And --

4 A -- but the standard --

5 Q And you --

6 A -- for --

7 Q And you said the UDO is supposed to -- requires that
8 the impervious surface amount --

9 A Total impervious surface --

10 Q Is that -- is that on this --

11 A It's not on here.

12 Q On the plat?

13 A Just another requirement of the UDO that's not on
14 this plat.

15 Q What is the -- what is the impervious -- is there
16 listed an impervious surface?

17 A The amount of impervious surface in the streets is
18 listed, as I believe it was five something acres.

19 Q Okay.

20 A But the UDO requires that the total amount, which
21 would include the houses, the driveways, all of that.

22 Q Okay. All right. And that's not on there?

23 A No.

24 Q All right. Okay. Go ahead.

25 A Next slide. Oh, my goodness.

1 Q That's all right. I have another one. Is that the
2 one with the blue arrows?

3 A Yeah.

4 Q All right.

5 A (Indiscernible). Can you flip that, Karen? That
6 needs to be 90 degrees.

7 Q I have -- hold on a minute.

8 A Okay. Leave it like that. I apologize. This is
9 one of my most important slides and it's not displaying
10 properly.

11 Q All right. I want to show you here -- I got to get
12 to the mike.

13 A Yeah.

14 Q I want to show you there what's marked as Exhibit 33
15 and ask you to examine that and tell me if you can identify
16 that.

17 (Exhibit No. 33 identified.)

18 A This is a print, large print of the preliminary plat
19 that we're discussing, and it's marked in blue with my
20 interpretation of where storm water flows.

21 Q Now, why -- how do you -- how were you able to make
22 that interpretation?

23 A Water flows downhill.

24 Q Okay.

25 MR. ROBINSON: Objection. That's speculation.

1 THE WITNESS: So looking at each of those lots,
2 looking at the topography and determining the --

3 BY MR. PARKER:

4 Q Wait a minute.

5 A -- which way the water would flow downhill.

6 Q Well, I'm sorry, we had an a objection to apparently
7 water flowing downhill.

8 MR. ROBINSON: That is incorrect. The objection is
9 to the speculation as to whether -- what the topography is.
10 I don't believe that Dr. Gregory has ever testified that he's
11 even set foot on this land.

12 BY MR. PARKER:

13 Q How --

14 A I don't need to set foot on this land. I looked at
15 topographic maps.

16 Q Okay. Do -- what is a topographic map?

17 A Okay. Shown in very, very light line print are what
18 are called contour lines. Contour lines are lines of points
19 of equal elevation, and this series of contour lines is
20 called a topographic map because it illustrates the
21 topography, the shape of the land surface, so all I've got to
22 do is look at this map and see which direction water flows.

23 Q And did you learn how to do that as a hydrologist --

24 A I taught this.

25 Q You taught that? Okay?

1 MR. ROBINSON: I reiterate the objection.

2 THE WITNESS: I not only learned how to do it, I
3 taught it for 34 years.

4 MR. ROBINSON: Dr. Gregory has no idea what the
5 grading on this property will be when it's finally
6 constructed.

7 THE WITNESS: That's absolutely true because this
8 plan doesn't show it.

9 MR. ROBINSON: That's right. So you can't speculate
10 in any way about where the water's going to go after it's
11 graded, can you?

12 MR. PARKER: Well, objection. He can cross-examine
13 when we get to cross-examination.

14 MR. ROBINSON: Well, I want the nature of my
15 objection to be in the record.

16 THE WITNESS: I'm just interpreting what I see here
17 now because this is what has been presented for approval.
18 Where's the grading plan --

19 BY MR. PARKER:

20 Q Was that --

21 A -- that I can interpret?

22 Q So looking at what's there now, did you go through
23 and look at where the water would flow from each of those
24 lots?

25 A I looked methodically at each of these lots based on

1 the current topography. Now, granted, as Mr. Robinson says,
2 there will be some grading, but my experience in fairly high
3 gradient slopes like this, there will be minimal grading that
4 will change the direction of water flow.

5 Now, the LKC Engineering may have some plans that
6 will dramatically change the water flow. I'm just
7 interpreting what I see right now with the current
8 topography.

9 There is a high hill here, and then the topography
10 goes down. This is -- this is a slope that averages about
11 five to six percent, and five percent slope is five-foot drop
12 in elevation per hundred feet horizontal. That's what that
13 means.

14 So the slope here down toward this stream is about
15 five to six percent here, and then it goes up to about seven
16 to eight percent here.

17 So we have a high hill here, and then the land
18 slopes downward to the stream, slopes downward to the stream.
19 This is a bit of a side ridge here so water from there is
20 going downward towards the stream that way, going downward
21 toward the stream that way.

22 So these three lots, the water is going to -- and
23 again, I'm just interpreting what I see now. The water is
24 going to flow into the roadside ditch, and that water will go
25 into the storm management feature, I believe.

1 Water from this lot is going to be flowing into what
2 I believe to be vegetated conveyance, water from there. And
3 then the vegetated conveyance, it shows it going down and
4 then back up. Well, water's not going to flow down and then
5 back up. Water off these lots is going to go into the
6 stream, which is verboten.

7 Water off that lot is going that way, that way, and
8 that way. That's going to accumulate in this vegetated
9 conveyance. That water is going to go downslope into the
10 stream.

11 Looking at the water over here, those lots under
12 current conditions flow toward the roadside ditch, and
13 remember, we've got a -- a ridge here, so water accumulating
14 in this roadside ditch is going to be going this way
15 downslope, so where is it going to go? If it makes it all
16 the way around this cul-de-sac it's going to go into that
17 stream.

18 Here the water is flowing down. If this is
19 vegetated conveyance, that water will go into this feature.
20 Water flowing down here, this vegetated conveyance goes
21 downslope. Water flowing here goes into this vegetated
22 conveyance. That water's going to go into the wetland.
23 Water flowing down here and in this vegetated conveyance,
24 some of it might make it into this feature from this area.

25 Let's go up here. Land slopes downward this way,

1 yeah.

2 Q Dr. Gregory, could you turn this way so they can see
3 what you're -- yeah, so they can see what you're doing. I'm
4 sorry.

5 A So here, runoff from these lots, this is going --
6 this is downslope, going to flow into what I have presumed
7 to -- and that's always a pitchy thing to do -- I presume
8 that's a vegetated conveyance, so water from those lots goes
9 into that vegetated conveyance, it's going to go down here.
10 Oops. There's a right-angle turn going back up hill. So
11 that water's going to go into this wetland.

12 Water coming down here --

13 MR. ROBINSON: Objection. Speculation.

14 THE WITNESS: -- accumulates in the roadside ditch.
15 Hopefully some of it will go into this vegetated conveyance.
16 Some of it might eventually make it into the wetland.

17 So based on what I see right now, the runoff pattern
18 of storm water is not all -- a very, very small percent of it
19 is going to these, whatever those storm management features
20 are supposed to be.

21 MR. ROBINSON: I object and move to strike --

22 THE WITNESS: Then if --

23 MR. ROBINSON: -- all of that testimony, and I want
24 a ruling on the motion to strike it.

25 MS. LELAND: I advise the chair to rule that that's

1 irrelevant.

2 MR. PARKER: I'm sorry. I didn't hear what you
3 said.

4 MS. LELAND: I agree that it's irrelevant
5 information.

6 MR. PARKER: Well, we -- we would argue -- we would
7 argue that the UDO requires a storm water plan. In this case
8 there is no storm water plan. There is no legend that
9 indicates there is a plan. The -- the -- Dr. Gregory has
10 evaluated the preliminary plat that you're being asked to
11 approve 53 homes. Once you make that approval, that's done.

12 He's evaluating it based on the storm water
13 situation and the runoff into these estuaries and these --
14 and these -- not estuaries, but into the wetlands that you
15 see on here.

16 The fact that the grading may be done, that should
17 be included in the plat. I would argue to you that it is
18 relevant, it's highly relevant in evaluating whether this is
19 appropriate, this -- a development as described here is
20 relevant for this piece of property.

21 MS. LELAND: Mr. Robinson, do you want to be heard?

22 MR. ROBINSON: I do. Thank you.

23 It is both irrelevant because there is a storm water
24 plan shown on the preliminary plat. The unified -- the
25 uniformed -- unified development ordinance doesn't state

1 exactly what has to be in that plan. It shows storm water
2 conveyances. It shows storm water ponds.

3 And I also object because it's not only irrelevant,
4 but it's sheer rank speculation by Dr. Gregory about where
5 the water's going to go. I don't think it's helpful at all
6 to this board to decide whether or not this plat meets the
7 requirements of the ordinance.

8 MR. PARKER: I'm sorry. I'm sorry, Mr. Daeke?

9 MR. DAEKE: I have a question. The topography is
10 there. This represents the existing topography?

11 THE WITNESS: Yes.

12 MR. DAEKE: So there's water or rain coming down
13 that, and the water's running off the way you're talking
14 about running, so what's the effect that has since it's there
15 now doing it, what does that have effect on the surrounding
16 community?

17 THE WITNESS: We're going to get to that a little
18 bit later in talking about --

19 MR. DAEKE: Let's get to it now, because that's what
20 we want to know --

21 THE WITNESS: Okay.

22 MR. DAEKE: The topography is there, the rain is
23 there, and it's running off the way you're talking about. I
24 want to know how it affects the other communities.

25 THE WITNESS: Go forward. Go forward. Go forward.

1 MR. DAEKE: And I'm talking about after the
2 development.

3 THE WITNESS: Yeah. This -- this is what I
4 wanted -- I was going to get that at the end, but I'm happy
5 to discuss this now.

6 Go back -- go forward where you were. Hydrologic
7 impact on land development.

8 One of the issues with the Moore County UDO that I
9 would like to recommend that you folks really look at is the
10 lack of any tree protection.

11 MR. ROBINSON: Objection. I cannot see how in the
12 world Dr. Gregory's opinions about what your UDO needs to
13 provide in the future has any even marginal relevance to what
14 you're deciding tonight.

15 MR. PARKER: It provides it now.

16 THE WITNESS: I'm about --

17 MR. PARKER: He's answering their question.

18 THE WITNESS: I'm about to tell you why. Because
19 with nothing in the UDO about tree protection there will be
20 complete clearing of trees on this site. That's -- that's --

21 MS. LELAND: Mr. Parker, this is totally irrelevant
22 and has no bearing on the legal standards that we have to
23 follow.

24 MR. PARKER: This --

25 MS. LELAND: It absolutely doesn't. Let's skip the

1 trees and go to something else.

2 MR. PARKER: He's trying to answer Mr. Daeke's
3 question.

4 MS. LELAND: It has no bearing on the legal
5 standards we have to follow. It's extraneous.

6 MR. PARKER: So -- okay. So you don't want him to
7 answer Mr. Daeke's question?

8 MS. LELAND: I don't think that's answering
9 Mr. Daeke's question.

10 MR. PARKER: May I rephrase Mr. Daeke's question for
11 him to answer?

12 MS. LELAND: Go ahead, but him suggesting we need to
13 revise our ordinance to -- for trees is irrelevant.

14 MR. PARKER: That's -- that's -- okay. Well, I'm --
15 I -- we misunderstood or didn't hear the same thing.

16 BY MR. PARKER:

17 Q So Mr. Daeke's asking you, the water that's running
18 now, where does it go and why is that different than if --
19 that's what he's asking. Where does the water go now and
20 what's the effect on the surrounding communities?

21 A Okay. This site, I have it -- I tried to actually
22 measure the area an aerial photo, but the highest elevation
23 area is open tillage, but a majority of the site is forestry,
24 which means very high infiltration capacity. These are sandy
25 soils for very high (indiscernible) rates downward, so most

1 of the rainfall is going into the soil and it's percolating
2 downward through the soil.

3 And the reason we have these wetlands way, way up
4 high on the landscape here is because there are partially
5 pervious layers deep in these soils that causes that
6 percolating rain water to eventually come back to the surface
7 in these wetland areas. But under current conditions this
8 site has very high infiltration capacity, and much of the
9 rain water infiltrates.

10 So the typical development involving land clearing,
11 and there's an example in Vass right now where all of the
12 trees were removed, land clearing of trees is done with large
13 track hoes. A large hole is dug around the tree. It is
14 pushed over. The stump is pushed out and it leaves huge
15 holes. Bulldozer then fills those holes and compacts,
16 compacts, compacts, so then you have an open area with no
17 vegetation, with severely compacted soil, and what that does
18 is convert infiltration into surface runoff.

19 So even with no impervious surface, the resulting
20 change in the hydrologic characteristic of the soil creates a
21 situation with a tremendous amount of surface runoff. These
22 sandy soils are highly erosive, so because of the slopes
23 here, because of the topographic character of this site,
24 there's likely to be a lot of erosion, a lot of surface
25 transport of polluted water into this stream --

1 Q Well --

2 A -- during and after the process.

3 MS. LELAND: Did that answer your question,
4 Commissioner Daeke?

5 MR. DAEKE: Yes.

6 MS. LELAND: Thank you.

7 MR. ROBINSON: I reiterate the objection and move to
8 strike that. It's all based on his theory that all the trees
9 are going to be cleared, which has not itself been proven and
10 also is not a part of this proceeding.

11 MS. LELAND: I agree.

12 MR. PARKER: It's --

13 THE WITNESS: There's not a tree protection sheet in
14 this plat.

15 BY MR. PARKER:

16 Q Well, I also --

17 A Making an assumption based on what I see.

18 MR. ROBINSON: Well, you're right. You're making
19 assumptions.

20 MS. LELAND: The chair is --

21 CHAIRMAN QUIS: I have a question. What is the
22 total amount of impervious surface created by this
23 development?

24 MR. ROBINSON: We can have an engineer testify to
25 that, but I can say in general terms that the total amount of

1 impervious surface that is known at this time, meaning the
2 roadways, et cetera, is shown on the preliminary plat. The
3 remainder of the impervious surface will be rooftops and
4 driveways, and of course no one can know that until they are
5 constructed.

6 CHAIRMAN QUIS: Thank you.

7 MR. PARKER: So, well, my argument would be that,
8 number one, it doesn't comply with the UDO because the total
9 amount's not listed; number two, he's testifying based upon
10 his 30, 40 years of experience in reading topography maps and
11 where water goes and his experience in wetlands, the damage
12 that can be caused from this type -- from this development as
13 is laid out here to this area.

14 And I would argue that it is relevant because it
15 goes to number two, which is that the preliminary plat meets
16 the specifications of the UDO. And it goes to the health and
17 safety -- or the public health of this area, which I intend
18 to ask a question about later. We hadn't gotten there yet.

19 CHAIRMAN QUIS: Thank you.

20 THE WITNESS: Karen, back up. There's just one more
21 point I wanted to make.

22 MR. PARKER: Whoa, whoa, whoa. He's made an
23 objection. They got to -- I think y'all got to rule; right?

24 MS. LELAND: We don't have to.

25 MR. PARKER: Okay. All right.

1 THE WITNESS: Okay. Stop there.

2 MR. PARKER: May I proceed then? Madam Attorney?

3 MS. LELAND: Yes, you can proceed. And let me just
4 state for everybody here, and for Mr. Parker, that these type
5 of cases are appealed to superior court. The local
6 government process, number one, is to preserve the record.
7 We can rule on objections if we want to or not rule on them.
8 Ultimately, the superior court judge rules on every objection
9 made.

10 MR. PARKER: Thank you. It's -- I understand. I
11 apologize to you and the commissioners. That's very unusual
12 from what I did for 30 years. I'm trying to be respectful
13 and wait for a ruling, but --

14 MS. LELAND: I understand, but I just want everybody
15 to know --

16 MR. PARKER: Thank you for --

17 MS. LELAND: -- because this is a different process.

18 MR. PARKER: I understand. Thank you. If I can
19 have just a minute?

20 THE WITNESS: Okay. Another point I wanted to make
21 is --

22 BY MR. PARKER:

23 Q Wait just a minute. Wait just a second. Okay. I
24 apologize. What were you going to say?

25 A We're going to talk about high quality waters.

1 Q High quality waters. All right. Now, yes, you had
2 noted based upon your experience and your education, what
3 is -- is this in a high quality water area?

4 A Absolutely.

5 Q What -- what does that mean?

6 A All right. Let me first show you this map from the
7 North Carolina Division of Water Resources stream
8 classification system. This is an online interactive map,
9 and highlighted here is a breach of Little River, how do you
10 pronounce that, Mr. Parker, Thaggard's --

11 Q Mr. Gregory, Dr. Gregory, could you move your mike
12 up on your thing? I can't hear you. Yeah. And make sure
13 it's still working.

14 A Can you hear me okay?

15 Q That's better. Thank you.

16 A Okay. All right.

17 Q Now, go back to this is a map from where?

18 A This is a map of this -- of this region, the portion
19 of the watershed of Little River.

20 Q Okay.

21 A The highlighted breach of Little River from, hoping
22 I said -- Thaygard's, Thaggard's --

23 Q Thaggard's Lake.

24 A Thaggard's Lake to one mile northwest of

25 US Highway 1 is classified as, we already know it's WS3, but

1 it's also classified as HQW, high quality water.

2 Next.

3 High quality water. This is from the North Carolina
4 administrative code surface waters of the state that the
5 commission classifies as HQW upon finding that such waters
6 are rated excellent based on biological, physical, chemical
7 characteristics in monitoring of the special studies. So
8 that breach of Little River and all tributaries that drain to
9 it are classified as high quality waters.

10 Next slide.

11 Okay. This is from the wonderful Moore County GIS,
12 three layers, digit elevation model, and basically a DEM is a
13 way of displaying elevation variation and color coding. So
14 the darkish red here is the highest elevations, so this is a
15 ridge top separating the drainage of the segment of Little
16 River that we're talking about from the adjacent Carvers
17 Creek Watershed. And here is the parcel that we are
18 discussing, and you see a stream that goes through that all
19 the way down, discharges into Little River.

20 So this segment of Little River and all streams
21 draining to it are classified as HQW.

22 Next slide there. Next one.

23 Okay. This is a zoomed in, again, showing, and this
24 really illustrates the topography of this particular site.
25 This is -- this is the highest elevation point is the

1 triangular shaped hill, goes downward into the stream valley,
2 goes downward into the stream valley, downward into the
3 stream valley.

4 And this stream is shown on the Moore County GIS.
5 It's shown on every type of US Geological survey map
6 available. It's shown on NRCS soil maps. So I don't know
7 why it's not on this preliminary plat.

8 Next slide.

9 There are key elements of the North Carolina
10 Administrative Code requiring -- regarding development of HQW
11 waters. I just listed the references, not going to try to
12 walk you through what it says, but in summary it says that in
13 HQ waters, very, very high functioning storm water management
14 systems are required that treat both quantity and quality.
15 That's the basis of these rules.

16 So, again, the folks who designed this have a lot of
17 work to do in my view in developing the storm water
18 management system that meets these requirements.

19 Next.

20 Okay. This I also found a very, very interesting
21 paragraph in the UDO. The final plat should perform
22 substantially to the approved preliminary plat. Well, it's
23 approved, if this preliminary plat is approved, there is a
24 tremendous amount of changes that need to be made to make it
25 a good quality plan. In my view it doesn't meet this

1 paragraph of the UDO because this preliminary plat should be
2 substantially what would be approved as a final plat.

3 Next slide.

4 Oh, we've already seen this. Next. Next.

5 And I just want to finish on this note. This is a
6 very poor quality plan. It violates many sections of the
7 UDO. It violates some standards of widely accepted
8 engineering practice, and in my view it should not be
9 approved at this stage. It needs a lot of work.

10 That's my -- that's my opinion based on a lot of
11 experience with reviewing plans.

12 Q Okay. All right. Dr. Gregory, let me ask you a
13 couple of questions.

14 Do you foresee with what you see with this plat that
15 there would be environmental impacts to people who are
16 downstream from this stream if this subdivision goes in?

17 A If this subdivision goes in, and with the current
18 state of very poorly developed conceptual storm water
19 management plan, there is going to be runoff going into this
20 stream that's polluted, and it's going to degrade the quality
21 of water that's going downstream from this point.

22 Q Okay. Would that potentially affect the people who
23 own property down below this plat?

24 A Those people would have cause for concern and maybe
25 even legal action.

1 Q Why, I mean, tell me what would -- what would --
2 what would be the concern?

3 A If there are folks downstream who are using this
4 high quality water for stock watering, or for irrigation, if
5 a subdivision like this cause substantial degradation of that
6 high quality water, then those folks would have cause for
7 action against that --

8 MR. ROBINSON: Objection to all the speculation. I
9 lost track. There were six or seven ifs in that answer.

10 THE WITNESS: I have dealt with a number of cases of
11 hydrologic trespass.

12 BY MR. PARKER:

13 Q Okay.

14 A And this is what that would be.

15 Q So let me ask -- let me ask a couple of things.

16 You reviewed Exhibit Number 33. That was Exhibit 33
17 right here? No, the map, the big map.

18 A Yes.

19 Q Okay. That one right there that you saw? May I
20 approach?

21 All right. On this map did you say the wetland
22 extended out from this area here?

23 A Up slope, yes.

24 Q Whose property is that?

25 A That's Carol Parker's property.

1 Q And did you say based upon your training, education
2 and experience that the -- that the way this plan is drawn
3 that that would be runoff coming from these lots into that
4 wetland?

5 A Into that wetland.

6 Q Which would -- would that potentially affect Carol
7 Parker's property?

8 A No, because it's up slope from that wetland area.

9 Q Okay. All right.

10 A But the people who have property down here below
11 this creek would be.

12 Q Now, this -- you've drawn in the creek here; is that
13 correct?

14 A Yes.

15 Q It's not in the plat.

16 A It's not in the plat. On this particular example I
17 drew it in --

18 Q Okay.

19 A -- to illustrate that there is a perennial stream
20 there in the valley.

21 Q Okay.

22 MR. PARKER: At this point we would move to
23 introduce Exhibit 33 for the commissioners.

24 MR. ROBINSON: Object.

25 (Exhibit No. 33 offered.)

1 (Exhibit No. 34 identified.) XXX

2 BY MR. PARKER:

3 Q I want to show you what's marked as Exhibit 34 and
4 ask you to examine that and tell me if you can identify
5 Exhibit 34?

6 A This is a printout of three layers from the Moore
7 County GIS, the interactive online GIS, the digital elevation
8 models showing color coded elevation, and you can see the
9 actual elevation numbers on this large scale.

10 So 450 feet here, and it goes down to 366 feet is
11 the elevation there. So this is really steep slopes going
12 down into the stream. So this is the topography. And this
13 is the parcel boundary from the Moore County GIS parcel map.
14 And of course this is the stream that's shown on the Moore
15 County GIS stream layer.

16 Q Which you -- which you, based upon your training and
17 experience, had expected to find --

18 A Yes.

19 Q -- if you had gone on the property? Okay. Does
20 this aide you in illustrating your testimony to the Moore
21 County commissioners about the hydrological issues related to
22 this subdivision?

23 A Yes. Well, again, we've got fairly steep slopes,
24 and a very, very well-designed storm water management plan
25 that is going to collect this storm water runoff into

1 well-designed storm water control measures, SCM is the
2 standard term used in -- in storm water design nowadays, it's
3 possible to keep sediment out of the wetland. It's possible
4 to keep polluted water out of that stream, but it requires a
5 well-designed storm water plan, which this plat does not have
6 at this point.

7 Q Okay. All right.

8 MR. PARKER: We would move to introduce Exhibit 34
9 at this time.

10 (Exhibit No. 34 offered.)

11 BY MR. PARKER:

12 Q What kind of pollution would you anticipate coming
13 off of this subdivision into that stream based upon your
14 training and experience?

15 MR. ROBINSON: Objection. Speculation.

16 THE WITNESS: There is voluminous research in the
17 research literature that at 10 percent impervious surface,
18 and that's the reason I brought up this issue about what's
19 going to be the total impervious surface here, but your
20 residential areas at 10 percent impervious surface, water
21 quality of receding waters starts to decline, starts to
22 degrade.

23 Fine sediment, petroleum products washing off the
24 streets and driveways, nitrogen, phosphorus, coliform
25 bacteria from pet waste, and number of different pollutants.

1 Unless a really, really well-designed storm water management
2 plan is put into place here, there's going to be a lot of
3 pollution going into this stream.

4 MR. PARKER: All right.

5 MR. PICERNO: Can I ask -- can I ask a question? Is
6 that -- can I ask, may we -- allowed to ask a question?

7 You state this is all downhill now. And we have
8 Union Church Road that runs up looks like above, and
9 everything runs down now off that Union Church Road, so why
10 are we not concerned about all the traffic that we've heard
11 that's supposedly on this road?

12 THE WITNESS: We are -- should be concerned.

13 MR. PICERNO: Okay. So where -- why are we not
14 worried about what's running downhill now with no storm water
15 control measures in place?

16 THE WITNESS: Well, I -- I've not really conducted
17 an assessment of the roadside here. I would -- I'd have to
18 speculate, but I suspect there is a roadside ditch that
19 collects water running off the road and goes down, and then
20 DOT over the years likes to dump storm water directly in the
21 streams.

22 Now, over the last 30 years that has changed because
23 designs that DOT has been developing there have been -- EPA,
24 Corps of Engineers, State Division of Water Resources has
25 really, really forced DOT to install storm control measures.

1 But on an old street like this, that runoff, they will go
2 into the stream.

3 BY MR. PARKER:

4 Q Okay. All right. Dr. Gregory, you also testified
5 that James and Caroline Ring, who are listed as the owners,
6 died.

7 MR. PARKER: I would like to move at this time to
8 introduce Opponent's Exhibits 28 and 29, which are certified
9 death certificates of James and Caroline Ring showing their
10 date of death, which was in September and October of last
11 year.

12 (Exhibits No. 28-29 identified.)

13 (Exhibits No. 28-29 offered.)

14 MR. PARKER: Madam Attorney, I would also ask,
15 because of the nature of identity theft, that if the
16 commissioners review those death certificates, I would ask
17 that the commissioners consider sealing them until and unless
18 they need to be seen by the superior court in this case.

19 MS. LELAND: Does that have a social security number
20 on it? Most of them do, but they're public record. That's
21 how you obtained it.

22 MR. PARKER: I understand, but they wouldn't give --
23 they won't give them out to just anybody. I only got them
24 because I was a lawyer asking for it for a hearing. They're
25 very particular about certified copies of them. And so

1 that -- I mean, that's fine. I just wanted to make the
2 request on behalf of the family for that, so...

3 MS. LELAND: We do have to follow the public records
4 law.

5 MR. PARKER: I understand that, but I just wanted
6 you to be aware of my concern.

7 MS. LELAND: I appreciate it.

8 MR. PARKER: Thank you.

9 BY MR. PARKER:

10 Q And Dr. Gregory, did you prepare a report of your
11 findings and evaluation?

12 A Yes, I did.

13 Q Okay. Would you recognize it if you saw it?

14 A Yes.

15 Q I want to show you what's been marked as Exhibit 35
16 and ask you to examine that and tell me if you can identify
17 it.

18 (Exhibit No. 35 identified.)

19 THE WITNESS: Yes, that's a report that I prepared
20 and submitted to Mr. Parker dated June 1, 2022.

21 BY MR. PARKER:

22 Q Okay. Is this a fair and accurate representation of
23 what you discussed and talked with with the county -- with
24 the board here?

25 A Yes.

1 Q Okay.

2 MR. PARKER: State -- I would move to introduce
3 Exhibit Number 35.

4 (Exhibit No. 35 offered.)

5 MR. PARKER: If I can have just a minute?

6 All right. That's all the questions I have at this
7 time.

8 MS. LELAND: I will ask the chair, are we good to
9 continue, or do we need a recess?

10 CHAIRMAN QUIS: It's been an hour and a half. I
11 think a five-minute recess would be very good.

12 MS. LELAND: Okay.

13 MR. PARKER: Thank you. That's good.

14 (Recess.)

15 MR. PARKER: I think he went to the restroom, and
16 I'm hearing there's a line down there, so I apologize to you,
17 but we only have like one stall and one urinal, so I
18 apologize.

19 MS. LELAND: Yes, uh-huh.

20 CHAIRMAN QUIS: Looks like we need more urinals.
21 Whoops.

22 (Audio begins mid sentence.)

23 MR. ROBINSON: -- members of the board, this will be
24 a second consecutive night that my client has engaged and had
25 a traffic engineer here to testify, and he wasn't able to be

1 gotten to last time, and I would just request that one way or
2 another we be given the opportunity to put him on the stand
3 tonight so that he might not have to come back if there's a
4 subsequent fourth round of public hearings.

5 CHAIRMAN QUIS: Reasonable request. Mr. Parker?

6 MR. PARKER: Mr. Chairman, we are not here to
7 obstruct, and that is a little out of the ordinary, but I do
8 not object to that. He can take him out of order if he feels
9 it necessary to put him on --

10 CHAIRMAN QUIS: How --

11 MR. PARKER: -- if that's --

12 MS. LELAND: That's fine. And I think for any of
13 the paid experts here we might want to try to get those all
14 in.

15 MR. PARKER: Well, I'll -- just -- wait a minute.
16 Just so you -- just so you know, I -- I am doing my best to
17 cut down on the number of witnesses. I'm anticipating only
18 four to five that I have left, but most of those are experts
19 which are similar to this so it could take longer, so --
20 because of that. But I am trying to cut down on those
21 number, but I do have, since three of them are my clients, I
22 just want to make sure they're okay with my strategy in doing
23 that, but I should be -- I'm trying to cut it down so we can
24 move along.

25 MS. LELAND: Do you have an estimate of how long you

1 think you would take just on your witnesses?

2 MR. PARKER: I have -- well, I don't. This took
3 longer than I thought. I -- thank you. I anticipated that
4 we would -- that he would not take more than about 45 minutes
5 to an hour, and that took consider -- that took twice as long
6 as I thought it would.

7 The other experts, my traffic engineer I don't think
8 is going to take that long. And my expert from -- from
9 Wilmington, my other one, he could take a little longer, and
10 Nick LaSalla could take longer, but they're -- Nick is local,
11 so that's not a problem bringing him back.

12 So -- but I do apologize. I'm trying to go as
13 quickly as I can, and I appreciate the indulgence of all the
14 board in hearing it out because it is important to this
15 community.

16 MS. LELAND: Okay.

17 CHAIRMAN QUIS: So how much time would you need to
18 have your expert witness testify?

19 MR. ROBINSON: Thank you, Mr. Chairman. So two
20 things on that. I think it would probably be ten to 15
21 minutes max with him, from my standpoint. I don't know about
22 cross-examination, but I would -- I know this is unusual, but
23 I would also request that it would be after their traffic
24 engineer testifies.

25 MS. LELAND: And I don't think that's unusual at all

1 and makes sense.

2 MR. PARKER: To what, do it after mine?

3 MS. LELAND: Uh-huh.

4 MR. PARKER: Well, most of the questions I have, his
5 may be able to answer, so I could eliminate mine, but I have
6 no problem. I'll do whatever order y'all want, and it is
7 more traditional for my guy to go first than his. And so I
8 will tell you that.

9 MS. LELAND: Yeah.

10 MR. PARKER: I don't object to whatever you decide.

11 MS. LELAND: I think if you maybe put your traffic
12 engineer up next.

13 MR. PARKER: That's who I have --

14 MS. LELAND: And then he'll put --

15 MR. PARKER: Right, that's what I was going to do.

16 MS. LELAND: You're going to do that?

17 MR. PARKER: Yeah. That was the plan.

18 MR. ROBINSON: Thank you very much. That would
19 be --

20 CHAIRMAN QUIS: Your traffic engineer and then we'll
21 go to yours.

22 MR. ROBINSON: That's --

23 MR. PARKER: That's where we're at.

24 CHAIRMAN QUIS: Would that be okay?

25 MR. ROBINSON: Thank you so much.

1 MR. PARKER: Thank you for your patience.

2 MR. ROBINSON: Am I good?

3 MS. LELAND: Yes. So we're back, and I think
4 recording.

5 MR. PARKER: Can he test the mike? Because I just
6 put new batteries in.

7 THE WITNESS: Yes, can you hear me all right?

8 MR. PARKER: No.

9 MS. LELAND: Huh-uh.

10 THE WITNESS: How about now?

11 MR. ROBINSON: Still the same.

12 MR. PARKER: Try it now.

13 THE WITNESS: How about now?

14 MS. LELAND: Yes, yes.

15 THE WITNESS: Just got to hold it up close.

16 MR. ROBINSON: Okay.

17 MS. LELAND: Okay. Proceed.

18 **CROSS-EXAMINATION OF GREGORY BY MR. ROBINSON:**

19 Q Very good. Dr. Gregory, my name's Nick Robinson and
20 I'm here on behalf of the applicant, and I have -- try to
21 make this fairly quick.

22 I have reviewed your -- your nine-page resume and
23 I've heard your testimony about your areas of expertise, and
24 I just want to clarify a few things for the record.

25 You do not have an undergraduate degree, a master's

1 degree, nor a doctoral degree in urban planning, regional
2 planning, community planning, or any similar field; is that
3 correct?

4 A No, I do not. That's correct.

5 Q That's right. And you are not a licensed surveyor;
6 is that correct?

7 A I'm not a licensed surveyor.

8 Q Okay. And you are not a professional engineer; is
9 that correct?

10 A That's correct.

11 Q And you are not a lawyer; is that correct?

12 A Definitely not.

13 Q Okay.

14 (Indiscernible from audience.)

15 MR. PARKER: Should have IT check that thing out
16 while we're doing that. Not you IT, that IT.

17 BY MR. ROBINSON:

18 Q And so with regard to the fact that you're not a
19 professional engineer, you're not in any way under state
20 licensure laws competent to design appropriate storm water
21 devices for a development of this type; is that correct?

22 MR. PARKER: Objection.

23 THE WITNESS: Correct.

24 MR. PARKER: Objection.

25 MR. ROBINSON: So Madam Attorney, for the record, I

1 know we went through this before, but I -- I -- I strenuously
2 object to all of the testimony from Dr. Gregory that went
3 outside the fields of hydrology, wetlands, and whatever the
4 other one was.

5 MR. PARKER: Soil science.

6 MR. ROBINSON: Soil science. And that would include
7 all of his opinions about whether or not the UDO has been
8 complied with, and that would include all of his opinions
9 about whether or not the engineering drawings on this
10 preliminary plat are effective, accurate and appropriate, and
11 that would include all of his opinions about whether or not
12 the -- the property descriptions and the legal property
13 description is accurately depicted on the plat.

14 So I just want to make that clear.

15 MS. LELAND: I appreciate it. I agree. And it's
16 noted in the record.

17 MR. ROBINSON: Okay. Thank you.

18 BY MR. ROBINSON:

19 Q Dr. Gregory, so you have had a distinguished career
20 and dedicated your life it seems to research and teaching on
21 the subjects of forestry and soil science and hydrology.

22 And so -- but we've also established you're not
23 licensed in any of those other areas I just mentioned, so --
24 so while you have -- might have opinions based on your chosen
25 field about whether the content and the requirements of this

1 unified development ordinance are conducive to protecting the
2 environment, you don't have any training, degree, or
3 certification in the skill of determining whether a
4 particular zoning application complies with a given
5 ordinance; is that fair?

6 A No, that's not fair, because I have over the years
7 worked closely with folks developing land development codes.
8 You know, whether that classifies as training or not, I don't
9 know. But I spent the last three to four years working with
10 this gentleman that you're going to hear from a little bit
11 later in making revisions and updates and improvements to the
12 land development code in Wilmington.

13 Q All right. And so what you're talking about there
14 is --

15 MR. PARKER: Objection. I'm going to ask he be
16 allowed to finish his answer.

17 MS. LELAND: Go ahead.

18 MR. ROBINSON: Proceed?

19 MS. LELAND: Finish.

20 THE WITNESS: Well, my point was, I do not have
21 formal training in a formal course in some kind of -- some
22 kind of urban planning environments, but I contend that I
23 have wide knowledge of land development codes and how they're
24 applied from my experience in working with them.

25

1 BY MR. ROBINSON:

2 Q Okay. And you're not a North Carolina certified
3 zoning official; is that correct?

4 A No.

5 Q Okay. Very good. So despite that lack of
6 certification, you have submitted to Mr. Parker and now
7 tendered into evidence a document entitled, "Review of
8 Special Use Permit Request and Preliminary Plat for Union
9 Church Road Conservation Subdivision," dated June 1, 2022,
10 that's Exhibit 35; is that correct?

11 A Yes.

12 Q Okay. Did you supply that report knowing that it
13 would likely be introduced to be admitted as evidence in
14 these proceedings?

15 A Yes.

16 Q Okay. And is everything in that report truthful and
17 honest to the best of your knowledge?

18 A To the best of my knowledge, yes.

19 Q Do you have that report in front of you?

20 A No, I do not. But I can get a copy from my
21 briefcase.

22 Q Yeah, let's get it. You're referring to Exhibit 35.

23 A Okay. I have a copy of the report in front of me.

24 Q Okay. Great. Thank you. So on page 4 of that
25 report at the top you list what you say are shortcomings of

1 the application for special use permit; is that correct?

2 A Yes.

3 Q And the very first subject matter under the list of
4 alleged shortcomings is the density calculation?

5 A Yes.

6 Q But you didn't testify about that tonight; is that
7 correct?

8 A No.

9 Q Do you withdraw that portion of this report?

10 A No.

11 Q Okay. So at the top of page 4 in that first
12 paragraph at the end of the first paragraph under "Density
13 Calculations" you say, and I'm reading from the report now,
14 so, "Density calculations must be based on buildable area
15 excluding areas such as the frequently flooded wetlands of
16 the conservation subdivision parcel that are not buildable."

17 Is that your position?

18 A Yes.

19 Q And so every criticism that you lodge in this report
20 thereafter about the density calculations for this
21 subdivision is based on that alleged requirement that the
22 density calculations must be based on buildable area;
23 correct?

24 A That is -- that has always been my understanding of
25 the conservation subdivision concept.

1 Q Okay. The concept?

2 A Yes.

3 Q Yeah. And if that assertion on your part turns out
4 to be incorrect, then every calculation that you have set out
5 in the report about the allowed density in the subdivision is
6 also wrong; correct?

7 A Yes, that's -- that's based on the opinion, and that
8 opinion is based on a lot of reading about the conservation
9 subdivision concept. It's based on that opinion that -- that
10 the -- the concept of conservation subdivisions based on the
11 area of the tract that is buildable.

12 Q Okay. And so can you -- it sounds like you're
13 basing that on general knowledge. Did you even consult the
14 unified development ordinance to determine if that was the
15 basis upon which density should be calculated in a
16 conservation subdivision in Moore County?

17 A I remember reading it, but I don't remember exactly
18 the details, no.

19 Q All right. So in section 18.89(f), which is, 18.8
20 is the section of the unified development ordinance which --
21 get back to it -- yeah. Yeah. There we go -- which relates
22 to conservation design standards for subdivisions in Moore
23 County. Get to that.

24 So section 18.8(f) reads in part: "Permitted
25 density equals gross area of the project site divided by the

1 minimum lot size of the zoning district."

2 So, now, do you retract your statement that the
3 density calculation under this ordinance -- under this
4 preliminary plat is incorrect?

5 A Based on that statement, yes.

6 Q Okay. Thank you. Okay. You also stated in your
7 report, and this time I'm talking about on page 5 under the
8 heading "Hydrologic Changes and Potential for Water Quality
9 Degradation" -- let me know when you're with me.

10 A Yes, I'm with you.

11 Q Okay. That first sentence under there says:
12 "Residential and commercial development always result in
13 substantial negative changes to hydrologic functions."

14 Is that your position?

15 A That is correct. That's my position. That's my
16 opinion based on many years of experience watching the
17 changes that occur with residential and commercial
18 development.

19 Q So basically, even if a development project is fully
20 compliant with all applicable regulations and requirements it
21 would still be your opinion that that would result in
22 substantial negative changes to hydrologic function?

23 A Yes.

24 Q No matter what?

25 A Yes.

1 Q So there's basically no way to design a subdivision
2 that would meet your standards of whether or not --

3 A There's no way to design a subdivision based on
4 current state regulations that will not cause degradation of
5 hydrologic functions of the site and transport of polluted
6 water off site because these regulations make compromises
7 based on degree of function and cost.

8 Q Great. Thank you. You mentioned that you think
9 that this preliminary plat does not meet the requirements of
10 the unified development ordinance in a few respects. I've
11 made known my objections to allowing your opinions in that
12 regard.

13 But one of the issues that you raised was the fact
14 that -- that Mr. and Mrs. Ring had died before this
15 application was filed and yet their names were listed on the
16 preliminary plat; is that correct?

17 A Yes.

18 Q Have you ever administered an estate of a decedent
19 in North Carolina?

20 A I have.

21 Q Have you ever been an executor?

22 A I have.

23 Q Okay. And are you aware as to how much time it
24 takes after a decedent dies to have the estate administered?

25 A I am very aware of that.

1 Q Okay. And so did you check the records in Moore
2 County to determine whether or not the estate of Mr. and
3 Mrs. Ring had been administered at the time of the filing of
4 this preliminary plat?

5 A The deed for Dennis and John Ring was dated in
6 December 2021, so that means the transfer of the land had
7 been made to them well before this plat was created.

8 Q Do you know when that deed was recorded?

9 A I had it on one of my slides. It wasn't recorded
10 until January something, 2022.

11 Q If I told you that it was recorded only eight days
12 before this application was filed, would you consider that to
13 be unlike --

14 A That's not what's shown on the deed that I looked
15 up.

16 Q All right.

17 MR. ROBINSON: May I approach the witness?

18 MS. LELAND: Yes.

19 THE WITNESS: I've got a copy of that deed in here
20 if you wish recorded on January 26th, 2022.

21 BY MR. ROBINSON:

22 Q Right. So it was recorded January 26th, 2022, and
23 this subdivision application was filed on February 4th;
24 correct?

25 A I don't know exactly when it was filed.

1 Q All right.

2 A But that -- those -- the names of the property
3 owners is something very easy to change before it's
4 submitted.

5 Q I quite agree with you, and it could also be changed
6 at any time before the plat becomes final; isn't that
7 correct?

8 A Yes, absolutely.

9 Q Yeah. You also mentioned that the certificate of
10 ownership on the preliminary plat is not signed?

11 A Correct.

12 Q Is it your opinion that under the UDO a preliminary
13 plat not yet approved by the board of commissioners has to be
14 signed by the owners?

15 A That's what the table that I showed in my power
16 point --

17 Q Says it has to be signed?

18 MR. PARKER: Objection.

19 THE WITNESS: (Indiscernible) that that has to be
20 signed to be valid.

21 MR. ROBINSON: I want to make sure that that got
22 into the record.

23 MR. PARKER: Yeah, he needs --

24 MR. ROBINSON: He got away from the microphone. Say
25 that again, please.

1 MR. PARKER: He needs to repeat that.

2 MR. ROBINSON: I got it.

3 THE WITNESS: Yeah, this table from the UDO lists
4 certificate of ownership and ded -- dedication as a
5 requirement on preliminary plat, and so, again, I'm making an
6 assumption that that should be signed and -- to be valid.

7 BY MR. ROBINSON:

8 Q And if you're incorrect about that, then that is not
9 a shortcoming of this preliminary plat, the fact that it's
10 not signed; correct?

11 MR. PARKER: Well, objection. That calls for a
12 legal conclusion.

13 THE WITNESS: Yeah.

14 BY MR. ROBINSON:

15 Q You said yes?

16 A No, I did not say yes.

17 Q Oh.

18 A In my experience any statement on a legal document
19 like this that is required to be signed, that document's not
20 valid until that signature's there.

21 Q Does it say that it has to be signed --

22 A No, it does not.

23 Q Okay. Thank you.

24 I want to be clear about one aspect of this. You
25 said in your report and in your testimony that you did some

1 investigation close to the site?

2 A Yes.

3 Q Did you ever set foot on the site?

4 A No, we did not.

5 Q Okay.

6 A We stayed outside the boundary.

7 Q Okay. And so you have never seen or laid eyes on
8 any water feature physically located on this property; is
9 that correct?

10 A Let -- let me just briefly describe how we knew
11 where we were. I had a local guide who had his phone, had an
12 application that had the parcel map from the -- the Moore
13 County GIS coupled with the GIS on his phone. So we were
14 following the blue dot in regard to the boundary, and we
15 always stayed far enough away from that boundary that we knew
16 we were not trespassing.

17 But we could see across the boundary, and when we
18 were down in the bottom of the stream valley I could see that
19 the wetland continued there. I could see that the stream
20 continued across that boundary and up slope well into the
21 parcel in consideration.

22 Q Yes. So how far into the site could you see?

23 A Probably 300 feet. That is fairly open forested
24 area.

25 Q Yeah. So would you say that you were incapable of

1 observing the vast, vast majority of the site from off site?

2 A Yeah, of course.

3 Q Yeah. Okay. Let me ask you a question about the
4 wetland delineation. You have acknowledged in your testimony
5 that the wetlands are not required to be delineated on a
6 preliminary plat under the UDO; is that correct?

7 A Correct.

8 Q And yet you spent a lot of time testifying about how
9 this plat was deficient because it did not delineate the
10 wetlands sufficiently to your satisfaction; is that correct?

11 A That's correct.

12 Q Yeah. And are you aware that the applicant in this
13 case has applied for a judicial delineation of the wetland by
14 the Corps of Engineers?

15 A Well, we requested information from you and you did
16 not provide it.

17 Q Did you request that of me?

18 A Mr. Parker did.

19 Q Okay. And did anybody ever explain to anybody why
20 you needed anything?

21 A I did not understand that question.

22 Q Yeah. That's fine. But so you're not aware whether
23 or not a judicial delineation to the Corps of Engineers has
24 long since been applied for?

25 A No, I am not aware because the information has not

1 been provided --

2 Q Uh-huh.

3 A -- from your clients.

4 Q And you'd agree, though, wouldn't you, because you
5 put it up on the screen, that if there are changes required
6 between the preliminary plat and the final plat that are
7 dictated by a change in jurisdictional wetlands --

8 A Yes.

9 Q -- that those would happen then at the final plat
10 stage; correct?

11 A Absolutely, yes.

12 Q And so if the jurisdictional delineation of the
13 wetland on this property is received and used for design of
14 the final plat, there will be no problem whatsoever; wouldn't
15 you agree?

16 A Yes, absolutely.

17 Q Thank you. You also stated that section 18.7 of the
18 U -- of the UDO states that there must be a well-developed
19 storm water plan. Is the phrase "well-developed" in the UDO
20 in section 18.7?

21 A No.

22 Q That's Dr. Gregory's --

23 A That's Dr. Gregory's phrase, yes.

24 Q All right. And so you don't know as you stand here
25 whether or not this preliminary plat has a storm water plan

1 on it sufficient to satisfy the language in section 18.7, do
2 you?

3 A That is a difficult question because the language in
4 the UDO is somewhat nebulous. It doesn't have very specific
5 language about what the form of that should be.

6 Q I accept that. And so you can't say with any
7 certainty whatsoever whether or not this preliminary plat is
8 deficient with respect to the storm water plan that is shown
9 thereon; that's correct, isn't it?

10 MR. PARKER: Objection. That calls for the ultimate
11 question from the commissioners. I think they're the ones
12 who decide that.

13 MR. ROBINSON: Well, I would quite disagree.
14 Mr. Parker put Dr. Gregory on to tell us exactly why this
15 plat was deficient in this respect. Can he now not answer a
16 question that's talked about it?

17 MR. PARKER: No, he can, Mr. Robinson. And I
18 encourage you to ask all of them. I'm putting my objection
19 on the record like you did when I asked the tough questions.

20 MR. ROBINSON: That's fine.

21 MR. PARKER: We're good.

22 BY MR. ROBINSON:

23 Q So now I want the answer.

24 A Would you please repeat the question?

25

1 Q Yeah. The question is, you can't say with any
2 certainty whatsoever whether or not the storm water plan that
3 is shown on this preliminary plat is sufficient to satisfy
4 the requirements of the UDO?

5 A I can say with certainty that the storm water plan
6 shown on this plat is not adequate.

7 Q That is not my question.

8 A I understand that.

9 Q I want you to answer my question. My question is,
10 can you -- you cannot say with certainty that the storm water
11 plan shown on this plat is insufficient to satisfy the
12 requirements of section 18.7 of the UDO; isn't that correct?

13 A That's correct.

14 Q Thank you.

15 A Because that section does not provide any details.
16 It's quite nebulous.

17 Q Dr. Gregory, do you know the difference between a
18 preliminary plat and construction drawings?

19 A I don't -- based on my reading of the UDO and my
20 understanding I have some concept of that, yes.

21 Q So to your knowledge and your experience, when would
22 the professional engineers's calculations of storm water
23 calculations be made in that project? Would they be made
24 before the preliminary plat or prior to the construction
25 drawings?

1 A Well, I can't tell from the UDO exactly when that's
2 required.

3 Q And so --

4 A In my experience with development plans in many,
5 many other jurisdictions, a full set of storm water plan with
6 the calculations and all that is the first submission.

7 Q Once again, that is your experience outside of Moore
8 County --

9 A Yes.

10 Q -- and --

11 A Absolutely.

12 Q Okay. Thank you. You did say that -- and you
13 noted, as did the planning director in Moore County, is that
14 this property is a high quality water area; is that correct?

15 A Yes.

16 Q And I appreciated your acknowledgement at the end of
17 your testimony that a well-designed SCM, it's possible, with
18 the well-designed SCM system it's possible to keep sediment
19 out of the stream; is that correct?

20 A Yes.

21 Q And so in this case if a well-designed SCM plan is
22 implemented prior to the construction then you would have to
23 acknowledge that there would be basically no problem?

24 A If a well-designed system is planned and
25 implemented, yes.

1 Q Thank you. So -- we've come far enough on that.

2 You also mentioned, I'm coming to the end here, that
3 your research with which you are familiar, and I have no
4 doubt you're extremely familiar with it, shows that
5 10 percent, anything above 10 percent maximum impervious on a
6 project will result in degradation to stream waters through
7 the communication of surface water to the streams; is that
8 correct?

9 A Correct, yes.

10 Q Do the applicable regulations limit impervious
11 surface in this project and in this zoning district and in
12 this watershed area to 10 percent?

13 A No.

14 Q Okay. So, in other words, the state regulations
15 allow much more than 10 percent of impervious surface; is
16 that correct?

17 A Yes, they do.

18 Q So really what you're testifying about is not so
19 much whether or not this plan complies with the storm water
20 regulations in place but really about what your fantasy type
21 of storm water requirements would be.

22 MR. PARKER: Objection on characterization to the
23 term fantasy, Mr. Robinson.

24 BY MR. ROBINSON:

25 Q Okay. We can change it to what your preferred --

1 preferred standards would be? I mean, my -- I'll ask the
2 question again.

3 A Well --

4 Q About fantasy, let me just re -- I'll retract the
5 question, ask another way.

6 You're not really testifying that -- that the storm
7 water devices that could be planned for this project would be
8 insufficient under applicable regulations, you're just saying
9 that they would exceed what you would prefer the regulations
10 to have as a maximum impervious surface requirement; is that
11 correct?

12 A Well, if a -- that's a complicated question. Let me
13 try to just address it with a statement.

14 The H -- the HQW regulations that I have referred to
15 refer specifically to storm water management systems that
16 treat both volume and quality, and the issue here is, is the
17 final plan going to produce a well-designed storm water
18 management system that meets -- meets those standards.

19 Q And that's something as to which you have --

20 A That's something that I --

21 Q -- information that --

22 A -- that I cannot conduct an assessment of at this
23 time.

24 Q So cannot be, by operation of logic, it cannot be a
25 deficiency of the current preliminary plat; can it?

1 A Well, the preliminary plat doesn't indicate to me
2 what the final plan might look like. It's -- it's a very,
3 very -- it's a concept plan. It's not a functional plan.

4 Q I want to piggyback on a question that Commissioner
5 Picerno asked about the amount of storm water that's coming
6 off of the Union Church Road at this time.

7 You didn't inspect that or investigate the ditch and
8 swell section on that road; did you?

9 A No, I did not walk the road and try to determine
10 where the storm water might be discharging.

11 Q And so if -- if -- and you said that a lot of times
12 DOT just allows storm water to go straight into a stream?

13 A In years past that was -- that was a standard
14 practice.

15 Q And do you -- or I was not sure on this. Do you
16 know whether or not the storm water from Union Church Road
17 is -- is being allowed by the DOT system to make its way
18 directly into the stream?

19 A I do not know because I haven't investigated that.

20 Q If it were it would be really important, wouldn't
21 it, to -- for this development to have a storm water system;
22 it would be helpful wouldn't it?

23 A Yes.

24 MR. PARKER: Objection.

25

1 BY MR. ROBINSON:

2 Q Because the storm water system in this development
3 would be based on storm water calculations under the
4 ordinance; correct?

5 A Based on the storm water calculations for the
6 catchment.

7 Q Okay. And the --

8 A Which would include -- the catchment of that stream
9 would include parts of Union Church Road.

10 Q Good. And so therefore that -- storm water coming
11 both from the development and from the roadway would be
12 captured, detained, and treated --

13 A That would certainly be the preferred objective,
14 yes.

15 Q Okay. Thank you. This is the last question. You
16 expressed concern about the impact of clearing of trees in
17 development in general; correct?

18 A Yes.

19 Q And you don't have any idea as you stand here
20 tonight the percentage of trees that would be cleared off of
21 any given lot in this subdivision; do you?

22 A No, I do not.

23 MR. ROBINSON: Thank you. No further questions.

24

25

1 REDIRECT EXAMINATION OF JAMES GREGORY BY MR. PARKER:

2 Q Dr. Gregory, you testified that you think that
3 every -- every subdivision is going to have hydrological
4 changes, I think that was what your testimony was?

5 A Correct.

6 Q Tell me what you mean by "hydrological changes."

7 A Typically, even with a well-designed storm water
8 management system, there are large events that produce very
9 high volumes of runoff that exceed the capacity of that storm
10 management system, and that's because, as I mentioned while
11 ago, storm management systems are compromised between maximum
12 function and cost. That's the reason for designing to the
13 ten-year storm.

14 And I've done a tremendous amount of work over the
15 years in examining streams in developed areas. And streams
16 in developed areas typically have greatly enlarged channels
17 due to the increased storm water runoff from the developed
18 area. They also have degraded water quality. It's so
19 typical in suburban areas that streams have been severely
20 degraded, even with what are supposed to be adequate storm
21 water management systems.

22 Q Okay. And our UDO does say there's got to be a
23 storm water management system. In evaluating this -- this
24 plat, do you have any idea what their management plan is for
25 this plat, based on the plat by itself?

1 A Based on this plat, as I said, this is just a
2 concept. It's a preliminary concept. A tremendous amount of
3 work yet to be done on actually engineering and planning that
4 system.

5 Q Right. So but what I'm saying is, without the
6 legend do you even know what the plan is?

7 A Because without the legend there's elements that I'm
8 just guessing as to what they're supposed to be.

9 Q Okay. All right. But you know that the storm water
10 plan, you don't know whether or not the plan that is not
11 really reflected on the plat is sufficient to meet the UDO?
12 That was your testimony?

13 A No, I do not, because --

14 Q Okay. But you know that what -- but can you state
15 based on your education, training and experience whether the
16 plan reflected in the plat is sufficient to handle storm
17 water runoff --

18 A No.

19 Q -- it --

20 A Because -- because it's an inadequate concept plan.
21 It's not a complete plan that show's all functions and all
22 the capacities of the SCM.

23 Q And based upon your training, education, experience,
24 when the final concept is done, would it require, based upon
25 your knowledge of -- of wetlands, is it going to require

1 major changes to the plan as this preliminary plan is?

2 A In my opinion there would be major changes, yeah.

3 Q All right. Now, is storm water --

4 MR. ROBINSON: Object to -- for the record.

5 MR. PARKER: I'm sorry. I didn't hear you.

6 MR. ROBINSON: I just object to that response.

7 Speculation.

8 MR. PARKER: All right. Thank you.

9 BY MR. PARKER:

10 Q The object -- now, is storm water the same as septic
11 runoff?

12 A No, they're two quite different hydrologic
13 processes.

14 Q Okay.

15 A Storm water is surface runoff; septic drainage is
16 subsurface flow.

17 Q All right. And does -- does the fact that this
18 would potentially contain 53 septic tanks, would that have
19 any effect on the hydrologic features?

20 A Drainage from septic systems potentially could
21 create polluted subsurface flow to the stream, and I say
22 potentially, because, again, it depends on the design and
23 adequacy of the systems.

24 Q Okay. And that you don't have any way to evaluate?

25 A No, because there's -- there's nothing, you know, at

1 this point in the planning about what those systems will be.

2 Q Okay. All right. Do -- everybody's asked questions
3 about water from Union Church Road.

4 A I didn't understand.

5 Q I said everyone has -- a lot of people have asked
6 about the runoff from the Union Church Road.

7 A Yes.

8 Q Do you anticipate that increasing or decreasing with
9 this subdivision, or would it remain the same?

10 A There would be -- there would be no impact on
11 runoff, I mean, that's -- that's rainfall dependent, because
12 unless the -- those impervious surface is increased --

13 Q Okay.

14 A -- in the vicinity of the subdivision.

15 Q All right. All right.

16 MR. PARKER: That's all the questions I have at this
17 time.

18 MR. ROBINSON: I don't have any further questions.
19 Thank you, Dr. Gregory.

20 MR. PARKER: Thank you.

21 MS. LELAND: Mr. Parker, go ahead and call your next
22 witness. I know you're going to --

23 MR. PARKER: Unless you tell me not to, I will --

24 MS. LELAND: Please.

25 MR. PARKER: Baohong Wan, come up, please. Oh,

1 before we start, did you label the will?

2 MR. ROBINSON: I did not.

3 MR. PARKER: Okay. Are you going to do that?

4 MR. ROBINSON: I mean, I'd be happy to introduce it
5 as -- as the next exhibit.

6 MR. PARKER: Okay. I think we're up to like 70, I
7 think. Are we going to go 100 with his?

8 UNIDENTIFIED SPEAKER: (Indiscernible.)

9 MR. PARKER: Well, that's the problem. He didn't
10 give it a number, and that's why --

11 MR. ROBINSON: (Indiscernible.) I can't give it a
12 number because I don't know when yours will end.

13 MR. PARKER: Well, I discussed -- well, I know I'm
14 up to 70 on mine, but I discussed with the clerk earlier
15 about just making all of yours 100 and up so that we would --
16 I'm not going to hit that number.

17 MR. ROBINSON: Yeah, that's fine. So this could
18 be -- this could be --

19 MR. PARKER: One hundred.

20 MR. ROBINSON: This could be Exhibit 100.

21 MR. PARKER: One hundred.

22 (Exhibit No. 100 identified.)

23 MR. ROBINSON: Yeah, and I will -- I'll hand up
24 copies.

25 MR. PARKER: And do you have copies?

1 MR. ROBINSON: I will hand up copies, yeah, for
2 everybody. I gave you one, right?

3 MR. PARKER: Yeah, I got mine.

4 MR. ROBINSON: Okay.

5 MR. PARKER: I'm going to write on mine.

6 MR. ROBINSON: Okay.

7 MR. PARKER: All right. All right. Thank you. May
8 I proceed?

9 BAOHONG WAN,
10 being first duly sworn, testified as follows on DIRECT
11 EXAMINATION BY MR. PARKER:

12 Q Sir, would you state your name and occupation for
13 the jury -- I mean, for the commissioners, please?

14 A Yes. My name is Baohong Wan. I'm a traffic
15 engineer with (indiscernible) and my office address is 940
16 Main Campus Street, Suite 500, in Raleigh, North Carolina.

17 Q All right, Mr. Wan, would you spell your name for
18 the record for us here?

19 A My first name's spelled B-A-O-H-O-N-G, G as in grin.
20 I always get is that T? And last name is W-A-N, Boahong Wan.

21 Q Okay. And Mr. Wan, you said you're a traffic
22 engineer?

23 A Yes. Graduate from NC State in 2002 with a master's
24 degree, and 2005 with a Ph.D. degree, and since then I been
25 practice traffic engineering in North Carolina, and I have PE

1 since 2008.

2 Q Okay. And you have a PE license?

3 A Yes, I have PE license.

4 Q What is that?

5 A The PE license is basically the regulation.

6 Basically it's a sign I think it ask --

7 Q Yeah, he knew, but I don't, so --

8 A It's professional engineer, and it has different
9 disciplines, and then my discipline is in transportation
10 engineering.

11 Q Can you tell us a little bit about your experience
12 in traffic engineering, what type of training, education,
13 experience have you had that has prepared you for that
14 position?

15 A Yes, of course. I received very rigorous training
16 from NC State, you know, engineering school, civil
17 engineering and learning traffic flow theory and
18 (indiscernible), you know (indiscernible), traffic safety,
19 highway design courses, and of course I took a lot, you know,
20 some math class from department of statistics, and just, you
21 know, on (indiscernible) you know, and the (indiscernible)
22 part. Also took computer classes, and then through the
23 programming (indiscernible) after the modeling and
24 (indiscernible) to have engineering training beyond all the
25 skills and do learn, you know, federal and state regulations

1 (indiscernible) guidances.
2 I believe, you know, we are with a perfect team,
3 (indiscernible) you know, if we're do a traffic study here
4 and then we learn the UDO from Moore County, not be expert
5 but we need to abide by it, and, you know, in traffic studies
6 we stick with North Carolina (indiscernible) manual. That's
7 basically what we start with, and all the other capacity
8 analysis and other procedure and (indiscernible) and
9 (indiscernible) requirement we derive from that, and then but
10 we do have -- I do have a comprehens, you know, try to comply
11 with (indiscernible) and do their system-wide evaluation
12 (indiscernible), across nation, sometime do the federal
13 project for nationwide or regional wide, network variation
14 performance matters, but do operational (indiscernible).
15 from (indiscernible) looking to opportunities to traffic
16 studies, and I done hundred of traffic studies mainly in Wake
17 County, Durham County, Orange County, and did recently expand
18 my footprint into this area, very exciting to see, you know,
19 the new come in and neighborhood concerns, you know, we hope
20 to -- it's, you know (indiscernible) opinion make it better,
21 make a more informed decision, make more data driven analysis
22 (indiscernible) for this one is.

23 Q Okay. And Mr., or is it Dr. Wan, I guess?

24 A Yes, Dr. Wan.

25 Q Okay. Dr. Wan, did you -- you said you worked for

1 VHB. What is that?

2 A VHB is traffic engineer firm, and we have 1500
3 professionals in (indiscernible) planners and engineers and
4 land surveyors and scientists.

5 Q Okay.

6 A And across the east coast, and we have over 30
7 offices along the east cost in North Carolina with two
8 offices. One near Raleigh, we have about one hundred
9 engineers and planners. We also have office in Charlotte and
10 with about ten -- ten staff, and I'm working in the Raleigh
11 office.

12 Q Okay. And have you ever testified as a traffic
13 engineer before?

14 A Yes, I did, yes.

15 Q Been qualified as an expert in it?

16 A Yes. I -- I do TI reviews, and also I, you know, I
17 prepare traffic studies, you know, for the developers, but
18 also do reviews and (indiscernible) requirements and working
19 with the NCDOT and do consider myself a traffic engineer
20 expert.

21 MR. PARKER: Okay. All right. We would tender him
22 as an expert to the commissioners as -- tender him as an
23 expert in traffic engineering.

24 Okay. Did you say no objection?

25 MR. ROBINSON: I said no objection.

1 MR. PARKER: All right.

2 BY MR. PARKER:

3 Q So Mr. Wan, do you know Travis Fluitt?

4 A Yes, I do know.

5 Q Okay.

6 A We work with, you know, (indiscernible) sometimes,
7 you know, it's a small profession and we all follow same
8 guidelines. Sometimes we have professional societies and we
9 do know, you know, he's a good guy.

10 Q Okay. All right. Well, that's good. I hope he
11 says the same thing about you.

12 So I -- let me ask a few --

13 A (Indiscernible.)

14 Q Let me ask you a few questions right here. Have you
15 had a chance to review his report on this traffic down here?

16 A Yes, I did. I think the later report I receive
17 June 21st you know.

18 Q I think that was the third one. Did you look at the
19 first one?

20 A Yeah, briefly.

21 Q Do you want to see it again?

22 MR. PARKER: Can you get me Exhibit 2?

23 May I approach?

24 I got to borrow it.

25

1 BY MR. PARKER:

2 Q Mr. Wan, I want to show you what is marked here as
3 Exhibit 2 and ask you to look at this. And this has
4 previously been introduced as Mr. Truitt's -- Mr. Fluitt, I'm
5 sorry, his traffic report dated May -- what is that, 16?

6 A Sixteen.

7 Q 2000 -- yeah. Have you had a chance to review that?

8 A Yes, I saw that.

9 Q Okay. Okay.

10 A Yeah.

11 Q Okay. I'm going to lay it right here in case you
12 got to look at it again, so we got to get it back. It's
13 right here if you need it. Okay?

14 A Sure.

15 Q Okay. All right. Well, I'm going to leave it
16 there.

17 A Yeah. Probably there for me to see it. Thank you.

18 Q All right. So I want to ask you some questions that
19 help me to understand that report a little bit. Okay? He
20 describes in there capacity, the highway capacity. Can you
21 explain to us, please, what is capacity on a road?

22 A Yeah. It's kind of complex concept, you know, about
23 traffic engineers and refer to highway capacity manual to
24 capacity, but one (indiscernible) capacity, and
25 (indiscernible) mean different things, (indiscernible)

1 signaling intersection it's really the maximum number of
2 vehicles can safely pass through. But we talk about roadway
3 is you assume are interrupt the flow and like a freeway and
4 how many cars can pass through in a given time period. And
5 for this case I believe a capacity really means capacity for
6 Union Road, and basically it's two-lane highway, highway
7 capacity.

8 Q Okay. So capacity, is it based on just the
9 structure of the highway then basically? Is it -- it's not
10 specific to Union Church Road capacity? You can look at a
11 road anywhere in the state without going there and compute
12 capacity?

13 A There's general concept, capacity concept
14 (indiscernible) because each facility (indiscernible) is
15 different.

16 Q Okay.

17 A Union Church is a very unique, and I think all the
18 neighbors that live in here (indiscernible), you know, every
19 day you got some (indiscernible), and I drove through that I
20 can't drive fifty (indiscernible) I don't know why
21 (indiscernible) speed limit 55 -- but any way, each road --

22 Q Wait a minute. Wait a minute. You said you don't
23 understand why the speed limit's 55 through there?

24 A I think that's probably the (indiscernible), you
25 know, basically the ordinance, but I'm not a legal expert so

1 I'm not going to comment on that.

2 Q Okay.

3 A But I do understand each (indiscernible). To
4 continue on my answer you're a (indiscernible) highway
5 manual, NCDOT has our own level surface software. We have a
6 general service (indiscernible) table either you can go to
7 the federal, you know, guidance, or go to state guidance you
8 can find under the category, let's say two-lane rural
9 roadway, two-lane rural highway, 55 speed limit, and then
10 under that and with certain, you know, assumption default
11 parameters and what's capacity going to be, and when you talk
12 about capacity, that's basically (indiscernible) threshold
13 (indiscernible) of level service D and E (indiscernible)
14 service.

15 Q I want to talk about level of service in just a
16 minute, but I want to ask you this. Now, does capacity, is
17 there more than one -- is there a generic or general capacity
18 and an actual capacity?

19 A It's -- yeah. It's -- it's first thing I think
20 capacity really the first thing we (indiscernible) capacity
21 how many cars you can pass through for the (indiscernible)
22 but each engineer, you know, we're not talking about that,
23 because, you know, (indiscernible) can pass through but it
24 was a purpose, right, and we talk about practical capacity.
25 That's why we use the level of service as kind of like a

1 supplement of (indiscernible) basically once you hit
2 (indiscernible) that means people driving experience become
3 like a from uncomfortable -- from comfortable,
4 (indiscernible) A, or B, to stable to C to D, it become
5 unstable and (indiscernible) bottleneck, and E, become like,
6 you know, any disruption will cause bottleneck.

7 Q Okay.

8 A So from that threshold basically it's a curve, but
9 the (indiscernible) that's already (indiscernible) capacity.

10 Q All right. So let me go back and ask you this just
11 to clarify for me.

12 A Yes.

13 Q There's theoretical capacity that you testified to?

14 A Correct.

15 Q And you look at that and you determine it based on
16 tables?

17 A Correct. That's general -- that's a theoretical
18 capacity, that is a practical capacity, and also the general
19 capacity is (indiscernible) for planning study. Okay. I'm
20 going to build a two-lane road in somewhere, I assume
21 everything default, default how many, you know, tracts it
22 going to be, and how level, you know, how much grade it going
23 to be, and (indiscernible) that's -- that's a factor, you
24 know, the -- everything follow standard.

25 So based on that and what the capacity going to be,

1 but when you do the capacity evaluation, and most time we
2 do -- do the adjustment on why because we understand that's
3 their actual situation may have a less than ideal lane width.

4 Q Okay.

5 A Or (indiscernible) ideal shoulder width with traffic
6 capacity -- there's like parameters you can use to discount
7 the general capacity to get actual capacity, but, you know,
8 that's -- that's a lot of computation.

9 Q So let me ask you this. In Mr. Fluitt's report from
10 May 16th, Mr. Fluitt found that there was the capacity for
11 the highway, I think was he estimated 11,800 cars, or
12 something like that?

13 A Yes.

14 Q Yeah, there it is under roadway capacity. Do you
15 see that under page 2?

16 A Yes, yes, I saw that.

17 Q Now, now, when you looked at that road did you come
18 up with that same number?

19 A I think that's a good starting point, to be honest.
20 I think (indiscernible) that, you know, North Carolina,
21 because if we have North Carolina guidelines and we use state
22 guidelines instead of federal, so North Carolina guidance
23 has, transportation branch has published (indiscernible)
24 table, and then default capacity, default (indiscernible)
25 capacity about two-lane roadway, and is 11,800. So it's,

1 like, you know --

2 Q Like he said?

3 A Yeah, so --

4 Q So would that be -- is that the theoretical
5 capacity? That's how many cars could theoretically use that
6 road every day?

7 A I think road it start it, it has a minimum and
8 maximum value. On what I mean, minimum maximum, there's a
9 guidelines on how to use the minimum or maximum. Basically
10 it's a minimum is more conserve because less than ideal
11 conditions and for the Union Church, if you live on the road
12 along curves you can (indiscernible) the issue, and for
13 two-lane road (indiscernible) it's basically (indiscernible)
14 volume but also you can pass trucks, you can past slow moving
15 cars.

16 So there's assumption of -- of (indiscernible) of
17 passing zone, you know, allowed. But if you have that curve,
18 and you have the safety issue, you may have to discount that,
19 and then that you can lose capacity, or, why, because, you
20 know, fast cars are following slow moving cars.

21 So with that if we don't do that step by step, you
22 know, we don't factor calculation, we can go conservative
23 like (indiscernible), go conservative, you know, with a
24 minimum value. The minimum value is 9,000.

25 Q Okay.

1 A (indiscernible) -- 800.

2 Q Then you said there's --

3 MR. ROBINSON: I'm sorry to interrupt. I couldn't
4 hear that answer. Was it -- did you say the minimum value
5 was 9,000 vehicles?

6 THE WITNESS: Yes, minimum capacity there is 9,000.

7 BY MR. PARKER:

8 Q Now, when you say minimum capacity, is that what
9 your actual or practical capacity is?

10 A That's still based on the adverse (indiscernible)
11 computation, and that's still a (indiscernible) number.

12 Q Okay.

13 A And to do the actual capacity and you need to go to
14 field (indiscernible) everything.

15 Q Okay.

16 A And then (indiscernible), you know, (indiscernible)
17 one point, three point, 30 points, do the average, or you use
18 30, you know, whatever is -- is narrowest point, because
19 that's bottleneck to determine (indiscernible). That's a
20 very really complicated -- that's very time consuming
21 process. So you're a, you know, if you don't want to go
22 through that process, go -- go to the look up table, but I
23 would, you know, because it's less than ideal conditions --

24 Q Okay.

25 A -- I would have downgraded that capacity from 11,800

1 to 9,000.

2 Q So that's --

3 A That's my opinion.

4 Q So the 9,000 as a traffic engineer, do you ever want
5 the cars to actually hit 9,000?

6 A Well, before it (indiscernible) easy to say, okay,
7 that's (indiscernible), and what's (indiscernible) capacity
8 what do you do? You add lanes.

9 Q You add lanes?

10 A And, yeah, you upgrade from two to four lanes, and
11 that's become like a very excellent dramatic, you know,
12 upgrade, but before you have that you can do a lot of things.
13 Let's see, you hit a four (indiscernible) ADT, I think that's
14 a number, you know, I saw like the later report already
15 predicting over 4,00. Once over 4,000, and turn lanes needed
16 because either --

17 Q Okay. So --

18 A And once it's over, I can't recall now maybe
19 exactly, but once you over (indiscernible) -- 8,000
20 (indiscernible), actually still have regulation, you can
21 stick with the 10-foot lane, you know, for the
22 (indiscernible) but once you are above certain value and then
23 you upgrade that for safety.

24 Q Okay. So --

25 A But it's -- it's -- it's only new build roadways

1 will follow (indiscernible).

2 Q Right. So --

3 A (Indiscernible.)

4 Q So when you get close to that nine you got to start
5 adding lanes or upgrading; is that right?

6 A Yes. That would be -- that would be a lot of
7 (indiscernible).

8 Q Okay.

9 A I think capacity one problem, but there is a lot of
10 safety (indiscernible) for this one. You do have school
11 traffic.

12 Q Okay.

13 A You got (indiscernible).

14 Q Okay. Now, this level of service, you said there's
15 A, B, C, D, E, and F; is that right?

16 A Yes. Yes.

17 Q Okay.

18 A After the field -- A -- again B is considered high
19 (indiscernible). A is really ideal, but B, (indiscernible),
20 B is, you know, very good level of service.

21 Q A, so A is ideal?

22 A A is ideal conditions. There's a condition, you
23 know, in there, in -- it's actually different for different
24 facilities, you know, again, talk about signal intersection,
25 stop sign control intersections are different than freeway,

1 and for two-lane road always, you know, different.

2 Q Okay. So level A is ideal? Level --

3 A Yes.

4 Q -- D is what Mr. Fluitt used here. Tell me what
5 that is.

6 A Again, that's more like a general practice of
7 traffic engineering. You know, of course if we built ideal
8 conditions everybody's drive on (indiscernible) nobody
9 sharing a road. That's A. That's impossible to achieve, but
10 of course we don't want it to fail either.

11 So you have to have a compromise based on, you know,
12 within curve and what's being considered acceptable, and that
13 become level D, and E is threshold. That is a
14 (indiscernible) acceptable, and just below that you can
15 maintain level D without having (indiscernible). That's your
16 concept capacity.

17 But I do know some jurisdictions, they are, you
18 know, for some sensitive areas they want to downgrade to say,
19 hey, we accept level C as standard, accept level D as
20 standard, but those are, you know, looking at (indiscernible)
21 cost, and for Moore County I don't believe you have such
22 regulations.

23 Q Okay. So in this level of service that you're
24 talking about, is that based on driver -- is driver
25 expectations of what is reasonable --

1 A Oh, yeah.

2 Q -- ever considered?

3 A Yes. It's -- it's -- there's a committee full of
4 service, and then that's basically (indiscernible)
5 expectation, you know, for signaling intersections. And
6 people expect wait a little longer so (indiscernible)
7 actually five seconds. You know, once over three to five
8 seconds that is about many, that's (indiscernible) that's a
9 capacity, but a stop sign control that (indiscernible). But,
10 you know, it's control intersections, you talk about people
11 have to stop, so that delay is the matter. But a freeway,
12 that's basically (indiscernible). So density is
13 (indiscernible).

14 Q Okay.

15 A For two-lane roadway, and the (indiscernible) and
16 chance of overtaking or passing.

17 Q So -- so --

18 A -- is a good (indiscernible).

19 Q So let's talk about intersections for a minute.

20 The intersection that -- there's an intersection at
21 issue here, a new one coming in to make a four-way
22 intersection.

23 A Yes.

24 Q And if this were level A, what would a driver's
25 expectation under that be to stop at that stop sign?

1 A This is, you talk stop sign?

2 Q Yeah, at a stop sign.

3 A At a stop sign you come in and you basically stop.

4 That's the law. And you stop. And you --

5 Q Right.

6 A -- can go because (indiscernible) A below --

7 Q All right. So A is like no time --

8 A Almost -- very rare conflict if you talk of stop
9 (indiscernible) intersection.

10 Q Okay. Now, and level B -- B as in boy?

11 A D, and B become little longer come in --

12 Q Let's do B first.

13 A -- than you expect. You do expect, I mean, during
14 peak hours, you know, a lot of traffic, you know, to
15 (indiscernible) east and west along Union Church Road, you
16 know, and you add a driveway and you start come, you know,
17 wait 30, 35 seconds. Once you're over 35 seconds that
18 become, boom, that's your (indiscernible).

19 Q Okay. Now, that's level B; is that right?

20 A Level D is 25 to 35, and then once above 35 become

21 A. That's for stop (indiscernible) intersection.

22 Q When it becomes above 35 seconds at a stop sign it
23 becomes what, E or F?

24 A E.

25 Q E or F?

1 A E, once above, F, that's F. One above 50, that's F.
2 That's a (indiscernible).

3 Q Okay. So here --

4 A By (indiscernible) once you're over, you know,
5 (indiscernible) consider feeling not great, once you're above
6 that and then you need to come up with engineering
7 (indiscernible) to mitigate traffic impact. But, you know,
8 we do know --

9 Q So what --

10 A (Indiscernible.)

11 Q So when you get to E you want to mitigate traffic
12 impact; is that right?

13 A Correct. Yeah. Once --

14 Q Why is --

15 A -- yeah.

16 Q Why is that?

17 A I mean, once it's a E it become painful for
18 everybody. It's not only for the community --

19 Q It becomes painful?

20 A For -- it become painful, you know, it's a
21 (indiscernible) capacity, and then, you know, the traffic can
22 break it down any time (indiscernible) any minor, you know,
23 fender bender can cause a major backup.

24 Q Right.

25 A That because of pain, you know, is not only for

1 existing community but as a road it becomes congested,
2 (indiscernible) developer (indiscernible) too. So it's a
3 business, you know, it's a common goal for --

4 Q Okay.

5 A -- people (indiscernible) to improve traffic.

6 Q Okay. Do drivers -- does driver's expectations --
7 when drivers become impatient at a stop sign, does that
8 affect safety?

9 A Yes. I mean, it's -- it's a really depends on, you
10 know, we all know different drivers. We have older drivers,
11 and we do have young drivers, and for this particular
12 location Union Church Road, and there the one high school and
13 two middle schools and another private school there. And I
14 do think a lot, you know, traffic will be school related.
15 And also there might be a driver, you know, young driver
16 population, and, you know, for regular folks, even for us,
17 for me myself, you know, in the morning, I do have, you know,
18 drop-off kids, I go to work, I have a meeting to catch up.
19 Time become very valuable. And once I become waiting for a
20 long time I become impatient, and I wonder for younger
21 drivers they do have class, you know, they don't want to get
22 tardy. That's a traffic issue going to cause more impact for
23 the public location.

24 But even for in general, you know, traffic safety
25 and congestion are interrelated terms, and basically the more

1 traffic cause more congestion, more crashes, and it's not
2 even (indiscernible). It's become like exponential because
3 we all know the secondary impact with a lot of traffic back
4 up and become -- yes, (indiscernible) you know, becomes less
5 (indiscernible) does that because it's not -- it's also
6 congestion -- and it become congestion and safety issue.

7 Q And has -- has there been studies to show that
8 impatience of a driver increases their aggressiveness?

9 A As increase --

10 Q As a driver, drivers who are impatient, do they
11 become more aggressive based --

12 A Oh, yeah. Oh, yeah. Of course.

13 Q Okay.

14 A Yeah, even myself, I can't -- I think that's human
15 nature, when we wait a long time, you know, I just -- yeah,
16 suspect.

17 Q Okay. So --

18 A Sometimes make a left turn, (indiscernible) right
19 turn, make U-turn somewhere.

20 Q And these levels of service, A, B, C, D, and E --

21 A Uh-huh.

22 Q -- they're designed to mitigate that impatience
23 looking at a road; is that right? Because that affects
24 safety?

25 A It's -- I think traffic safety different matter than

1 (indiscernible) crash modify (indiscernible) factor. Predict
2 for a certain facility and (indiscernible), you know, your
3 ADT as a variable, that's mean traffic allowable as a
4 variable, and how much crash can occur given, you know, maybe
5 a year period, you know. But does that one (indiscernible)
6 have a lot of (indiscernible) give you a base line, but also
7 if you adding left-turn lane let's say to a two-lane roadway,
8 and the crash can reduce by from 30 percent to 70 percent
9 reduction.

10 Q Okay.

11 A So adding left-turn lane is a capacity improvement
12 but it's a more of a safety improvement as well.

13 Q Okay. All right. So let me ask you this. Do
14 driver's expectations vary depending on whether they're in
15 the city or the country?

16 A It's probably so. I would think, you know, because
17 driver experience if I live in city (indiscernible) people
18 used to say, hey, they're driving, okay, not bad, it's 30
19 minutes. But for me, I'm 30 minutes, I'm, you know, from
20 Raleigh all the way past Durham already, right?

21 I think if you talk about level service as relate to
22 expectation, although we try to use a generic concept, but I
23 do think driver expectation and population (indiscernible) is
24 different between urban and suburban and the rural --

25 Q Right. So when you do these capacity calculations,

1 you try to -- you try to make a -- you don't try to make a
2 distinction between country and the city; is that right?

3 A The level service does not differentiate between
4 that, but if a very detail level (indiscernible) you say we
5 do like a traffic modeling, we can model driver behavior
6 parameters, change that to become more aggressive or more
7 conservative.

8 Q So the capacity for this road would be the same here
9 or in Apex?

10 A It should be different.

11 Q It should be different?

12 A I would say, yeah, but, if you look at the general
13 it's a two-lane highway (indiscernible) but once you apply
14 local sight, you know, characteristics (indiscernible) curve
15 adjustment or sight distance (indiscernible), with passing
16 zone restriction adjustment, and it would become different.
17 It would --

18 Q Okay. All right. Let me ask you this. What will
19 increase a traffic count on a highway?

20 A It's -- it's basically, you know, it's talk about
21 that, I think the first thing is basically economic
22 environment and demand, and this area has experiencing, you
23 know, pretty good growth in recent years.

24 Q Okay.

25 A And that's, you know, more people moving in, think

1 North Carolina good place and (indiscernible) good place
2 to --

3 Q Right.

4 A -- raise a family they move here. And then Fort
5 Bragg, you know, area, the people just want to work in
6 Fayetteville and raise family over here.

7 So that's basically, you know, factor, but also
8 economic environment, they're manufacturing site, you know,
9 (indiscernible) Sanford, they feel (indiscernible) come in.

10 Q So increasing traffic -- growth can increase
11 traffic; is that correct?

12 A Oh, yeah, of course. Yeah. Yes.

13 Q All right. And are you familiar -- have you
14 reviewed Union Church Road? Are you familiar with that road?

15 A Yes. Yes.

16 Q All right. Do you know how many schools are on
17 Union Church Road?

18 A I think I counted four schools.

19 Q Okay.

20 A I counted like I think one high school and two
21 middle schools, and seems there is a private school, you know
22 (indiscernible).

23 Q Do those schools increase traffic on the highways?

24 A I would think so. I think, you know, if you look at
25 the -- at their population increase with the new homes being

1 built, being approved, being contracted and being occupied,
2 the population -- increase population by 30 percent,
3 50 percent, people still go to school, you know, I think
4 drive or (indiscernible) population for the school can
5 increase. Then the school (indiscernible) traffic increase
6 as well.

7 Q Okay. All right. So would people moving to
8 Carthage increase the traffic on Union Church Road?

9 A Yes. My observation of Union Church Road is, it's a
10 parallel route to NC, I think 24/27, but it does connect to
11 NC 690?

12 Q Yes.

13 A Right?

14 Q 690.

15 A And is provide an alternate route to Fayetteville,
16 so for people live in Carthage --

17 Q Okay.

18 A -- and if they choose to commute to Fayetteville, I
19 think there's a definite potential route. And also we just
20 mention the schools. I know there are developments
21 (indiscernible) along Union Church Road are called
22 (indiscernible) but even they live further, but if their kids
23 attend schools along Union Church Road they do need a job
24 there.

25 Q Okay.

1 A So that all increase traffic.

2 Q All right. Would people moving to Vass increase
3 traffic?

4 A I would think so, too. And also, you know, school
5 is definitely their biggest driver, but secondly, you know,
6 for people living in Vass if they have a chance to, you know,
7 work in the town, you know, of Carthage, or if drive to RTP
8 (indiscernible) go there.

9 Q Okay.

10 A (Indiscernible) alternate route.

11 Q Okay.

12 A So it's a potential. But for me myself, you know, I
13 don't (indiscernible) from home to work directly. I usually
14 drop off kids, and it's my (indiscernible) so my chore each
15 day basically. I think a lot of people do make that choice.
16 School is definitely can cause, you know, (indiscernible)
17 different routing choice --

18 Q Right.

19 A -- for drivers.

20 Q Have you -- have you reviewed a letter from the Town
21 of Vass indicating how many homes they have approved for --
22 to be built down there with new subdivisions?

23 A I believe so. I saw that.

24 Q I have it here. If I may approach?

25 A Yeah.

1 Q I want to show you this right here.

2 A Uh-huh.

3 Q And ask you to examine it. This is --

4 A I have --

5 Q -- Exhibit 12?

6 A Yes. (Indiscernible.)

7 Q Okay.

8 A Yeah.

9 Q This is Exhibit 12.

10 A Uh-huh.

11 Q Have you had a chance to review this exhibit?

12 A Yes.

13 Q Okay. And can you tell me based upon Exhibit 12, a
14 letter from the Town of Vass indicating how many homes they
15 have added since 2007, here is 20, how many homes have they
16 added?

17 MR. ROBINSON: Objection. That's not what the
18 letter says, how many homes have been added.

19 MR. PARKER: Okay. Well, let's correct that then.

20 BY MR. PARKER:

21 Q This is a list of approved subdivisions with
22 locations, number of lots and approximate approval years.

23 Now, if these numbers are accurate, can you tell me
24 how many they have approved there?

25 A Yes. I did some quick math. I think -- I think

1 there are seven approved by the Town of Vass recently, and
2 the total (indiscernible) total for that they include 302
3 single-family homes and 29 multi-family homes, so total is
4 331 residential units.

5 Q 331 have been approved in Vass?

6 A Yes, that's what I saw from table.

7 Q Okay. Would that increase, in your opinion as a
8 traffic engineer, would that increase traffic on Union Church
9 Road?

10 MR. ROBINSON: Objection. Lack of foundation.

11 THE WITNESS: Yes, it can generate more traffic, and
12 by IT standard it's 9.44 daily trips per single-family units,
13 and 7.32 per multi-family units. So for 302 single-family
14 and 29 townhomes, the total can add up approximately 3,000
15 daily trips, and (indiscernible) due to we think, you know,
16 it's like Union Church Road I think (indiscernible) small
17 percentage, say ten percent of that, that will add 300 trips
18 to Union Church Road.

19 BY MR. PARKER:

20 Q Okay. All right. So you calculated what did you
21 say (indiscernible).

22 (Microphone difficulty.)

23 Q So based upon your calculations you estimated, what,
24 3,000 trips?

25 A Yes, from the newly approved residential units in

1 Town of Vass.

2 Q But now we know -- and you're saying you know all of
3 those are not going to be going up and down Union Church
4 Road?

5 A No, no, of course not.

6 Q All right. So have you reviewed a letter from the
7 Town of Carthage indicating how many subdivisions they --
8 residential units they have approved there?

9 A Yes. The list goes longer, and we receive total of
10 13 residential developments recent approved by the Town of
11 Carthage. Housing total I have is 1801 single-family homes,
12 and 216 multi-family apartments, and a total is 2,017
13 residential development units.

14 Q So Carthage has approved 2,017 more residences
15 since, I think their longest date's 2015?

16 A Yes, that's what I see on the table.

17 Q Do you have an opinion whether or not these homes
18 would increase traffic on Union Church Road?

19 A Again, this one, you know, based on standard 9.44
20 daily trip per single-family units, 7.32 per multi-family,
21 and we get for 2,017 residential units, we are looking at
22 18,583 daily trips.

23 Q 18,000?

24 A 18,000.

25 Q Yeah, but all of those wouldn't go down Union Church

1 Road?

2 A No, not all of that would go down -- it can, you
3 know, you have limit to drive school, you know, Union Pines
4 High School. I think that's one out of three high schools in
5 the county?

6 Q Yes.

7 A Yeah. And then you have two middle schools out of
8 five in the schools -- in the county, and I do think if your
9 kids of school age and you (indiscernible) Union Church Road.

10 Q Now, we have a lot of people who work in
11 Fayetteville.

12 A Yes, for people, you know, working in Fayetteville,
13 would definitely that's -- that's a very common road for you
14 drive your kids and then go to, you know, go down the road to
15 Fort Bragg and Fayetteville, and even using a very
16 conservative small portion, 10 percent of 18,583, and you
17 still have, yeah, 1860.

18 Q Okay.

19 A 1860 daily trips, and to be added along Union Church
20 Road.

21 Q All right.

22 A And also --

23 Q Go ahead. I'm sorry.

24 A Yeah. I do want to point out, you know, if we can
25 make a simple assumptions to say not everybody have kids, but

1 if every family size of 2.5 as family, person per family as
2 general, and that will increase the population of Carthage by
3 30 percent.

4 Q Okay.

5 A And by same matter if you use 2.5 per units for the
6 Town of Vass, that can increase population by 83 percent.

7 Q 83 percent. Okay.

8 A Yes.

9 Q Let me ask you this. Are you familiar with the
10 subdivision right across from Union Pines?

11 A Yes, Union Hills.

12 Q Union Hills, yes. Do you know whether -- there are
13 43 homes that have yet to be built there?

14 A It's not listed on this table, so that need to be
15 counted differently.

16 Q Okay. How would you count that differently?

17 A So you basically apply to generation, you know,
18 based on, I think it's most likely single-family.

19 Q Okay.

20 A So go through the same thing, you know, the first
21 five or six lots, and like single-family so you still apply
22 IT standard.

23 Q Okay.

24 A So (indiscernible) distribution generation,
25 distribution practice, I think it's also like, what, you

1 know, the (indiscernible), so that's standard practice.

2 Q Okay. So, now, the people who moved to Union Hills,
3 would where they work impact the -- their traffic, I mean,
4 where they go?

5 A It's really just -- I think it was, did I see a
6 commercial, or was advertised, I think, you know, that's
7 probably from (indiscernible) advertised as a bedroom for
8 Fayetteville.

9 Q Yeah.

10 A So it's probably going to take in a lot of buyers
11 will be --

12 MR. ROBINSON: Object to the speculation on that.

13 MR. PARKER: Okay. Well --

14 THE WITNESS: That's commercial, right?

15 BY MR. PARKER:

16 Q If I may approach? I want to show you what is
17 marked as Exhibit 27, ask you to examine that and tell me if
18 you can identify that.

19 (Exhibit No. 27 identified.)

20 A That's (indiscernible) at the Union Hills, cover
21 price.

22 Q Okay. And this was -- this came off the website
23 from Union Hills?

24 A I just saw this (indiscernible).

25 Q Okay. All right. Does this say that Union Hills is

1 a brand new pearl community located in Fayetteville, North
2 Carolina?

3 A Yes, that's what it reads. That's -- that's why I
4 got my impression from, yeah.

5 Q Okay.

6 A So we can make judgment call to say, hey, this
7 number (indiscernible) toward Fayetteville, but you want to
8 say one hundred percent (indiscernible) you know, but you
9 still got to make a reasonable judgment, you know, start with
10 Fayetteville, but we (indiscernible), you know, go to work
11 (indiscernible) are just based on using this information. Of
12 course, that's -- that's what we call a judgment, and
13 guidance, one thing, but we do have that training and
14 background to make the best call.

15 Q So if this were marketed to people from
16 Fayetteville, would you as a traffic engineer expect them to
17 travel to Fayetteville?

18 MR. ROBINSON: Objection. This is way outside his
19 level of expertise.

20 MR. PARKER: He's a traffic engineer. He's supposed
21 to be able to design and plan for traffic.

22 MR. ROBINSON: He's not a marketing expert.

23 MR. PARKER: I -- I'm not alleging he's a marketing
24 expert.

25 MR. ROBINSON: You said if this is marketed to

1 people in Fayetteville would it increase the traffic.

2 MR. PARKER: I see. That's -- that's a fair
3 objection. Thank you.

4 BY MR. PARKER:

5 Q If the people moving there were working in
6 Fayetteville, would it increase the traffic going towards
7 Vass?

8 A Yes.

9 Q All right.

10 A That's definitely yes.

11 Q Thank you.

12 MR. PARKER: Thank you, Mr. Robinson. That was a
13 fair objection.

14 BY MR. PARKER:

15 Q All right. So let me ask you this. As a traffic
16 engineer if you were to issue a report that had numbers that
17 were off by a factor of three, would you consider that report
18 to be reliable?

19 A A lot of report I base on the information available
20 at that time so I would keep revising and make the best
21 judgment based on most recent information, and but also the
22 methodology, I would still look at methodology. Let's see if
23 you (indiscernible) alone, you know, (indiscernible) be
24 aggressive otherwise so the baseline too low no matter how
25 much growth you going to apply you still want to get there

1 because one neighborhood could cause significant increase.
2 That's way beyond basic growth rate. So basically I think
3 you probably (indiscernible) consider methodology
4 (indiscernible) and I think (indiscernible) that's always
5 what we do. And even for the planners and (indiscernible) we
6 always strive for improvement.

7 Q Okay. So let me ask you this. Based on your
8 examination of this subdivision and the traffic rates there,
9 do you feel that -- what do you feel would make -- could that
10 entrance there be made safer to this proposed subdivision?

11 A Start with I would encourage left-turn lanes. I
12 think the (indiscernible) already (indiscernible) it's over
13 (indiscernible) ADT, although I may, you know, based on
14 recent growth rate from 2020 to 2022, that's, you know, from
15 2400 to 3400, that's equivalent to 19 percent per year growth
16 of cars you have little bit of (indiscernible) demand due to
17 pandemic.

18 Q Yes.

19 A Even for long term, you know, it's -- it's
20 (indiscernible) six percent, but short-term, you do
21 accelerating growth in this area.

22 Q Right.

23 A So based on the 12 percent growth, and then that
24 will get number, you know, higher than what, you know, the
25 current report shows, and if you take consideration of their,

1 you know, their (indiscernible) Vass and Carthage, you know,
2 another way to look at the student population and then may
3 still public, may increase the proportion to public increase,
4 and they use that school to as a generator and then that's
5 another thing that, but either way you can (indiscernible)
6 end up with 6500 to 7200 to range. That's my rough
7 calculation, but that's a lot of assumptions, you know, with
8 (indiscernible) you know, can improve.

9 But based on that, 6,000, and I would strongly
10 encourage two-lane consideration to increase turn lane, and
11 side entrance across from Henderson Road, and why so it is
12 because left-turn lane is proven (indiscernible) statistics,
13 you know, compared by federal highway, and also DOT recommend
14 the practice and increase -- just adding left-turn lane can
15 add ten per -- rather ten percent capacity, and also can
16 reduce crash from 30 percent to 70 percent. That's a huge
17 improvement.

18 So, yeah, definite encourage consideration of
19 left-turn lane at the entrance.

20 Q So why do you say that you should add capacity if
21 it's already at 4,000? I mean, if it's under 4,000 now?

22 Do you have an opinion -- do you have an opinion as
23 an expert as to what the -- how you would anticipate the
24 capacity based on the growth you've seen in Carthage, Vass,
25 Union Hills, how that capacity would increase there?

1 A The traffic demand going to increase with more
2 residential development units, and the capacity can be
3 increased by adding turn lanes. Also by providing a wider
4 travel lanes and shoulders.

5 Q All right. And --

6 A That's what --

7 Q If you add -- if you add wider travel lanes where
8 does the lane for those travel lanes come from?

9 A Other jurisdictions they do require you to upgrade
10 the roadway along the frontage, the frontage --

11 Q Uh-huh.

12 A -- to standard, you know, can be comprehensive
13 turn-lane standard.

14 Q So how far -- how far back would they be taking the
15 extra lane? How far --

16 A Actual lane is depending on the, you know
17 statistics and (indiscernible).

18 Q Okay.

19 A That's a function that I think generally you can put
20 for this type road, you can put 150 feet of left-turn lane,
21 and with, you know, another hundred feet of taper.

22 Q About how many, 200 or three --

23 A 200 plus 150, that's -- that's 350 total, 50 feet in
24 total, but, you know, that's in general. That's traffic
25 engineer's number.

1 Q Right.

2 A When we go into the roadway design stage and
3 (indiscernible).

4 Q Okay.

5 A (Indiscernible.) And do more (indiscernible) they
6 can determine, you know, what's the best.

7 Q Yeah. I'm asking about, well, I was asking about
8 longitudinal feed. I'm asking about lateral feature, also
9 going to take land for the sides, right?

10 A Oh, the cross-section improvement, yes. Once you
11 add a lane your DOT standard is 11, the very extreme cases
12 accept 10-foot lane or more. I understand, I think I saw on
13 the report they (indiscernible) 10-foot of lane, so once you
14 put your turn lane, that's opportunity to add actual two
15 feet, I think standard 12-foot of lane (indiscernible).

16 And then that's probably some kind of make the road
17 wider, and, you know, drainage or storm water (indiscernible)
18 may not like it, but traffic safety wise and (indiscernible)
19 less obstacles you probably have a better sight distance and
20 you probably have better safety.

21 Q Okay. So I think I've got just a couple more
22 questions.

23 Does increase -- does the -- does traffic affect the
24 amount of litter on the side of the highways? Litter.

25 A Can you say that again? Sorry.

1 Q Does traffic, the amount of traffic affect the
2 amount of litter on the highways, on the sides of the road?

3 A Not expert on this one, but I feel likely because
4 that's -- that is (indiscernible), right?

5 MR. ROBINSON: Objection. That's speculation.

6 MR. PARKER: Well, yeah, he says he's not an expert,
7 so I'll take that. Okay.

8 BY MR. PARKER:

9 Q All right. All right. If I can have just a second?

10 A Yeah, I think sort of related to that question I
11 think traffic add noise. That's the kind of question, you
12 know, traffic engineer we always study. I think you build a
13 new roadway and there's not a wall to mitigate a --

14 Q One more question --

15 A -- fast flying car, you know.

16 Q One more question. Does increased traffic increase
17 noise?

18 A Oh, yeah, yes.

19 Q All right.

20 A And increase speed you create noise as well.

21 MR. PARKER: All right. That's all.

22 CROSS-EXAMINATION OF BOAHONG WAN BY MR. ROBINSON:

23 Q Good evening, Dr. Wan. My name is Nick Robinson and
24 I'm the attorney for the applicant here tonight. Just have a
25 few questions for you.

1 Mr. Parker asked you a question about Travis Fluitt
2 and whether or not you know him. Do you consider Travis
3 Fluitt to be a competent traffic engineer in North Carolina?

4 A Oh, yes.

5 Q Okay.

6 A Definitely.

7 Q And you mentioned in your testimony, though I don't
8 think it was followed up on, that you have reviewed his
9 traffic assessment for this project that is dated June 21,
10 2022?

11 A Yes, that's the latest version and I received.

12 Q Okay.

13 A And that's the one I referring to, and then the
14 prediction (indiscernible) under the build-out year is over
15 4,000. I think that was the recent projection I've been
16 referring to.

17 Q Okay. And that's a -- that's a 13-page traffic
18 assessment --

19 A Uh-huh.

20 Q -- and that's the one that you reviewed that has his
21 seal on it and is dated June 21, 2022?

22 A Yes.

23 Q Okay.

24 A I have a copy over here.

25 Q I'm going to introduce that as Exhibit 101?

1 (Exhibit No. 101 marked.)

2 MR. PARKER: Are you still putting him on the stand?

3 MR. ROBINSON: What's that?

4 MR. PARKER: Are you still putting him on the stand?

5 MR. ROBINSON: Yeah.

6 MR. PARKER: Okay. I got it. Thank you.

7 MR. ROBINSON: For the record, yeah, that -- that
8 updated traffic assessment by Mr. Fluitt dated June 21 was
9 supplied to Mr. Parker on or about that date, maybe one day
10 later.

11 BY MR. ROBINSON:

12 Q Dr. Wan, have you reviewed that traffic report that
13 I just marked as Exhibit 101?

14 A Yes.

15 Q And it's --

16 A I did.

17 Q -- in it's entirety?

18 A Yes.

19 Q Okay. And as you stand here today, having reviewed
20 that report, are there -- would you say that there are any
21 errors in the report?

22 A I don't think error is the right word to say.

23 Q Okay.

24 A No errors.

25 Q Okay. Thank you. The issue of level of service D

1 for highway capacity, you testified that the standard number
2 of trips per day for a road like Union Church Road under
3 state tables would be 11,800 trips per day; is that correct?

4 A It's not for Union Church Road. It's for two-lane
5 highway under default values.

6 Q Yeah, so the default value for Union Church Road
7 being a two-lane highway would be 11,800 trips per day?

8 A No, not necessarily.

9 Q Could be that --

10 A That's where we were differing, you know, we have
11 different judgment.

12 Q Right. You testified that it could be less, too,
13 right? You could use a minimum number that would be 9,000
14 vehicles per day for that roadway?

15 A Yes, and with good reasons to do that --

16 Q Yeah.

17 A -- type of adjustment.

18 Q Okay. And then in Mr. Fluitt's report, did he
19 address the question of roadway capacity?

20 A Say it again.

21 Q Yes. Did Mr. Fluitt address the question of roadway
22 capacity on Union Church Road in his report marked as Exhibit
23 101?

24 A Yes, there is section talking about roadway
25 capacity.

1 Q Yeah.

2 MR. PARKER: Just make sure, you handed the report
3 up? I don't know if he's got that one. Just make sure he's
4 looking at it.

5 MR. ROBINSON: Yeah, that's --

6 BY MR. ROBINSON:

7 Q Do you have a copy of that report?

8 A Yes, I have a copy of the report. That's why took
9 me longer to find --

10 Q Yeah.

11 A -- the specific section.

12 Q Absolutely fair. So in that paragraph entitled,
13 "Roadway Capacity" --

14 A Yes.

15 Q -- did Mr. Fluitt address the -- the question of the
16 roadway capacity on Union Church Road?

17 A It reads as -- it's a different word. Yeah.

18 Q I'm not sure I follow you.

19 A Okay. If you read two sentence on the first
20 paragraph --

21 Q Yes.

22 A -- on page 2, the first one talk about capacity.
23 The second one it's in general, first one. The second one
24 talk about Union Church Road a two-lane highway.

25 Q Uh-huh.

1 A And with 10-foot lanes and 55 miles --

2 Q Yeah.

3 A -- posted speed limit. It has correspond allows the
4 threshold of 11,800 per day. I know it implies capacity, but
5 it does not specifically say.

6 Q If you even changed that number to 9,000, which is
7 the one that you prefer --

8 A Yeah.

9 Q -- and then read the next paragraph, while site
10 traffic from this development is projected to be split
11 east/west on Union Church Road, even if all site traffic is
12 added to one direction, the daily traffic volume at project
13 build out would be approximately 4600 --

14 A Uh-huh.

15 Q -- or less than 40 percent of LOSD threshold?

16 A Yes.

17 Q Is that an accurate statement?

18 A I have a slight different opinion on this. One, you
19 know, first one you're adding that onto the background
20 assumption. That one has either using growth rate of
21 six percent a year alone --

22 Q Right.

23 A -- may not be adequate.

24 Q What would you base that on? What would you base
25 that statement that a six percent growth rate may not be

1 adequate? What would you be basing that on?

2 A And the further thing, this thing I talk about is
3 let me just emphasize that, and then if you look at his
4 target growth rate from 2016 at 2400, to '22 at 3400, you
5 back (indiscernible) that by six years, the composite growth
6 rate per year is a 5.9 something. That's six percent. I
7 believe that's accurate for the, you know, long term.

8 Q Yeah.

9 A But, you know, short-term, in 2020, the total volume
10 stay at 2400, and 2022 it will become 3400. So if you
11 backtrack that by two years and you get 19 percent per year
12 growth rate. So that's much higher than six percent. That's
13 why I feel, you know, you probably want to go there extreme
14 of high.

15 Q Yeah.

16 A You want to go generally the low. So probably
17 choose the higher rate of, you know, (indiscernible) at
18 10 percent to 15 percent, that's the (indiscernible) person
19 on there. So that's, you know, again, that's -- that's in
20 your judgment. That's my, based on my professional look at
21 the historic data. That's the one thing.

22 The second thing, again, call it baseline one in the
23 low, so I would look beyond those, you know, (indiscernible)
24 because I understand, you know, of course (indiscernible),
25 you know, applicable in most cases, but for this one we do

1 have schools as, you know, travel destinations, and I talk
2 about, you know, population increase for the city, for the
3 town, and the school probably increase, and you want to
4 factor that in. And how does that compare to the, you know,
5 how much you can use the growth rate cover.

6 So that's kind of more like a different way cross
7 check on that, and based on that, and I have a calculation,
8 you know, either increase by 25 percent based on 40 percent,
9 so it can increase by 1600 cars to 2300 cars. So it's
10 another range.

11 So, again, you know, and in judgment, it's not
12 perfect science, but we do want to check, make sure, and then
13 we cover, you know, our, you know, not most extreme case, but
14 we want to cover on the conservative side (indiscernible),
15 make sure, you know, we -- we, you know, provide a sufficient
16 mitigations.

17 Q So you -- I didn't quite follow all of that, but
18 under -- even under your conservative estimate is there a
19 scenario in your conservative estimate where the number of
20 trips per day on Union Church Road during the applicable time
21 period exceeds 9,000 trips per day?

22 A No, no.

23 Q Okay. All right. Great. Thank you.

24 A Yes.

25 Q The -- the other thing I wanted to ask you about is

1 Mr. Parker asked you a lot of questions about growth in Vass
2 and growth in Carthage, and I appreciated the numerical
3 statistics that you gave with that.

4 And if you'll allow me to summarize, you basically
5 said that if all of the homes that have -- home sites that
6 have been approved in Vass turn into constructed homes with
7 people living in them, that would be 331 new homes, and that
8 would result in 3,000 additional daily trips?

9 A Correct.

10 Q But that only 10 percent of those would be likely to
11 come down Union Church --

12 A 10 percent is just general assumption, just throw a
13 number there.

14 Q So that would be 300 trips?

15 A Correct.

16 Q And so that number 300 additional trips to Union
17 Church Road would go down if some percentage of those houses
18 never get built; right? If there's a recession, if --

19 A Yeah, of course. You know, as -- that's -- that's
20 why traffic engineer job is difficult, because --

21 Q Right.

22 A -- we by the law, by TI guidance, or by
23 (indiscernible) requirement, we are required to account for
24 other planned approved development, but sometimes it may not
25 happen. That's when you do the more detail analysis,

1 construction analysis, (indiscernible) analysis, and you do
2 make that adjustment.

3 Q Okay. So then would you say that the adjustment for
4 the possibility that not all of those homes would get built
5 is built into your statistic?

6 A The (indiscernible) we assume 100 percent
7 contracted. That's how the number's being calculated.

8 Q And do you know what the student generation rate is
9 in Moore County per household?

10 A I have no studies on that.

11 Q Okay.

12 A Glad to hear if you have that.

13 Q All right. So you don't have any idea how many
14 students are likely to be in any house which would then
15 impact how many of the people are driving to school; correct?

16 A Correct.

17 Q Okay. And you also don't have any idea how many
18 children in this neighborhood would be homeschooled, for
19 example; correct?

20 A Correct.

21 Q And you also don't have any idea how many children
22 in this area would go to private schools; is that correct?

23 A There's a private school right down still on Union
24 Church, but, you know.

25 Q That's --

1 A Correct.

2 Q -- some other private school. Okay. All right.

3 The last thing I want to ask you about, and I appreciate your
4 patience with my questions, is the -- you stated that all
5 things considered you would strongly encourage consideration
6 of a left-turn lane?

7 A Correct.

8 Q Okay.

9 MR. ROBINSON: That -- that's it. That's all the
10 questions I have.

11 MR. PARKER: Sorry. Just a few.

12 REDIRECT EXAMINATION OF BOAHONG WAN BY MR. PARKER:

13 Q So did you -- you reviewed Mr. Fluitt's first
14 report; is that right?

15 A Yes.

16 Q And in that first report he estimated two percent
17 growth from 2016 to 2022; is that right?

18 A Correct. That was documented in the first report.

19 Q Okay. Did you review -- and you've reviewed his
20 last report; is that right?

21 A Yes, I reviewed last report as well.

22 Q Did you -- did you also review his second report
23 which was dated June the, I think it was like the 16th. Did
24 you review that report?

25 A I briefly scanned through that --

1 Q Okay.

2 A -- as well.

3 Q Okay. And that report did state -- that report
4 indicated that he revised his daily number to the 3400 that
5 we heard from a witness; is that right?

6 A Yes, think so.

7 Q And that's where he got six percent growth for the
8 second and third report?

9 A Yes.

10 Q But you're saying that from 2019 to 2000 -- or 2020
11 to 2022, the number went up 19 percent?

12 A No, that's a 42 percent of volume increase, and we
13 use a composite growth, and that's 19 percent per year, but
14 that's a short-term and --

15 Q Okay.

16 A Yeah.

17 Q And if that growth rate were to continue, how long
18 would it be before we hit 8,000 cars, 7,000 --

19 A If that growth -- I think that's probably
20 (indiscernible) answer the question.

21 Q As to the --

22 A (Indiscernible) you must determine how long you
23 going to double it, right, seven years.

24 Q All right. So -- and let me ask you, the first
25 report, now, the third report -- the first report was like

1 how many pages? That was like three pages? The first
2 report?

3 A Yeah, handed me the one --

4 Q The third report --

5 A I think two is -- yeah, I have four pages.

6 Q Okay. The third report was 13 pages.

7 A Okay.

8 Q Is that right?

9 A Uh-huh. I don't have a copy in front of me, but --

10 Q Okay.

11 A -- but I trust you.

12 Q Well, no, I understand that, but I want to make sure
13 it -- it's the one he handed up. Do you have that one? 101?

14 A Thank you.

15 Q So that report is 13 pages. I think that's what
16 Mr. Robinson said, and I trusted him.

17 A Yes, I would.

18 MR. ROBINSON: I would consent that it's 13 pages.

19 BY MR. PARKER:

20 Q All right. So I want you to look at that, though,
21 and tell me about the last -- the last pages are traffic
22 crash data; isn't that right?

23 A Yes, actually third, I think I received the third
24 report.

25 Q Yes.

1 A This one. Is that --

2 Q Okay.

3 A So yes, the last page is crash report also with nice
4 map showing their --

5 Q Oh, it's actually 17 pages. Okay. That last -- but
6 those last pages of those crash reports, that's actually data
7 that your office sent me; isn't that right?

8 A I don't think I can recall.

9 Q Okay. All right. That's fine. Thank you. That's
10 all.

11 A Yeah, but I do see safety analysis (indiscernible)
12 most recent report.

13 MR. PARKER: Okay.

14 MR. ROBINSON: One follow-up question.

15 **RECROSS-EXAMINATION OF BAOHONG WAN BY MR. ROBINSON:**

16 Q The -- there's been a lot of talk about the increase
17 from 2400 AADT, average trip, daily trips in 2020, up to
18 3,400 in 2022; correct?

19 A Yes. Yes.

20 Q And you do realize that that number 3,400 is not a
21 final or published number by DOT; correct?

22 A Correct. That's all that analysis current based on.

23 Q Right. And is it customary for a traffic engineer
24 to base their traffic assessment on preliminary,
25 non-published AADTs?

1 A So (indiscernible) DOT process of collecting traffic
2 data, but they do apply a monthly daily factor and do the
3 adjustment, and to get the AADT. So AADT would be a
4 calculated number, and this would be raw data. So we rely on
5 the final number of AADT, and, you know, but if we don't have
6 the data, the most accurate we do, the most recent
7 (indiscernible), so that's close approximation, I would say.
8 I think that's nothing wrong be with that to draw
9 conclusions. I think that's what, you know, their team, the
10 one team is writing report on. I don't have issue with that.

11 Q Yeah, so -- so, is it fair to say then, Dr. Wan,
12 that that it is not typical to base your traffic assessment
13 on unpublished preliminary AADT from the DOT, but that in
14 this case, in this report, Mr. Fluitt has included that data;
15 is that correct?

16 A Yes.

17 Q All right. Thank you.

18 MR. ROBINSON: That's all the questions I have.

19 MS. LELAND: Okay. Is that it?

20 MR. PARKER: That's all.

21 MS. LELAND: Okay.

22 MR. ROBINSON: Great.

23 MS. LELAND: You want to call your expert now?

24 MR. ROBINSON: That would be great, if I may.

25 MS. LELAND: Yes. Is that okay?

1 MR. ROBINSON: Travis Fluitt. Yeah. You can go
2 over there if you want. It's up to you.

3 DR. WAN: You can get my notes. I need to return
4 this.

5 MS. LELAND: Mr. Parker, how many experts do you
6 have left?

7 MR. PARKER: Two. Yeah, you don't want to start
8 that tonight if you want to be done by 8:30. And I got one
9 from Wilmington, but I'm going to apologize to him, so --

10 MS. LELAND: Is that one going to be long, the one
11 from Wilmington?

12 MR. PARKER: I'm sorry?

13 MS. LELAND: Will your expert from Wilmington be a
14 long one, or --

15 MR. PARKER: A long -- oh, probably. He's going to
16 be discussing the UDO. He's an expert planner.

17 MS. LELAND: Okay. So that will be long.

18 MR. PARKER: Yeah. Sorry.

19 MR. ROBINSON: Is this -- yes, it is. Okay.

20 TRAVIS FLUITT,
21 being first duly sworn, testified as follows on DIRECT

22 EXAMINATION BY MR. ROBINSON:

23 Q Can you state your name for the record, please?

24 A Travis Fluitt with Kimley-Horn and Associates, 421
25 Fayetteville Street, Suite 600, Raleigh, North Carolina,

1 27601.

2 Q Do you recall testifying in this matter on May 16th?

3 A I do.

4 Q And do you acknowledge that you were admitted as an
5 expert in traffic engineering and that your testimony tonight
6 will be as an expert in the field of traffic engineering as
7 well?

8 A I do.

9 Q Great. You previously prepared a traffic assessment
10 for this matter that was dated May 16th, 2022, and introduced
11 in this matter as Exhibit 2; is that correct?

12 A Correct.

13 Q Okay. And Mr. Parker asked you some questions on
14 May 16th about traffic counts on Union Church Road; correct?

15 A Correct.

16 Q Did you check into those traffic counts between the
17 May 16th, 2022, first public hearing and the June 2nd, 2022,
18 second public hearing?

19 A I did.

20 Q Were you also present for the testimony of Jamie
21 Viera, an engineer from NCDOT offices regarding preliminary
22 traffic counts on Union Church Road?

23 A I was.

24 Q And to summarize, her letter stated that the annual
25 average daily traffic count, AADT, for the road Union Church

1 Road had been 2600 in 2012, and the preliminary but not yet
2 final or published count for 2022 is 3,400?

3 A Correct.

4 Q All right. Is -- I asked Dr. Wan this question. Do
5 you agree with his answer? Is it customary in the field of
6 traffic engineering in North Carolina to base traffic
7 assessments on preliminary unpublished traffic counts?

8 A And I would concur with his answer, it's not
9 necessarily customary, but nothing wrong with it.

10 Q Okay. And nevertheless did you check those
11 unpublished preliminary counts and incorporate them into a
12 revised traffic assessment in this matter?

13 A I did.

14 Q So essentially you assumed that the unpublished
15 preliminary counts for 2022 would become final, and you
16 reassessed the traffic impact of this subdivision based on
17 that count rather than the last official published AADT count
18 from the year of 2020?

19 A Correct.

20 Q Okay. Can you describe for the board then your
21 reassessment and the extent, if any, that it changes your
22 bottom line on the traffic assessment?

23 A Yes. We recalculated the growth rate based on the
24 new daily traffic volume from 2016 to 2022, and the result in
25 growth rate was six percent per year. Projecting that to the

1 year 2025, and then adding the site traffic, the daily
2 traffic volume on Union Church Road is less -- projected to
3 be less than 40 percent of capacity on Union Church Road.

4 Therefore, it is still my conclusion that Union
5 Church Road has more than adequate capacity to accommodate
6 proposed development traffic and the site traffic will not
7 have a significant impact on traffic in this area.

8 Q And you heard Dr. Wan's testimony just now. Did
9 anything in his testimony change your opinion?

10 A It did not.

11 Q Okay. You were also present at the June 2nd, 2022,
12 second public hearing in this matter to hear testimony from
13 residents in the area regarding crashes that have occurred
14 over the years on Union Church Road; correct?

15 A Correct.

16 Q And are anecdotal reporting by individuals of
17 crashes a reliable basis for conducting a traffic assessment
18 in North Carolina?

19 A They are not.

20 Q Rather than anecdotal experiences, where do you as a
21 traffic engineer and expert in the field turn for reliable
22 data regarding crash statistics?

23 A We rely on crash reports collected by state and
24 local law enforcement that are collected in a state-wide
25 database.

1 Q So after June 2nd, 2022, public hearing part two,
2 did you review the NCDOT crash data for the 1.2 mile section
3 of road on Union Church Road between McIntosh Road and Shaw
4 Road intersections for the period from 2017 to March -- or
5 April 2017 through March 2022?

6 A I did.

7 Q Can you please show the board the portion of the
8 roadway included in that review?

9 A Yes. It's on the last page of my report.

10 Q Let me -- hold on. I've got some copies of it that
11 I can hand up.

12 MR. ROBINSON: May I approach?

13 THE WITNESS: While he's handing those out, I'll
14 just reiterate that the section is 1.2 miles from McIntosh
15 Road to Shaw Road which encompasses the site frontage.

16 BY MR. ROBINSON:

17 Q So I just handed out -- here we go, yeah -- a copy
18 of that report to the board so that they could see that. And
19 it is found at tab 3. Okay.

20 So you were going to describe this section of Union
21 Church Road that you included the crash data for?

22 A Yes. I did while you're handing --

23 Q All right. So everybody's already seen that. All
24 right. Sorry about that.

25 Can you please report to the board your findings and

1 conclusions regarding crash data and also your conclusions
2 regarding the impact of this proposed subdivision on those
3 statics?

4 A Yes. There were eight reported crashes along this
5 section of Union Church Road within the five-year period
6 reported by DOT. One of those crashes involved an animal, so
7 there's not much you can do about that. None of the crashes
8 involved a fatality or incapacitating injuries, and only one
9 involved visible injury. There were no more than two crashes
10 at any one location, and only one in the vicinity of the
11 proposed site driveway, and I am pleased to report that none
12 of the crashes involved farm equipment.

13 Q That's good to know.

14 A The reported crash rate for this section of Union
15 Church Road is approximately half of the reported state-wide
16 crash rate for two-lane undivided rural secondary routes, and
17 less than half of the reported crash rate for Moore County.

18 A review of the crash data does not indicate an
19 existing crash problem in this area, and it is my opinion
20 that the proposed site is not expected to create a safety
21 issue at this location, or increase the crash rate along this
22 section of Union Church Road.

23 Q Okay. On June 2nd, 2022, did you update the
24 May 16th, 2022, traffic assessment to include your findings
25 and conclusions regarding the traffic counts?

1 A I did.

2 Q And that was on June 2nd, and we did not introduce
3 that interim update on June 2nd because we never got to our
4 rebuttal evidence that night; correct?

5 A Correct.

6 Q Yeah. So on June 21, 2022, did you further update
7 your traffic assessment to incorporate your findings and
8 conclusions regarding the crash data as well as the traffic
9 counts on Union Church Road?

10 A I did.

11 Q And are your updated findings regarding both the
12 traffic data and the crash data included in your June 21,
13 2022, updated traffic assessment?

14 A They are.

15 Q Is -- do you have a true and correct copy of the
16 June 21, 2022, updated traffic assessment there with you?

17 A Yes.

18 Q And is that your seal and signature at the top?

19 A It is.

20 MR. ROBINSON: So I would like to go, and I've
21 already handed it up, but I would like to go ahead and
22 introduce that as Exhibit, I think it was 101.

23 (Exhibit No. 101 offered.)

24 BY MR. ROBINSON:

25 Q So based on your updated traffic assessment, the

1 input of NCDOT, all of the other information and experience
2 at your disposal pertinent to the project, do you have an
3 opinion based on a reasonable degree of engineering certainty
4 as to whether this site is appropriate for the proposed
5 project based on traffic considerations?

6 A Yes, I do.

7 Q What is your expert opinion?

8 A It is my opinion that the proposed development is
9 appropriate based on traffic considerations.

10 Q And is there anything that Dr. Wan testified to
11 tonight that would change that opinion?

12 A No, there is not.

13 Q Do you have any reservations about that opinion at
14 this time?

15 A I do not.

16 Q Okay. Regarding SUP criteria 12.2.B(1), that a
17 project not materially endanger the public health or safety,
18 do you have an opinion as to whether this project as proposed
19 will materially endanger the public health or safety from a
20 traffic standpoint?

21 A Yes, I do, and it is my opinion that this project as
22 proposed will not materially endanger the public health or
23 safety from a traffic standpoint.

24 Q All right. And do you have any reservations about
25 that opinion?

1 A I do not.

2 Q Based on your experience and review do you have any
3 reservations about approval of the requested SUP based on
4 traffic concerns?

5 A I do not.

6 Q All right.

7 MR. ROBINSON: I don't have any further questions
8 for this witness at this time.

9 MR. PARKER: Thank you.

10 CROSS-EXAMINATION OF TRAVIS FLUITT BY MR. PARKER:

11 Q Mr. Fluitt, you made first report on May 16th; is
12 that right.

13 A That's correct.

14 Q At that time you estimated a growth rate of two
15 percent?

16 A That's correct.

17 Q That number, that estimate you would agree was
18 wrong?

19 A It was based on the available data at the time.

20 Q But it was wrong?

21 A I would not say that.

22 Q Okay. So you still say that it is two percent?

23 A No.

24 Q What do you say it is now?

25 A I do not know what the exact growth rate is. The

1 growth rate from 2016 to 2022 was approximately six percent.

2 Q Okay. So that's over five years; right?

3 A Five to six years.

4 Q Yes. So that changed your estimate for the second
5 report you did on June 2nd; isn't that right?

6 A That's correct.

7 Q All right. And then you issued that report based on
8 the data that we presented; is that right?

9 A That Ms. Viera presented? Yes.

10 Q Yes. Okay. Well, she was offered by us. So you
11 changed it based on that; right?

12 A Correct.

13 Q Now, do you disagree with Mr. Wan that between 2020
14 and 2022 the growth rate would be 19 percent if you went with
15 2020 numbers, and you went with 2022 numbers?

16 A It would, but as Mr. Wan noted, that was -- that
17 data was from Covid times, so -- and Ms. Viera noted as well,
18 so I would not include that data.

19 Q So, but that also would have been -- and so you
20 didn't even factor that in in your first assessment; is that
21 right?

22 A That's correct.

23 Q Okay. So -- so you admit then that -- that -- would
24 you at least agree that two percent is inaccurate?

25 A It is low based on the newer data available, yes.

1 Q Did you consider the growth in Vass that Dr. --
2 Dr. Wan has testified to?

3 A I did not look at specific number of homes.

4 Q Okay. You heard him testify that there were 331; is
5 that right?

6 A I did.

7 Q Have you evaluated the letter I had from the Town of
8 Vass, Exhibit Number 12?

9 A I have.

10 Q Okay. You have?

11 A I have.

12 Q Okay. Did you note in there that every one of these
13 subdivisions occurred in 2000 was, except for one, was 2016
14 and up?

15 A Yes.

16 Q Okay. And the one from prior to 2016 was -- that
17 was 2007 at 20 homes; isn't that right?

18 A I believe so. I don't have the report in front of
19 me.

20 Q Do you want to see it?

21 A I will take your word for it.

22 Q Okay. All right. So then at 331, that would be
23 between 2016 and 2022 they have approved 300, over 300 homes?

24 A Yes.

25 Q Okay. The one for Carthage, Carthage, you heard him

1 testify that there were over 1800 approved; is that right?

2 A That's what I heard. I have not review that memo.

3 Q Okay. May I approach?

4 A You may.

5 Q Thank you. (Indiscernible.)

6 MR. ROBINSON: This one is. Okay.

7 MR. PARKER: Did you see it?

8 BY MR. PARKER:

9 Q I'm going have to borrow this again, Mr. Truitt. I
10 apologize. I'm not going to get too close to you. All
11 right.

12 So this is the one right here. Now, from the 1800
13 here, how many of these subdivisions were approved prior to
14 2016?

15 A One.

16 Q Okay. And how many homes did that involve?

17 A Says approximately 26.

18 Q So then from 2016 to today Carthage has approved
19 over 1800 homes, basically?

20 A Yes.

21 Q Would you agree with Mr. Wan that this has potential
22 to increase traffic on Union Church Road?

23 A It does.

24 Q But you did not take into consideration those facts
25 in your estimation?

1 A We -- that's what the background growth rate covers.
2 Growth in number of homes in a particular area does not
3 directly translate into one-for-one traffic growth, vehicular
4 growth on a particular roadway.

5 Q But it would explain part of the difference between
6 being two percent and six percent -- or and 19 percent;
7 wouldn't it?

8 A It would.

9 Q Okay. And if that growth rate continues it would
10 continue to increase; you'd agree with that?

11 A It would.

12 Q Okay. All right. That you didn't consider in your
13 report?

14 A There again I say the background growth rate
15 considered those things.

16 Q Now, let me ask you this. In your third report you
17 did list crash data?

18 A Yes.

19 Q Is there a difference between capacity analysis and
20 a safety analysis on a road?

21 A Yes.

22 Q Describe that difference for me, please.

23 A Well, the capacity is based on how many vehicles you
24 can physically put on a roadway can pass -- can pass a
25 certain point over the course of this certain period of time,

1 be it a day or an hour.

2 Q And you would agree with Mr. Wan that part of that
3 is involved in the LOS service -- level of service that you
4 choose?

5 A Yes.

6 Q And that level of service is based on driver's
7 expectations; isn't that right?

8 A Yes, to some extent.

9 Q And if driver's expectation is, is that they will
10 only have to wait at a stop sign for 20 seconds and they have
11 to wait for 50 seconds, that improves the -- that effects
12 those numbers; isn't that right?

13 A Yes.

14 Q Okay. In fact, that affects capacity; isn't that
15 right?

16 A Not necessarily.

17 Q It does -- there is a difference between general
18 capacity, which is what you've got at eleven eight, and
19 actual capacity, which is based on a lot of other factors;
20 isn't that right?

21 A Yes, but the eleven eight includes many of those
22 factors.

23 Q Right. The actual capacity of a road would never
24 exceed the general capacity, would it?

25 A Say that again.

1 Q The actual capacity, the general capacity, the one
2 that you get the theoretical capacity, is always going to be
3 more than the actual capacity if you were to do that
4 calculation; isn't that right?

5 A I would not say so. I've seen instances where a
6 road carries much higher volume of traffic than you would
7 expect or project based on capacity levels of service.

8 Q Okay. So let me ask you this. The difference,
9 though, is a community -- does a community have the ability,
10 can they choose the level of service they want to have for
11 their community?

12 A Municipalities do.

13 Q How do they do that?

14 A Through ordinances.

15 Q Through ordinances?

16 A Yes.

17 Q So they can choose that we want people waiting at
18 stop signs no more than 15 seconds; right?

19 A They can set thresholds that are requirements in a
20 traffic analysis.

21 Q Okay. And you chose D here?

22 A Yes.

23 Q Level of service D is when traffic is starting to
24 become unstable; isn't that right?

25 A That's the -- yes.

1 Q Yes. And when traffic starts to become -- now,
2 that's not based on any study of yours, that's just the
3 number you picked for here; isn't that right?

4 A No, it is the number that is referenced by the
5 transportation -- North Carolina Transportation planning
6 branch --

7 Q Okay.

8 A -- for -- let me get my terminology right, two-lane
9 rural highway with 10-foot lanes and a 55-mile-an-hour posted
10 speed limit, all of which applies to Union Church Road.

11 Q Were you here when Ernie Legg testified that he sat
12 at a stop sign for five minutes?

13 A I believe so.

14 Q Would that affect your -- your estimation at all?

15 A No.

16 Q I don't know, he's laughing, but that's a good
17 question because I don't know, Mr. Robinson. I apologize.

18 A No.

19 Q No, it wouldn't matter that? Would you agree with
20 Mr. Wan that, or Dr. Wan, that drivers' impatience affects
21 aggressiveness?

22 A It can. I am not a psychologist, though.

23 Q Okay.

24 A I'm not an expert in driver psychology.

25 Q All right. Now, let me ask you this. So there is a

1 difference between capacity and safety evaluations?

2 A Yes.

3 Q You did not do a safety evaluation in your first
4 report, did you?

5 A Not based -- I did not do a review of a strip
6 analysis provided by DOT.

7 Q And a strip analysis is where you identify a segment
8 of highway and then you evaluate that; isn't that right?

9 A Correct.

10 Q Okay. That is what -- it actually took until the
11 third report for you to look at that; isn't that right?

12 A Correct.

13 Q And why did you choose Shaw Road and McIntosh Road
14 in the third report?

15 A I did not. DOT -- or we requested of DOT to pull
16 crash data for this section, and they said that they were
17 already doing that based on another request and that they
18 would provide us the data.

19 Q Okay. And that other request was mine that I
20 provided to Mr. Robinson; isn't that right?

21 A I would assume so.

22 Q So you did not request one outside of my request, I
23 mean, larger than mine; isn't that right?

24 A We were going to pull the data ourselves, but since
25 they were doing it we thought it prudent to use the same

1 data.

2 Q All right. Did you -- so -- okay. So it was
3 based -- all right. So here's my question to you, next one.

4 Is the May 31st crash that took out internet, is it
5 on -- is it on that crash report?

6 A May 31st of this year?

7 Q Yes.

8 A No, it would not be.

9 Q Okay. So it doesn't include the most recent stuff.
10 How long does it take for that stuff to get uploaded; do you
11 know?

12 A Several months.

13 Q Several months?

14 A I couldn't say specifically.

15 Q Okay. All right. So it wouldn't necessary -- it
16 wouldn't necessarily include the fatal -- well, it wouldn't
17 have included the fatal crash right outside of Union Pines
18 anyway; would it?

19 A No, that would have been west of this area.

20 Q Because that was further away than what you
21 requested after I requested it. All right.

22 And do you have a copy of Exhibit 2B? I'm going to
23 show you that. That's your second report.

24 May I approach?

25 A Yes.

1 Q Is that it?

2 A That is it. I actually don't have a copy of that.
3 Nick, do you have a copy of that?

4 MR. ROBINSON: Somewhere.

5 MR. PARKER: Okay. Could you find -- did you get me
6 2B out of there? Okay. All right. Thank you. All right.

7 BY MR. PARKER:

8 Q There it is right there. So that is a copy of your
9 second report; isn't that right?

10 A It is.

11 Q Okay. And it's an accurate representation of what
12 the second one was?

13 A Yes.

14 Q Okay. All right.

15 MR. PARKER: I'm sorry. That's all.

16 MR. ROBINSON: Okay. I just have a quick follow-up.

17 REDIRECT EXAMINATION OF TRAVIS FLUITT BY MR. ROBINSON:

18 Q So you heard Dr. Wan's testimony, didn't you,
19 Travis, that if you assume every one of those subdivisions in
20 Vass gets built out completely, and if you assume that every
21 one of those subdivisions in the letter in Carthage gets
22 built out completely, that the Vass subdivisions would add
23 approximately 331 trips per day; correct?

24 A Correct.

25 Q And that his estimate of the Carthage subdivisions

1 if completely built out would add 1860 trips per day to Union
2 Church Road; correct?

3 A Correct.

4 Q And would the combined total of that, whatever that
5 number is, 331 plus 1860, would, if those proved to be a
6 reality, would they change your conclusions in your traffic
7 assessment?

8 A They would not.

9 Q All right.

10 MR. ROBINSON: No further questions.

11 **RECROSS-EXAMINATION OF TRAVIS FLUITT BY MR. PARKER:**

12 Q Dr. Wan, you would agree Dr. Wan picked 10 percent,
13 it could be much higher; isn't that right?

14 A Or much lower.

15 Q There you go. All right.

16 MR. PARKER: Thank you.

17 MR. ROBINSON: That's all the questions I have for
18 this witness. And I want to again express my gratitude to
19 the board chairman for allowing me to let him testify this
20 evening.

21 MR. PARKER: I will agree with you, Mr. Robinson,
22 and thank them as well.

23 MR. ROBINSON: Yeah.

24 CHAIRMAN QUIS: Thank you both. Thank you all for
25 your patience here tonight. It's 9:00 o'clock. We're going

1 to continue this hearing, and we need to check a date and
2 time.

3 MS. LELAND: How much -- we need to think about
4 probably how much time needs to be allotted, or that you may
5 want to allot.

6 CHAIRMAN QUIS: Let's ask for a -- how much time do
7 you think it will take each of you to wrap up? And I know
8 you can't give us a specific time, but give us something.
9 Would be great to have one more --

10 MR. PARKER: I agree. I want it to be done. I
11 wanted it to be done tonight but it didn't happen. I want it
12 to be done in the next time.

13 I have, I believe, three witnesses left. One is the
14 continuation that Mr. Robinson wants to ask questions of, so
15 that one's not going to take long, and then I have at least
16 two experts, and then I have -- I have three parties who I'm
17 trying to -- I told Mr. Robinson at the break, I'm trying
18 to -- I need to talk with them. I don't -- I hope not to
19 call them, and if I did, they would not be long anyway.

20 CHAIRMAN QUIS: Give us a ballpark, please.

21 MR. PARKER: And closings, yes, so I would say
22 probably, I would say probably two hours for our evidence
23 probably.

24 CHAIRMAN QUIS: Mr. Robinson?

25 MR. ROBINSON: Yeah. Thank you. I have just two

1 additional witnesses now that Mr. Fluitt has finished. So
2 that would be Deborah Ensminger and Philip Picerno.

3 I would say, I don't know how long the
4 cross-examination would go, but I would say that my walking
5 them through the evidence would be 45 minutes, and then I
6 would probably have a 20 to 25 minute closing, maybe,
7 something like that. So an hour to hour and 15 for my part.

8 MS. LELAND: Looking at three to four hours?

9 MR. ROBINSON: Yeah.

10 MR. PARKER: Plan on four.

11 CHAIRMAN QUIS: The July meeting? The day of that?

12 MS. GRAHAM: Unless you want to call a special
13 meeting, because I think we should allow at least four hours.

14 CHAIRMAN QUIS: Uh-huh. True.

15 MR. PARKER: Ms. Graham will probably tell you that
16 every lawyer has underestimated the time it will take for him
17 to finish.

18 MS. GRAHAM: I recall that --

19 MS. LELAND: Or her.

20 MS. GRAHAM: -- vividly.

21 MR. PARKER: Do what?

22 MS. LELAND: Or her.

23 MR. PARKER: Yes, that's -- yes.

24 CHAIRMAN QUIS: Is there a particular date that --
25 I'll ask this of everyone. Could it be a week from now?

1 MR. PICERNO: Yeah, Mr. Chairman, the longer these
2 things spread apart the harder it is for us to keep these
3 things together.

4 CHAIRMAN QUIS: True.

5 MR. PICERNO: So it really needs to wrap up probably
6 within the next week, if everybody could come next week,
7 maybe next Tuesday and be done, because if we keep spreading
8 it out, you forget half what you've heard, and it's not fair
9 to either party.

10 CHAIRMAN QUIS: I'll be in Washington Tuesday and
11 Wednesday.

12 MR. PICERNO: Well, that ain't going to work.

13 MS. GRAHAM: Monday?

14 CHAIRMAN QUIS: Huh?

15 MS. GRAHAM: Will you be available Monday?

16 MR. PICERNO: What about Thursday, next Thursday?

17 MS. GRAHAM: 17th?

18 MR. PICERNO: I'm talking about June. I'm talking
19 about next Thursday.

20 MS. GRAHAM: I'm talking about June 27th.

21 MR. PARKER: My expert will be in Baltimore next
22 week. He leaves Wednesday.

23 MS. GRAHAM: Are you available?

24 MR. PICERNO: I'm going to be here. I'm good. My
25 question is him.

1 CHAIRMAN QUIS: Monday.

2 MS. GRAHAM: Monday?

3 CHAIRMAN QUIS: His expert won't be available next
4 week.

5 MR. PICERNO: Then you got the week of the 4th.

6 MR. PARKER: He is available the week of the 4th,
7 the 7th, July 7th.

8 MS. GRAHAM: Week of what?

9 MR. PARKER: He's available July 7th but that's the
10 week of the 4th.

11 MS. LELAND: And I think we have three staff that
12 will be on vacation, and I'm one of them. Unless you want me
13 to come back.

14 MS. GRAHAM: Do you want a Saturday.

15 (Indiscernible.)

16 MS. GRAHAM: You'll be gone all the week of
17 July 4th; correct?

18 MS. LELAND: Wayne, myself and the clerk will be
19 gone.

20 MS. GRAHAM: And so will our chair.

21 MS. LELAND: As traditional.

22 MR. PICERNO: And they've earned it.

23 MS. LELAND: Yes.

24 (Indiscernible.)

25 MR. ROBINSON: Did you already rule out Tuesday,

1 Wednesday, of next week?

2 MR. PICERNO: Our chairman's going to be gone next
3 Tuesday, Wednesday.

4 MR. ROBINSON: Yeah.

5 CHAIRMAN QUIS: Your witness will be leaving
6 Wednesday?

7 MR. PARKER: Yes, he leaves Wednesday for Baltimore,
8 but he's checking on the 14th of July.

9 MS. GRAHAM: Say the 12th of July?

10 MS. ENSMINGER: I'm not available on that week.

11 MR. ROBINSON: We're in trouble.

12 MR. PICERNO: We're a busy group.

13 MR. PARKER: Are you available any time that week,
14 Ms. Ensminger?

15 MS. ENSMINGER: (Indiscernible.)

16 MS. GRAHAM: The 12th of July, that's a Tuesday.
17 That's the week before our 19th meeting.

18 MR. PARKER: How about 21st, July 21st?

19 MR. ROBINSON: Tomorrow night?

20 MS. GRAHAM: Nick's good with that.

21 MR. PARKER: We're available July 21st if you want
22 to stick with Thursdays.

23 MS. GRAHAM: Debora's not here that week.

24 CHAIRMAN QUIS: 21st?

25 MS. GRAHAM: The 12th.

1 CHAIRMAN QUIS: You were talking about July --

2 MS. GRAHAM: Yeah, I'm talking about July 12th.
3 Debora's not going to be here that week.

4 MR. PARKER: I can't hear you.

5 THE COURT: What did you say, 21st?

6 MR. PARKER: I was looking at Thursdays because
7 y'all were wanting Thursdays. He's available the 21st. He
8 said he could do the 18th, 19th, 20th.

9 MR. PICERNO: Why don't we do it Monday the 18th,
10 and then our meeting on Tuesday we're done and everybody can
11 go on vacation.

12 MS. GRAHAM: Let's get done with our --

13 MR. PARKER: I can do the 18th.

14 MS. GRAHAM: Laura, is anybody gone the 18th?

15 MR. PICERNO: 18th.

16 CHAIRMAN QUIS: 18th.

17 MR. PICERNO: Have our meeting Tuesday and be done?

18 MR. PARKER: Do Monday night the 18th of July?

19 MS. GRAHAM: Beginning at 5:00 p.m.

20 MR. PARKER: 5:00 p.m.

21 CHAIRMAN QUIS: How about a little earlier, maybe
22 4:00?

23 MS. GRAHAM: Yeah, let's do.

24 MR. PARKER: I'm good with that. Four? Three?

25 Yeah, that's fine.

1 MS. GRAHAM: 4:00 o'clock on July the 18th.

2 MR. PARKER: Thank you.

3 MS. GRAHAM: Okay. I need --

4 MR. PARKER: Is that okay, Mr. Robinson?

5 MR. ROBINSON: Yes, it's fine with me, and with

6 Philip, I'm just checking with --

7 UNIDENTIFIED MALE: Ms. Ensminger is also available
8 on the 18th.

9 MR. ROBINSON: It's a happy, happy day.

10 MS. GRAHAM: Okay.

11 MS. LELAND: He said he could do it 3:00. Should we
12 do it earlier?

13 MS. GRAHAM: Three?

14 MS. LELAND: Because we'll be here a long time.

15 MS. GRAHAM: Three? Can you do three?

16 MR. ROBINSON: Yeah.

17 MR. PARKER: Can you do 3:00? Yeah, we're fine with
18 that, and that way if it takes --

19 MS. GRAHAM: We have one that can't be here at 3:00.

20 MS. LELAND: He can't be here?

21 MR. PICERNO: Four.

22 MS. GRAHAM: Okay. Four. All right. I need to
23 make a motion. Make a motion we continue this quasi-judicial
24 hearing until July the 18th at 4:00 p.m.

25 MR. PICERNO: Second.

1 CHAIRMAN QUIS: Okay. Any discussion? All in
2 favor.

3 (Commissioners respond aye.)

4 MR. PARKER: Thank you.

5 MR. ROBINSON: And thank you all.

6 CHAIRMAN QUIS: We're going to adjourn the meeting.

7 (Meeting adjourned.)

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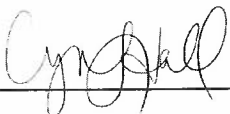
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1 CERTIFICATE OF TRANSCRIPT OF AUDIO RECORDING

2
3 This is to certify that the foregoing transcript of
4 proceedings taken at the June 23rd, 2022, meeting of the
5 Moore County Board of Commissioners is a true and accurate
6 transcript of the proceedings recorded by the Clerk of the
7 Moore County Board of Commissioners and transcribed by me to
8 the best of my ability.

9 I further certify that I was not personally present
10 during said proceedings, I am not related to any party or
11 attorney, nor do I have any interest whatsoever in the
12 outcome of this action.

13 This the 15th day of August, 2022.

14
15 

16 Cynthia L. Hall, RPR
17 Official Court Reporter
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