

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III Secretary

March 15, 2019

Chatham Capitol, LLC 400 Market Street Chapel Hill, NC 27516 -AND-Chatham County Dan LaMontagne 12 East Street, PO Box 1809 Pittsboro, NC 27312

SUBJECT: ENCROACHMENT AGREEMENT (E081-019-19-00039) 6-inch DIP Waterline SR 1863 Chatham County

Attn: Dan LaMontagne

Attached is a properly executed copy of a Right of Way Encroachment Agreement which covers the following:

Installation of 6- inch DIP waterline tap on SR1863 in Chatham County, and any associated preconstruction work.

This agreement is approved subject to the Special Provisions and plans which are attached to and made a part of the Encroachment Agreement. Any work associated with the subject project permitted under an NCDOT approved Driveway Permit shall be completed in accordance with this Encroachment Agreement.

Sincerely, Brandon H. Jones, P.E. Division Engineer

DocuSigned by: Matthew kitchen, P.E.

By: Matthew Kitchen, PE District Engineer

cc: Justin Bullock, P.E., Chatham County Maintenance Engineer's Office

 Mailing Address:
 Telephone: (336) 318-4000

 NC DEPARTMENT OF TRANSPORTATION
 Fax: (336) 318-4573

 DISTRICT OFFICE
 Customer Service: 1-877-368-4968

 PO BOX 1164
 ASHEBORO, NC 27204

Location: 300 DOT DRIVE ASHEBORO, NC 27205

Website: www.ncdot.gov

ENCROACHMENT SPECIAL PROVISIONS Chatham County (E081-019-19-00039) (Chatham County)

Approval of the encroachment agreement is made subject to the following Special Provisions:

- 1. Changes noted in red on the plans shall be incorporated into and made a part of the encroachment agreement. An executed copy of the encroachment agreement shall be available at the construction site at all times. NCDOT reserves the right to stop all work unless evidence of approval can be shown.
- **2.** Notify the following prior to beginning work:
 - District Engineer 300 DOT Drive Asheboro, NC 27205 (336) 318-4000

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- **3.** The Encroaching Party shall comply with all applicable federal, state and local environmental regulations, and shall obtain all necessary federal, state and local environmental permits, including but not limited to, those related to sediment control, stormwater, wetland, streams, endangered species, and historical sites.
- 4. All materials and construction shall be in accordance with NCDOT standards and specifications, including but not limited to the latest versions of the <u>NCDOT Standard Specifications for Roads and Structures</u>, the <u>NCDOT Roadway Standards Drawings</u>, and <u>NCDOT Policies and Procedures for Accommodating Utilities on Highway Rights of Way.</u>
- **5.** It shall be the responsibility of the Encroacher to determine the location of other utilities within the encroachment area in accordance with General Statute 87-102. The Encroacher shall be responsible for notifying other utility owners and providing protection and safeguards to prevent damage or interruption to existing facilities and to maintain accessibility to existing utilities. Costs to repair, restore, or relocate existing utilities due to this encroachment shall be the responsibility of the encroaching party.
- 6. NCDOT does not guarantee the Right of Way on this road, nor will it be responsible for any claim for damages brought by any property owner by reason of this encroachment. All Right of Way and easements necessary for construction and maintenance shall be dedicated to NCDOT with the proof of dedication furnished to the District Engineer prior to beginning work. Encroachment within the Right of Way does not imply approval for encroachment onto adjacent property. The Encroacher shall be responsible for securing any easement, permit, permission, or approval for encroachment or other use of property outside the state maintained right of way. Right of Way monuments disturbed during construction shall be referenced by a Professional Land Surveyor and reset immediately after construction.
- 7. The encroaching Party shall take whatever measures are necessary to minimize soil erosion and siltation, water pollution, and air pollution. It shall be the responsibility of the Encroaching Party to keep fully informed to comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. In the event of conflict between regulations, specifications, or requirements, the more restrictive requirement shall apply. All erosion and pollution control devices and measures shall be constructed, installed, maintained and removed by the encroaching party in accordance with all applicable Federal, State and Local laws, regulations, ordinances, and policies. No construction shall begin until all erosion control devices have been installed to the satisfaction of the District Engineer. Failure to comply with this provision shall be grounds for immediate suspension of all activities within the Right of Way.
- **8.** Effective July 1, 2010, all flagging operations within NCDOT Right of Way require qualified and trained Work Zone Flaggers. Effective July 1, 2011, qualified and trained Work Zone Traffic Control Supervisors will be required on Significant Projects. The program will include anyone working within NCDOT Right of Way including work associated with NCDOT construction and encroachment agreements.
- **9.** The encroaching party shall provide an inspector acceptable to the District Engineer for the work to be performed under this agreement. All costs and expenses for inspection shall be the responsibility of the encroaching party. The inspector's name, telephone and qualifications shall be provided in writing to the District Engineer prior to beginning construction.

- **10.** A pre-construction conference between NCDOT, the Encroaching Party or the Encroaching Party's designated representative, and the contractor(s) is required prior to commencing any work within the Right of Way.
- **11.** Storage of materials or equipment within the Right of Way is prohibited. During non-working hours, equipment shall be parked as close to the right of way line as possible and shall be properly barricaded so that no equipment obstruction shall be within the Clear Recovery Area.
- **12.** Construction equipment or vehicles shall not be parked on the pavement or roadway shoulder.
- **13.** Construction is authorized to be performed on Monday through Friday during the hours between sunrise and sunset.
- **14.** No lane(s) of traffic shall be closed, or alteration of the traffic flow will be allowed on or during holidays, holiday weekends, special events, and/or any other time when traffic is unusually heavy. Holidays and holiday weekends shall include Easter, Memorial Day, Independence Day, and Labor Day.
- **15.** The encroaching party may delegate the performance of certain provisions of this agreement to contractors or other parties. However, this shall not in any way release the encroaching party from its obligations to the terms and provisions of the encroachment.
- **16.** The Encroaching Party shall provide the District Engineer with "as-built" plans upon completion of the installation.
- **17.** Written notification shall be provided to the District Engineer upon completion of the work proposed under this agreement. Materials test frequencies and methods shall be in conformance with the NCDOT Materials and Tests guidelines, or as directed by NCDOT. A letter of approval, or recommendations for compliance, will be provided upon receipt and review of test reports.
- **18.** The encroaching party or the contractor(s) for the encroaching party may request a written letter stating that the encroachment has been satisfactorily completed by making a request in writing to the appropriate County Maintenance Engineer. The letter of completion does not relieve the encroaching party from any obligations or responsibilities under the terms and provisions of the encroachment or from obligations or responsibilities for making repairs needed for a reasonable time period.
- 19. The traveling public shall be warned of construction with complete and proper signing and traffic control devices in accordance with the current <u>Manual on Uniform Traffic Control Devices (MUTCD</u>). No work shall be performed in the Right of Way unless this requirement is satisfied. NCDOT reserves the right to require a written traffic control plan for encroachment operations. Traffic control devices and operations shall include, but are not limited to the following:
 - Adequate and appropriate advance warning signs for any and all work zones, closed or obstructed areas.
 - "End Construction" signage beyond the end of all work zones.
 - Adequate and appropriate delineation and control devices for all work zone areas including but not limited to lane closures, disturbed areas, and active work sites.
 - Properly trained and equipped flagmen.
 - Proper maintenance of all traffic control devices, including but not limited to proper signage and controls during periods of inactivity and removal of inappropriate traffic control signage and/or devices.
- 20. The Encroacher agrees to provide traffic control devices, lane closures, road closures, positive protection and/or any other warning or positive protection devices necessary for the safety of road users during construction and any subsequent maintenance. This shall be performed in conformance with the latest <u>NCDOT Roadway</u> <u>Standard Drawing and Standard Specifications for Roads and Structures</u> and Amendments or Supplements thereto. When there is no guidance provided in the Roadway Standard Drawings or Specifications, comply with the <u>Manual on Uniform Traffic Control Devices for Streets and Highways</u> and Amendments or Supplement thereto. Information as to the above rules and regulations may be obtained from the Division Engineer.
- **21.** Traffic shall not be detoured or rerouted without the prior written approval of the Division Engineer. Two-way traffic shall be maintained at all times.
- **22.** In the event work is completed in less time than permitted, the normal traffic pattern shall be restored as soon as the work has been completed.

- **23.** The Traffic Services Supervisor shall be notified at (910) 947-3930 in Carthage, NC, prior to beginning work on the Right of Way if there are existing NCDOT signs, traffic signals, or signal equipment in or near the proposed work zone. Costs to relocate, replace, or repair NCDOT signs, signals, or associated equipment shall be the responsibility of the Encroacher.
- **24.** Excavation within 500 feet of a signalized intersection will require notification by the party of the second part to the Division Traffic Engineer at telephone number (910) 947-3930. All traffic signal or detection cables must be located prior to excavation.
- **25.** Access to the site covered under this agreement shall remain closed (i.e. barricaded) to traffic until all requirements relating to traffic control and signalization have been satisfied.
- **26.** Ingress and egress shall be maintained to businesses and dwellings. Driveways altered during construction shall be restored to a condition equal to that prior to beginning construction.
- **27.** Excavated material shall not be placed on the paved roadway surface at any time unless specifically approved by the District Engineer. Drainage structures shall not be blocked with excavated material at any time.
- **28.** Trenches/excavations/bore pits shall not remain open longer than a 24-hour period. No trench/excavation/bore pit shall be left open overnight except in the event of emergency, in which case the encroacher shall notify the District Engineer and inform him as to the nature and anticipated duration of the emergency. Any excavation left open overnight due to emergency shall be protected and delineated with complete, adequate and appropriate safety and traffic control devices.
- **29.** Excavated areas adjacent to pavement having more than a 2 inch drop shall be backfilled and made safe with a 6:1 or flatter slope and shall be designated by appropriate delineation during periods of construction inactivity including, but not limited to, night and weekend hours.
- **30.** All excavations inside the theoretical 1:1 slope from the existing edge of pavement to the bottom of the nearest trench wall shall be made in accordance with the following conditions:
 - Traffic shall be moved to a travel lane outside the limits of a theoretical 1:1 slope from the bottom of the nearest trench wall to the pavement surface.
 - Active excavation shoring such as sheet piling shall be installed. The design of the shoring shall include the effects of traffic loads. The design shall be designed and sealed by an engineer registered in North Carolina. Shoring plans and design calculations shall be submitted to the Division Engineer for review prior to construction. **Trench boxes shall not be accepted as shoring**.
 - The trench backfill shall meet the Statewide Borrow Criteria. The trench shall be backfilled in accordance with Section 300-6 of the latest version of the <u>NCDOT Standard Specifications for Roads and</u>
 <u>Structures.</u>
 - At the first sign of trench failure, the trench shall be immediately backfilled with materials consisting of A-1, A-3, A-2-4 soils or A-4 soils having a maximum of 45% passing a No. 200 sieve and a maximum P.I. of 6. All work shall cease, and the Division Engineer shall be contacted. The Encroaching party or contractor shall repair any damage to the pavement caused by the excavation.
 - All trench excavation inside the limits of the theoretical 1:1 slope from the bottom of the nearest trench wall to the pavement surface shall be completely backfilled and compacted at the end of each construction day. No portion of the trench shall be left open overnight.
 - The length of parallel excavation shall be limited to the length necessary to install and backfill on joint of pipe at a time, not to exceed twenty-five (25) feet.
- **31.** Drainage structures and systems shall be preserved and protected. Any structure which is disturbed or damaged during construction shall be immediately restored to its original condition at no expense to the Department of Transportation. All utility installations shall be designed and constructed so as not to hinder, disrupt or interfere with existing storm drainage. All facilities shall pass over or under highway drainage facilities.
- **32.** The dry bore method of boring shall be utilized and made perpendicular to the roadway. Any bore exceeding 6 inches shall be encased. Encasements shall extend from ditch line to ditch line in cut sections, 5 feet beyond toe of slope in fill sections, and 3 feet behind curb sections. When the directional boring method is used an overbore shall not be more than two (2") inches greater than the diameter of the pipe encasement. An overbore exceeding two (2") inches greater than the diameter of the pipe or encasement will be considered if the encroachment agreement includes a statement signed and sealed by a North Carolina Registered Professional

Engineer indicating that an overbore in excess of two (2") inches of the pipe or encasement will arch and no damage will be done to the pavement or subgrade.

- **33.** At points where the utility is placed under existing storm drains the trench shall be backfilled with Class B concrete up to the outside diameter of the existing pipe.
- **34.** Hydrants shall be placed behind the roadway ditch and as near the right of way line as possible.
- **35.** The grade of top of pipe or casing, including services, shall provide the following minimum bury:
 - Crossing under roadways 3 feet from pavement surface
 - Longitudinal installations 3 feet from finished grade
 - Crossing under ditches 2 feet from ditch line
- **36.** All service connections shall be bored unless construction is of ductile iron or equal quality material with satisfactory leakproof joints.
- **37.** All blow-off assemblies shall be directed away from any travel lane.
- **38.** All blow-off valves, vaults, manholes and other appurtenances within the NCDOT right of way shall be located behind the ditch and at the right of way line. Manholes and/or vaults shall not be placed in the ditch line, side slopes of ditches or in the pavement.
- 39. All manholes and/or vaults shall be of an NCDOT pre-approved design. Manholes or vaults shall be designed for HS-20 live loads and conform to the latest versions of the <u>NCDOT Standard Specifications for Roads</u> <u>and Structures</u>, the <u>NCDOT Roadway Standards Drawings</u>. Any proposed structure which is not of a design pre-approved by NCDOT shall be submitted to NCDOT with details and design calculations sealed by a Professional Engineer for approval prior to construction. A list of approved structures may be obtained from NCDOT Design Services at 919-250-4128.
- **40.** Manhole rings and covers, and valve covers shall be a traffic bearing type designed for HS-20 loading and approved for use within NCDOT right of ways. All such appurtenances shall be installed flush to or below the surface of the ground in such a manner that they do not pose obstacles or obstructions to pedestrians, vehicles, equipment, or roadway maintenance operations.
- **41.** All vaults, manholes and other appurtenances within the NCDOT right of way shall be located behind the ditch and at the right of way line. Manholes and/or vaults shall not be placed in the ditch line, side slopes of ditches or in the pavement.
- **42.** Manholes/Valves should not be located in the pavement or shoulders of any State road. Exceptions may be made on roads at those locations where manholes/valves are essential parts of existing lines that are permitted to remain in place under existing and proposed roadways. Every effort should be made to minimize such installations and to avoid their location in wheel paths or at street intersections, insofar as practicable. Manholes should be designed and located in such a manner that will cause the least interference with roadway users, other utilities, and future highway expansion.
- **43.** Pavement cuts shall be allowed for tapping purposes only and at the dimensions and locations shown on the approved plans.
- **44.** All disturbed soil areas shall be promptly seeded and mulched. The encroaching party shall obtain the District Engineer's approval of ditch and shoulder grading prior to seeding and mulching.
- **45.** All earth areas shall be regraded, seeded and mulched in accordance with Section 1660 of the latest version of the <u>NCDOT Standard Specifications for Roads and Structures</u>. The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

<u> March 1 – August 31</u>		<u>September 1 – February 28</u>	
50#	Tall Fescue	50#	Tall Fescue
10#	Centipede	10#	Centipede
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)
500#	Fertilizer	500#	Fertilizer

4000# Limestone

4000# Limestone

- Add 10 pounds of Kobe or Korean Lespedeza and 10 pounds of Millet to the above mixture from May 1 to August 31.
- On cut and fill slopes 2:1 or steeper, Centipede shall be applied at the rate of 5 pounds per acre and add 20# Sericea Lespedeza from January 1 to December 31.
- Fertilizer shall be 10-20-20 analysis. Upon written approval of the Engineer, a different analysis may be used provided the 1-2-2 ratio is maintained and the rate of application is adjusted to provide the same amount of plant food as a 10-20-20 analysis.
- **46.** The encroaching party or any agent acting on behalf of the encroaching party shall exercise care and provide any and all necessary measures and precautions to preserve and protect existing landscaping and roadside plantings within the right of way. Existing landscaping and landscape plantings shall not be disturbed unless approved by the NCDOT Division 8 Roadside Environmental Engineer. All costs associated with restoration or replacement of landscaping or landscape plantings damaged or destroyed by the encroaching party or its agents shall be the responsibility of the encroaching party.
- **47.** In the event it is determined that there is a conflict between the existing landscaping or landscape plantings and the proposed utility installation, the encroaching party or any agent acting on behalf of the encroaching party shall not proceed until the Division 8 Roadside Environmental Engineer has been notified and the conflict has been resolved to his satisfaction.
- **48.** Upon completion of the work authorized under this agreement, the encroaching party shall notify the Division 8 Roadside Environmental Engineer for inspection of the work to verify that landscaping and landscape plantings are acceptable. No bonds shall be released until this requirement has been satisfied.
- **49.** The Division 8 Roadside Environmental Engineer can be contacted as follows:

Roadside Environmental Engineer 902 N. Sandhills Boulevard Aberdeen, NC 28315 (910-944-2344)

- **50.** The area of proposed construction covered under this agreement lies within the limits of an NCDOT construction project and is subject to the following conditions:
 - Relocation, modification, or adjustment of the proposed utility necessary for the construction of the NCDOT project shall be the responsibility of the Encroaching party and shall be done at no expense to the Department of Transportation upon notification by the Department.
 - The NCDOT project shall have priority over all others. Work performed under this agreement shall be performed either prior to the NCDOT operations, or after the NCDOT project is completed. If the work is performed prior to the NCDOT project, the encroaching party shall obtain written approval from the District Engineer to commence work within the project limits. No work permitted under this encroachment shall be performed during the period of the NCDOT project unless approved in writing by the District Engineer. NCDOT shall not be held liable for any delays to work proposed under the encroachment agreement.
 - Installations proposed within an NCDOT contract project shall be subject to approval by the contractor for the project. The encroaching party shall obtain a waiver in writing from the project contractor releasing NCDOT from liability for damages or delays and granting access within the project limits.
- **51.** The encroaching party shall assume all responsibility, obligation, and liability for maintenance of the structure permitted under this encroachment agreement. This condition shall be conveyed in any future buy, lease, sell or rental agreement. In the event that the encroaching party, or any future responsible party should fail to satisfy this condition, NCDOT reserves the right close or remove the structure.
- **52.** The utility proposed under this agreement shall be placed at or near the existing right of way line at a location acceptable to the District Engineer.
- **53.** Any disturbed or damaged guardrail shall be reset in accordance with current NCDOT standards or as directed by the District Engineer.

- 54. The following minimum dimensions shall apply where the method of installation is directional drilling or boring:
 - Drilled hole diameter 2"-6" •

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- Minimum Depth of Cover 6'
- Drilled hole diameter >6" to 15" • Drilled hole diameter >15" to 36"
- Minimum Depth of Cover 12 times the hole diameter Minimum Depth of Cover -15'
- 55. Notify the District Engineer's office at (336) 318-4000, prior to beginning work. The encroaching party shall provide the District Engineer with the following information at least 3 working days prior to commencing operations:
 - Proposed schedule of operations
 - The name(s) and phone number(s) of project contact person(s). (See Special Provision 10) •
 - Tentative locations where directional bores will commence and terminate.
- **56.** All activities or operations approved under this agreement which fall within the project limits or contract period of any active NCDOT project shall require a waiver from the prime Contractor for the NCDOT project, granting the encroaching party access within the project and releasing NCDOT from claims against NCDOT by the prime Contractor resulting from the encroaching party's operations or activities. The NCDOT project shall have precedence and priority over all others.

Revised 8/3/2017 #84

ROUTE	_1863	PROJECT	E081-019-19-00039 Sunset Grove Sub. 2	_ COUNTY OF	STATE OF NORTH CAROLINA Chatham
DEF	PARTMENT OF TRAN -AND- Chatham Capital	SPORTATION		THREE ENCROAC PRIMARY A	PARTY RIGHT OF WAY CHMENT AGREEMENT ON AND SECONDARY SYSTEM
	-AND- Chatham Cour	nty			
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					party of the third part,
Route(s) Mt. Gilea	THAT WHEREAS, the <u>1863 (Valley Ln)</u> d Church Road (SR 17	party of the secor (00) and Valley La	WITNESSET nd part desires to encroa , locate ane (SR 1863)	H ich on the right of id <u>3,050 feet ea</u>	way of the public road designated as st of the intersection of
with the o	construction and/or ere	ction of: <u>45 If of</u>	f 6" DIP waterline (tappin htrol along new waterline	ig sleeve and gate easement	e valve is to be outside
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beg	That it is agreed by both pa un within one (1) year from ond part from the party of t	arties that this agreen the date of authoriz he first part.	ment shall become void if ac ation by the party of the first	tual construction of t part unless written w	he work contemplated herein is not vaiver is secured by the party of the
FORM F Rev. Jul	R/W 16.6 y 1, 1977				

During the performance of this contract, the second party, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor"), agrees as follows:

- <u>Compliance with Regulations</u>: The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the U. S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be a. amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the b. grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations either by competitive C. bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives d. issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
- Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to,
- (1) withholding of payments to the contractor under the contract until the contractor complies, and/or
- (2) cancellation, termination or suspension of the contract, in whole or in part.
- Incorporation of Provisions: The contractor shall include the provisions of paragraphs "a" through "f" in every subcontract, f. including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Department of Transportation to enter into such litigation to protect the interests of the State, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

That when title to the subject that constitutes the aforesaid encroachment passes from the party of the second part and vests in the party of the third part, the party of the third part agrees to assume all responsibilities and rights and to perform all obligations as agreed to herein by the party of the second part.

R/W (166) : Party of the Second Part certifies that this agreement is true and accurate copy of the form R/W (166) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

WITNESS:

WITNESS:

Chatham County 12 East Street, PO Box 1809

DEPARTMENT OF TRANSPORTATION

BY: Matthew Brandon H. Jones, PE DIVISION ENGINEER DE44C69F4BC74D9.

Dist Engineer manao

Chatham Capital, LLC

400 Market Street

Chapel Hill, NC 27516

Second Party

Ban LaMontagne, Interim County Manager

Chatham County

Pittsboro, NC 27312

Third Party



CHATHAM CAPITAL, LLC	SARAH O'BRIEN
NAME OF FIRM	NAME OF CONTACT
sarah.bpropnc@gmail.com	919-933-4422
EMAIL ADDRESS	PHONE NUMBER
DN(S) FIRM(S) FINANCIALLY RESPONSIBLE FOR T	HIS LAND-DISTURBING ACTIVITY.
ON(S) FIRM(S) FINANCIALLY RESPONSIBLE FOR TI CHATHAM CAPITAL, LLC	HIS LAND-DISTURBING ACTIVITY.
DN(S) FIRM(S) FINANCIALLY RESPONSIBLE FOR T CHATHAM CAPITAL, LLC NAME OF PERSON/FIRM	HIS LAND-DISTURBING ACTIVITY. SARAH O'BRIEN NAME OF CONTACT
DN(S) FIRM(S) FINANCIALLY RESPONSIBLE FOR T CHATHAM CAPITAL, LLC NAME OF PERSON/FIRM 400 MARKET STREET, SUITE 115	HIS LAND-DISTURBING ACTIVITY. SARAH O'BRIEN NAME OF CONTACT 400 MARKET STREET, SUITE 115
ON(S) FIRM(S) FINANCIALLY RESPONSIBLE FOR T CHATHAM CAPITAL, LLC NAME OF PERSON/FIRM 400 MARKET STREET, SUITE 115 MAILING ADDRESS	HIS LAND-DISTURBING ACTIVITY. SARAH O'BRIEN NAME OF CONTACT 400 MARKET STREET, SUITE 115 STREET ADDRESS

SUMMARY INFORMATION

DEVELOPMENT NAME: CASE NUMBER: TRANSACTION NUMBER: OWNER/DEVELOPER:

CHATHAM COUNTY PIN: ZONING DISTRICT: DEED BOOK/PAGE - DEED DATE:

TOTAL ACREAGE: PROPOSED USE: PHASE 2 TOTAL ACREAGE: PHASE 2 LOT DATA:

TOTAL LOTS IN PHASE 2: RESIDENTIAL DENSITY: MIN. SQUARE FOOTAGE: MAX. SQUARE FOOTAGE: SUNSET GROVE SUBDIVISION - PHASE 2

CHATHAM CAPITAL, LLC 400 MARKET STREET CHAPEL HILL, NC 27516 PH: 919-414-2047

9773-60-1790 R-1, COUNTY ZONING 1676/0506 - 2013

765/0244 - 1998 108.8 ACRES

SINGLE FAMILY SUBDIVISION 42.9 ACRES

25 LOTS + 2 HOA LOTS 0.58 DU/ACRE 40,023 S.F. 129,246 S.F.





REVISIONS

NO.	DATE	DESCRIPTION
\vdash		
\vdash		
\square		

PROJECT INFORMATION

PROJECT MANAGER:	RJB
DRAWN BY:	AJF
APPROVED BY:	RJB
DRAWING NAME:	BASE-SUNSETGRO

PROJECT NAME

SUNSET GROVE SUBDIVISION PHASE 2

CHATHAM COUNTY NORTH CAROLINA

DEVELOPER

CHATHAM CAPITAL LLC

400 MARKET STREET CHAPEL HILL, NC 27516

SHEET NAME

COVER SHEET

DRAWING SCALE

AS SHOWN

PLAN SET CONSTRUCTION DRAWINGS

DATE 3-8-2019

SHEET NUMBER

COVER

PUBLIC IMPROVEMENT QUANTITIES - PHASE 2 ONLY			
PHASE NUMBER	2		
NUMBER OF LOTS	25 RESIDENTIAL LOTS + 2 HOA LOTS		
LOT NUMBERS BY PHASE	7-31		
NUMBER OF UNITS	25		
LIVABLE BUILDINGS	25		
OPEN SPACE	NO		
NUMBER OF OPEN SPACE LOTS	0		
PUBLIC WATER (LF)	4592 LF		
PUBLIC SEWER (LF)	0 LF		
PUBLIC STREET (LF)	2841 LF		
PUBLIC SIDEWALK (LF)	0 LF		
EXIST. PUBLIC STREET IMPROVE. (LF)	0 LF		
NEW STREET CONSTRUCTION (LF)	2841 LF		
STREET SIGNS (EA)	2 EA		

NOTES

1. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH ALL CHATHAM COUNTY AND NCDOT STANDARDS AND SPECIFICATIONS. 2. ALL STREETS SHOWN ON THESE PLANS SHALL HAVE THE FULL WIDTH OF THE RIGHT-OF-WAY CLEARED AND GRADED WITHIN 50 FEET OF ALL STREET INTERSECTIONS. 3. BOUNDARY SURVEY PROVIDED BY CE GROUP, DATED FEBRUARY 2016. 4. TOPOGRAPHIC MAPPING PROVIDED BY SULLIVAN SURVEYING, 1143 D EXECUTIVE CIRCLE, CARY, NC 27511 (919-469-4738), DATED FEBRUARY 2016 AND AUGMENTED BY CHATHAM COUNTY GIS. ALL BEARINGS ARE NC GRID BEARINGS, NAVD 88 DATUM UTILIZED. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES. 5. ANY LOCATION OF LANDSCAPING WILL BE FIELD COORDINATED BY THE DEVELOPER TO ELIMINATE CONFLICTS.

8. THE CONTRACTOR IS RESPONSIBLE FOR ANY CONFLICTS WITH EXISTING OR PROPOSED UTILITIES. TRAFFIC SIGNAL DEVICES, UTILITY POLES, STREET SIGNS, ETC. 9. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS/HER ACTIVITIES. CALL UTILITY LOCATING SERVICE 72 HOURS PRIOR TO DIGGING AT 1-800-632-4949.

10. ALL OPEN SPACE NOT OWNED WITHIN AN INDIVIDUAL LOT SHALL BE MAINTAINED BY THE SUBDIVISION HOMEOWNERS ASSOCIATION. 11. THE MINIMUM CORNER CLEARANCE FROM THE CURB LINE OR EDGE OF PAVEMENT OF INTERSECTING STREETS SHALL BE AT LEAST TWENTY (20) FEET FROM THE POINT OF TANGENCY OF THE RADIUS CURVATURE, OR TWENTY (20) FEET FROM THE INTERSECTION OF RIGHT OF WAY LINES, WHICHEVER IS GREATER. THE RADIUS OF THE DRIVEWAY SHALL NOT ENCROACH ON THE MINIMUM CORNER CLEARANCE. 12. WITHIN THE AREA OF A DEFINED SIGHT TRIANGLE, THE AREA SHALL BE CLEAR OF OBSTRUCTIONS GREATER THAN FORTY-EIGHT (48) INCHES IN HEIGHT AS MEASURED FROM THE SURFACE ELEVATION OF ADJACENT DRIVEWAY OR ROADWAY. SIGHT DISTANCE TRIANGLES ARE DENOTED ON PLANS AS 10'X70' AND ARE TO BE RECORDED AT

13. PARKING REQUIRED BY DETACHED HOMESITES WILL BE PROVIDED IN THEIR GARAGES AND ON THEIR OWN DRIVEWAYS. ON-STREET PARKING AREAS ARE NOT 14. CONTRACTOR IS RESPONSIBLE FOR LOCATION AND CONTINUAL SERVICE FOR ALL EXISTING SERVICES THAT ARE TO REMAIN ON THE PROPERTY. 15. THE CONTRACTOR SHALL VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES, PRIOR TO STARTING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. 16. ALL WATERLINE VALVES AND OTHER APPURTENANCES SHALL BE LOCATED OUTSIDE THE PAVEMENT AND DITCHES AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE. NOTE GATE VALVES SHALL BE LOCATED OUTSIDE OF PAVEMENT AND NOT IMMEDIATELY AT THE EDGE OF PAVEMENT.

ACTIVITY NARRATIVE

THE DEVELOPER'S INTENT IS TO CREATE A SUBDIVISION WITHIN THIS PARCEL THAT RETAINS THE NATURAL VIEWS OF THE SITE INCLUDING BUFFER SPACE, CREEKS AND OTHER NATURAL AREAS. THE DEVELOPMENT IS AIMED AT MAINLY OVERSIZED LOTS FOR THE DEVELOPMENT OF A COMMUNITY, BUT STILL PROVIDES ISOLATION TO THOSE WISHING TO LIVE ON A VERY PRIVATE PARCEL.

GENERAL NOTES

2012 N The follow Raleigh, M	CDOT STANDARD SPECIFICATIONS FOR ROAD AND ST wing Roadway Standards as appear in "Roadway Standard Drawings" N. C., Dated 2012 are applicable to this project and by reference	UCTURES - ROADWAY ENGLISH STANDARD ighway Design Branch - N. C. Department of Transp hereby are considered a part of these plans:	DRAWINGS ortation - 1. ALL EASEMENTS ARE O UNLESS OTHERWISE NOTED. 2. AREAS COMPUTED BY COO
STD.NO. 200.02 225.02 225.04 225.06 560.01 654.01 700.05 838.01 838.45 840 14	TITLE Method of Clearing - Method II Guide for Grading Subgrade - Secondary and Local Method of Obtaining Superelevation - two lane pavement Method of Grading Sight Distance at Intersections Method of Shoulder Construction Pavement Repairs Tying Proposed Pavement to Existing Pavement Concrete Endwall for Single and Double Pipe Culverts Notes for Reinforced Concrete Endwall	STD.NO.TITLE876.01Rip Rap in Channels876.02Guide for Rip Rap at Pipe Outl876.04Drainage Ditches with Class "B1101.01Work Zone Advance Warning Sign1101.02Temporary Lane Closures 2-Lane1101.02Temporary Lane Closures - Lane1101.11Traffic Control Design Tables1110.01Stationary Work Zone Signs1135.01Cones1150.01Elagging Devices	<pre>sets sets sets sets sets sets sets set</pre>
840.14 840.15 840.19 840.20 862.01 862.02 862.03	Brick Drop Inlet Brick Drop Inlet Drop Inlet Frame and Grates Concrete Grated Drop Inlet Type 'D' Frames and Wide Slot Flat Grates Guardrail Placement Guardrail Installation Structure Anchor Units	1205.01 to 1205.09 Pavement Markings 1205.01 to 1253.01 Raised Pavement Mar 1261.01 to 1262.02 Guardrail & Barrier 1264.01 Object Markers Types 1264.02 Object Markers Installation 1605.01 Temporary Silt Fence 1607.01 Gravel Construction Entrance 1622.01 Guide for Temporary Berms and 1630.02 Silt Basin Type B 1630.03 Temporary Silt Ditch 1630.05 Temporary Diversions 1631.01 Matting Installation 1632.03 Rock Inlet Sediment Trap Type 1633.02 Temporary Rock Silt Check Typ 1640.01 Coir Fiber Baffle	PReservePRn Deliniators1. SAWCUT AND REMOVE IPROVIDE STRAIGHT LATERALPROPOSED WIDENING WHERE2. FOR DETAILS, REFERENCEDRAWINGS AS LISTED ON TISlope Drain3. MINIMUM CLEARANCE FROMSlope Drain3. MINIMUM CLEARANCE FROMShall BE AT LEAST TWENT4. WITHIN THE SIGHT TRIALOBSTRUCTION BETWEEN TWOABOVE THE CURB LINE ELENO CURBING EXISTS.5. THE CONTRACTOR WILL OFre BCFACILITIES.

PAVEMENT SCHEDULE				
С3	PROP. 2.0" MIN. ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD., IN EACH OF TWO LIFTS			
D1	PROP. 4" MIN. ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.			
J1	PROP. 8" AGGREGATE BASE COURSE.			
т	PROP. EARTH MATERIAL.			

NOTES

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5. ANY LOCATION OF LANDSCAPING WILL BE FIELD COORDINATED BY THE DEVELOPER TO ELIMINATE CONFLICTS. 6. THE DEVELOPER WILL NOT INSTALL STREET LIGHTS.

7. ALL NEW UTILITY LINES MUST BE UNDERGROUND. 8. THE CONTRACTOR IS RESPONSIBLE FOR ANY CONFLICTS WITH EXISTING OR PROPOSED UTILITIES, TRAFFIC SIGNAL DEVICES, UTILITY POLES, STREET SIGNS, ETC. 9. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS/HER ACTIVITIES. CALL UTILITY LOCATING SERVICE 72 HOURS PRIOR TO DIGGING AT 1-800-632-4949.

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SPECIFICALLY PROVIDED. 14. CONTRACTOR IS RESPONSIBLE FOR LOCATION AND CONTINUAL SERVICE FOR ALL EXISTING SERVICES THAT ARE TO REMAIN ON THE PROPERTY. 15. THE CONTRACTOR SHALL VERIFY CONDITIONS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES, PRIOR TO STARTING CONSTRUCTION AND

NOTIFY THE ENGINEER OF ANY DISCREPANCIES. 16. NCDOT APPROVAL IS REQUIRED PRIOR TO COMMENCMENT OF WORK IN THE RIGHT OF WAY ALONG MT. GILEAD CHURCH ROAD (DRIVEWAY PERMIT AND 3-PARTY)

EXISTING SURVEY NOTES:



when no rain is expected for the installation timeframe. g. Remove pumps, temporary piping and backfill area. Stabilize disturbed area with seed per NPDES stabilization chart on sheet D-2. 6. Install storm and protect inlets with block and gravel inlet controls, sediment traps or other

- Sediment Control Officer.

2. NPDES SELF-INSPECTION NOTE: AS OF MARCH 10, 2003, ALL CONSTRUCTION SITES EQUAL TO OR GREATER THAN ONE DISTURBED ACRE ARE REQUIRED TO HAVE EROSION CONTROL BEST MANAGEMENT PRACTICES AND INSTALLED SEDIMENT CONTROL DEVICES INSPECTED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT PRODUCING GREATER THAN 0.5 INCHES OF RAINFALL, WITHIN NORMAL BUSINESS HOURS. IN NORTH CAROLINA, INSPECTIONS MUST COMPLY WITH THE NPDES PROGRAM AS WELL AS STATE WATER QUALITY AND LOCAL ORDINANCE REQUIREMENTS. THIS MEANS ADHERING, IN PART, TO THE NC GENERAL PERMIT (NCG010000) FOR CONSTRUCTION ACTIVITIES. IT IS THE RESPONSIBILITY OF THE OWNER OR OPERATOR (I. E., DEVELOPER, GENERAL CONTRACTOR OR OTHER FINANCIALLY-RESPONSIBLE PARTY) TO CONDUCT OR DELEGATE THESE INSPECTIONS. WRITTEN DOCUMENTATION OF THESE INSPECTIONS ALONG WITH A COPY OF APPROVED EROSION & SEDIMENT CONTROL PLANS MUST BE POSTED AT THE CONSTRUCTION SITE.

CENTERED ON EXISTING STRUCTURES

ORDINATE METHOD. RZIONTAL GROUND DISTANCES MEASURED

HOUT THE BENEFIT OF A TITLE AND IS HICH MAY BE DISCLOSED BY A FULL TITLE

CONTROL CORNER" SHALL NOT BE DEEMED HAN ANY OTHER POINT SHOWN HEREON. DINATES AND MSL ELEVATIONS TAKEN FROM /AN SURVEYING, DATED 2013-2014. EPRESENT A BOUNDARY SURVEY AND CONFORMS

ROJECT NOTES:

EXISTING PAVEMENT (FULL DEPTH) TO L AND LONGITUDINAL JOINTS TO TIE IN **REQUIRED**.

ICE LIST OF 2012 NCDOT ROADWAY STANDARD HIS SHEET.

ROM CURB LINE OF INTERSECTING STREETS TY (20) FEET FROM THE POINT OF TANGENCY. EANGLES SHOWN ON THIS PLAN, NO

(2) FEET AND EIGHT (8) FEET IN HEIGHT VATION OR THE NEAREST TRAVELED WAY, IF

COORDINATE WITH ALL EXISTING UTILITIES JECT WORK HAS NO IMPACT ON EXISTING

CONSTRUCTION SEQUENCE

1. Schedule a preconstruction conference with the Chatham County Lead Erosion and Sediment Control Officer and Chatham County Senior Watershed Specialist, Morgan DeWit, (919-542-8268). Obtain a land-disturbing permit.

2. Install gravel construction pad, temporary diversions with ditch lining, silt fence, sediment basins, temporary pipe slopes or other measures as shown on the approved plan. Note that stream crossing shall not be installed until erosion control has been installed and inspected and approved by Chatham County, see item #5 below. Clear only as necessary to install these devices. Ensure ditch lining on temporary diversions and seed berms and basins immediately after construction.

3. Call for an onsite inspection by the Lead Erosion and Sediment Control Officer to obtain a Certificate of Compliance.

4. Add wattles in temporary diversion ditches when other erosion control is being installed, prior to clearing & grubbing. Once onsite inspection is approved, begin clearing and grubbing. Maintain erosion control devices as needed. Confirm installation of wattles in ditch lines as indicated on the plans. Note that additional wattles may be required based on performance of

5. Install stream culvert at Sunset Grove Drive roadway stream crossing. Begin earthwork operations in conjunction with the construction of the permanent culvert.

a. All excavation shall be performed only in dry or isolated areas of the work zone.

b. Install upstream pump and flexible piping for pump-around. Pumps and hoses shall be of sufficient size to dewater the work area.

c. Place upstream stream plug. Place downstream plug to protect culvert installation area. Begin pumping operations for stream diversion.

d. Place dewatering pump as appropriate to dry out the work area between plugs as needed. e. Ensure any pumped water is not being contaminated with sediment loss from this site. If silt laden water is noticed, all discharge from the pump-around must be run through a sediment bag or stilling basin prior to discharge into stream.

f. Install culvert in accordance with the plans. Culvert installation should occur in dry weather

approved measures as shown on the plan.

7. Stabilize site as areas are brought up to finish grade with vegetation, paving, ditch linings, etc. All roadside ditches will be required to have matting and wattles as they are installed per plan sheets. Seed and mulch denuded areas per Ground Stabilization Time Frames. 8. When construction is complete call for an interim inspection by the Lead Erosion and

9. If site is approved, convert the temporary skimmer basin located at SCM-C. Remove and dispose of any accumulated sediment in the basins.

a. Ensure the capacity is available in the basin with an as-built topo of the basin and forebay. Provide an as-built survey of the riser structure, barrel, dam, and emergency spillway. If the capacity is sufficient, plant the littoral shelf and close the drain value to start accumulating water in the basin.

10. Remove temporary diversions, temporary drainage pipes, silt fence, sediment basins, etc., and seed out/stabilize any resulting bare areas relating to the new roadway construction. All remaining permanent erosion control devices, such as velocity dissipaters, should be installed. 11. When vegetation has become established, call for a final site inspection by the Lead Erosion and Sediment Control Officer. Obtain a Certificate of Completion.

NPDES INFORMATION

1. NPDES STABILIZATION CHART IS FOUND ON SHEET D-2.





REVISIONS

NO.	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT MANAGER:	RJB
DRAWN BY:	AJF
APPROVED BY:	RJB
DRAWING NAME:	BASE-SUNSETGRO

PROJECT NAME

SUNSET GROVE **SUBDIVISION** PHASE 2

CHATHAM COUNTY NORTH CAROLINA

DEVELOPER

CHATHAM CAPITAL LLC

400 MARKET STREET CHAPEL HILL, NC 27516

SHEET NAME

GENERAL NOTES

DRAWING SCALE

AS SHOWN

PLAN SET CONSTRUCTION DRAWINGS

DATE

3-8-2019

SHEET NUMBER









Summary of Structures						
	Rational	Area	Q_10	Reference	Depth	
	С	(ac)	(cfs)	Elevation	(ft)	
				(TOP)		
Т	0.60	0.10	0.4	495.50	4.8	
т	0.50	1.09	3.2	499.50	5.0	
т	0.60	0.01	0.0	388.00	0.0	
Т	0.60	0.01	0.0	393.00	4.6	
Т	0.60	0.14	0.5	395.50	6.0	
Т	0.50	3.10	9.2	395.50	5.0	
Т	0.60	0.29	1.0	396.00	7. <mark>1</mark>	
Т	0.50	3.49	10.3	396.00	5.0	
/ALL	0.00	448.00	0.0	391.45	10.3	
ALL	0.00	26.30	0.0	424.13	5.9	
2	0.70	9.39	38.9	389.60	6.6	







REVISIONS

NO.	DATE	DESCRIPTION
· · · · ·		

PROJECT INFORMATION

PROJECT MANAGER:	RJB
DRAWN BY:	AJF
APPROVED BY:	RJB
DRAWING NAME:	BASE-SUNSETGRO

PROJECT NAME

SUNSET GROVE SUBDIVISION PHASE 2

CHATHAM COUNTY NORTH CAROLINA

DEVELOPER

CHATHAM CAPITAL LLC

400 MARKET STREET CHAPEL HILL, NC 27516

SHEET NAME

DETAILS

DRAWING SCALE

AS SHOWN

PLAN SET CONSTRUCTION DRAWINGS

D-4

DATE 3-8-2019

SHEET NUMBER