

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

#### **DIVISION OF HIGHWAYS**

ANTHONY J. TATA

April 13, 2015

## **Chatham County**

Subject: Subdivision Final Plan Review – Fearrington Village Section X Area B Diehl and Phillips, P.A c/o Mr. Alan Keith P.E 1500 Piney Plains Rd. Suite 200 Cary, NC 27518

Dear Mr. Keith:

The N. C. Department of Transportation, Division of Highways has reviewed the construction plans signed and sealed by Alan Keith P.E. on April 1, 2015 as submitted to this office and approval is granted subject to the following stipulations and recommendations:

- 1. All Construction is to be in accordance with the details as shown on the plans, as well as conform to the most recent edition of the *Standard Specifications for Roads and Structures*.
- 2. A Driveway Permit was issued for this package (DW 19.972).
- 3. The entire proposed right of way is to be cleared and grubbed throughout the whole phase of the project. Please be aware that the areas within the sight distance quadrants are to be treated as right of way.
- 4. All soil areas within the proposed right of way and any other soil areas disturbed during construction shall be seeded and mulched immediately upon completion of roadway construction. The seeding shall be done as outlined in the seeding specification attachment.
- 5. The crossline drainage is approved as proposed on the construction plans. If, however field conditions dictate any changes, these shall be made upon approval by NCDOT. If any of the property owners desire to pipe their ditches within the proposed NCDOT right of way, please advise them that this work should conform to NCDOT specifications for this type of work (see attached). If any ditches are piped and not satisfactorily completed to NCDOT specifications, this could result in the road not being accepted for addition to the state maintained system of roads. Any ditches piped or other encroachment prior to addition to the state maintained system are subject to an encroachment agreement, as are utility companies, when the road is added.
- 6. The typicals as shown in the plans, are approved.

Fearrington Village Section X Area B Final Plan Approval Plans signed and sealed by Alan Keith P.E. April 1, 2015 Page 2 of 13

- 7. The Division of Highways will only allow mailboxes, with non-rigid type post, such as 4" x 4" wooden or small diameter metal type on new additions. Brick columns or mailboxes on rigid stands such as block, stone or any other type deemed to be a traffic hazard will not be allowed within the right of way. This policy applies to all roads being considered for addition to the State Maintained System.
- 8. An erosion control plan shall require approval from Chatham County. The developer should forward this plan to Mr. Jim Willis, Erosion and Sediment Control Officer, 80 East, P.O. Box 130, Pittsboro, N.C. 27312, phone (919) 545-8343 for his review and approval.
- 9. As this subdivision is proposed to be public and is likely to be requested to be added to the state maintained system of roads, the developer will be responsible for providing a PE Certification, (See Attached) and testing results for base and asphalt density stating that the streets have been built in accordance with the most current "Subdivision Roads: Minimum Construction Standards" manual and with the attached approved plans. Please be advised that this PE Certification does not approve the road for addition to the State Highway System for maintenance. When the proper home density is achieved and roads have been satisfactorily maintained, the developer or property owners must submit Form SR-1, Petition for Road Addition (copy attached to this correspondence), and four (4) copies of the recorded plat to request that the road or roads be added to the State Highway system. Any maintenance problems found when the road is requested to be added must be repaired by the developer prior to the road becoming state maintained. As stated in GS 136-102.6, final acceptance by the Division of Highways of the public streets and placing them on the State highway system for maintenance shall be conclusive proof that the streets have been constructed according to the minimum standards of the Board of Transportation.
- 10. The developer shall comply with all applicable local, state, and federal environmental regulations, and shall obtain all necessary local, state, and federal environmental permits, including, but not limited to, those related to sediment control, stormwater, wetlands, streams, endangered species, and historical sites.
- 11. A properly completed Verification of Compliance with the Department of Environment and Natural Resources (DENR)(page 35, attached) must be submitted prior to the road(s) being considered for addition to the NCDOT System.
- 12. In preparing the final plat for certification by this office and subsequent recording, the following information will be incorporated:
  - A. The sight distance quadrants at the intersections shall be shown either as a public easement or as the property line.
  - B. Public easements for drainage throughout the development.
  - C. All roads shall be shown as public and the right of way width shown
- 13. If the plans of this subdivision change in a way that would cause a change in the classification of these roads from Local Residential to Residential Collector the developer will be responsible for

Fearrington Village Section X Area B Final Plan Approval Plans signed and sealed by Alan Keith P.E. April 1, 2015 Page 3 of 13

upgrading roads to meet Residential Collector standards prior to addition the state maintenance system.

14. This approval does not approve the utilities within this subdivision. Any utilities shall be submitted for approval to this office via a properly executed Encroachment Agreement to be approved at the time the roads within the subdivision are petitioned to be added to the state system for maintenance. Please note that water valves should be located a minimum of 6' from edge of pavement, fire hydrants should be behind the right of way line and all service taps should be installed prior to paving.

If you have any further questions regarding this matter, please do not hesitate to call this office at 336. 318.4000

Yours truly,

DocuSigned by:

Jeff Loflin, P.E. —2D8073931376436...

Jeff B. Loflin, PE District Engineer

### Attachments

cc: Rob W. Stone II, P.E., Division Engineer Justin Bullock, P.E., Chatham County Maintenance Engineer Lynn Richardson, Chatham County Planning Alan Keith, P.E. Diehl and Phillips, P.A File



# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY GOVERNOR DIVISION OF HIGHWAYS

ANTHONY J. TATA SECRETARY

# PROFESSIONAL ENGINEER CERTIFICATION SUBDIVISIONS AND COMMERCIAL DRIVEWAYS DIVISION 8, DISTRICT 1

DATE:			
COUNTY:			
SUBDIVISION NAME:			
STREET NAMES	From Sta. No.	To Sta. No.	
This is to certify that the above	listed roads have been con	nstructed in accordance with the	approved plans and all
aspects of the most current Sub	division Roads: Minimum	Construction Standards manual.	
	NAME:		
SIG	NATURE:		
NC PE LI	CENSE #:		

Professional Engineer Seal

# North Carolina Department of Transportation Division of Highways Petition for Road Addition

ROADWAY INFORMATION: (Please Print/Type)

	31-1		
County:	Road Name: (Please list addition	al street names and lengths on th	e back of this form.)
Subdivision Name:		Length (miles):	
Number of occupied home	es having street frontage:	Located (miles):	
miles N  S  E  W (Check one)	of the intersection of Route	and Route	(SR, NC, US)
We, the undersigned, being	ng property owners and/or develope	rs of	in
County,	do hereby request the Division of H	ighways to add the ab	ove described road.
	ame and Address of First Petitioner. (Please Print	t/Type)  Phone Number: _	
Street Address:			
Mailing Address:			
	Property Owners	3	
<u>Name</u>	Mailing Address		<u>Telephone</u>

## INSTRUCTIONS FOR COMPLETING PETITION:

- 1. Complete Information Section
- 2. Identify Contact Person (This person serves as spokesperson for petitioner(s)).
- 3. Attach four (4) copies of recorded subdivision plat or property deeds, which refer to candidate road.
- 4. Adjoining property owners and/or the developer may submit a petition. Subdivision roads with prior NCDOT review and approval only require the developer's signature.
- 5. If submitted by the developer, encroachment agreements from all utilities located within the right of way shall be submitted with the petition for Road addition. However, construction plans may not be required at this time.
- 6. Submit to District Engineer's Office.

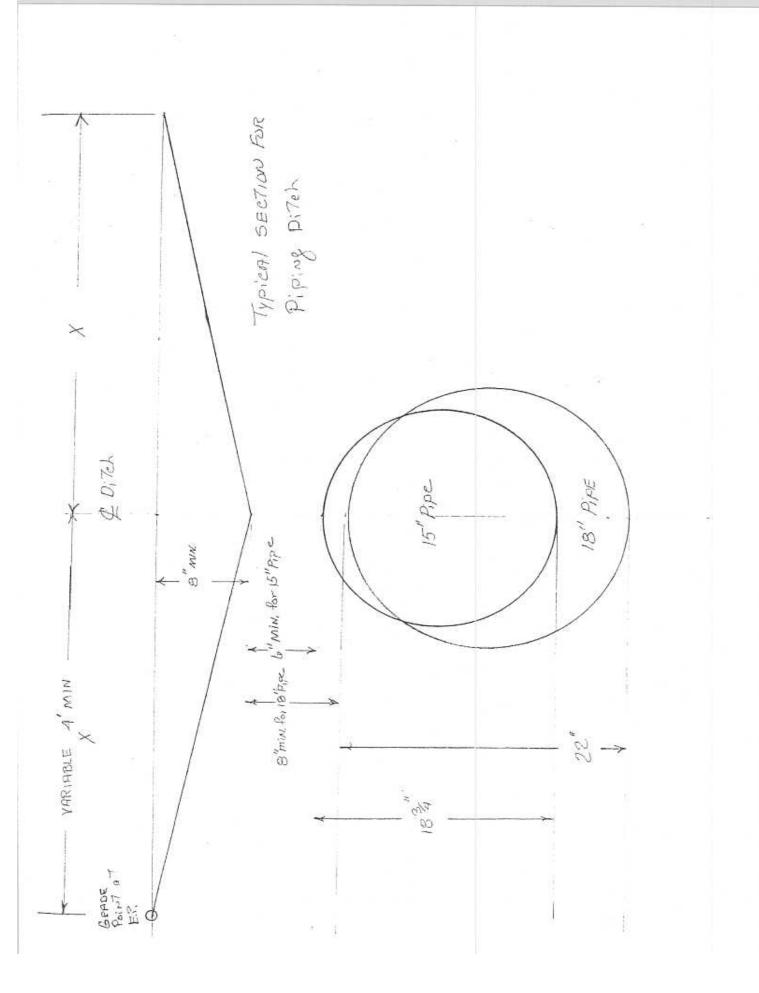
FOR NCDOT USE ONLY: Please check the appropriate block					
☐ Rural Road	☐ Subdivision platted prior to October 1, 1975	☐ Subdivision platted after September 30, 1975			

### **REQUIREMENTS FOR ADDITION**

If this road meets the requirements necessary for addition, we agree to grant the Department of Transportation a right-of-way of the necessary width to construct the road to the minimum construction standards of the NCDOT. The right-of-way will extend the entire length of the road that is requested to be added to the state maintained system and will include the necessary areas outside of the right-or-way for cut and fill slopes and drainage. Also, we agree to dedicate additional right-of-way at intersections for sight distance and design purposes and execute said right-of-way agreement forms that will be submitted to us by representatives of the NCDOT. The right-of-way shall be cleared at no expense to the NCDOT, which includes the removal of utilities, fences, other obstructions, etc.

General Statute 136-102.6 (see page 29 for Statute) states that any subdivision recorded on or after October 1, 1975, must be built in accordance with NCDOT standards in order to be eligible for addition to the State Road System.

ROAD NAME	<u>HOMES</u>	<u>LENGTH</u>	ROAD NAME	<u>HOMES</u>	<u>LENGTH</u>



# POSSIBLE SUPPLIERS FOR GRATES AND FRAMES

SOUTHERN FOUNDRY P.O. BOX 186 APEX, N.C. 27502 (919) 362-7744 NORFOLK CAST, INC. P.O. BOX 328 NORFOLK, VA. 23501

VULCAN FOUNDRY CORP. P.O. BOX 905 DENHAM SPRINGS, LA. 1(800)626-4653 US FOUNDRY 8351 N. W.93<sup>RD</sup> ST MEDLEY, FLA.33166 (305)885-0301 FAX (305) 844-3253

SUPER CAST, INC. 1104 US HWY. 117 BYPASS, S. GOLDSBORO, N.C. 27530 (919)736-9010 FAX (919)736-0290

BUNCH PATTERN WORKS, INC. P.O. BOX 267 HWY 308 N. LEWISTON-WOODVILLE,N.C. 27849

CAPITAL FOUNDRY OF VIRGINIA, INC. P.O. BOX 2212 VIRGINIA BEACH, VIRGINIA 23450

EMPORIA FOUNDRY, INC. 620 REESE STREET EMPORIA, VIRGINIA 23847

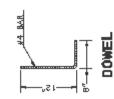
ENNIS ENTERPRISES P.O. BOX 931 WILMINGTON, N.C. 28402 (910) 371-9323

840.15

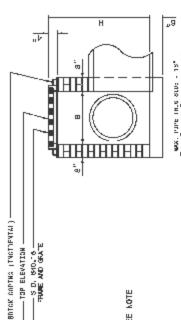
## 12" THRU 30" PIPE BHICK DHOP INLET ENGLISH STANDARD DRAWING FOR

1-12| STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

SEE STANDARD DRAWING 840,25 FOR ATTACHMENT OF FRANES AND GRATES. DO NOT USE BRICK MASOWRY DROP INLET IN LOCATIONS SUBJECT TO TRAFFIC.



 1



-SEE NOTE

CTION Y-Y	нетант, н)	DEDUCTIONS FOR ONE PIPE
SECT	FOR DROP INLET(BASED ON NIN. 1	CUBIC YARDS BRICK MASONRY
	FÓR DRÓP	BIO YARDS

SECTION X-X

.9

Î	TIONS	ONE PIPE		9	٦ D.	0	8	0
HEIGHT,	DEDUCTIONS	8	C.S.	0.020	0.331	0.074	0.078	0.122
ED ON MICH.	CUBIC YARDS	BAICK MASONAY	H '14815H 'N.M PVB3M5A EUS LUTAT EUSON	3.622	0.600	0.578	5.885	0.991
INLET (846	CUBIC	BAICK	MAII PER FOOT HT.	0.313	0.913	6.818	0.913	0.913
ES FOR DROP	CUBIC YARDS	CONCRETE	ROTTON SLAB	0.268	0.268	0.260	B53" Q	0.288
DINENGIÓNS AND DUANTITIES FOR DRÓP INLET(BASED ON MIN. HEIGHT, H)	DIMENSIONS OF BOX & PIPE	NIN. HCIGHT	н	5'-D"	.8-,2	.9-,2	.,0-,0	36"
ENGIONS	0F BQ)	WIDTH	В	2'-0"	1	/	/	00
DIM	NENSI DYS	SPAN	٧	30	1	/	1	3,-0%
	DIR	PIPE	D	15"	15"	18"	24"	36"

.085 .085 .178

IT REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STO. NO. 040.00.
FOR 6.0" IN HIGHT OR LESS, USE 8" WALL, OVER 8'-0" IN HIGHT, USE 18" WALL AND 8" WALL FOR THE REMAINING 6'-0". QLANITIES 0 OF ADJUSTED ACCORDINGLY. USE BRICK OF CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 540 OF THE STANDARD SPECIFICATIONS. PROVIDE ALL CATCH BASINS OVER 5'-8" IN DEPTH WITH STEPS 12" ON CENTER, USE STEPS WHICH COMPLY WITH STD, DRAWING 840,88 DEDJOT FOR FIPE(S) FROM TOTAL CU. YOS. OF BRICK MASCURY. USE FÜRMS FOR CONSTRUCTION OF THE BOTTOM RIAB USE CLASS "E" CONCRETE THROUGHOUT. HSP #4 B4R COMPLIS AT 12" CENTERS MORTAN JOINTE 15" +/- 16" THICK.

CONSTRUCT WITH PIPE CROWNS MATCHING.

CHYMMER ALL EXPOSED CORNERS I"

DRAWING NOT TO SCALE.

- 5 D, 640, 6 --TOP ELEVATION

ut.

WITH COPING REMOVES PLAN

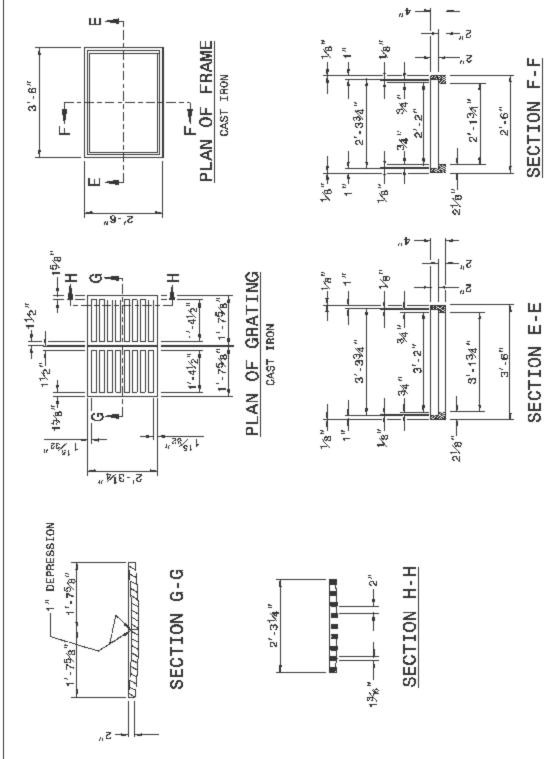
STATE OF 11-12
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR BRICK DROP INLET 12" THRU 30" PIPE

840.15

ENGLISH STANDAND DRAWING FOR DROP INLET FRAME AND GRATES FOR USE WITH SID. DWG.S 840.14 AND 840.15

NING FOR S40.15 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DEPT. OF TRANSPORTATION OF HIGHWAYS BALEIGH, N.C.



STATE OF U-12
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR DROP INLET FRAME AND GRATES
FOR USE WITH STD. DWG.S 840.14 AND 840.15

# VERIFICATION OF COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

(Check Appropriate Box)

Permits from the N.C. Department of Er U.S. Army Corp of Engineers are not applicable federal and state regulations have	required for this p	aral Resources and the project. However, all
The required permits from the N.C. Resources and the U.S. Army Corp of En Copies of permits and Completion Certific	gineers have been of	ironment and Natural otained for this project.
All applicable NPDES Stormwater Permit (The applicant should contact the N.C. determine if a stormwater permit is require	Division of Water	een met for this project. Quality in Raleigh to
The project is in compliance with all applications and regulations.	cable sedimentation a	nd erosion control
Project Name:		
Township:	County:	
Project Engineer:	Phone No.:	
Project Contact:		
Applicants Name:		P.E. SEAL
Date Submitted:		
(Reference Page 11, Item 10)		11/07/2003
	35	

#### ATTACHMENT "A"

Seeding and mulching shall be in accordance with Section 880 of the North Carolina Standard Specifications for Roads and Structures, except that Articles 880-8(B) shall not apply. Final determination of soil type shall be made by the Engineer. The following rates in pounds per acre shall apply:

## SANDY SOIL

#### CLAY SOIL

50# - KY 31 Tall Fescue or Alta Tall Fescue 100# - KY 31 Tall Fescue or Alta Tall Fescue

5# - Centipede

15# - Kenblue Bluegrass

50# - Pensacola Bahiagrass

500# - Fertilizer

500# - Fertilizer

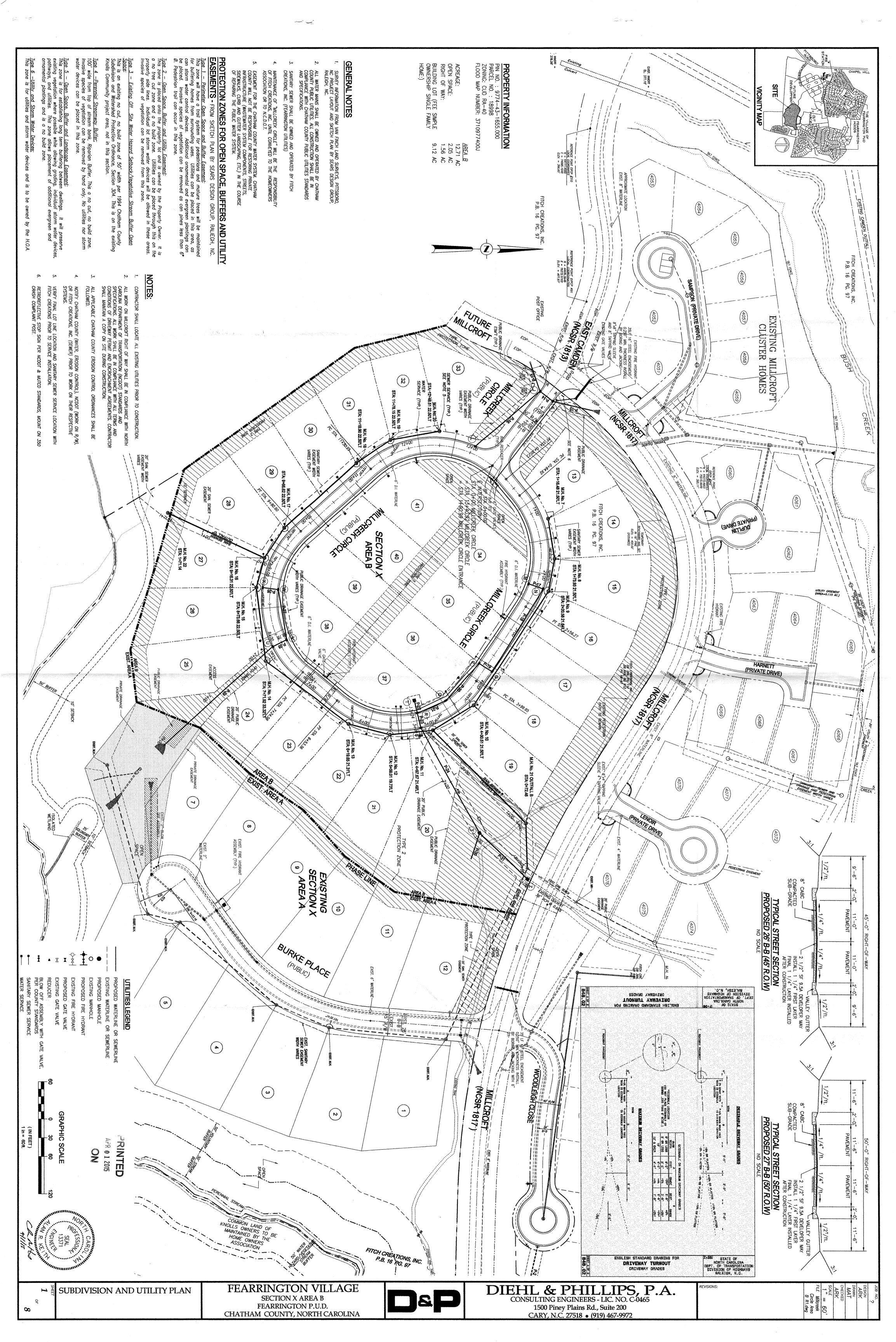
4000# - Limestone

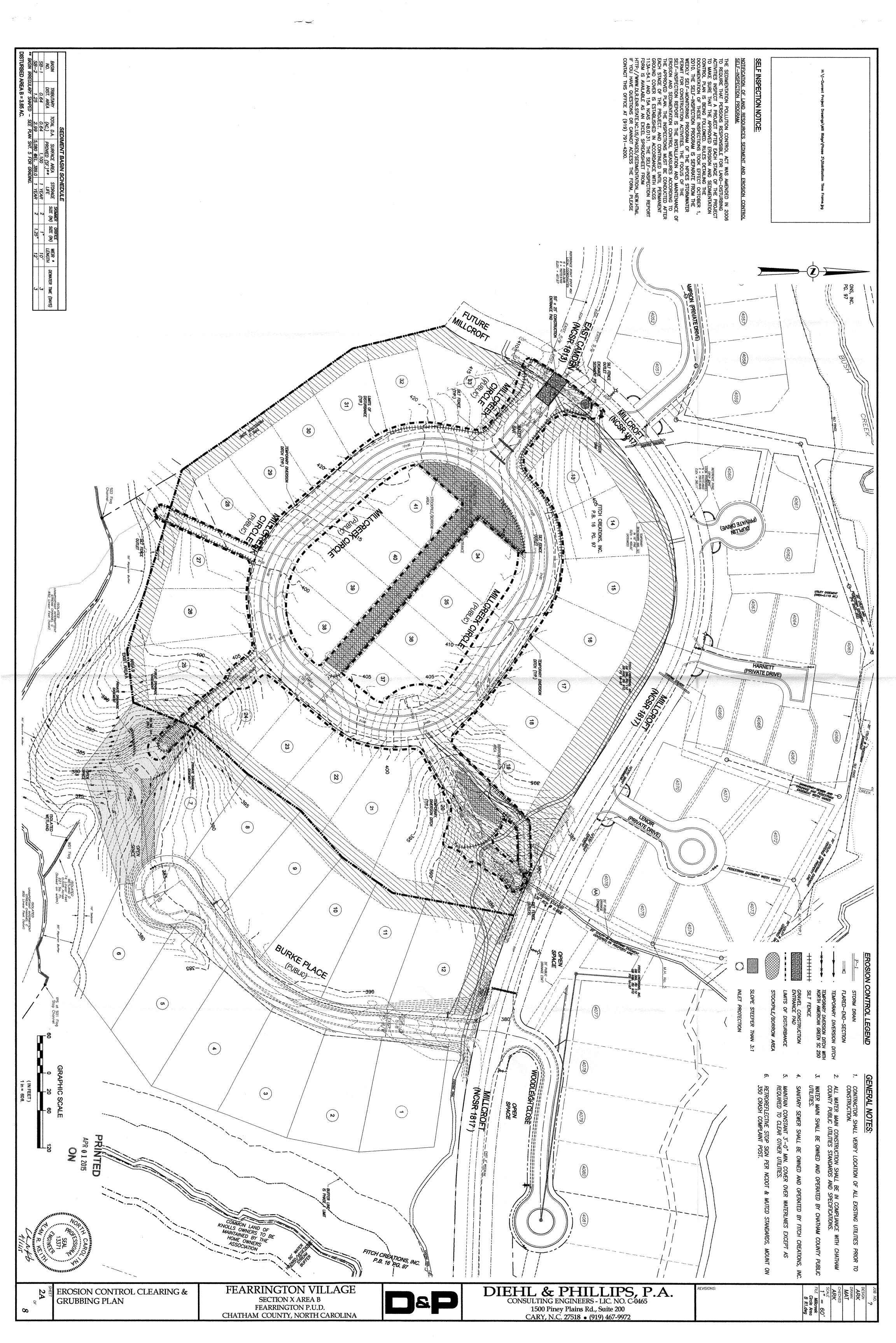
4000# - Limestone

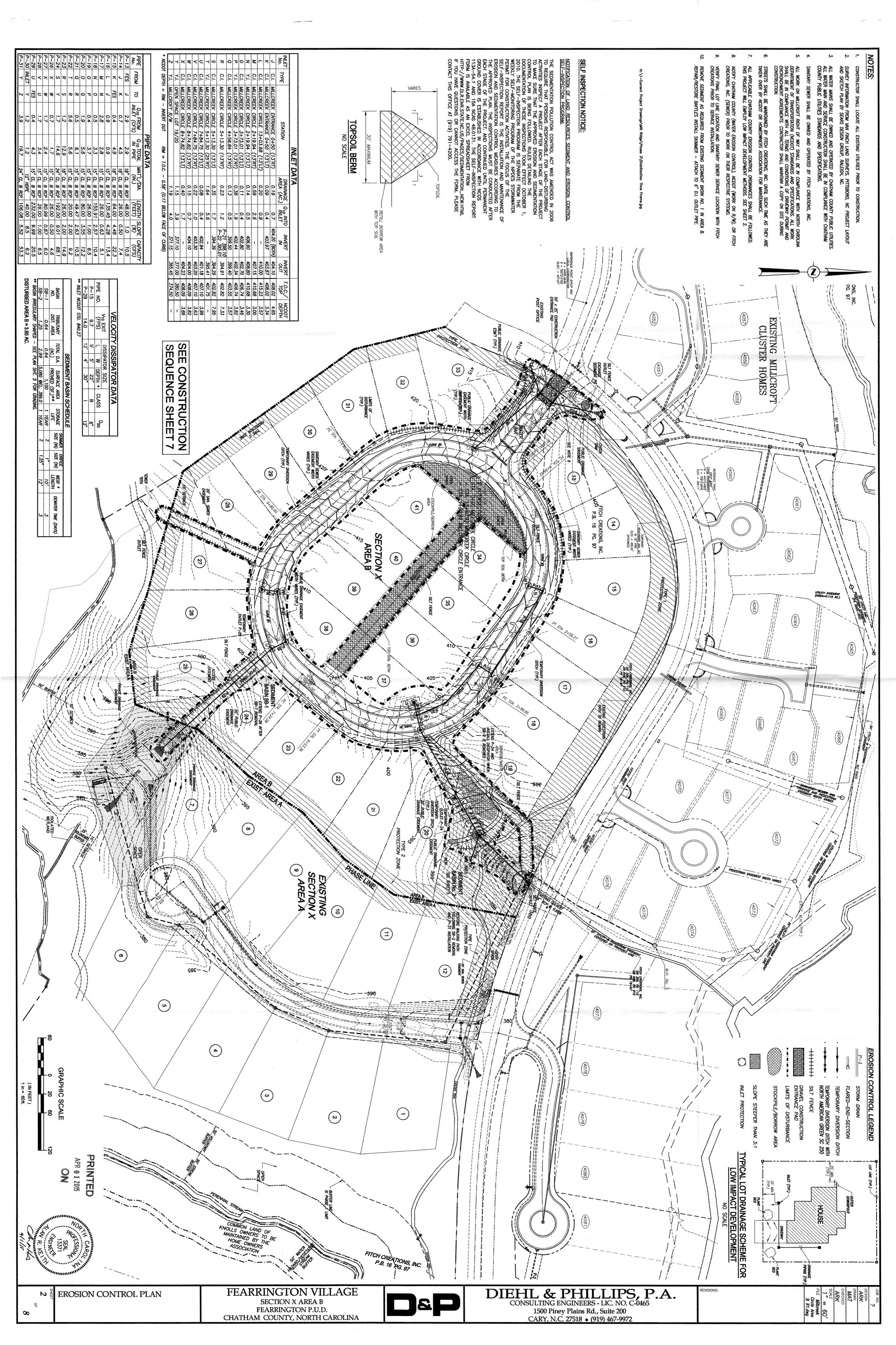
Add 10# Kobe or Korean Lespedeza and 10# Millet to the above mixture from May 1 to August 31.

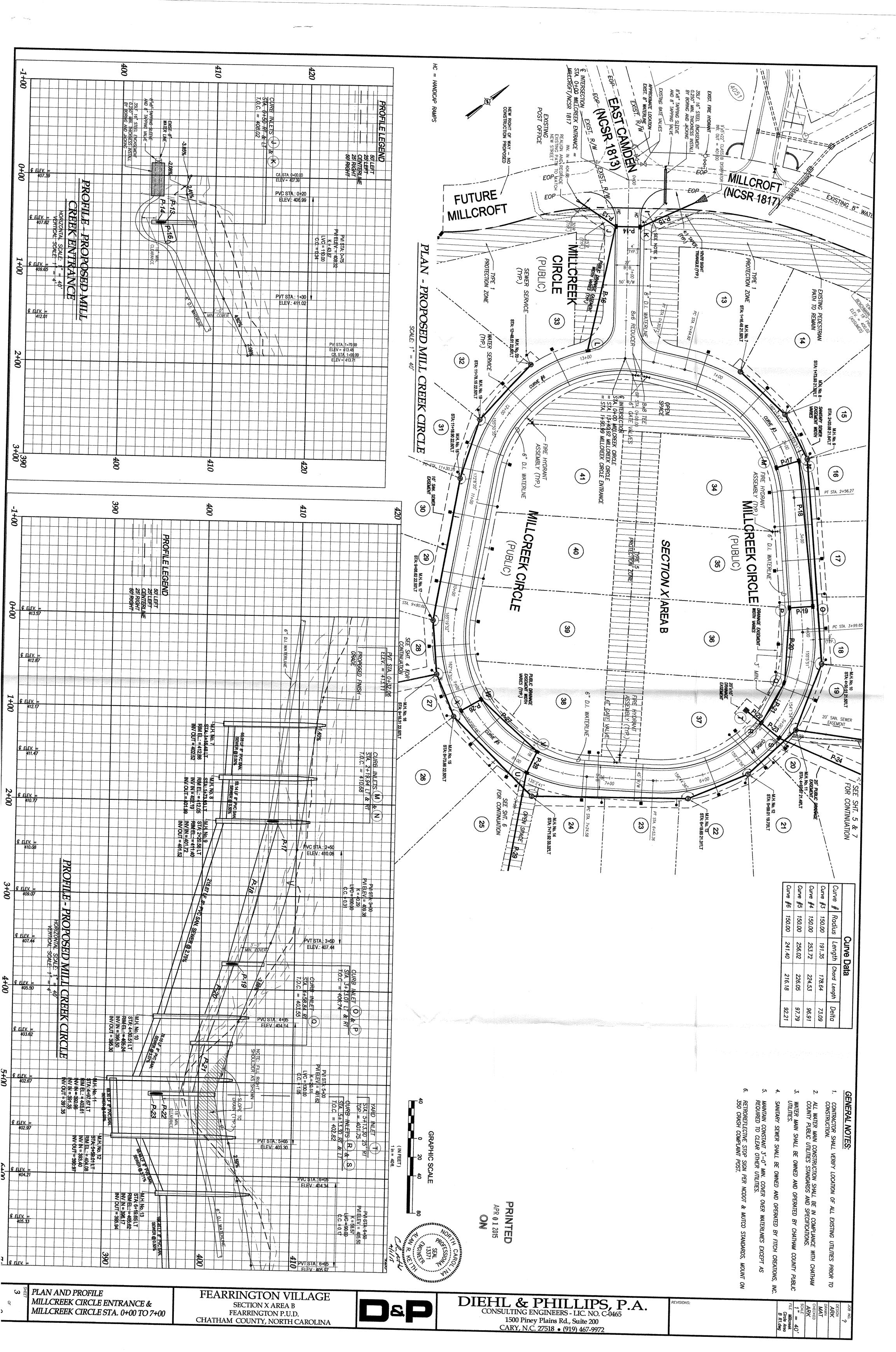
On cut and fill slopes 2:1 or steeper, add 30# Sericea Lespedeza from January 1 to December 31.

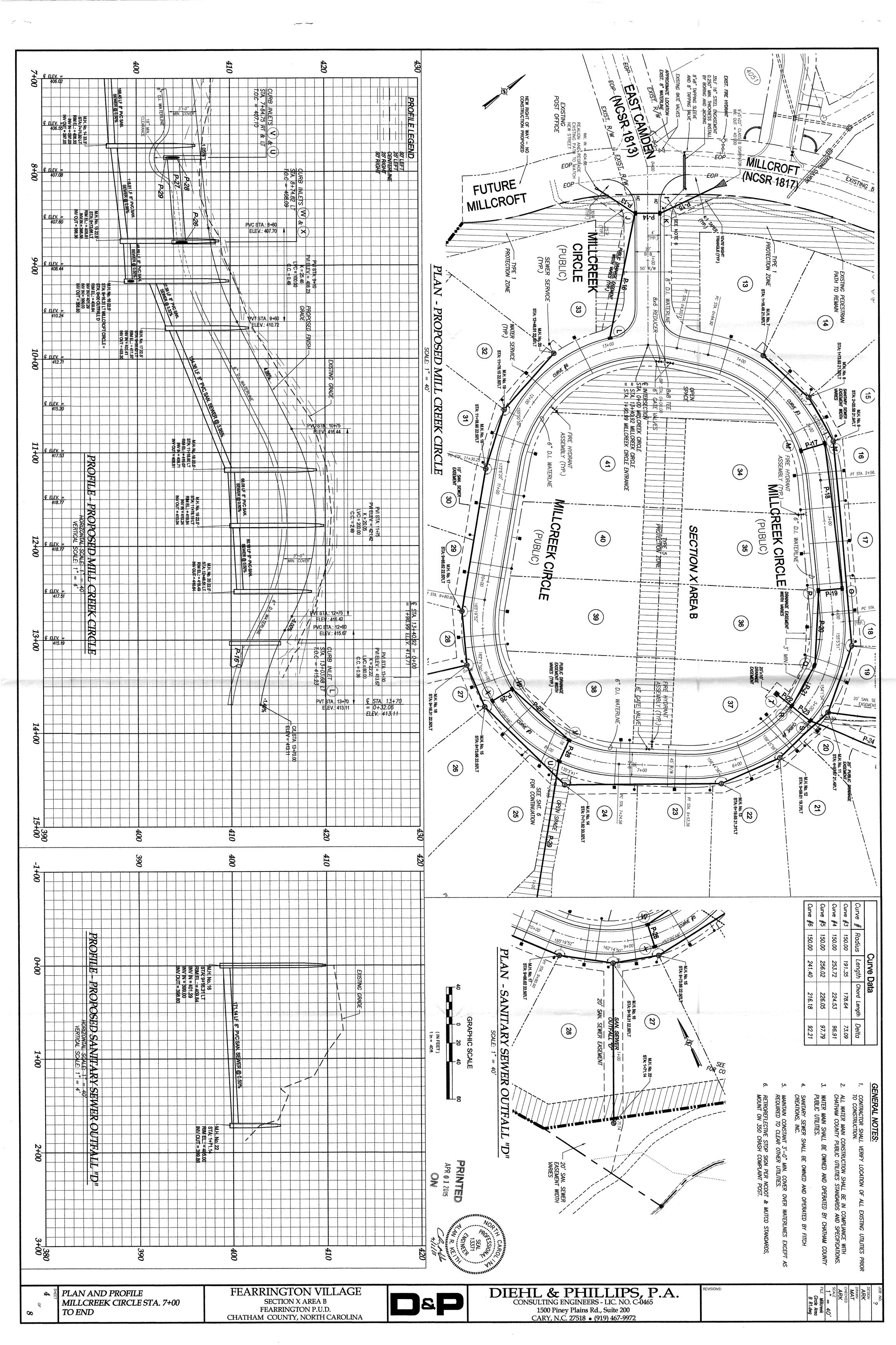
Fertilizer shall be 10-20-20 analysis. Upon written approval of the Engineer, a different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis.

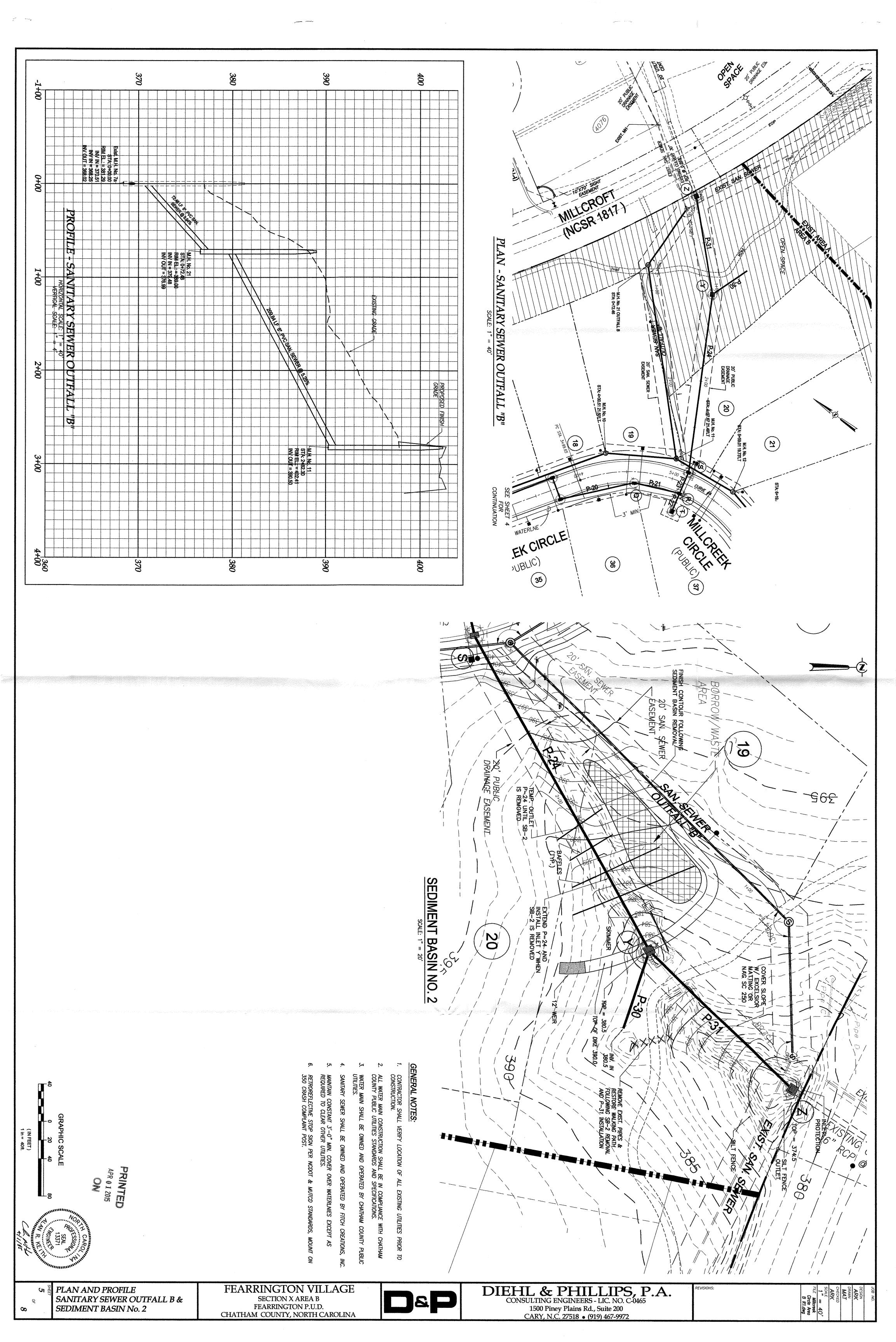


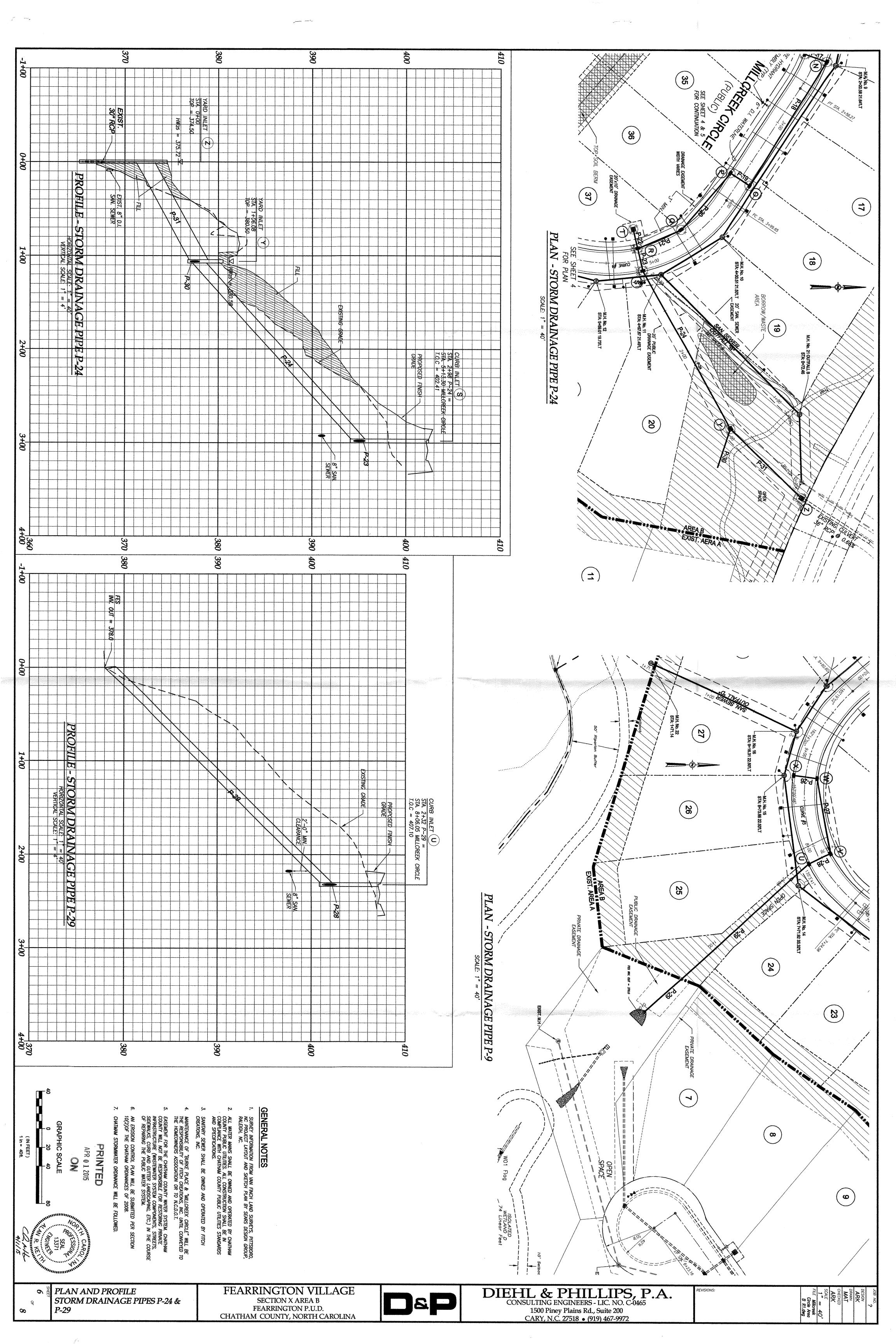


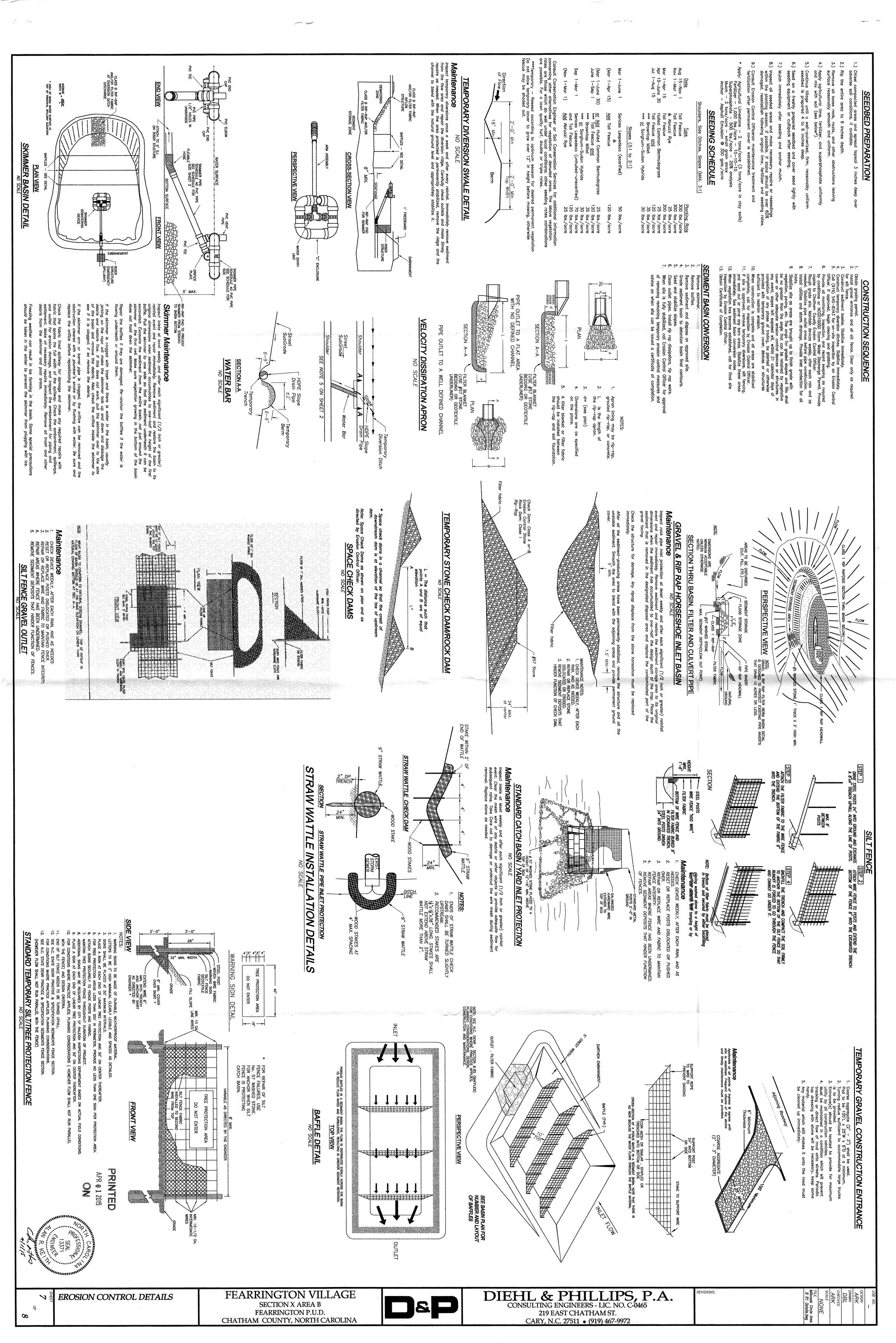


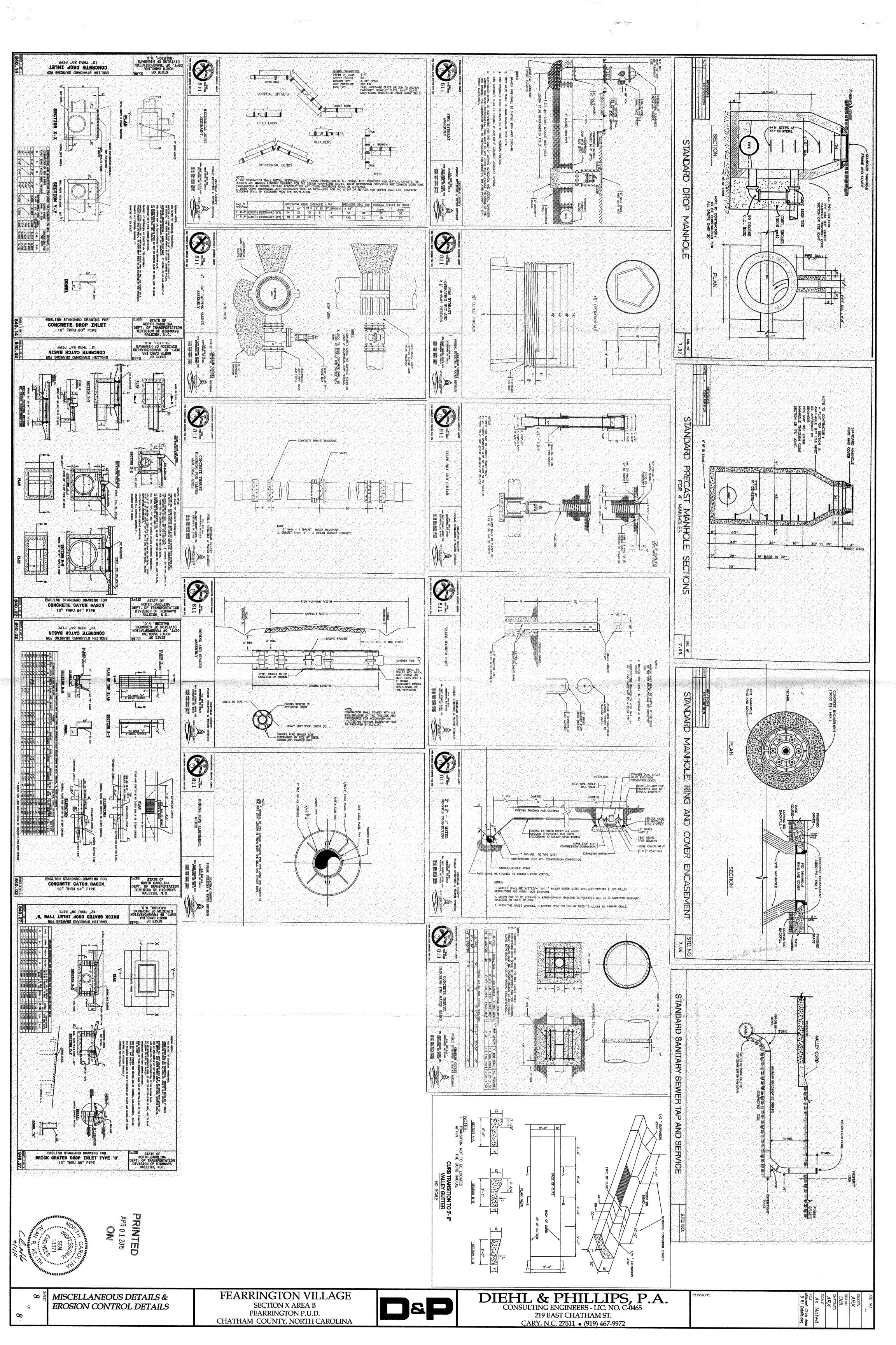














# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT McCrory Governor

#### **DIVISION OF HIGHWAYS**

ANTHONY J. TATA SECRETARY

April 14, 2015

Roy B. Fitch, Jr. President, Fitch Creations, Inc. 2000 Fearrington Village Center Pittsboro, NC 27312

And

County of Chatham 12 East Street Pittsboro, NC 27312

SUBJECT: ENCROACHMENT AGREEMENT (19.4218)

50 LF of 8" DI water line and 35 LF of 16" steel encasement

SR 1817

**Chatham County** 

Dear Mr. Fitch:

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

Construction of 50 LF of 8" DI water line and 35 LF of 16" steel encasement in Chatham County, and any associated pre-construction 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,

R. W. Stone II, P.E. Division Engineer

Docusigned by:

Jeff Loftin

By: Jeff Loflin, P.E. District Engineer

## Attachments

cc: Robert Memory, State Utility Agent, Utility Coordination Unit (cover letter only)

Jeff Loflin, P.E., District Engineer (with original)

Justin Bullock, P.E., Chatham County Maintenance Engineer's office

County of Chatham

Alan R. Keith, P.E., Diehl & Phillips, P.A.

File

(19.4218)

19.4218 STATE OF NORTH CAROLINA Section X Area B **COUNTY OF** Chatham ROUTE NCSR 1817 PROJECT Fearrington PUD THREE PARTY RIGHT OF WAY DEPARTMENT OF TRANSPORTATION ENCROACHMENT AGREEMENT ON -AND-PRIMARY AND SECONDARY SYSTEM Fitch Creations, Inc. 2000 Fearrington Village Center Pittsboro, NC 27312 -AND-County of Chatham 12 East Street Pittsboro, NC 27312 THIS AGREEMENT, made and entered into this the 14 day of April, 20 15 , by and between the Department of Transportation, party of the first part; and Fitch Creations, Inc. party of the second part; and County of Chatham party of the third part, WITNESSETH THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as

Route(s) NCSR 1817

\_ , located \_ 40 feet east of NCSR 1817 and NCSR 1813

intersection

with the construction and/or erection of: approximately 50 LF 8-inch D.I. water line, 35 LF 16-inch steel encasement 0.250' min. thickness installed by boring and jacking with valves and appurtenanaces as shown on plans

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the installation, operation, and maintenance of the above described facility will be accomplished in accordance with the party of the first part's latest POLICIES AND PROCEDURES FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS-OF-WAY, and such revisions and amendments thereto as may be in effect at the date of this agreement. Information as to these policies and procedures may be obtained from the Division Engineer or State Utility Agent of the party of the first part.

That the said party of the second part binds and obligates himself to install and maintain the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway, nor obstruct nor interfere with the proper maintenance thereof, to reimburse the party of the first part for the cost incurred for any repairs or maintenance to its roadways and structures necessary due to installation and existence of the facilities of the party of the second part, and if at any time the party of the first part shall require the removal of or changes in the location of the said facilities, that the said party of the second part binds himself, his successors and assigns, to promptly remove or alter the said facilities, in order to conform to the said requirement, without any cost to the party of the first part.

That the party of the second part agrees to provide during construction and any subsequent maintenance proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

That the party of the second part agrees to restore all areas disturbed during installation and maintenance to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any installation or maintenance operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the construction site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

Provided the work contained in this agreement is being performed on a completed highway open to traffic; the party of the second part agrees to give written notice to the Division Engineer of the party of the first part when all work contained herein has been completed. Unless specifically requested by the party of the first part, written notice of completion of work on highway projects under construction will not be required.

**FORM R/W 16.6** Rev. July 1, 1977 That in the case of noncompliance with the terms of this agreement by the party of the second part, the party of the first part reserves the right to stop all work until the facility has been brought into compliance or removed from the right of way at no cost to the party of the first part.

That it is agreed by both parties that this agreement shall become void if actual construction of the work contemplated herein is not begun within one (1) year from the date of authorization by the party of the first part unless written waiver is secured by the party of the second part from the party of the first part.

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:

- a. <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 amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the 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.
- c. <u>Solicitations for Subcontracts, including Procurements of Materials and Equipment</u>: In all solicitations either by competitive 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.
- d. <u>Information and Reports</u>: The contractor shall provide all information and reports required by the Regulations, or directives 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.
- e. <u>Sanctions for Noncompliance</u>: 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.
- f. Incorporation of Provisions: The contractor shall include the provisions of paragraphs "a" through "f" in every subcontract, 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.

DEPARTMENT OF TRANSPORTATION
BY: Jeff Loflin
2D807393137643DIVISION ENGINEER
Roy B. Fitch, Jr. / Williams
President, Fitch Creations, Inc.
2000 Fearrington Village Center
Pittsboro, NC 27312
Second Party
- Church here
CHARLIE HORNE
COUNTY MANAGER
PO BOX 1809 PITTSBORD, NC 27312
Third Party

#### **ENCROACHMENT SPECIAL PROVISIONS**

Fearrington P.U.D. and Chatham County Public Utilities ENC#19.4218 (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:
  - Justin Bullock, P.E., Maintenance Engineer 1404 E Raleigh St. Siler City, NC 27344 (919)742-3431
- **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.** NCDOT WORK ZONE TRAFFIC CONTROL QUALIFICATIONS AND TRAINING PROGRAM: Effective July 1, 2010, all flagging operations within NCDOT Right of Way require qualified and trained Work Zone Flaggers. Qualified and trained Work Zone Traffic Control Supervisors will be required on Significant Projects.
  - Training for this certification is provided by NCDOT approved training sources and by private entities that have been pre-approved to train themselves. If you have questions, contact our web site at <a href="http://www.ncdot.org/doh/preconstruct/wztc/WZTCTrainingProgram/default.html">http://www.ncdot.org/doh/preconstruct/wztc/WZTCTrainingProgram/default.html</a>, or contact Stuart Bourne, P.E. with NCDOT Work Zone Traffic Control Unit at (919) 662-4338 or <a href="mailto:sbourne@ncdot.gov">sbourne@ncdot.gov</a>.
- **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, but not be limited to 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 certification signed by a licensed Professional Engineer verifying that construction meets NCDOT design requirements. Certification shall include the following:
  - Subgrade density
  - Base and pavement thickness by type
  - Stone Base density
  - Core and test locations
- **17.** The Encroaching Party shall provide the District Engineer with "as-built" plans upon completion of the installation.
- **18.** 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.
- **19.** 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.
- 20. The traveling public shall be warned of construction with complete and proper signing and traffic control devices in accordance with the current Manual on Uniform Traffic Control Devices (MUTCD) and the latest NCDOT Roadway Standard Drawing and Standard Specifications for Roads and Structures. 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/women.
  - 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.

- 21. 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 NCDOT Roadway Standard Drawing and Standard Specifications for Roads and Structures and Amendments or Supplements thereto. When there is no guidance provided in the Roadway Standard Drawings or Specifications, comply with the Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplement thereto. Information as to the above rules and regulations may be obtained from the Division Engineer.
- **22.** 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.
- **23.** 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.
- **24.** 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.
- **25.** 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.
- 26. All temporary and final pavement markings, reflective pavement markers, traffic control devices, and signage are the responsibility of the encroaching party and shall be installed in accordance with current NCDOT standards. Final pavement marking plans shall be submitted to and approved by the Division Traffic Engineer at (910)947-3930, at 150 DOT Drive, Carthage, NC 28327. Plans should be submitted as soon as possible to allow adequate time for review. Pavement markings shall be pre-marked and the Division Traffic Services Supervisor shall be notified at (910) 947-3930 for inspection of pre-marking before permanent pavement markings are placed. The encroaching party shall provide at least two working days notification for the inspection. Pavement markings and reflective pavement markers which are damaged, obscured, or obliterated during construction shall be replaced in conformance with current NCDOT standards. Thermoplastic pavement markings shall be installed at locations where the adjacent pavement are thermoplastic or as directed by the Division Traffic Engineer.
- **27.** All pavement markings shall be thermoplastic and shall conform to the requirements of the latest version of the **NCDOT Standard Specifications for Roads and Structures**.
- **28.** 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.
- **29.** 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.
- **30.** 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.
- **31.** 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.
- **32.** All backfill shall meet the Statewide Borrow Criteria and shall be placed in accordance with section 300-6 of the latest version of the NCDOT Standard Specifications for Roads and Structures. Backfill material shall be free from rocks and debris placed in six inch loose layers and compacted to at least 95% of standard density as determined by AASHTO Method T-99 as modified by NCDOT, except that backfill material placed within eight (8) inches of the pavement subgrade shall be compacted to 100% of standard density. (Copies of these testing procedures are available on request from the NCDOT Materials and Tests Unit.) Each layer must be fully compacted by an approved mechanical tamp before the next layer is placed.

- **33.** 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.
- **34.** 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 positive 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 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.
- **35.** 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.
- **36.** Hydrants shall be placed behind the roadway ditch and as near the right of way line as possible.
- **37.** The grade of top of pipe or casing, including services, shall provide the following minimum bury:

Crossing under roadways Longitudinal installations Crossing under ditches 3 feet from pavement surface
 3 feet from finished grade
 2 feet from ditch line

- **38.** All service connections shall be bored unless construction is of ductile iron or equal quality material with satisfactory leakproof joints.
- **39.** All blow-off assemblies shall be directed away from any travel lane.
- **40.** 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.
- 41. 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 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.

- **42.** 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.
- **43.** 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.
- **44.** 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.
- **45.** Locating tape or detection wire shall be installed with non-ferrous pipelines.
- **46.** The encroaching party shall contact Justin Bullock, P.E., County Maintenance Engineer at (919) 724-3431 for inspection of forms or grade line prior to placing concrete for curb and gutter. A minimum of 24 hours notice is required for inspections.
- **47.** 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.
- **48.** All earth areas shall be regraded, seeded and mulched in accordance with Section 1660 of the latest version of the **NCDOT Standard Specifications for Roads and Structures**. Final determination of soil type shall be made by the Engineer. The following rates in pounds per acre apply:
  - YEAR ROUND MIXTURE (Sandy Soils)

KY 31 Tall Fescue or Alta Tall Fescue – 50 pounds Pensacola Bahiagrass – 50 pounds Centipede – 5 pounds Fertilizer (10-20-20 analysis) – 500 pounds Limestone – 4000 pounds

• YEAR ROUND MIXTURE (Clay Soils)

KY 31 Tall Fescue or Alta Tall Fescue – 100 pounds Kenblue Bluegrass – 15 pounds Fertilizer (10-20-20 analysis) – 500 pounds Limestone – 4000 pounds

- 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, add 30# 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.
- **49.** 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.
- **50.** 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.

- **51.** 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.
- **52.** The Division 8 Roadside Environmental Engineer can be contacted as follows:

Roadside Environmental Engineer 902 N. Sandhills Boulevard P. O. Box 1067Aberdeen, NC 28315 (910-944-2344)

- **53.** 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.
- **54.** 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.
- **55.** 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.
- **56.** The District Engineer will make a field inspection during construction to evaluate the need for guardrail. If the District Engineer determines that the location meets the current NCDOT warrants and criteria for the installation of guardrail, the encroaching party shall furnish and install guardrail at locations and as directed by the District Engineer.
- **57.** 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.
- **58.** The proposed utility shall be placed at a minimum depth of 2 feet below the adjacent pavement elevation and shall not be closer than 3 feet from the edge of pavement.