# ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT NCDEQ STANDARDS AND SPECIFICATIONS

# **SYMBOLS AND ABBREVIATIONS**

### AGGREGATE BASE COURSE ALUMINIZED STEEL - TYPE 2 BACK TO BACK EXISTING BLOW-OFF ASSEMBLY BLOW-OFF ASSEMBLY EXISTING GATE VALVE EXISTING REDUCER CURB AND GUTTER EXISTING WATER METER CUBIC FEET PER SECOND EXISTING SAN SEWER MANHOLE CURB INLET EXISTING CLEAN OUT CENTER LINE EXISTING POWER POLE CORRUGATED METAL PIPE EXISTING TELEPHONE PEDESTAL CLEAN OUT EXISTING AREA LIGHT EXISTING SIGN COMMUNICATION **NEW CURB INLET** CONCRETE NEW GRATE INLET/YARD INLET DOUBLE CHECK VALVE NEW FLARED END SECTION DOUBLE DETECTOR CHECK VALVE NEW BLOW-OFF ASSEMBLY DROP INLET NEW GATE VALVE DUCTILE IRON PIPE **EASEMENT** NEW WATER METER ELECTRIC **EXISTING** NEW PLUG FLARED END SECTION FIRE HYDRANT FORCE MAIN FEET PER SEC **GALVANIZED** GATE VALVE HIGH DENSITY POLYETHYLENE TEMP COMBINATION SILT/TREE PROTECTION FENCE LENGTH TEMP DIVERSION DITCH LINEAR FEET DISTURBED LIMITS MANHOLE PAVEMENT ----- g ---- g ---- EXISTING GAS LINE FINISHED PAD ELEVATION — — — COM — — COM — EXISTING COMMUNICATIONS LINE POWER POLE —— — т — — т — EXISTING UNDERGROUND TELEPHONE POLYVINYL CHLORIDE —— —— E —— —— E —— EXISTING UNDERGROUND ELECTRIC RADIUS RIGHT-OF-WAY —— — — w — — w — EXISTING WATER LINE REDUCER REINFORCED CONCRETE PIPE —— —— ss — —— ss —— FXISTING SANITARY SFWFR REDUCED PRESSURE ZONE SANITARY SEWER NEW STORM DRAINAGE STATION ----- w ----- w ---- NEW WATER LINE TEMPORARY DIVERSION DITCH TELEPHONE ------ FM ------- NEW SANITARY SEWER FORCE MAIN TEMPORARY SEDIMENT BASIN \_\_\_\_\_ G \_\_\_\_\_ G \_\_\_\_ NEW GAS MAIN UNDERGROUND • • • • • • • • • • • • • • HANDICAPPED ACCESSIBLE ROUTE

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE CITY OF SANFORD AND NCDOT

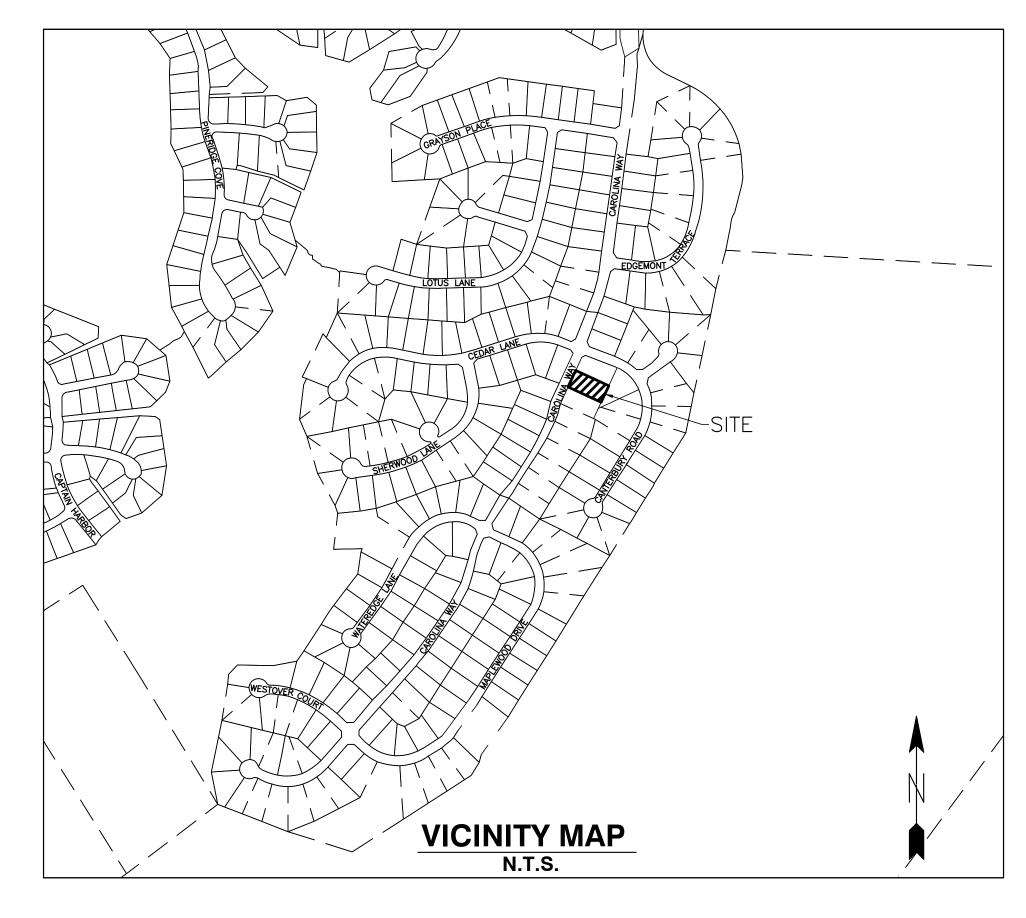
# 2975 CAROLINA WAY EROSION CONTROL PLAN 2975 CAROLINA WAY

CITY OF SANFORD, HARNETT COUNTY, NORTH CAROLINA

# SHEET INDEX

COVE

C3.1 GRADING AND DRAINAGE PLAN



## OWNER/DEVELOPER:

CHAMBERLAIN HOMES LLC 120A N SALEM ST APEX, NC 27502

CONTACT: TIMEA MCMILLAN PHONE: (978) 210-5726

EMAIL: timea@barbeeconstructionservices.com

### **CONSTRUCTION NOTES**

WHEELCHAIR RAMP

WATER LINE
WATER METER
YARD INLET

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPALITY STANDARDS, SPECIFICATIONS, AND DETAILS. WORK IN THIS PROJECT SHALL ALSO CONFORM TO THESE PLANS, THE LATEST EDITIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) ROAD AND BRIDGE SPECIFICATIONS, THE ROAD AND BRIDGE STANDARDS, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS, THE FINAL GEOTECHNICAL REPORT, AND GENERAL DESIGN STANDARDS. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS, OR PLANS, THE MOST STRINGENT SHALL
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TRENCH SAFETY DURING ALL PHASES OF
- THE LOCATION AND SIZE OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE NORTH CAROLINA ONE—CALL UTILITIES LOCATION SERVICE (ULOCO) AT 1—800—632—4949 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE SITE.
- 4. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- TRAFFIC CONTROL ON PUBLIC STREETS SHALL BE IN CONFORMANCE WITH THE TRAFFIC CONTROL PLAN, THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," AND AS FURTHER DIRECTED BY CITY AND
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
- 7. A PRE—CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE THE MEETING WITH THE CITY ENGINEERING DIVISION.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.

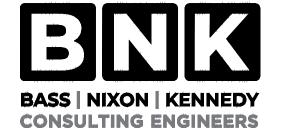
- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND APPLICABLE MUNICIPALITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
   MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKFILL AROUND DRAINAGE
- STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AS SET OUT IN ASTM STANDARD D698. STONE BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST AS SET OUT IN ASTM STANDARD D1557. THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A CERTIFIED MATERIALS TESTING LABORATORY AND THE CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING THE LABORATORY.
- 12. PROPOSED CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND ROADWAY PROFILES/SUPERELEVATIONS ARE TO BE USED IN CASE OF DISCREPANCY.
- 13. THE CONTRACTOR SHALL REVIEW, VERIFY AND COORDINATE ALL DIMENSIONS SHOWN ON PLANS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER PRIOR TO STARTING PROJECT.
- 14. ALL CURB JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1.5 FEET. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT.
- 15. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA REQUIREMENTS AND THE "NORTH CAROLINA STATE BUILDING CODE, VOL. 1—C ACCESSIBILITY CODE.
- 16. OWNER SHALL PROVIDE FENCING AND OTHER SAFETY MEASURES NECESSARY IN AND AROUND ANY PROPOSED STORMWATER MANAGEMENT MEASURES (PONDS, WETLANDS, ETC.) OBTAINING PROPER PERMITS SHALL BE THE RESPONSIBILITY OF THE OWNER.

- 17. RETAINING WALLS EXCEEDING 30 INCHES IN HEIGHT SHALL INCLUDE FALL PROTECTION IN THE FORM OF A HANDRAIL OR FENCING ON THE HIGH SIDE OF THE RETAINING WALL.
- 18. PROPER COMPACTION OF ALL FILL SOILS PLACED ON SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COMPACTION SHALL BE ADEQUATE TO SUPPORT THE PROPOSED USE OF AREAS IN WHICH FILL SOILS ARE PLACED. THE CONTRACTOR SHALL HIRE A GEOTECHNICAL ENGINEER TO TEST AND VERIFY THAT COMPACTION IS ADEQUATE FOR THE PROPOSED USE OF IN THE AREA OF FILL PLACEMENT.
- 19. ALL ASPECTS OF THIS PROJECT SHALL BE IN FULL COMPLIANCE WITH CURRENT ADA STANDARDS. IF THE CONTRACTOR NOTES ANY ASPECTS OF THE PROJECT WHICH ARE NOT IN COMPLIANCE, THE ENGINEER SHALL BE NOTIFIED PRIOR TO ANY FURTHER WORK BEING PERFORMED. ANY WORK PERFORMED AFTER THE CONTRACTOR NOTES SUCH A NON COMPLIANCE IS SUBJECT TO REMOVAL AND REPAIR AT THE CONTRACTOR'S EXPENSE.
- D. THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OR THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR PONDS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS—BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.
- 21. RETAINING WALLS SHOWN HEREIN SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER WITH EXPERIENCE DESIGNING RETAINING WALLS. AT LEAST 14 DAYS PRIOR TO BEGINNING CONSTRUCTION OF RETAINING WALLS, THE CONTRACTOR SHALL CONTACT THE OWNER'S GEOTECHNICAL ENGINEER TO SCHEDULE AND COORDINATE ALL APPROPRIATE INSPECTIONS, TESTING, AND VERIFICATION NECESSARY DURING RETAINING WALL CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL PROVIDE CONTINUOUS INSPECTION, TESTING AND VERIFICATION FOR THE DURATION OF RETAINING WALL CONSTRUCTION. PROPER SCHEDULING, EXECUTION, AND RECORD KEEPING FOR ALL REQUIRED INSPECTIONS, TESTING, AND VERIFICATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH RECORDS SHALL BE RETAINED AND SHALL BE PROVIDED TO THE OWNER AND BASS, NIXON & KENNEDY, INC. ALL MONITORING, TESTING, AND VERIFICATION SHALL CONFORM TO THE MOST RECENT VERSION OF THE NC BUILDING CODE CHAPTER 18, SECTION 1806 OR THE WALL DESIGN ENGINEER'S SPECIFICATIONS,

WHICHEVER IS MORE STRINGENT.



### **ENGINEER:**



6310 CHAPEL HILL ROAD, SUITE 250 RALEIGH, NORTH CAROLINA 27607 TELEPHONE: (919) 851-4422 FAX: (919) 851-8968

CERTIFICATION NUMBERS: NCBELS (C-0110) NCBOLA (C-0267)

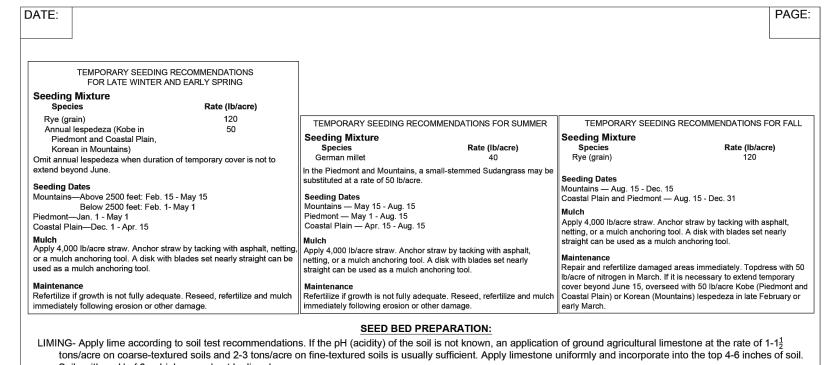
CONTACT: EMAIL:



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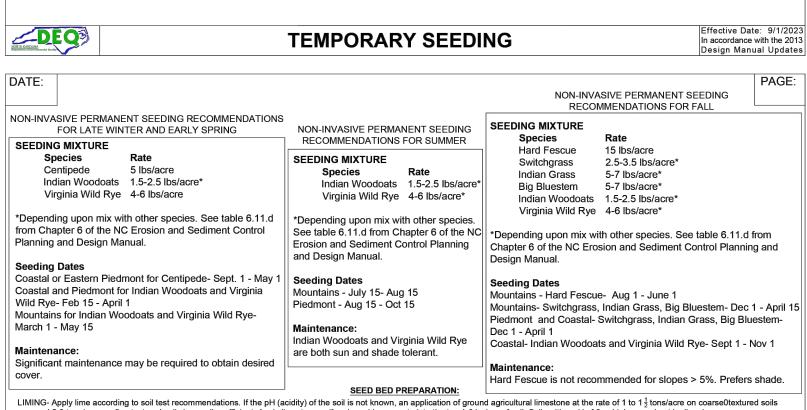
ARCHITECTURAL REVIEW COMMITTEE (ARC) REQUIREMENTS

- 2. ANY CONTRACTOR WHO CUTS ACROSS, OR INTO, ANY ROAD IN CAROLINA LAKES, WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECTURAL AND/OR ROADS COMMITTEE WILL BE FINED, EXCLUDING PUBLIC UTILITIES REPAIR, FINE PLUS COST FOR ROAD REPAIR, CLASS C VIOLATION.
- 3. OCCUPANCY OF UNFINISHED HOME: NO PERSON OR PERSONS SHALL MOVE INTO OR OCCUPY A NEW RESIDENCE WITHOUT A PRIOR WRITTEN "FINAL INSPECTION FORM" FROM THE CAROLINA LAKE ARCHITECTURAL COMMITTEE THIS APPROVAL LS GIVEN IN CONJUNCTION WITH HARNETT COUNTY'S APPROVAL AND DOES NOT SUPERSEDE THE COUNTY, (FINE INCLUDES DENAIL OF APPROVAL FOR FUTURE CONSTRUCTION), CLASS B VIOLATION.
- 4. TO AVOID AN ANNOYANCE OR NUISANCE TO THE COMMUNITY, NO CONSTRUCTION ON JOB SITES WILL BE PERMITTED ON SUNDAYS AND THE FOLLOWING HOLIDAYS: NEW YEARS DAY, LABOR DAY, CHRISTMAS DAY, MEMORIAL DAY, VETERANS DAY, FOURTH OF JULY, THANKSGIVING DAY. IF THE BUILDER AND CONTRACTOR FEEL THAT THEY HAVE SPECIAL CIRCUMSTANCES, APPLICATION CAN BE MADE TO THE ARCHITECTURAL DIRECTOR FOR WRITTEN APPROVAL FOR A VARIANCE. CLASS B VIOLATION.
- 5. ASSESSMENTS: BUILDERS/PROPERTY OWNERS ASSOCIATION ASSESSMENTS MUST BE PAID AND CURRENT BEFORE THE ARCHITECTURAL COMMITTEE GRANTS APPROVAL TO BUILD ON THE LOT. CLASS B VIOLATION.
- 6. FAILURE TO OBTAIN "STAKING AND FOOTER APPROVALS" AS SPECIFIED IN THE APPROVAL LETTER WILL RESULT IN A FINE. CLASS B VIOLATION
- 7. CONTRACTORS MUST USE A STANDARDIZED MAILBOX AS APPROVED BY THE BOARD OF DIRECTORS. CLASS B VIOLATION.
- 8. FENCE POLICY AND REQUIREMENTS SEE COMMUNITY CODE SECTIONS 5.3. CLASS B VIOLATION.
- 9. CONTRACTORS ARE REQUIRED TO HAVE THE ARCHITECTURAL COMMITTEE INSPECT YOUR CONSTRUCTION AT THE FOLLOWING POINTS: A) AFTER THE LOT AND HOUSE ARE STAKED AND TREES MARKED FOR SAVING, BEFORE FEARING THE LOT. B) SETBACKS CHECKED AFTER THE FOOTERS ARE DUG. C) COLORS AND CONFORMITY OF DESIGN WILL BE CHECKED PERIODICALLY THROUGH CONSTRUCTION. CLASS B VIOLATION.



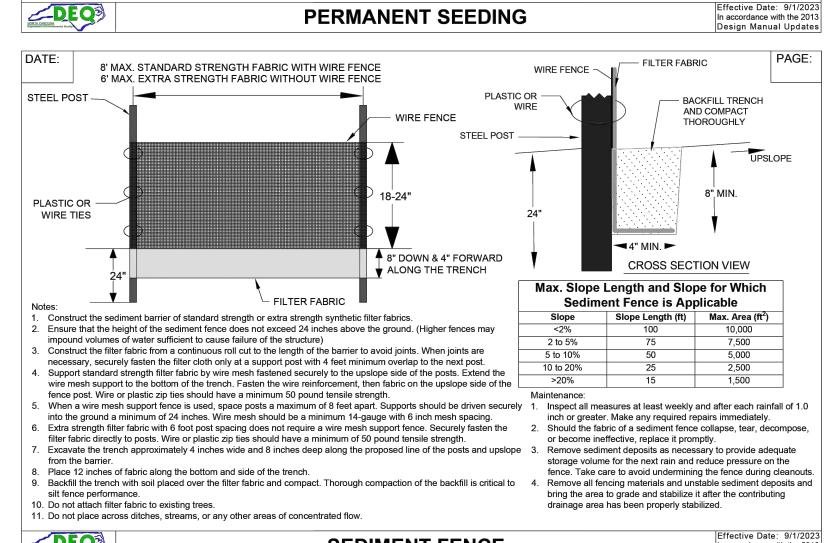
2024 BASS, NIXON & KENNEDY, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION AND CONSENT OF BASS, NIXON & KENNEDY, INC.

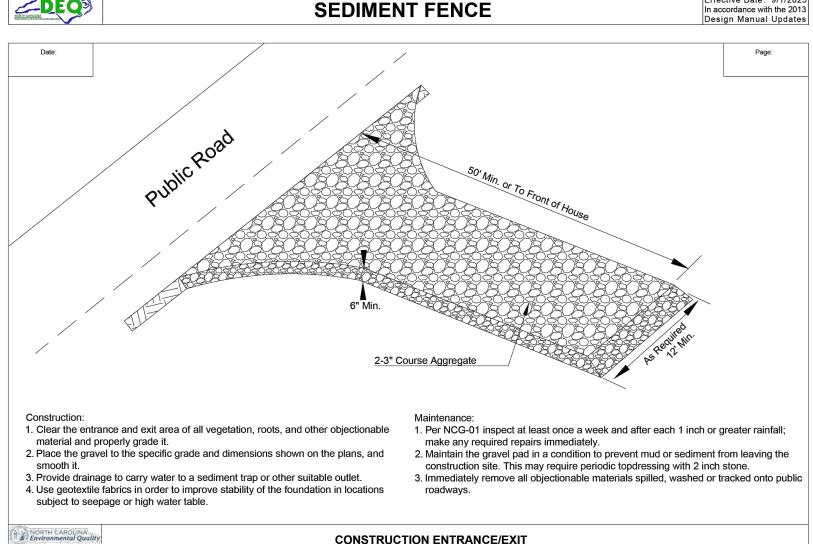
FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700 - 1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application. SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage. Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.



and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.
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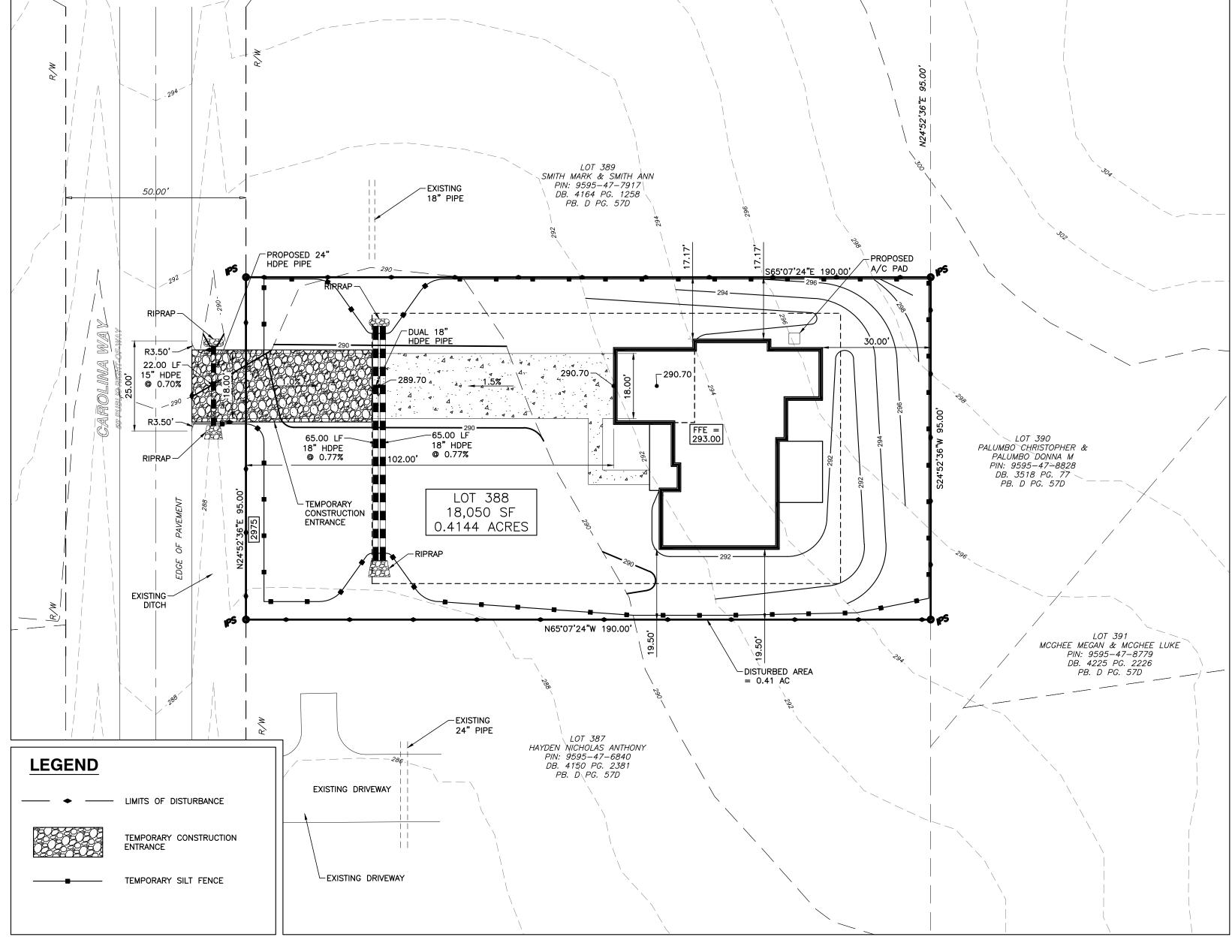
2. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted. . Use a seeding mix that will produce fast0growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must cover at leaser 80% of the soil surface. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.



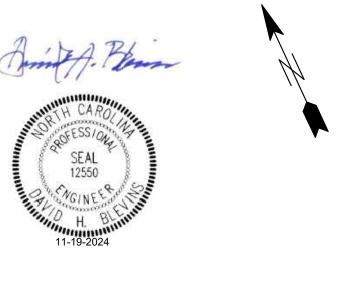




SITE DATA







NO FLOODPLAINS EXIST ON-SITE

NOTE: ONSITE VEHICLE OR EQUIPMENT

WASHING IS NOT ALLOWED.

**SCALE IN FEET** 

29 ROS NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE CITY OF SANFORD AND NCDEQ

KENNEDY, IN ENGINEERS

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