

Pender County Planning and Community Development

Planning Division

805 S. Walker Street
PO Box 1519
Burgaw, NC 28425



Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Blake Farm Single Family Parcel U Major Subdivision – Preliminary Plat

Case Number: SUBMAJ 2025-126

Application Type: Preliminary Plat

Applicant: Elizabeth Shelton

Owner: DR Horton, Inc.

Location: The project site is located off Blake Farm Boulevard.

Property ID #(s): 3262-72-5914-0000

Description: DR Horton has applied to build 50 single-family detached dwelling units as part of the Blake Farm development.

Current Zoning: PD, Planned Development

Technical Review Committee Meeting

April 3, 2025

Board of County Commissioners/Planning Board Meeting

N/A

Included: Application & Site Plan

APPLICATION

Pender County Planning and Community Development



805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Planned Development & Residential Mixed Zoning Districts Preliminary Plat Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. **Pre-submittal Meeting**
Date of Meeting _____
2. **Signed Application**
3. **Payment**
\$500 plus \$10 per lot for the first 100 lots/units, \$5 per lot thereafter
4. **Paper Plan Sets**
Two (2) 24 x 36, Four (4) 11 x 17
5. **Digital Submission**
For all documents submitted in paper copy, please bring a digital copy with paper submission.
6. **Adjacent Property List**
A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the of the perimeter of the project bounds.
7. **Adjacent Property Envelopes**
The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. **Permits**
Please include any permits issued on the project including but not limited to: environmental, traffic analysis, utility, or site specific conditions.
9. **Site Plan Requirements**
A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.4, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.
(See Preliminary Plat Checklist)

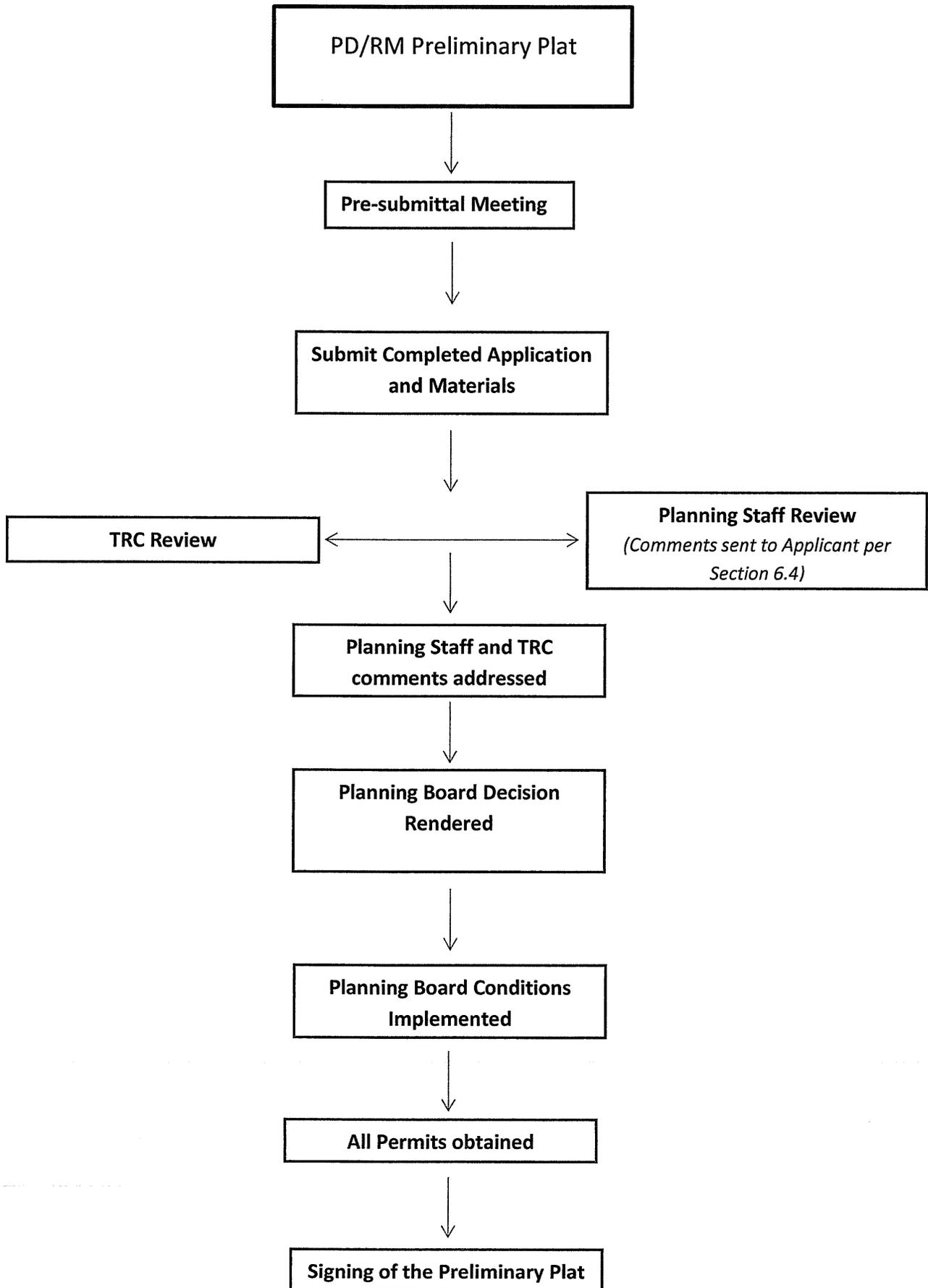
I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant Elizabeth Stelton

Date 2/27/20

Printed Name Elizabeth Stelton

Staff Initials:	_____
Date:	_____



Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

Preliminary Plat Specific Requirements

Preliminary plats not illustrating or containing the data from Section A shall be returned to the developer or the authorized agent for completion and resubmission.

A. The preliminary plat shall be prepared in accordance with the following specifications:

1. Plat Requirements

- a) The plat must be prepared by an authorized Licensed Professional.
- b) The name(s), address(es), and telephone number(s) of the owner(s), registered land surveyor(s), land planner(s), architect(s), landscape architect(s), and professional engineer(s) responsible for the subdivision and the registration number(s) and seal(s) of the registered land surveyor(s).
- c) A sketch vicinity map at an appropriate scale, showing the relationship between the subdivision and the surrounding area.
- d) The date of the survey and the plan preparation; with spaces per subsequent revision.
- e) The name of the township, county, and state in which the subdivision is located.
- f) Deed book and reference of ownership acquisition.
- g) The names of current owners of adjacent landowners along with PIN, current uses, other legal reference where applicable, shall be shown.
- h) The exact boundary lines of the tract to be developed fully dimensioned by bearings and distances, and the location of intersecting boundary lines of adjoining lands.
- i) Scale at 1" = 50' or larger, denoted both graphically and numerically.
- j) North arrow in accordance with the Standards of Practice for Land Surveyors.
- k) The location, purpose, and dimensions of areas to be used for purposes other than residential;
- l) The blocks lettered alphabetically throughout the entire subdivision and the lots numbered consecutively throughout each block.
- m) The proposed minimum building setback lines and density calculations.
- n) The location and dimensions of all proposed and existing rights-of-way, utility or other easements, riding trails, pedestrian or bicycle paths, natural buffers, and areas if any to be dedicated to public use with the purpose of each stated.
- o) Property lines, buildings or other structures, water courses, railroads, bridges, culverts, storm drains, and corporate limits, township boundaries, and county lines.
- p) Sufficient survey to determine readily and reproduce on the ground every straight or curved boundary line, road line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, central angles, and tangent distances for the center line of curved roads and curved property lines that are not the boundary of curved roads. All dimensions shall be in accordance with the Standards and Practices of Land Surveyors.
- q) The accurate locations and descriptions of all monuments, markers, and control points.
- r) Sufficient information shall be provided so that a corner of the property can be located on the ground and found with a measurement from the intersection of two state maintained roads.

Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

2. Design Standards

- a) All subdivided land and parcels shall comply with Section 7.2, Lot Design.
- b) Street layout and access shall conform to Section 7.4, Access and Section 7.5, Street Design.
- c) Calculated open space requirements must adhere to Section 7.6, Open Space.
- d) Landscaping and Buffers shall be shown on the site plan and adhere to the landscaping standards set forth in Article 8, Landscaping and Buffers.

3. Road Layout

- a) Right-of-way lines and pavement widths of all roads and the location and width of all adjacent roads and easements.
- b) The location and design of parking areas and pedestrian and vehicular access points. That the design of traffic patterns, traffic control measures and street pavement areas, including plan profiles and cross section views, and with provisions for maintaining traffic flows for both public use as well as emergency management services are consistent with the requirements of this Ordinance and any other adopted plan.
- c) When the subdivision entrance does not connect to a NCDOT maintained road, recorded documents shall be submitted that confirm the property and the proposed lots have access to a NCDOT maintained road by a public or private street that meets the standards of this Ordinance.
- d) For non-residential and multifamily projects, the location of trash handling, recycling, grease bins, and other waste-related facilities employed in the normal operation of the use.
- e) When any development proposes private streets a description of the method to provide Pender County Emergency Service personnel and vehicles immediate access shall be submitted.
- f) Stormwater facilities, water supply, sanitary sewer service, fire protection and hydrants, street signs, and street lighting designed in conformance with department standards, specifications and guidelines;
- g) Plan profile and cross section of drainage and utility services and other proposed easements or dedications as required.

4.) Traffic Impacts

- a. Existing traffic counts for road(s) and intersection(s) studied and dates/times counts were conducted.
- b. Estimated AM and PM Peak Hour Trips per the Institute of Transportation Engineers Trip Generation Manual.
- c. A Traffic Impact Analysis is required when the development generates 100 trips in the morning or evening peak hours or over 1,000 trips per day. The Traffic Impact Analysis must state the dates and times the counts were conducted.

5.) Adopted Plan Compliance

- h) Compliance with all applicable requirements of this Ordinance and any other County adopted plan, policy document or approved Master Development Plan conditions.
- i) Demonstrate compliance with the most recent Comprehensive Land Use Plan and any other applicable adopted land use document(s).
- j) Compliance with site construction specifications.

Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

- k) The Administrator, Technical Review Committee, or the Planning Board may request additional information be submitted that is pertinent to review of the proposed subdivision for compliance with the provisions of this Ordinance or other Pender County Ordinances.
- B. Upon completion of Section A, the following additional materials or permits are required with the preliminary plat for final approval in accordance with Section 3.10.3.K.:
- 1. Wastewater (either; a or b, as applicable)
 - l) On-Site or Off-Site Wastewater Disposal System
 - a. Verification by the Pender County Health Department.
 - b. Soil suitability analysis indicating the suitability of the property for individual septic tanks
 - c. Detailed description of any proposed waste water system and system maintenance arrangements and procedures to serve lots that are not suitable for traditional onsite septic systems, along with a map showing the proposed location of the offsite components of the system, including lines.
 - m) Community Wastewater Systems
 - a. Authorization to Construct, as approved by the appropriate State Agency
 - b. Wastewater line extensions based upon previous approval of wastewater system
 - c. Construction plans sealed by a registered engineer, as approved by the appropriate State Agency
 - d. If applicable, Certification that the system will be owned by a Public or Community Water System as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.
 - 2) Water (either a or b, as applicable)
 - a. Public Water System
 - i. Authorization to Construct, as approved by the appropriate State Agency
 - ii. Construction plans sealed by a registered engineer, as approved by the appropriate State Agency ~~NC-DEQ~~,
 - iii. Acceptance of operation and maintenance of the system by a Public (Pender County Utilities) or Community Water system as defined in this Ordinance,
 - iv. If applicable, Certification that the system will be owned by a Public or Community Water system as defined in this Ordinance with conditional acceptance of ownership or certification that the system will be owned by a homeowners association established under the provisions of this Ordinance.
 - b. Private Water
 - i. Well permits for each individual as demonstrated through verification of receipt of the preliminary plat of the development by the Pender County Health Department.
 - 3. Road Layout
 - a) Public Right of Way
 - i) Driveway Permit: Approval by NCDOT of connection of subdivision roads with NCDOT maintained roads.
 - ii) Plan Approval: Street construction & street drainage plans as approved by NCDOT District Engineer with letter of approval (for public streets).

Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

- iii) Verification of receipt of the preliminary plat of the development by the NCDOT District Engineer or his the appointed designee.
- b) Private Right of Way
 - i) Street construction & street drainage plans in accord with NCDOT submittal requirements, design and construction standards or in accord with Section 7.5, Street Design, private street standards. The plans must be signed and sealed by a registered surveyor or engineer.
 - ii.) A letter from the design professional will accompany the plans certifying that they meet the NCDOT submittal requirements, design and construction standards or Private Street Standards, Pender County (for private streets).
 - iii) When any street layout or geometric design does not specifically meet the NCDOT Secondary Road Standards or the adopted Pender County Private Street Standards, a narrative explanation, justification detailed drawing of the design shall be submitted for review.
- 4. Approved road and subdivision names in accordance with Article 11.
- 5. Stormwater Management and Drainage Plans
 - a.) Stormwater Management Plan as approved by the appropriate State Agency (with letter of approval).
 - b) Drainage Plan: a general description and map of the proposed drainage for the subdivision shall include the following:
 - The boundaries of all drainage basins that flow through the property from upstream.
 - All drainage facilities that flow through the property and receive any stormwater discharge from upstream.
 - The boundaries of all drainage basins that receive discharge from the property that is located from the discharge point on the property to the recipient perennial stream.
 - All drainage facilities that receive stormwater discharge from the property from the discharge point to the recipient perennial stream.
 - This information can be described in a narrative submission and shown on a copy of a USGS 7.5 Minute Quad or other similar topographical map (11 X 17 map submission)
 - A drainage plan that will include all portions of the development shall be submitted. This plan shall be prepared and sealed by a registered engineer. The plan and facilities shall provide for a drainage system for these areas that will accommodate the ten-year storm event without flooding or substantial ponding of water in the areas included in the plan. The plan must also accommodate any discharge from properties in upland portions of the drainage basin that flows through the property for the same storm event for the type development for which that property is zoned. The boundary of any drainage area on a portion of the site and/or upland from the site and drainage areas between stormwater discharge points from the site to the recipient perennial stream shall be shown on a map (copy of 7.5 min. USGS Quad or similar map). Any drainage facility receiving stormwater discharge from the development shall have the capacity to carry the anticipated stormwater flow from areas that discharge through them for the 10 year storm event from the point of discharge at the development to the recipient perennial stream without over flowing their banks. The location, size

Specific requirements can be found in Section 6.4 of the Pender County Unified Development Ordinance

and/or capacity of all structures included in the drainage system and receiving discharge from the development to the recipient perennial stream shall be shown on the plan and calculations used in designing the drainage system shall be submitted in a legible format. This plan may be included in the street and drainage plan, stormwater management plan or on the preliminary plat, as long as the design professional certifies that the specific drainage plan submitted complies with these requirements and the information required is shown or submitted.

- 4) Approval from the Division of Coastal Management when the development is located in an Area of Environmental Concern.
- 5) Sediment & Erosion Control Plans as approved by the appropriate State Agency (with letter of approval).
- 7) Wetlands
 - b) Approval of Wetlands Delineation by the Army Corps of Engineers (USACE) (if wetlands in development).
 - c) Wetlands fill authorization or permit if construction in wetlands is involved.
- 8) Flood Requirements in accordance with the Flood Damage Prevention Ordinance
- 9) Any other local, State or Federal permit as required for the specific project.

Pender County Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425



Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

Preliminary Plat Subdivision Application

Major Subdivision

Proposed subdivisions consisting of eleven (11) lots or more are classified as Major Subdivisions and are required to follow the Master Development Plan review process found in Figure 2 and 3 at the end of Section 3.4. All major subdivisions shall include a preliminary and final plat. Upon approval of the Master Development Plan by the Planning Board, the applicant may proceed with the preparation of the preliminary plat.

Pre-application Conference

Applicants proposing a major subdivision site plan shall request a pre-application conference with the Administrator prior to submitting the documents for review.

- 1) The purpose of the pre-application conference shall be to discuss the proposal in relation to the requirements of all adopted Land Use Plans and Unified Development Ordinance and to obtain advice on the preparation of the preliminary plan.
- 2) If applicable, the applicant shall provide a copy of the approved Master Development Plan for discussion at the pre-application conference.

Review

- A. Completed plats, application, fees and other required data must be submitted 45 days before a scheduled Planning Board meeting.
- B. When required submission material is submitted as noted above, it shall be placed on the next scheduled Planning Board agenda, if applicable.
- C. The Administrator will forward the Major Subdivision application and site plan to the Technical Review Committee for review. The TRC shall make recommendations concerning whether the plan meets the requirements and or plans of their particular state agency, county department or utility authority
- D. Major subdivision plans must meet all the requirements prescribed in Section 6.4, Preliminary Plat Contents and Section 6.5, Final Plat Contents.
- E. The preliminary plat must be submitted in digital format to the Administrator within the time frame indicated above. The digital submission of the plat will be considered proprietary information. The digital layout will be made available to the Tax Supervisor for parcel update and the digital submission may be returned to the person submitting it.
- F. The plat will be reviewed for compliance with this Ordinance.
- G. Due to the subdivision of land for residential purposes a portion of land must be dedicated to open space by means of providing recreational area to the residents or payments in lieu of dedication to the County. Open space requirements may be referenced in Section 7.6, Open Space.
- H. Planning Board will take action on the plat submission within 65 days after completed submission.
- I. Planning Board Master Development Plan approval shall be valid for two years. If all conditions of preliminary plat are met and a phase of the final plat is recorded, the preliminary plat status shall remain valid perpetually for all remaining phases.
- J. Preliminary plat approval constitutes approval of the layout and authorizes the developer to proceed with construction of the subdivision and improvements in accord with the approved plat, conditions attached to the approval, and submittal of required permits.

- K. All conditions of preliminary plat approval must be completed and submitted within two (2) years of the approval date.
- L. If a preliminary plat is not approved, the reasons for disapproval must be specified and provided to the developer in writing. Disapproval of a preliminary plat may be appealed to the Pender County Board of Commissioners.
- M. A preliminary plat will not be scheduled for review that is incomplete or does not have the required documents submitted with it.

Minor Subdivision

Proposed subdivisions of ten (10) lots or less, except family and three lot divisions are classified as a minor subdivision and shall follow the preliminary plat review process. Proposed minor subdivisions located in PD, Planned Development district must follow the Master Development Plan review process which requires Planning Board approval.

Pre-application Conference

Applicants who are proposing a residential site development plan shall request a pre-application conference with the Administrator prior to submitting the documents for review.

- 1) The purpose of the pre-application conference shall be to discuss the proposal in relation to the requirements of any adopted Land Use Plans and Unified Development Ordinance and to obtain advice on the preparation of the preliminary plat.
- 2) If applicable, the applicant shall provide a copy of the approved Master Development Plan for discussion at the pre-application conference.

Review

- A. Application form must be completed and fee paid at the time of submission.
- B. Minor subdivision plans must meet all the requirements prescribed in Section 6.4, Preliminary Plat Contents and Section 6.5, Final Plat Contents.
- C. The Administrator will forward the Minor Subdivision application and site plan to the Technical Review Committee for review. The TRC shall make recommendations concerning whether the plan meets the requirements and/or plans of their particular state agency, county department or utility authority within five (5) business days.
- D. For projects in the PD zoning district, the administrator may request that the site plan be presented to the Planning Board for its review.
 - 1) The Planning Board may make recommendations to the Administrator concerning the site plan.
 - 2) The Administrator shall incorporate such recommendations into the review of the site plan.
- E. When required submission material is submitted, the Administrator shall review and provide comments or approval to the applicant within fifteen (15) working days.
- F. The plat will be reviewed for compliance with this Ordinance.
- G. Plat approval constitutes approval of the layout and authorizes the developer to proceed with construction of the subdivision and improvements in accord with the approved plat and any conditions attached to the approval.
- H. If a plat is not approved, the reasons for disapproval must be specified and provided to the applicants in writing. Disapproval of a plat may be appealed to the Pender County Zoning Board of Adjustment.
- I. Approval of the preliminary plat shall be valid for two (2) years of the approval date unless building permits have been obtained for construction.

APPLICATION FOR SUBDIVISION

THIS SECTION FOR OFFICE USE			
Application No.	SUB	Date	
Application Fee	\$	Invoice Number:	
Master Plan Hearing Date		Preliminary Plat Hearing Date	
SECTION 1: APPLICANT INFORMATION			
Applicant's Name:	Elizabeth Shelton	Owner's Name:	D.R. Horton, Inc.
Applicant's Address:	6752 Parker Farm Drive, Suite 210	Owner's Address:	6752 Parker Farm Drive, Suite 210
City, State, & Zip	Wilmington, NC, 28403	City, State, & Zip	Wilmington, NC, 28403
Phone Number:	(910) 742-7946	Phone Number:	
Email Address:	elshelton@drhorton.com	Email Address:	
Legal relationship of applicant to landowner: DR Horton Division President			
SECTION 2: PROJECT INFORMATION			
Preliminary Plat	<input checked="" type="checkbox"/> Residential <i>RP, PD, RM, MH District</i>		<input type="checkbox"/> Mixed Use <i>PD</i>
Subdivision Type	<input checked="" type="checkbox"/> Major (11 lots or more)	<input type="checkbox"/> Minor (10 lots or less)	
Property Identification Number (PIN):	3262-72-5914-0000		
Zoning Classification:	PD	Total property acreage:	19.35 ACRES
Number of Lots:	50	Acreage to be disturbed:	11.90 ACRES
Water Provider:	Pender County	Wastewater Provider:	Pluris Hampstead
Additional Information:			
SECTION 3: SIGNATURES			
Applicant's Signature		Date:	2/27/25
Applicant's Printed Name:	Elizabeth Shelton	Date:	
Owner's Signature		Date:	2/24/25
Owner's Printed Name:	Mike Cook	Date:	

NOTICE TO APPLICANT	
1. Applicant or agent authorized in writing must attend the public hearing. 2. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Planning Board or other authorized person agrees to table or delay the hearing. 3. All fees are non-refundable 4. A complete application packet must be submitted prior to the deadline in order to be placed on the next Planning Board Agenda	
Office Use Only	
<input type="checkbox"/>	Subdivision Fees: \$500 + \$10/lot-unit for the first 100 lots/units; \$5/lot-unit thereafter (Major Subdivision) \$150 + \$10 per lot (Minor Subdivision)
Total Fee Calculation: \$	
Attachments Included with Application: (Please include # of copies)	

CD /other digital version	<input type="checkbox"/> Y <input type="checkbox"/> N	Plan Sets	# of large	# of 11X17	Other documents/Reports	<input type="checkbox"/> Y <input type="checkbox"/> N
Payment Method:	Cash : <input type="checkbox"/> \$ _____	Credit Card: <input type="checkbox"/> Master Card <input type="checkbox"/> Visa		Check: <input type="checkbox"/> Check # _____		
Application received by:						Date:
Application completeness approved by:						Date:
Date scheduled for public hearing:						

SITE PLAN

BLAKE FARM PARCEL U

TECHNICAL REVIEW COMMITTEE SUBMITTAL PENDER COUNTY, NORTH CAROLINA

MARCH 2025

FOR REVIEW
ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Eastwood Road | Wilmington, NC 28403
TEL: 910-746-1144 FAX: 910-833-8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 2000'

DATE
03/07/2025

DRAWN BY
331

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 2000'

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 2000'

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 2000'

DATE
03/07/2025

DRAWN BY
331

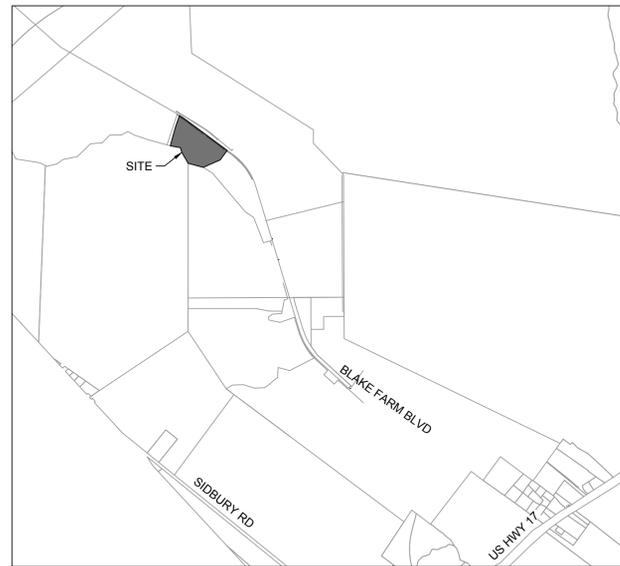
DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 2000'

SITE DATA

PROJECT:	BLAKE FARM PARCEL U
ENGINEER:	TIMMONS GROUP 430 EASTWOOD ROAD WILMINGTON, NC 28403 PHONE: 910-746-1174 JOHN WALL, PE EMAIL: JOHN.WALL@TIMMONS.COM
DEVELOPER:	D.R. HORTON 6752 PARKER FARM DRIVE, SUITE 210 WILMINGTON, NC 28403 GRAYSON MORGAN PHONE: 910-602-8215 EMAIL: GAMORGAN@DRHORTON.COM
OWNER:	D.R. HORTON 4049 BELLE TERRE BLVD MYRTLE BEACH, SC 29579 PIN: 3262-72-5914-0000
PROPERTY LOCATION:	BLAKE FARM BLVD PENDER COUNTY, NC 28411
ZONING:	PD
EXISTING USE:	VACANT LAND
PROPOSED USE:	RESIDENTIAL
TOTAL SITE AREA:	19.35 AC
TOWNSHIP:	TOPSAIL
DEED BOOK/ PAGE:	4834/2535



VICINITY MAP

1"=2000'

Parcel	Per Approved Master Plan		Required Open Space Acres (.03 AC / UNIT)	Approved/Under Construction/Existing		Active Open Space (Min 50%) Acres	Passive Open Space Acres	Total Open Space Acres
	Land Use	Dwelling Units		Land Use	Dwelling Units			
H*	Residential	45	1.35	Residential	49	1.25	0.65	1.9
I*	Residential	39	1.17	Residential	31	1.34	0.52	1.86
J*	Amenity	0	0	Amenity	0			
K	Residential	141	4.23	Residential	136	11.69	10.9	22.59
L	Residential	130	3.9	Residential	119			
M	Residential	498	14.94	Undeveloped	0			
O	Residential	53	1.59	Undeveloped	0			
P	Residential	379	11.37	Residential	326	5.34	30.72	36.06
Q*	Residential	256	7.68	Undeveloped	25	0.36	0.45	0.81
R	Residential	138	4.74	Residential	158	3.71	20.59	24.3
S	Residential	237	7.11	Undeveloped	0			
T	Residential	110	3.3	Undeveloped	0			
U*	Residential	205	6.15	Undeveloped	50	0.79	0.79	1.58
V	Residential	128	3.84	Undeveloped	0			
W	Residential	89	2.67	Undeveloped	0			
X	Residential	194	5.82	Undeveloped	0			
Y	Residential	65	1.95	Undeveloped	0			
Total		2707	81.81		894	24.48	64.62	89.1

* In TRC Review

Parcel	Per Approved Master Plan		Approved/Under Construction/Existing		Units Remaining
	Land Use	Dwelling Units	Land Use	Dwelling Units	
H*	Residential	45	Residential	49	-4
I*	Residential	39	Residential	31	8
J*	Amenity	0	Amenity	0	0
K	Residential	141	Residential	136	5
L	Residential	130	Residential	119	11
M	Residential	498	Undeveloped	0	498
O	Residential	53	Undeveloped	0	53
P	Residential	379	Undeveloped	326	53
Q*	Residential	256	Undeveloped	25	231
R	Residential	138	Undeveloped	158	-20
S	Residential	237	Undeveloped	0	237
T	Residential	110	Undeveloped	0	110
U*	Residential	205	Undeveloped	50	155
V	Residential	128	Undeveloped	0	128
W	Residential	89	Undeveloped	0	89
X	Residential	194	Undeveloped	0	194
Y	Residential	65	Undeveloped	0	65
Total		2707		894	1813

* In TRC Review

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT
1-800-632-4949

CONTACT THESE UTILITIES

PENDER COUNTY PLANNING AND COMMUNITY DEVELOPMENT ATTN: TRAVIS HENLEY PH: 910-259-1734	PENDER COUNTY UTILITIES (WATER) ATTN: KENNITH KEEL PH: 910-259-0212
PIEDMONT NATURAL GAS ATTN: CARL PAQUET PH: 910-350-2242	DUKE ENERGY ATTN: KEVIN LEATHERWOOD PH: 910-602-4304
PLURIS HAMPSTEAD, LLC (SEWER) ATTN: RANDY HOFFER PH: 910-327-2880	BELL SOUTH ATTN: STEVE DAYVAULT PH: 910-341-0741
EMERGENCY DIAL 911 POLICE - FIRE - RESCUE	TIME WARNER CABLE PH: 910-763-4638

Sheet Number	Sheet Title
C0.0	COVER SHEET
C0.1	GENERAL NOTES
C1.0	OVERALL EXISTING CONDITIONS
C1.1	DEMOLITION PLAN
C2.0	OVERALL SITE PLAN
C2.1	DETAILED SITE PLAN - SHEET 1 OF 2
C2.2	DETAILED SITE PLAN - SHEET 2 OF 2
C3.0	OVERALL UTILITY PLAN
C3.1	DETAILED UTILITY PLAN - SHEET 1 OF 2
C3.2	DETAILED UTILITY PLAN - SHEET 2 OF 2
C4.0	OVERALL GRADING AND DRAINAGE PLAN
C4.1	DETAILED GRADING AND DRAINAGE PLAN - SHEET 1 OF 2
C4.2	DETAILED GRADING AND DRAINAGE PLAN - SHEET 2 OF 2
C9.0	SITE NOTES AND DETAILS
C9.1	SITE NOTES AND DETAILS
C9.2	UTILITY NOTES AND DETAILS
C9.3	UTILITY NOTES AND DETAILS
C9.4	STORMWATER NOTES AND DETAILS
C9.5	STORMWATER NOTES AND DETAILS
C9.6	STORMWATER NOTES AND DETAILS

CERTIFICATE OF DISCLOSURE: PRIVATE ROADS

I (we) the developers of _____ subdivision located in the unincorporated area of Pender County understand that the roads in said subdivision are designated private. I understand that ownership and maintenance of the roads will be the responsibility of the developer until such time that the developer designates the responsibility to the property owners' association. Responsibilities must be accepted by the homeowners association as specified in the homeowner covenants for said subdivision. The private roads in said subdivision are to be constructed in accordance with this UDQ and all applicable County Codes which includes the design, installation, inspection, and approval by a licensed Professional Engineer (PE) recognized in the State of North Carolina prior to final plat approval for all or a portion of the subdivision. If all or a portion of the road infrastructure system within the subdivision is bonded through a surety, performance bond, or cash escrow, no bond shall be released until all road construction improvements are complete and certified by the Professional Engineer.

It shall be disclosed to the prospective buyer of a lot or lots within the subdivision that road maintenance shall run through the property owners association in perpetuity after acceptance from the developer until such time that the roads are re-platted as publicly designated roads and taken over for maintenance through the North Carolina Department of Transportation (NCDOT).

Developer's Name _____ Date _____

APPROVED BY PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE ADMINISTRATOR

SIGNATURE: _____

DATE: _____

SITE PLAN VALID FOR TWO YEARS FROM APPROVAL DATE



TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA
COVER SHEET

JOB NO.
70442
SHEET NO.
C0.0

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

S:\31170442-Blake_Farms_Parcel_UDWG\SheetCD70442-331-C01-0-COVER.dwg | Plotted by: Grant Smith

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Esawood Road | Wilmington, NC 28403
TEL: 910.740.1144 FAX: 910.933.0124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
NONE

GENERAL NOTES

BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA

JOB NO.
70442
SHEET NO.
001

- NOTES:
- CONTRACTOR TO OBTAIN, REFERENCE, AND UTILIZE ALL AVAILABLE ENVIRONMENTAL REPORTS (PHASE 1 ESA, ASBESTOS, ETC.) FROM DEVELOPER.
 - CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS FROM LOCAL AND STATE AUTHORITIES TO COMPLETE THE WORK.
 - CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS.
 - INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TREE PROTECTION PRIOR TO BEGINNING DEMOLITION WORK.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE ALL EXISTING PROPERTY MARKERS. IF DISTURBED, REPLACEMENT MUST BE BY A CERTIFIED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
 - ASBESTOS OR HAZARDOUS MATERIAL, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIAL CONTRACTOR.
 - ALL WASTE MATERIAL GENERATED FROM CLEARING AND DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS BY THE CONTRACTOR
 - REMOVE/ DEMOLISH/ ABANDON AFTER EROSION CONTROL MEASURES ARE IN PLACE AND APPROVAL OF THE INSPECTOR. REFER TO EROSION CONTROL PLAN.
 - REMOVE TOPSOIL AND STOCKPILE APPROPRIATELY ON-SITE ON-SITE TEMPORARY STOCKPILES SHALL BE LOCATED WITHIN CONSTRUCTION LIMITS.
 - DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED BY THE OWNER OR OTHERS EXCEPT WHEN PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE ACCEPTABLE TEMPORARY UTILITY SERVICES. (1) NOTIFY OWNER NOT LESS THAN ONE WEEK IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS. (2) DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT RECEIVING OWNER WRITTEN PERMISSION. (3) COORDINATE ALL UTILITY RELOCATION WITH APPROPRIATE UTILITY PROVIDER.
 - ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER, ETC. THAT MUST BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED AND REPAIRED PER THE SPECIFICATIONS AND DETAILS OR TO MATCH EXISTING CONDITIONS (WHETHER OR NOT SHOWN ON THE DRAWINGS TO BE REMOVED). UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OF PAVEMENTS UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR DETAIL.
 - SUBSURFACE FEATURES ARE SHOWN IN APPROXIMATE LOCATION. CONTRACTOR IS RESPONSIBLE FOR SUBSURFACE UTILITY EXPLORATION TO DETERMINE UTILITY LOCATION AND DEPTHS.
 - THE CONTRACTOR SHALL USE NC ONE CALL (811) TO LOCATE ALL UNDERGROUND UTILITIES.
 - CONTRACTOR IS RESPONSIBLE FOR REMOVING OR ABANDONING ALL EXISTING UTILITIES AND STRUCTURES REQUIRED TO COMPLETE SITE CONSTRUCTION, EITHER ONSITE OR IN PUBLIC ROW, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
 - WATER AND SEWER ABANDONMENT SHALL BE DONE IN ACCORDANCE WITH PENDER COUNTY STANDARDS INCLUDING DISCONNECT FROM THE MAIN AND REMOVAL OF SERVICES FROM THE RIGHT-OF-WAY.
 - ANY EXISTING UNIDENTIFIED SEPTIC SYSTEMS AND WELLS FOUND ON SITE AND FEDERAL REGULATIONS AT NO CHARGE TO THE OWNER.
 - VERIFY ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY THE ENGINEER IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED DESIGN.
 - REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
 - CONTRACTOR SHALL COORDINATE ALL CONNECTIONS, RELOCATIONS, AND DEMOLITION WORK WITH THE APPROPRIATE COMPANY OR JURISDICTION HAVING AUTHORITY AND SHALL OBTAIN ANY PERMITS AS REQUIRED.
 - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
 - EXISTING MANHOLES, VALVE BOXES, VAULTS, CLEANOUTS, UTILITY POLES ETC. TO REMAIN WITHIN THE GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO FUNCTION PROPERLY WITH THE PROPOSED FINISHED GRADES (WHETHER OR NOT INDICATED TO BE MODIFIED).
 - CONTRACTOR SHALL NOTIFY APPROPRIATE DEPARTMENTS PRIOR TO BEGINNING ANY WORK WITHIN PUBLIC RIGHT-OF-WAY.
 - ALL DISTANCES SHOWN ON SURVEY ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.
 - THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY THIS FIRM.
 - BASIS OF BEARING SHOWN HEREON IS NC GRID NAD 83/2011.
 - VERTICAL DATA SHOWN HEREON IS BASED ON NAVD83 (GEOID18).
 - A CORPUS OF ENGINEERS 401 PERMIT MUST BE OBTAINED FOR ANY WORK WITHIN THE WETLANDS WHERE APPLICABLE, PRIOR TO THE START OF ANY WORK.

- NOTES:
- TREE INVENTORY, BOUNDARY, AND TOPOGRAPHIC SURVEY COMPLETED BY MCKIM & CREED. THE SURVEY SHALL BE FIELD VERIFIED BY CONTRACTOR AND ANY DISCREPANCIES REPORTED TO THE OWNER AND ENGINEER.
 - THE SUBJECT PROPERTY IS LOCATED IN ZONE X AND ZONE AE WITH FIRM MAP NUMBER 3720326200L AND AN EFFECTIVE DATE OF 1/17/2025

- GENERAL SITE NOTES
- STATE STORMWATER PERMIT MUST BE OBTAINED PRIOR TO ANY CONSTRUCTION OF IMPERVIOUS SURFACE. NO NATURAL DRAINAGE AREAS WILL BE CUT OFF OR DISTURBED BEFORE OBTAINING THE PERMITS.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH PENDER COUNTY AND NCDOT STANDARDS AND SPECIFICATIONS.
 - CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM THEIR ACTIVITIES. CALL UTILITY LOCATOR SERVICE BEFORE DIGGING.
 - ALL UTILITIES SHALL BE UNDERGROUND.
 - EACH LOT WILL BE SERVED BY PENDER COUNTY UTILITIES (PCU) AND PLURIS HAMPSTEAD.
 - NCDOT EROSION CONTROL PERMIT WILL BE REQUIRED, AND ALL EROSION CONTROL REGULATIONS WILL BE COMPLIED WITH.
 - CONSTRUCTION DRAWINGS MUST BE FULLY APPROVED PRIOR TO CONSTRUCTION.
 - SIGNAGE SHALL BE APPROVED PRIOR TO INSTALLATION OF ANY SIGNAGE
 - STREET NAMES MUST BE APPROVED BY PENDER COUNTY PRIOR TO FINAL PLAT.
 - ALL STREETS ARE PROPOSED TO BE PRIVATE (BUILT TO PENDER COUNTY STANDARDS/NCDOT PAVEMENT AND SUBGRADE STANDARDS) AND ARE NOT ELIGIBLE TO BE ADDED TO THE STATE HIGHWAY SYSTEM FOR MAINTENANCE PER GENERAL STATUTE 136-102.6. PENDER COUNTY EMERGENCY SERVICE PERSONNEL AND VEHICLES WILL HAVE ACCESS TO THE PROPOSED PRIVATE RIGHT-OF-WAY.
 - EACH DRIVEWAY WILL HAVE A MIN. OF 2 DRIVEWAY PARKING SPACES PER LOT OUTSIDE OF THE RIGHT OF WAY.
 - A HOMEOWNERS ASSOCIATION WILL BE FORMED PRIOR TO THE SALE OF THE LOTS AND MEMBERSHIP WILL BE AUTOMATIC UPON PURCHASE WITHIN THE DEVELOPMENT. THE HOMEOWNERS ASSOCIATION WILL COMPLY WITH THE STANDARDS SET FORTH IN THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE.
 - THE HOME OWNERS ASSOCIATION (HOA) WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE STREETS, STORMWATER SYSTEMS AND OPEN SPACE AREAS.
 - THERE SHALL BE A NOTE ON THE FINAL PLATS, MASTER COVENANTS, AND DEEDS SHOWING THE LOCATION OF WETLANDS AND NOTING THAT THOSE AREAS MAY NOT BE FILLED, DISTURBED, OR ALTERED IN ANY WAY UNLESS PROPERLY PERMITTED BY THE NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES AND/OR THE U.S. ARMY CORPS OF ENGINEERS.
 - ALL STREET LIGHTING SHALL BE CONSISTENT WITH SECTION 7.1 OF THE PENDER COUNTY UDO.
 - STATE STORMWATER PERMITS MUST BE OBTAINED PRIOR TO ANY CONSTRUCTION. NO NATURAL DRAINAGE AREAS SHALL BE CUT OFF OR DISTURBED BEFORE OBTAINING PERMITS.
 - PROJECT TO BE BUILT TO PCU STANDARDS FOR WATER AND SEWER. A UTILITY PLAN MUST BE SUBMITTED AND APPROVED BY PCU.
 - ONLY PENDER COUNTY APPROVED MATERIALS ARE TO BE USED WITHIN THE RIGHT OF WAY.
 - A CORPUS OF ENGINEERS 401 PERMIT MUST BE OBTAINED FOR ANY WORK WITHIN THE WETLANDS WHERE APPLICABLE, PRIOR TO THE START OF ANY WORK.
 - A 5' SIDEWALK IS PROPOSED ON BOTH SIDES OF THE ROAD.
 - ALL SIDEWALKS AND HANDICAP ACCESS RAMPS SHALL MEET ADA REQUIREMENTS. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN DESIGN INFORMATION AND ADA REQUIREMENTS PRIOR TO CONSTRUCTION.
 - ADA ACCESSIBLE ROUTE SHALL HAVE A 5.0% MAXIMUM LONGITUDINAL SLOPE AND A 2.0% MAXIMUM CROSS SLOPE (EXCLUDING RAMPS).
 - THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL STOP SIGNS, DIRECTIONAL SIGNS AND STRIPING SHOWN ON THE PLANS.
 - CONTRACTOR TO CONTACT THE DESIGN PROFESSIONAL FOR ENTRANCE CLARIFICATIONS, CONSTRUCTION ANOMALIES AND INSTALLATION QUESTIONS.
 - ALL DIMENSIONS ARE FROM THE FACE OF CURB, UNLESS NOTED OTHERWISE.
 - NCDOT STANDARD DETAILS, AS REFERENCED, TO BE CONSTRUCTED WITH THE 2024 ROADWAY STANDARD DRAWINGS.

FLOOD PLAIN NOTE:
ANY LAND DISTURBANCE IN AN AE ZONE REQUIRES A FLOOD PLAIN DEVELOPMENT PERMIT PRIOR TO COMMENCEMENT OF WORK. NO LAND DISTURBANCE ACTIVITY IS PERMITTED IN THE NEA (NON-ENCROACHMENT AREA) WITHOUT A HYDRAULIC/HYDROLOGY NO-IMPACT STUDY COMPLETED BY A LICENSED HYDRAULIC ENGINEER AND SUBMISSION OF A NO-RISE CERTIFICATE BY THE ENGINEER. THE NO-IMPACT STUDY MUST USE THE CURRENT HEC-RAS MODELING AND WILL BE REVIEWED BY THE STATE FOR COMPLIANCE.

EROSION AND SEDIMENT CONTROL GENERAL NOTES

- THE GRADING CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES BOTH ON AND OFF-SITE.
- THE GRADING CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AFTER EACH RAINFALL EVENT OR AS DIRECTED BY LOCAL AUTHORITIES OR THE ENGINEER.
- THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR OFF-SITE DISPOSAL OF ALL CLEARING AND GRADING WASTE MATERIALS GENERATED DURING HIS PHASE OF WORK AND FOR OBTAINING ALL APPLICABLE PERMITS FOR OFF-SITE STOCKPILES AND/OR WASTE AREAS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY TRACKED SOIL FROM ALL ADJACENT ROADWAYS THAT ARE IMPACTED BY CONSTRUCTION TRAFFIC.
- CONTRACTOR SHALL ABIDE BY ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.

CONSTRUCTION SEQUENCE - PHASE I

- OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS. KEEP A COPY OF THE APPROVED PLAN ON-SITE AND POST APPROVAL PLACARD.
- NOTIFY NCDOT - LAND QUALITY SECTION, PENDER COUNTY, AND OWNER REPRESENTATIVE AND CONDUCT PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CLEARING OR ANY OTHER CONSTRUCTION.
- CONTRACTOR TO COORDINATE WORK AROUND EXISTING UTILITIES WITH THE CORRESPONDING UTILITY COMPANIES.
- ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT EDITION OF THE NCDOT EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- INSTALL GRAVEL CONSTRUCTION ENTRANCES, TEMPORARY SILT FENCES, DIVERSIONS AND OTHER MEASURES AS SHOWN ON DRAWINGS. CLEAR ONLY AS NECESSARY TO INSTALL AND MAINTAIN THESE DEVICES.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED.
- ROUGH GRADE SITE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES DEEMED NECESSARY BY NCDOT.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISHED GRADE WITH VEGETATION, PAVING, TEMPORARY DITCH AND SLOPE LINING, ETC. SEE SLOPE AND SURFACE STABILIZATION NOTES LISTED ON THIS SHEET.
- ANY MATERIAL HAULED OFF-SITE SHALL BE TAKEN TO AN AUTHORIZED SITE WITH AN ACTIVE ESC PLAN.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ANY SOIL STOCKPILES ARE TO BE SURROUNDED BY SILT FENCE AND SEEDED FOR STABILIZATION IF TO BE LEFT UNDISTURBED FOR MORE THAN 7 DAYS.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED, CALL FOR A FINAL INSPECTION BY NCDOT INSPECTOR TO OBTAIN A CERTIFICATE OF COMPLETION AND REMOVE REMAINING PERIMETER MEASURES.

CONSTRUCTION SEQUENCE - PHASE II

- BEGIN GRADING AND STORM SEWER AND UTILITY INSTALLATION. INSTALL INLET PROTECTION AS NEEDED ON CONSTRUCTED STORM SEWER INLETS.
- CONTRACTOR TO COORDINATE WORK AROUND EXISTING UTILITIES WITH THE CORRESPONDING UTILITY COMPANIES.
- INSPECT ALL MEASURES AND DEVICES WEEKLY AND AFTER ALL RAINFALL EVENTS. MAKE PROMPT REPAIRS AS NEEDED.
- MAINTAIN ALL PHASE I EROSION CONTROL DEVICES THROUGHOUT CONSTRUCTION OR AS INDICATED ON PLANS.
- MAINTAIN POSITIVE DRAINAGE TO EROSION CONTROL DEVICES AT ALL TIMES AND ADJUST MEASURES IF NECESSARY TO INTERCEPT SEDIMENT AND PREVENT EROSION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENVIRONMENTAL ENGINEERING DEPARTMENT.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISHED GRADE WITH VEGETATION, PAVING, TEMPORARY DITCH AND SLOPE LINING, ETC. SEE SLOPE AND SURFACE STABILIZATION NOTES LISTED ON THIS SHEET.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED, CALL FOR INSPECTION BY PENDER COUNTY.
- WHEN SITE IS APPROVED BY PENDER COUNTY INSPECTOR; REMOVE SEDIMENT BASINS/CONVERT THEM TO PERMANENT SCMS, FINE GRADE AND STABILIZE AREAS.
- ONCE REMAINING VEGETATION IS ESTABLISHED, CALL FOR A FINAL INSPECTION BY PENDER COUNTY INSPECTOR TO OBTAIN A CERTIFICATE OF COMPLETION AND REMOVE REMAINING PERIMETER MEASURES.

NCDOT SELF-INSPECTION PROGRAM

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED.

RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010.

THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FROM THE LAND QUALITY WEB SITE.
HTTP://PORTAL.NCDENR.ORG/WEB/EROSION

MAINTENANCE PLAN

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL MEASURES AS DESIGNED.
- REMOVE SEDIMENT FROM BEHIND SILT FENCE WHEN DEPTH REACHES 6-INCHES AT THE FENCE. REPAIR SILT FENCE AS NECESSARY TO MAINTAIN A BARRIER.
- ALL SEEDED AREAS SHALL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO PROJECT SPECS TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE GROWTH.
- MAINTAIN SILT/TREE PROTECTION FENCING THROUGHOUT DURATION OF CONSTRUCTION.
- INSPECT RIPRAP OUTLET PROTECTION STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLOGGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
- TOP DRESS CONSTRUCTION ENTRANCES WITH CLEAN STONE AS NECESSARY TO MAINTAIN PROPER FUNCTIONING.
- REFER TO SPECIFIC DEVICE DETAILS FOR ADDITIONAL MAINTENANCE REQUIREMENTS.

GROUND STABILIZATION

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	7 DAYS FOR ALL HQW AREAS
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ALLOWED
SLOPES 3:1 OR FLATTER	7 DAYS	7 DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ANY OTHER AREAS WITH SLOPES FLATTER THAN 4:1	7 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)
* EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE. (SECTION II.B(2)(B))		
PERMANENT GROUND COVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 60 CALENDAR DAYS (WHICHEVER IS SHORTER).		



These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



LEGEND

- PROPERTY LINE
- EXISTING WETLANDS
- LIMITS OF DISTURBANCE
- 1% ANNUAL CHANCE FLOOD

TREE LEGEND

- HOLLY
- WATER OAK
- WILLOW OAK
- RED MAPLE
- CHERRY
- WHITE OAK
- BALD CYPRESS

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Eastwood Road | Wilmington, NC 28403
 TEL: 910.746.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.	REVISION DESCRIPTION
DATE	
03/07/2025	
DRAWN BY	
331	
DESIGNED BY	
331	
CHECKED BY	
J. WALL	
SCALE	
1" = 60'	

TIMMONS GROUP

BLAKE FARM PARCEL U
 NORTH CAROLINA LICENSE NO. C-1652
 PENDER COUNTY, NORTH CAROLINA
OVERALL EXISTING CONDITIONS

JOB NO.	70442
SHEET NO.	C1.0

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

S:\31170442-Blake_Farms_Parcel_U\DWG\SheetCD70442-331-C1-DE-EXIS.dwg | Plotted by Nabin Sridhar





SIGNIFICANT TREE REMOVAL				
POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
15012	222518.13	2367913.01	9"	RED MAPLE
15013	222499.02	2367941.26	9"	RED MAPLE
15020	222533.33	2367688.64	8"	WHITE OAK
15024	222616.38	2367539.82	9"	RED MAPLE
15025	222636.77	2367516.24	9"	RED MAPLE
15030	222751.15	2367568.48	8"	RED MAPLE
15036	222967.47	2367329.35	9"	WATER OAK
15040	222877.59	2367305.63	8"	WATER OAK
15117	222368.45	2367338.85	12"	WATER OAK
15136	222876.40	2367371.14	11"	WATER OAK
15142	222805.46	2367564.39	11"	WATER OAK
15147	222745.30	2367511.51	9"	AMERICAN HOLLY
15148	222756.36	2367477.32	8"	WATER OAK
15157	222276.11	2368362.54	8"	HOLLY
15158	222255.51	2368351.02	8"	WATER OAK
15159	222185.24	2368318.26	10"	WATER OAK
15194	222176.93	2368247.39	12"	WATER OAK
15195	222173.26	2368224.80	7"	HOLLY
15214	222215.96	2368047.67	21"	WATER OAK
15215	222225.79	2368068.74	8"	WATER OAK
15216	222208.47	2368060.96	9"	WATER OAK
15217	222251.14	2368062.59	9"	WATER OAK
15280	222334.94	2367967.29	9"	WATER OAK
15286	222321.12	2367996.54	10"	WATER OAK
15287	222343.32	2367755.54	8"	WATER OAK
15288	222358.08	2367738.71	12"	WATER OAK
15289	222370.17	2367730.34	12"	WATER OAK

SIGNIFICANT TREE REMOVAL				
POINT NUMBER	NORTHING	EASTING	DBH	COMMON NAME
15301	222403.55	2367638.44	9"	WATER OAK
15302	222409.99	2367615.77	14"	BALD CYPRESS
15303	222420.46	2367590.42	13"	WATER OAK
15304	222449.07	2367580.40	9"	WATER OAK
15305	222463.08	2367583.96	8"	WATER OAK
15306	222477.64	2367570.21	8"	WATER OAK
15307	222472.71	2367518.75	14"	WATER OAK
15337	222587.72	2367354.71	15"	WATER OAK
15338	222572.46	2367338.48	11"	WATER OAK
36151	222304.94	2368368.62	7"	HOLLY
36156	222410.07	2368123.54	8"	HOLLY
36161	222309.65	2368267.26	9"	WATER OAK
36163	222247.47	2368252.92	9"	WATER OAK
36164	222212.06	2368256.19	10"	WATER OAK
36165	222204.24	2368221.00	6"	HOLLY
36166	222201.37	2368175.90	8"	HOLLY
36167	222215.10	2368130.73	12"	RED MAPLE
36168	222213.83	2368108.66	10"	WATER OAK
36169	222196.21	2368110.73	10"	WATER OAK
36170	222204.51	2368121.66	8"	HOLLY
36179	222649.20	2367718.95	8"	WATER OAK
36180	222535.33	2367689.15	8"	WATER OAK
36208	222216.13	2368302.34	8"	WATER OAK
36209	222252.36	2367999.35	8"	WATER OAK
37016	222449.83	2368070.61	8"	WATER OAK
37025	222332.08	2367791.63	26"	BALD CYPRESS

LEGEND

- PROPERTY LINE
- EXISTING WETLANDS
- LIMITS OF DISTURBANCE
- 1% ANNUAL CHANCE FLOOD

TREE LEGEND

- HOLLY
- WATER OAK
- WILLOW OAK
- RED MAPLE
- CHERRY
- WHITE OAK
- BALD CYPRESS

TREE REMOVAL

- TREE TO BE REMOVED
- TREE TO BE RETAINED

- NOTES:**
- EXISTING VEGETATION TO BE REMOVED WITHIN LOD. RETAIN SIGNIFICANT TREES NOT SHOWN TO BE DEMO'D THIS SHEET.
 - WHERE ANY SIGNIFICANT TREE SHOWN ON THE SIGNIFICANT TREE SURVEY IS PROPOSED TO BE REMOVED SUCH REMOVAL SHALL BE MITIGATED BY THE PLANTING ON SITE OF TWO (2) TREES OF THE SAME SPECIES WITH A MINIMUM CALIPER OF 2" OR GREATER.
 - REFER TO SHEET C5.0-5.8 FOR EROSION AND SEDIMENT CONTROL MEASURES

SCALE 1" = 60'

North Carolina 811
www.nc811.org

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Eastwood Road | Wilmington, NC 28403
TEL: 910.746.1144 | FAX: 919.833.8124 | www.timmons.com

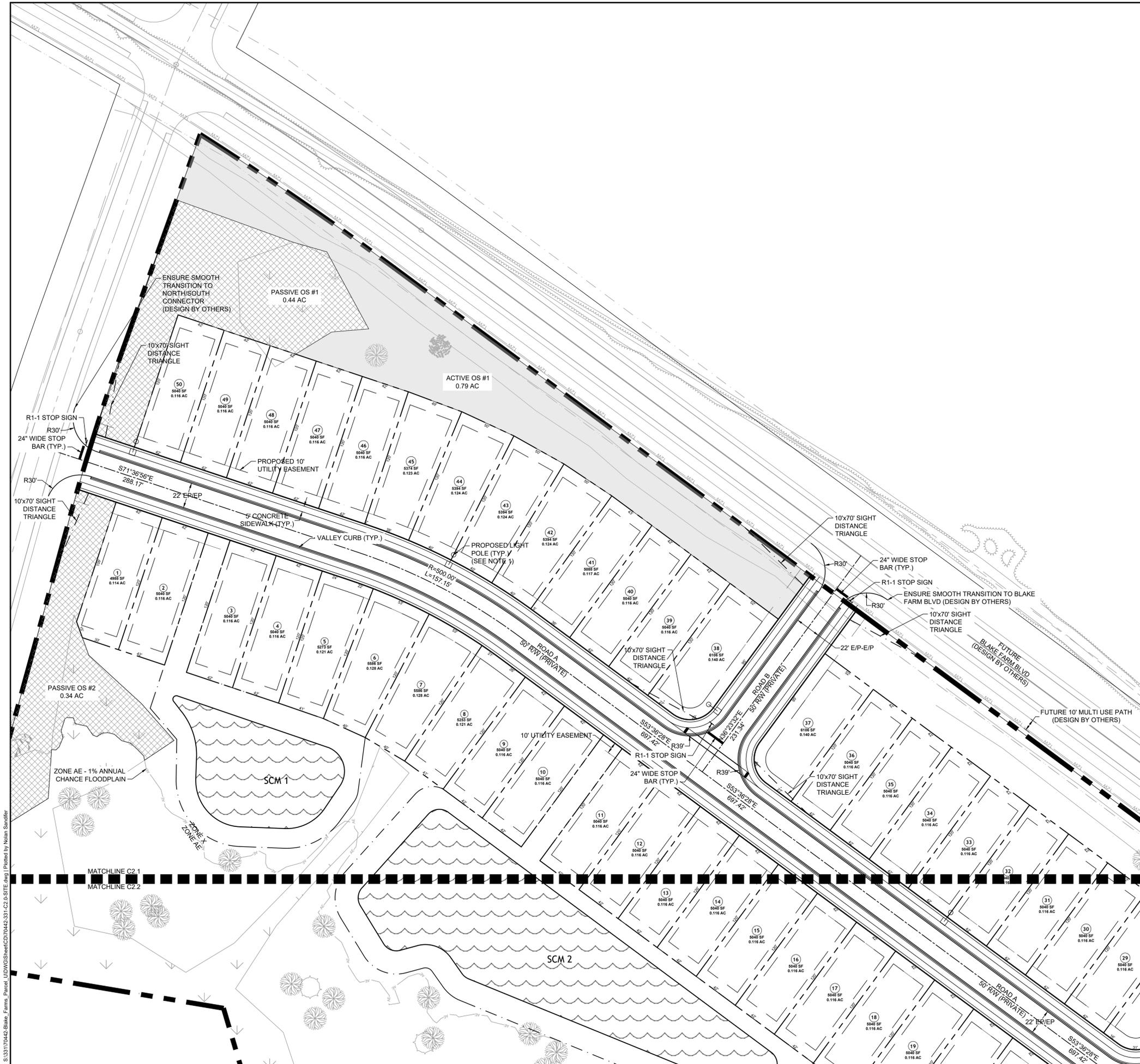
YOUR VISION ACHIEVED THROUGH OURS.

DATE: 03/07/2025
DRAWN BY: 331
DESIGNED BY: 331
CHECKED BY: J. WALL
SCALE: 1" = 60'

TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA
DEMOLITION PLAN

JOB NO. 70442
SHEET NO. C1.1

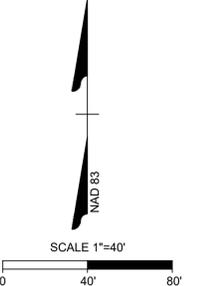
PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION
These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



NOTES:
 1. LIGHTING LAYOUT SHOWN FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE WITH DUKE ENERGY FOR EXACT LIGHT POLE LOCATIONS AND DETAILS

LEGEND

	PROPERTY LINE
	PROPOSED RIGHT OF WAY
	PROPOSED LOT LINE
	SIGHT TRIANGLE
	UTILITY EASEMENT
	EXISTING WETLANDS
	PASSIVE OPEN SPACE
	ACTIVE OPEN SPACE



FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Eastwood Road | Wilmington, NC 28403
 TEL: 910.746.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION	DATE

DATE
 03/07/2025

DRAWN BY
 331

DESIGNED BY
 331

CHECKED BY
 J. WALL

SCALE
 1" = 40'

TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA

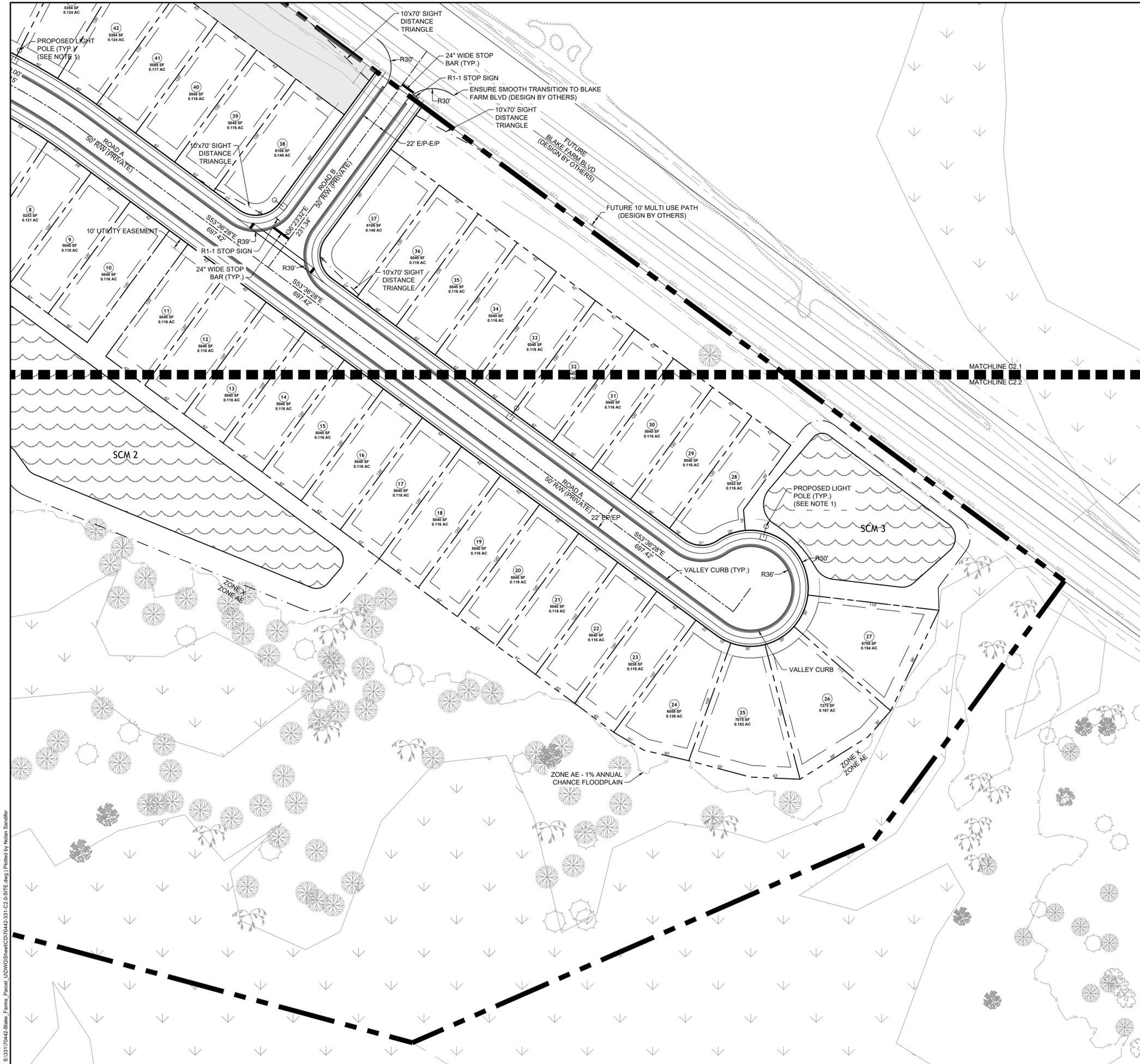
DETAILED SITE PLAN - SHEET 1 OF 2

JOB NO.
 70442

SHEET NO.
 C2.1

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

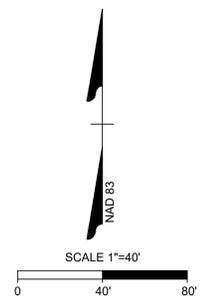
S:\31170442-Blake_Farms_Parcel_U\DWG\SheetCD70442-331-C2.DWG (S:\SITE.dwg) Plotted by Neam Sanifur



NOTES:
 1. LIGHTING LAYOUT SHOWN FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE WITH DUKE ENERGY FOR EXACT LIGHT POLE LOCATIONS AND DETAILS

LEGEND

	PROPERTY LINE
	PROPOSED RIGHT OF WAY
	PROPOSED LOT LINE
	SIGHT TRIANGLE
	UTILITY EASEMENT
	EXISTING WETLANDS
	PASSIVE OPEN SPACE
	ACTIVE OPEN SPACE



FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Esplanade Road | Wilmington, NC 28403
 TEL: 910.746.1144 | FAX: 910.833.8124 | www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE	REVISION DESCRIPTION
03/07/2025 <td></td>	

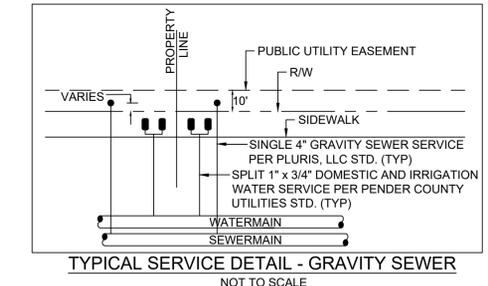
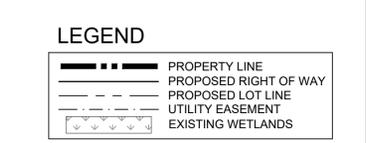
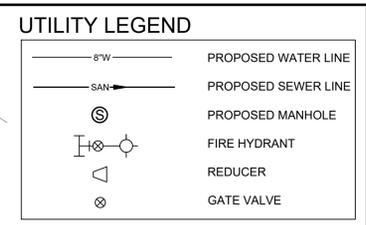
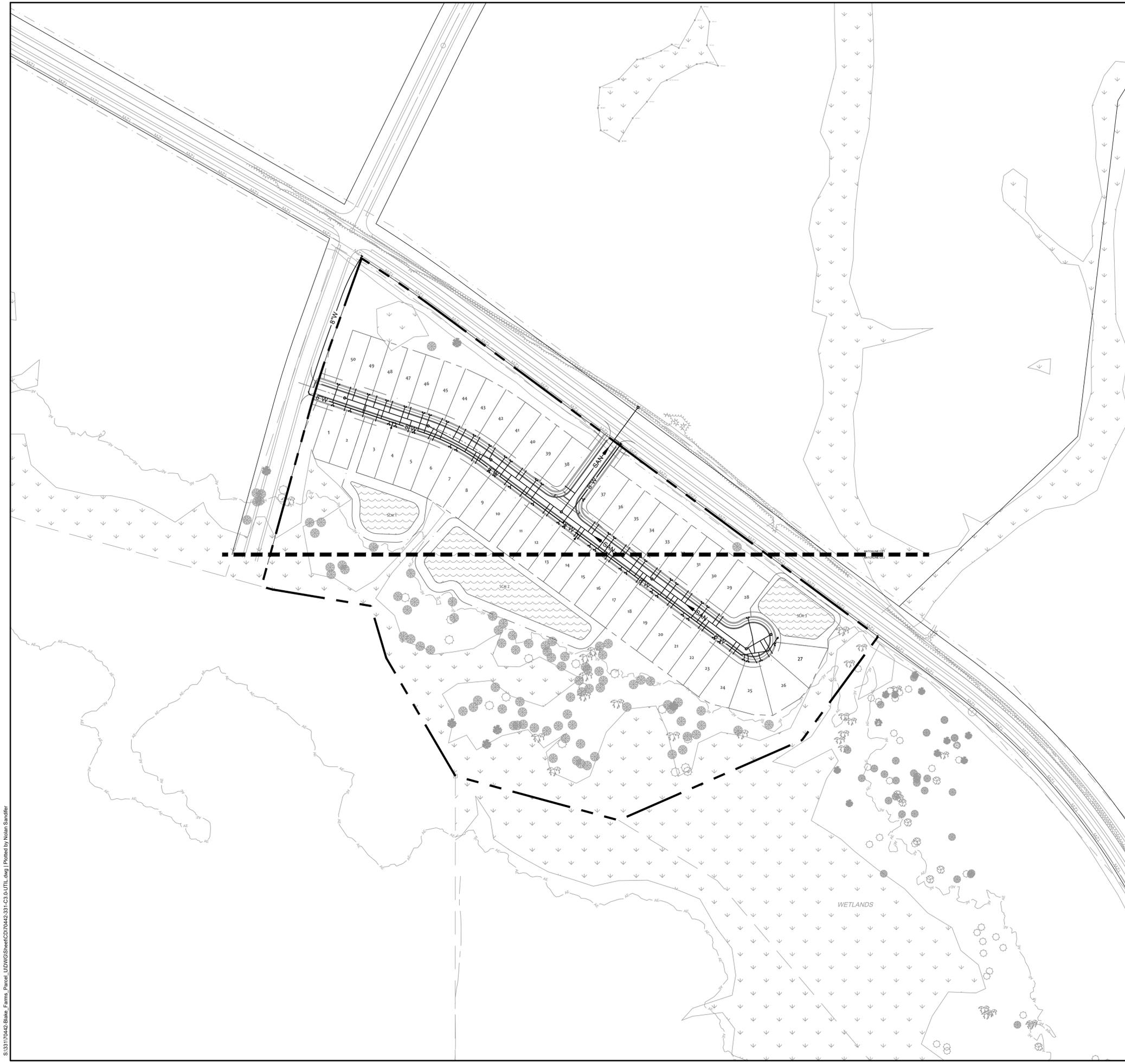
DRAWN BY: 331
 DESIGNED BY: 331
 CHECKED BY: J. WALL
 SCALE: 1" = 40'

TIMMONS GROUP
 NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA
DETAILED SITE PLAN - SHEET 2 OF 2

JOB NO.	70442
SHEET NO.	C2.2

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

S:\31170442-Blake_Farms_Parcel_U\DWG\SheetCD70442-331-C2-C2 (S SITE.dwg) | Printed by Neam Sanifur



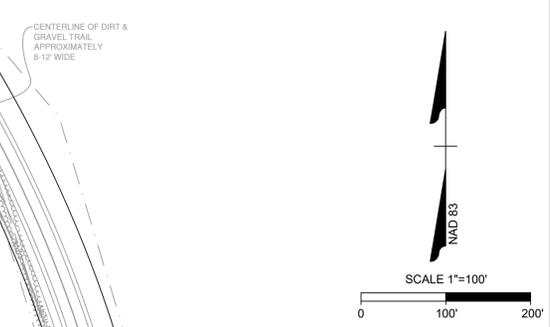
UTILITY NOTES

1. WATER AND SANITARY SEWER UTILITY MAINS ARE PRIVATE BEYOND THE PUBLIC STREET RIGHT-OF-WAY AND UTILITY EASEMENTS.
2. THIS PROJECT SHALL COMPLY WITH CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND NCDQS HAS ISSUED THE "FINAL APPROVAL".
3. WATER: 1" PVC SERVICES SHALL BE CONSTRUCTED USING ASTM D2241, IPS, GASKETED PIPE, SDR 21. 4"-12" PVC MAINS AND SERVICES SHALL BE CONSTRUCTED USING AWWA C-900 PVC, CL235 (DR-18), REQUIREMENTS OF AWWA C900 ELASTOMERIC PUSH-ON JOINTS.
4. SANITARY SEWER: FOR PIPE SIZES 4" AND 6" PIPE SHALL BE SCH 40 CONFORMING TO THE REQUIREMENTS OF ASTM D1785 WITH SOLVENT WELD JOINTS CONFORMING TO ASTM D2672. FOR PIPE SIZES 8" THROUGH 12", PIPE SHALL BE CLASS 150, DR18 CONFORMING TO THE REQUIREMENTS OF AWWA C900 WITH ELASTOMERIC PUSH-ON JOINTS CONFORMING TO ASTM D3212 OR ASTM D3139.
5. WATER AND SEWER SERVICES CANNOT BE ACTIVATED ON NEW MAINS UNTIL ENGINEER'S CERTIFICATION AND AS-BUILTS ARE RECEIVED AND "FINAL APPROVAL" ISSUED BY PUBLIC WATER SUPPLY SECTION OF NCDNR AND "FINAL ENGINEERING CERTIFICATION" ISSUED BY NCDQS.
6. SITE UTILITY CONTRACTOR TO PROVIDE WATER AND SANITARY SEWER SERVICE TO WITHIN 5 FEET OF THE BUILDING. CONTRACTOR SHALL COORDINATE SITE PLAN CONNECTIONS WITH THE ARCHITECTURAL BUILDING PLANS.
7. MINIMUM OF 36" COVERAGE ABOVE ALL WATERMAINS.
8. PENDER COUNTY UTILITIES INSPECTOR SHALL BE PRESENT WHEN TAPS ARE MADE.

- RELATION OF WATER MAINS TO SANITARY SEWERS:**
1. LATERAL SEPARATION OF SANITARY SEWERS AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION, IN WHICH CASE:
 - 1.1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
 - 1.2. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER.
 2. CROSSING A WATER MAIN OVER A SEWER MAIN: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION IN WHICH CASE BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
 3. CROSSING A WATER MAIN UNDER A SEWER MAIN: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER MAIN BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
 4. CROSSING A SEWER MAIN/WATER MAIN OVER OR UNDER A STORM DRAIN PIPE: WHENEVER IT IS NECESSARY FOR A SEWER MAIN/WATER MAIN TO CROSS A STORM DRAIN PIPE, THE SEWER MAIN/WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER MAIN/WATER MAIN NEAREST TO THE OUTSIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 24 INCH CLEAR SEPARATION DISTANCE HORIZONTAL, OR THE SEWER MAIN/WATER MAIN SHALL EITHER BE CONSTRUCTED OF DUCTILE IRON PIPE OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING.

FIRE PROTECTION NOTES

1. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
2. HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
3. COMBUSTIBLE MATERIALS MAY NOT BE STORED OR ERRECTED ON SITE WITHOUT CITY FIRE INSPECTOR APPROVAL.
4. NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
5. CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
6. ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
7. FIRE HYDRANTS ARE TO BE INSTALLED PER SPECIFICATIONS.



FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Essexwood Road | Wilmington, NC 28403
 TEL: 910.740.1144 FAX: 910.933.6124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION	DATE

DATE	03/07/2025
DRAWN BY	331
DESIGNED BY	331
CHECKED BY	J. WALL
SCALE	1" = 100'

TIMMONS GROUP
 NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA

OVERALL UTILITY PLAN

JOB NO.	70442
SHEET NO.	C3.0

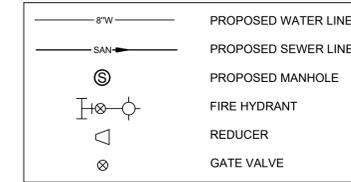
S:\31170442-Blake_Farms_Parcel_UDWG\SheetCD70442-331-C3.0-UTIL.dwg | Plotted by Nolan Sandifer

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

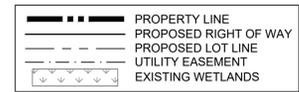
FOR REVIEW ONLY

SANITARY SEWER TABLE (SANITARY SEWER)						
STRUCTURE UP	HEIGHT	TOP	INV IN	INLET PIPE	INV OUT	OUTLET PIPE
MH 1	10.01'	32.27	±22.25'	281 LF 8" DR-18 C900 PVC @ 0.40% (MH 2)		
MH 2	6.62'	30.00	23.48' 23.48'	190 LF 8" DR-18 C900 PVC @ 0.40% (MH 3) 245 LF 8" DR-18 C900 PVC @ 0.63% (MH 6)	23.38'	281' LF 8" DR-18 C900 PVC @ 0.40% (MH 1)
MH 3	5.76'	30.00	24.34'	155 LF 8" DR-18 C900 PVC @ 0.40% (MH 4)	24.24'	190' LF 8" DR-18 C900 PVC @ 0.40% (MH 2)
MH 4	5.12'	30.08	25.06'	192 LF 8" DR-18 C900 PVC @ 0.46% (MH 5)	24.96'	155' LF 8" DR-18 C900 PVC @ 0.40% (MH 3)
MH 5	3.52'	29.46			25.94'	192' LF 8" DR-18 C900 PVC @ 0.46% (MH 4)
MH 6	5.87'	30.90	25.13'	255 LF 8" DR-18 C900 PVC @ 0.40% (MH 7)	25.03'	245' LF 8" DR-18 C900 PVC @ 0.63% (MH 2)
MH 7	4.44'	30.59	26.25'	62 LF 8" DR-18 C900 PVC @ 0.40% (MH 8)	26.15'	255' LF 8" DR-18 C900 PVC @ 0.40% (MH 6)
MH 8	4.07'	30.57			26.50'	62' LF 8" DR-18 C900 PVC @ 0.40% (MH 7)

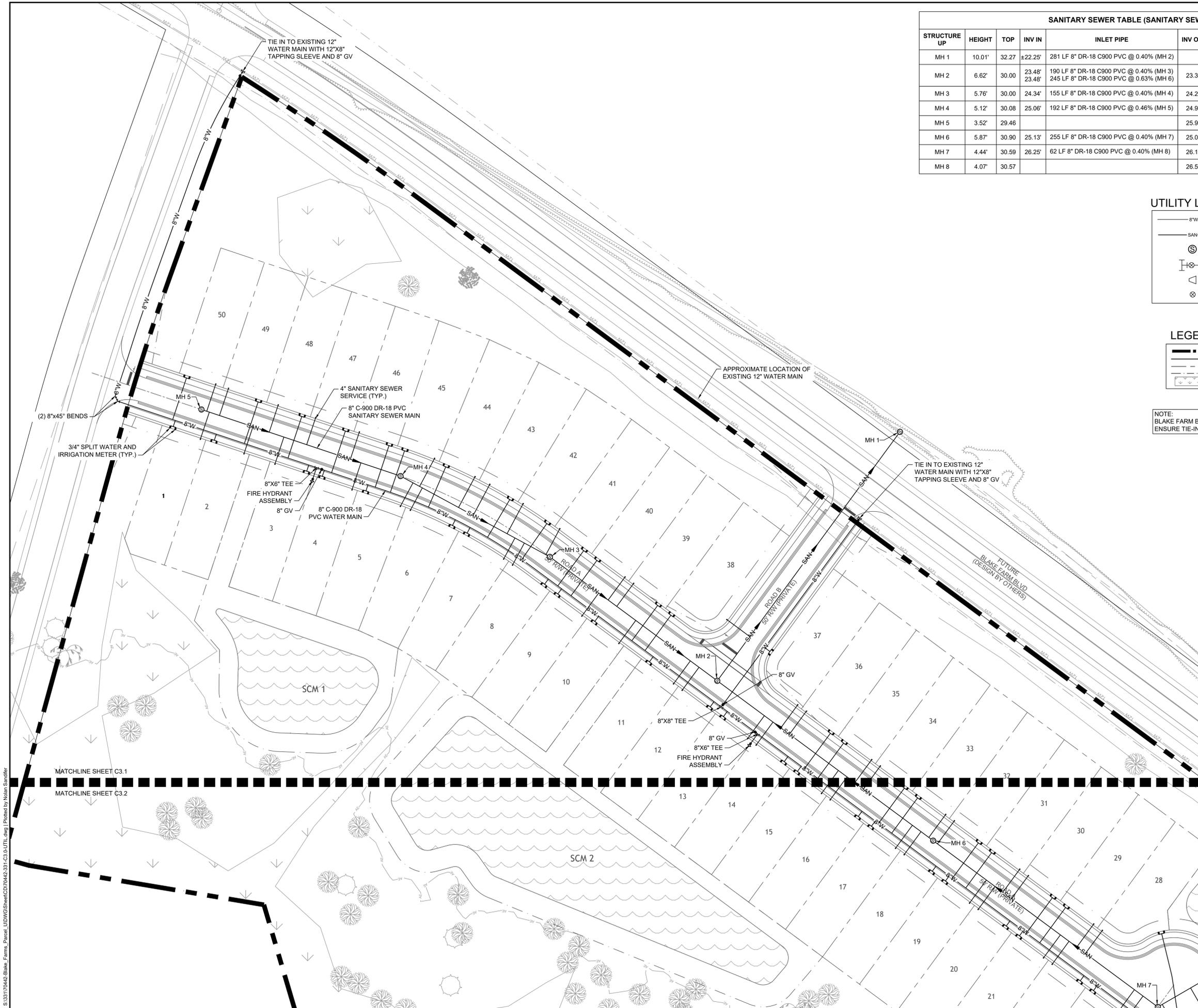
UTILITY LEGEND



LEGEND



NOTE:
BLAKE FARM BLVD IS CURRENTLY UNDER DESIGN.
ENSURE TIE-INS FOR UTILITY CONNECTIONS.



THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Edgewood Road | Wilmington, NC 28403
TEL: 910.746.1144 FAX: 910.933.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 40'

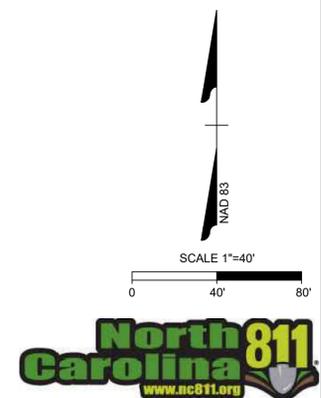
TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA

DETAILED UTILITY PLAN - SHEET 1 OF 2

JOB NO.
70442

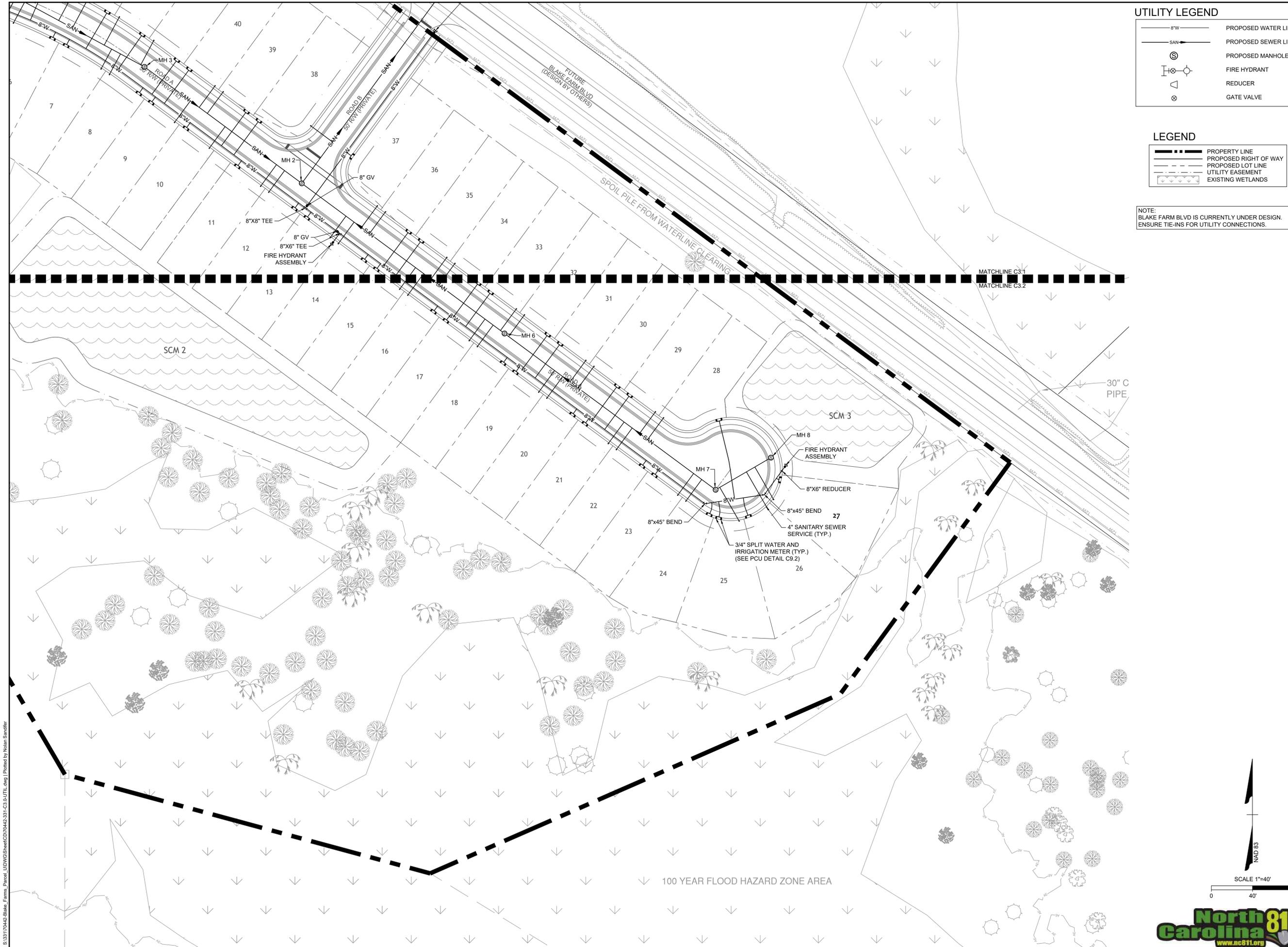
SHEET NO.
C3.1



MATCHLINE SHEET C3.1
MATCHLINE SHEET C3.2

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

S:\31170442-Blake_Farms_Parcel_UDWG\SheetCD\70442-331-C3.1-D\UTIL.dwg | Printed by Nolan Stridler



UTILITY LEGEND

- 8"W — PROPOSED WATER LINE
- SAN — PROPOSED SEWER LINE
- ⊙ PROPOSED MANHOLE
- ⊕ FIRE HYDRANT
- △ REDUCER
- ⊗ GATE VALVE

LEGEND

- PROPERTY LINE
- - - PROPOSED RIGHT OF WAY
- · - · - PROPOSED LOT LINE
- · - · - UTILITY EASEMENT
- ▨ EXISTING WETLANDS

NOTE:
BLAKE FARM BLVD IS CURRENTLY UNDER DESIGN.
ENSURE TIE-INS FOR UTILITY CONNECTIONS.

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Eadswood Road | Wilmington, NC 28403
TEL: 910.746.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
1" = 40'

TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA

DETAILED UTILITY PLAN - SHEET 2 OF 2

JOB NO.
70442

SHEET NO.
C3.2

NAD 83

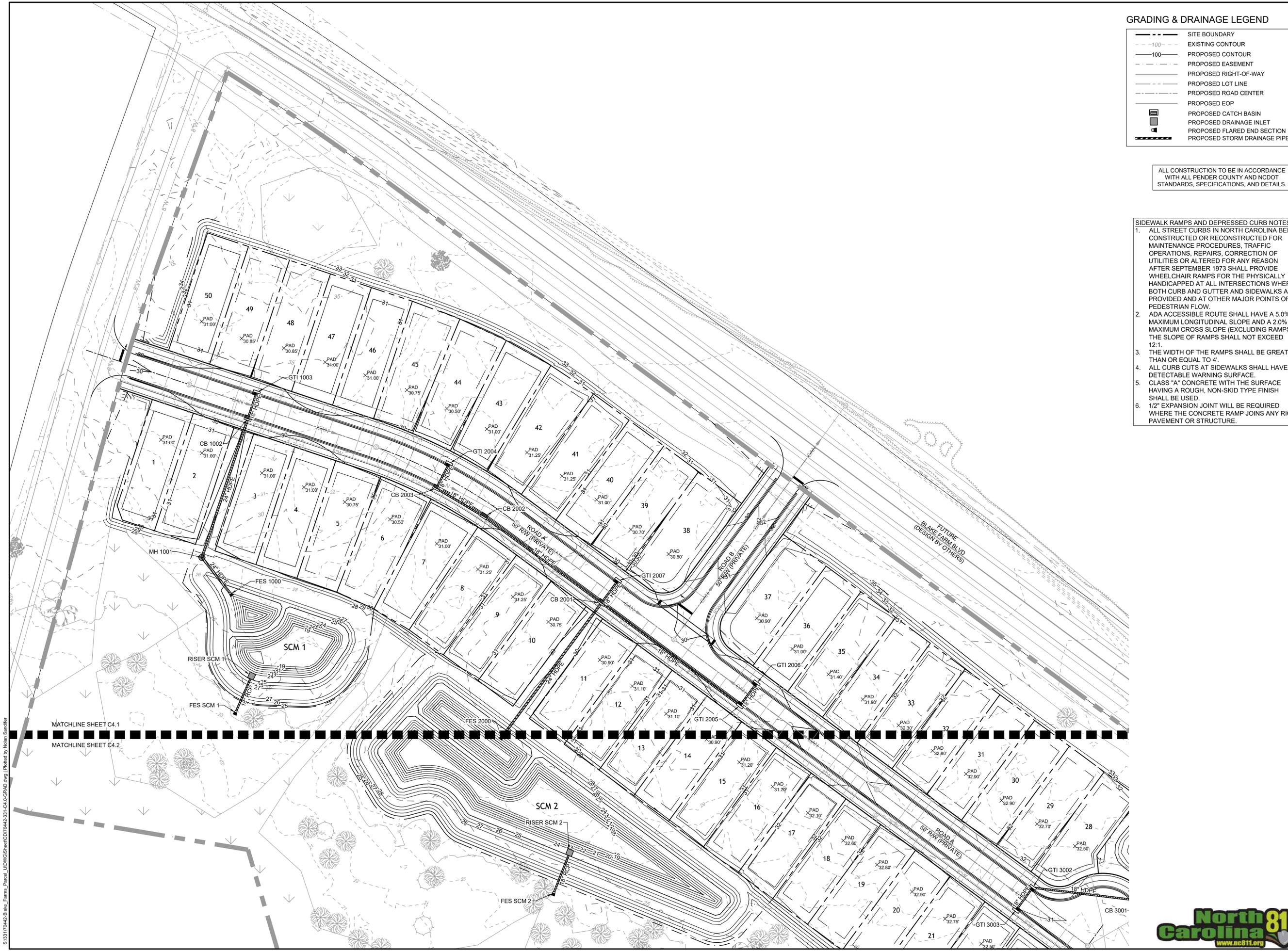
SCALE 1"=40'

0 40' 80'

100 YEAR FLOOD HAZARD ZONE AREA

S:\31170442-Blake_Farms_Parcel_UDWG\SheetCD70442-331-C3-D\UTIL.dwg | Printed by Nolan Sandifer

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION



GRADING & DRAINAGE LEGEND

	SITE BOUNDARY
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED LOT LINE
	PROPOSED ROAD CENTER
	PROPOSED EOP
	PROPOSED CATCH BASIN
	PROPOSED DRAINAGE INLET
	PROPOSED FLARED END SECTION
	PROPOSED STORM DRAINAGE PIPE

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL PENDER COUNTY AND NCDOT STANDARDS, SPECIFICATIONS, AND DETAILS.

SIDEWALK RAMPS AND DEPRESSED CURB NOTES:

- ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
- ADA ACCESSIBLE ROUTE SHALL HAVE A 5.0% MAXIMUM LONGITUDINAL SLOPE AND A 2.0% MAXIMUM CROSS SLOPE (EXCLUDING RAMPS). THE SLOPE OF RAMPS SHALL NOT EXCEED 1:1.
- THE WIDTH OF THE RAMPS SHALL BE GREATER THAN OR EQUAL TO 4'.
- ALL CURB CUTS AT SIDEWALKS SHALL HAVE DETECTABLE WARNING SURFACE.
- CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH SHALL BE USED.
- 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Eastwood Road | Wilmington, NC 28403
 TEL: 910.746.1144 FAX: 919.833.6124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE	03/07/2025
DRAWN BY	331
DESIGNED BY	331
CHECKED BY	J. WALL
SCALE	1" = 40'

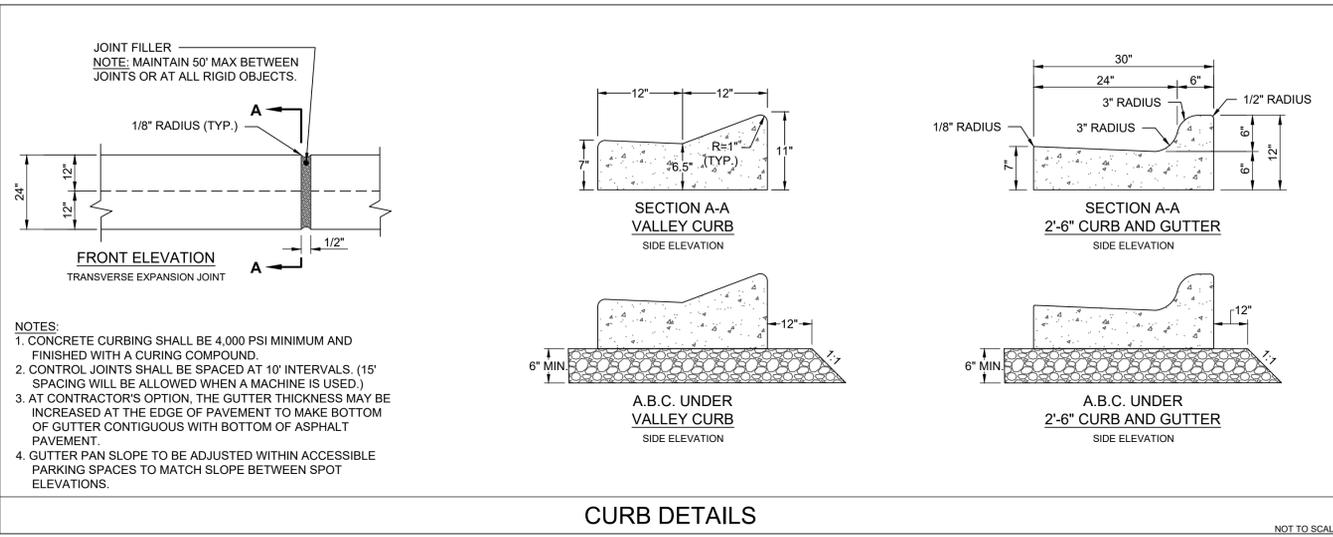
TIMMONS GROUP
 NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA
DETAILED GRADING AND DRAINAGE PLAN - SHEET 1 OF 2

JOB NO.	70442
SHEET NO.	C4.1



S:\31170442-Blake_Farms_Parcel_U\DWG\SheetCD70442-331-C4.1-D-GRAD.dwg | Plotted by Nolan Sandifer

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

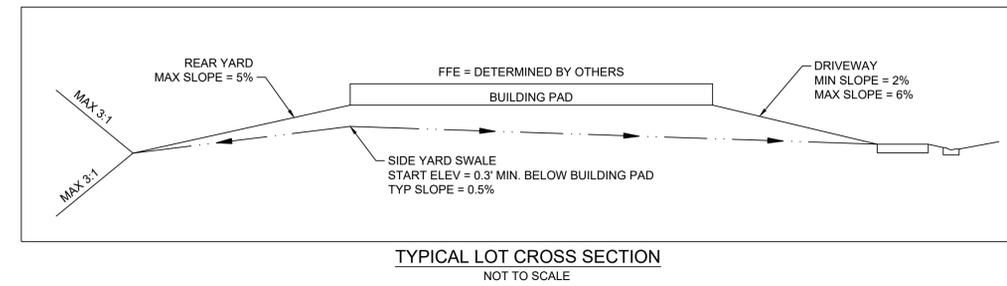
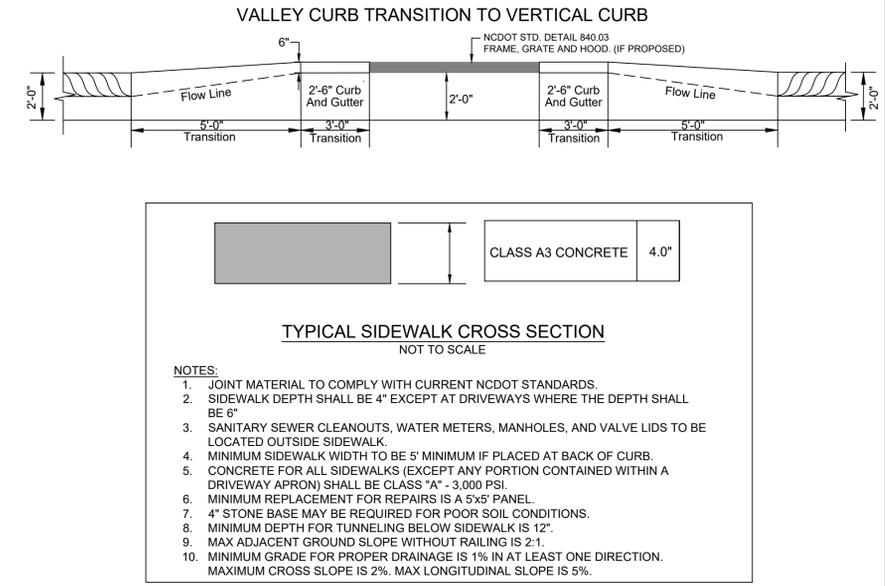
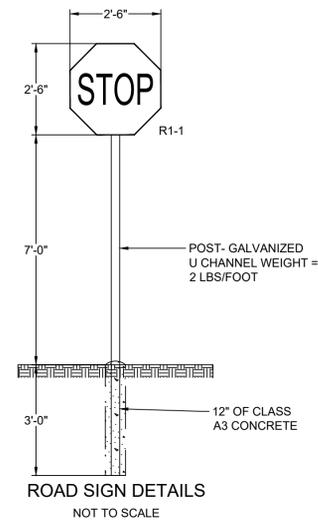


PAVEMENT SECTION NOTES:

- PREPARING, GRADING, SHAPING, AND COMPACTION OF SUBGRADE SOILS SHOULD BE PERFORMED IN ACCORDANCE WITH DIVISION 5, SECTION 501 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (2018). PREPARING, GRADING, SHAPING, AND COMPACTION OF AGGREGATE BASE COURSE (ABC) STONE SHOULD BE PERFORMED IN ACCORDANCE WITH DIVISION 5, SECTION 520 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (2018). PLACEMENT AND COMPACTION OF THE BITUMINOUS CONCRETE SHOULD BE PERFORMED IN ACCORDANCE WITH DIVISION 6, SECTION 600 OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (2018). PROPER SUBGRADE COMPACTION, ADHERENCE TO THE NCDOT SPECIFICATIONS, AND COMPLIANCE WITH PROJECT PLANS AND SPECIFICATIONS ARE CRITICAL TO THE PERFORMANCE OF THE CONSTRUCTED PAVEMENT.
- CONTRACTOR MAY CHOOSE TO INSTALL INTERMEDIATE COURSES OF PAVEMENT TO STABILIZE THE SITE DURING CONSTRUCTION AT NO ADDITIONAL COST. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ADEQUATE THICKNESS REQUIRED FOR INTERMEDIATE PAVING. INCREASES IN THE DESIGN PAVEMENT SECTION TO FACILITATE INTERMEDIATE PAVING SHALL BE PROVIDED AT NO ADDITIONAL COST.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO SUBGRADE, INSTALLED BASE COURSE AND/OR INTERMEDIATE PAVING PRIOR TO PLACING SUBSEQUENT PAVEMENT LIFTS AT NO ADDITIONAL COST.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING PAVEMENT DURING ALL PHASES OF WORK. THE FINAL SURFACE OF PAVEMENT SHALL BE FREE OF ALL DEFECTS OR DAMAGE.

SIDEWALK RAMPS AND DEPRESSED CURB NOTES:

- ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
- ADA ACCESSIBLE ROUTE SHALL HAVE A 5.0% MAXIMUM LONGITUDINAL SLOPE AND A 2.0% MAXIMUM CROSS SLOPE (EXCLUDING RAMPS). THE SLOPE OF RAMPS SHALL NOT EXCEED 12:1.
- THE WIDTH OF THE RAMPS SHALL BE GREATER THAN OR EQUAL TO 4'.
- ALL CURB CUTS AT SIDEWALKS SHALL HAVE DETECTABLE WARNING SURFACE.
- CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH SHALL BE USED.
- 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.



FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Eastwood Road | Wilmington, NC 28403
TEL: 910.746.1144 FAX: 910.933.6124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
03/07/2025

DRAWN BY
331

DESIGNED BY
331

CHECKED BY
J. WALL

SCALE
NONE

TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA

SITE NOTES AND DETAILS

JOB NO.
70442

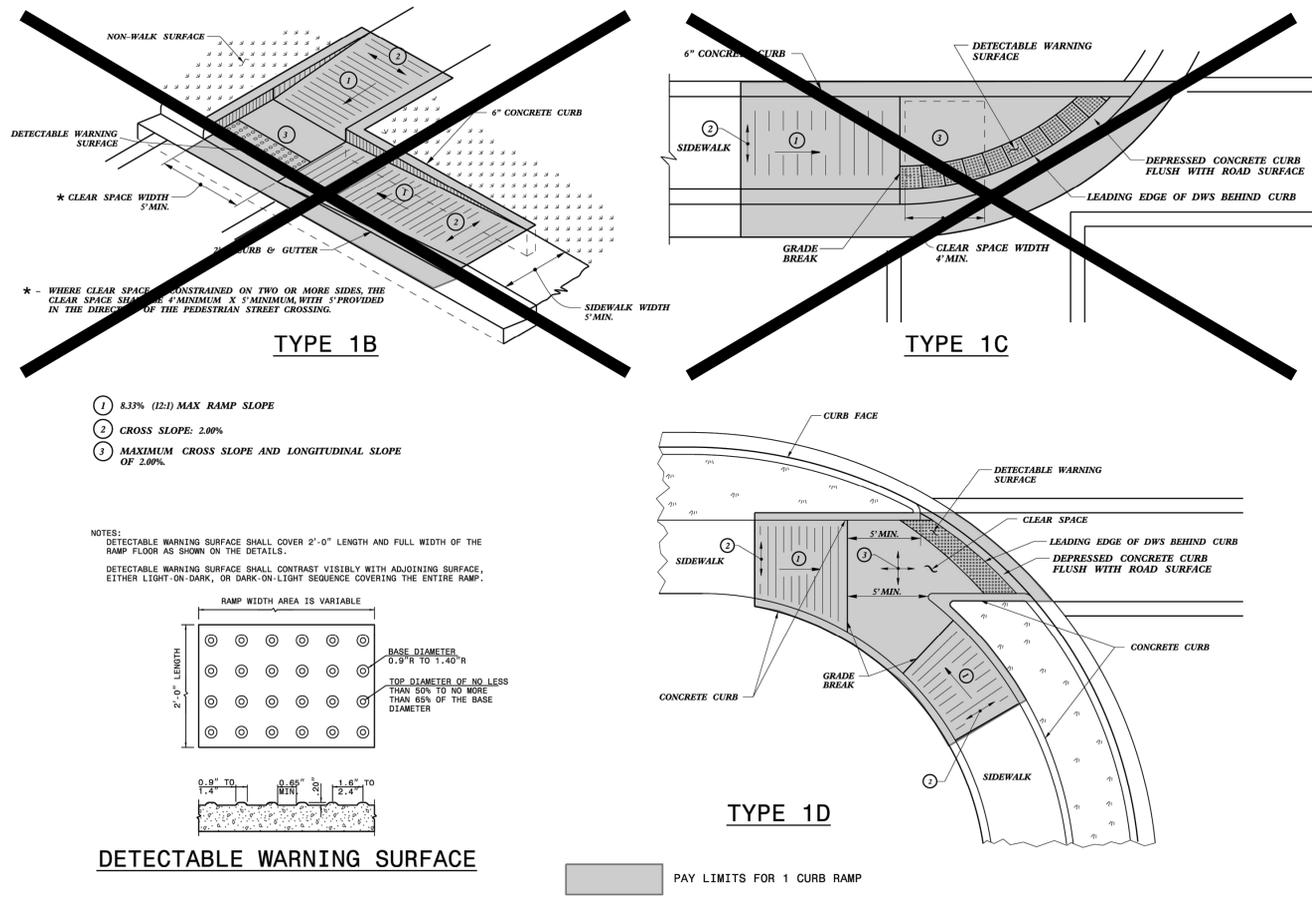
SHEET NO.
C9.0



PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

S:\31170442-Blake_Farms_Paveel_UDWGS\SheetCD70442-331-C91-D-NTD1.dwg | Plotted by Nolan Samtler



- NOTES:
1. CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
 2. LOCATE CURB RAMPS AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMPS OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
 3. COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
 4. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
 5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
 6. TERMINATE PARKING A MINIMUM OF 20' FROM THE BACK OF PEDESTRIAN CROSSWALK.
 7. CONSTRUCT CURB RAMPS A MINIMUM OF 4' WIDE.
 8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
 9. ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMPS WILL BE 2% MAXIMUM.
 10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
 11. CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
 12. CONSTRUCT CLEAR SPACES FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT CLEAR SPACES FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. IF CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
 13. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
 14. SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'x5' CLEAR SPACE AT THE TOP OF RAMPS, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
 15. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, WHERE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE, OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
 16. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01.
 17. PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
 18. DETECTABLE WARNING SURFACES WILL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 19. DETECTABLE WARNING SURFACES WILL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

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

1-24

ROADWAY STANDARD DRAWING FOR CURB RAMP DIRECTIONAL RAMP

SHEET 7 OF 13

848.06

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

1-24

ROADWAY STANDARD DRAWING FOR CURB RAMP NOTES

SHEET 13 OF 13

848.06

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE WILMINGTON OFFICE 430 Eastwood Road | Wilmington, NC 28403 TEL: 910.746.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
03/07/2025
DRAWN BY
331
DESIGNED BY
331
CHECKED BY
J. WALL
SCALE
NONE

TIMMONS GROUP

NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA

SITE NOTES AND DETAILS

JOB NO.
70442
SHEET NO.
C9.1



PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

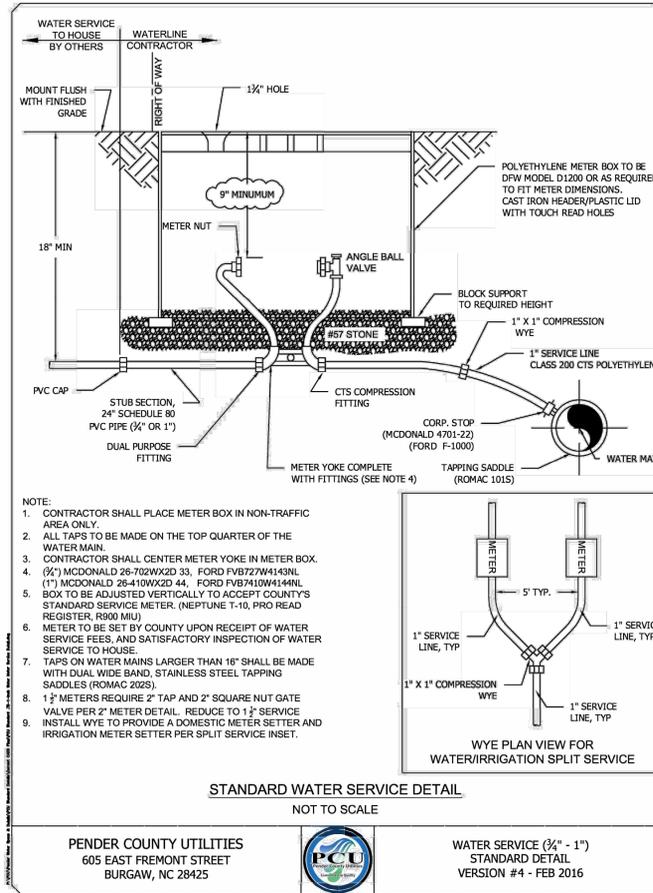
PCU STANDARD NOTES

1. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE BEGINNING WORK. THE MEETING MUST BE SCHEDULED WITH PENDER COUNTY UTILITIES (PCU) AT LEAST ONE WEEK IN ADVANCE. ATTENDEES MUST INCLUDE PCU, THE UTILITY CONTRACTOR'S SUPERINTENDENT, THE SUPPLIER, AND THE CONSULTING ENGINEER.
2. ALL MATERIALS USED SHALL CONFORM TO PENDER COUNTY UTILITIES REQUIREMENTS. NON-CONFORMING MATERIAL WILL NOT BE ACCEPTED FOR FINAL CERTIFICATION.
3. ALL PIPE SHALL BE C900 CR18 PVC, UNLESS OTHERWISE NOTED (SEE PCU STANDARD DETAIL). PCU MUST APPROVE THE USE OF DIP IN THE FIELD BEFORE INSTALLATION. PIPE SHOULD NEVER BE UNDER THE ROADWAY, PARKING LOT, OR SIDEWALKS. PENDER COUNTY UTILITIES DOES NOT ALLOW SIZE-ON-SIZE TAPS.
4. PCU STANDARD WATERLINE PIPE RESTRAINING METHOD IS MEGA LUGS. AT A MINIMUM ALL FITTINGS, VALVES, ETC. MUST BE RESTRAINED (SEE PCU STANDARD DETAIL).
5. PCU MUST INSPECT CASING INSTALLATIONS PRIOR TO BACKFILL. PCU MUST WITNESS PRESSURE TESTS, AND WITHDRAWAL OF BACTERIOLOGICAL SMPLES. CONTACT PENDER COUNTY UTILITIES INSPECTOR TO SCHEDULE.
6. CLOSE-OUT DOCUMENTS WHICH MUST BE RECEIVED PRIOR TO PCU SIGNING THE NCDEQ PWSS APPLICANT CERTIFICATION INCLUDE: BACTERIOLOGICAL TESTS, PRESSURE TESTS, DEED OF DEDICATION, AFFIDAVIT/RELEASE OF LIENS, WARRANTY, AND RECORDS DRAWINGS (PDF & GIO REFERENCED CAD).
7. AN 18-MONTH WARRANTY PERIOD APPLIES TO ALL WATERLINE CONSTRUCTION. THIS WARRANTY PERIOD DOES NOT BEGIN UNTIL FINAL APPROVAL OF THE SYSTEM HAS BEEN RECEIVED FROM NCDEQ PWSS.

PENDER COUNTY UTILITIES
605 E FREMONT STREET
PO BOX 995, BURGAW, NC 28425



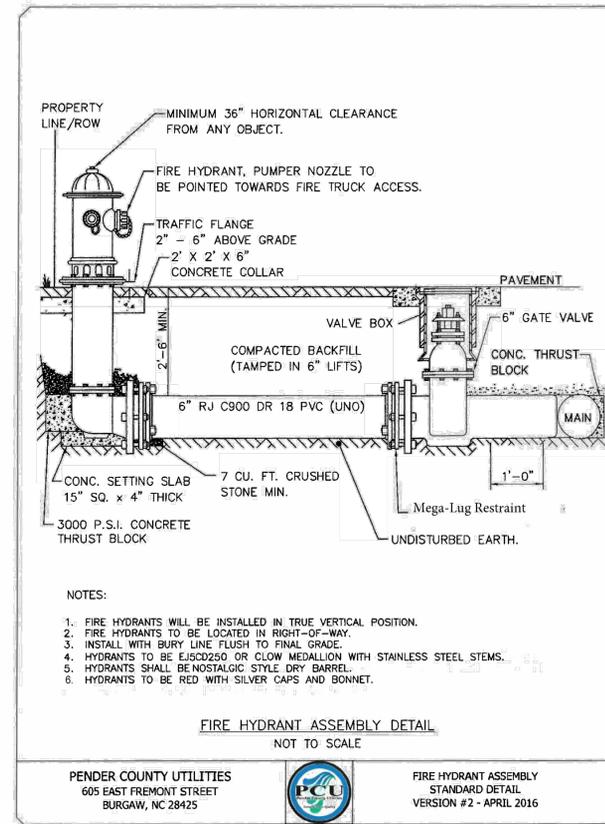
STANDARD NOTES
PCU WATER SYSTEMS
VERSION #4 - OCTOBER 2023



PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425



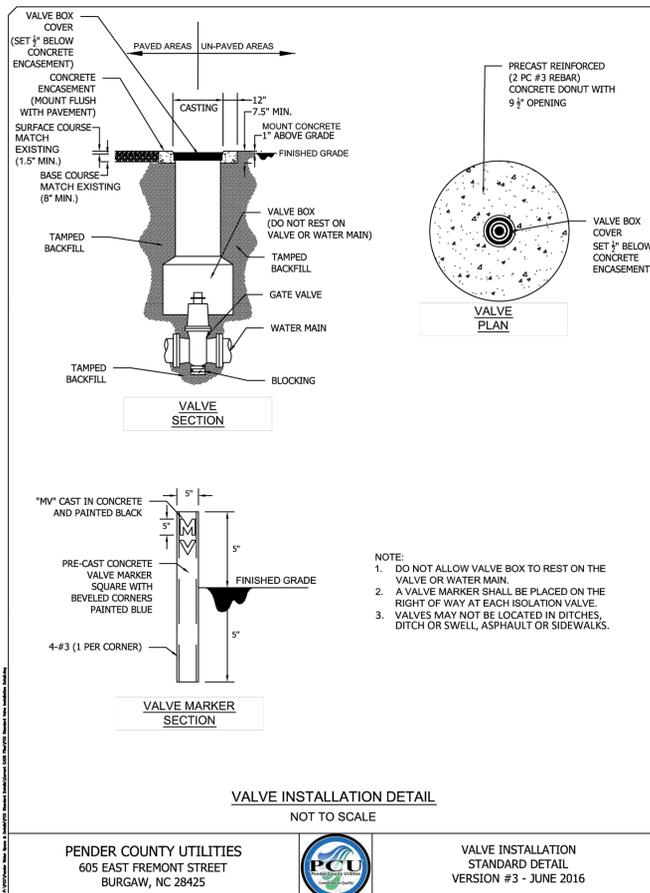
WATER SERVICE (3/4\"/>



PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425



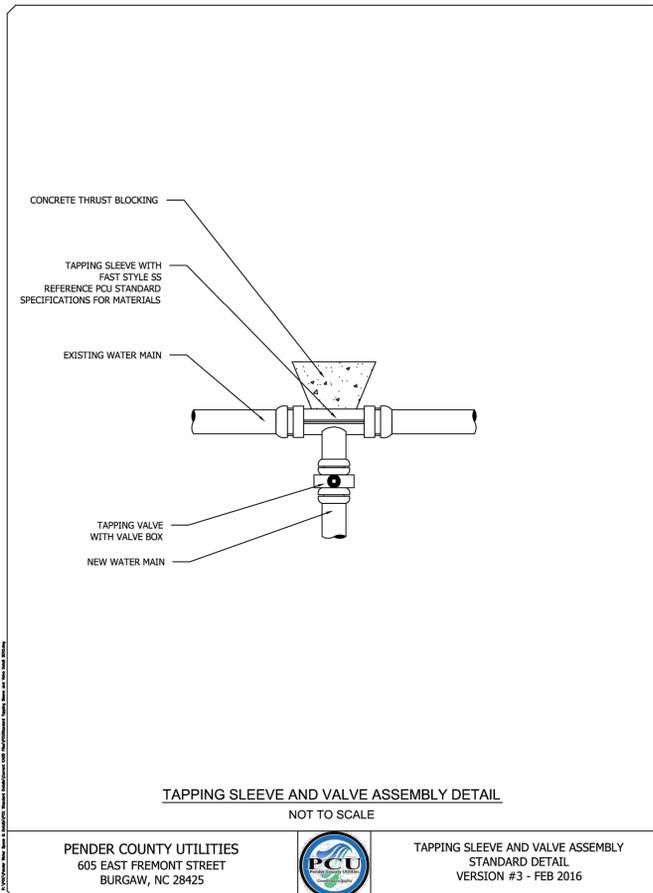
FIRE HYDRANT ASSEMBLY
STANDARD DETAIL
VERSION #2 - APRIL 2016



PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425



VALVE INSTALLATION
STANDARD DETAIL
VERSION #3 - JUNE 2016



PENDER COUNTY UTILITIES
605 EAST FREMONT STREET
BURGAW, NC 28425



TAPPING SLEEVE AND VALVE ASSEMBLY
STANDARD DETAIL
VERSION #3 - FEB 2016

PIPE DIAMETER (INCHES)	D. I. P.				P. V. C.			
	90°	45°	22 1/2°	11 1/4°	90°	45°	22 1/2°	11 1/4°
3"	30'	18'	10'	5'	40'	20'	10'	5'
4"	35'	19'	10'	5'	50'	25'	10'	5'
6"	55'	28'	10'	5'	80'	35'	10'	5'
8"	65'	30'	10'	10'	90'	40'	10'	10'
10"	80'	35'	20'	10'	110'	50'	20'	15'
12"	95'	40'	20'	10'	130'	55'	20'	15'
16"	120'	50'	25'	15'	165'	70'	25'	20'
20"	150'	65'	30'	15'	200'	85'	30'	20'
24"	180'	70'	35'	20'	210'	90'	40'	25'
30"	190'	80'	40'	20'	250'	105'	50'	25'
36"	220'	85'	45'	25'	0	0	0	0
42"	240'	100'	50'	25'	0	0	0	0
48"	250'	120'	60'	30'	0	0	0	0

Restrained lengths for valves, dead ends and branches from tees shall be the same as for 90° (degree) bends

PIPE DIAMETER (INCHES)	Restrained Length In Feet For Reducer									
	3"	4"	6"	8"	10"	12"	16"	20"	24"	30"
3"	0	0	0	0	0	0	0	0	0	0
4"	40'	0	0	0	0	0	0	0	0	0
6"	50'	45'	0	0	0	0	0	0	0	0
8"	75'	70'	40'	0	0	0	0	0	0	0
10"	95'	90'	70'	40'	0	0	0	0	0	0
12"	120'	115'	100'	75'	40'	0	0	0	0	0
16"	180'	155'	140'	125'	100'	70'	0	0	0	0
20"	200'	195'	180'	170'	150'	130'	75'	0	0	0
24"	180'	155'	150'	140'	135'	120'	90'	50'	0	0
30"	185'	190'	185'	180'	170'	160'	120'	105'	70'	0
36"	220'	220'	210'	210'	205'	195'	160'	150'	135'	70'
42"	240'	240'	235'	230'	225'	220'	205'	180'	155'	105'
48"	255'	250'	245'	240'	235'	230'	215'	195'	175'	125'

Length of restrained joint for larger diameter pipe

NOTES:
1. PENDER COUNTY STANDARD RESTRAINT METHOD IS MEGA LUGS, UNLESS SPECIFICALLY APPROVED BY PCU IN WRITING.
2. ALL FITTINGS AND JOINTS SHALL BE RESTRAINED JOINT.
3. "L" ABOVE IS GIVEN IN FEET FROM FITTING JOINT.

PENDER COUNTY UTILITIES
605 E FREMONT STREET
PO BOX 995, BURGAW, NC 28425



RESTRAINED JOINT TABLE
STANDARD DETAIL
VERSION #2 - OCTOBER 2023

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
430 Esawood Road | Wilmington, NC 28403
TEL: 910.740.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION	DATE
	03/07/2025
DRAWN BY	331
DESIGNED BY	331
CHECKED BY	J. WALL
SCALE	NONE

TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA
UTILITY NOTES AND DETAILS

JOB NO.
70442
SHEET NO.
C9.2



PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
WILMINGTON OFFICE
 430 Eastwood Road | Wilmington, NC 28403
 TEL: 910.746.1144 FAX: 910.833.6124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

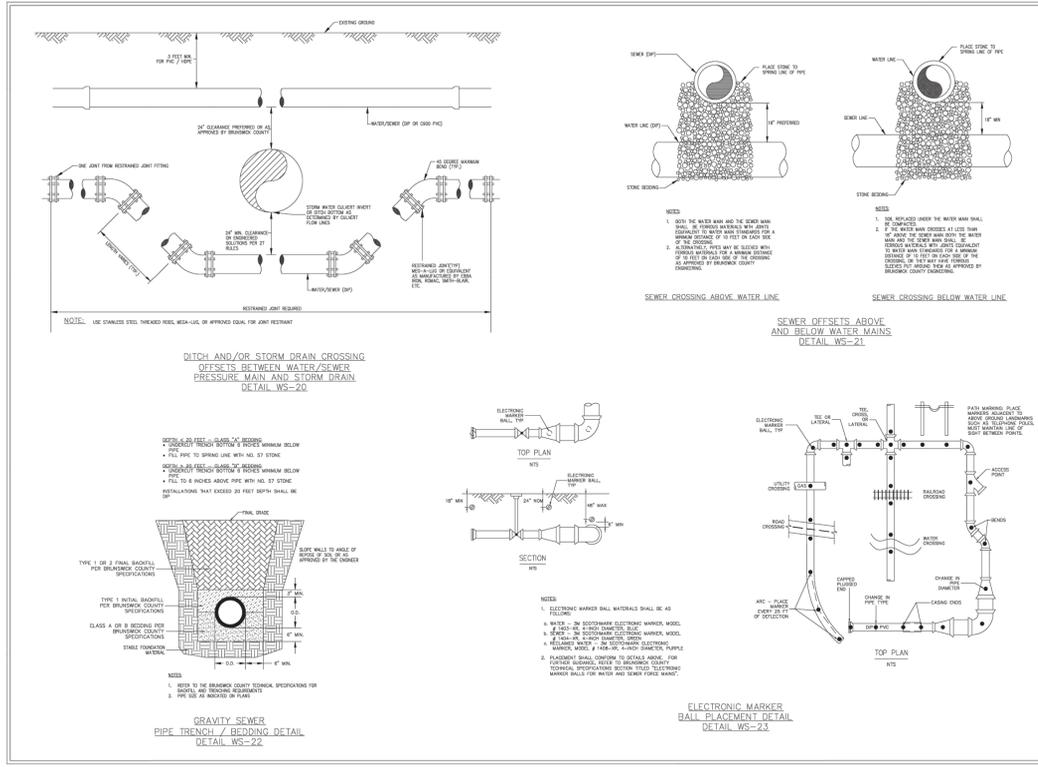
DATE
 03/07/2025
 DRAWN BY
 331
 DESIGNED BY
 331
 CHECKED BY
 J. WALL
 SCALE
 NONE

TIMMONS GROUP
 NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA
 UTILITY NOTES AND DETAILS

JOB NO.
 70442
 SHEET NO.
 C9.3

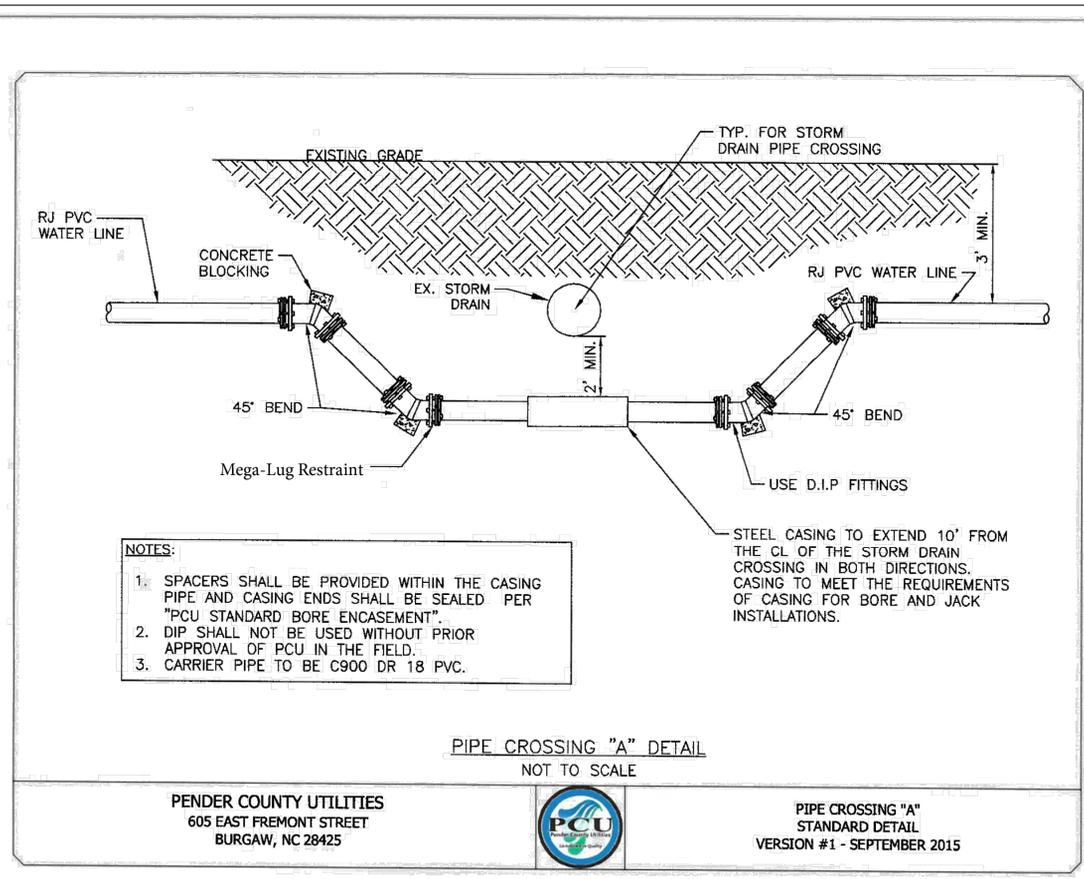
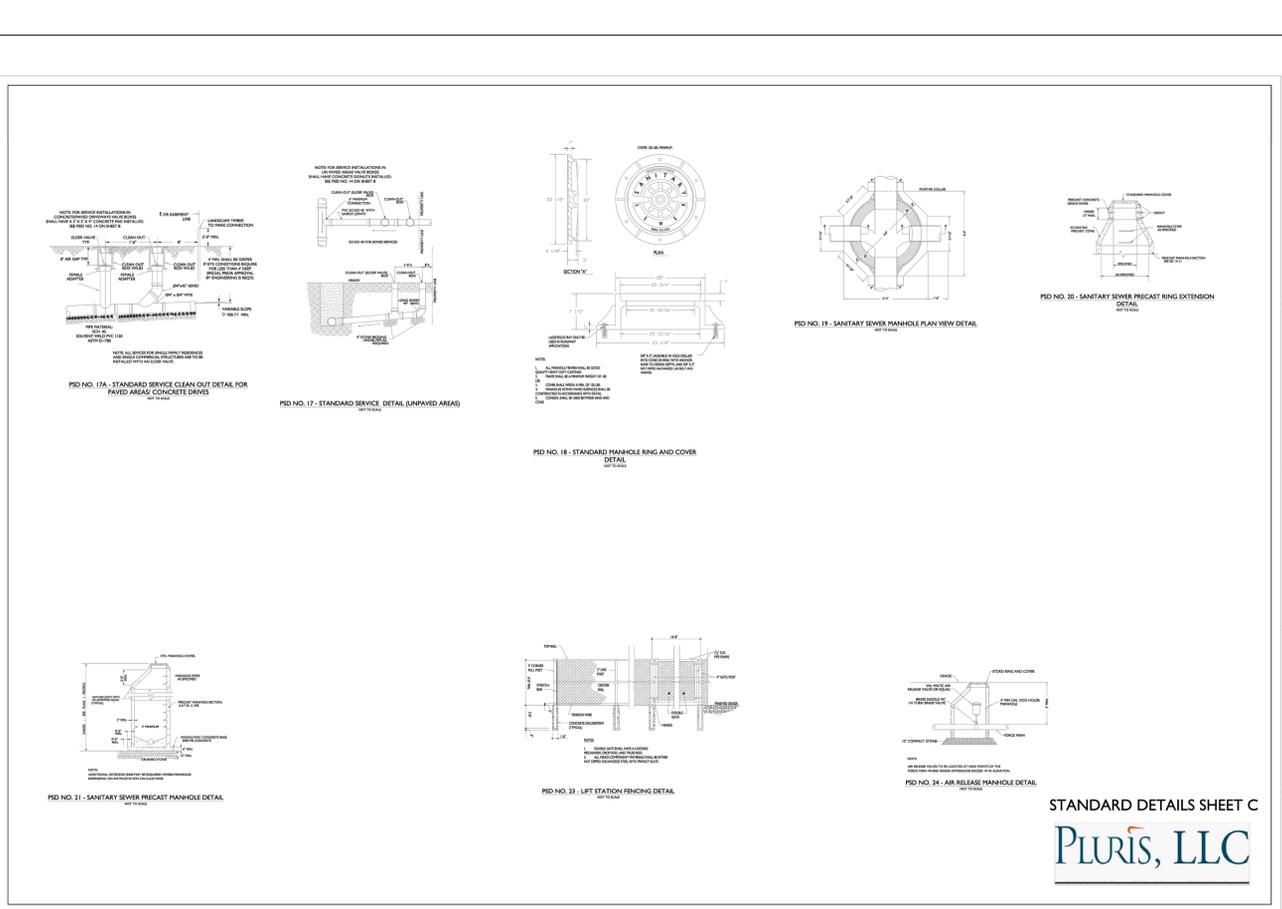
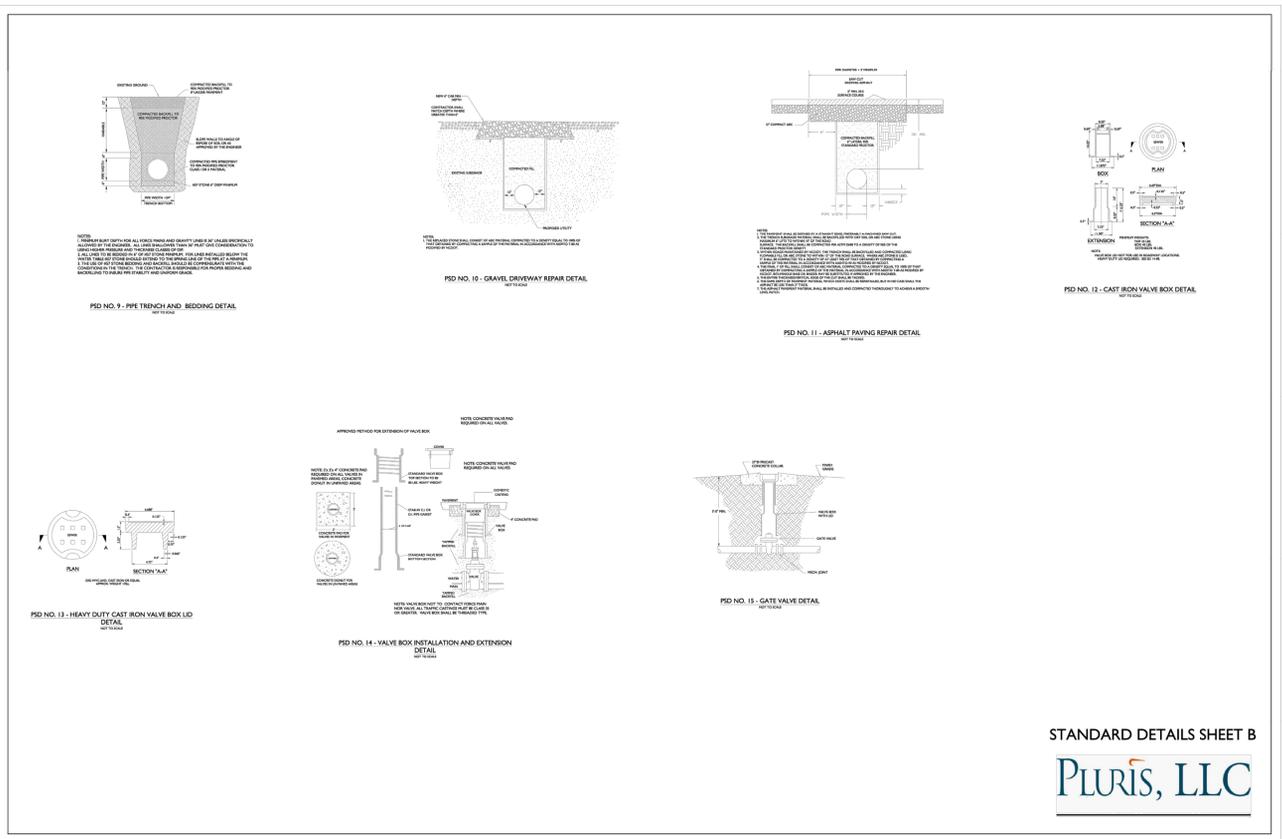
PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.

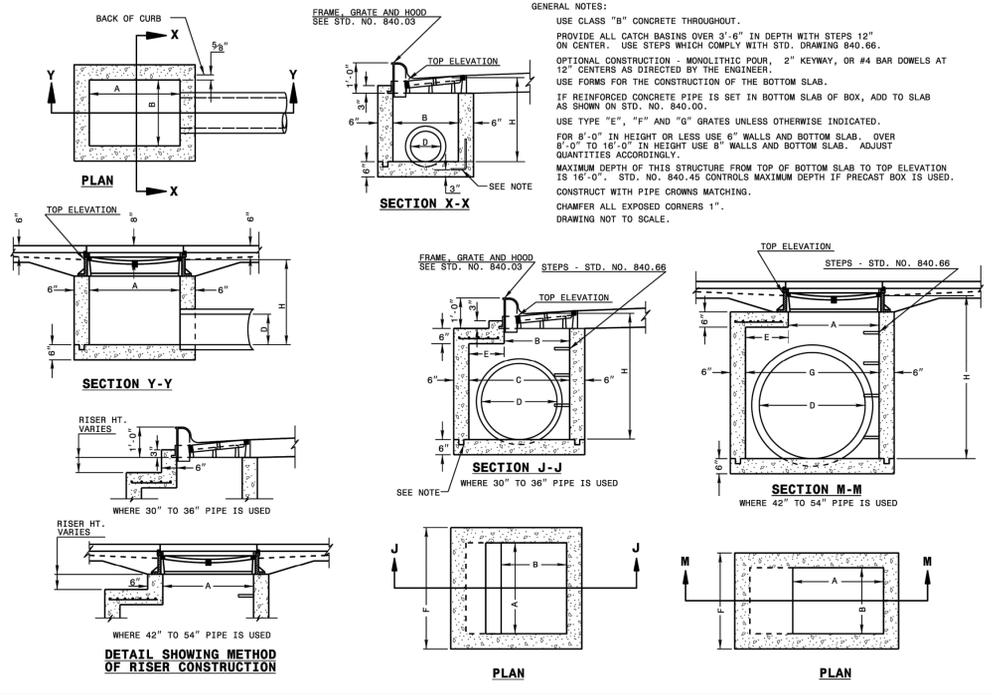


GENERAL WATER & SEWER DETAIL
 VERSION #1 - APRIL 2024

PENDER COUNTY UTILITIES
 605 EAST FREMONT STREET
 BURGAW, NC 28525



- GENERAL NOTES:**
1. ALL PIPE BEDDING SHALL BE CLASS "C" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 2. THE BEDDING SHALL PROVIDE A FIRM FOUNDATION OF UNIFORM DENSITY ALONG THE ENTIRE LENGTH OF PIPE. RECESSES SHALL BE MADE TO ACCOMMODATE BELLS AND JOINTS.
 3. WHERE UNSTABLE SOILS ARE ENCOUNTERED AS DETERMINED BY GEOTECHNICAL ENGINEER, A MINIMUM 4- INCH THICK BEDDING OF STONE SHALL BE PLACED.
 4. THE STONE SHALL BE UNIFORMLY GRADED FROM 3/4 INCH TO NO. 4 IN ACCORDANCE WITH ASTM C-33. CARE SHALL BE TAKEN TO PREVENT UNDERCUTTING IN SUITABLE SOIL.
 5. AREAS UNDERCUT SHALL BE FILLED WITH SUITABLE SOIL AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D-1557 STANDARD TEST METHOD.
 6. THIS DETAIL IS REPRESENTATIVE, AND PIPE TRENCH DESIGN IS SUBJECT TO SPECIFIC SOIL CATEGORY (I, II, III), AND INSTALLATION TYPE (1, 2, 3, 4), AS DIRECTED BY THE ENGINEER AND SITE CONDITIONS.

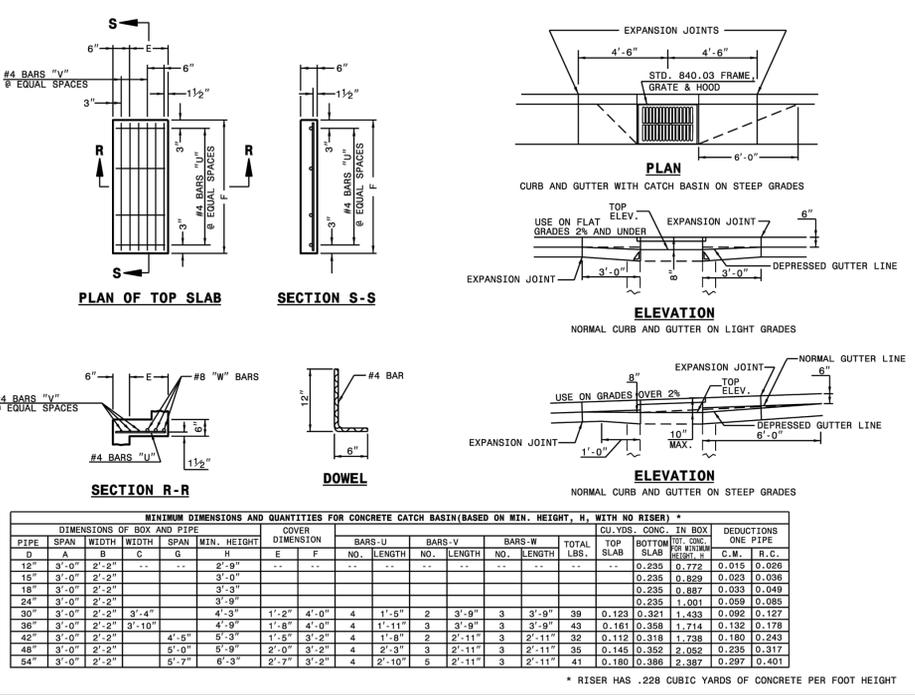


STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
CONCRETE CATCH BASIN
 12" THRU 54" PIPE

1-24

SHEET 1 OF 2
840.02

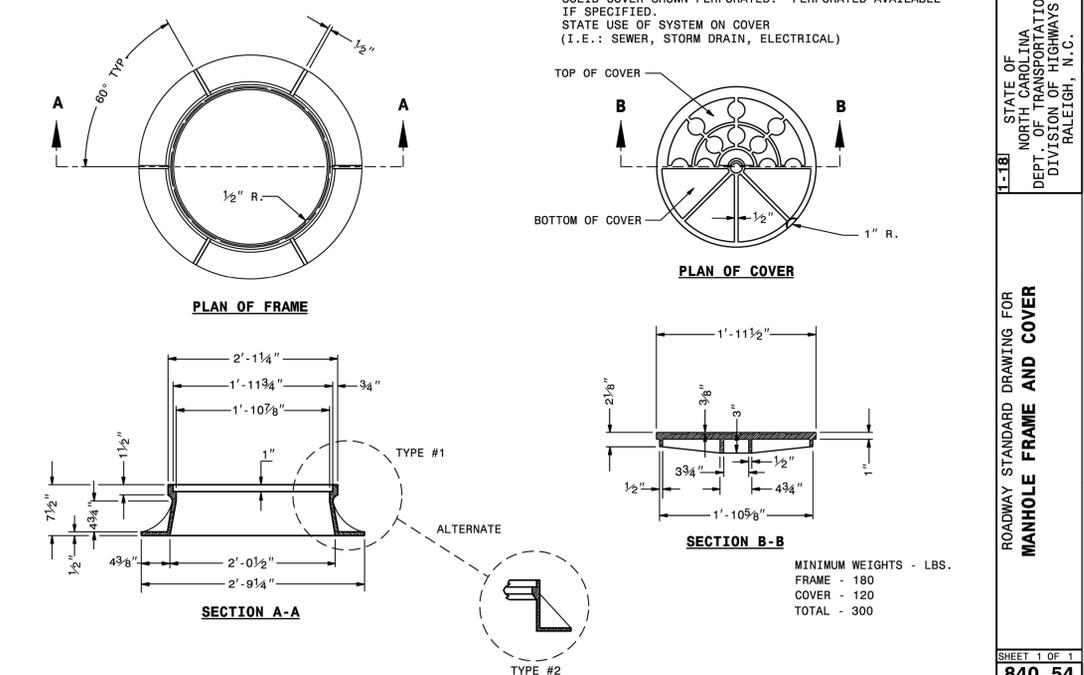
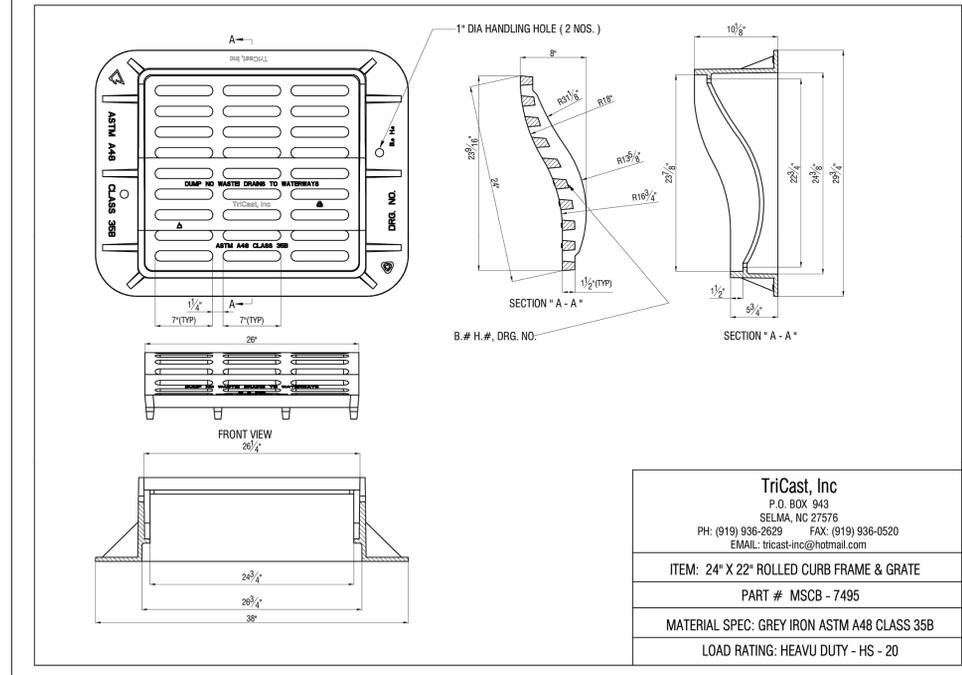
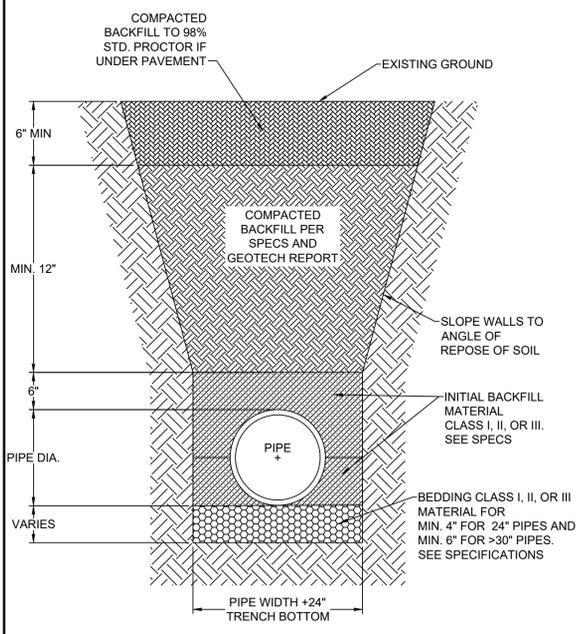


STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
CONCRETE CATCH BASIN
 12" THRU 54" PIPE

1-24

SHEET 2 OF 2
840.02



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

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

1-18

SHEET 1 OF 1
840.54

S:\31170442-Blake_Farms_Parcel_LUDWIGSheetCD70442-331-C91-D-NTD1.dwg | Plotted by Nolan Spangler



FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE
 WILMINGTON OFFICE
 430 Esawood Road | Wilmington, NC 28403
 TEL: 910.746.1144 FAX: 910.833.6124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE
 03/07/2025

DRAWN BY
 331

DESIGNED BY
 331

CHECKED BY
 J. WALL

SCALE
 NONE

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

1-18

SHEET 1 OF 1
840.54

TIMMONS GROUP
 NORTH CAROLINA LICENSE NO. C-1652

BLAKE FARM PARCEL U
 PENDER COUNTY, NORTH CAROLINA

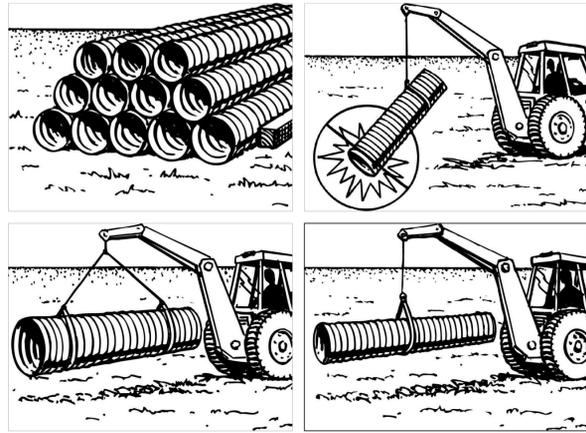
STORMWATER NOTES AND DETAILS

JOB NO.
 70442

SHEET NO.
 C9.4

PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staking without the express written consent of TIMMONS GROUP.



- STACK PIPE ON LEVEL GROUND TO PREVENT WARPING OF PRODUCT.
- DO NOT LIFT PIPE BY INSERTING FORKLIFT INTO THE END OF THE PIPE.
- TO PREVENT DAMAGE TO THE BELL OR SPIGOT WHEN MOVING PIPE SECTIONS, DO NOT DRAG OR STRIKE PIPE ENDS AGAINST ANYTHING.
- PIPE CAN BE MOVED WITH A BACKHOE AND A NYLON SLING. LIFT 36" AND LARGER DIAMETER PIPE WITH A SLING AT TWO POINTS, SPACED APPROXIMATELY 10 FEET APART. SMALLER DIAMETERS CAN USE ONE LIFT POINT.

STEP 1 : PIPE HANDLING AND STORAGE



TRENCH MUST BE WIDE ENOUGH TO FIT PIPE, WORKERS, AND COMPACTION EQUIPMENT.

PIPE DIAMETER	MINIMUM BETWEEN PIPES	MINIMUM TRENCH WIDTH
12"	12"	30"
15"	12"	34"
18"	12"	39"
24"	12"	48"
30"	15"	56"
36"	18"	64"
42"	21"	72"
48"	24"	80"
60"	30"	96"

RECOMMENDED MINIMUM TRENCH WIDTHS, WHEN TRENCH WALLS AND FOUNDATION ARE STABLE. FOR ADDITIONAL TRENCH WIDTH OPTIONS REFER TO ADS INSTALLATION STANDARDS AND ASTM D2321.



ENSURE BEDDING IS UNIFORM AND TRUE TO LINE AND GRADE. MIDDLE THIRD SHOULD BE LOOSE TO CRADLE PIPE.



EXTEND BEDDING AT LEAST 2 FEET BEYOND THE END OF THE PIPE BEING INSTALLED.

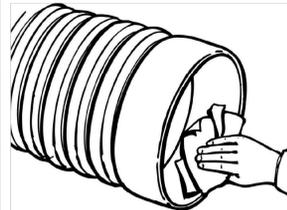


TRENCH SHOULD BE DRY OR PROPERLY DEWATERED BEFORE PLACING BEDDING AND BACKFILL.

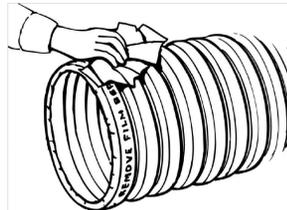


IF STONE OR ANY OPEN GRADED BEDDING MATERIAL IS USED, WRAP THE STONE WITH A MIN. 6 OUNCE NON-WOVEN GEOTEXTILE.

STEP 3 : PREPARATION OF BEDDING MATERIAL



PUSH PIECE



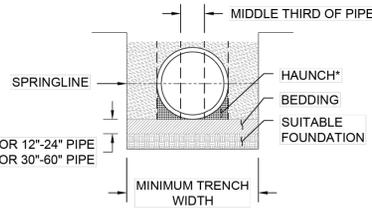
NYLON STRAP

- USE A CLEAN RAG OR BRUSH TO LIGHTLY LUBRICATE INSIDE THE BELL. CLEAN SPIGOT END OF PIPE. REMOVE PLASTIC WRAP FROM GASKET. DO NOT ALLOW LUBRICATED SECTION TO TOUCH DIRT OR BACKFILL.
- ALIGN PIPE AND PLACE SPIGOT INTO BELL. USING STRAP OR PUSH PIECE, FULLY INSERT SPIGOT INTO BELL. WHEN LEADING BELL EDGE TOUCHES "HOME" MARK JOINT IS FULLY INSERTED. INSIDE JOINT GAPS SHOULD BE TIGHT ON ALL SIDES. SEE MANUFACTURER FOR JOINT TOLERANCE.

STEP 4 : PIPE JOINT ASSEMBLY



TRACKHOE OPERATOR SHALL UNIFORMLY PLACE A SHALLOW LIFT (NOT TO EXCEED 8"), OVER THE PIPE SO WORKERS CAN DIAGONALLY KNIFE OR BOOT PRESS SOIL UNDER PIPE HAUNCHES. PLACING BACKFILL UNDER THE PIPE HAUNCHES HELPS PREVENT THE PIPE FROM SHIFTING DURING BACKFILL COMPACTION. FOR ADDITIONAL GUIDANCE SEE ASTM D2321.



* HAUNCH BACKFILL PROVIDES SUPPORT FOR SOIL & TRAFFIC LOADS. BACKFILL SHOULD BE WORKED INTO HAUNCH AREA IN 4-6" LIFTS



PLACE BACKFILL AROUND PIPE IN 4"-6" COMPACTED LIFTS OR AS DIRECTED BY THE ONSITE GEOTECHNICAL ENGINEER (LOOSE LIFTS SHALL NOT EXCEED 8"). COMPACT BEDDING AND BACKFILL WITH SMALL TO MEDIUM COMPACTION EQUIPMENT TO SPECIFIED DENSITY. VISUALLY INSPECT THE PIPE TO ENSURE THE APPROPRIATE SHAPE IS MAINTAINED. BACKFILL SHOULD BE NEAR OPTIMUM MOISTURE WHEN COMPACTED. FOR ADDITIONAL GUIDANCE SEE ASTM D2321.

STEP 6 : COMPACT BACKFILL IN LIFTS

PIPE DIA	MAXIMUM COVER FOR ADS HP STORM PIPE (FT)				
	CLASS I	CLASS II		CLASS III	
		COMPACTED	95% SPD	90% SPD	95% SPD
12"	41	28	21	20	16
15"	42	29	21	21	16
18"	44	30	21	22	17
24"	37	26	18	19	14
30"	39	27	19	19	15
36"	28	20	14	14	11
42"	30	21	14	15	11
48"	29	20	14	14	10
60"	29	20	14	14	10

FILL HEIGHTS BASED ON CALCULATIONS SHOWN IN THE STRUCTURES SECTION OF THE ADS DRAINAGE HANDBOOK (V20.7). CALCULATIONS ASSUME NO HYDROSTATIC PRESSURE AND A DENSITY OF 120 PCF FOR OVER BURDEN MATERIAL. INSTALLATION IN ACCORDANCE WITH ASTM D2321. WITH FILL HEIGHTS AS SHOWN, SEE TABLE 3 FOR SOIL DATA. STANDARD PROCTOR DENSITY USED FOR COMPACTION. INCREASE SOIL CLASS AND/OR COMPACTION EFFORT AS NEEDED TO MEET REQUIRED FILL HEIGHTS ON PROJECT PLANS

PIPE DIA	MINIMUM COVER FOR ADS HP STORM PIPE (IN)		
	H20 AXLE LOAD (lbs)	CLASS II @ 90% SPD	CLASS III @ 90% SPD
12" - 48"	32000	12	12
60"	32000	24	24

FOR TRAFFIC APPLICATIONS MINIMUM COVER IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT (ASPHALT) OR TO TOP OF RIGID PAVEMENT (CONCRETE).

MINIMUM COVER VALUES DO NOT ACCOUNT FOR RUTTING OR UNSTABLE SOIL OVER THE PIPE. ADDITIONAL COVER MAY BE REQUIRED TO MAINTAIN THE PIPE'S STRUCTURAL INTEGRITY.

TABLE 1 : MAXIMUM & MINIMUM COVER



WHEN COMPACTING OVER THE PIPE WITH LIGHT WEIGHT COMPACTION EQUIPMENT, ENSURE THERE IS 6" MINIMUM COVER.



MEDIUM SIZED COMPACTORS MAY BE USED TO COMPACT BACKFILL IN LIFTS UP SIDES OF PIPE.



MEDIUM SIZED COMPACTORS MUST HAVE 12" MINIMUM COVER BEFORE COMPACTING OVER THE PIPE.



SEE TABLE 2 FOR MINIMUM COVER REQUIREMENTS FOR TYPICAL CONSTRUCTION EQUIPMENT.

STEP 7 : COMPACT OVER TOP OF PIPE

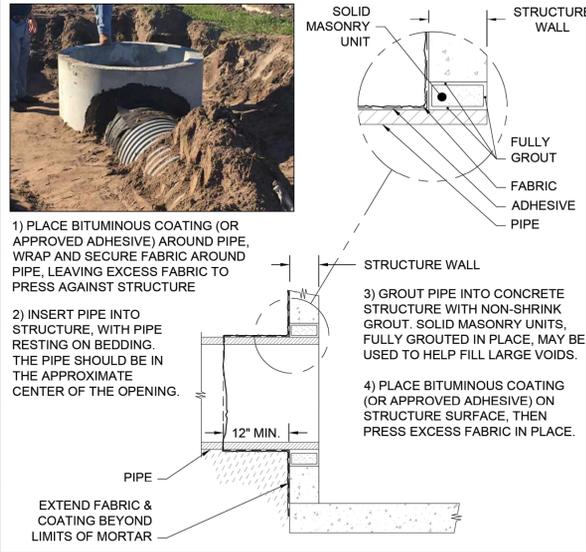
CONSTRUCTION VEHICLE	VEHICLE DESCRIPTION	MINIMUM TIRE	AXLE LOAD (lbs)	PIPE DIAMETER	TEMPORARY MINIMUM COVER HEIGHTS (in)				
					CLASS I @ 90% SPD	CLASS II @ 90% SPD	CLASS III @ 90% SPD	CLASS III @ 90% SPD	CLASS III @ 90% SPD
CAT CT660	DUMP TRUCK	22.5-R11	46000	12"-60"	9	9	12	12	18
CAT 16M3	GRADER	23.5-R25	58753	12"-21"	12	12	15	15	21
CAT 730C	ARTICULATED DUMP TRUCK	23.5-R25	74538	12"-15"	15	15	18	18	24
				18"-60"	15	15	18	18	24
CAT CS78B ¹	ROLLER	84-IN DRUM	74600	12"-21"	15	15	21	21	27
				24"-60"	15	15	21	21	27
KOMATSU WA800-3	WHEEL LOADER	45/65-45	158270	12"-30"	15	15	21	21	30
				36"-60"	15	15	21	21	36

¹ACCELERATOR (VIBRATOR) TURNED ON
MINIMUM COVER VALUES DO NOT ACCOUNT FOR RUTTING OR UNSTABLE SOIL OVER THE PIPE. ADDITIONAL COVER MAY BE REQUIRED TO MAINTAIN THE PIPE'S STRUCTURAL INTEGRITY.

NOMINAL DIAMETER (in)	MINIMUM COVER (in)
12	9
15	11
18	13
24	17
30	22
36	25
42	29
48	33
60	40

FLOTATION NOTES:
THE PIPE IS ASSUMED TO BE EMPTY WITH GROUNDWATER TO THE GRADE SURFACE AND SATURATED SOIL DENSITY OF 130 PCF. IF THE PIPE IS FULL OF WATER THESE VALUES MAY BE ADJUSTED BY THE SITE DESIGN ENGINEER. FOR MORE INFORMATION ON FLOTATION, REFER TO ADS TECH NOTE TN 5.05.

TABLE 2 : MIN. COVER FOR CONSTRUCTION VEHICLES & FLOTATION



STEP 8 : FABRIC & GROUT CONNECTION TO STRUCTURE

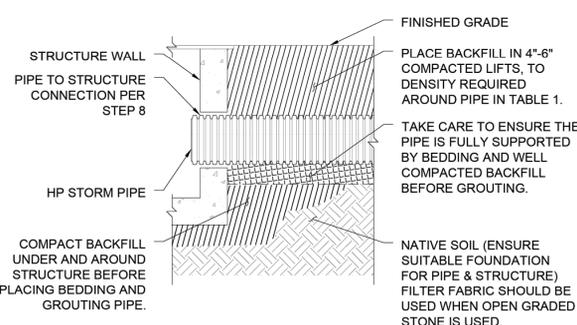
ASTM D2321 SOIL CLASS ¹	ASTM D2487 SOIL GROUP ²	AASHTO M145 SOIL GROUPS ¹
STONE BACKFILL		
CLASS I ²	ANGULAR CRUSHED ROCK, WITH 100% PASSING 1-1/2 IN. SIEVE 15% PASSING #4 SIEVE 25% PASSING #8 SIEVE 51% PASSING #200 SIEVE ALL PARTICLE SURFACES SHALL BE FRACTURED.	
GRAVEL AND SAND BACKFILL		
CLASS II	CLEAN, COARSE GRAINED SOILS: "SW", "SP", "GW", "GP", OR ANY SOIL BEGINNING WITH ONE OF THESE SYMPOLS WITH 51% PASSING #200 SIEVE.	A1, A3
COARSE GRAINED SOILS WITH FINES		
CLASS III	COARSE GRAINED SOILS WITH FINES: "GM", "GC", "SM", "SC", OR ANY SOIL BEGINNING WITH ONE OF THESE SYMBOLS, CONTAINING >12% PASSING #200 SIEVE; "CL", "ML", OR ANY SOIL BEGINNING WITH ONE OF THESE SYMBOLS, WITH 20% RETAINED ON #200 SIEVE.	A-2.4, A-2.5, A-2.6, OR A-4 OR A-6 SOILS WITH MORE THAN 30% RETAINED ON #200 SIEVE

¹SEE ASTM D2321 FOR ADDITIONAL GUIDANCE REGARDING THE USE OF LISTED SOILS AS BACKFILL AROUND THERMOPLASTIC PIPE
²IT IS HIGHLY RECOMMENDED TO WRAP THIS MATERIAL WITH A GEOTEXTILE TO PREVENT MIGRATION OF FINES INTO AND THROUGH VOIDS IN THE BACKFILL.

BACKFILL AROUND PIPE SHALL MEET ASTM D2321 CLASS I, II, OR III UNLESS SPECIFICALLY APPROVED IN WRITING BY THE PROJECT DESIGN ENGINEER AND MAXIMUM COVER DATA IS PROVIDED.

TABLE 3 : BACKFILL CLASSIFICATIONS

STEP 5 : PLACING MATERIAL INTO HAUNCH AREA



STEP 9 : COMPACT BACKFILL AROUND STRUCTURE

DRAWN: JLM DATE: 08/20/17
REVISION: 1 DWG NO: STD-1301B
NOT TO SCALE

HP STORM INSTALLATION GUIDE

HP Storm must be installed in accordance with ASTM D2321. IN ADDITION TO ALL SITE CONDITIONS REQUIRED BY STATE AND LOCAL CODES, INDUSTRY STANDARDS AND GUIDELINES, MANUFACTURER'S INSTALLATION RECOMMENDATIONS, OSHA, AND ALL APPLICABLE LAWS.
THIS DRAWING PREPARED AT THE WILMINGTON OFFICE 430 Esawood Road | Wilmington, NC 28403 TEL: 910.740.1144 FAX: 910.833.8124 www.timmons.com
YOUR VISION ACHIEVED THROUGH OURS.
DATE: 03/07/2025
DRAWN BY: 331
DESIGNED BY: 331
CHECKED BY: J. WALKER
SCALE: NONE

HP Storm HIGH PERFORMANCE
ADVANCED DRAINAGE SYSTEMS, INC.
4640 TRUEMAN BLVD
HILLIARD, OH 43026
SHEET 1 OF 1

FOR REVIEW ONLY

THIS DRAWING PREPARED AT THE WILMINGTON OFFICE 430 Esawood Road | Wilmington, NC 28403 TEL: 910.740.1144 FAX: 910.833.8124 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

DATE: 03/07/2025
DRAWN BY: 331
DESIGNED BY: 331
CHECKED BY: J. WALKER
SCALE: NONE

TIMMONS GROUP
NORTH CAROLINA LICENSE NO. C-1652
BLAKE FARM PARCEL U
PENDER COUNTY, NORTH CAROLINA
STORMWATER NOTES AND DETAILS

JOB NO. 70442
SHEET NO. C9.6



PROGRESS DRAWINGS - DO NOT USE FOR CONSTRUCTION