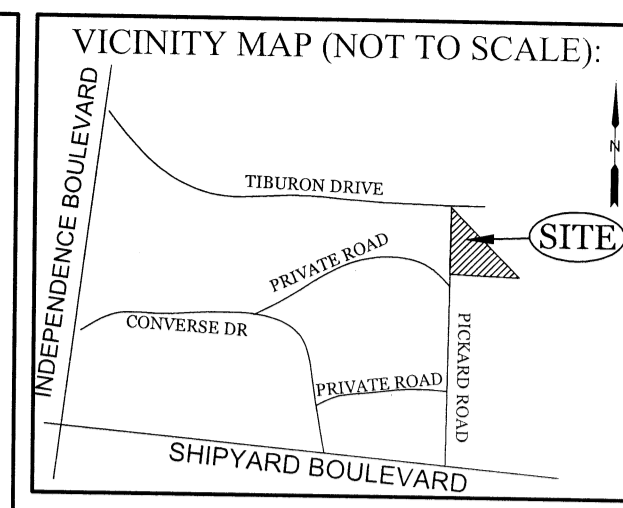


**SITE DATA**

PARCEL ID:	R06113-001-009-000
CURRENT ZONING:	RB (REGIONAL BUSINESS)
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS:	2580 PICKARD RD. WILMINGTON, NC 28401
CURRENT OWNER:	LIGHTHOUSE MEDICAL PROPERTIES, LLC 4114 SHIPYARD BLVD WILMINGTON, NC 28403
TOTAL ACREAGE IN PROJECT BOUNDARY:	76,363 S.F. (± 1.75 ac.)
TOTAL DISTURBED AREA:	± 1.16 ac.
EXISTING ONSITE IMPERVIOUS AREAS:	0.0 S.F.
SITE IS VACANT	



REVISIONS

NO.	DESCRIPTION

NOTE: THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

NOTE: CROWN OF THE TREE IS NEEDED FOR LEAF GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISFIGURE CROWN WITH INTENSIVE PRUNING.

CRZ  
8" MAX  
ORANGE SAFETY FENCE OR ORANGE SILT FENCE (TYPICAL)

STANDARD DETAIL  
**TREE PROTECTION DURING CONSTRUCTION**  
SHEET 1 of 2

DATE: JAN, 2015  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

CITY OF WILMINGTON  
NORTH CAROLINA  
PO BOX 1810  
WILMINGTON, NC 28402  
(910) 341-7807

SD 15-09

NOTES:  
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.  
2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).  
3. IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 1" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.  
4. WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.  
5. FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. DAMAGING THE BARK WITH EQUIPMENT SHALL BE STORED BENEATH TREES, DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.  
6. FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

**INTRACOASTAL ENGINEERING, PLLC**  
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.839.8953  
Email: charlie@intracoastalengineering.com  
License Number: P-0662

EXISTING CONDITIONS /  
TREE REMOVAL &  
PROTECTION PLAN  
FOR  
**INTRACOASTAL INTERNAL MEDICINE**  
CITY OF WILMINGTON  
NEW HANOVER COUNTY, NC

STANDARD DETAIL  
**TREE PROTECTION DURING CONSTRUCTION**  
SHEET 2 of 2

DATE: JAN, 2015  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

CITY OF WILMINGTON  
NORTH CAROLINA  
PO BOX 1810  
WILMINGTON, NC 28402  
(910) 341-7807

SD 15-09

NOTES:  
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.  
2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM CLEARLY LEGIBLE AND SPACED AS DETAILED.  
3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.  
4. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCING AND SIGNS THROUGHOUT DURATION OF PROJECT.  
5. TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.  
6. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

8" MAX.  
VARIABLE AS DIRECTED BY THE ENGINEER  
WARNING SIGN  
TREE PROTECTION AREA DO NOT ENTER  
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR  
GRADE  
ORANGE, UV RESISTANT HIGH - TENSILE STRENGTH POLY BARRICADE FABRIC (TYPICAL)  
FRONT VIEW

STEEL POST  
WARNING SIGN  
ORANGE, UV RESISTANT HIGH - TENSILE STRENGTH POLY BARRICADE FABRIC (TYPICAL)  
SIDE VIEW

TREE PROTECTION AREA DO NOT ENTER  
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR  
WARNING SIGN DETAIL

PROFESSIONAL SEAL  
NORTH CAROLINA  
ENGINEER  
032555  
CHARLES D. CATER  
2.8.18

CLIENT INFORMATION:  
Intracoastal Internal Medicine  
4114 Shipyard Blvd.  
Wilmington NC 28403  
910-332-0701

DRAWN: JAE SHEET SIZE: 24x36  
CHECKED: CDC DATE: 2/7/2018  
APPROVED: CDC SCALE: 1" = 30'  
PROJECT NUMBER: 2017-025

DRAWING NUMBER:  
**C-0**

1 OF 6

- NOTES:  
1. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.  
2. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.  
3. TREE PROTECTION SIGNAGE SHALL BE ADDED ALONG THE LIMITS OF DISTURBANCE ADJACENT TO TREES EVERY 100' TO PROTECT TREES ADJACENT TO THE CONSTRUCTION SITE.

Approved Construction Plan

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning \_\_\_\_\_  
Public Utilities \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

CITY OF WILMINGTON  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN

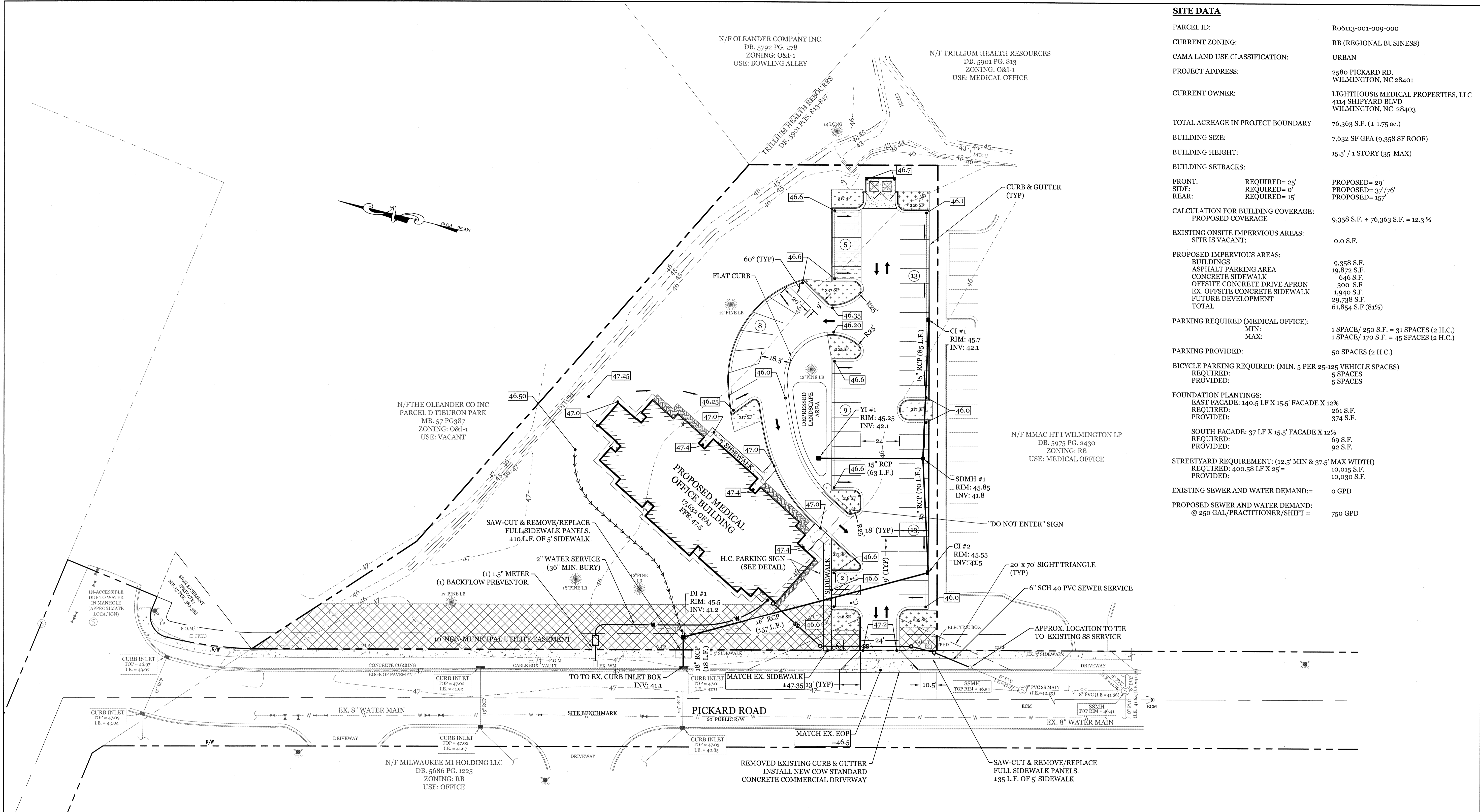
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

LEGEND

PROPERTY LINE  
ALTIMETERS  
TREE PROTECTION FENCE  
LIMITS OF DISTURBANCE  
TREES TO BE REMOVED

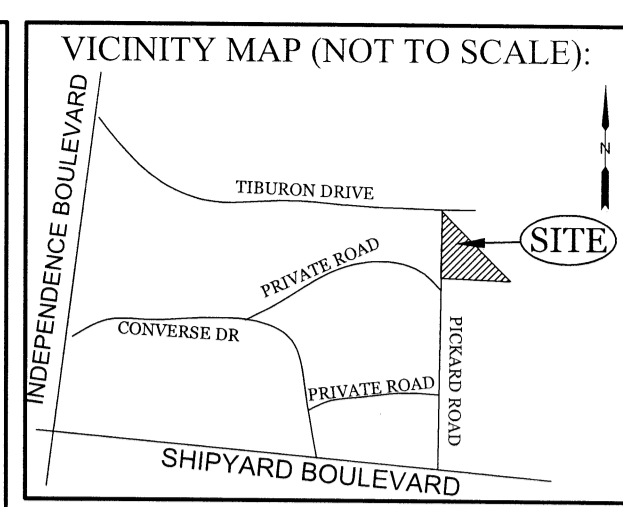
30' 15' 0' 30' 60'

Scale: 1"=30'



**SITE DATA**

PARCEL ID:	R06113-001-009-000	
CURRENT ZONING:	RB (REGIONAL BUSINESS)	
CAMA LAND USE CLASSIFICATION:	URBAN	
PROJECT ADDRESS:	2580 PICKARD RD. WILMINGTON, NC 28401	
CURRENT OWNER:	LIGHTHOUSE MEDICAL PROPERTIES, LLC 4114 SHIPYARD BLVD WILMINGTON, NC 28403	
TOTAL ACREAGE IN PROJECT BOUNDARY:	76,363 S.F. (± 1.75 ac.)	
BUILDING SIZE:	7,632 SF GFA (9,358 SF ROOF)	
BUILDING HEIGHT:	15.5' / 1 STORY (35' MAX)	
BUILDING SETBACKS:		
FRONT:	REQUIRED= 25'	PROPOSED= 29'
SIDE:	REQUIRED= 0'	PROPOSED= 37' / 76'
REAR:	REQUIRED= 15'	PROPOSED= 157'
CALCULATION FOR BUILDING COVERAGE:	9,358 S.F. ÷ 76,363 S.F. = 12.3 %	
EXISTING ONSITE IMPERVIOUS AREAS:	0.0 S.F.	
PROPOSED IMPERVIOUS AREAS:		
BUILDINGS:	9,358 S.F.	
ASPHALT PARKING AREA:	19,872 S.F.	
CONCRETE SIDEWALK:	646 S.F.	
OFFSITE CONCRETE DRIVE APRON:	300 S.F.	
EX. OFFSITE CONCRETE SIDEWALK:	1,940 S.F.	
FUTURE DEVELOPMENT:	29,738 S.F.	
TOTAL:	61,854 S.F. (81%)	
PARKING REQUIRED (MEDICAL OFFICE):		
MIN:	1 SPACE / 250 S.F. = 31 SPACES (2 H.C.)	
MAX:	1 SPACE / 170 S.F. = 45 SPACES (2 H.C.)	
PARKING PROVIDED:	50 SPACES (2 H.C.)	
BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)		
REQUIRED:	5 SPACES	
PROVIDED:	5 SPACES	
FOUNDATION PLANTINGS:		
EAST FACADE: 140.5' LF X 15.5' FACADE X 12%	261 S.F.	
REQUIRED:	374 S.F.	
PROVIDED:	69 S.F.	
SOUTH FACADE: 37' LF X 15.5' FACADE X 12%	92 S.F.	
REQUIRED:	10,015 S.F.	
PROVIDED:	10,030 S.F.	
STREETYARD REQUIREMENT: (12.5' MIN & 37.5' MAX WIDTH)		
REQUIRED: 400.58 LF X 25'	10,015 S.F.	
PROVIDED:	10,030 S.F.	
EXISTING SEWER AND WATER DEMAND=	0 GPD	
PROPOSED SEWER AND WATER DEMAND:	750 GPD	



**REVISIONS**


**INTRACOASTAL ENGINEERING, PLLC**  
 5725 Oleander Dr. Unit E-7  
 Wilmington, North Carolina 28403  
 Phone: 910.859.8983  
 Email: Charlie@intracoastalengineering.com  
 License Number: P-10662

**PLAN FOR INTRACOASTAL INTERNAL MEDICINE CITY OF WILMINGTON NEW HANOVER COUNTY, NC**

- DEVELOPMENT NOTES:**
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.
  - PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & NEW HANOVER COUNTY REGULATIONS.
- UTILITY NOTES:**
- EXISTING WATER AND SANITARY SEWER SERVICES ARE CURRENTLY AVAILABLE TO THE SITE FROM CAPE FEAR PUBLIC UTILITY AUTHORITY PUBLIC MAINS.
  - ALL PROPOSED UTILITY SERVICES, SUCH AS ELECTRIC POWER, CATV, GAS & TELEPHONE SHALL BE INSTALLED UNDERGROUND.
  - ALL WATER & SEWER UTILITIES TO BE INSTALLED PER CFWA TECHNICAL SPECIFICATIONS & STANDARDS.
  - PROJECT SHALL COMPLY WITH CFWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND N.C.D.E.N.R. HAS ISSUED THEIR "FINAL APPROVAL." CALL 343-3910 FOR INFORMATION.
  - ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USFCCCOR OR ASSE.
  - WATER & SEWER SERVICES CANNOT BE ACTIVATED ON NEW MAINS UNTIL THE ENGINEER'S CERTIFICATION AND AS-BUILTS ARE RECEIVED AND "FINAL APPROVAL" ISSUED BY THE PUBLIC WATER SUPPLY SECTION OF NCDENR, AND "FINAL ENGINEERING CERTIFICATION" ISSUED BY DIVISION OF WATER QUALITY SECTION OF NCDENR.
  - IF CONTRACTOR DESIRES CFWA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
  - WHEN PVC WATER MAINS AND SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED, SINGLE-STRAND COPPER WIRE INSTALLED & STRAPPED TO THE PIPES WITH DUCT TAPE. THIS IS TO BE ACCESSIBLE IN ALL VALVES AND METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL U-LOCO AT 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
  - THE BELLSOUTH CONTACT IS STEVE DAYVAULT, BUILDING INDUSTRY CONSULTANT, AT 910-392-8712. CONTACT HIM PRIOR TO STARTING THE PROJECT IN ORDER TO FACILITATE GOOD COMMUNICATION AND MAXIMUM FLEXIBILITY.
  - THE PROCESS FOR TELEPHONE CABLE PLACEMENT: \* FINAL GRADE WILL NEED TO BE ESTABLISHED. \* POWER WILL PLACE THEIR CABLE FIRST - APPROXIMATELY 3' DEEP. \* BELLSOUTH & CABLE TV WILL THEN PLACE THEIR CABLE AT APPROXIMATELY 2' DEEP.
  - SOLID WASTE DISPOSAL BY PRIVATE DUMPSTER SERVICE.
  - ALL RUNOFF FROM IMPERVIOUS SURFACES TO BE DIRECTED TO PIPED STORM DRAIN SYSTEM.
- GENERAL TRAFFIC NOTES:**
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. [DETAIL SD 15-13 COWP TECH STDS]
  - ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. [DETAIL SD 15-13 COWP TECH STDS]
  - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
  - A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN. [SD 15-14 COWP TECH STDS]
  - CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
  - ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' TO 10'.

- FIRE & SAFETY NOTES:**
- CONSTRUCTION TYPE: V (COMMERCIAL)
  - BUILDING WILL NOT BE SPRINKLED
  - PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS.
  - ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES
  - HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF STRUCTURE.
  - IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.

**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning \_\_\_\_\_

Public Utilities \_\_\_\_\_

Traffic \_\_\_\_\_

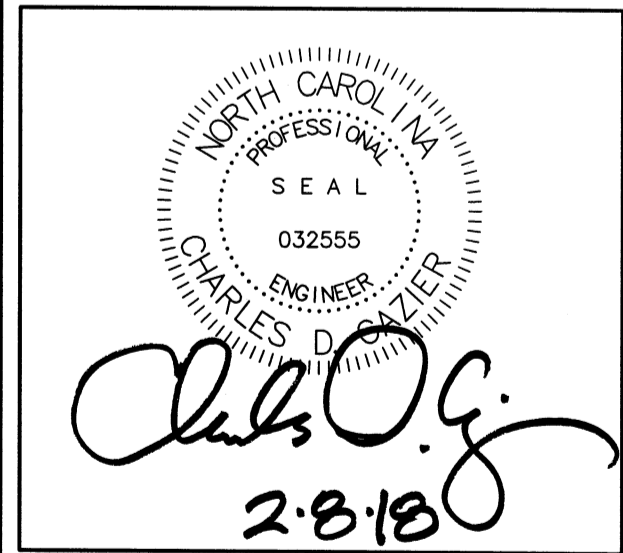
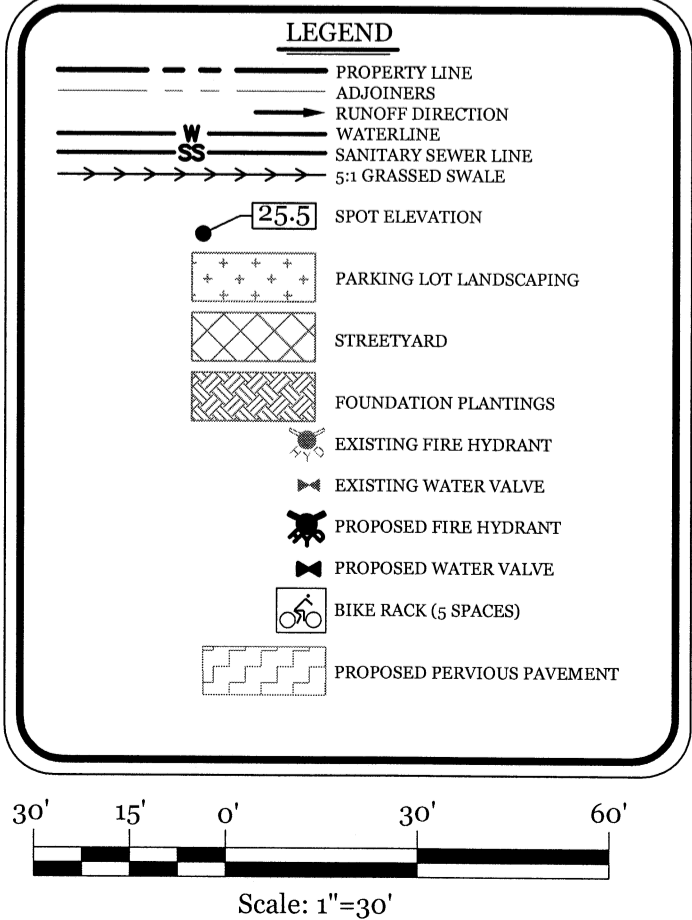
Fire \_\_\_\_\_

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_

Signed: \_\_\_\_\_



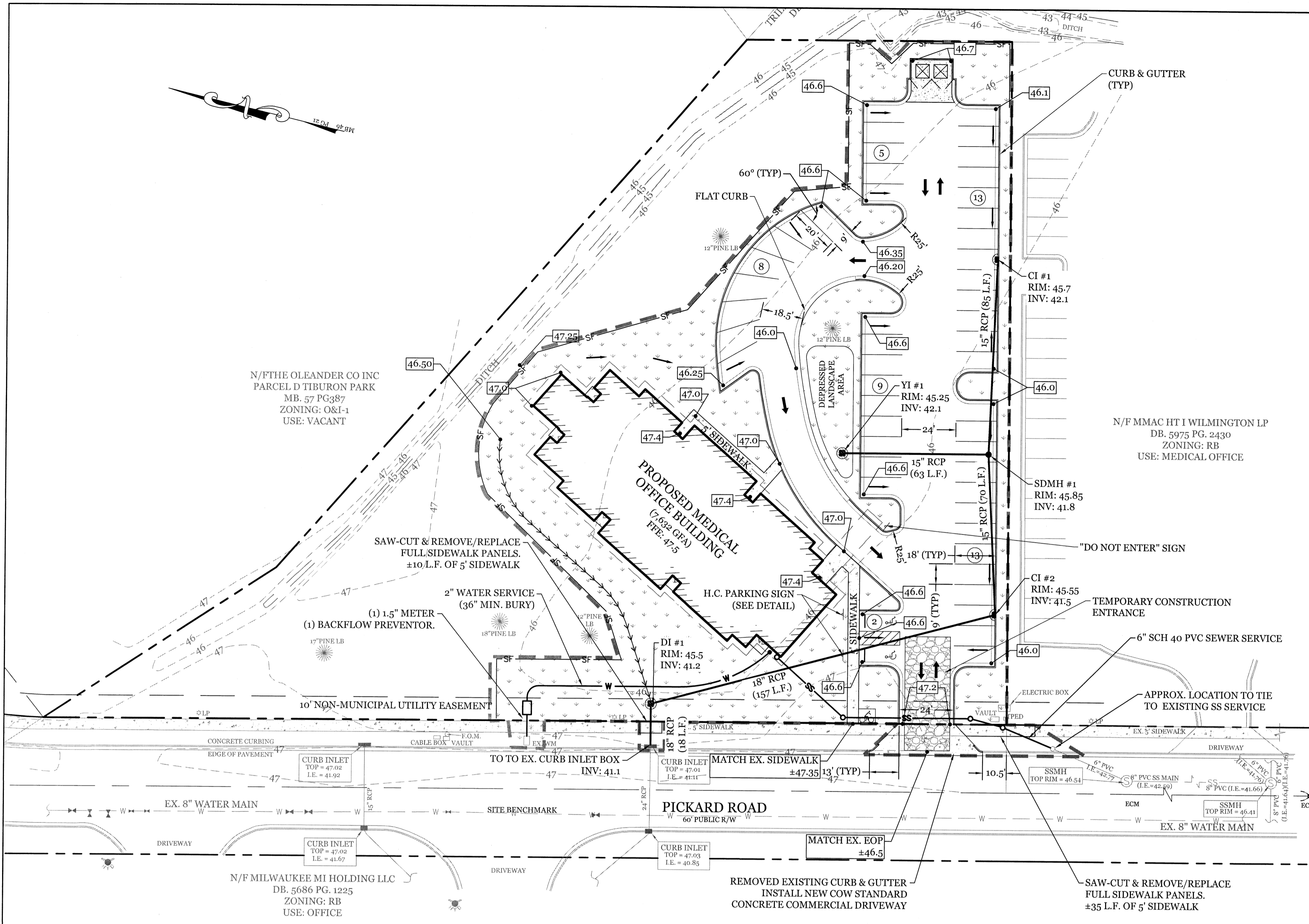
**CLIENT INFORMATION:**

Intracoastal Internal Medicine  
 4114 Shipyard Blvd.  
 Wilmington NC 28403  
 910-332-0701

DRAWN: JAE	SHEET SIZE: 24x36
CHECKED: CDC	DATE: 2/7/2018
APPROVED: CDC	SCALE: 1" = 30'
PROJECT NUMBER: 2017-025	

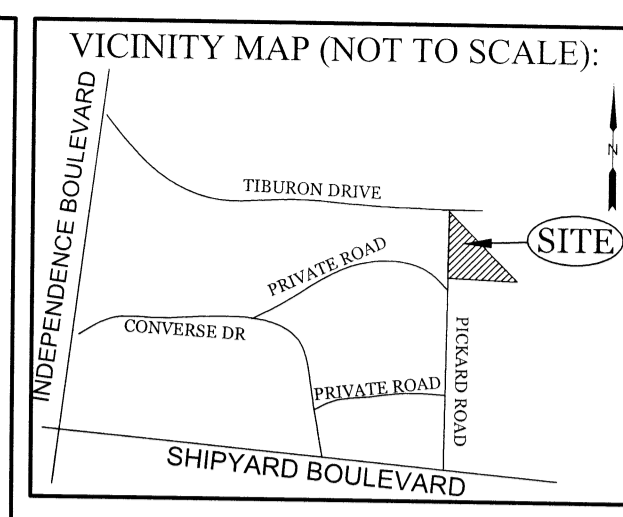
DRAWING NUMBER: **C-1**

2 OF 6



**SITE DATA**

PARCEL ID:	R06113-001-009-000
CURRENT ZONING:	RB (REGIONAL BUSINESS)
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS:	2580 PICKARD RD. WILMINGTON, NC 28401
CURRENT OWNER:	LIGHTHOUSE MEDICAL PROPERTIES, LLC 4114 SHIPYARD BLVD WILMINGTON, NC 28403
TOTAL ACREAGE IN PROJECT BOUNDARY:	76,363 S.F. (± 1.75 ac.)
TOTAL DISTURBED AREA:	± 1.16 ac.
BUILDING SIZE:	7,632 SF GFA (9,358 SF ROOF)
CALCULATION FOR BUILDING COVERAGE: PROPOSED COVERAGE:	9,358 S.F. ÷ 76,363 S.F. = 12.3 %
EXISTING ONSITE IMPERVIOUS AREAS: SITE IS VACANT:	0.0 S.F.
PROPOSED IMPERVIOUS AREAS:	
BUILDINGS	9,358 S.F.
ASPHALT PARKING AREA	19,872 S.F.
CONCRETE SIDEWALK	646 S.F.
OFFSITE CONCRETE DRIVE APRON	300 S.F.
EX. OFFSITE CONCRETE SIDEWALK	1,940 S.F.
FUTURE DEVELOPMENT	29,738 S.F.
TOTAL	61,854 S.F. (81%)



**REVISIONS**

NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**  
 5725 Oleander Dr. Unit E-7  
 Wilmington, North Carolina 28403  
 Phone: 910.859.8983  
 Email: charlie@intracoastalengineering.com  
 License Number: P-06062

**SEDIMENTATION & EROSION CONTROL PLAN**  
 FOR  
**INTRACOASTAL INTERNAL MEDICINE**  
 CITY OF WILMINGTON  
 NEW HANOVER COUNTY, NC

**NORTH CAROLINA TEMPORARY GRASSING DETAIL**

SEEDING MIXTURE SPECIES	APPLICATION RATE
<b>LATE WINTER &amp; EARLY SPRING:</b> Rye (grain) Tall Fescue (blend of two or three improved varieties) Rye (grain) Omit annual Lespedeza when duration of temporary cover is not to extend beyond June	100 (lb/acre) 50 (lb/acre)
<b>SUMMER:</b> German Millet In the Piedmont and Mountains, a small-stemmed sundangrass may be substituted at a rate of 50 (lb/acre)	40 (lb/acre)
<b>FALL:</b> Rye (grain)	120 (lb/acre)

**NORTH CAROLINA PERMANENT GRASSING DETAIL**

SEEDING MIXTURE SPECIES	APPLICATION RATE
<b>FALL &amp; WINTER:</b> Tall Fescue (blend of two or three improved varieties) Rye (grain)	200 (lb/acre) 25 (lb/acre)
<b>SPRING &amp; SUMMER:</b> Pensacola Bahiagrass Sericea Lespedeza Common Bermudagrass German Millet Tall Fescue	50 (lb/acre) 30 (lb/acre) 10 (lb/acre) 10 (lb/acre) 50 (lb/acre)

**GROUND STABILIZATION CRITERIA**

SYMBOL	SITE AREA DESCRIPTION	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS
[Symbol]	* Perimeter dikes, ditches and slopes	7 Days	None
[Symbol]	* High Quality Water (HQW) Zones	7 Days	None
[Symbol]	* Slopes Steeper than 3:1	7 Days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
[Symbol]	* Slopes 3:1 or flatter	14 Days	7-days for slopes greater than 50 ft. in length
[Symbol]	* All other areas with slopes flatter than 4:1	14 Days	None (except for perimeters & HQW Zones)

**SEEDING DATES**

**LATE WINTER & EARLY SPRING:**  
Mountains - Above 2500 ft: Feb. 15-May 15  
Piedmont - Jan. 1-May 1  
Coastal Plain - Dec. 1-Apr. 15

**SUMMER:**  
Mountains - May 15-Aug. 15  
Piedmont - May 1-Aug. 15  
Coastal Plain - Apr. 15-Aug. 15

**FALL:**  
Mountains - Aug. 15-Dec. 15  
Coastal Plain and Piedmont - Aug. 15-Dec. 30

**SOIL AMENDMENTS:**  
Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

**MULCH:**  
Apply 4,000 lb/acre straw, anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**MAINTENANCE:**  
Refertilize if growth is not fully adequate, reseed, refertilize and mulch immediately following erosion or other damage.

**SOIL AMENDMENTS:**  
Apply lime and fertilizer according to soil tests, or apply 3,000-5,000 lb/acre ground agricultural limestone (use the lower rate on sandy soils) and 1,000 lb/acre 10-10-10 fertilizer.

**MAINTENANCE:**  
Fertilize according to soil tests or apply 40 lb/acre nitrogen in January or February, 40 lb in September and 40 lb in November, from a 12-4-8, 16-4-8, or similar turf fertilizer. Avoid fertilizer applications during warm weather, as this increases stand losses to disease. Reseed, fertilize, and mulch damaged areas immediately, mow to a height of 2.5-3.5 inches as needed.

**SOIL AMENDMENTS:**  
Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agriculture limestone and 500 lb/acre 10-10-10 fertilizer.

**MAINTENANCE:**  
Refertilize the following April with 50 lb/acre nitrogen. Repeat as growth requires, may be mowed only once a year. Where a neat appearance is desired, omit sericea and mow as often as needed.

**MULCH:**  
Apply 4,000 lb/acre straw, anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**BUILDING WASTE HANDLING:**  
- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS  
- DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE  
- EARTHEN MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES ARE AVAILABLE  
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.

**INSPECTIONS:**  
- SAME WEEKLY REQUIREMENTS  
- SAME RAIN GAUGE & INSPECTIONS AFTER 0.50" RAIN EVENT  
- INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS"  
- INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.  
- RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.  
- ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.

**SEDIMENT BASINS:**  
- OUTLET STRUCTURES MUST BE WITHDRAWN FROM BASIN SURFACES UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.  
- USE ONLY DWQ APPROVED FLOCCULANTS.

**MAINTENANCE PLAN:**

- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
- ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2 INCHES OF 2-3 INCH STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED, WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
- SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION, SEDIMENT TRAP Baffles, AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
- DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY ASSOCIATED WITH A SWALE.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX. WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.

**CONSTRUCTION SEQUENCE:**

CONSTRUCTION OF SITE TO START WITH INSTALLATION OF CONSTRUCTION ENTRANCE AND SILT FENCE ALONG ALL LOCATIONS PER PLANS. UPON INSTALLATION OF SILT FENCE, TREES SHOULD BE REMOVED IN LOCATIONS AS NECESSARY. ALL SLOPED AREAS SHOULD BE SEEDING IN ACCORDANCE TO SPECIFICATIONS. SLOPE STABILIZATION IS WITHIN 21 CALENDAR DAYS OF ANY PHASE OF CONSTRUCTION. ALL OTHER AREAS MUST BE STABILIZED WITHIN 15 WORKING DAYS. CONTRACTOR TO FOLLOW NPDES STABILIZATION REQUIREMENTS PER TABLE ON THIS SHEET AS WELL. MOST STRINGENT REQUIREMENT TO BE MET.

- GENERAL CLEARING AND GRADING OF THIS SITE WILL NOT BE DONE UNTIL THE TEMPORARY SILT FENCE & CONSTRUCTION ENTRANCE HAS BEEN INSTALLED.
- NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (3 VERTICAL TO 3 HORIZONTAL).
- NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES DURING AND AFTER CONSTRUCTION.
- INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO GRAVELED CONSTRUCTION ENTRANCE, SILT FENCE, TREE PROTECTION FENCE & SEDIMENT BASINS. CONTRACTOR TO BE FAMILIAR WITH USACOE GENERAL PERMIT CONDITIONS FOR ROAD CROSSINGS. SPECIFIC CONSTRUCTION METHODS MAY BE REQUIRED ABOVE AND BEYOND WHAT IS SPECIFIED IN THIS PLAN. INSTALL ALL SECONDARY EROSION CONTROL MEASURES, SUCH AS INLET PROTECTION AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
- ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION TO BE CLEANED WHEN HALF FULL.
- A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
- MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
- MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
- REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

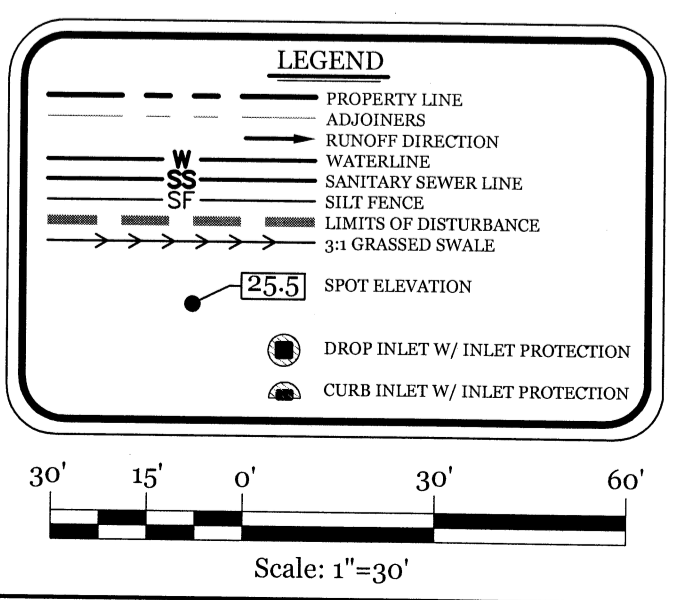
**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning \_\_\_\_\_  
 Public Utilities \_\_\_\_\_  
 Traffic \_\_\_\_\_  
 Fire \_\_\_\_\_

**CITY OF WILMINGTON**  
 NORTH CAROLINA  
 Public Services • Engineering Division  
 APPROVED STORMWATER MANAGEMENT PLAN

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
 Signed: \_\_\_\_\_

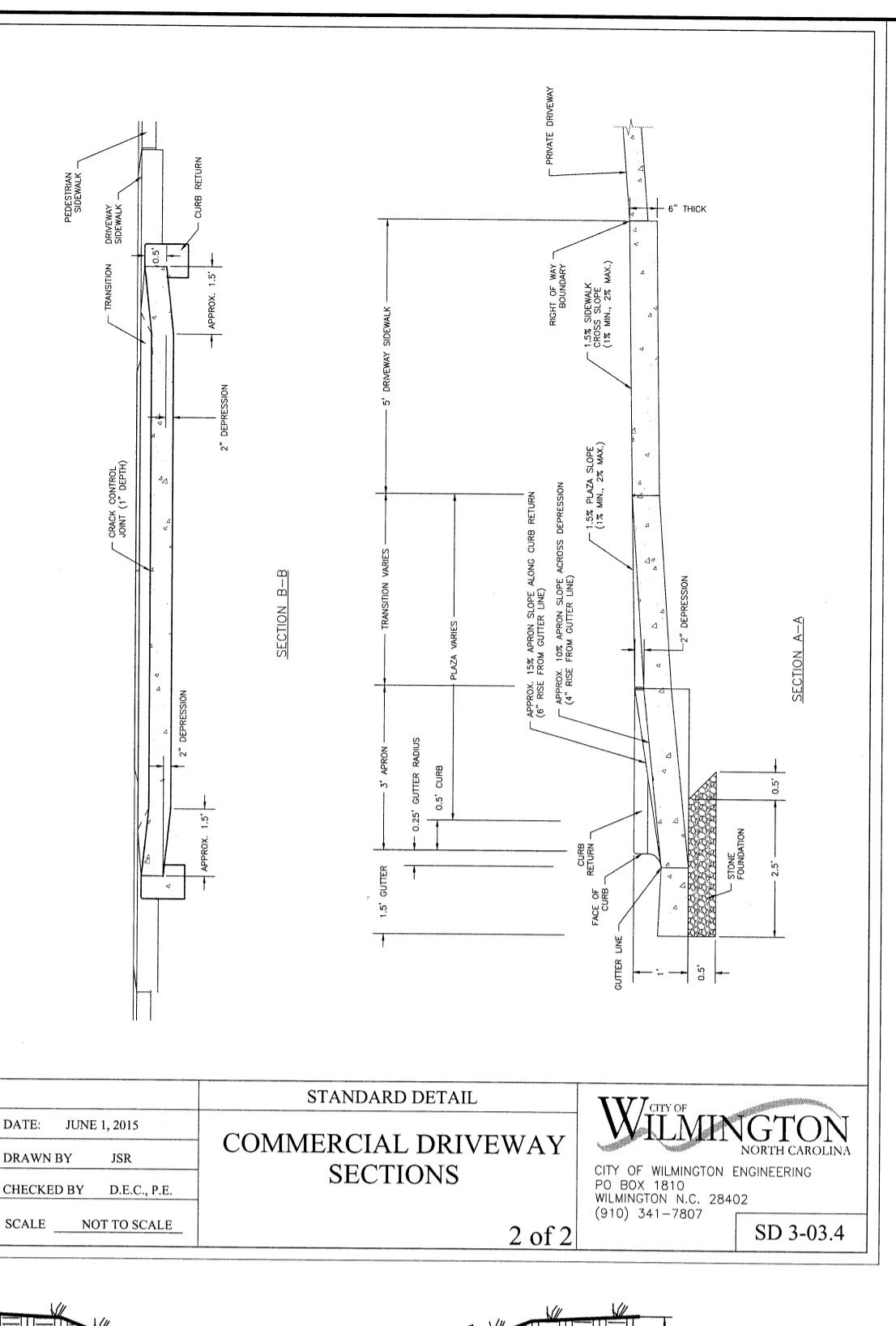
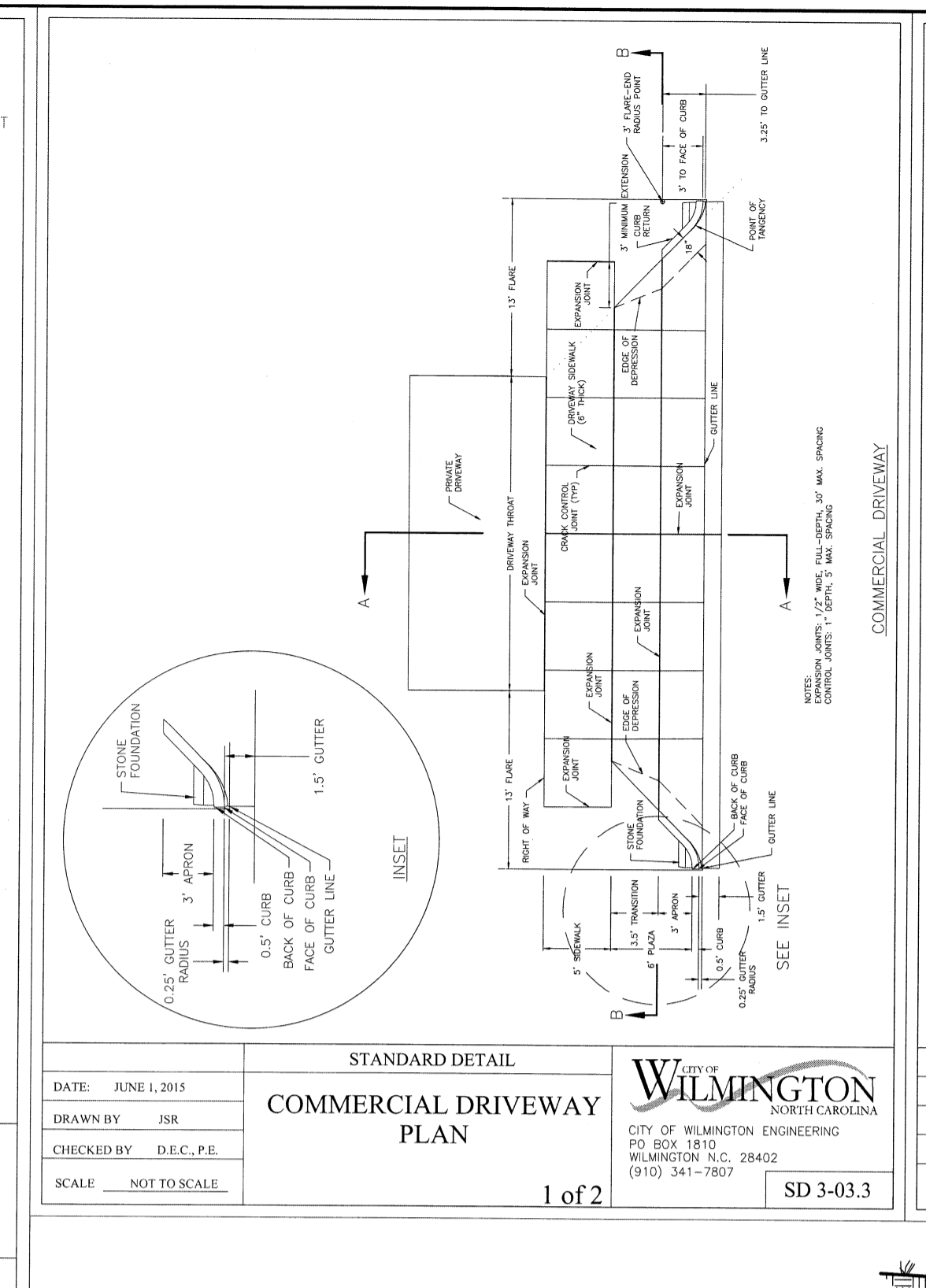
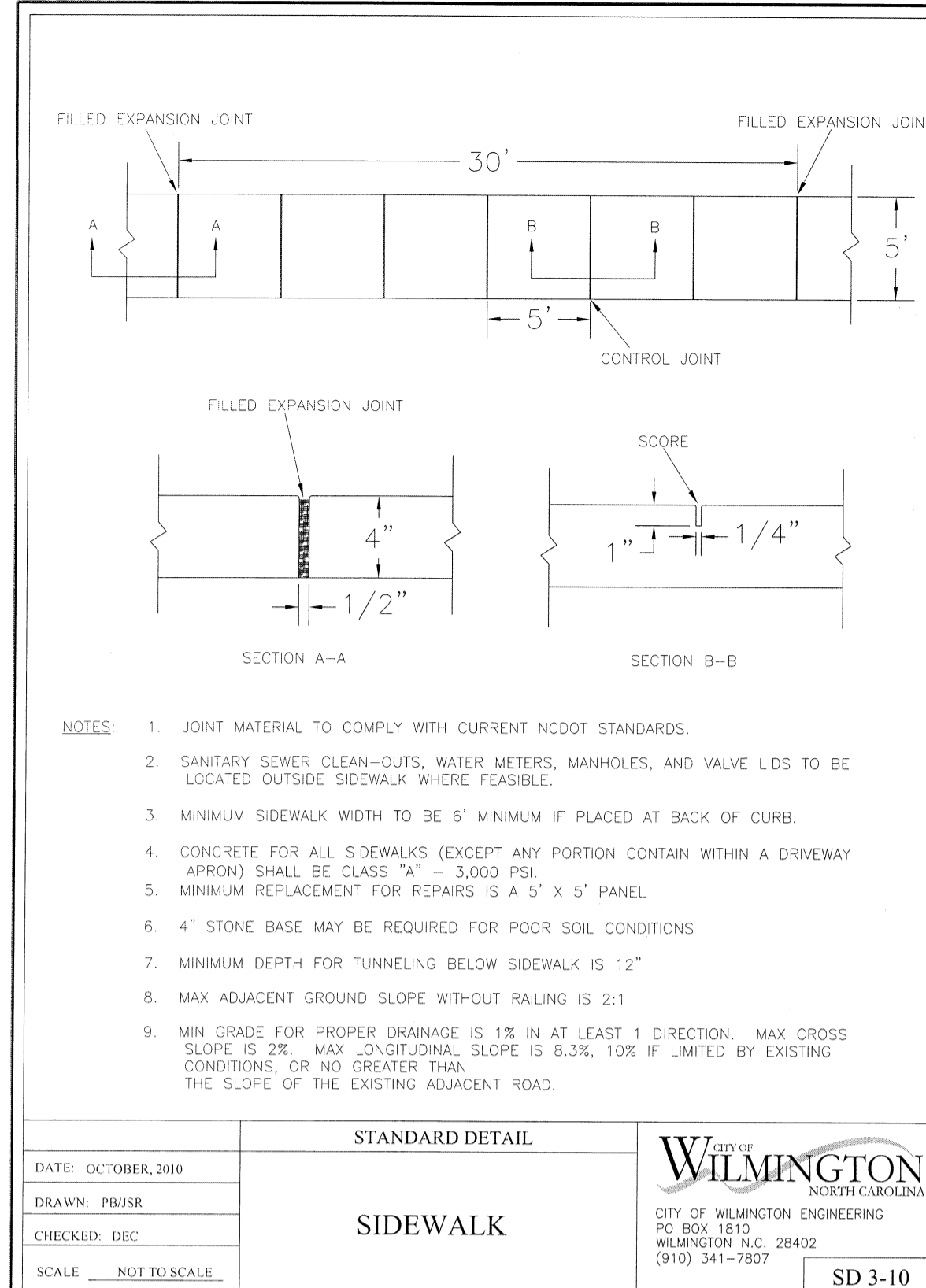


Charles D. Cazier  
2.8.18

**CLIENT INFORMATION:**  
 Intracoastal Internal Medicine  
 4114 Shipyard Blvd.  
 Wilmington NC 28403  
 910-332-0701

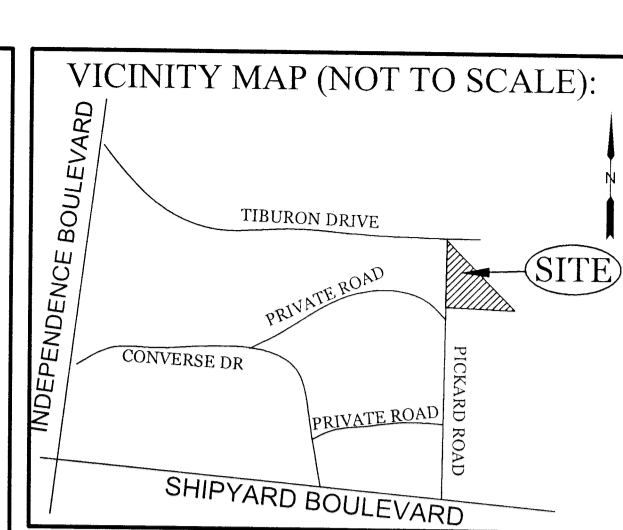
DRAWN:	JAE	SHEET SIZE:	24x36
CHECKED:	CDC	DATE:	2/7/2018
APPROVED:	CDC	SCALE:	1" = 30'
PROJECT NUMBER:	2017-025		
DRAWING NUMBER:	C-2		

Scale: 1"=30'



**SITE WORK NOTES:**

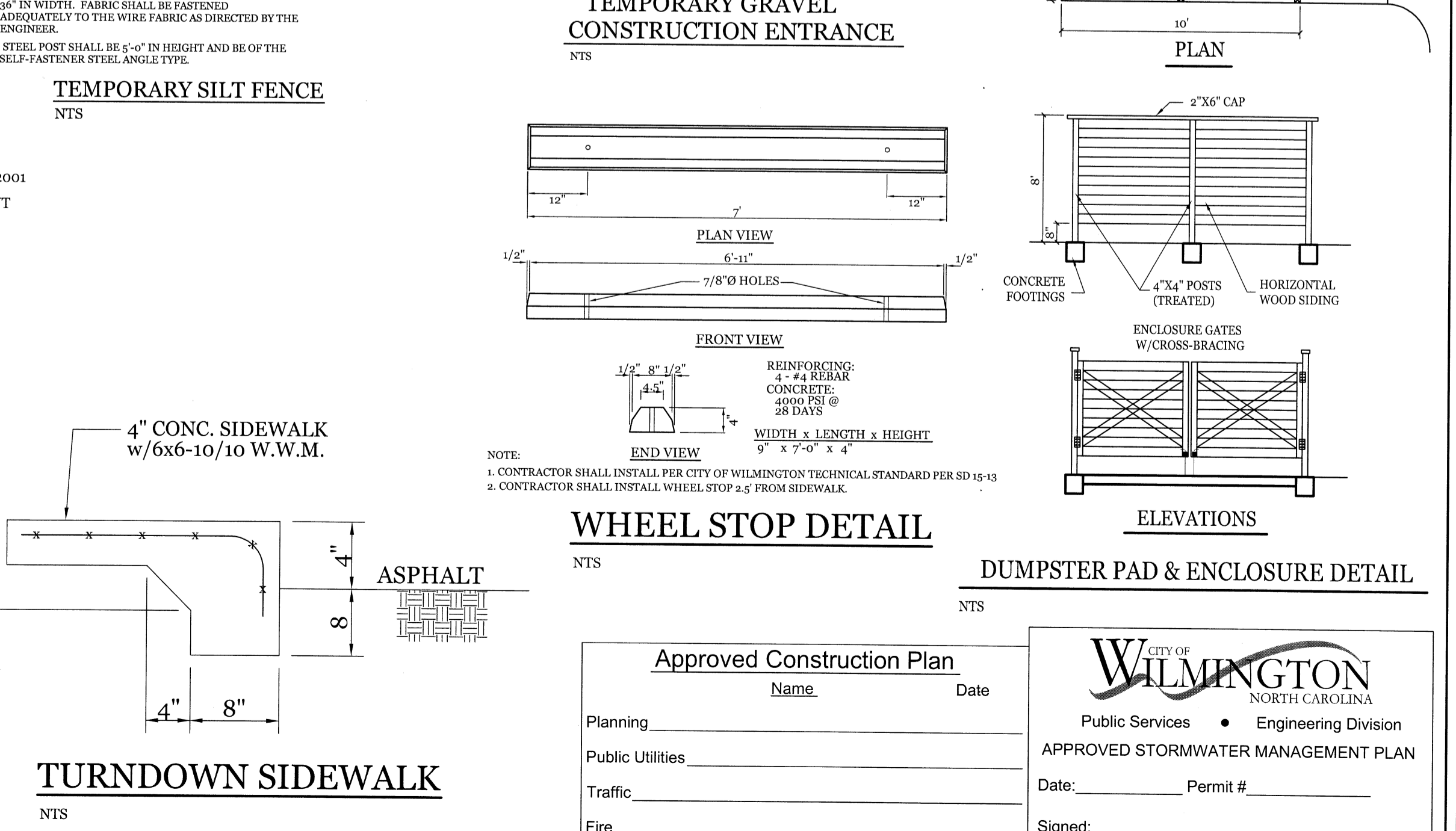
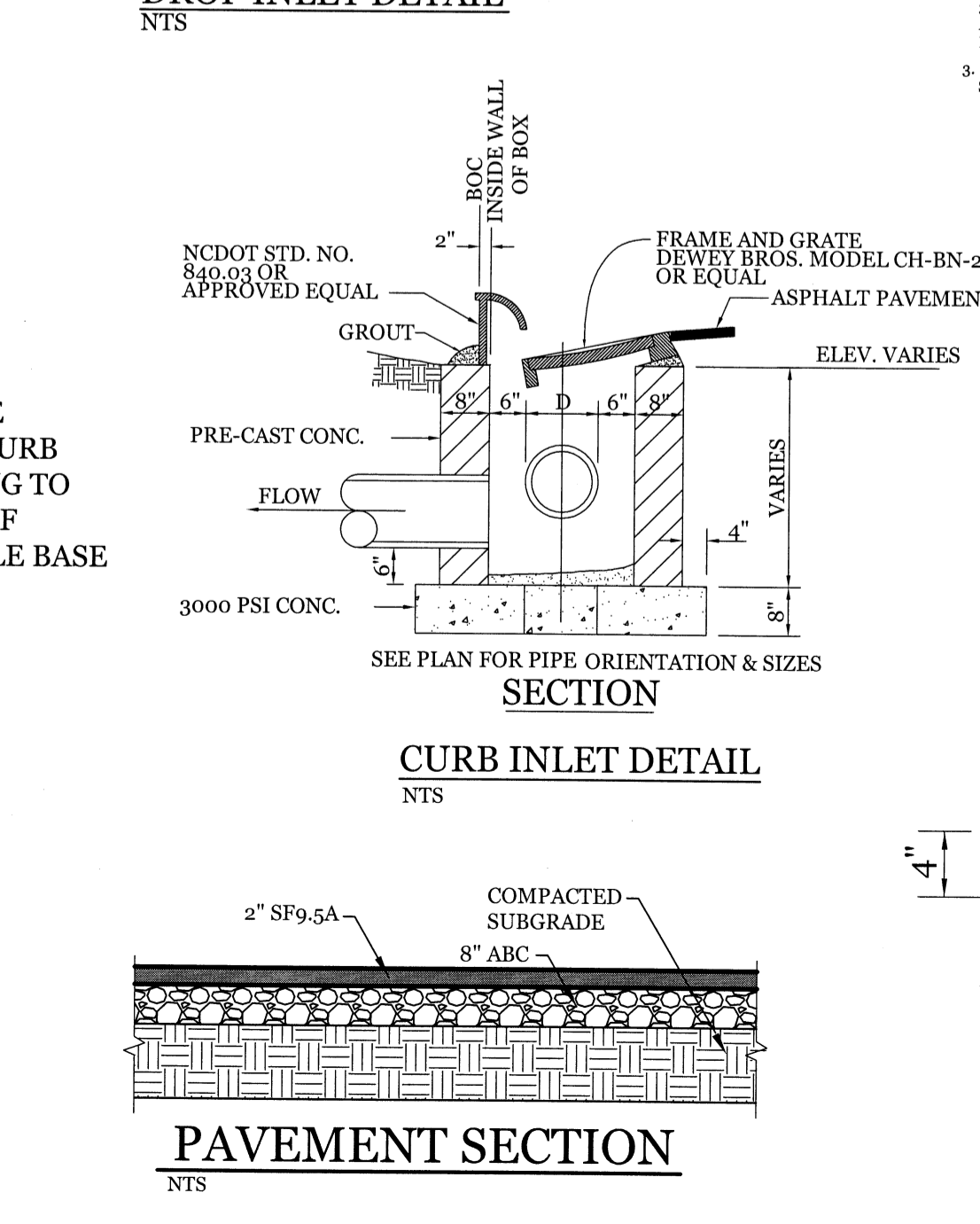
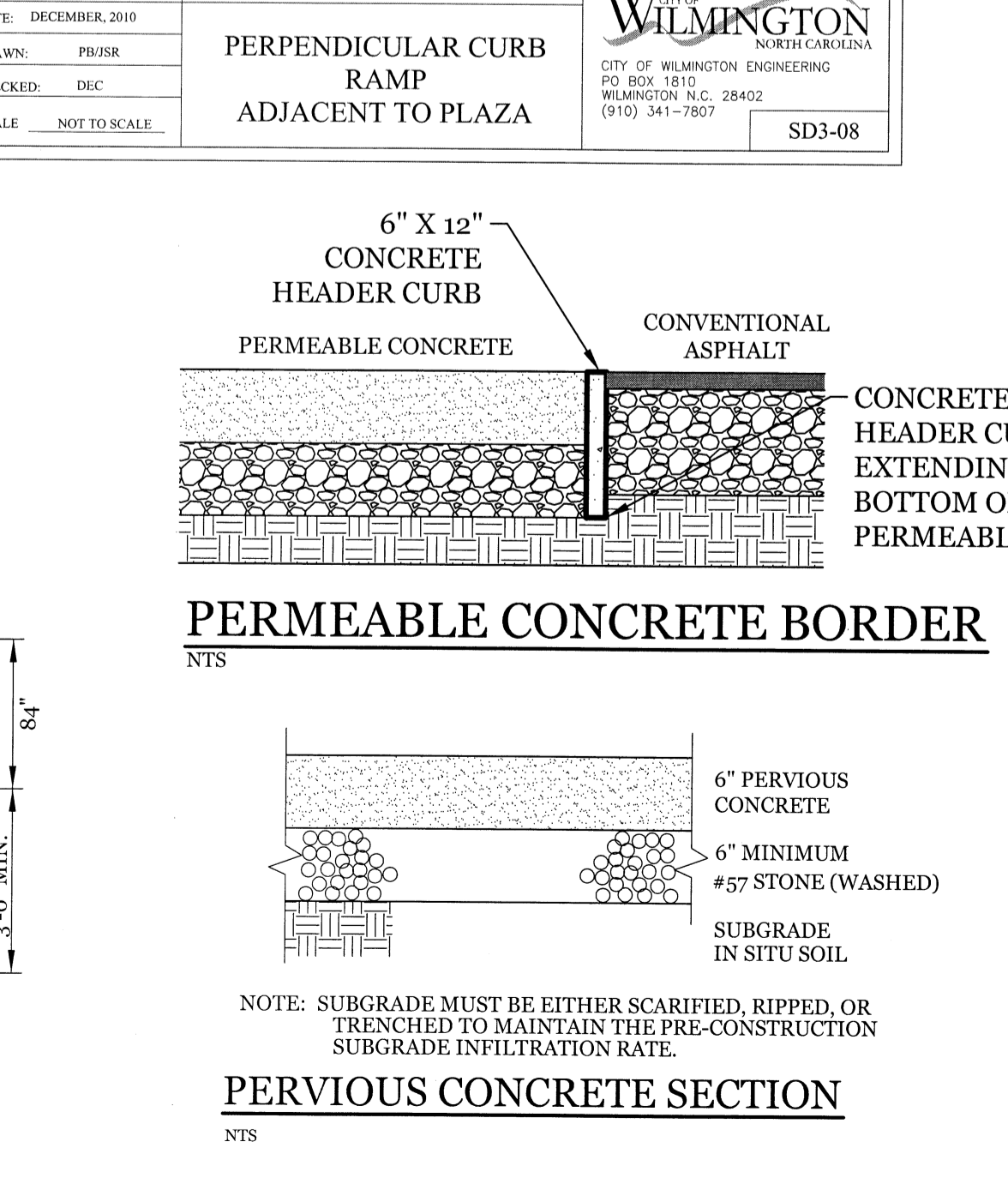
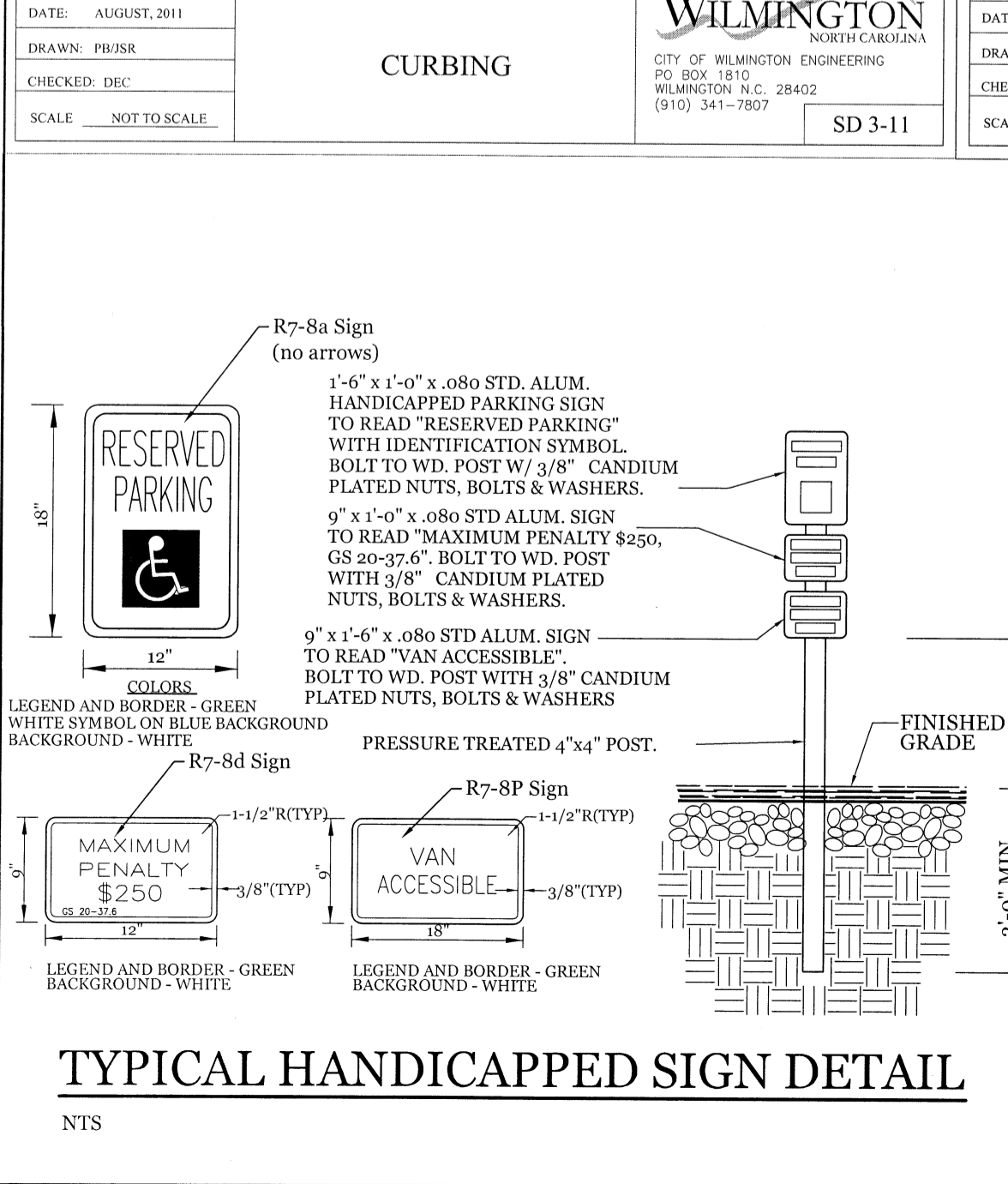
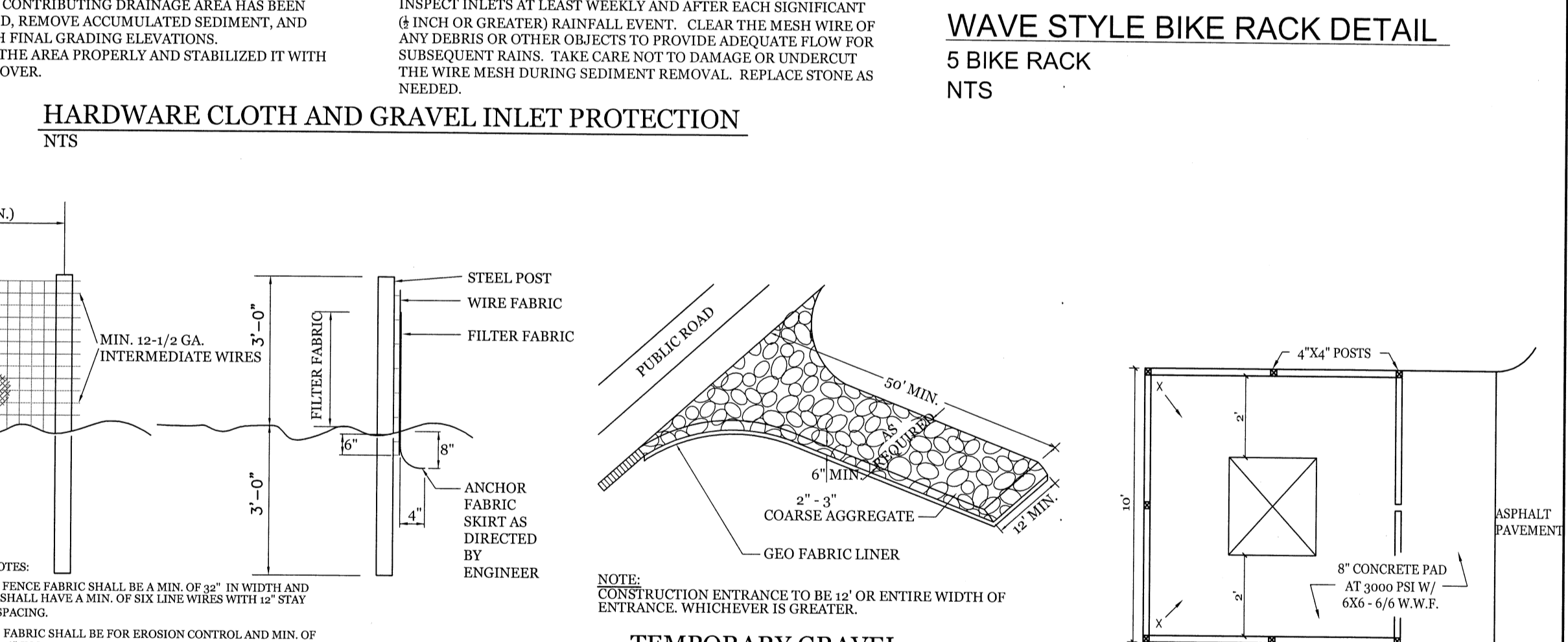
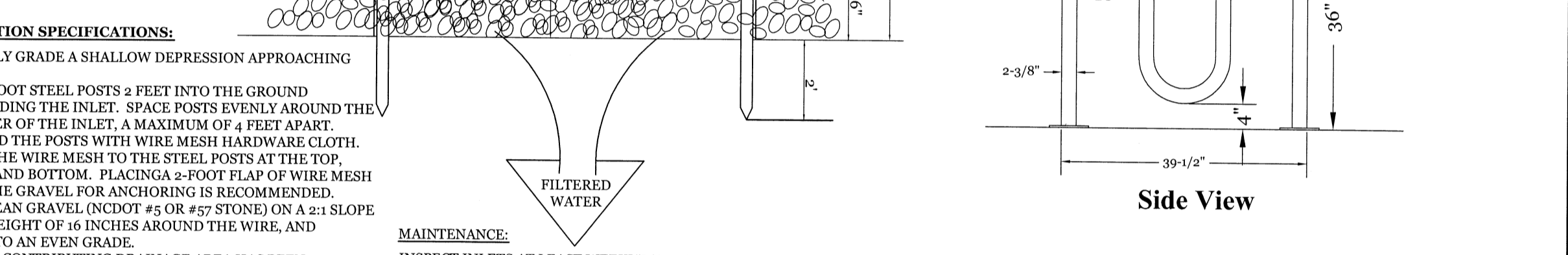
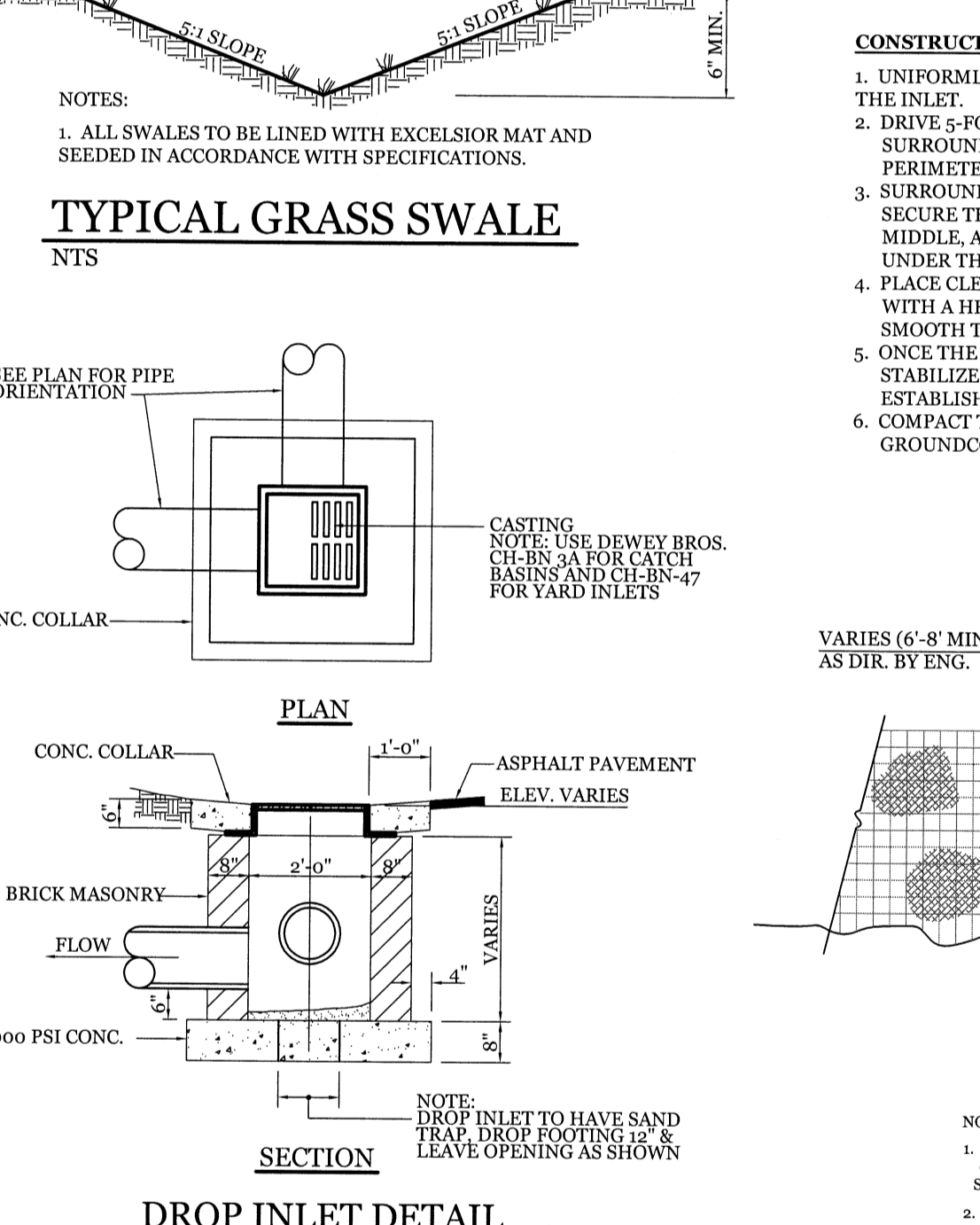
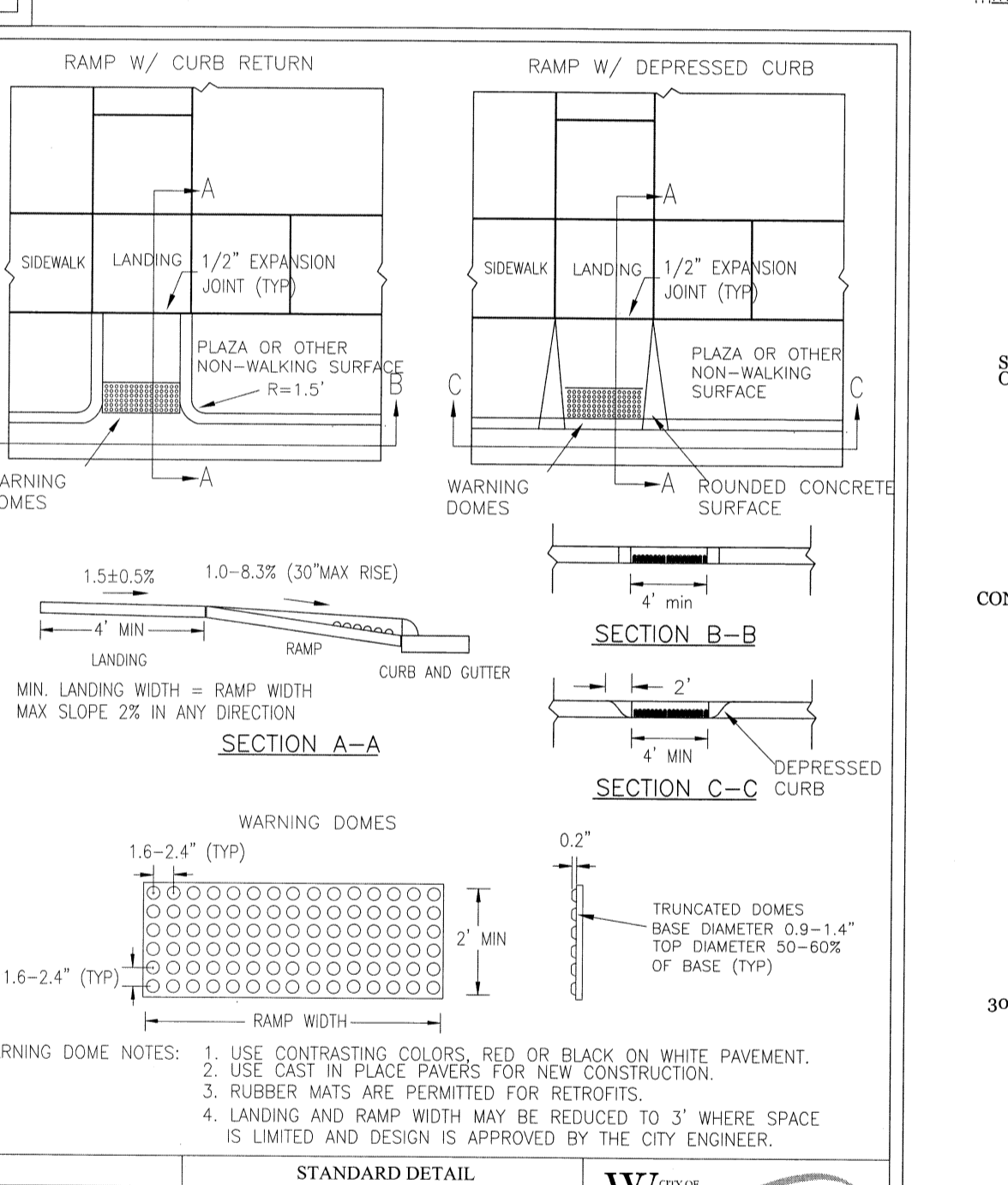
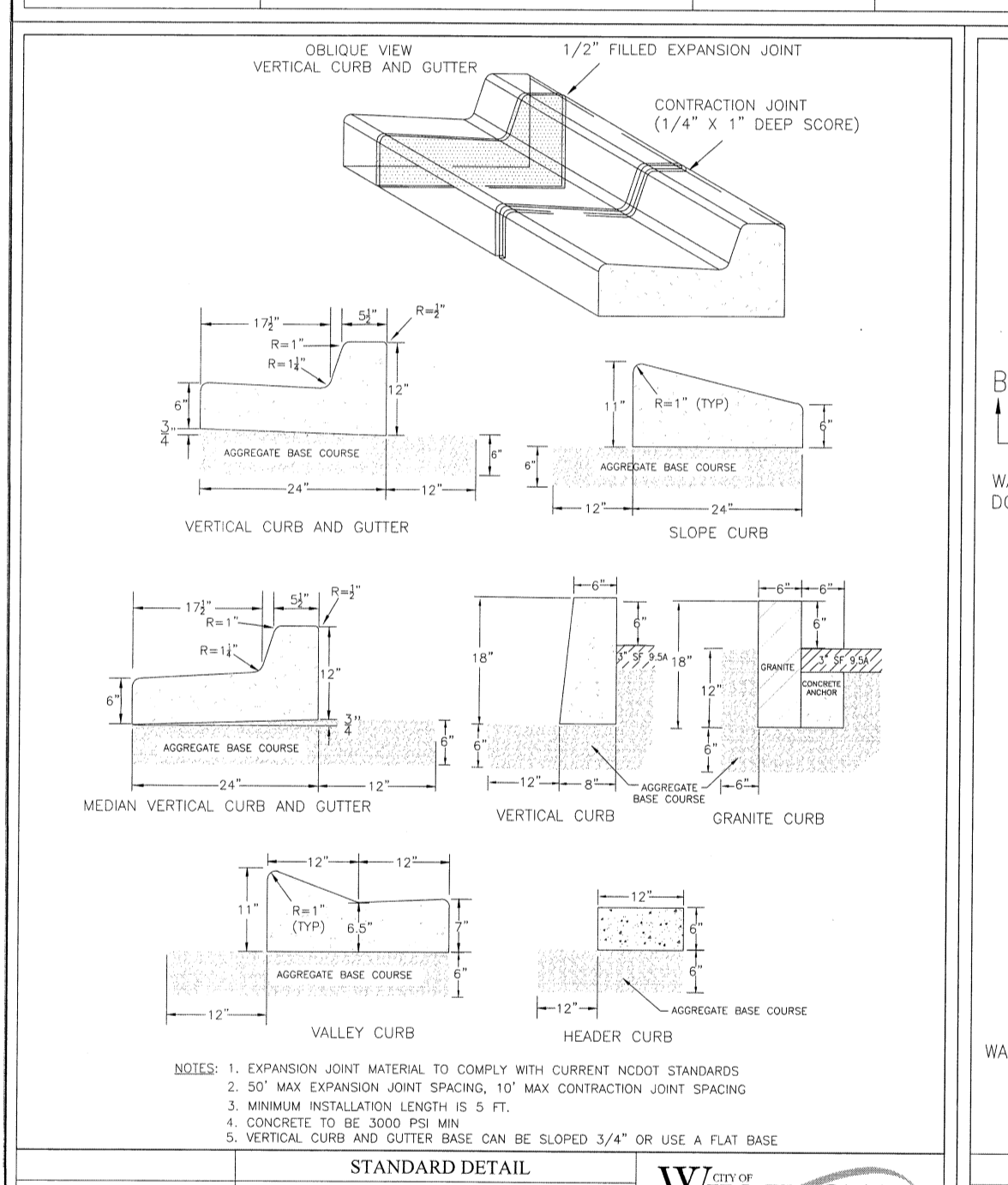
1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BOTH ON AND ADJACENT TO THE SITE.
2. CLEARING: CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE DESIGNATED TO REMAIN.
3. GRUBBING AND STRIPPING: CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN LIMITS OF CONSTRUCTION.
4. MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY SOFT AREAS.
5. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
6. FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL RECOMMENDATIONS.
7. THE CONTRACTOR SHALL NOTE THAT THE GRADING PLAN MAY NOT REPRESENT A BALANCED EARTHWORK CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT AND FILL QUANTITIES AND COMPLETE INSTALLATION TO SPECIFIED GRADES.
8. THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF-SITE PROPERLY PERMITTED FACILITY AS REQUIRED.
9. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES AT ALL CROSSINGS PRIOR TO COMMENCING TRENCH EXCAVATION. IF ACTUAL CLEARANCES ARE LESS THAN INDICATED ON PLAN, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. ANY CONDITION DISCOVERED OR EXISTING THAT WOULD NECESSITATE A MODIFICATION OF THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
10. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NO ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. BEFORE COMMENCING ANY EXCAVATIONS OR IN EXCAVATE, IN WRITING, NOT LESS THAN 10 DAYS PRIOR TO EXCAVATING.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.
13. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE & CURB BOXES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
14. EXISTING SURVEYING PERFORMED BY DEREK DANFORD, N.C. PLS No. L-45458
15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES OR QUESTIONS TO THE ENGINEER PRIOR TO INSTALLATION.
16. THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
17. ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CPWA CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
18. ALL BACKFILL FROM UTILITY INSTALLATION MUST BE COMPACTED OR AMENDED TO PROVIDE TRAFFIC BEARING CAPACITY. GEOTECHNICAL ENGINEER TO BE CONSULTED AT CONTRACTORS COST AS NECESSARY.
19. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO INSTALLATION. ALL AREAS SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT ALL TIMES.
20. CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR ENTRAINED.
21. FIELD TESTING SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.
22. ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.



**REVISIONS**

NO.	DATE	DESCRIPTION

**INTRACOASTAL ENGINEERING, PLLC**  
5725 Oleander Dr. Unit E-7  
Wilmington, North Carolina 28403  
Phone: 910.859.8983  
Email: Charles@intracoastalengineering.com  
License Number: P-0062



**DETAILS FOR INTRACOASTAL INTERNAL MEDICINE CITY OF WILMINGTON NEW HANOVER COUNTY, NC**

**CHARLES D. CALDER**  
Professional Engineer  
032555  
2.8.18

**CLIENT INFORMATION:**  
Intracoastal Internal Medicine  
4114 Shipyard Blvd.  
Wilmington NC 28403  
910-332-0701

**APPROVED CONSTRUCTION PLAN**

Planning \_\_\_\_\_ Date \_\_\_\_\_  
Public Utilities \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

**APPROVED STORMWATER MANAGEMENT PLAN**

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

DRAWN: JAE SHEET SIZE: 24x36  
CHECKED: CDC DATE: 2/7/2018  
APPROVED: CDC SCALE: NTS  
PROJECT NUMBER: 2017-025  
DRAWING NUMBER: **C-3**