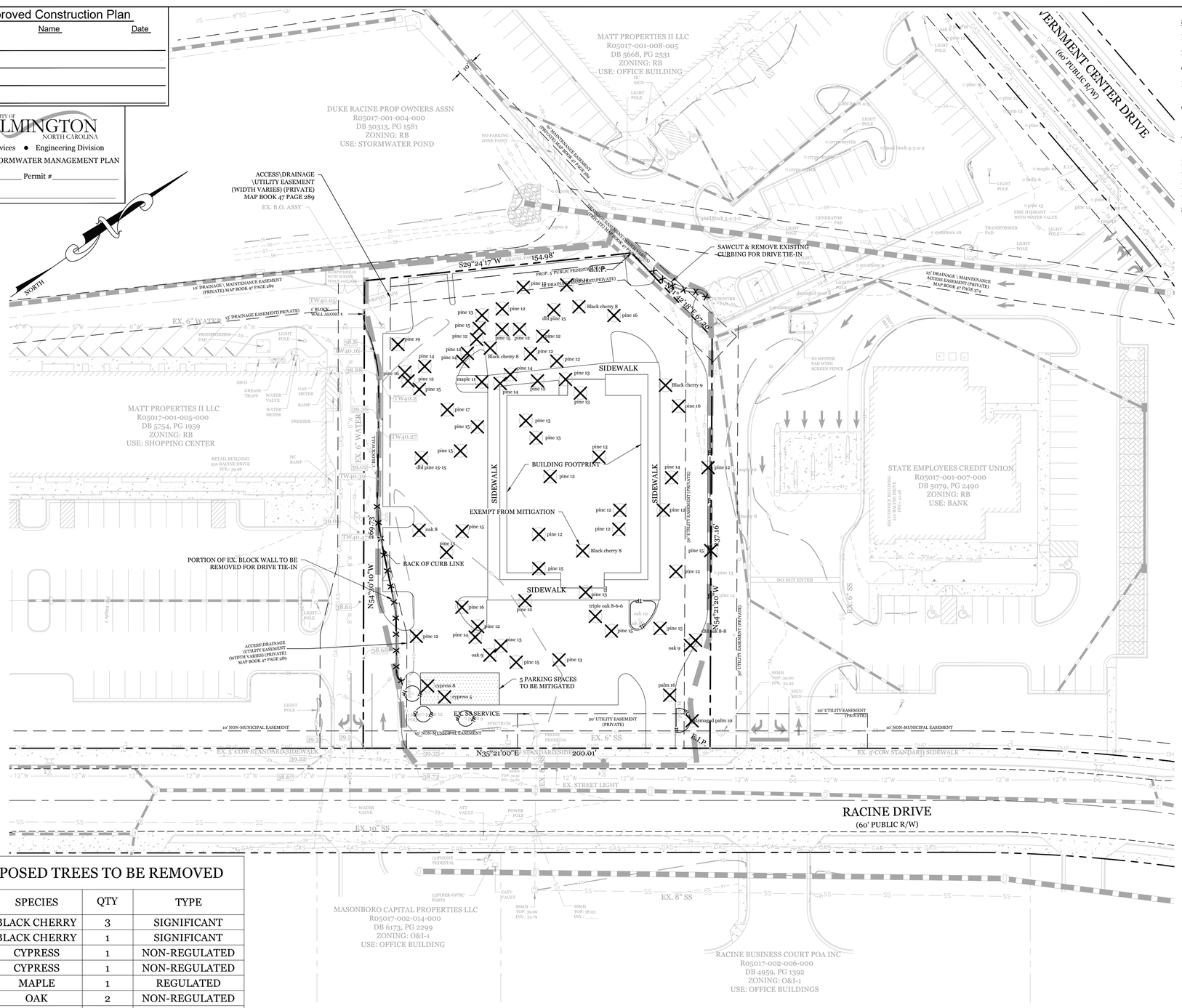
Approved Construction Plan

	Name	Date
Planning		
Public Utilities		
Traffic		
Fire		

CITY OF WILMINGTON
NORTH CAROLINA
Public Services ● Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date:_____ Permit #_____
Signed: _____

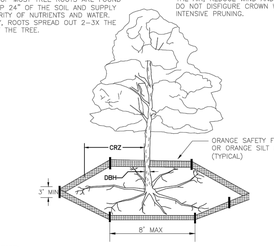


SITE DATA

PARCEL ID:	R05017-001-006-000
ZONING:	RB-REGIONAL BUSINESS
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS	240 RACINE DR. WILMINGTON, NC 28403
CURRENT OWNERS:	MATT PROPERTIES III LLC 3356 GRANVILLE DR RALEIGH, NC 27609
TOTAL ACREAGE IN PROJECT BOUNDARY	54,893 S.F. (1.26 AC.)
EXISTING ONSITE IMPERVIOUS AREAS: ASPHALT:	3,060 S.F.
EXISTING ONSITE IMPERVIOUS AREAS TO BE REMOVED: ASPHALT:	425 S.F.
SOIL TYPE:	Se (Seagate Fine Sand) 70.2% Le (Leon sand) 29.8% *(Per the USDA websoil survey map)*

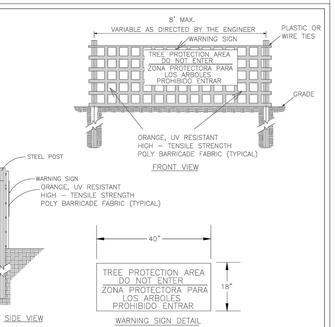
NOTE:
THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2~3X THE HEIGHT OF THE TREE.

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.



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 12" OF MULCH AND/OR LOGGING MATTS 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. NO MATERIALS OR 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.

DATE: JAN, 2015	STANDARD DETAIL	CITY OF WILMINGTON NORTH CAROLINA
DRAWN BY JSR	TREE PROTECTION DURING CONSTRUCTION	CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807
CHECKED BY RDG, P.E.	SHEET 1 of 2	SD 15-09
SCALE NOT TO SCALE		



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 FENCE 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.

DATE: JAN, 2015	STANDARD DETAIL	CITY OF WILMINGTON NORTH CAROLINA
DRAWN BY JSR	TREE PROTECTION DURING CONSTRUCTION	CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807
CHECKED BY RDG, P.E.	SHEET 2 of 2	SD 15-09
SCALE NOT TO SCALE		

PROPOSED TREES TO BE REMOVED

SIZE	SPECIES	QTY	TYPE
8"	BLACK CHERRY	3	SIGNIFICANT
9"	BLACK CHERRY	1	SIGNIFICANT
5"	CYPRESS	1	NON-REGULATED
8"	CYPRESS	1	NON-REGULATED
11"	MAPLE	1	REGULATED
6"	OAK	2	NON-REGULATED
8"	OAK	4	REGULATED
9"	OAK	2	REGULATED
10"	PALM	1	REGULATED
16"	PALM	1	REGULATED
12"	PINE	19	REGULATED
13"	PINE	9	REGULATED
14"	PINE	7	REGULATED
15"	PINE	17	REGULATED
16"	PINE	4	REGULATED
17"	PINE	1	REGULATED
19"	PINE	1	REGULATED
TOTAL		75	

REQUIRED TREE MITIGATION CHART

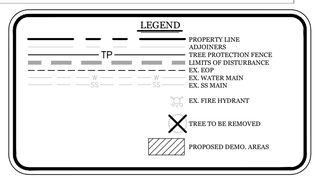
QTY	SIZE	TYPE	% MITIGATION	REPLACEMENT TREE QTY
1	8"	CYPRESS	100%	5.33
1	5"	CYPRESS	100%	3.33
1	9"	CHERRY	50%	3.00
2	8"	CHERRY	50%	5.33
TOTAL REPLACEMENT TREES				**12**

* REPLACEMENT TREE TO BE SHOWN ON LANDSCAPE PLAN BY OTHERS

CREDITS FOR PRESERVED TREES

QTY	DBH	TYPE	TOTAL DBH
1	8"	OAK	8
1	10"	OAK	10
1	9"	PALM	9
1	10"	PALM	10
1	12"	PALM	12
1	14"	PALM	14
TOTAL CREDITS FOR PRESERVED TREES			**11**

NOTES:
1. EXISTING SURVEY DATA PROVIDED BY MICHAEL UNDERWOOD AND ASSOCIATES, PA.
2. NO WETLANDS EXIST ON SITE.
3. PROPERTY IS LOCATED IN ZONE "X" ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP 3720314800K, DATED 08/28/18
4. THIS PROPERTY IS NOT AFFECTED BY AN AEC.
5. NO CONSERVATION RESOURCES EXIST ON SITE.
6. THIS PROPERTY IS NOT AFFECTED BY ANY HISTORIC OR ARCHAEOLOGICAL SITES.
7. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, A CONSTRUCTION ENTRANCE AND SILT FENCING SHALL BE INSTALLED.
8. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
9. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
10. TREE PROTECTION SIGNAGE SHALL BE ADDED ALONG THE LIMITS OF DISTURBANCE ADJACENT TO TREES EVERY 100' TO PROTECT TREES ADJACENT TO THE CONSTRUCTION SITE.



30' 15' 0' 30' 60'
Scale: 1"=30'

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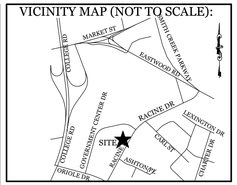

REVISIONS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: 910.859.8983
Email: Charlie@intracoastalengineering.com
License Number P-0662

EXISTING CONDITIONS, TREE REMOVAL & PROTECTION PLAN
FOR
240 RACINE DR.
OFFICE BUILDING
WILMINGTON, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032555 CHARLES D. CAYLER

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	2/3/2021
APPROVED:	CDC	SCALE:	1" = 30'
PROJECT NUMBER:		2020-029	

DRAWING NUMBER: C-0
1 OF 6

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 # _____

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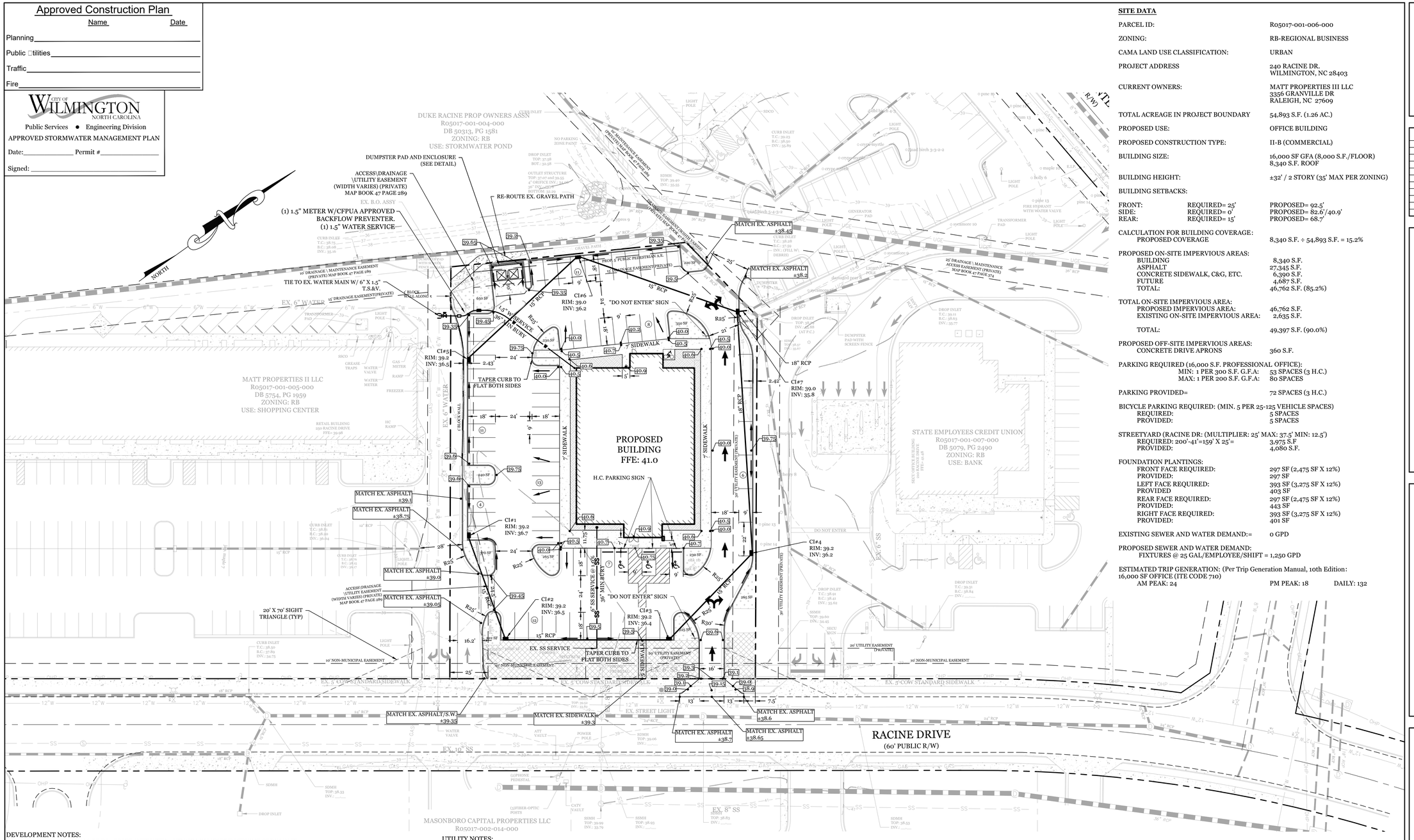


DEVELOPMENT NOTES:

1. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH CITY OF WILMINGTON ZONING ORDINANCE.
2. PROJECT SHALL COMPLY WITH ALL FEDERAL, STATE & CITY OF WILMINGTON REGULATIONS.
3. RUNOFF FROM ALL IMPERVIOUS SURFACES, INCLUDING ROOF DRAINAGE, TO BE DIRECTED TO STORM DRAIN SYSTEM.

FIRE & SAFETY NOTES:

1. PROPOSED BUILDING WILL NOT BE SPRINKLED
2. PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS.
3. ALL WEATHER ACCESS ROAD MUST BE MAINTAINED AROUND CONSTRUCTION SITE AT ALL TIMES.
4. HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF STRUCTURE.
5. IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
6. CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS ON THE SITE THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

GENERAL TRAFFIC NOTES:

1. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS OFF THE R/W TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
2. 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 & SD 11-3 COFW TECH STDS]
3. ALL SIGNS AND PAVEMENT MARKINGS OFF RIGHT OF WAY ARE TO MEET/BE MAINTAINED TO MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. [DETAIL SD 15-13 & SD 11-3 COFW TECH STDS]
4. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
5. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
6. CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.
7. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30" TO 10'.
8. STREET TREES MUST BE LOCATED A MINIMUM OF 15 FEET FROM STREET LIGHTS. [COFW SD 15-17]
9. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. NOTE THIS ON THE PLAN AND CONTACT 341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.

UTILITY NOTES:

1. EXISTING WATER AND SANITARY SEWER SERVICES ARE CURRENTLY AVAILABLE TO THE SITE FROM CAPE FEAR PUBLIC UTILITY AUTHORITY PUBLIC MAINS.
2. ALL PROPOSED UTILITY SERVICES, SUCH AS ELECTRIC POWER, CATV, GAS & TELEPHONE SHALL BE INSTALLED UNDERGROUND.
3. ALL WATER & SEWER UTILITIES TO BE INSTALLED PER CFPUA TECHNICAL SPECIFICATIONS & STANDARDS.
4. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCCCHR OR ASSE.
5. IF CONTRACTOR DESIRES CFPUA 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.
6. 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.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL NC811 AT 811 OR 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB & GUTTER, PAVEMENT, ETC. THAT MAY BE BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
8. THE PROCESS FOR TELEPHONE CABLE PLACEMENT: * FINAL GRADE WILL NEED TO BE ESTABLISHED. * POWER WILL PLACE THEIR CABLE FIRST – APPROXIMATELY 3' DEEP. * TELEPHONE & CABLE TV WILL THEN PLACE THEIR CABLE AT APPROXIMATELY 2' DEEP.
9. SOLID WASTE DISPOSAL BY PRIVATE DUMPSTER SERVICE.

SITE DATA

PARCEL ID:		R05017-001-006-000
ZONING:		RB-REGIONAL BUSINESS
CAMA LAND USE CLASSIFICATION:		URBAN
PROJECT ADDRESS		240 RACINE DR. WILMINGTON, NC 28403
CURRENT OWNERS:		MATT PROPERTIES III LLC 3356 GRANVILLE DR RALEIGH, NC 27609
TOTAL ACREAGE IN PROJECT BOUNDARY		54,893 S.F. (1.26 AC.)
PROPOSED USE:		OFFICE BUILDING
PROPOSED CONSTRUCTION TYPE:		II-B (COMMERCIAL)
BUILDING SIZE:		16,000 SF GFA (8,000 S.F./FLOOR) 8,340 S.F. ROOF
BUILDING HEIGHT:		±32' / 2 STORY (35' MAX PER ZONING)
BUILDING SETBACKS:		
FRONT:	REQUIRED= 25'	PROPOSED= 92.5'
SIDE:	REQUIRED= 0'	PROPOSED= 82.6'/40.9'
REAR:	REQUIRED= 15'	PROPOSED= 68.7'

CALCULATION FOR BUILDING COVERAGE:
PROPOSED COVERAGE 8,340 S.F. ÷ 54,893 S.F. = 15.2%

PROPOSED ON-SITE IMPERVIOUS AREAS:

BUILDING	8,340 S.F.
ASPHALT	27,345 S.F.
CONCRETE SIDEWALK, C&G, ETC.	6,390 S.F.
FUTURE	4,687 S.F.
TOTAL:	46,762 S.F. (85.2%)

TOTAL ON-SITE IMPERVIOUS AREA:

PROPOSED IMPERVIOUS AREA:	46,762 S.F.
EXISTING ON-SITE IMPERVIOUS AREA:	2,635 S.F.
TOTAL:	49,397 S.F. (90.0%)

PROPOSED OFF-SITE IMPERVIOUS AREAS:
CONCRETE DRIVE APRONS 360 S.F.

PARKING REQUIRED (16,000 S.F. PROFESSIONAL OFFICE):

MIN: 1 PER 300 S.F. G.F.A:	53 SPACES (3 H.C.)
MAX: 1 PER 200 S.F. G.F.A:	80 SPACES

PARKING PROVIDED= 72 SPACES (3 H.C.)

BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)

REQUIRED:	5 SPACES
PROVIDED:	5 SPACES

STREETYARD (RACINE DR: (MULTIPLIER: 25' MAX: 37.5' MIN: 12.5')

REQUIRED: 200'-41'=159' X 25'=	3,975 S.F
PROVIDED:	4,080 S.F.

FOUNDATION PLANTINGS:

FRONT FACE REQUIRED:	297 SF (2,475 SF X 12%)
PROVIDED:	297 SF
LEFT FACE REQUIRED:	393 SF (3,275 SF X 12%)
PROVIDED	403 SF
REAR FACE REQUIRED:	297 SF (2,475 SF X 12%)
PROVIDED:	443 SF
RIGHT FACE REQUIRED:	393 SF (3,275 SF X 12%)
PROVIDED:	401 SF

EXISTING SEWER AND WATER DEMAND:= 0 GPD

PROPOSED SEWER AND WATER DEMAND:
FIXTURES @ 25 GAL/EMPLOYEE/SHIFT = 1,250 GPD

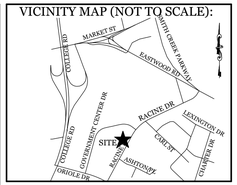
ESTIMATED TRIP GENERATION: (Per Trip Generation Manual, 10th Edition: 16,000 SF OFFICE (ITE CODE 710)
AM PEAK: 24 PM PEAK: 18 DAILY: 132

LEGEND

PROPERTY LINE
EASEMENT
CENTER LINE
EXISTING WATERLINE
EXISTING SANITARY SEWER LINE
RUNOFF FLOW DIRECTION
25.5 SPOT ELEVATION
BIKE RACK (5 SPACES EACH)
INTERIOR PARKING LANDSCAPING
FOUNDATION PLANTINGS
STREETYARD LANDSCAPING

30' 15' 0' 30' 60'
Scale: 1"=30'

VICINITY MAP (NOT TO SCALE):



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-0662

SITE, GRADING, DRAINAGE, & UTILITIES PLAN

FOR

240 RACINE DR. OFFICE BUILDING

WILMINGTON, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032555 CHARLES D. CAYER

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

DRAWN:	JAE	SHEET SIZE:	24 X 36
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CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

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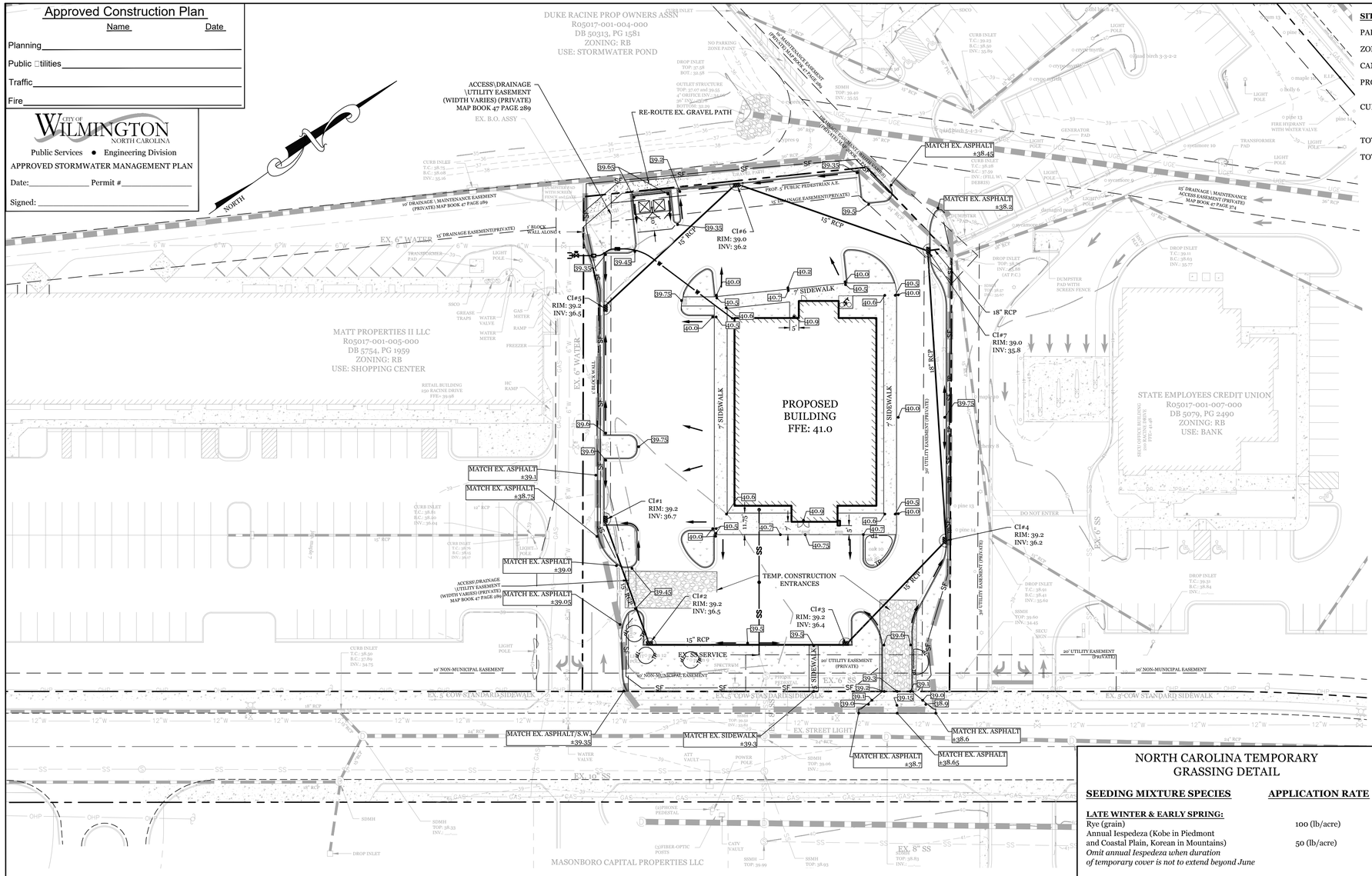

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TOTAL ACREAGE IN PROJECT BOUNDARY	54,893 S.F. (1.26 AC.)
TOTAL DISTURBED AREA:	1.25 AC.

LEGEND

- PROPERTY LINE
- EASEMENT
- CENTER LINE
- W — EXISTING WATERLINE
- SS — EXISTING SANITARY SEWER LINE
- LIMITS OF DISTURBANCE
- SF — TEMP. SILT FENCE
- CURB INLET PROTECTION
- 25.5 SPOT ELEVATION

30' 15' 0' 30' 60'

Scale: 1"=30'

MAINTENANCE PLAN:

1. 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.
2. 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.
3. 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.
4. 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 SEEDED IN ACCORDANCE TO SPECIFICATIONS. SLOPE STABILIZATION IS WITHIN 7-14 CALENDAR DAYS OF ANY PHASE OF CONSTRUCTION. ALL OTHER AREAS MUST BE STABILIZED WITH IN 15 WORKING DAYS. CONTRACTOR TO FOLLOW NPDES STABILIZATION REQUIREMENTS PER TABLE ON THIS SHEET AS WELL. MOST STRINGENT REQUIREMENT TO BE MET.

1. GENERAL CLEARING AND GRADING OF THIS SITE WILL NOT BE DONE UNTIL THE TEMPORARY SILT FENCE & CONSTRUCTION ENTRANCE HAS BEEN INSTALLED.
2. NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3 HORIZONTAL).
3. NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES DURING AND AFTER CONSTRUCTION.
4. INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO GRAVELED CONSTRUCTION ENTRANCE, SILT FENCE, TREE PROTECTION FENCE & SEDIMENT BASINS. INSTALL ALL SECONDARY EROSION CONTROL MEASURES, SUCH AS INLET PROTECTION AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
5. ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION TO BE CLEANED WHEN HALF FULL.
6. A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
7. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
8. MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

SYMBOL	GROUND STABILIZATION CRITERIA		
	SITE AREA DESCRIPTION	STABILIZATION TIMEFRAME	STABILIZATION TIMEFRAME EXCEPTIONS
	* Perimeter dikes, swales, ditches and slopes	7 Days	None
	* High Quality Water (HQW) Zones	7 Days	None
	* 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
	* Slopes 3:1 or flatter	14 Days	7-days for slopes greater than 50 ft. in length
	* All other areas with slopes flatter than 4:1	14 Days	None (except for perimeters & HQW Zones)

NORTH CAROLINA TEMPORARY GRASSING DETAIL

SEEDING MIXTURE SPECIES	APPLICATION RATE
LATE WINTER & EARLY SPRING:	
Rye (grain)	100 (lb/acre)
Annual Iespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50 (lb/acre)
Omit annual Iespedeza when duration of temporary cover is not to extend beyond June	
SUMMER:	
German Millet	
In the Piedmont and Mountains, a small-stemmed sundangrass may be substituted at a rate of 50 (lb/acre)	40 (lb/acre)
FALL:	
Rye (grain)	120 (lb/acre)

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.

NORTH CAROLINA PERMANENT GRASSING DETAIL

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

SEEDING DATES

FALL & WINTER:
January - April
August - December

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.

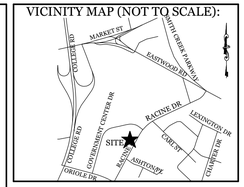
SPRING & SUMMER:
April 1 - July 15

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.

VICINITY MAP (NOT TO SCALE):



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-0662

SEDIMENTATION & EROSION CONTROL PLAN

FOR

240 RACINE DR. OFFICE BUILDING

WILMINGTON, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 032555 ENGINEER CHARLES D. CAZIER

PRELIMINARY NOT FOR CONSTRUCTION

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	2/3/2021
APPROVED:	CDC	SCALE:	1" = 30'
PROJECT NUMBER:		2020-029	

DRAWING NUMBER: C-2

Approved Construction Plan

Name Date

Planning _____

Public Utilities _____

Traffic _____

Fire _____

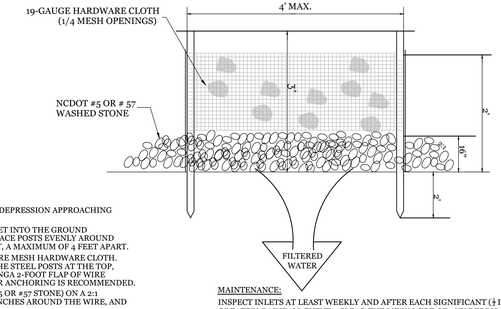
CITY OF WILMINGTON NORTH CAROLINA

Public Services ● Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____



CONSTRUCTION SPECIFICATIONS:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACINGA 2-FOOT FLAP OF WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.

MAINTENANCE:

INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

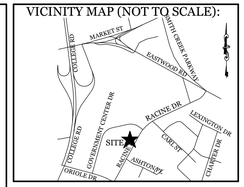
HARDWARE CLOTH AND GRAVEL INLET PROTECTION

NTS

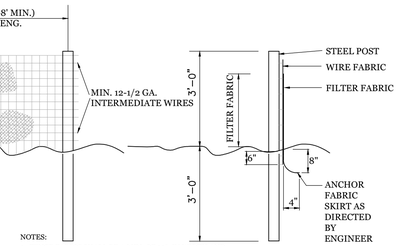
SITE WORK NOTES:

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 "NC 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 IN OR ALONG ROADWAYS OR RIGHT-OF-WAYS, PUBLIC AREAS OR IN PRIVATE EASEMENTS, THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE PERSONNEL OF THEIR INTENT TO 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. 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.
15. THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE DIRECTED BY OWNER.
16. ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CFPUA CODES. METERS, TAPS, MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL REQUIREMENTS.
17. 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.
18. 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.
19. CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR ENTRAINED.
20. 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.
21. ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.

VICINITY MAP (NOT TO SCALE):



REVISIONS

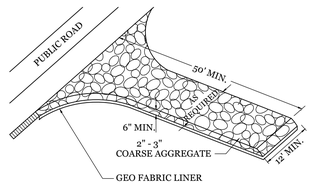


NOTES:

1. FENCE FABRIC SHALL BE A MIN. OF 32" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" STAY SPACING.
2. FABRIC SHALL BE FOR EROSION CONTROL AND MIN. OF 36" IN WIDTH. FABRIC SHALL BE FASTENED ADEQUATELY TO THE WIRE FABRIC AS DIRECTED BY THE ENGINEER.
3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER STEEL ANGLE TYPE.

TEMPORARY SILT FENCE

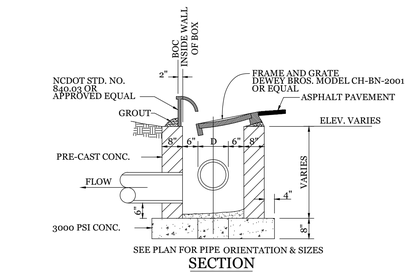
NTS



NOTE:
CONSTRUCTION ENTRANCE TO BE 12' OR ENTIRE WIDTH OF ENTRANCE. WHICHEVER IS GREATER.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

NTS

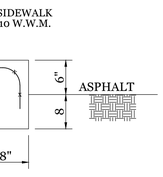


SEE PLAN FOR PIPE ORIENTATION & SIZES

SECTION

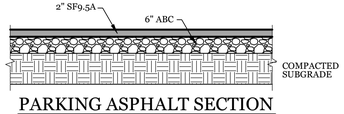
CURB INLET DETAIL

NTS



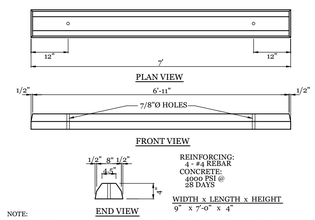
TURNDOWN SIDEWALK

NTS



PARKING ASPHALT SECTION

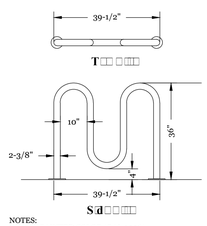
NTS



NOTE:
1. CONTRACTOR SHALL INSTALL PER CITY OF WILMINGTON TECHNICAL STANDARD PER SD 15-13
2. CONTRACTOR SHALL INSTALL WHEEL STOP 2.5' FROM SIDEWALK.

WHEEL STOP DETAIL

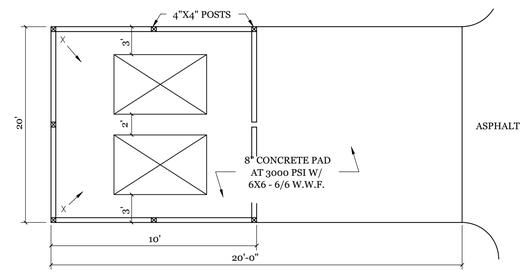
NTS



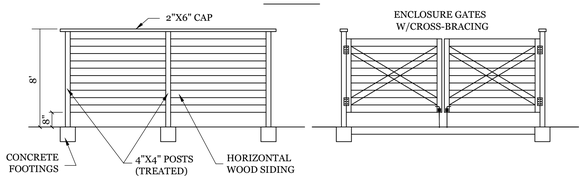
NOTES:
1. TO BE PAINTED COLOR "RAL 9006"

WAVE STYLE BIKE RACK DETAIL

5 BIKE RACK
NTS



PLAN



ELEVATIONS

DUMPSTER PAD & ENCLOSURE DETAIL

NTS

INTRACOASTAL ENGINEERING, PLLC
5725 Oleander Dr. Unit E-7
Wilmington, North Carolina 28403
Phone: 910.859.8983
Email: Charlie@intracoastalengineering.com
License Number P-0662

DETAILS

FOR

240 RACINE DR.
OFFICE BUILDING

WILMINGTON, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032555 ENGINEER CHARLES D. CAYER

PRELIMINARY NOT FOR CONSTRUCTION

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	2/3/2021
APPROVED:	CDC	SCALE:	NTS
PROJECT NUMBER:		2020-029	

DRAWING NUMBER: C-3

Approved Construction Plan

Name Date

Planning _____

Public Utilities _____

Traffic _____

Fire _____

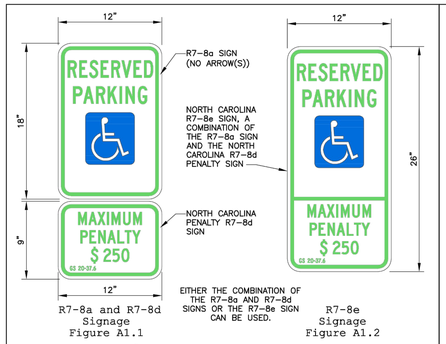
CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____



R7-8a and R7-8d Signage
Figure A1.1

EITHER THE COMBINATION OF THE R7-8a AND R7-8d SIGNS OR THE R7-8e SIGN CAN BE USED.

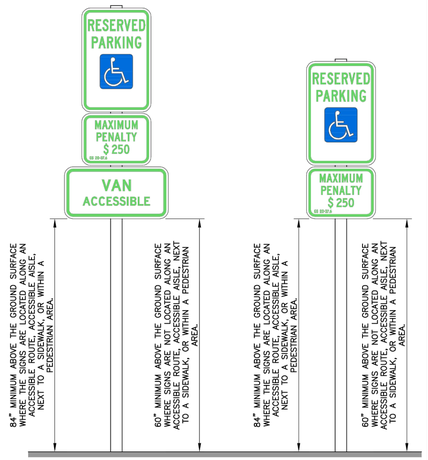
R7-8e Signage
Figure A1.2

WHERE VAN ACCESSIBLE PARKING IS PROVIDED, THE VAN ACCESSIBLE (R7-8P) SIGN SHALL BE MOUNTED BELOW THE OTHER ACCESSIBLE PARKING SIGNS.
(2009 EDITION MUTCD SECTION 2B.47)

R7-8P Signage
Figure A1.3

FOR DESIGN OF ACCESSIBLE SIGNS, SEE THE FOLLOWING:

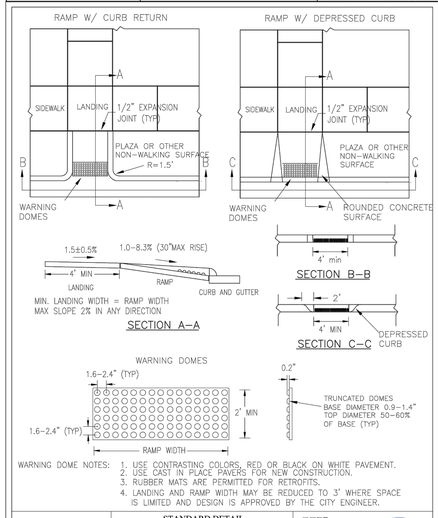
- 2009 MUTCD OR LATEST EDITION.
- 2004 EDITION OF THE STANDARD HIGHWAY SIGNS AND THE 2012 SUPPLEMENT OR LATEST EDITION.
- NORTH CAROLINA 2009 SUPPLEMENT TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR LATEST EDITION
- NCDOT DRAWING H-1_5 FOR SIGNS SP00075, SP00076, AND SP00077.



Signage Height
Figure A2.1

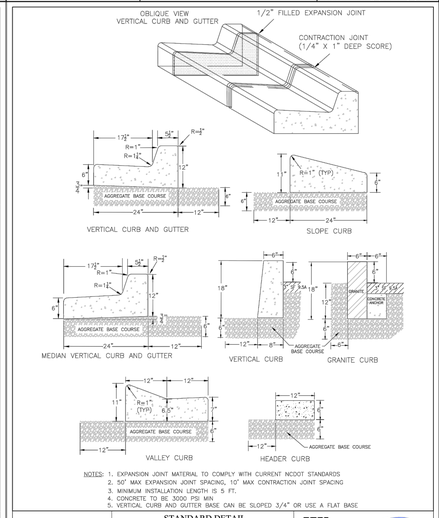
DATE:	NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS SHEET A1 OF 5	CITY OF WILMINGTON TRAFFIC ENGINEERING P.O. Box 1810 • Wilmington, NC 28402 • (910) 341-7800
DRAWN BY:	DALE THOMPSON		
CHECKED BY:	RANDALL GLAZIER		
SCALE:	NOT TO SCALE		

DATE:	NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS SHEET A2 OF 5	CITY OF WILMINGTON TRAFFIC ENGINEERING P.O. Box 1810 • Wilmington, NC 28402 • (910) 341-7800
DRAWN BY:	DALE THOMPSON		
CHECKED BY:	RANDALL GLAZIER		
SCALE:	NOT TO SCALE		



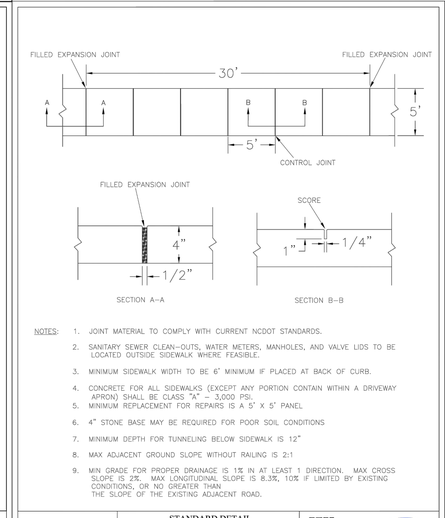
WARNING DOME NOTES:
1. USE CONTRASTING COLORS, RED OR BLACK ON WHITE PAVEMENT.
2. USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
3. RUBBER MATS ARE PERMITTED FOR RETROFITS.
4. LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

DATE:	DECEMBER, 2010	STANDARD DETAIL PERPENDICULAR CURB RAMP ADJACENT TO PLAZA	CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807
DRAWN:	PB/JSR		
CHECKED:	DEC		
SCALE	NOT TO SCALE		SD3-08



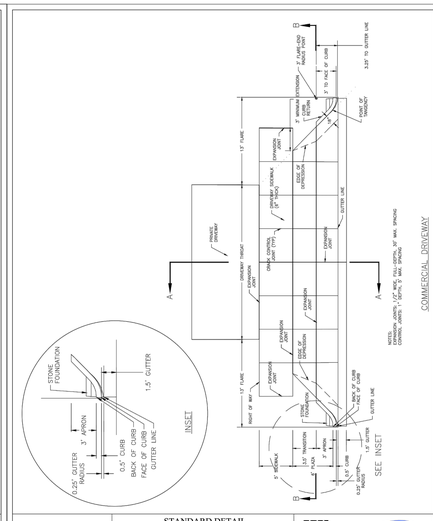
NOTES:
1. EXPANSION JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS
2. 50' MAX EXPANSION JOINT SPACING, 10' MAX CONTRACTION JOINT SPACING
3. MINIMUM INSTALLATION LENGTH IS 5 FT.
4. CONCRETE TO BE 3000 PSI MIN.
5. VERTICAL CURB AND GUTTER BASE CAN BE SLOPED 3/4" OR USE A FLAT BASE

DATE:	AUGUST, 2011	STANDARD DETAIL CURBING	CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807
DRAWN:	PB/JSR		
CHECKED:	DEC		
SCALE	NOT TO SCALE		SD 3-11

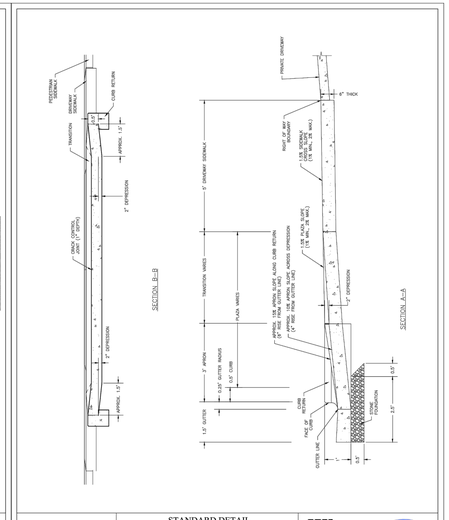


NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" - 3,000 PSI.
5. MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS
7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12"
8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1
9. MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

DATE:	OCTOBER, 2010	STANDARD DETAIL SIDEWALK	CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807
DRAWN:	PB/JSR		
CHECKED:	DEC		
SCALE	NOT TO SCALE		SD 3-10

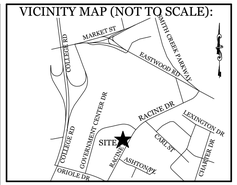


DATE:	JUNE 1, 2015	STANDARD DETAIL COMMERCIAL DRIVEWAY PLAN 1 of 2	CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807
DRAWN BY	JSR		
CHECKED BY	D.E.C., P.E.		
SCALE	NOT TO SCALE		SD 3-03.3



DATE:	JUNE 1, 2015	STANDARD DETAIL COMMERCIAL DRIVEWAY SECTIONS 2 of 2	CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON N.C. 28402 (910) 341-7807
DRAWN BY	JSR		
CHECKED BY	D.E.C., P.E.		
SCALE	NOT TO SCALE		SD 3-03.4

VICINITY MAP (NOT TO SCALE):



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-0662

DETAILS

FOR

240 RACINE DR.
OFFICE BUILDING
WILMINGTON, NORTH CAROLINA

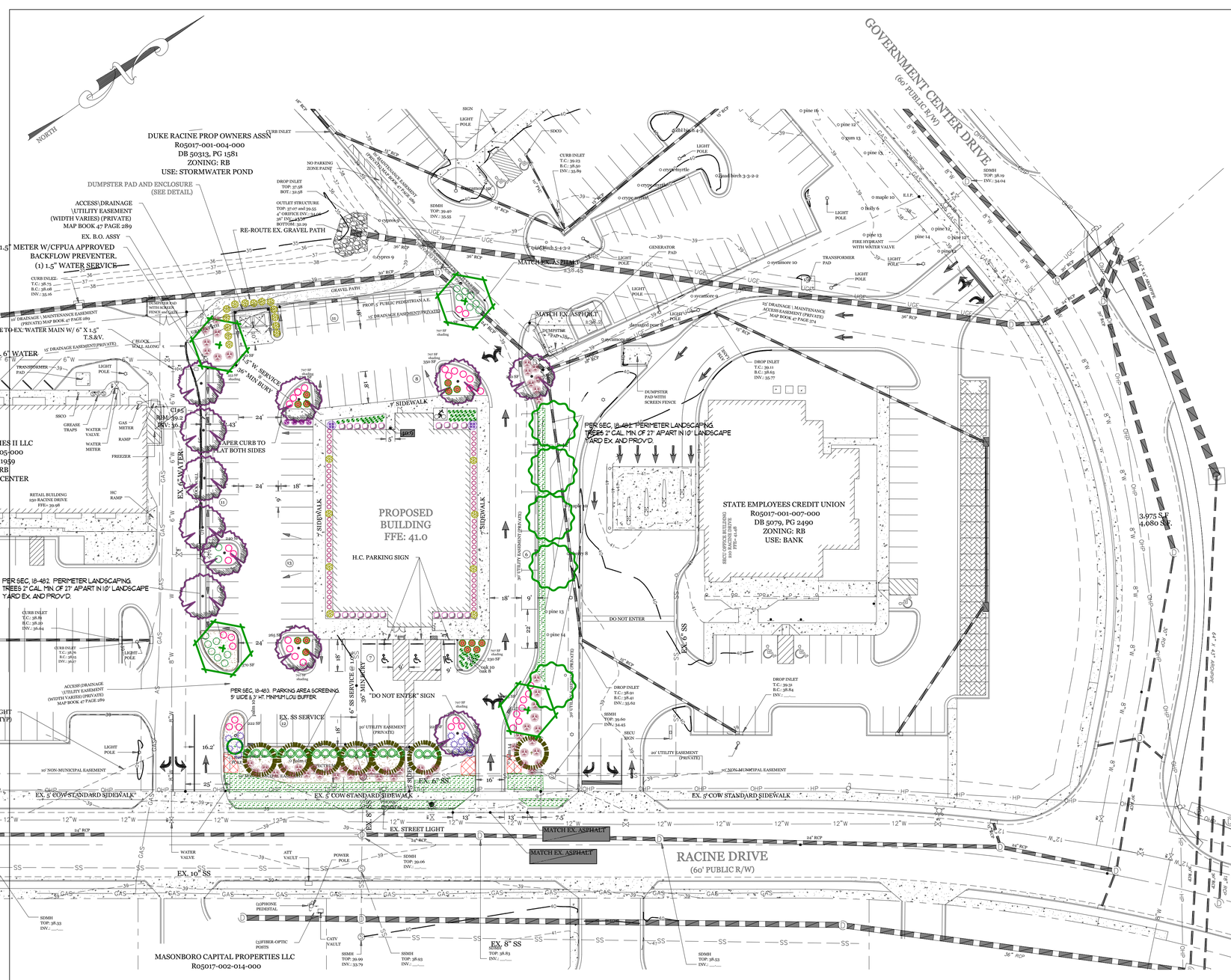
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032555 ENGINEER CHARLES D. CAZIER

PRELIMINARY NOT FOR CONSTRUCTION

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

DRAWN:	JAE	SHEET SIZE:	24 X 36
CHECKED:	CDC	DATE:	2/3/2021
APPROVED:	CDC	SCALE:	NTS
PROJECT NUMBER:	2020-029		

DRAWING NUMBER:
C-4



SITE DATA

PARCEL ID:	R05017-001-006-000
ZONING:	RB-REGIONAL BUSINESS
CAMA LAND USE CLASSIFICATION:	URBAN
PROJECT ADDRESS	240 RACINE DR. WILMINGTON, NC 28403
CURRENT OWNERS:	MATT PROPERTIES III LLC 3356 GRANVILLE DR RALEIGH, NC 27609
TOTAL ACREAGE IN PROJECT BOUNDARY	54,893 S.F. (1.26 AC.) x 15 = 19 trees 2" cal. req'd. & prov'd.
PROPOSED USE:	OFFICE BUILDING
PROPOSED CONSTRUCTION TYPE:	II-B (COMMERCIAL)
BUILDING SIZE:	16,000 SF GFA (8,000 S.F./FLOOR) 8,340 S.F. ROOF
BUILDING HEIGHT:	±32' / 2 STORY (35' MAX PER ZONING)

BUILDING SETBACKS:

FRONT:	REQUIRED= 25'	PROPOSED= 92.5'
SIDE:	REQUIRED= 0'	PROPOSED= 82.6'/40.9'
REAR:	REQUIRED= 15'	PROPOSED= 68.7'

CALCULATION FOR BUILDING COVERAGE:
PROPOSED COVERAGE 8,340 S.F. ÷ 54,893 S.F. = 15.2%

PROPOSED ON-SITE IMPERVIOUS AREAS:

BUILDING	8,340 S.F.
ASPHALT	27,345 S.F.
CONCRETE SIDEWALK, C&G, ETC.	6,390 S.F.
FUTURE	4,687 S.F.
TOTAL:	46,762 S.F. (85.2%)

TOTAL ON-SITE IMPERVIOUS AREA:

PROPOSED IMPERVIOUS AREA:	46,762 S.F.
EXISTING ON-SITE IMPERVIOUS AREA:	2,635 S.F.
TOTAL:	49,397 S.F. (90.0%)

PROPOSED OFF-SITE IMPERVIOUS AREAS:
CONCRETE DRIVE APRONS 360 S.F.

PARKING REQUIRED (16,000 S.F. PROFESSIONAL OFFICE):
MIN: 1 PER 300 S.F. G.F.A: 53 SPACES (3 H.C.)
MAX: 1 PER 200 S.F. G.F.A: 80 SPACES

PARKING PROVIDED= 72 SPACES (3 H.C.)

BICYCLE PARKING REQUIRED: (MIN. 5 PER 25-125 VEHICLE SPACES)
REQUIRED: 5 SPACES
PROVIDED: 5 SPACES

STREETYARD (RACINE DR: (MULTIPLIER: 25' MAX: 37.5' MIN: 12.5')
REQUIRED: 200'-41'=159' X 25'=
PROVIDED:

FOUNDATION PLANTINGS:
FRONT FACE REQUIRED: 297 SF (2,475 SF X 12%)
PROVIDED: 297 SF
LEFT FACE REQUIRED: 393 SF (3,275 SF X 12%)
PROVIDED 403 SF
REAR FACE REQUIRED: 297 SF (2,475 SF X 12%)
PROVIDED: 443 SF
RIGHT FACE REQUIRED: 393 SF (3,275 SF X 12%)
PROVIDED: 401 SF

EXISTING SEWER AND WATER DEMAND:= 0 GPD

PROPOSED SEWER AND WATER DEMAND:
FIXTURES @ 25 GAL/EMPLOYEE/SHIFT = 1,250 GPD

ESTIMATED TRIP GENERATION: (Per Trip Generation Manual, 10th Edition:
16,000 SF OFFICE (ITE CODE 710)
AM PEAK: 24 PM PEAK: 18 DAILY: 132

LANDSCAPE NOTES:

1. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
2. THE AREAS WITHIN THE TRIANGULAR SIGHT DISTANCE SHALL BE MAINTAINED FREE OF ALL OBSTRUCTIONS BETWEEN 30" AND 10'.
3. A RAIN/FREEZE SENSOR SHALL BE USED IF THERE IS AN IRRIGATION SENSOR.
4. ALL PLANT BEDS ARE TO RECEIVE 3-4" OF PINESTRAW OR MULCH.
5. LANDSCAPING SHALL BE COMPLETE BEFORE ISSUANCE OF A CO.

SHADING REQUIREMNTS:
27,345 SF X .20 = 5,468 SF OF INTERIOR SHADING REQ'D.
10 TREES X 353 SF = 3530 SF SHADING
6 TREES X 707 SF = 4242 SF SHADING
TOTAL SHADING: 7,772 SF

LEGEND

COMMON NAME	QTY	SIZE	HEIGHT	QTY REQ'D	
FLOWER, PERENNIAL					
LIRIOPE, BIG BLUE	52	1 GAL.	N/A	0	
SHRUB					
BOXWOOD, WINTERGREEN	62	3 GAL.	12"	62	
EVERED LOROPETALUM	14	3 GAL.	12"	0	
CAMELLIA SASANQUA YULETIDE	2	7 GAL.	12"	2	
LIGUSTRUM RECURVE	23	7 GAL.	3'	23	LOW BUFFER
MISCANTHUS ADAGIO	52	3 GAL.	12"	52	
HOLLY, SKY PENCIL	0	7 GAL.	3'	0	
HOLLY, YAUPON, DWARF	26	3 GAL.	N/A	0	
DRIFT ROSE	37	3 GAL.	N/A	0	
BREEZE GRASS	13	3 GAL.	N/A	0	
YEW, PRINGLES	22	3 GAL.	12"	22	
YEW, UPRIGHT JAPANESE	23	7 GAL.	3'	23	
YUCCA, COLORGUARD	4	3 GAL.	N/A	0	
TREE					
TRIDENT MAPLE	11	2" CAL.		11	CANOPY
ALLEE ELM	4	2" CAL.		4	CANOPY
EAGLESTON HOLLY, TREE FORM	1		8'	1	UNDERSTORY
BALD CYPRESS	7	2" CAL.		7	CANOPY
SHUMARD OAK	4	2" CAL.		4	CANOPY

CITY OF WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date:_____ Permit #_____
Signed: _____

Approved Construction Plan

	Name	Date
Planning		
Public Utilities		
Traffic		
Fire		

CLIENT INFORMATION:
AMANDA CHAPPEL
MATT PROPERTIES III, LLC
1908 EASTWOOD ROAD, SUITE 222
WILMINGTON, NC 28403

FREEMAN LANDSCAPE, INC.
Landscape Installation Professionals
JIM@FREEMANLANDSCAPE.COM
910-796-1166

Revision #: 1

Date: 2/3/2021

Scale: 30' 15' 0' 30' 60
Scale: 1"=30'

1" = 30'

Landscape Plan:

240 Racine Dr. Office Bldg.

Landscape Design by: Jim Freeman - NCLC# 0071

Freeman Landscape, Inc.

Outdoor Lighting

Shoebox LED

The energy-efficient Shoebox LED combines a decorative, contemporary style with versatility and ample lighting effect that is perfect for streets, parking lots, commercial buildings and residential communities. The Shoebox LED provides excellent color rendition along with a controlled light pattern that reduces glare and keeps the light directed only where you want it. Available in black, dark bronze, gray or white with one to four fixtures per pole.

LED *(Light Emitting Diode)*	150, 220, 420, 530 watts
Mounting heights	25', 30', 35'
Colors	Black Bronze Gray White
Poles	Fiberglass *(1 or 2 fixtures per pole)* Decorative tapered metal Decorative square metal

Note: 35' pole available in black or bronze only.

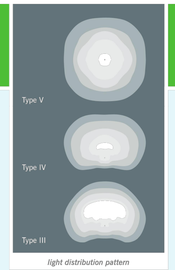
For additional information, visit us at **duke-energy.com/OutdoorLighting** or call us toll free at **866.769.6417**.

DUKE ENERGY. PROGRESS

BUILDING A SMARTER ENERGY FUTURE®

Outdoor Lighting

Shoebox LED



light distribution pattern

Light source: LED *(white)*

Replacement for:* LED Wattage 150 – 250-watt HPS and metal halide;
LED Wattage 205 – up to 400-watt metal halide;
LED Wattage 530 – 1,000-watt metal halide

Warm-up and restrike time: Instant on *(no warm-up or restrike time)*

Wattage	BUG Rating	Light Pattern	Lumens	Color Temp
LED 150	B5-U0-G3	IESNA Type V (circular)	19580	4,000K
LED 150	B3-U0-G4	IESNA Type IV (forward throw)	18459	
LED 150	B2-U0-G3	IESNA Type III (oval)	19006	
LED 220	B5-U0-G3	IESNA Type V *(circular)*	25870	
LED 220	B3-U0-G4	IESNA Type IV *(forward throw)*	24390	
LED 220	B2-U0-G4	IESNA Type III *(oval)*	25114	
LED 420	B5-U0-G5	IESNA Type V *(circular)*	48514	
LED 420	B3-U0-G5	IESNA Type IV *(forward throw)*	43765	
LED 530	B5-U0-G5	IESNA Type V *(circular)*	60296	
LED 530	B3-U0-G5	IESNA Type IV *(forward throw)*	54395	

** These are approximate replacement suggestions; actual conditions could be different.*

Poles available:

Name	*Mounting height*	*Color*
Round tapered decorative metal*	35'	Black Bronze
Decorative square metal*	25' and 30'	Black Gray Bronze White
Fiberglass	30'	Black *(1 or 2 fixtures per pole)* Gray *(1 or 2 fixtures per pole)*

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

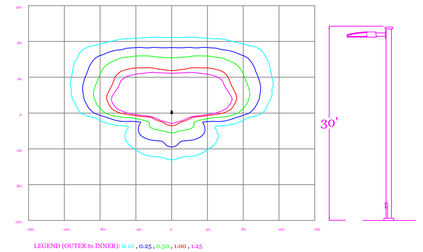
**2' raised foundation available when required on metal poles only.*

ISOFOOTCANDLE CURVES

FIXTURE: 220w Shoebox
MOUNTING HEIGHT: 30 FT
LIGHT SOURCE: LED'S, 4000K, 70 CRI
LUMENS - 25715
PATTERN: TYPE III Rg-U0-G4 (zero light at or above 90 degrees)

NOTE: THE FOOTCANDLE READINGS BELOW ARE MAINTAINED AND HAVE BEEN DEPRECIATED FOR LED LUMEN DEPRECIATION AND LUMINAIRE DIRT DEPRECIATION. FOR INITIAL FOOTCANDLES, DIVIDE THE READINGS BELOW BY .85.

ASSY# LFIX-SBX-LED-205-BLK-III-MULTIV-____P (BLACK)
POLE ASSY# LPOLE-SB-ST1-20FT-BLK-SQ-____P (BLACK)
BRACKET ASSY# LBKT-SD1S-25N-BLK-UNV-ST1-____P (BLACK)



LEGEND (OUTER to INNER): 0.10 , 0.25 , 0.50 , 1.00 , 1.25

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Grid	+	0.7 fc	5.7 fc	0.0 fc	N/A	N/A
Parking	✳	2.5 fc	5.7 fc	0.5 fc	11.4:1	5.0:1

Schedule

Symbol	Label	QTY	Description	Number Lamps	Lumens per Lamp	LLF
■ ●	220w SB III	6	LED 220w Shoebox - Type III - 4000K	64	392	0.85

LIGHTING DESIGN TOLERANCE

The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy Progress. Any inaccuracies in the supplied information, differences in luminaire installation, lighted area geometry including elevation differences, reflective properties of surrounding surfaces, obstructions (foliage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.

Customer approval_____ Date_____

DISTANCE CALIBRATION (INCHES)

0 0.5 1.0 2.0 3.0 4.0

DUKE ENERGY. PROGRESS

PROPRIETARY & CONFIDENTIAL

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240 RACINE DRIVE
Wilmington, NC
SITE LIGHTING PLAN

Designed by DEP LIGHTING SOLUTIONS
Reviewed by N. Johnson Scale 1" = 20'
Date 11/24/2020 Size "Arch D"
Description LED 220w Shoebox
Drawing No. 20-0400A Sht. 1 OF 1