

- LEGEND:**
- FENCE (BARBED)
 - FENCE (CHAINLINK)
 - FENCE (WOOD)
 - ELECTRIC (OVERHEAD)
 - ELECTRIC (UNDERGROUND)
 - GAS LINE
 - STORM DRAIN
 - SANITARY SEWER
 - FIBER OPTIC LINE
 - TELEPHONE LINE
 - WATER LINE
 - SETBACK LINES
 - CLEAR AND STRIP AREA
 - LIMITS OF DISTURBANCE
 - TREE PROTECTION FENCING
 - 8"x8" PRESSURE-TREATED TIMBERS
 - LANDSCAPE BORDER AND WHEEL STOP
 - POWER POLE
 - LIGHT POLE
 - GUYANCHOR
 - TRANSFORMER PAD
 - FIBER OPTIC PEDESTAL
 - TELEPHONE PEDESTAL
 - TELEPHONE MANHOLE
 - SANITARY SEWER MANHOLE
 - SANITARY SEWER CLEAN-OUT
 - STORM DRAIN MANHOLE
 - STORM DRAIN
 - DROP INLET/CATCH BASIN
 - FIRE HYDRANT
 - WATER VALVE
 - WATER METER

- NOTES:**
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN US SURVEY FEET, UNLESS NOTED OTHERWISE.
 - THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A CERTIFIED TITLE REPORT AND THEREFORE THE PROPERTY SHOWN HEREON MAY BE SUBJECT TO RECORDED OR UNRECORDED RIGHT-OF-WAYS, EASEMENTS, RESTRICTIONS OF RECORD, OR OTHER ENCUMBRANCES NOT OBSERVED OR SHOWN HEREON.
 - NO DETERMINATION HAS BEEN MADE BY THE SURVEYOR AS TO THE FOLLOWING: FLOOD ZONES, WETLANDS, UNDERGROUND STORAGE FACILITIES, CEMETERIES, HAZARDOUS WASTE DEPOSITS OR MATERIALS, OR OTHER CONDITIONS.
 - THIS MAP IS NOT INTENDED FOR RECORDATION AS PER G.S. 47-60 AS AMENDED.
 - THE CALCULATED PROPERTY LINES SHOWN HEREON WERE DRAWN FROM FIELD LOCATED BOUNDARY EVIDENCE AND/OR RECORDED DEEDS AND MAPS AS NOTED.
 - ANY LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE APPROXIMATE BASED ON INFORMATION PROVIDED BY OTHERS AND FIELD LOCATIONS. ALL UTILITIES SHOWN HEREON ARE SUBJECT TO FIELD VERIFICATION.
 - A LANDSCAPING PLAN INDICATING THE LOCATION OF THE 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.
 - CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
 - ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
 - BUSINESS IDENTIFICATION SIGNAGE MUST BE PERMITTED SEPARATELY THROUGH THE CITY OF WILMINGTON. NO OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY WILL BE ALLOWED.
 - NO OBSTRUCTIONS ALLOWED BETWEEN 30' ABOVE GROUND LEVEL AND 10' ABOVE GROUND LEVEL WITHIN THE 20x70 SIGHT DISTANCE TRIANGLE.

- LEGEND:**
- IRON PIPE FOUND
 - IRON ROD FOUND
 - IRON ROD SET

TEMPORARY SEEDING

GRASS TYPE	AMOUNT/1000 SF	TIME OF SEEDING	INITIAL	FERTILIZATION/1000 SF MAINTENANCE
RYE GRAIN	1-2 LBS	NOV. THRU JAN.	25 LBS 10-10-10	N/A N/A N/A
BROWN TOP MILLET	1-2 LBS	JUNE THRU AUG.	25 LBS 10-10-10	N/A N/A N/A

PERMANENT SEEDING

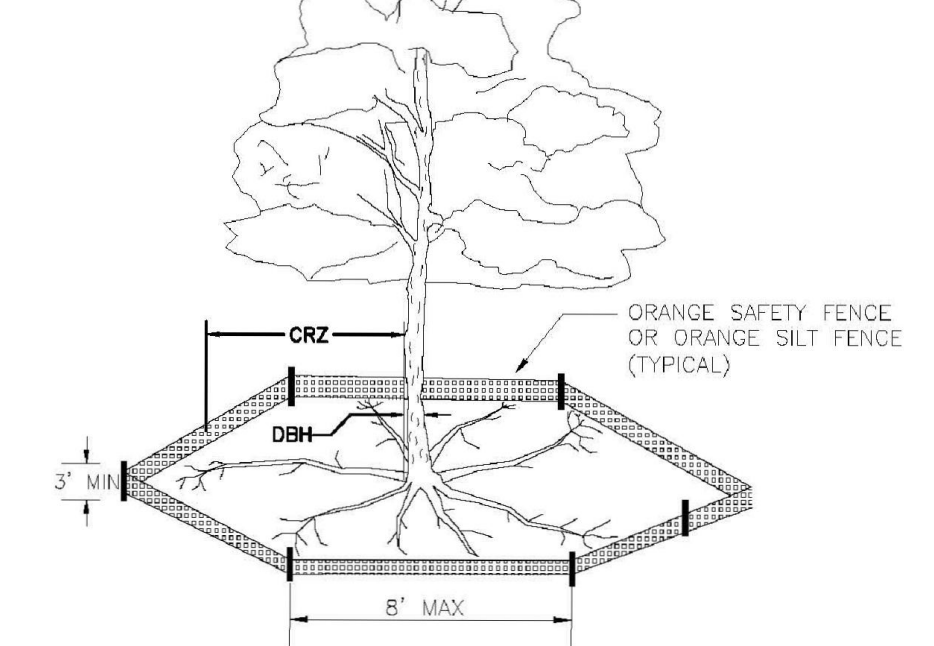
GRASS TYPE	AMOUNT/1000 SF	TIME OF SEEDING	INITIAL	FERTILIZATION/1000 SF MAINTENANCE
BERMUDA, COMMON	1-2 LBS	APR. THRU JUNE	25 LBS 10-10-10	MARCH-APRIL 12 LBS 10-10-10 EACH 4-8 WKS 1-2 LBS N. AUG-SEPT 12 LBS 10-10-10
FESCUE, TALL (KENTUCKY 31)	5-7 LBS	SEPT THRU OCT FEB THRU OCT	25 LBS 10-10-10	MAY & DEC 1/2 TO 1 LB. N. SEPT - OCT 12 LBS 10-10-10
SERICEA LESPEDEZA (SLOPES)	1-2 LBS	MARCH THRU APR.	25 LBS 10-10-10	FEB - MARCH 1/2 TO 1 LB. N. N/A

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

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: GROWTH OF THE TREE IS NEEDED FOR LEAF LAY, 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. DO NOT DISGUISE CROWN WITH INTENSIVE PRUNING.



- NOTES:**
- 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.
 - CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 - IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
 - 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.
 - 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.
 - 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.

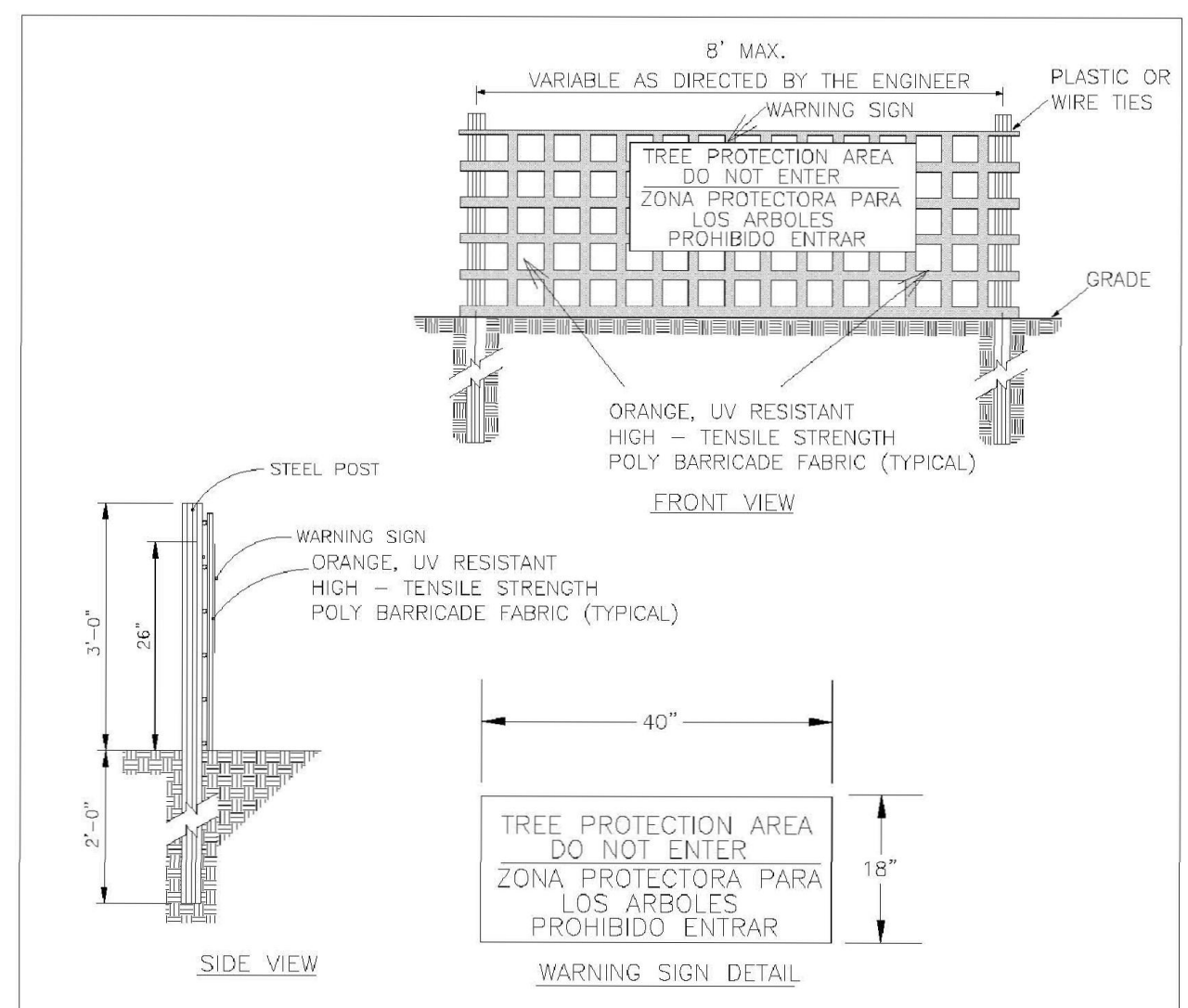
STANDARD DETAIL

TREE PROTECTION DURING CONSTRUCTION

SHEET 1 of 2

DATE: JAN 2015
DRAWN BY: JSR
CHECKED BY: RDK/P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807
SD 15-09



- NOTES:**
- THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
 - WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 - 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.
 - ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
 - TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
 - ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

STANDARD DETAIL

TREE PROTECTION DURING CONSTRUCTION

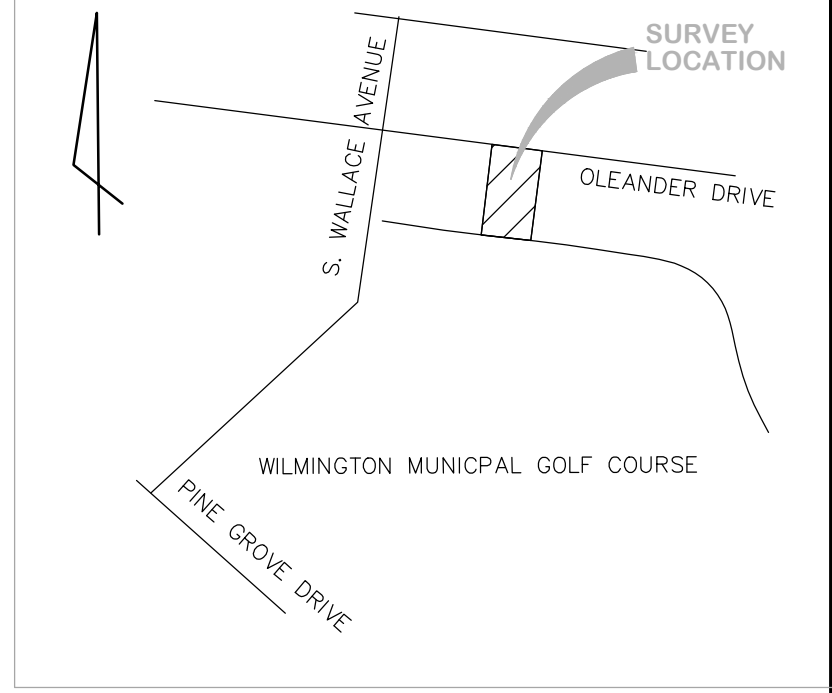
SHEET 2 of 2

DATE: JAN 2015
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SCALE: 1" = 20'

REV. NO.	DESCRIPTION	DATE



LANDSCAPE LEGEND

SYMBOL	SPECIFICATION	QTY
	CRAPE MYRTLE LAGERSTROEMIA INDICA 2" CALIPER AT PLANTING	2
	LAUREL OAK QUERCUS LAURIFOLIA 2" CALIPER AT PLANTING	2
	MAGNOLIA 'ROYAL STAR' MAGNOLIA STELLATA 2" CALIPER AT PLANTING	2
	WAX MYRTLE MYRICA CERIFERA MIN. 12" HEIGHT AT PLANTING	4
	INDICA AZALEA RHODODENDRON INDICA MIN. 12" HEIGHT AT PLANTING	11
	GLOSSY ABELIA ABELIA GRANDIFLORA MIN. 12" HEIGHT AT PLANTING	4
	TREE PROTECTION FENCING	
	4" MULCH AROUND NEW TREES, GRASS OR SOD REMAINING	

PARKING SHADE CALCULATIONS:

TOTAL PARKING AREA: 4,250 SF
4,250 x 20% = 850 SF
2 CRAPE MYRTLES @ 425 SF
2 STAR MAGNOLIAS PROVIDED
4 x 314 SF = 1,256 SF SHADE PROVIDED

TREE MITIGATION CHART

TREES PRESERVED ON SITE

- 8" OAK
- 3" DOGWOOD
- (2) 6" DOGWOODS
- 8" DOGWOOD
- (2) 24" MAGNOLIAS

TOTAL DBH - 79'6" = 13

REAR FOUNDATION PLANTING CALCULATIONS

FAÇADE SURFACE: 915.75
915.75 x 12% = 110 SF
258 SF PROVIDED (EXISTING AND PROPOSED)

5006 OLEANDER DRIVE

BUG-N-A-RUG

WILMINGTON NEW HANOVER NORTH CAROLINA

LANDSCAPE PLAN

RIGHT ANGLE ENGINEERING, P.C.
212 PRINCESS STREET
WILMINGTON, NC 28401
(910) 251-8544 FAX (910) 251-2208 FIRM: C-0829

DATE: 12/2/21
Scale: 1"=20'
Drawn: NNC
Checked: WSL
Project No: BN0121
Sheet No: L1