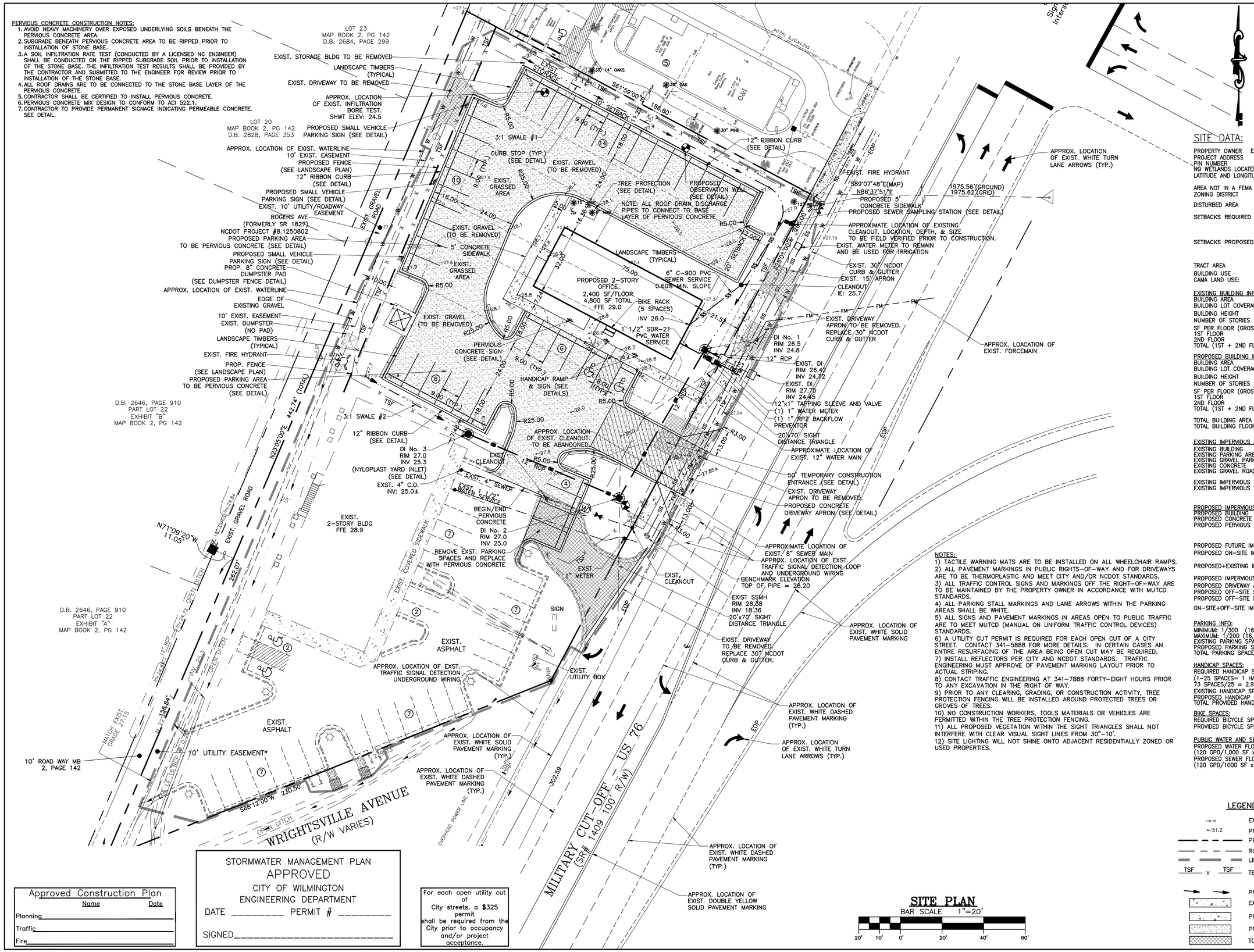
PERVIOUS CONCRETE CONSTRUCTION NOTES:

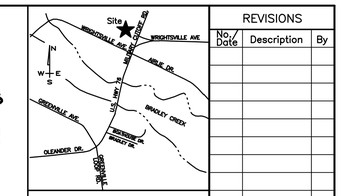
1. AVOID HEAVY MACHINERY OVER EXPOSED UNDERLYING SOILS BENEATH THE PERVIOUS CONCRETE AREA.
2. SUBGRADE BENEATH PERVIOUS CONCRETE AREA TO BE RIPPED PRIOR TO INSTALLATION OF STONE BASE.
3. A SOIL INFILTRATION RATE TEST (CONDUCTED BY A LICENSED NC ENGINEER) SHALL BE CONDUCTED ON THE RIPPED SUBGRADE SOIL PRIOR TO INSTALLATION OF THE STONE BASE. THE INFILTRATION TEST RESULTS SHALL BE PROVIDED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION OF THE STONE BASE.
4. ALL ROOF DRAINS ARE TO BE CONNECTED TO THE STONE BASE LAYER OF THE PERVIOUS CONCRETE.
5. CONTRACTOR SHALL BE CERTIFIED TO INSTALL PERVIOUS CONCRETE.
6. PERVIOUS CONCRETE MIX DESIGN TO CONFORM TO ACI 522.1.
7. CONTRACTOR TO PROVIDE PERMANENT SIGNAGE INDICATING PERMEABLE CONCRETE. SEE DETAIL.



SITE PLAN

BAR SCALE 1"=20'

20' 10' 0' 20' 40' 60'



LOCATION MAP
NOT TO SCALE

SITE DATA:

PROPERTY OWNER	ESSENTIAL REAL ESTATE HOLDINGS LLC
PROJECT ADDRESS	1648 MILITARY CUTOFF RD
PIN NUMBER	R05616-003-006-000
NO WETLANDS LOCATED ON-SITE	
LATITUDE AND LONGITUDE	34°13'13"N 77°49'57"W
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	O&I-OFFICE & INSTITUTION
DISTURBED AREA	1.41 AC
SETBACKS REQUIRED	FRONT: 20' REAR: 20' SIDE: 10'
SETBACKS PROPOSED	FRONT: 21' REAR: 82' SIDE: 78'/69'
TRACT AREA	60,905 SF (1.40 AC)
BUILDING USE	OFFICE
CAMA LAND USE:	WATERSHED RESOURCE PROTECTION

EXISTING BUILDING INFO:

BUILDING AREA	5,665 SF
BUILDING LOT COVERAGE (5,665/60,905)	9.3%
BUILDING HEIGHT	36'
NUMBER OF STORIES	2
SF PER FLOOR (GROSS)	
1ST FLOOR	5,665 SF
2ND FLOOR	5,665 SF
TOTAL (1ST + 2ND FLOOR)	11,330 SF

PROPOSED BUILDING INFO:

BUILDING AREA	2,400 SF
BUILDING LOT COVERAGE (2,440/60,905)	4.0%
BUILDING HEIGHT	36'
NUMBER OF STORIES	2
SF PER FLOOR (GROSS)	
1ST FLOOR	2,400 SF
2ND FLOOR	2,400 SF
TOTAL (1ST + 2ND FLOOR)	4,800 SF
TOTAL BUILDING AREA (EXST. & PROP.)	8,065 SF
TOTAL BUILDING FLOOR AREA (EXST. & PROP.)	16,130 SF

EXISTING IMPERVIOUS AREAS (ON-SITE):

EXISTING BUILDING	5,665 SF
EXISTING PARKING AREA	12,785 SF
EXISTING GRAVEL PARKING AREA	14,660 SF
EXISTING CONCRETE	1,335 SF
EXISTING GRAVEL ROAD (ROGERS AVE.)	3,045 SF
EXISTING IMPERVIOUS TO BE REMOVED	15,925 SF
EXISTING IMPERVIOUS TO REMAIN	21,565 SF (35.4%)

PROPOSED IMPERVIOUS AREAS: (ON-SITE)

PROPOSED BUILDING	2,400 SF
PROPOSED CONCRETE (CURB, SIDEWALK, PAD)	1,865 SF
PROPOSED PERVIOUS CONCRETE	4,030 SF (TOTAL: 16,120 SF) (WITH 75% IMPERVIOUS CREDIT)
PROPOSED FUTURE IMPERVIOUS	720 SF
PROPOSED ON-SITE IMPERVIOUS AREA	9,015 SF (14.8%)
PROPOSED+EXISTING IMPERVIOUS AREA	30,580 SF (50.2%)
PROPOSED IMPERVIOUS AREAS: (OFF-SITE)	
PROPOSED DRIVEWAY APRON	555 SF
PROPOSED OFF-SITE SIDEWALK	760 SF
PROPOSED OFF-SITE IMPERVIOUS AREA	1,315 SF
ON-SITE+OFF-SITE IMPERVIOUS AREA	31,895 SF (52.4%)

PARKING INFO:

MINIMUM: 1/300 (16,130/300)	54 SPACES
MAXIMUM: 1/200 (16,130/200)	81 SPACES
EXISTING PARKING SPACES	32 SPACES
PROPOSED PARKING SPACES	40 SPACES
TOTAL PARKING SPACES PROVIDED	72 SPACES

HANDICAP SPACES:

REQUIRED HANDICAP SPACES (1-25 SPACES= 1 HANDICAP SPACE) 73 SPACES/25 = 2.92	3
EXISTING HANDICAP SPACES	2
PROPOSED HANDICAP SPACES	2
TOTAL PROVIDED HANDICAP SPACES	4

BIKE SPACES:

REQUIRED BICYCLE SPACES	5
PROVIDED BICYCLE SPACES	5

PUBLIC WATER AND SEWER BY CFPUA

PROPOSED WATER FLOW: (120 GPD/1,000 SF x 4,800 x 110%)	634 GPD
PROPOSED SEWER FLOW: (120 GPD/1000 SF x 4,800 SF)	576 GPD

NOTES:

1) TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
3) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
4) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
5) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
6) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
7) INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
8) CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
9) PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES.
10) NO CONSTRUCTION WORKERS, TOOLS MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
11) ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.
12) SITE LIGHTING WILL NOT SHINE ONTO ADJACENT RESIDENTIALLY ZONED OR USED PROPERTIES.

LEGEND

+31.73	EXIST. SPOT ELEVATION
←31.2	PROPOSED SPOT ELEVATION
	PROPERTY LINE (BOUNDARY)
	RIGHT OF WAY
	LIMITS OF DISTURBANCE
TSF X TSF	TEMPORARY SILT FENCE
	PROPOSED RUN-OFF ARROWS
	EXIST. CONCRETE AREA
	PROPOSED CONCRETE AREA
	PROPOSED PERVIOUS CONCRETE AREA
	TO BE REMOVED

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED_____

For each open utility cut of City streets, a $325 permit shall be required from the City prior to occupancy and/or project acceptance.

REVISIONS

No. Date	Description	By

SITE, GRADING, DRAINAGE, EROSION CONTROL, STORMWATER MANAGEMENT, AND UTILITY PLAN

ESSENTIAL OFFICE BUILDING

WILMINGTON, NORTH CAROLINA

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631

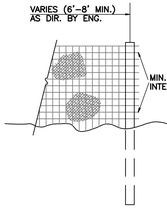
© 2012 TRIPP ENGINEERING, P.C.
NC LICENSE No. C-1427

DATE 11-28-12
DESIGN PGT
DRAWN EJW

C1

SHEET 1 OF 2

12017

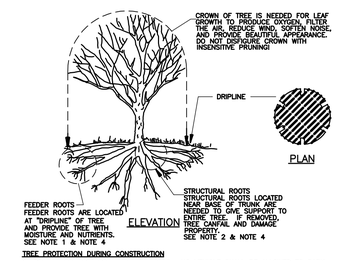


NOTES:

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

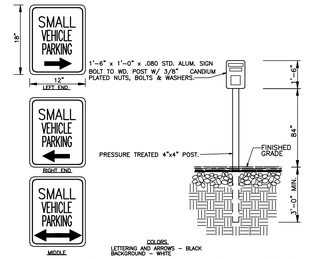


TREE PROTECTION DURING CONSTRUCTION

1. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO HEAVY MATERIALS SHALL BE STORED BENEATH TREES. RESULTS OF COMPACTION CAUSE WATER AND AIR NOT TO REACH THE ROOTS AND THE TREE WILL DIE. THESE "FEEDING ROOTS" OCCUR WELL AWAY FROM THE BASE OF THE TREE TO THE EDGE OF THE OVERHEAD BRANCH CANOPY. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. APPROPRIATE BARRIER SHOULD PREVENT DAMAGE FROM OCCURING DURING CONSTRUCTION.
2. NO CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK. THESE ARE ESSENTIAL IN SUPPORTING THE TREE AND HOLDING IT UPRIGHT IN HIGH WINDS. REMOVAL OF THESE ROOTS ALONG ONE SIDE IS OFTEN DONE BECAUSE OF A WALK, PAVING OR BUILDING WHICH IS BEING CONSTRUCTED.
3. AVOID CUT AND FILL WITHIN DIAMETER OF TREE CROWN DURING EXCAVATION.

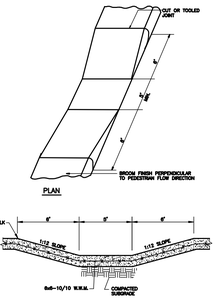
METHOD OF TREE PROTECTION DURING CONSTRUCTION

SD 15–09
NOT TO SCALE



SMALL VEHICLE PARKING SIGN DETAIL

NTS


CUT OR TOOLED JOINT
PLAN
BROOM FINISH PERPENDICULAR TO PEDESTRIAN FLOW DIRECTION
4" SIDEWALK 3000 PSI CONCRETE
5'–0"
5'–0"
5'–0"