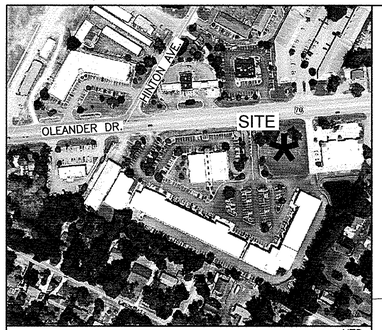

VICINITY MAP NTS

R06206-007-004-000
5709 OLEANDER DR.
ZONED O&I-1
RESTAURANT
MARO ENTERPRISES LLC

R06207-003-018-000
5725 OLEANDER DR.
ZONED CB
CONDOMINIUM COMMON AREA
OLEANDER OAKS CONDOMINIUM

LEGEND	1. GROUND STABILIZATION		
	SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
	PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
	HIGH QUALITY WATER (HQW) ZONES.	7 DAYS	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' IN LENGTH.
	ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES).

2. BUILDING WASTES HANDLING
- NO PAINT OR LIQUID WASTES IN STREAM OR STORM DRAINS
- DEDICATED AREA FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO ALTERNATIVE IS AVAILABLE.
- EARTHEN MATERIALS STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVE IS AVAILABLE
- CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.

3. INSPECTIONS
- SAME WEEKLY INSPECTION REQUIREMENTS
- SAME RAIN GUAGE AND INSPECTIONS AFTER 0.5" RAIN EVENT
- INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUISNESS HOURS"
- RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST
- ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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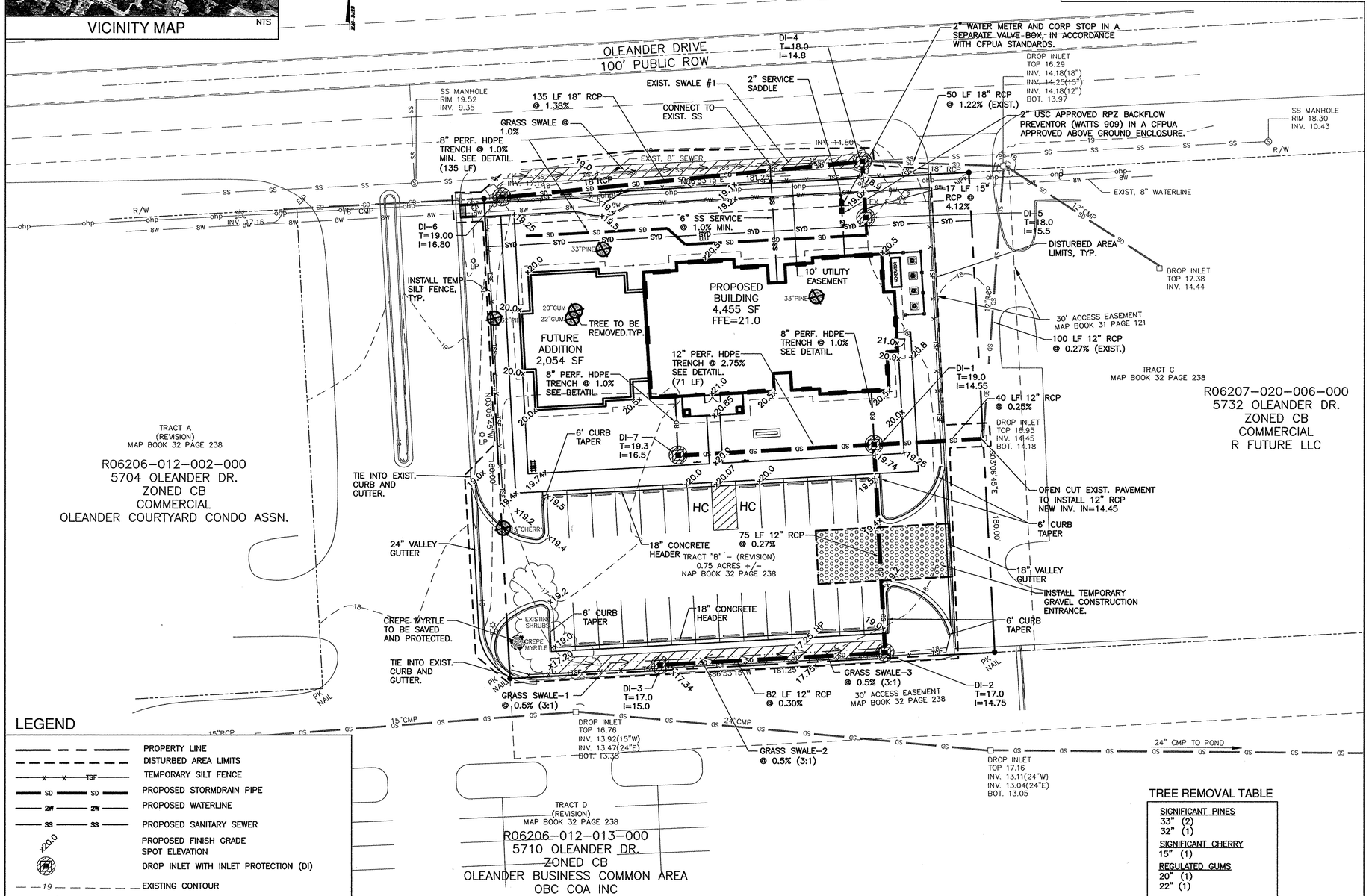

SITE DATA TABLE

EXISTING PARCEL ID#:	R06206-012-011-000
EXISTING PARCEL PIN#:	314608.78.9926.000
SITE ADDRESS:	5712 OLEANDER DRIVE
PARCEL OWNER:	WELLS REAL ESTATE HOLDINGS LLC
EXISTING PARCEL AREA:	0.75 AC (32,625 SF)
PROPOSED PARCEL USE:	OFFICE
CURRENT ZONING:	CB-COMMUNITY BUSINESS
CAMA LAND CLASSIFICATION:	WATERSHED RESOURCE PROTECTION
SOIL TYPE:	Se (HYDROLOGIC SOIL GROUP "A")
BUILDING SETBACKS CB:	FRONT SETBACK: 20' INTERIOR SIDE SETBACK: 10' CORNER SIDE SETBACK: 20' REAR SETBACKS: 10'
BUILDING SETBACKS PROPOSED:	FRONT SETBACK: 27' SIDE SETBACK EAST: 30' SIDE SETBACK WEST: 11' REAR SETBACKS: 100'
BUILDING AREA (FOOTPRINT):	4,455 SF PROPOSED 2,054 SF FUTURE ADDITION 6,509 SF TOTAL
MAX. LOT COVERAGE CB:	30%
PROPOSED LOT COVERAGE:	20.00% (INCLUDES FUTURE ADDITION)
BUILDING HEIGHT:	25'±
BUILDING CONSTRUCTION TYPE:	VB
TOTAL IMPERVIOUS AREA:	
EXISTING ASPHALT:	2,720 SF
PROPOSED BUILDING:	6,509 SF (FOOTPRINT)
PERVIOUS PAVEMENT PARKING AND DRIVE ISLE:	8,126 SF
PERVIOUS PAVEMENT SIDEWALK:	1,950 SF
CONCRETE CURB AND GUTTER:	850 SF
CONCRETE SIDEWALK:	840 SF
TOTAL FOR SITE:	20,995 SF
% IMPERVIOUS:	64.35%
TOTAL NEW ON-SITE IMPERVIOUS AREA (AFTER 75% CREDIT):	
PROPOSED BUILDING:	6,509 SF (FOOTPRINT)
PERVIOUS PAVEMENT PARKING AND DRIVE ISLE:	2,032 SF
PERVIOUS PAVEMENT SIDEWALK:	488 SF
CONCRETE CURB AND GUTTER:	850 SF
TOTAL FOR SITE:	*9,879 SF
% IMPERVIOUS:	30.28%

*DOES NOT INCLUDE REQUIRED CONCRETE SIDEWALK ALONG OLEANDER DR. THAT SHOULD BE IN THE ROW. CONCRETE SIDEWALK SHALL BE LOCATED WITHIN A PUBLIC/PEDESTRIAN ACCESS EASEMENT.

PARKING REQUIREMENT

PARKING REQ'D: OFFICE	1/200 MAX, 1/300 MIN.
TOTAL PARKING REQUIRED:	33 MAX, 22 MIN.
PARKING PROPOSED	27 TOTAL
ACCESSIBLE PARKING REQUIRED	2
ACCESSIBLE PARKING PROPOSED	2
BICYCLE PARKING REQUIRED	5
BICYCLE PARKING PROPOSED	5

LANDSCAPING REQUIREMENTS (REFER TO LANDSCAPE PLAN)
15 TREES PER DISTURBED ACRE REQUIRED
STREETYARD LANDSCAPING: 18 MULTIPLIER
181.25-15 (18) = 2,993 SF REQUIRED 2,993 SF PROPOSED
FOUNDATION PLANTINGS: 12% FACE OF BUILDING X LENGTH
TRASH REMOVAL WILL BE BY HANDCART
WATER AND SEWER CAPACITY NEEDS

PER 2T RULES: 25 GAL/EMPLOYEE (OFFICE USE)
25 EMPLOYEES @ 25 GAL/EMPLOYEE/DAY=625 GPD
DISTURBED AREA: 0.76 AC

LEGEND

- PROPERTY LINE
- DISTURBED AREA LIMITS
- TEMPORARY SILT FENCE
- PROPOSED STORMDRAIN PIPE
- PROPOSED WATERLINE
- PROPOSED SANITARY SEWER
- x20.0 PROPOSED FINISH GRADE SPOT ELEVATION
- DROP INLET WITH INLET PROTECTION (DI)
- 19 EXISTING CONTOUR
- 13"PINE EXISTING TREE TO BE SAVED AND PROTECTED
- 13"PINE EXISTING TREE TO BE REMOVED
- PERVIOUS PAVEMENT
- CONCRETE

TREE REMOVAL TABLE

SIGNIFICANT PINES
33" (2)
32" (1)
SIGNIFICANT CHERRY
15" (1)
REGULATED GUMS
20" (1)
22" (1)

SCALE: 1" = 20'
0 20 40 60

City of Wilmington North Carolina
Public Services • Engineering Division
APPROVED DRAINAGE PLAN
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.

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

GRADING, DRAINGE, EROSION CONTROL AND UTILITIES PLAN
WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

OWNER/DEVELOPER
HAROLD W. WELLS, IV, MANAGER
WELLS REAL ESTATE HOLDINGS, LLC
1 NORTH THIRD STREET
WILMINGTON, NC 28401
910 251-5402

NORRIS & TUNSTALL
CONSULTING ENGINEERS, P.C.
902 MARKET STREET
WILMINGTON, NC 28401
PHONE (910) 343-9653
1429 ASH-LITTLE RIVER RD. NW
ASH, NC 28420
PHONE (910) 287-5900
licence #C-3641

15005

DES. JST
CKD. JPN
DRWN. NKS
DATE 7/19/16

NORTH CAROLINA PROFESSIONAL SEAL 030889 ENGINEER JASON CLARK 7/19/2016

C1.1

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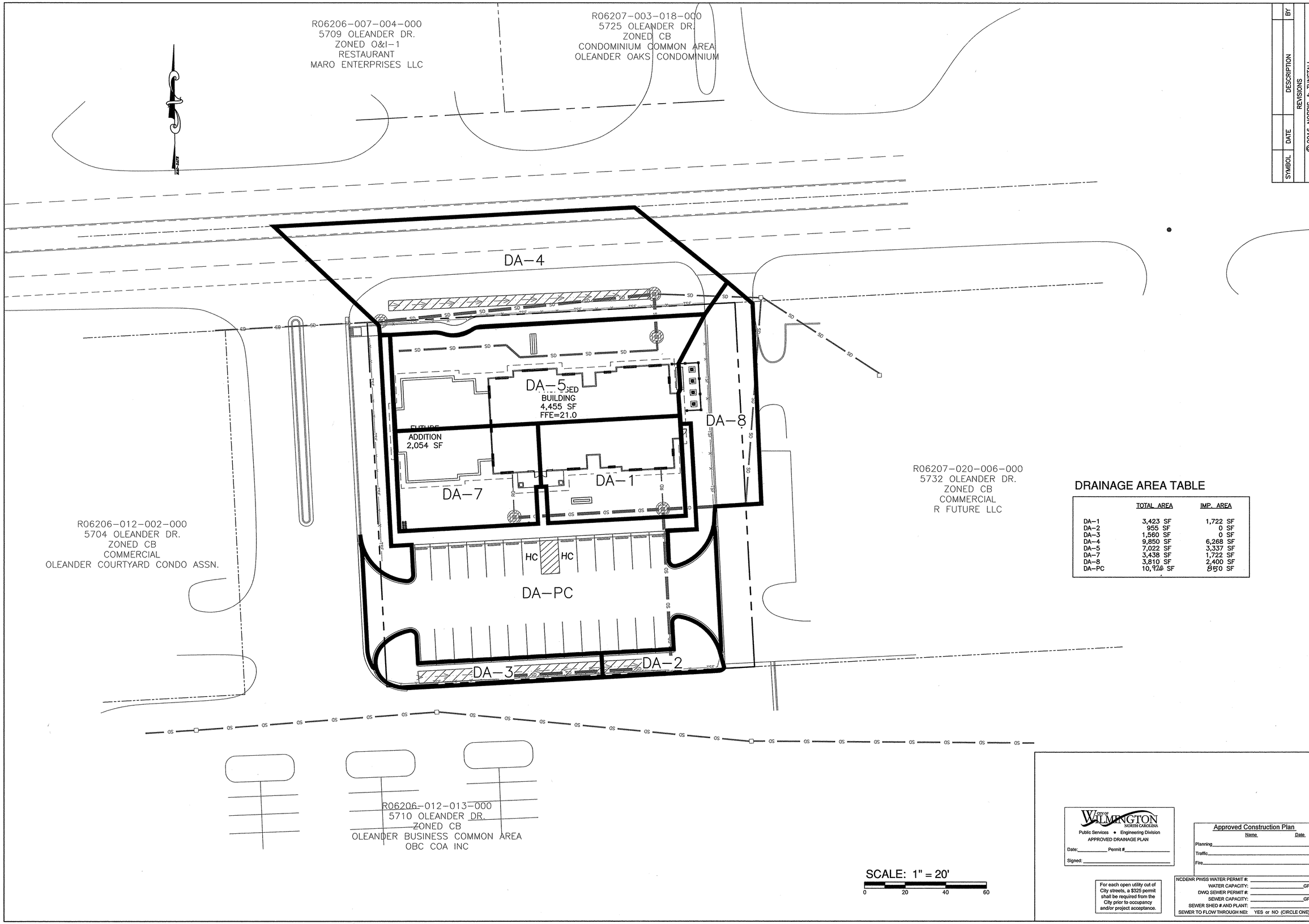

DRAINAGE AREA TABLE

	TOTAL AREA	IMP. AREA
DA-1	3,423 SF	1,722 SF
DA-2	955 SF	0 SF
DA-3	1,560 SF	0 SF
DA-4	9,850 SF	6,268 SF
DA-5	7,022 SF	3,337 SF
DA-7	3,438 SF	1,722 SF
DA-8	3,810 SF	2,400 SF
DA-PC	10,926 SF	850 SF

SYMBOL	DATE	DESCRIPTION	BY

REVISIONS

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DRAINAGE AREA PLAN

WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

OWNER/DEVELOPER
HAROLD W. WELLS, IV, MANAGER
WELLS REAL ESTATE HOLDINGS, LLC
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ASH, NC 28420
PHONE (910) 287-5900

15005

DES.	JST
CKD.	JPN
DRWN.	NKS
DATE	7/19/16

NORTH CAROLINA PROFESSIONAL SEAL 030669 ENGINEER JASON CLARK 7/19/2016

City of WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED DRAINAGE PLAN
Date:_____ Permit #_____
Signed: _____

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

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

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

C1.2

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R06206-007-004-000
5709 OLEANDER DR.
ZONED O&I-1
RESTAURANT
MARO ENTERPRISES LLC

R06207-003-018-000
5725 OLEANDER DR.
ZONED CB
CONDOMINIUM COMMON AREA
OLEANDER OAKS CONDOMINIUM

OLEANDER DRIVE
100' PUBLIC ROW

SS MANHOLE
RIM 19.52
INV. 9.35

NEW 5' CONCRETE SIDEWALK WITHIN A PEDESTRIAN/ PUBLIC ACCESS EASEMENT

INSTALL HC ACCESSIBLE RAMP WITH DETECTABLE WARNING MAT. SEE DETAIL

DROP INLET
TOP 16.29
INV. 14.18(18")
~~INV. 14.25(15")~~
INV. 14.18(12")
BOT. 13.97

SS MANHOLE
RIM 18.30
INV. 10.43

24' EXIST.

INV. 14.80

EXIST. 8" SEWER

18" RCP

EXIST. 8" WATERLINE

12" CMP

DROP INLET
TOP 17.38
INV. 14.44

STREETYARD

10' UTILITY EASEMENT

24'± EXIST.

24'± EXIST.

PROPOSED BUILDING
4,455 SF
FFE=21.0

FUTURE ADDITION
2,054 SF

20"GUM
22"GUM
33"PINE

30' ACCESS EASEMENT
MAP BOOK 31 PAGE 121

EXISTING PAVEMENT

20'X70' SIGHT TRIANGLE

TRACT C
MAP BOOK 32 PAGE 238

R06207-020-006-000
5732 OLEANDER DR.
ZONED CB
COMMERCIAL
R FUTURE LLC

TRACT A
(REVISION)
MAP BOOK 32 PAGE 238

R06206-012-002-000
5704 OLEANDER DR.
ZONED CB
COMMERCIAL
OLEANDER COURTYARD CONDO ASSN.

BICYCLE PARKING

NEW PERVIOUS PAVEMENT

HC SIGN

NEW PERVIOUS SIDEWALK

DROP INLET
TOP 16.95
INV. 14.45
BOT. 14.18

N03°06'45"W 180.00'

S03°06'45"E 180.00'

5.85'

OBSERVATION WELL (3) TYP.

TRACT "B" - (REVISION) 24'
0.75 ACRES +/-
MAP BOOK 32 PAGE 238

S86°53'15"W 181.25'

10.52'

WHEEL STOPS, TYP.

BAFFLE REQUIRED SEE DETAIL.

30' ACCESS EASEMENT
MAP BOOK 32 PAGE 238

PK NAIL

15"CMP

DROP INLET
TOP 16.76
INV. 13.92(15"W)
INV. 13.47(24"E)
BOT. 13.38

24"CMP

DROP INLET
TOP 17.16
INV. 13.11(24"W)
INV. 13.04(24"E)
BOT. 13.05

24" CMP TO POND

TRACT D
(REVISION)
MAP BOOK 32 PAGE 238

R06206-012-013-000
5710 OLEANDER DR.
ZONED CB
OLEANDER BUSINESS COMMON AREA
OBC COA INC

LEGEND

	PROPERTY LINE
	DISTURBED AREA LIMITS
X X TSF	TEMPORARY SILT FENCE
SD SD	PROPOSED STORMDRAIN PIPE
2W 2W	PROPOSED WATERLINE
SS SS	PROPOSED SANITARY SEWER
x20.0	PROPOSED FINISH GRADE SPOT ELEVATION
	DROP INLET WITH INLET PROTECTION (DI)
19	EXISTING CONTOUR
13"PINE	EXISTING TREE TO BE SAVED AND PROTECTED
13"PINE	EXISTING TREE TO BE REMOVED
	PERVIOUS PAVEMENT
	CONCRETE

SCALE: 1" = 20'
0 20 40 60

City of Wilmington North Carolina
Public Services • Engineering Division
APPROVED DRAINAGE PLAN
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.

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Planning		
Traffic		
Fire		

NCDENR PWSS WATER PERMIT #: _____
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SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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LAYOUT PLAN

WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

OWNER/DEVELOPER
HAROLD W. WELLS, IV, MANAGER
WELLS REAL ESTATE HOLDINGS, LLC
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1429 ASH-LITTLE RIVER RD. NW
ASH, NC 28420
PHONE (910) 287-5900
licence #C-3641

15005

DES. JST
CKD. JPN
DRWN. NKS

DATE 7/19/16

SEAL 030869 NORTH CAROLINA PROFESSIONAL ENGINEER T. JASON CLARK 7/19/16

C1.3

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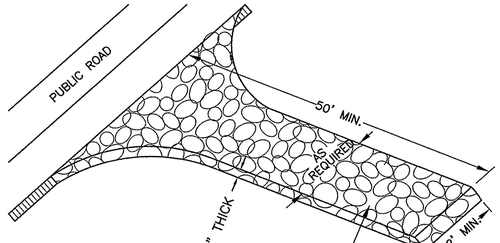
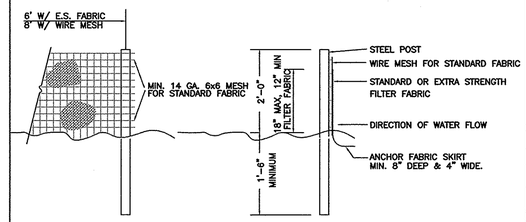


NOT TO SCALE

1 TEMPORARY GRAVELLED CONSTRUCTION ENTRANCE

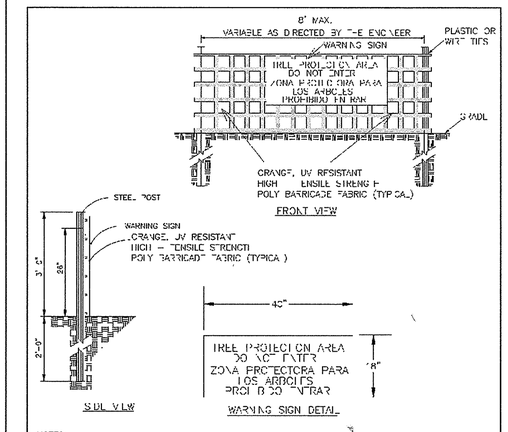


NOTES:

1. SYN. FENCE FABRIC SHALL BE MIN. OF 30" IN WIDTH WITH 30 LB/IN TENSILE STRENGTH FOR STANDARD FABRIC AND 50 LB/IN FOR EXTRA STRENGTH.
2. FABRIC SHALL BE CONTINUOUS LENGTH. IF JOINTS ARE NECESSARY, LAP FABRIC POST TO POST.
3. STEEL POST SHALL BE MIN 4' IN HEIGHT AND BE OF THE SELF–FASTENER STEEL ANGLE TYPE.

NOT TO SCALE

2 TEMPORARY SILT FENCE

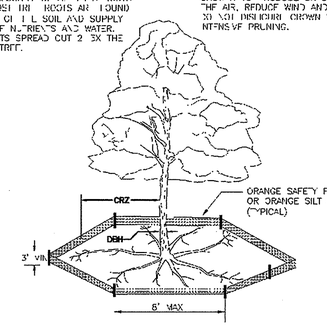


NOTES:

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 PROVISION 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.

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 INCLUDE 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 FOOT 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 THE 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 RAISED SIDEWALK, SHALL BE MAINTAINED 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. DURING BUILDING DAMAGE 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 AS ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LIEN OF $10,000 FOR 3 YRS FOR TREE MITIGATION.

EROSION CONTROL NOTES AND MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES 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 #4 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, BLOCK AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION 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 WATTLES, 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 SEDIMENT FENCE, THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF–FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.

5. LAND QUALITY REQUIRES:
ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED, ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN, TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS.
WATER QUALITY REQUIRES:
ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, ALL SLOPES STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL (3:1) AND ALL HIGH QUALITY WATER (HQW) ZONES SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN SEVEN (7) CALENDAR DAYS FROM THE LAST LAND–DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN FOURTEEN (14) CALENDAR DAYS FROM THE LAST LAND–DISTURBING ACTIVITY.

TEMPORARY/PERMANENT GRASS SPECIFICATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS.

2. RIP THE ENTIRE AREA TO A 6 INCH DEPTH.

3. REMOVE ALL ROCKS, ROOTS AND OTHER OBSTRUCTIONS LEAVING SURFACES SMOOTH AND UNIFORM.

4. APPLY AGRICULTURAL LIME AND FERTILIZER UNIFORMLY AND MIX WITH SOIL.
LIME: 45 LBS. PER 1000 S.F.
PHOSPHOROUS: 20 LBS PER 1000 S.F.
FERTILIZER: 17 LBS. PER 1000 S.F.

5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, UNIFORM SEED BED IS PREPARED 4–6 INCHES DEEP.

6. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY.
2 – 3 LBS PER 1000 S.F. (SEE MIXTURE BELOW)

7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
GRAIN STRAW & HAY AT 75 TO 100 LBS PER 1000 S.F.
WOOD CHIPS AT 500 LBS. PER 1000 S.F.
JUTE & MESH AS PER MANUFACTURER

8. ASPHALT FOR ANCHORING MULCH SHALL BE TYPE SS–1 EMULSION AND APPLIED AT A RATE OF 1000 GAL. PER ACRE FOR SLOPE STABILIZATION, AND 150 GAL. PER TON OF STRAW FOR ANCHORING STRAW.

9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEED WITHIN THE PLANTING SEASON, IF POSSIBLE. IF GRASS STAND SHOULD BE OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.

10. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE, TREATMENT, AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

11. SEED FOR TEMPORARY AND PERMANENT APPLICATIONS SHALL BE:

20%	CARPET GRASS
28%	BERMUDA GRASS
20%	TURF FESCUE
10%	CREEPING RED FESCUE
20%	ANNUAL RYE GRAIN

*BERMUDA SEED SHALL BE HULLED FOR WARM WEATHER PLANTING. PURITY OF SEED SHALL BE A MIN. OF 98% AND GERMINATION SHALL BE A MIN. OF 85%.

ALL DISTURBED AREA SHALL BE SEEDED WITHIN 7–14 DAYS OF THE COMPLETION OF GRADING. SEE EROSION CONTROL AND MAINTENANCE NOTES. CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS, OTHER SEEDING SCHEDULES MAY BE POSSIBLE.

SITE WORK NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH FIELD CONSTRUCTION CONDITIONS.

2. CONTRACTOR SHALL COORDINATE WORK WITHIN NCDOT AND LOCAL RIGHT OF WAYS WITH PROPER AUTHORITIES AND SHALL MEET ANY REQUIREMENTS AS TO TRAFFIC CONTROL AND CONNECTION TO EXISTING STREETS.

3. CLEARING AND GRUBBING: REMOVE ALL TREES AS REQUIRED UNLESS OTHERWISE NOTED TO REMAIN, STUMPS, ROOTS, SHRUBBERY, ASPHALT, CONCRETE, STRUCTURES, BURIED UTILITIES, STORAGE TANKS, ETC. WITHIN LIMITS OF CONSTRUCTION.

4. STRIPPING: BEFORE EXCAVATING OR FILLING, REMOVE ALL TOPSOIL, WOOD, LEAVES, AND ANY OTHER UNSUITABLE MATERIAL.

5. MUCKING: REMOVE ANY SOFT, ORGANIC SILT MATERIALS AND EXISTING BURIED CONSTRUCTION DEBRIS AS REQUIRED AND FILL TO SUBGRADE ELEVATIONS WITH A CLEAN SELECT–FILL COMPACTED AS SPECIFIED.

6. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR EXCAVATED SPOIL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES.

7. BORROW MATERIAL: THE CONTRACTOR SHALL FURNISH BORROW MATERIAL REQUIRED FROM OFF SITE AND OBTAIN ALL REQUIRED PERMITS ASSOCIATED WITH BORROW OPERATIONS.

8. FILL AND COMPACTION: AFTER STRIPPING THOSE AREAS DESIGNATED TO RECEIVE FILL SHOULD BE PROOFROLLED. THE TOP 8" OF SUBGRADE SHALL BE COMPACTED TO AT LEAST 98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. ANY AREA WHICH PUMPS OR RUTS EXCESSIVELY SHOULD BE UNDERCUT AND REPLACED WITH A CLEAN, SILTY OR CLAYEY SAND HAVING A UNIFIED SOIL CLASSIFICATION OF SP, SM, OR SC. FILL MATERIAL 5" OUTSIDE OF BUILDING AREAS SHALL THEN BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D–698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED TO 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. FILL MATERIALS WITHIN BUILDING AREAS TO A LINE OUTSIDE THE BUILDING AREAS SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D–698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED IN 6 INCH LAYERS TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. IN AREAS WHERE NO STRUCTURAL FILL IS TO BE PLACED THE UPPER 12 INCHES OF IN–PLACE SUBGRADE SHOULD BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. IF THE MATERIAL IS TOO DRY TO COMPACT TO THE REQUIRED DENSITY EACH LAYER SHALL BE WETTED IN ACCORDANCE WITH COMPACTION REQUIREMENTS. IF THE MATERIAL IS TOO WET TO SECURE PROPER COMPACTION, IT SHALL BE HARROWED REPEATEDLY OR OTHERWISE AERATED WITH SUITABLE EQUIPMENT UNTIL OPTIMUM MOISTURE CONTENT IS OBTAINED. FILL SHALL BE PLACED IN SUCH A MANNER THAT THE SURFACE WILL DRAIN READILY AT ALL TIMES. SEE STRUCTURAL NOTES AND SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

9. LAYOUT: THE CONTRACTOR SHALL PROVIDE ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK.

10. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION.

11. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION FROM SURVEY BY MICHAEL UNDERWOOD AND ASSOC. PA AND PROVIDED BY OWNER.

12. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT JOBSITE.

13. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF RELOCATION OR DISCONNECTION OF ALL EXISTING UTILITIES WITH APPLICABLE AGENCIES AND AUTHORITIES.

14. ALL PAVEMENT AND BASE MATERIALS AND WORKMANSHIP SHALL CONFORM TO NCDOT STANDARDS.

15. WATER AND SEWER SERVICES SHALL BE INSTALLED TO MEET LOCAL AND STATE PLUMBING CODES. METER AND TAPS SHALL MEET ALL LOCAL REQUIREMENTS.

16. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE.

17. SEE SOILS REPORT FOR ADDITIONAL REQUIREMENTS.

18. CONTRACTOR SHALL NOTE THAT EARTHWORK QUANTITIES ARE HIS RESPONSIBILITY. PLANS DO NOT REPRESENT A BALANCED EARTHWORK CONDITION.

19. REINF. CONC. PIPE SHALL BE CLASS III W/RUBBER GASKETED JOINT OR "RAM NECK". INSTALL PER MANUFACTURER'S REQUIREMENTS.

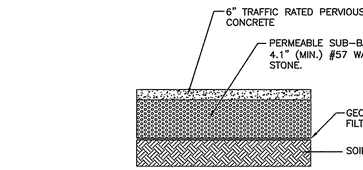
CALL 811 (3) WORKING DAYS BEFORE YOU DIG.

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

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

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		



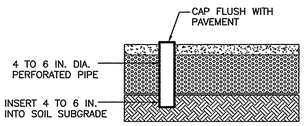
NOTES:

1. TRAFFIC RATED PERVIOUS MATERIALS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

2. PERVIOUS MATERIALS SECTION MAY VARY DEPENDING UPON MANUFACTURER.

NOT TO SCALE

3 PERVIOUS PAVEMENT SECTION

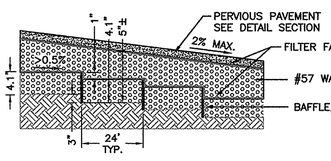


PERVIOUS PAVEMENT OBSERVATION WELL NOTES:

1. IF THE SUBGRADE IS NOT TERRACED, THEN THE OBSERVATION WELL SHALL BE PLACED AT THE LOW END OF THE SUBGRADE SLOPE. IF THE SUBGRADE IS TERRACED, THEN ONE OBSERVATION WELL SHALL BE BUILT INTO THE LOW END OF EACH TERRACE.
2. OBSERVATION WELLS SHALL BE FITTED WITH A LOCKABLE CAP INSTALLED PLACED EVEN WITH THE PAVEMENT SURFACE TO FACILITATE QUARTERLY INSPECTION AND MAINTENANCE.
3. THE OBSERVATION WELL SHALL CONSIST OF A RIGID 4 TO 6 IN. DIAMETER PERFORATED PVC PIPE.

NOT TO SCALE

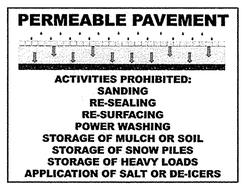
4 PERVIOUS PAVEMENT OBSERVATION WELL DETAIL



1. DEPTH OF PERVIOUS PAVEMENT AS SPECIFIED FROM LOADING CONDITIONS.
2. TOTAL WASHED STONE DEPTH PER MANUFACTURERS SPECS FOR LOAD BEARING CAPACITY.
5. CONTRACTOR SHALL PROTECT PERVIOUS PAVEMENT FROM SEDIMENTATION UNTIL SURROUNDING PERMANENT VEGETATION IS ESTABLISHED.

NOT TO SCALE

5 PERVIOUS PAVEMENT SECTION WITH BAFFLE



NOTES:
1. THE PERMEABLE PAVEMENT SIGN IS BASED ON AN 18" X 24" STANDARD SIZE FOR SIGN PRODUCTION.
2. A HIGH–RESOLUTION IMAGE FILE CAN BE PROVIDED BY THE DWQ FOR USE IN FABRICATING THE SIGN. THE GRAFFIC IS IN COLOR BUT COLOR SIGNS ARE NOT REQUIRED.

6 PERMEABLE PAVEMENT SIGNAGE DETAIL

PERMEABLE PAVEMENT CONSTRUCTION SEQUENCE:

The following is a typical construction sequence to properly install pervious concrete. The means and methods of installation shall be determined by the contractor and shall be installed per the manufacturer recommendations, product standards and industry guidelines.

Step 1. Construction of the permeable pavement shall only begin after the entire contributing drainage area has been stabilized. The proposed site should be checked for existing utilities prior to any excavation. Do not install the system in rain or snow.

Step 2. Temporary erosion and sediment (E&S) controls (silt fence) are needed during installation to divert stormwater away from the permeable pavement area until it is completed. The proposed permeable pavement area must be kept free from sediment during the entire construction process. Construction materials that are contaminated by sediments must be removed and replaced with clean materials.

Step 3. Where possible, excavators or backhoes should work from the sides to excavate the aggregate layer to its appropriate design depth and dimensions.

Step 4. In-situ soil testing shall be done after excavation to verify existing infiltration rate. Soils testing shall be conducted by an appropriately qualified professional, the testing can be done by the contractor, the designer, or a third party hired by owner. The results of the testing shall be given to the designer of record for review. If results show a lower infiltration rate than the rate of design the depth of aggregate must be revised.

Step 5. The native soils along the bottom and sides of the permeable pavement system should be scarified or tilled to a depth of 3 to 4 inches prior to the placement of the filter layer or filter fabric.

Step 6. Filter fabric should be installed on the bottom and the sides of the aggregate layer.

Step 7. Place observation wells as shown on plans.

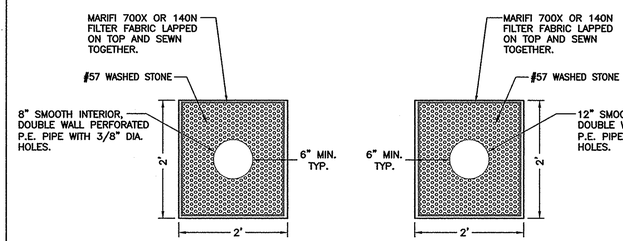
Step 8. Inspect all aggregate prior to placement. Ensure aggregate is clean, free of fines and conform to the plans and specifications. All aggregate shall be spread (not dumped). Moisten and spread the washed stone without driving on the soil subgrade, being careful not to damage the observation wells. Follow compaction recommendations by the permeable pavement manufacturer or that from industry guidelines.

Step 9. Ensure edge restraints and barriers between permeable pavement are installed per design.

Step 10. Contractor is to follow standard installation procedures for the specific type of pervious pavement that is being installed. For this project pervious concrete will be installed. Only certified and experienced contractors shall install the pervious concrete and installation shall be per the manufacturer recommendations, product standards and industry guidelines. Pervious concrete shall be constructed in accordance with the latest version of ACI 522.1, Specifications for Pervious Concrete.

Step 11. After installation, protect the installed pervious concrete until project completion, including routing construction traffic away from the installed pervious concrete. Contractor shall provide protection techniques including mats, plastic sheeting and barriers to ensure the pervious concrete remains protected until project completion.

7 PERMEABLE PAVEMENT CONSTRUCTION SEQUENCE



8" PERFORATED PIPE TRENCH DETAIL

12" PERFORATED PIPE TRENCH DETAIL

8 PERFORATED PIPE TRENCH DETAILS

9 TYPICAL GRASS SWALE

NOTES AND DETAILS
WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

OWNER/DEVELOPER
HAROLD W. WELLS, IV, MANAGER
WELLS REAL ESTATE HOLDINGS, LLC
1 NORTH THIRD STREET
WILMINGTON, NC 28401
910 251-5402

NORRIS & TUNSTALL
CONSULTING ENGINEERS, P.C.
902 MARKET STREET, WILMINGTON, NC 28401 PHONE (910) 343–9653
1429 ASH–LITTLE RIVER RD. NW, ASH, NC 28420 PHONE (910) 287–5900
licence #C–3641

15005

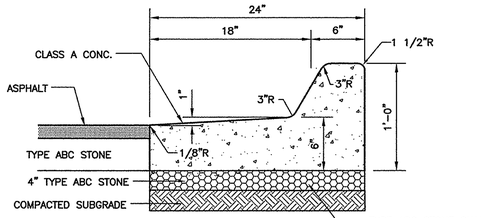
DES.	JST
CKD.	JPN
DRWN.	NKS
DATE	7/19/16

NORTH CAROLINA PROFESSIONAL SEAL 030869 ENGINEER JASON CLARK 7/19/16

C2

F:\Projects\2015\15005 Wells Insurance Oleander Dr. Site\15005 Plans\dwg\15005.master.R3.dwg, 7/19/2016 9:48:50 AM

NOTE: INSTALLATION OF NEW 24" CURB AND GUTTER ANY COW OR NCDOT STREET SHALL REQUIRE A MINIMUM OF 6" ABC STONE BASE.

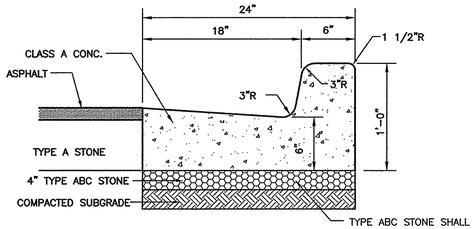


NOTE: CURB TYPE DEPENDS ON GRADES SHOWN ON GRADING PLAN. GRADES INDICATING FALL AWAY FROM CURB SHALL BE SPILL OFF TYPE CURB. GRADES INDICATING CURB ACCEPTING FLOW SHALL BE FLOW LINE TYPE.

NOT TO SCALE

1 24" CURB AND GUTTER SECTION (SPILL-OFF)

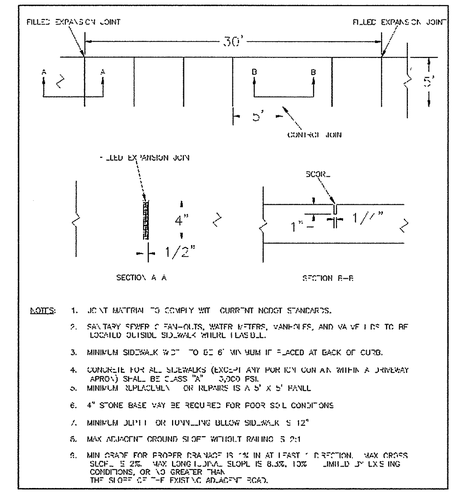
NOTE: INSTALLATION OF NEW 24" CURB AND GUTTER ANY COW OR NCDOT STREET SHALL REQUIRE A MINIMUM OF 6" ABC STONE BASE.



NOTE: CURB TYPE DEPENDS ON GRADES SHOWN ON GRADING PLAN. GRADES INDICATING FALL AWAY FROM CURB SHALL BE SPILL OFF TYPE CURB. GRADES INDICATING CURB ACCEPTING FLOW SHALL BE FLOW LINE TYPE.

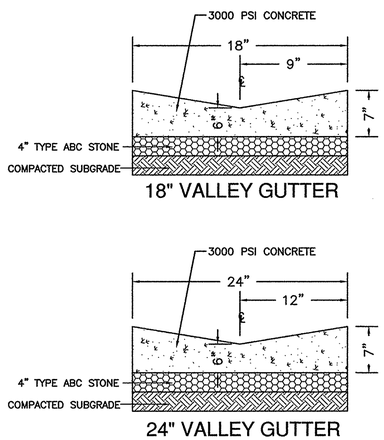
NOT TO SCALE

2 24" CURB AND GUTTER SECTION (FLOW-LINE)

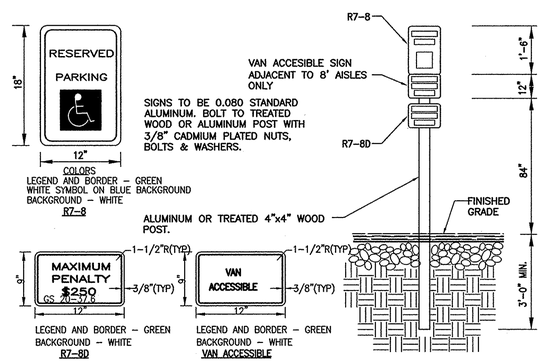


NOT TO SCALE

3 STANDARD SIDEWALK DETAIL

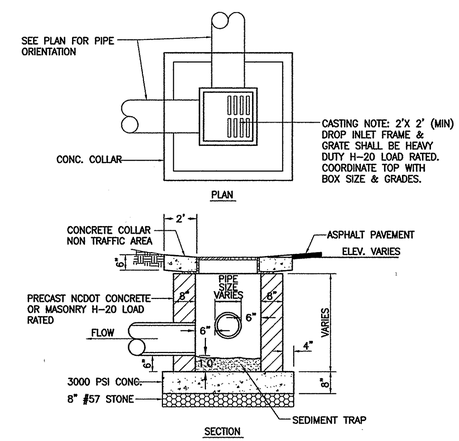


4 VALLEY GUTTER DETAILS



NOT TO SCALE

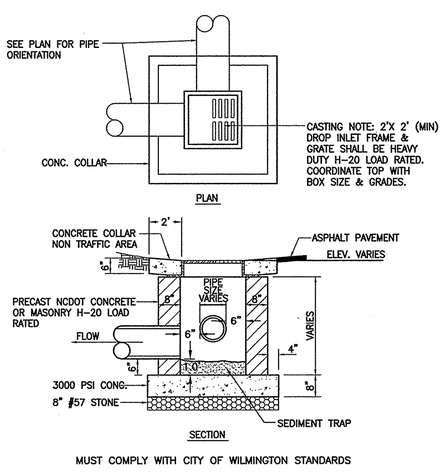
5 TYPICAL HANDICAPPED SIGN DETAIL



MUST COMPLY WITH CITY OF WILMINGTON STANDARDS

NOT TO SCALE

6 DROP INLET DETAIL

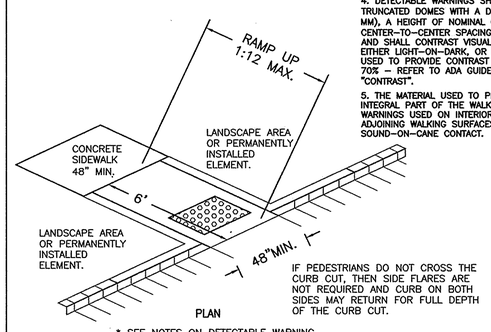


MUST COMPLY WITH CITY OF WILMINGTON STANDARDS

NOT TO SCALE

7 DROP INLET DETAIL

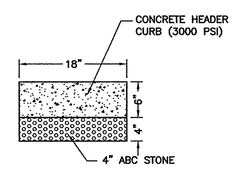
NOTE:
1. RAMP SHALL HAVE A DETECTABLE WARNING COMPLYING WITH ADA GUIDELINES:
2. THE DETECTABLE WARNINGS AT CURB RAMPS SHALL BE 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
3. MARKED CROSSINGS THAT ARE RAISED TO THE SAME LEVEL AS THE ADJOINING SIDEWALK SHALL BE PRECEDED BY A 24 INCH DEEP DETECTABLE WARNING EXTENDING THE FULL WIDTH OF THE MARKED CROSSING.
4. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23 MM), A HEIGHT OF NOMINAL 0.2 IN (5 MM) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN (60 MM) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70% – REFER TO ADA GUIDELINES FOR DEFINITION OF "CONTRAST".
5. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT.



* SEE NOTES ON DETECTABLE WARNING

NOT TO SCALE

8 SIDEWALK, CURB CUT AND WHEEL CHAIR RAMP DETAIL



NOT TO SCALE

9 18" CONCRETE HEADER DETAIL

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

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

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

CITY OF WILMINGTON STANDARD NOTES:

1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
2. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING;
3. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
4. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
5. INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
6. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
7. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
8. IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. POSTED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
9. CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
10. 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.
11. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS, AND CURBING WILL BE REPLACED.
12. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
13. PROJECT SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
14. IF THE 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.
15. ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REGULATIONS. CALL 332-6558 FOR INFORMATION.
16. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCCCHR OR ASSE.
17. WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED SINGLE STRAND COPPER WIRE INSTALLED THE ENTIRE LENGTH AND SECURED TO ALL VALVES. THIS WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
18. THE NUMBER AND SPACING OF DRIVEWAYS FOR ALL INTERCONNECTED SITES WILL BE DETERMINED BY THE COMBINED FRONTAGE OF THE INTERCONNECTED PROPERTIES.
19. UNDERGROUND FIRE LINE MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC ROW TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
20. A LANDSCAPE PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEER DIVISION AND PARKS AND RECREATIN DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.
21. IF AND IRRIGATION SYSTEM IS PLANNED FOR THE SITE, UTILIZE MOISTURE SENSORS.
22. ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.
23. PLEASE CONSIDER INCORPORATING XERIC LANDSCAPING FOR ALL NEW LANDSCAPING.

UTILITY NOTES FOR FIRE HYDRANTS:

1. FIRE HYDRANTS MUST BE WITHIN 150' OF THE FIRE DEPARTMENT CONNECTION.
2. THE FIRE DEPARTMENT CONNECTION MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
3. LANDSCAPING AND PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTIONS OR FIRE HYDRANTS. A 3' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANT CONNECTION AND THE FIRE HYDRANT.
4. FIRE HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
5. NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDINGS.
6. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
7. THE CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
8. TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES.
9. UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
10. A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND UTILITIES.
11. HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMODATE BASE FIRE FLOW REQUIREMENTS OF THE STRUCTURE.
12. BUILDING CONSTRUCTION TYPE: VB

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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NOTES AND DETAILS
WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

OWNER/DEVELOPER
HAROLD W. WELLS, IV, MANAGER
WELLS REAL ESTATE HOLDINGS, LLC
1 NORTH THIRD STREET
WILMINGTON, NC 28401
910 251-5402

NORRIS & TUNSTALL
CONSULTING ENGINEERS, P.C.
902 MARKET STREET
WILMINGTON, NC 28401
PHONE (910) 343-9653
1429 ASH-LITTLE RIVER RD. NW
AIKEN, SC 29801
PHONE (910) 287-5900
licence #C-3641

15005

DES. JST
CKD. JPN
DRWN. NKS
DATE 7/19/16

NORTH CAROLINA PROFESSIONAL SEAL 030869 ENGINEER T. JASON CLARK 7/19/16

C3

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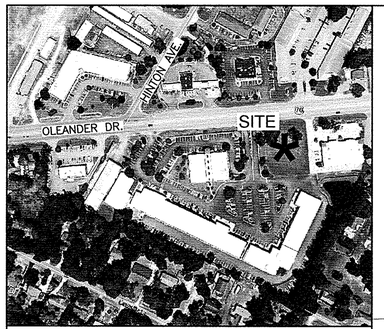

VICINITY MAP NTS

R06206-007-004-000
5709 OLEANDER DR.
ZONED O&I-1
RESTAURANT
MARO ENTERPRISES LLC

R06207-003-018-000
5725 OLEANDER DR.
ZONED CB
CONDOMINIUM COMMON AREA
OLEANDER OAKS CONDOMINIUM

OLEANDER DRIVE
100' PUBLIC ROW

SS MANHOLE
RIM 19.52
INV. 9.35

DROP INLET
TOP 16.29
INV. 14.18(18")
~~INV. 14.25(15")~~
INV. 14.18(12")
BOT. 13.97

SS MANHOLE
RIM 18.30
INV. 10.43

EXIST. 8" SEWER

EXIST. 8" WATERLINE

N86°53'15"E 181.25'

EX. FH

12"CMP

DROP INLET
TOP 17.38
INV. 14.44

30' ACCESS EASEMENT
MAP BOOK 31 PAGE 121

PROPOSED
BUILDING
4,455 SF
FFE=21.0

FUTURE
ADDITION
2,054 SF

TRACT C
MAP BOOK 32 PAGE 238

R06207-020-006-000
5732 OLEANDER DR.
ZONED CB
COMMERCIAL
R FUTURE LLC

DROP INLET
TOP 16.95
INV. 14.45
BOT. 14.18

S03°06'45"E 180.00'

TRACT A
(REVISION)
MAP BOOK 32 PAGE 238

R06206-012-002-000
5704 OLEANDER DR.
ZONED CB
COMMERCIAL
OLEANDER COURTYARD CONDO ASSN.

TRACT "B" - (REVISION)
0.75 ACRES +/-
MAP BOOK 32 PAGE 238

EXISTING SHRUBS

CREPE MYRTLE

S86°53'15"W 181.25'

30' ACCESS EASEMENT
MAP BOOK 32 PAGE 238

15"RCP

15"CMP

DROP INLET
TOP 17.51
INV. 15.10(15"W)
INV. 14.83(15"E)
BOT. 14.55

DROP INLET
TOP 16.76
INV. 13.92(15"W)
INV. 13.47(24"E)
BOT. 13.38

24"CMP

DROP INLET
TOP 17.16
INV. 13.11(24"W)
INV. 13.04(24"E)
BOT. 13.05

24" CMP TO POND

TRACT D
(REVISION)
MAP BOOK 32 PAGE 238

R06206-012-013-000
5710 OLEANDER DR.
ZONED CB
OLEANDER BUSINESS COMMON AREA
OBC COA INC

SCALE: 1" = 20'
0 20 40 60

INVENTORY SITE DATA

EXISTING PARCEL ID#:	R06206-012-011-000
EXISTING PARCEL PIN#:	314608.78.9926.000
PARCEL ADDRESS:	5712 OLEANDER DRIVE
PARCEL OWNER:	WELLS REAL ESTATE HOLDINGS LLC
EXISTING PARCEL AREA:	0.75 AC (32,625 SF)
PROPOSED PARCEL USE:	OFFICE
CURRENT ZONING:	CB-COMMUNITY BUSINESS
CAMA LAND CLASSIFICATION:	WATERSHED RESOURCE PROTECTION
SOIL TYPE:	Se (HYDROLOGIC SOIL GROUP "A")
SITE DOES NOT LIE WITHIN 100 YEAR FLOOD PLAIN	
NO CAMA AREAS OF CONCERN OR ASSOCIATED SETBACKS	
HISTORICAL/ARCHAEOLOGICAL SITE:	NONE
CEMETERY:	NONE
FORESTED AREA:	SEE PLAN FOR TREE SURVEY
WETLANDS:	NONE EXIST WITHIN SITE AREA
ENDANGERED SPECIES/HABITAT:	NONE REPORTED

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

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

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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SITE INVENTORY PLAN
WELLS INSURANCE OLEANDER DR. SITE
5712 OLEANDER DRIVE
WILMINGTON, N. C.

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DES.	JST
CKD.	JPN
DRWN.	NKS
DATE	7/19/16

NORTH CAROLINA PROFESSIONAL SEAL 030669 ENGINEER JASON CLARK
7/19/2016

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