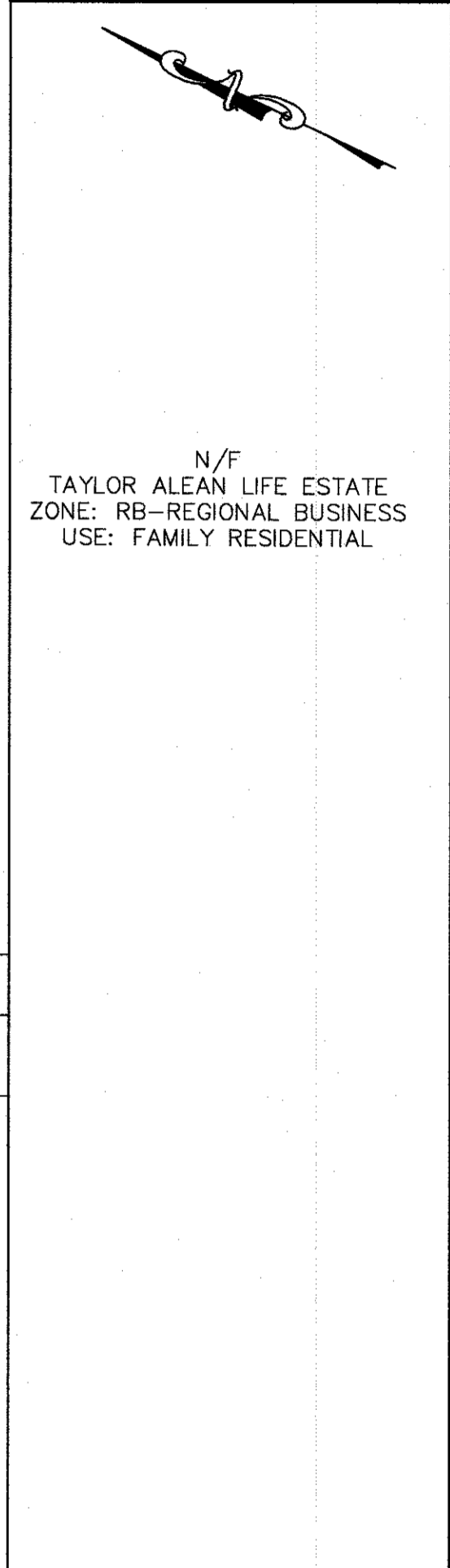


REVISIONS		
No./Date	Description	By



**SITE INVENTORY AND DEMOLITION PLAN**  
**PARKWAY VOLVO**  
 OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC  
 ADDRESS: 5820 MARKET ST., WILMINGTON, NC

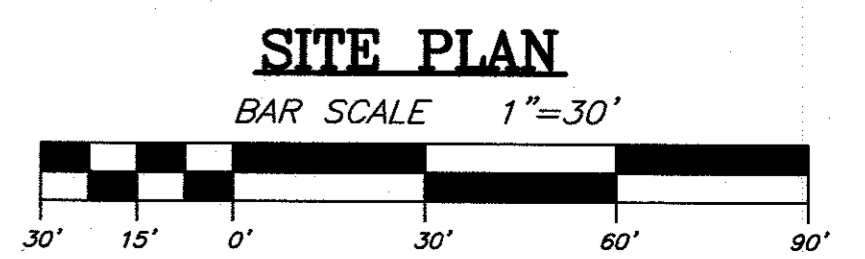
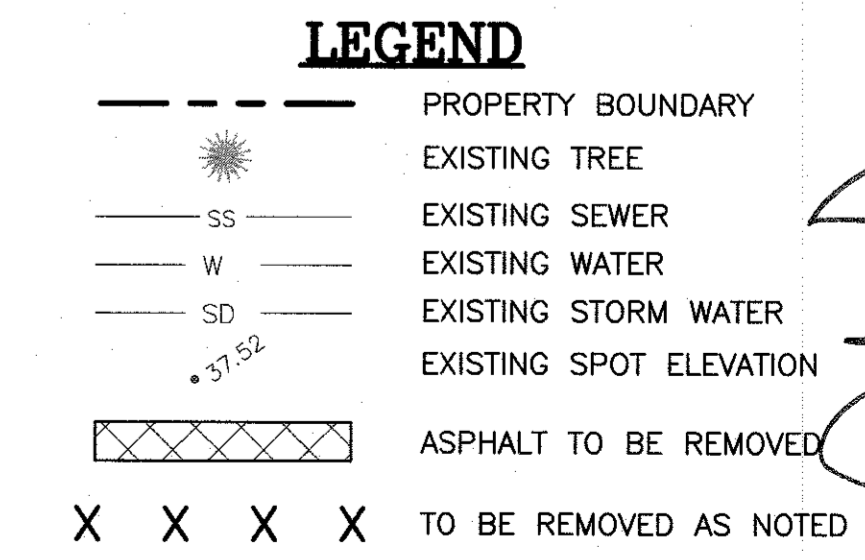
PLEASE NOTE: ALL EXISTING ASPHALT AND CURBING TO BE REMOVED

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	

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

- SITE INVENTORY NOTES:**
- PREPARER OF THE PLAN: TRIPP ENGINEERING, P.C.
  - APPLICANT NAME: PARKWAY VOLVO
  - SITE ADDRESS OF THE DEVELOPMENT: 5820 MARKET ST.
  - PROPERTY OWNER: WILMINGTON AUTO GROUP PROPERTIES, LLC
  - DEVELOPER: PARKWAY VOLVO
  - PROPERTY BOUNDARY: SEE PLAN  
TAX PARCEL INFORMATION: R05010-001-003-000
  - PROPERTY ZONING: RB-REGIONAL BUSINESS
  - ADJACENT PROPERTY OWNER INFORMATION: SEE PLAN
  - VICINITY MAP: SEE PLAN
  - TOPOGRAPHY: SEE PLAN
  - 100-YEAR FLOOD BOUNDARY: N/A
  - EXISTING DITCHES, CREEKS AND STREAMS: SEE PLAN
  - SOIL: Se; SEAGATE FINE SAND
  - CAMA AEC: N/A
  - CAMA LAND CLASSIFICATION: URBAN
  - CONSERVATION RESOURCES: NONE  
ASSOCIATED SETBACKS: N/A
  - HISTORIC OR ARCHAEOLOGICAL SITE: N/A
  - CEMETERIES, BURIAL SITES/GROUNDS: N/A
  - FORESTED AREAS, HABITAT AND DOMINANT SPECIES: N/A
  - WETLANDS: NO WETLANDS EXIST ON SITE
  - PROTECTED SPECIES OR HABITAT: N/A
  - EXISTING OR PROPOSED THOROUGHFARES, BIKE ROUTES, PEDESTRIAN SIDEWALKS OR TRAILS AND TRANSIT FACILITIES: SEE SITE PLAN

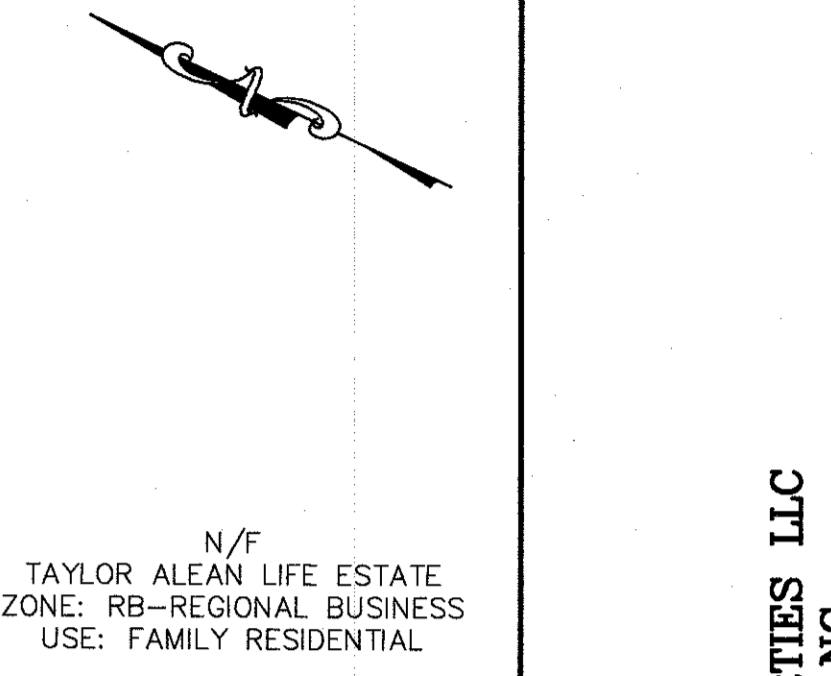
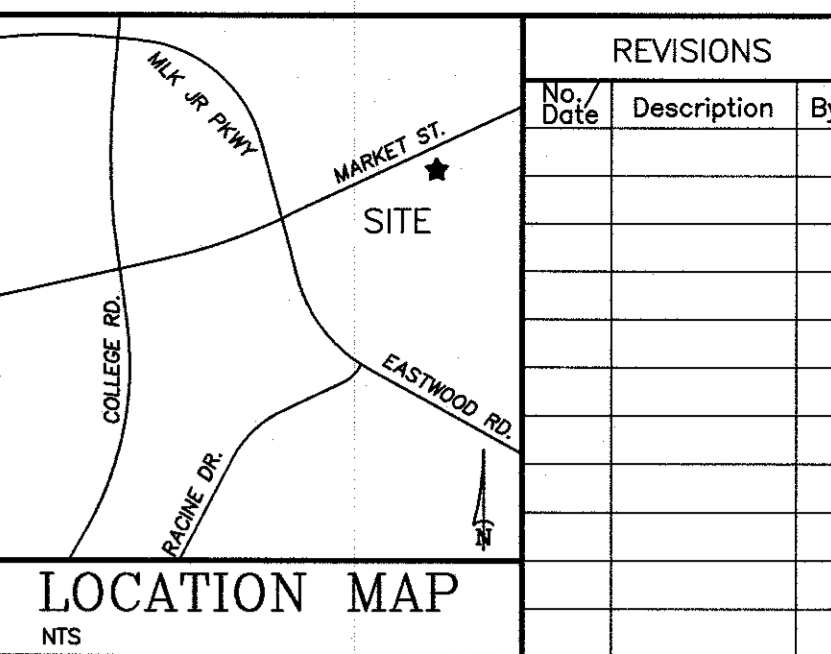
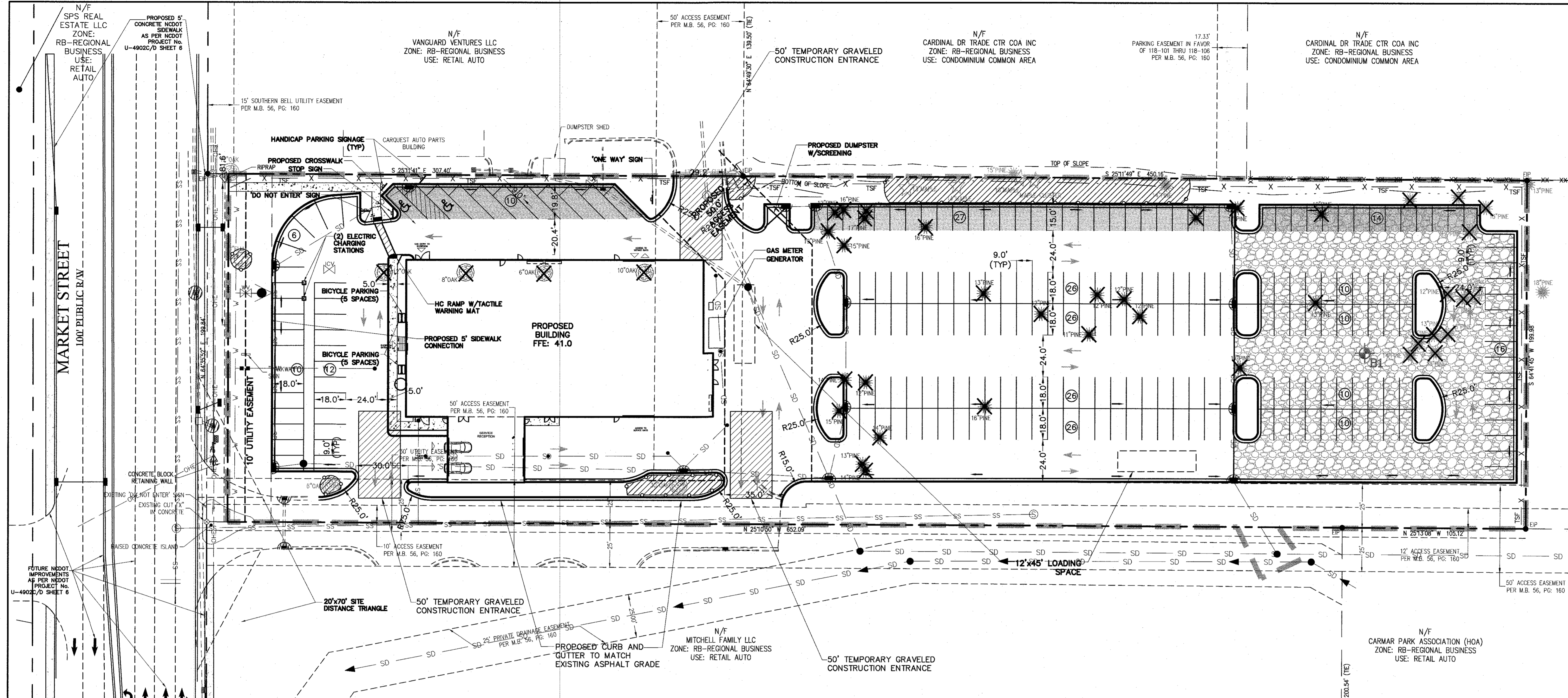


**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
 © LICENSE NO. 52127



DATE 01-23-19  
 DESIGN PGT  
 DRAWN EJW

**C1**  
 SHEET 1 OF 6  
 17069



REVISIONS		
No./Date	Description	By

**SITE AND TREE REMOVAL PLAN**  
**PARKWAY VOLVO**  
 OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC  
 ADDRESS: 5820 MARKET ST., WILMINGTON, NC

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	

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

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

**SITE DATA:**

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 Ac.
SETBACKS REQUIRED	FRONT: 25' REAR: 15' INTERIOR SIDE: 0' CORNER LOT SIDE: 25'
PROPOSED BUILDING SETBACKS	FRONT: 101' REAR: 484' SIDE: 42' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IBB
PROPOSED BUILDING AREA (GROSS)	17,500 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORIES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,650 SF

**SITE DATA: (CONT'D)**

EXISTING ON-SITE IMPERVIOUS AREAS:	
EXISTING BUILDINGS	
EXISTING ASPHALT	48,507 SF
EXISTING CONCRETE	
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF (32%)
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
PROPOSED ON-SITE IMPERVIOUS AREAS:	
PROPOSED BUILDING	17,265 SF
PROPOSED ASPHALT	73,869 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,503 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
PERM. GRID 22,294 S.F. 100% PERVIOUS	17,008 SF
PROPOSED-EXISTING IMPERVIOUS	109,311 SF (72.2%)
PARKING REQUIRED: (AUTOMOBILE DEALER)	17,265 SF
MINIMUM: 1/500 SF (17,265/500)	53
TOTAL PARKING PROVIDED:	239
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CFPWA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED (1-2% SPACES = 1 HANDICAP SPACE)	PROPOSED 35 SPACES/25=1.4
BICYCLE PARKING REQUIRED: (35 PARKS)	2 HANDICAP SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

**NOTES:**

**ZONING**

- TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
- PERMITTING OF BUSINESS IDENTIFICATION SIGNAGE IS A SEPARATE PROCESS. CITY OF WILMINGTON WILL NOT ALLOW OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY.
- CONTRACTOR SHALL MAINTAIN FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
- EXISTING EASEMENTS AS SHOWN.
- CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND FIRE LINE(S) 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 910-341-0696.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT. (SD 15-14 C&M TECH STDS)

**SOLID WASTE**

- SITE TO USE ON-SITE DUMPSTER.

**TRAFFIC**

- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR MCDOT STANDARDS. (DETAIL 50-13 C&M TECH STDS)
- ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD-13 C&M TECH STDS)
- CONTRACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNALS FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
- CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- CONTRACT TRAFFIC ENGINEERING AT 741-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- NO ROWS TO BE CLOSED.
- NO STREETS PROPOSED.
- NO OFF SITE PARKING PROPOSED.
- NO PROPOSED DRIVEWAY.
- TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
- FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT. (SD 15-14 C&M TECH STDS)

**FIRE AND LIFE SAFETY**

- CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
- HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
- FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
- ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-343-0696
- ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.

**NOTES: (CONT'D)**

**LANDSCAPING**

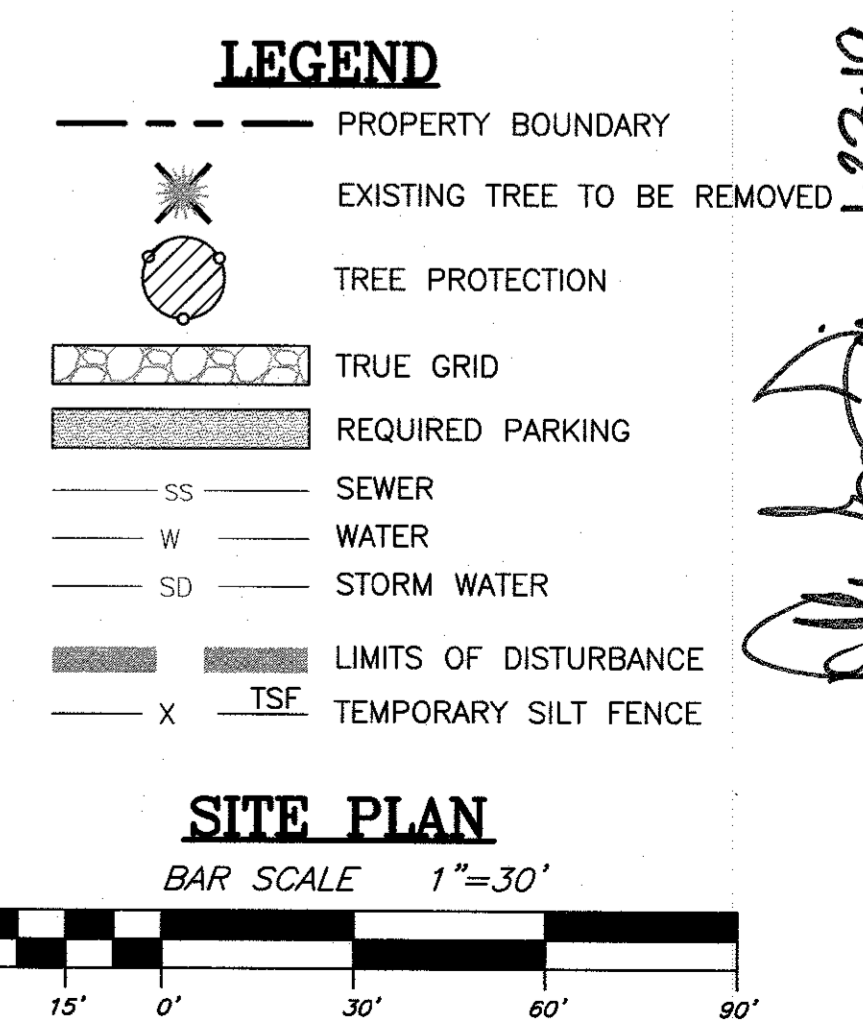
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND OBSTRUCTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.

**CEPLA**

- WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 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 DEVELOPERS SIDE OF THE WATER METER BOX.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA'S CONNECTION CONTROL REGULATION. CALL 332-8419 FOR INFORMATION.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOORR OR ASSE.
- PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
- CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
- ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

**DEADENDS**

- SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCEQD PERMIT No. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT No. 2004022 & 2012023



**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
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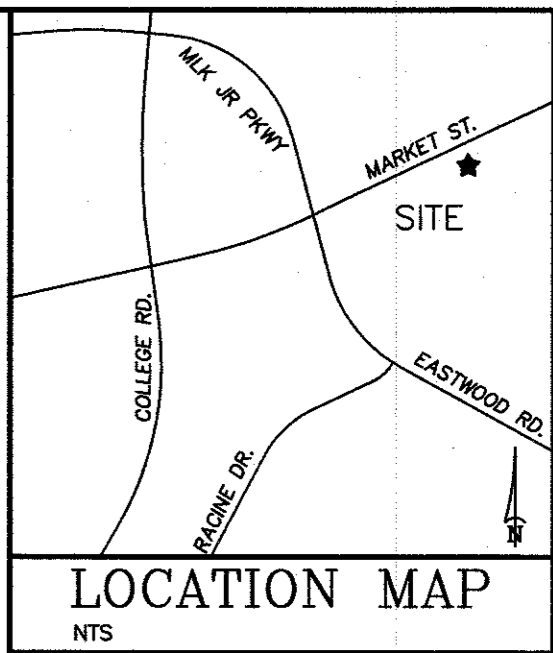
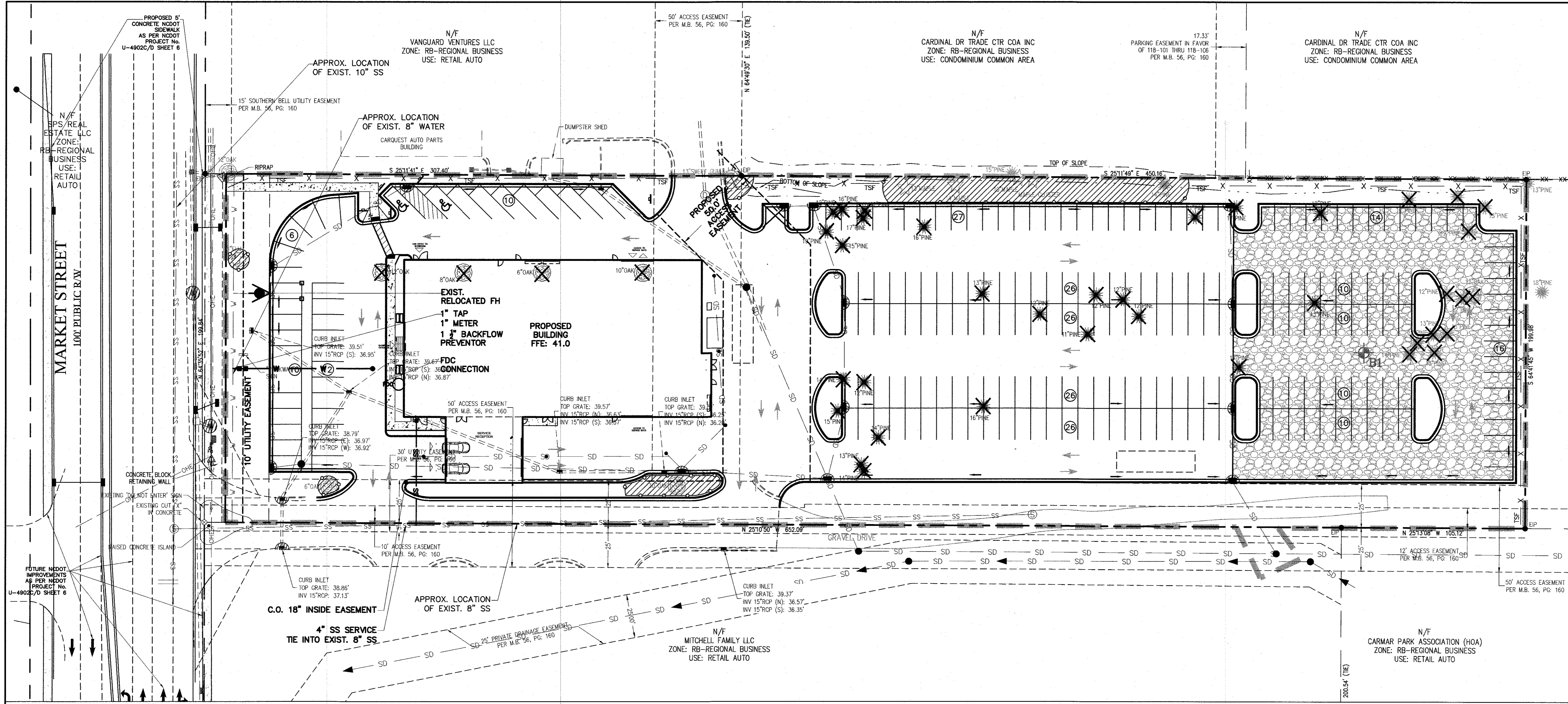
1-23-19

**SEAL**  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 PHILIP GREGORY TRIPP  
 17374

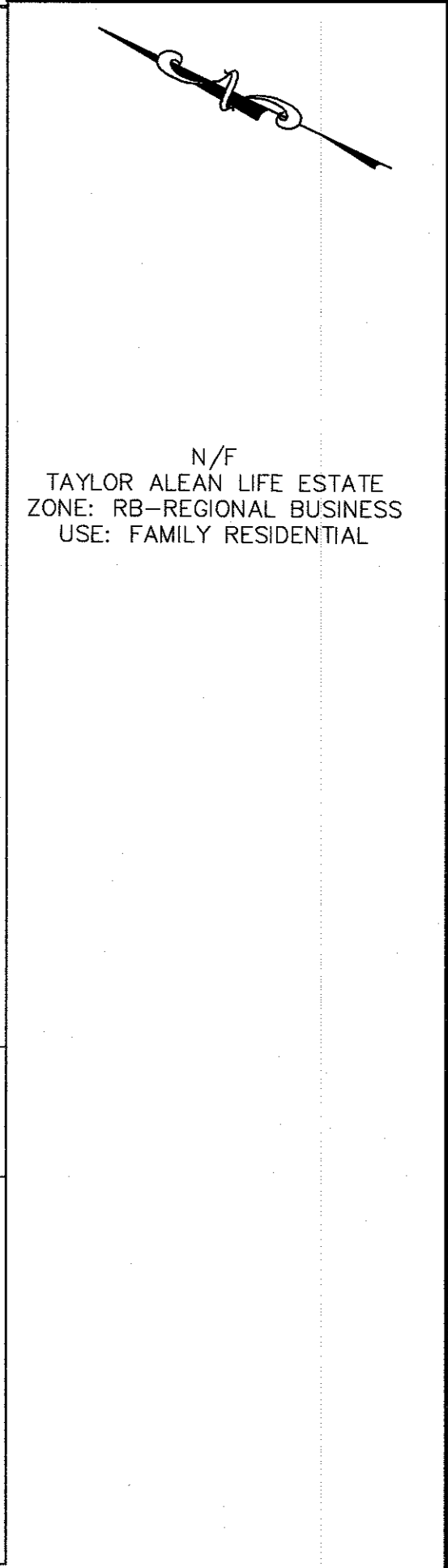
DATE 01-23-19  
 DESIGN PGT  
 DRAWN EJW

**C2**

SHEET 2 OF 6  
 17069



REVISIONS		
No./Date	Description	By



**UTILITY PLAN**

**PARKWAY VOLVO**  
 OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC  
 ADDRESS: 5820 MARKET ST., WILMINGTON, NC

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	

**City of Wilmington**  
 Public Services • Engineering Division  
 APPROVED STORMWATER MANAGEMENT PLAN

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

**SITE DATA:**

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 Ac.
<b>SETBACKS REQUIRED</b>	
FRONT:	25'
REAR:	15'
INTERIOR SIDE:	0'
CORNER LOT SIDE:	25'
<b>PROPOSED BUILDING SETBACKS</b>	
FRONT:	101'
REAR:	464'
SIDE:	42'
CORNER LOT SIDE:	N/A
<b>TRACT AREA</b>	
	151,429 SF (3.47 AC)
<b>BUILDING USE</b>	
BUILDING TYPE	AUTOMOBILE DEALER
<b>PROPOSED BUILDING AREA (GROSS)</b>	
BUILDING LOT COVERAGE (15,850/151,429)	17,500 SF
NUMBER OF UNITS	10%
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORIES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,650 SF

**SITE DATA: (CONT'D)**

<b>EXISTING ON-SITE IMPERVIOUS AREAS:</b>	
EXISTING BUILDINGS	48,507 SF
EXISTING ASPHALT	48,507 SF (32%)
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF (32%)
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
<b>PROPOSED ON-SITE IMPERVIOUS AREAS:</b>	
PROPOSED BUILDING	17,265 SF
PROPOSED ASPHALT	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
TRUE GRID 22,094 S.F. 100% PERVIOUS FUTURE	17,008 SF
PROPOSED+EXISTING IMPERVIOUS	109,311 SF (72.2%)
<b>PARKING REQUIRED: (AUTOMOBILE DEALER)</b>	
	17,265 SF
MINIMUM:	1,500 SF (17,265/500)
<b>TOTAL PARKING PROVIDED:</b>	
	239
<b>CAMA LAND USE:</b>	
	URBAN
<b>PUBLIC WATER AND SEWER BY CFPWA</b>	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	600 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
<b>HANDICAP SPACES REQUIRED (1-2% SPACES= 1 HANDICAP SPACE)</b>	
35 SPACES/25-1.4	2 HANDICAP SPACES
<b>BICYCLE PARKING REQUIRED: (35 PARKS)</b>	
BICYCLE PARKING PROVIDED:	10 SPACES

**NOTES:**

**ZONING**

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, P.L.C.
- 2) PERMITTING OF BUSINESS IDENTIFICATION SIGNAGE IS A SEPARATE PROCESS. CITY OF WILMINGTON WILL NOT ALLOW OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY.
- 3) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
- 4) EXISTING EASEMENTS AS SHOWN.
- 5) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 6) UNDERGROUND FIRE LINE(S) 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 910-341-0566.
- 7) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- 8) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT. (SD 15-14 COW TECH STDS)

**SOLID WASTE**

- 1) SITE TO USE ON-SITE DUMPSTER.

**TRAFFIC**

- 1) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 COW TECH STDS)
- 2) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD-13 COW TECH STDS)
- 3) CONTRACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNALS FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
- 4) CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- 5) ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBS WILL BE REPLACED.
- 6) CONTRACT TRAFFIC ENGINEERING AT 741-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 7) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 8) NO ROWS TO BE CLOSED.
- 9) NO STREETS PROPOSED.
- 10) NO OFF SITE PARKING PROPOSED.
- 11) NO PROPOSED DRIVEWAY.
- 12) TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- 13) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 14) STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
- 15) TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- 16) 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.
- 17) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT. (SD 15-14 COW TECH STDS)

**FIRE AND LIFE SAFETY**

- 1) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
- 2) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
- 3) HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
- 4) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- 5) LANDSCAPING OR PARKING CANYOT BLOCK OR IMPEDS THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
- 6) ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT
- 7) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0566
- 8) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.

**NOTES: (CONT'D)**

**LANDSCAPING**

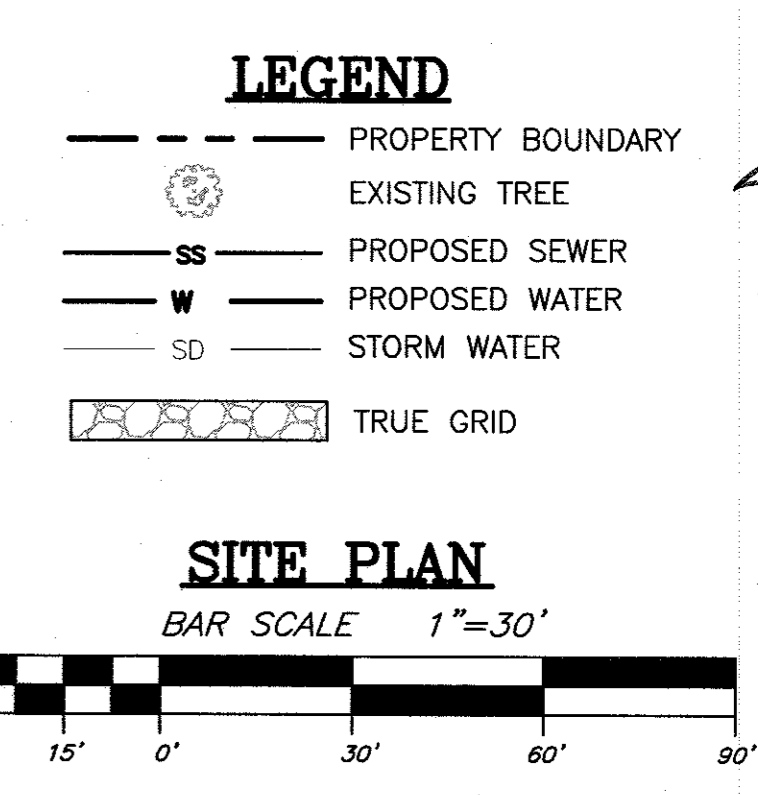
- 1) PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 3) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL REVEAL ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.
- 4) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.

**SEWIA**

- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS. CALL 332-8419 FOR INFORMATION.
- 2) PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 3) 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 DEVELOPERS SIDE OF THE WATER METER BOX.
- 4) ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA'S CONNECTION CONTROL REGULATION. CALL 332-8419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USEFCOCHR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
- 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
- 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

**DRAINAGE**

- 1) SILE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT NO. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023

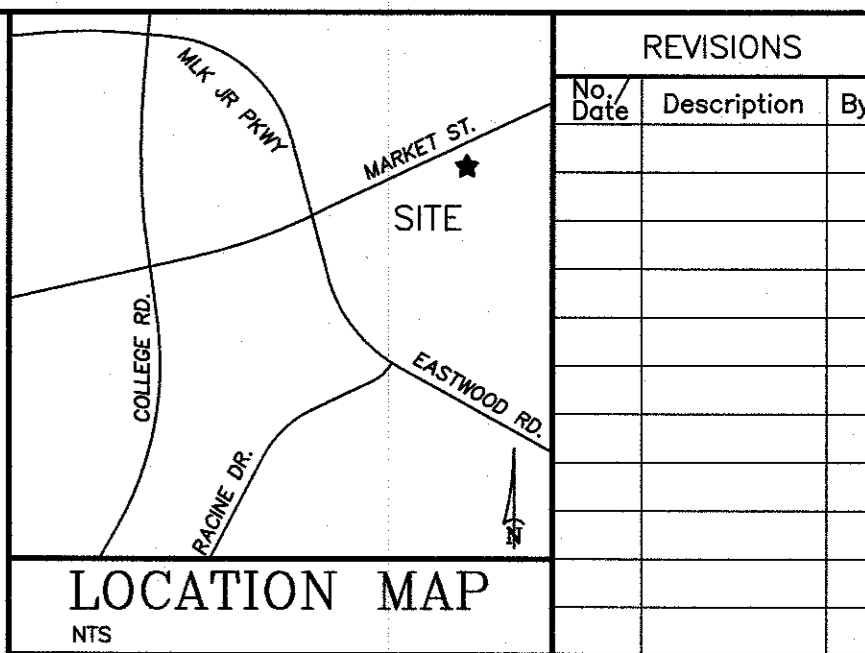
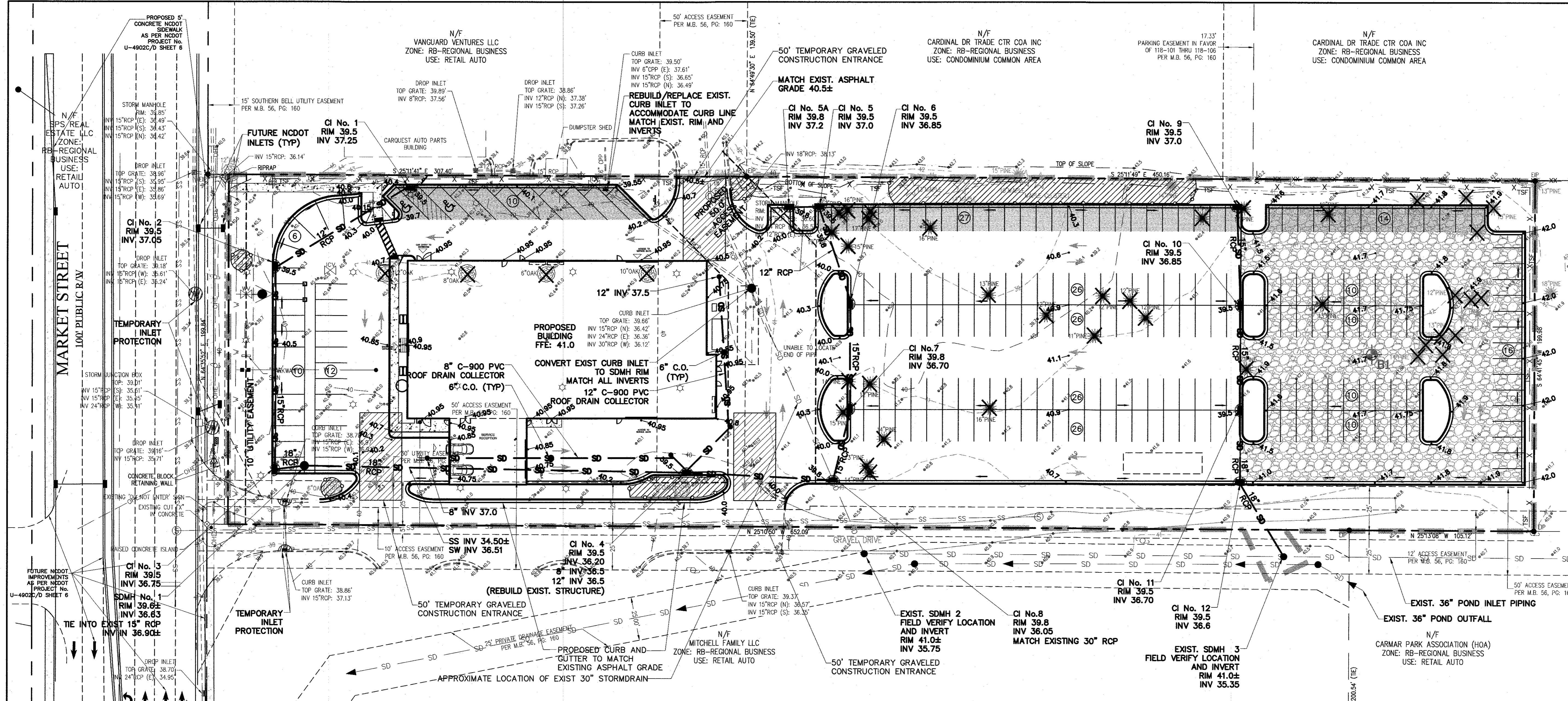


**TRIPP ENGINEERING, P.C.**  
 419 Chestnut Street  
 Wilmington, North Carolina 28401  
 Phone 910-763-5100  
 Fax 910-763-5631  
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DATE 01-23-19  
 DESIGN PGT  
 DRAWN EJW

**C3**

SHEET 3 OF 6  
 17069



REVISIONS		
No./Date	Description	By

N/F  
TAYLOR ALEAN LIFE ESTATE  
ZONE: RB-REGIONAL BUSINESS  
USE: FAMILY RESIDENTIAL

N/F  
CARDINAL DR TRADE CTR COA INC  
ZONE: RB-REGIONAL BUSINESS  
USE: CONDOMINIUM COMMON AREA

N/F  
VANGUARD VENTURES LLC  
ZONE: RB-REGIONAL BUSINESS  
USE: RETAIL AUTO

N/F  
MITCHELL FAMILY LLC  
ZONE: RB-REGIONAL BUSINESS  
USE: RETAIL AUTO

N/F  
CARMAR PARK ASSOCIATION (HOA)  
ZONE: RB-REGIONAL BUSINESS  
USE: RETAIL AUTO

GRADING, DRAINAGE, EROSION CONTROL AND  
STORMWATER MANAGEMENT PLAN  
**PARKWAY VOLVO**  
OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC  
ADDRESS: 5820 MARKET ST., WILMINGTON, NC

TRIPP ENGINEERING, P.C.  
419 Chestnut Street  
Wilmington, North Carolina 28401  
Phone 910-763-5100  
Fax 910-763-5631  
© LICENSE NO. EC-127

1-23-19

DATE 01-23-19  
DESIGN PGT  
DRAWN EJW

**C4**

SHEET 4 OF 6  
17069

**NOTES:**

- ZONING**
- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
  - 2) PERMITTING OF BUSINESS IDENTIFICATION SIGNAGE IS A SEPARATE PROCESS. CITY OF WILMINGTON WILL NOT ALLOW OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY.
  - 3) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
  - 4) EXISTING EASEMENTS AS SHOWN.
  - 5) CONTRACTOR SHALL MAINTAIN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
  - 6) UNDERGROUND FIRE LINE(S) 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 910-341-0966.
  - 7) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  - 8) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN. (SD 15-14 COW TECH STD)
- SOLID WASTE**
- 1) SITE TO USE ON-SITE DUMPSTER.
- TRAFFIC**
- 1) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 COW TECH STD)
  - 2) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD-13 COW TECH STD)
  - 3) CONTRACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNALS FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
  - 4) CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
  - 5) ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING SHALL BE REPLACED.
  - 6) CONTRACT TRAFFIC ENGINEERING AT 741-7888 TO DISCUSS STREET LIGHTING OPTIONS.
  - 7) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
  - 8) NO ROWS TO BE CLOSED.
  - 9) NO STREETS PROPOSED.
  - 10) NO OFF-SITE PARKING PROPOSED.
  - 11) NO PROPOSED DRIVEWAY.
  - 12) TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
  - 13) ALL PARKING STALL MARKINGS AND LINE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
  - 14) STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
  - 15) TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
  - 16) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  - 17) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN. (SD 15-14 COW TECH STD)
- FIRE AND LIFE SAFETY**
- 1) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
  - 2) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
  - 3) HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
  - 4) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
  - 5) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPIDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
  - 6) ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT
  - 7) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0966
  - 8) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.

**NOTES: (CONT'D)**

- LANDSCAPING**
- 1) 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.
  - 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
  - 3) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.
  - 4) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.
- GENUA**
- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
  - 2) PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
  - 3) 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 DEVELOPERS SIDE OF THE WATER METER BOX.
  - 4) ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA'S CONNECTION CONTROL REGULATION. CALL 332-8419 FOR INFORMATION.
  - 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFPOCQR OR ASSE.
  - 6) PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
  - 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
  - 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
  - 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
- DRAINAGE**
- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT NO. SW6 000647 & SW6 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023

**SITE DATA: (CONT'D)**

EXISTING ON-SITE IMPERVIOUS AREAS:	-
EXISTING BUILDINGS	48,507 SF
EXISTING ASPHALT	48,507 SF (32%)
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
PROPOSED ON-SITE IMPERVIOUS AREAS:	
PROPOSED BUILDING	17,265 SF
PROPOSED ASPHALT	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
TRUE GSD 22,094 S.F. 100% PERVIOUS	17,008 SF
PROPOSED+EXISTING IMPERVIOUS	109,311 SF (72.2%)
PARKING REQUIRED: (AUTOMOBILE DEALER)	17,265 SF
MAXIMUM:	53
MINIMUM: 1,500 SF (17,265/500)	35
TOTAL PARKING PROVIDED:	239
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CFPUA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED	PROPOSED
(1-2% SPACES= 1 HANDICAP SPACE)	2 HANDICAP SPACES
3% SPACES/25=1.4	10 SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

**SITE DATA:**

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 Ac.
SETBACKS REQUIRED	
FRONT:	25'
REAR:	15'
INTERIOR SIDE:	0'
CORNER LOT SIDE:	25'
PROPOSED BUILDING SETBACKS	
FRONT:	101'
REAR:	464'
SIDE:	42'
CORNER LOT SIDE:	N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	RB
PROPOSED BUILDING AREA (GROSS)	17,500 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,650 SF

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

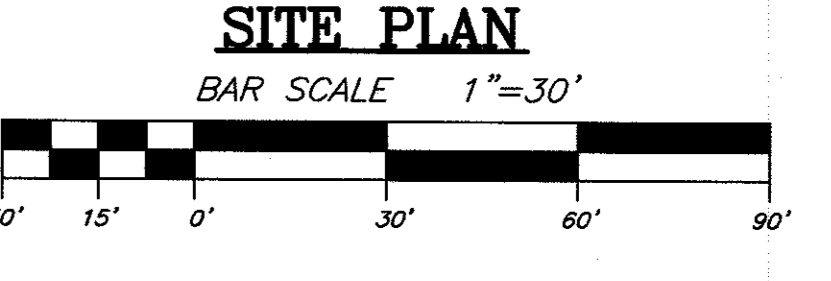
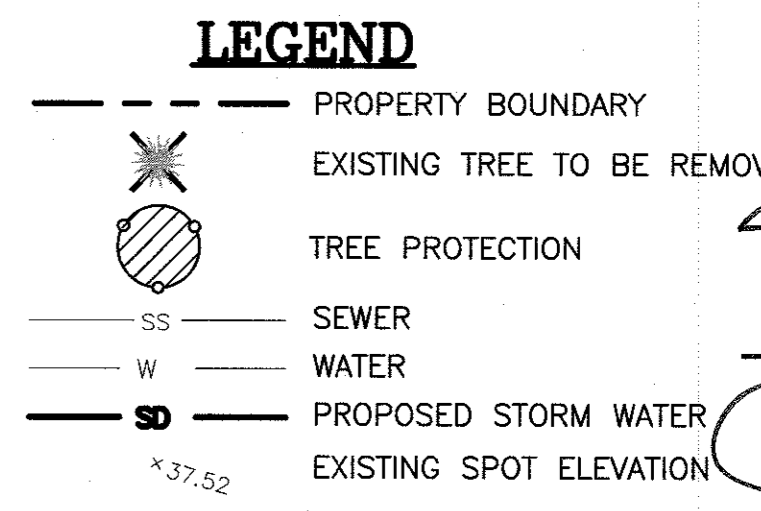
**Approved Construction Plan**

Name	Date
Planning	
Traffic	
Fire	

Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN

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

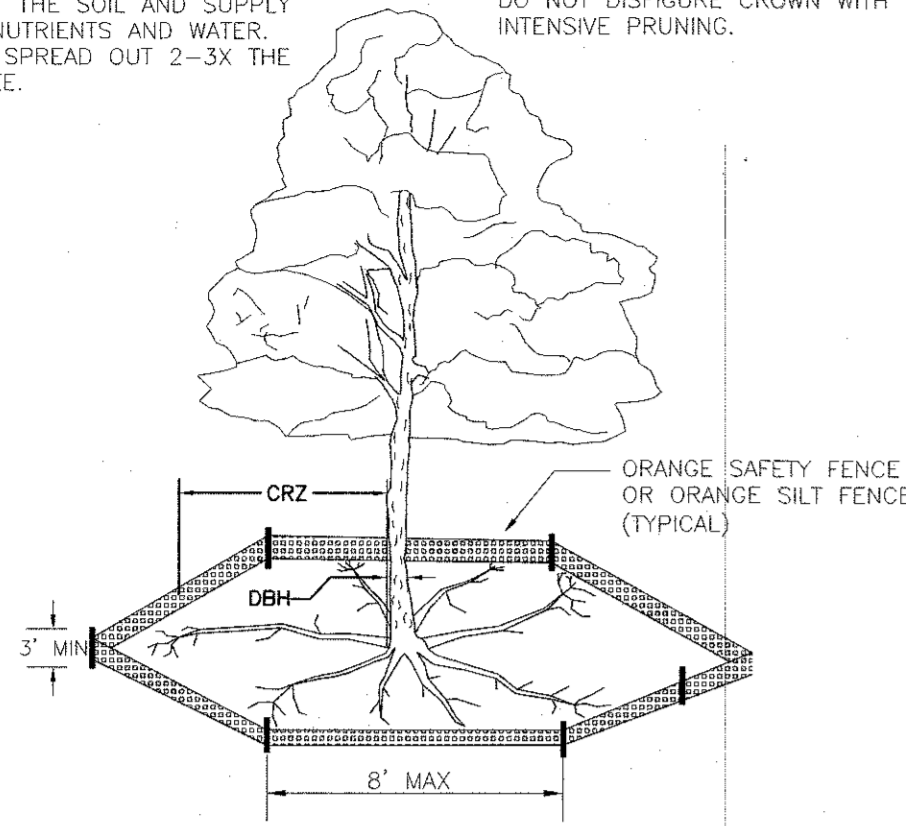
Signed: \_\_\_\_\_





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.



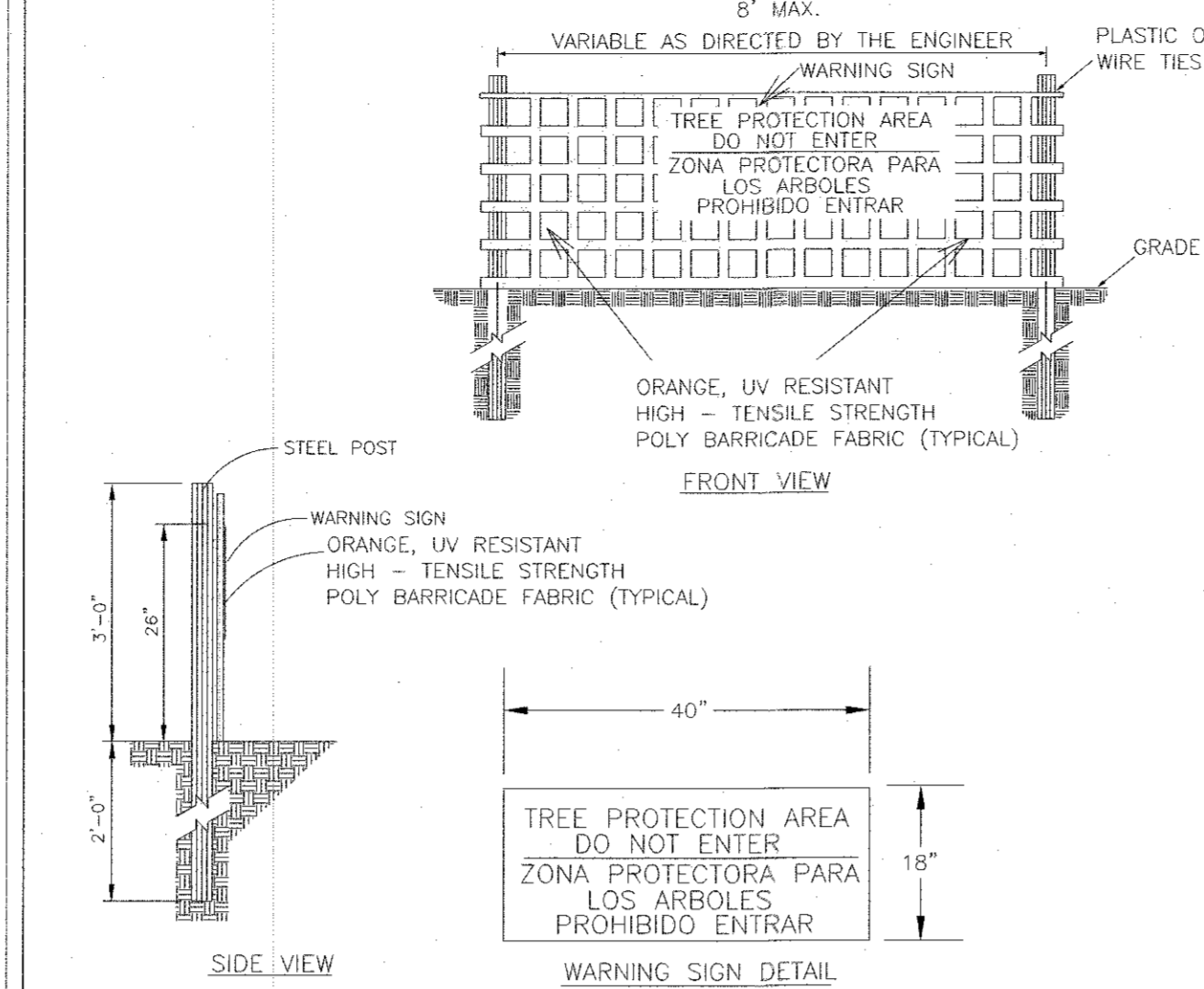
- NOTES:
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
  2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
  3. IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
  4. WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
  5. FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. 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  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

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

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

SD 15-09



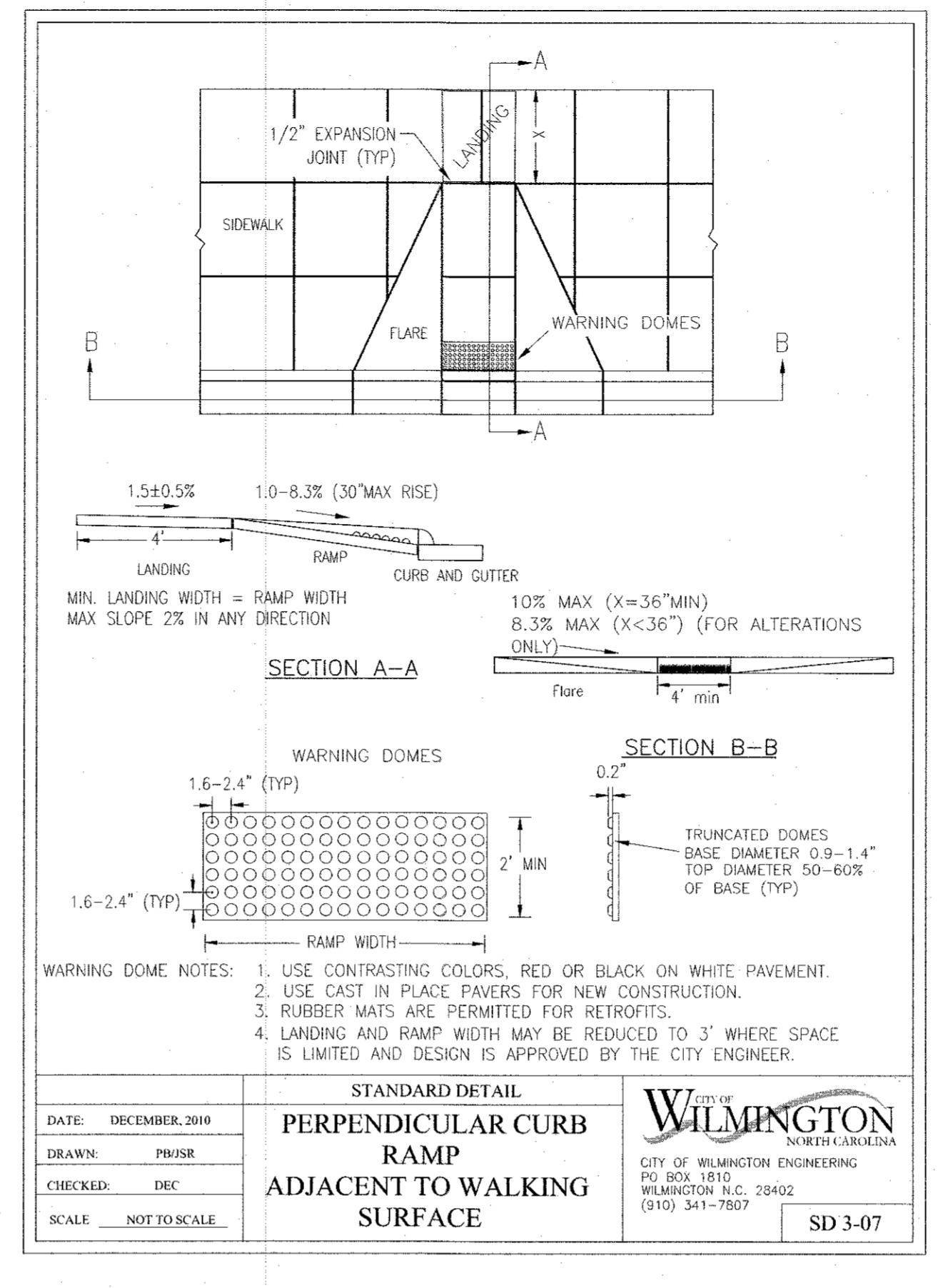
- NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
  2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
  3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.
  4. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION 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  
DRAWN BY: JSR  
CHECKED BY: RDG, P.E.  
SCALE: NOT TO SCALE

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

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

SD 15-09



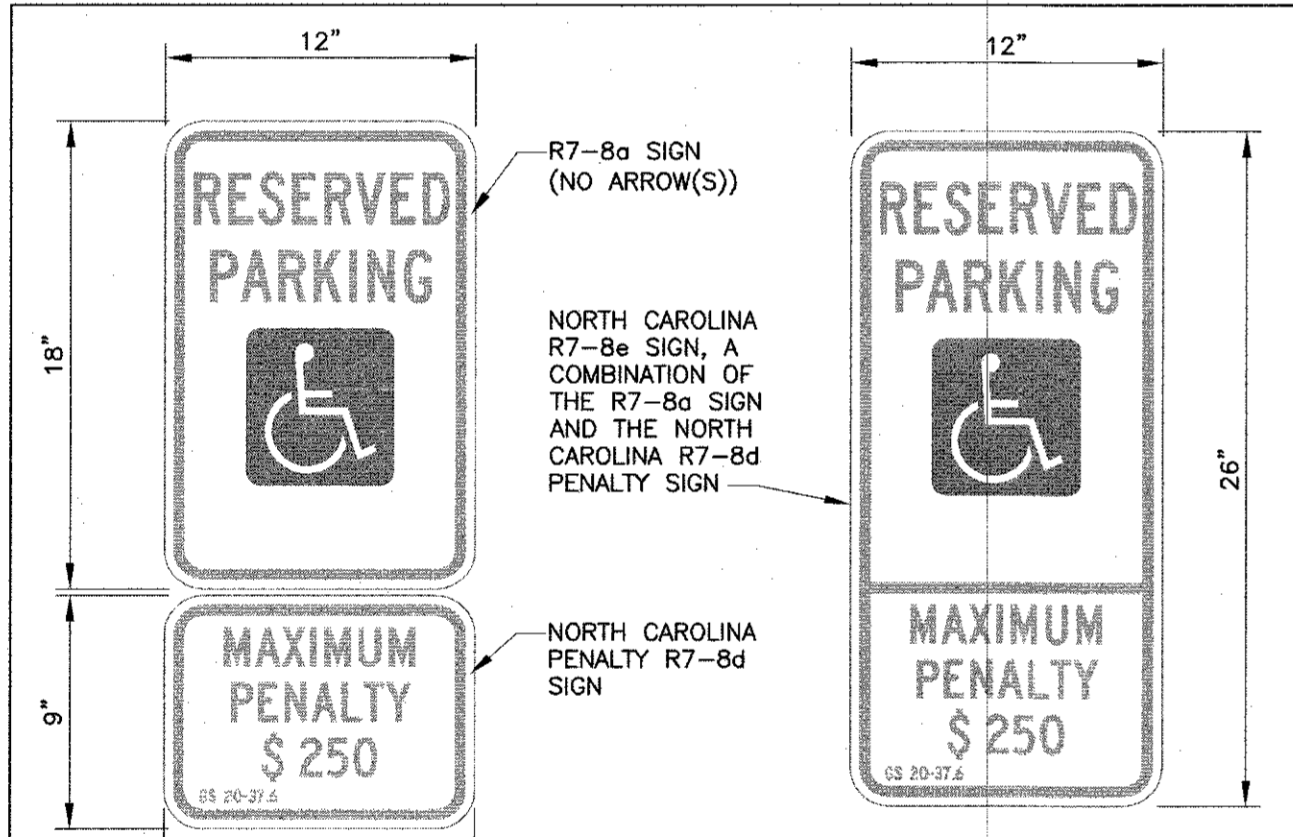
- WARNING DOME NOTES:
1. USE CONTRASTING COLORS, RED OR BLACK ON WHITE PAVEMENT.
  2. USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
  3. RUBBER MATS ARE PERMITTED FOR RETROFITS.
  4. LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

DATE: DECEMBER, 2010  
DRAWN: PW/RSR  
CHECKED: DEC  
SCALE: NOT TO SCALE

STANDARD DETAIL  
**PERPENDICULAR CURB RAMP ADJACENT TO WALKING SURFACE**

CITY OF WILMINGTON NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-07

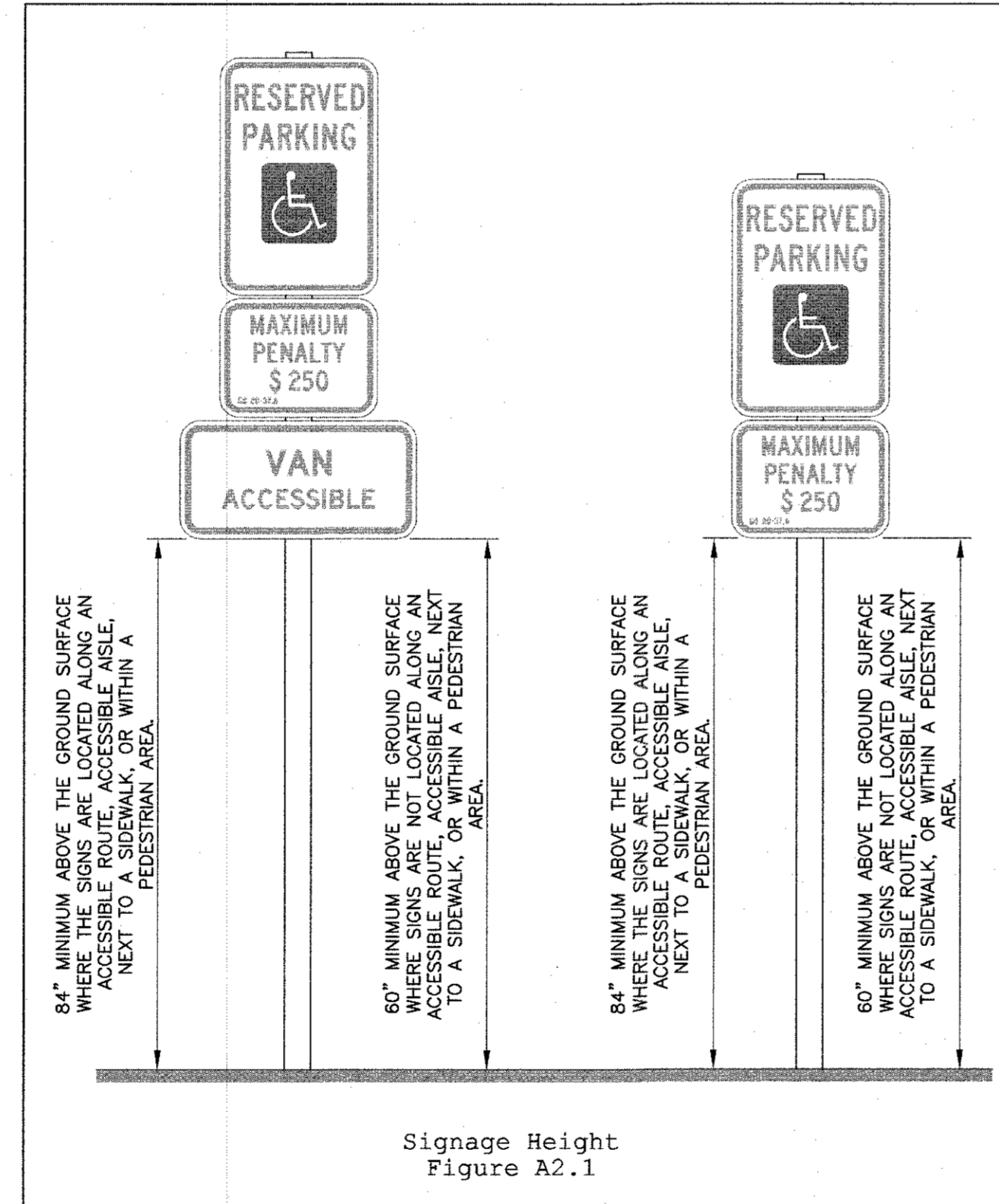


- FIGURE A1.1  
R7-8a and R7-8d Signage
- FIGURE A1.2  
R7-8e Signage
- FIGURE A1.3  
R7-8p Signage
- FOR DESIGN OF ACCESSIBLE SIGNS, SEE THE FOLLOWING:
- 2009 MUTCD OR LATEST EDITION.
  - 2004 EDITION OF THE STANDARD HIGHWAY SIGNS AND THE 2012 SUPPLEMENT OR LATEST EDITION.
  - NORTH CAROLINA 2009 SUPPLEMENT TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR LATEST EDITION.
  - NCDOT DRAWING H-1-S FOR SIGNS SP00075, SP00076, AND SP00077.

DATE: NOVEMBER 9, 2016  
DRAWN BY: DALE THOMPSON  
CHECKED BY: RANDALL GLAZIER  
SCALE: NOT TO SCALE

ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS  
SHEET A1 OF 5

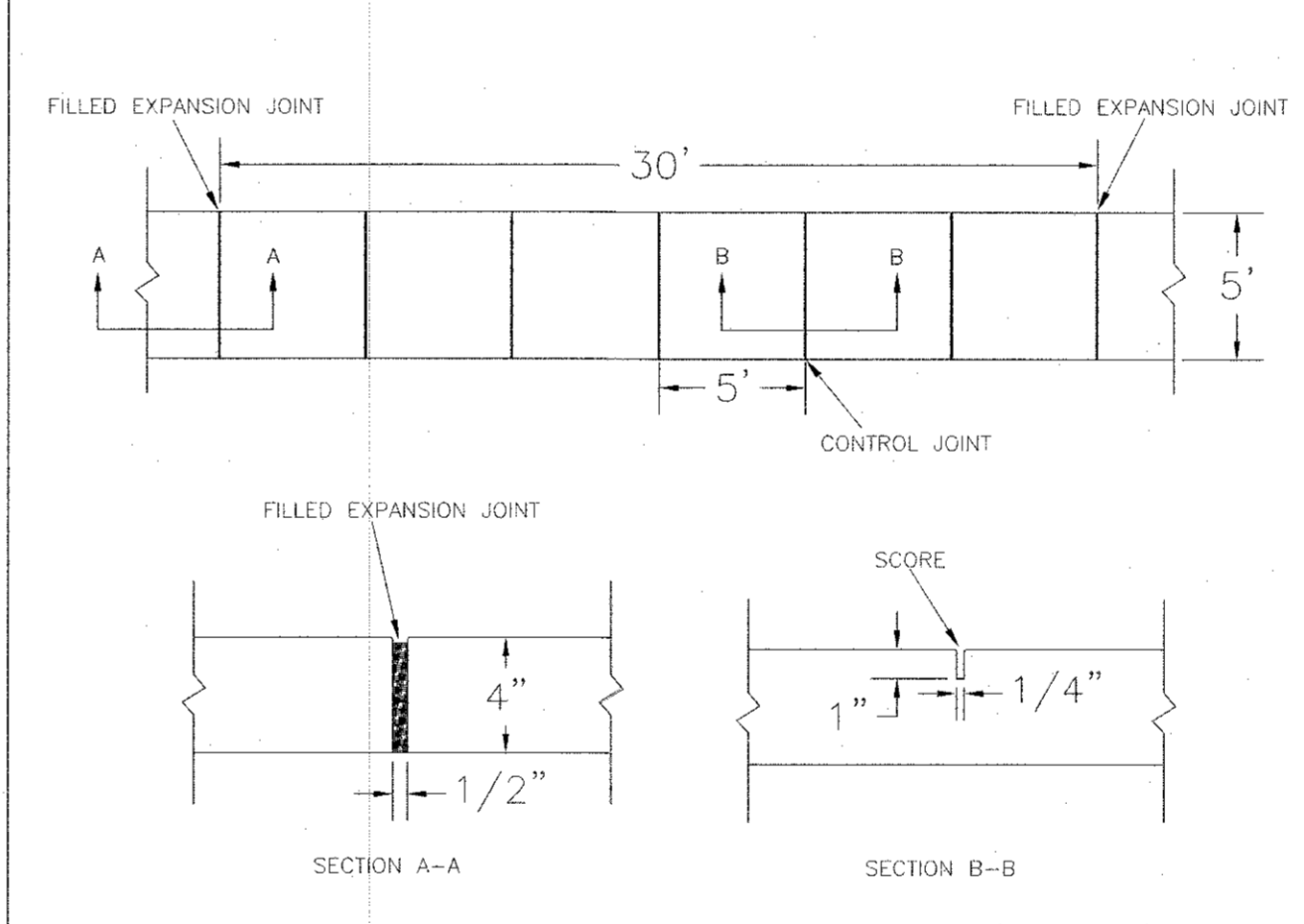
CITY OF WILMINGTON NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, NC 28402  
(910) 341-7807



DATE: NOVEMBER 9, 2016  
DRAWN BY: DALE THOMPSON  
CHECKED BY: RANDALL GLAZIER  
SCALE: NOT TO SCALE

ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS  
SHEET A2 OF 5

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



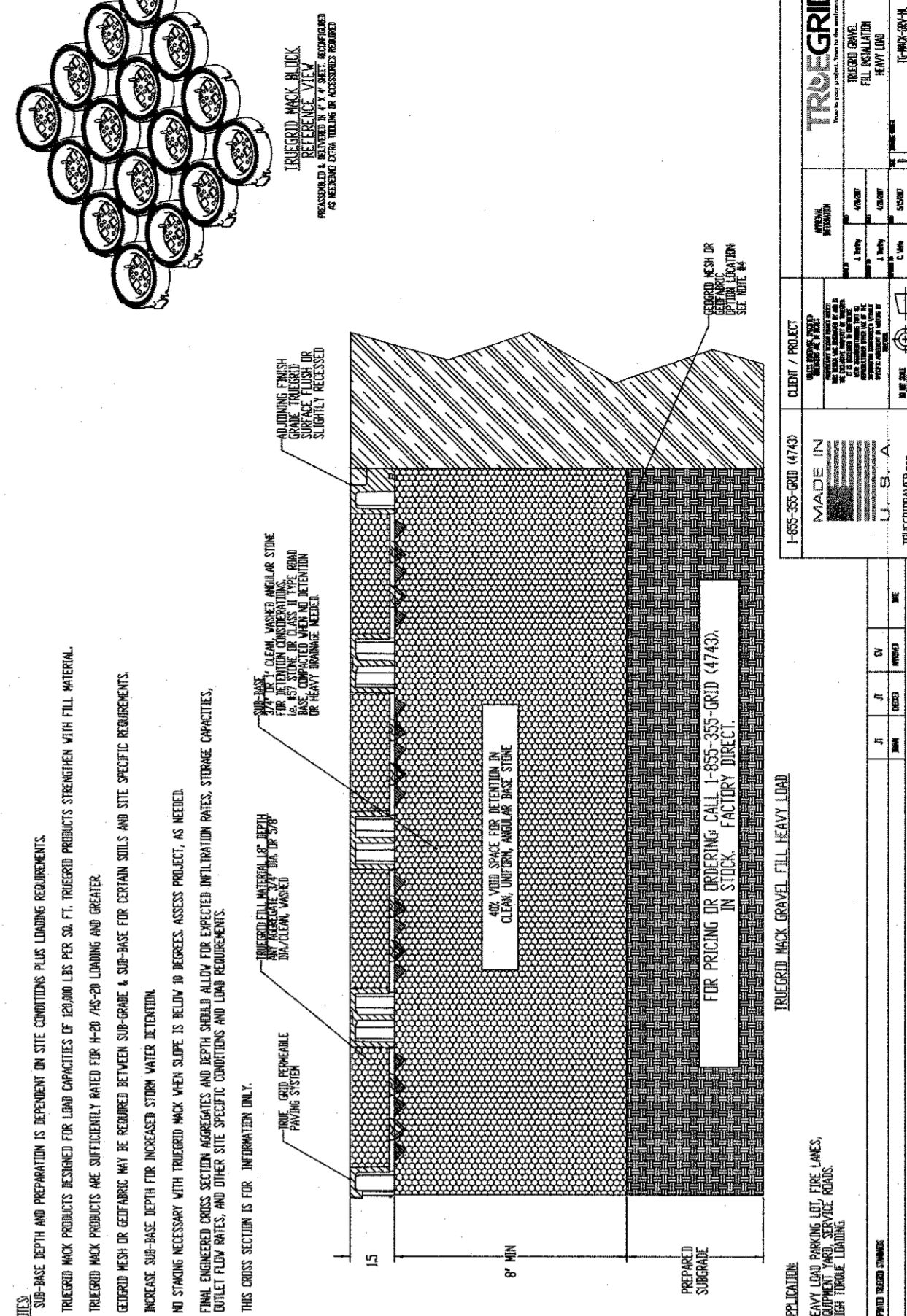
- NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
  2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
  3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
  4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY 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  
DRAWN: PW/RSR  
CHECKED: DEC  
SCALE: NOT TO SCALE

STANDARD DETAIL  
**SIDEWALK**

CITY OF WILMINGTON NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-10



- 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  
DRAWN: PW/RSR  
CHECKED: DEC  
SCALE: NOT TO SCALE

STANDARD DETAIL  
**CURBING**

CITY OF WILMINGTON NORTH CAROLINA  
CITY OF WILMINGTON ENGINEERING  
PO BOX 1810  
WILMINGTON, N.C. 28402  
(910) 341-7807

SD 3-11

Approved Construction Plan

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

Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN

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

REVISIONS

No.	Date	Description	By

DETAILS AND NOTES

TRIPP ENGINEERING, P.C.  
419 Chestnut Street  
Wilmington, North Carolina 28401  
Phone 910-763-5100  
Fax 910-763-5681  
© 2018 TRIPP ENGINEERING, P.C.  
LICENSE NO. 35-127

**T**

SEAL  
17374  
ENGINEER  
PHILIP GREGORY TRIPP

DATE 01-23-19  
DESIGN PGT  
DRAWN EJW

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SHEET 6 OF 6  
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WILMINGTON NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN