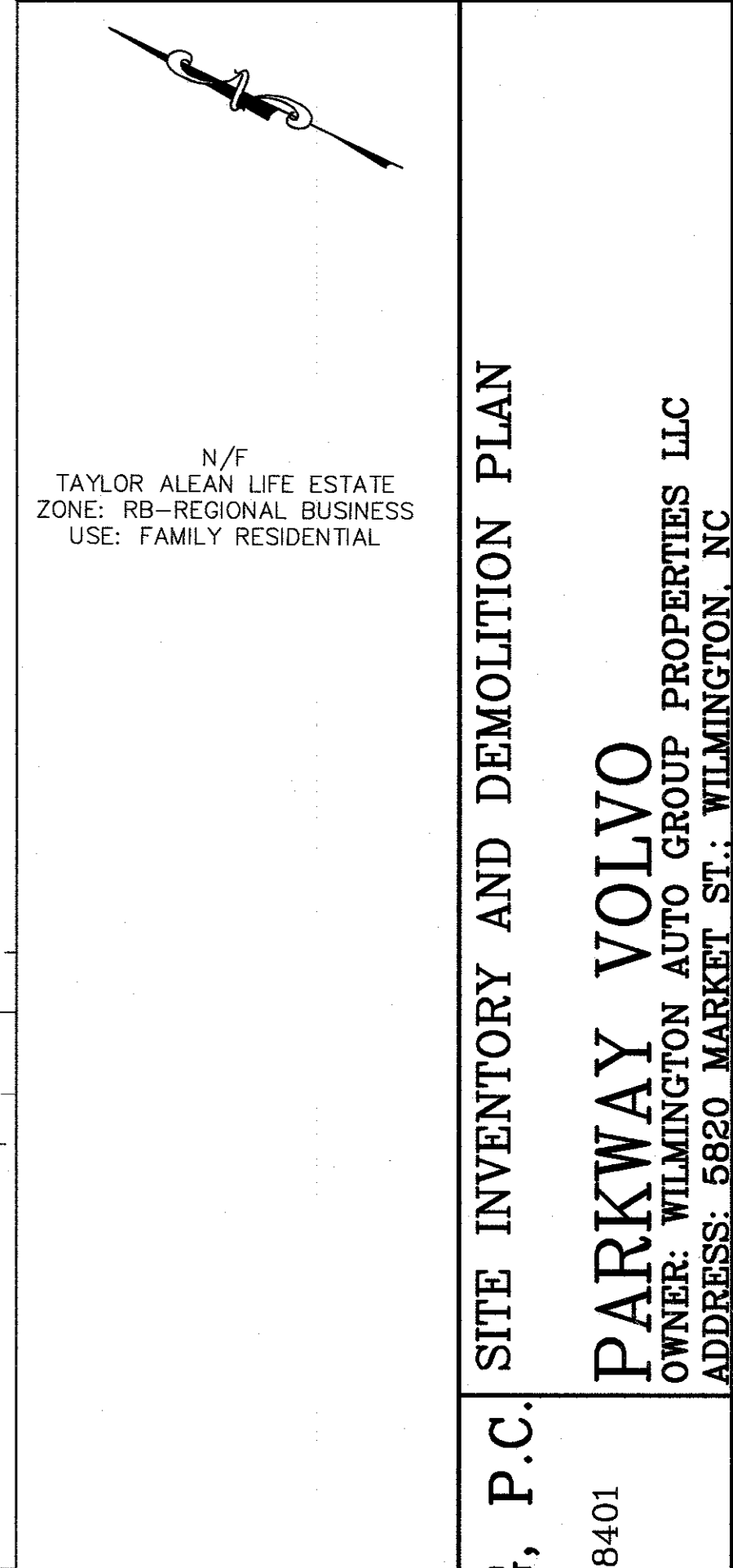


REVISIONS		
No./Date	Description	By



PLEASE NOTE: ALL EXISTING ASPHALT AND CURBING TO BE REMOVED

EXIST. STRIPING

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

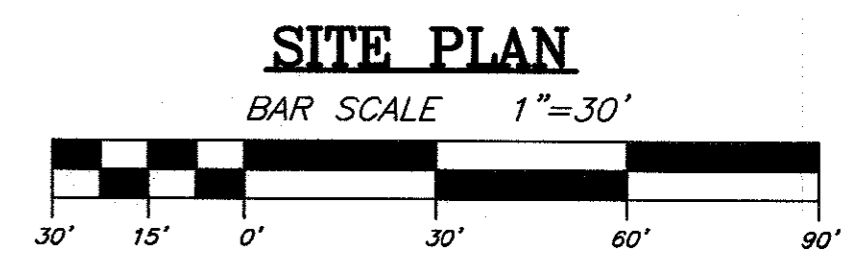
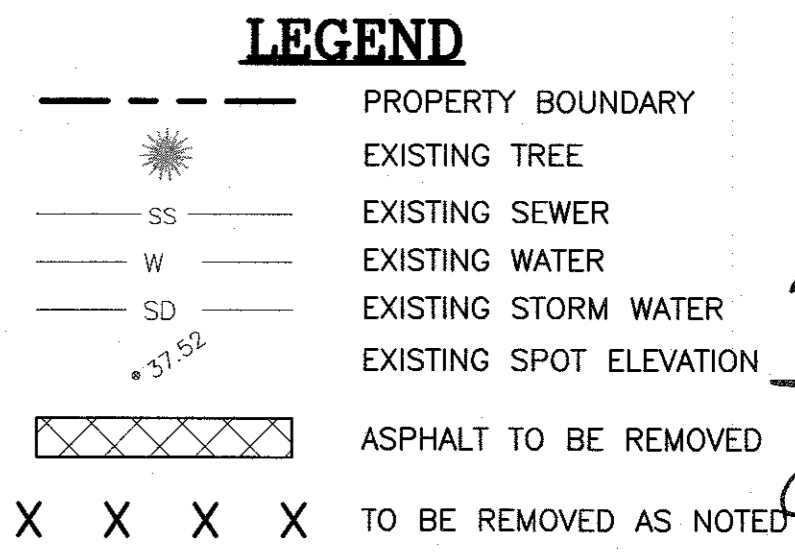
Approved Construction Plan		
Name	Date	
Planning		
Traffic		
Fire		

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

INVENTORY OF TREES TO BE REMOVED		
TREE TYPE	TREE SIZE	QUANTITY
PINE	12"	14
PINE	13"	5
PINE	14"	5
PINE	15"	3
PINE	16"	3
PINE	17"	3
PINE	19"	1
OAK	12"	2
OAK	10"	1
OAK	8"	1

INVENTORY OF TREES TO BE PRESERVED			
TREE TYPE	TREE SIZE	QUANTITY	TOTAL DBH
PINE	14"	1	14
OAK	30"	1	30
OAK	6"	1	6
MAPLE	14"	1	14
MAPLE	13"	1	13
MAPLE	10"	1	10
SWEET GUM	13"	1	26



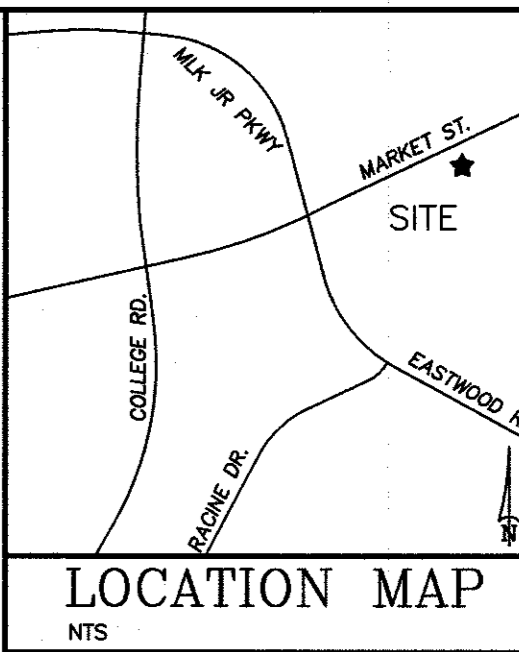
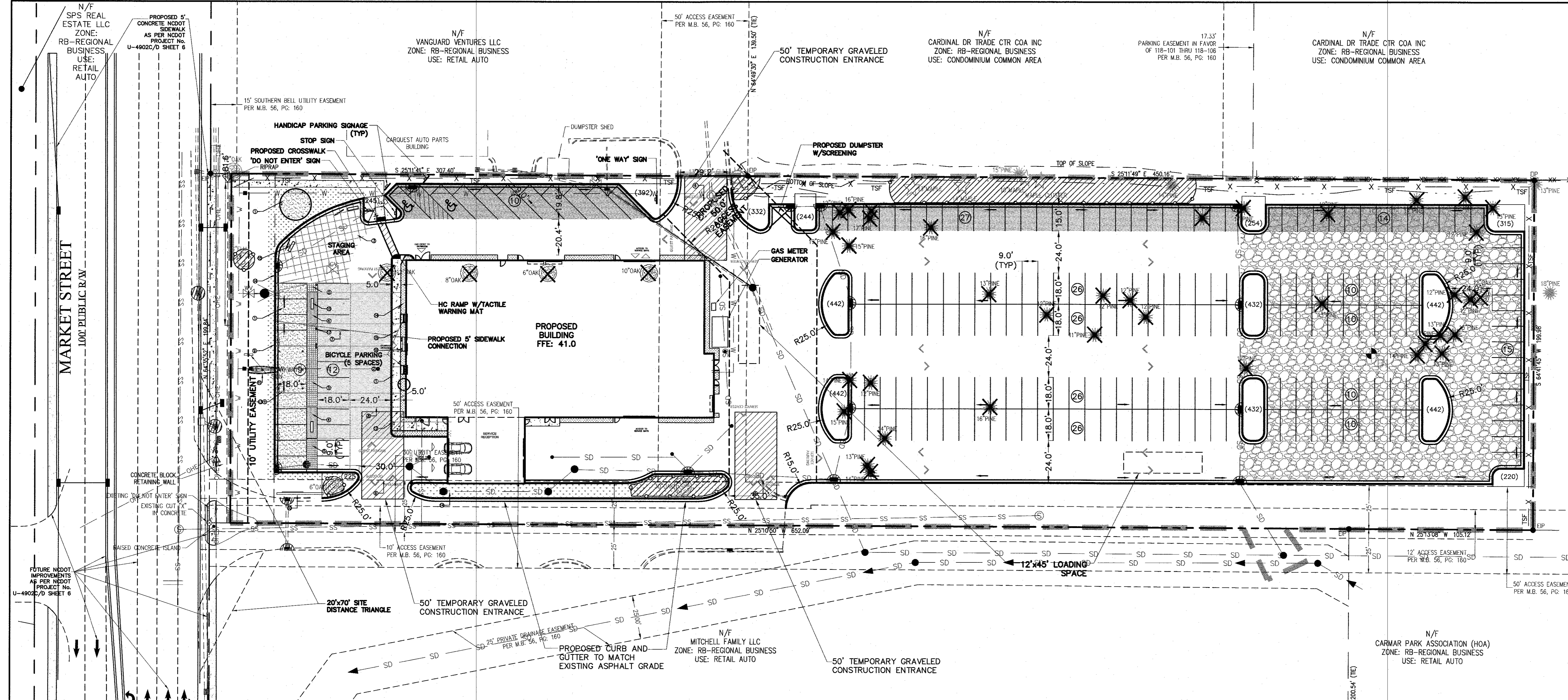
TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
© 2015 TRIPP ENGINEERING, P.C.

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

SITE INVENTORY AND DEMOLITION PLAN

DATE 01-23-19
DESIGN PGT
DRAWN EJW

C1
SHEET 1 OF 6
17069



REVISIONS			
No.	Date	Description	By
1	02-13-19	ADDED FIRE LINE, CONCRETE COLLAR, UPDATE SW	EWJ
2	02-19-19	ADDED SW IN	EWJ
3	02-21-19	ISLAND	EWJ

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

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.

Name	Date
Planning	
Traffic	
Fire	

Approved Construction Plan

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	RS010-001-003-000
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' SIDE: 464' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IIB
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

SITE DATA: (CONT'D)

EXISTING ON-SITE IMPERVIOUS AREAS:	
EXISTING ASPHALT	48,507 SF
EXISTING CONCRETE	0 SF
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	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
TOTAL IMPERVIOUS	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:	231
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 (1-25 SPACES = 1 HANDICAP SPACE)	PROPOSED
35 SPACES/25=1.4	2 HANDICAP SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

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 MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 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 910-341-0696.
- 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 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 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
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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 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)
- 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 910-341-0696
- 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 TRAPPER SWITCH.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN ISOTHERM RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 510. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

- 1) FROM 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'.

CEPWA

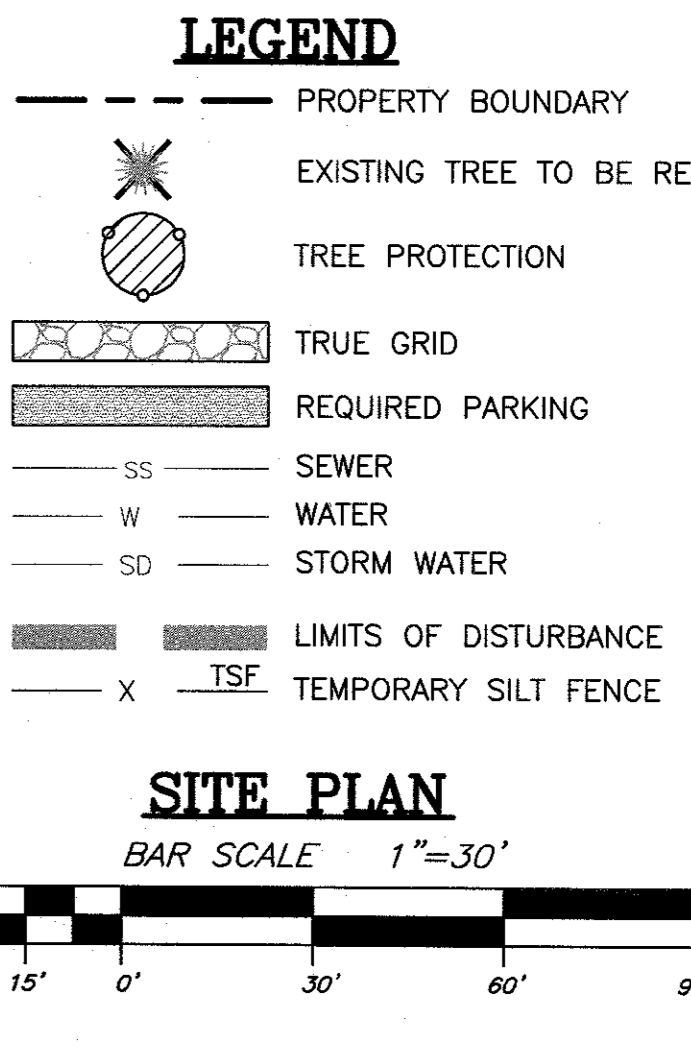
- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 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 DEVELOPER'S 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 USFCOOR 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.

DEWATERING

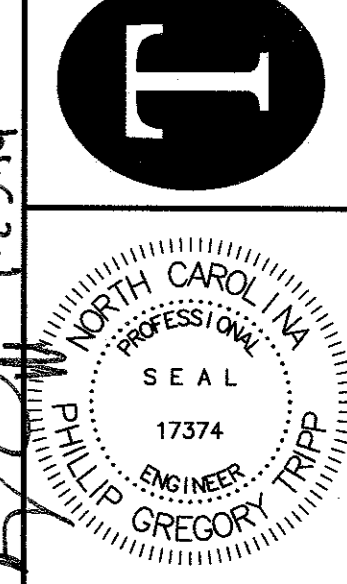
- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT NO. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023

KEY LEGEND

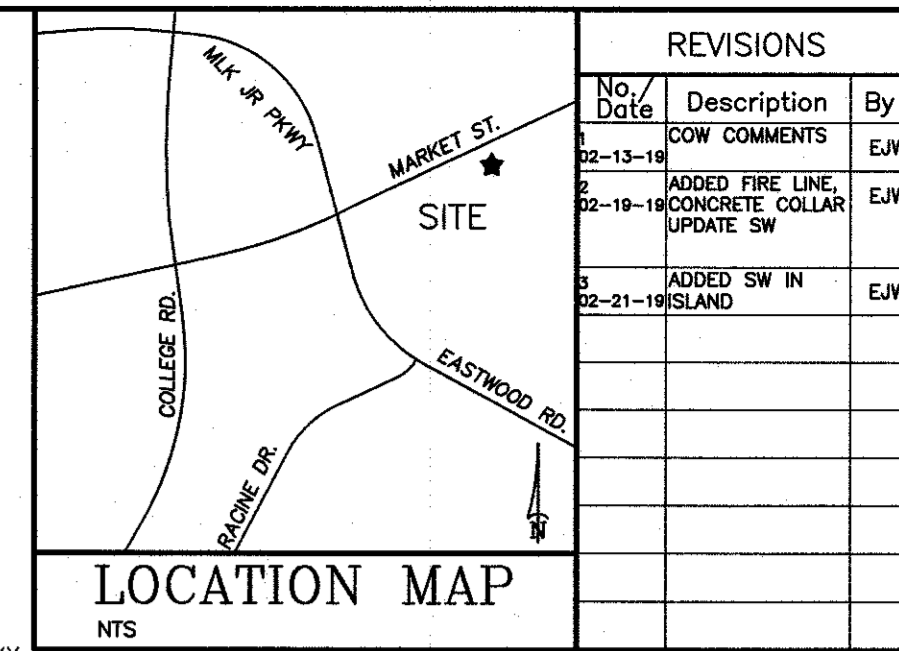
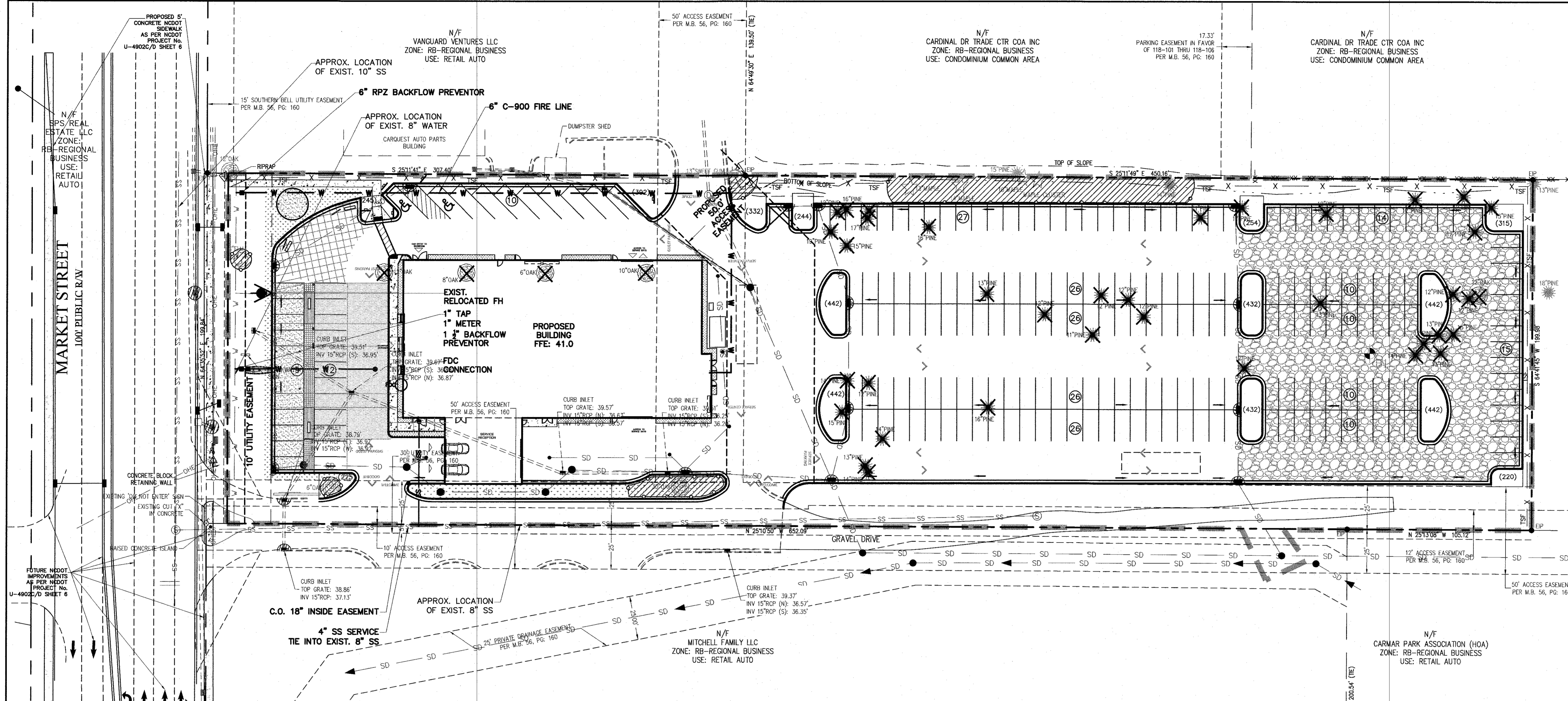
1. LIGHT GRAY CONCRETE, FINISH SHALL HAVE A BRUSHED PATTERN ON ALL VISIBLE SURFACES.
2. DARK GRAY CONCRETE, FINISH SHALL HAVE A BRUSHED PATTERN ON ALL VISIBLE SURFACES.
3. LIGHT GRAY CONCRETE, SMOOTH, SAND BLOASTED FINISH WITH REVEALS AT 30" O.C. EA. WAY
4. BROWN STAINED CONCRETE WITH STAMPED WOOD DECK PATTERN
5. LIGHT GRAY PAVEMENT TO MATCH CONCRETE (CELLULAR GRASSSED PAVEMENT SYSTEM)
6. WHITE ASPHALT GRAPHICS IN VOLVO BROAD FONT, TYP.
7. PARKING STRIPING PER LOCAL CODES & REQUIREMENTS.
8. CONCRETE EXPANSION JOINTS, TYP.
9. PLAZA WALL IN LIGHT GRAY CONCRETE, SMOOTH FINISH, THE WALL SHOULD NOT OBSTRUCT VIEW FROM OFF PROPERTY INTO THE PLAZA.
10. C.P.O. WALL, WHITE STUCCO, SMOOTH FINISH, WITH ILLUMINATED VOLVO C.P.O. LETTER SIGNAGE (BY VENDOR OF RECORD).
11. PYLON SIGN BY VENDOR OF RECORD.
12. BOLLARD LIGHT
13. FEATURE DISPAY PAD W/ RECESSED LIGHTING
14. LOW LYING PLANTS: PLANTING SHALL MAKE USE OF LOCAL PLANTS AND NOT OBSTRUCT THE VIEW FROM OFF PROPERTY INTO THE PLAZA.
15. PLAZA BENCH
16. ENTRY MAT LOCATION
17. ELECTRIC VEHICLE CHARGING STATION



TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5681
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LICENSE NO. EC-197



DATE 01-23-19
DESIGN PGT
DRAWN EJW
C2
SHEET 2 OF 6
17069



REVISIONS		
No.	Date	Description
1	02-13-19	ADD COMMENTS
2	02-19-19	ADD FIRE LINE, MONUMENT COLLAR UPDATE SW
3	02-21-19	ADD SW IN ISLAND

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

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

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

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

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

N/F
SPS/REAL ESTATE LLC
ZONE: RB-REGIONAL BUSINESS
USE: RETAIL AUTO

UTILITY PLAN

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
© 2018 TRIPP ENGINEERING, P.C.

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:	464'
SIDE:	42'
CORNER LOT SIDE:	N/A
TRACT AREA	
151,429 SF (3.47 AC)	
BUILDING USE	
BUILDING TYPE	AUTOMOBILE DEALER
PROPOSED BUILDING AREA (GROSS)	
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)

EXISTING ON-SITE IMPERVIOUS AREAS:	
EXISTING ASPHALT	48,507 SF
EXISTING CONCRETE	0 SF
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
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PROPOSED CONCRETE	1,369 SF
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TRUE GRID 22,094 S.F. 100% PERVIOUS	17,008 SF
PROPOSED+EXISTING IMPERVIOUS	109,311 SF (72.2%)
PARKING REQUIRED: (AUTOMOBILE DEALER)	
MAXIMUM:	53
MINIMUM: 1/500 SF (17,265/500)	35
TOTAL PARKING PROVIDED:	231
CAMA LAND USE:	
PUBLIC WATER AND SEWER BY CFPWA	
EXISTING WATER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED	
(1-25 SPACES: 1 HANDICAP SPACE)	PROPOSED
35 SPACES/25=1.4	2 HANDICAP SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

NOTES:

ZONING

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
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- 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 910-341-0896.
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- 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 COFW 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 COFW 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 COFW TECH STDS)
- 3) CONTACT 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 WILL BE REPLACED.
- 6) CONTACT 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 COFW 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 CANNOT BLOCK OR IMPERE 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 910-341-0896
- 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.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN ROOMY RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 510. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

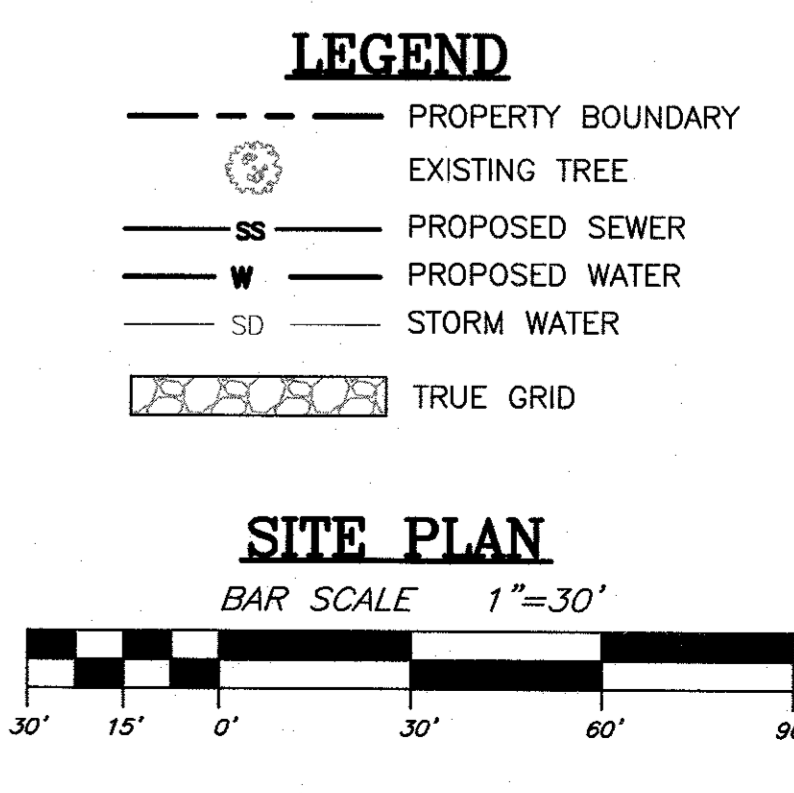
- 1) PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED 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'.

DETAILS

- 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 332-6419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USCFOCORR 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

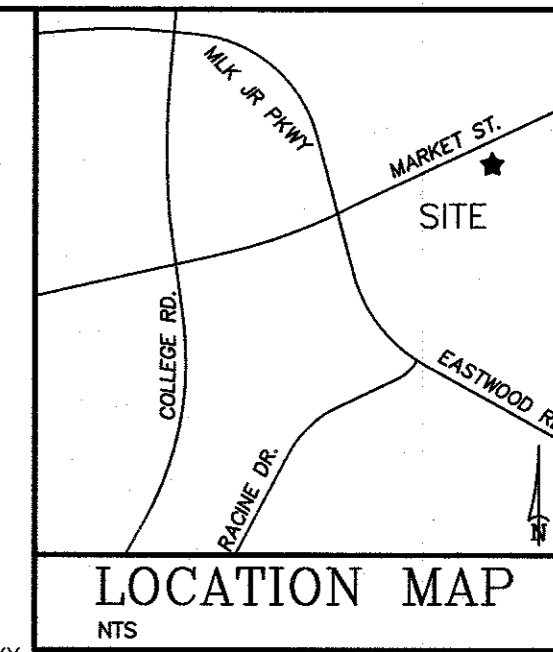
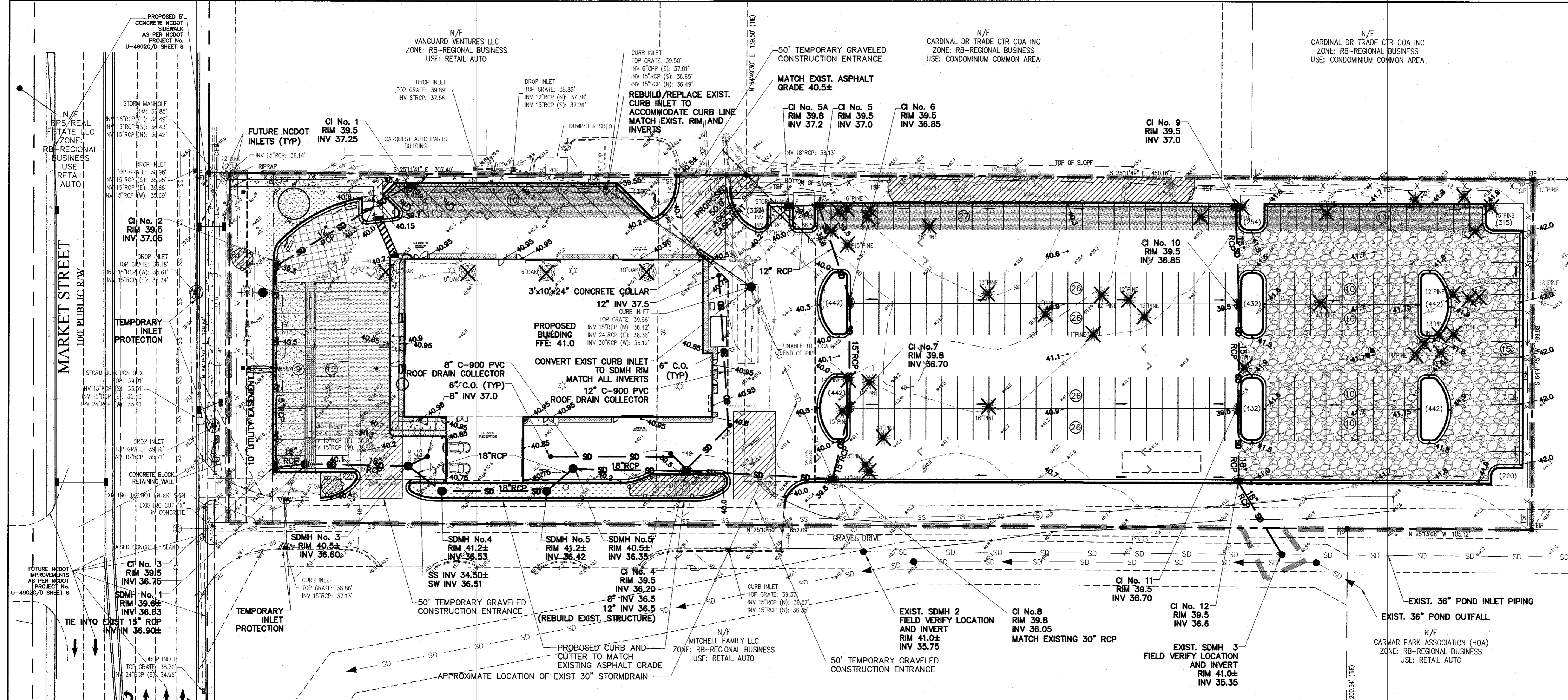
- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT No. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT No. 2004022 & 2012023



DATE 01-23-19
DESIGN PGT
DRAWN EJW

C3

SHEET 3 OF 6
17069



REVISIONS		
No.	Date	Description
02-13-19		ADDED FIRE LINE, CONCRETE COLLAR, UPDATE SW
02-21-19		ADDED SW IN ISLAND

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

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
© 2018 TRIPP ENGINEERING, P.C.

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: 464' SIDE: 42' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IB
PROPOSED BUILDING AREA (GROSS)	17,500 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	2
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	48,507 SF
EXISTING ASPHALT	0 SF
EXISTING CONCRETE	0 SF
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	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
TRUE GRID 22,094 S.F. 100% PERVIOUS	0 SF
FUTURE	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)	33
TOTAL PARKING PROVIDED:	231
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CFPWA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	600 GPD
PROPOSED WATER FLOW:	500 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED (1-2% SPACES=1 HANDICAP SPACE)	PROPOSED
35 SPACES/25=1.4	2 HANDICAP SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

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 LINES 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 910-341-0695.
- 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 CURBING WILL BE REPLACED.
- 6) CONTRACT TRAFFIC ENGINEERING AT 721-7888 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) FADLE 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 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.
- 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 910-343-0696.
- 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.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN 800MHz RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 610. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

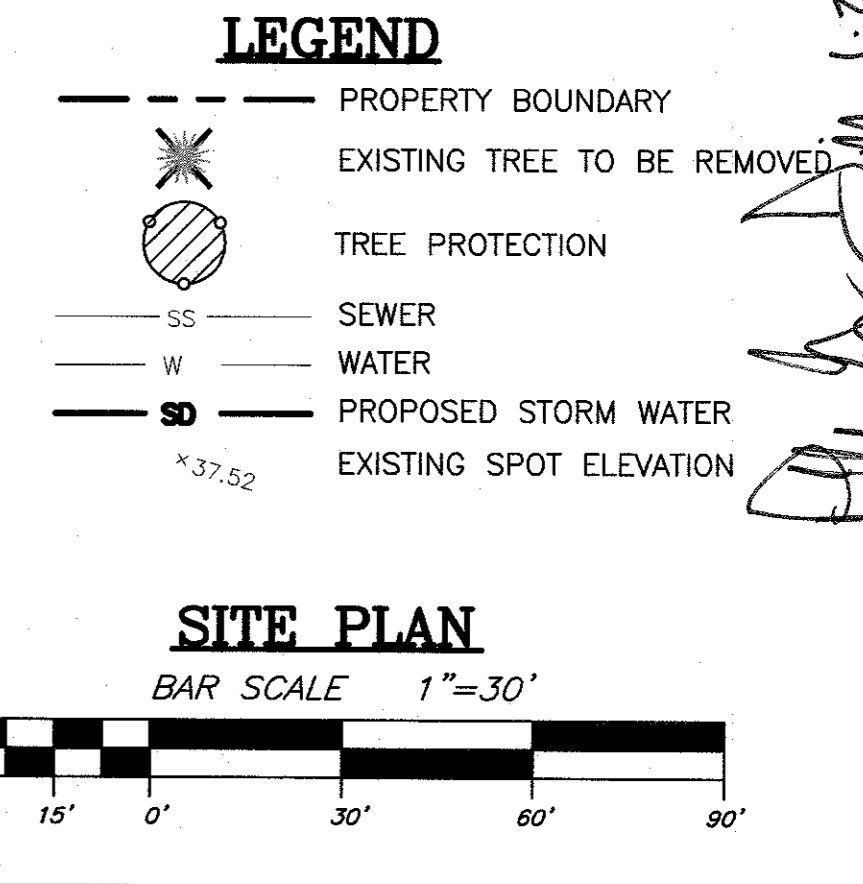
- 1) PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED 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'.

CFPWA

- 1) WATER AND SEWER SERVICE SHALL MEET CFAA FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CFPWA 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 CFPWA 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 CFPWA WATER SHALL COMPLY WITH THE CFPWA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOORR 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. SWB 000647 & SWB 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023



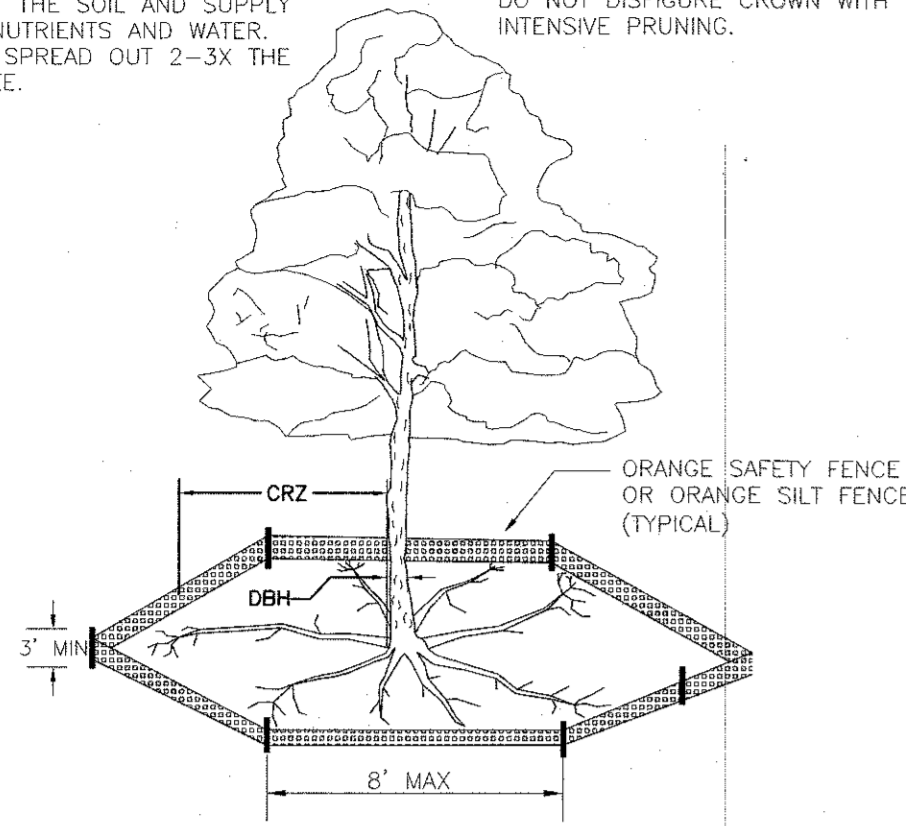
TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
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DATE 01-23-19
DESIGN PGT
DRAWN EJW

C4
SHEET 4 OF 6
17069

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.



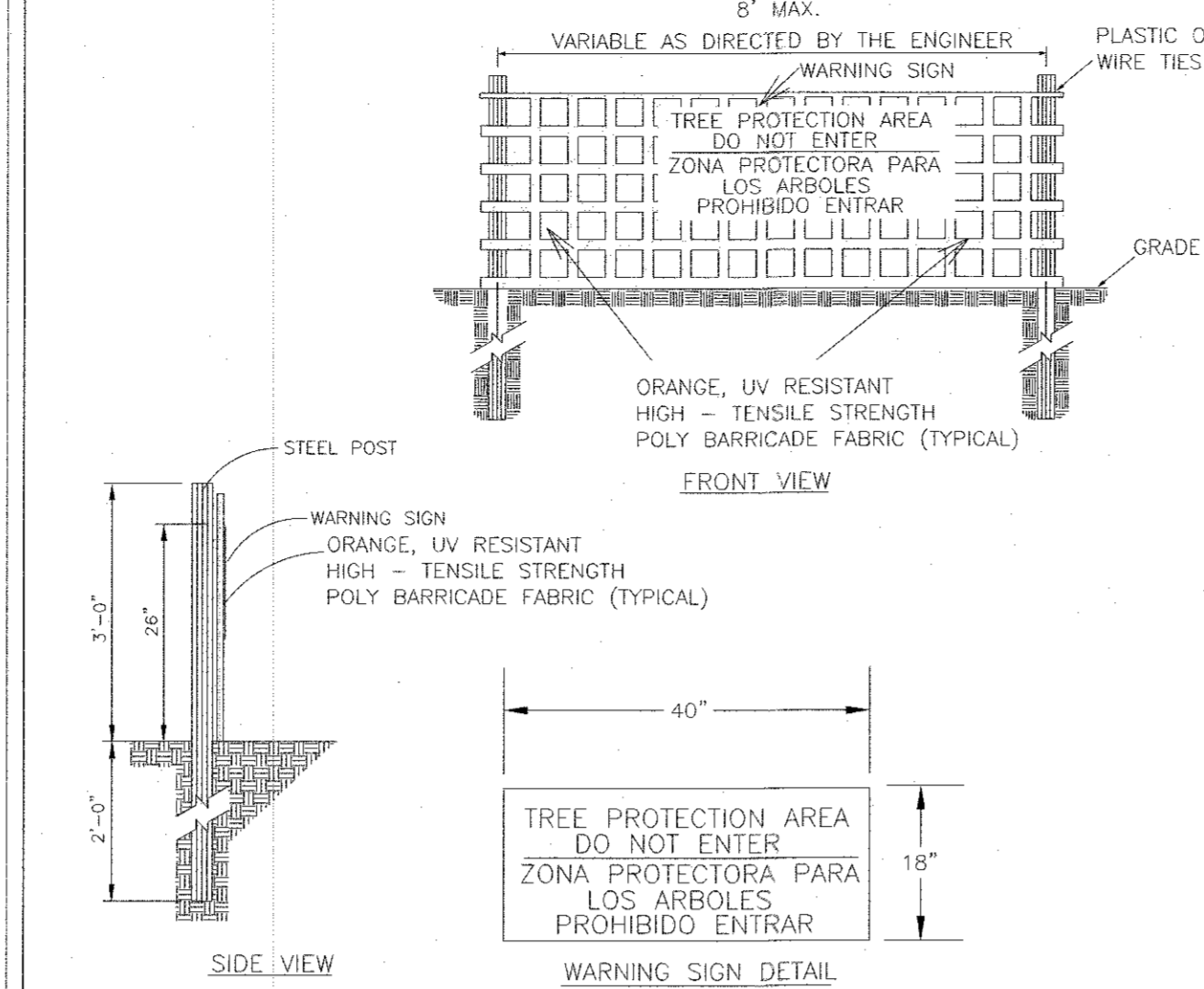
- NOTES:
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
 2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
 3. IF CONSTRUCTION OCCURS 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

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

SD 15-09



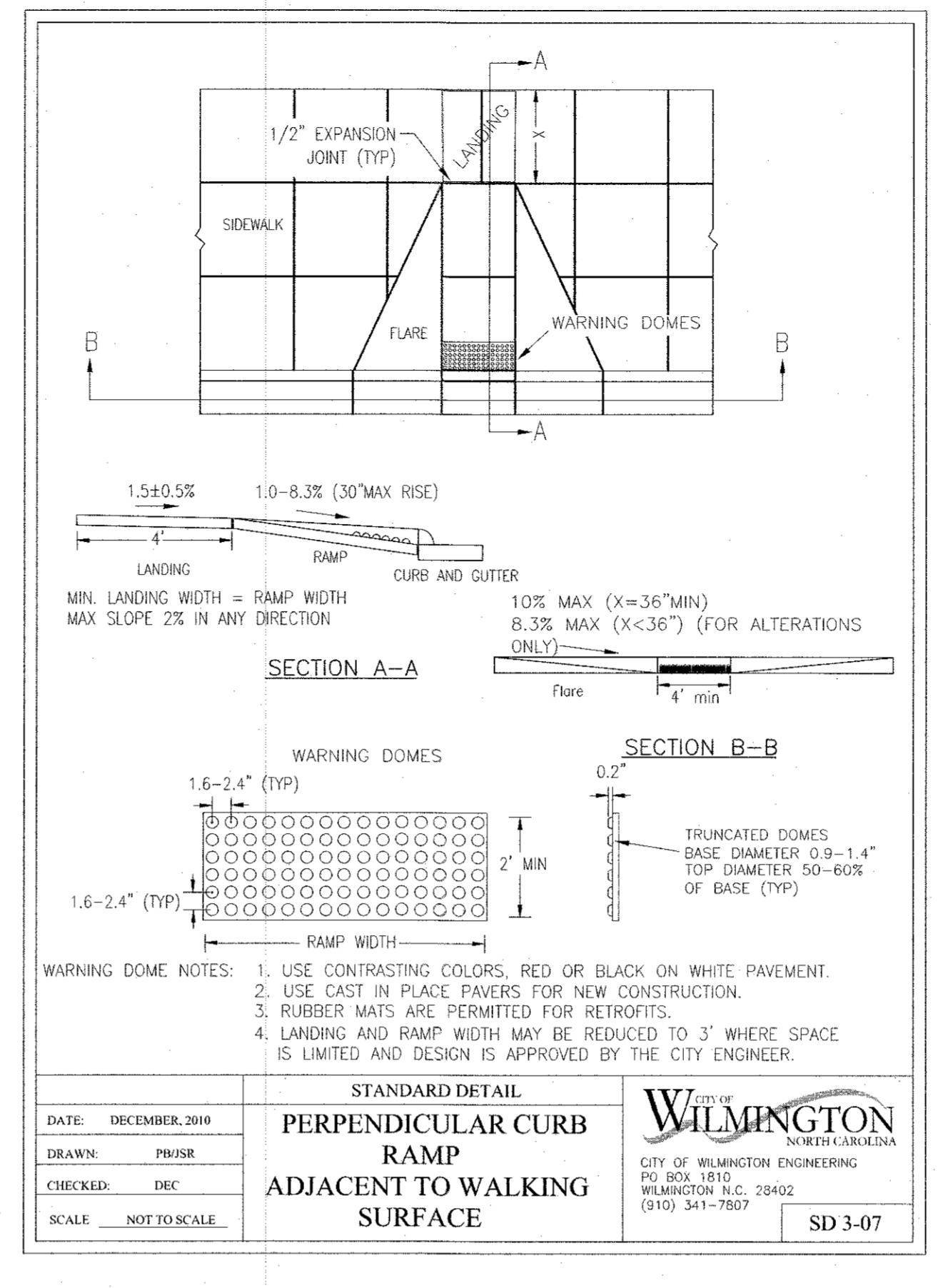
- NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
 2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 3. SIGNS SHALL BE PLACED 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

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

SD 15-09



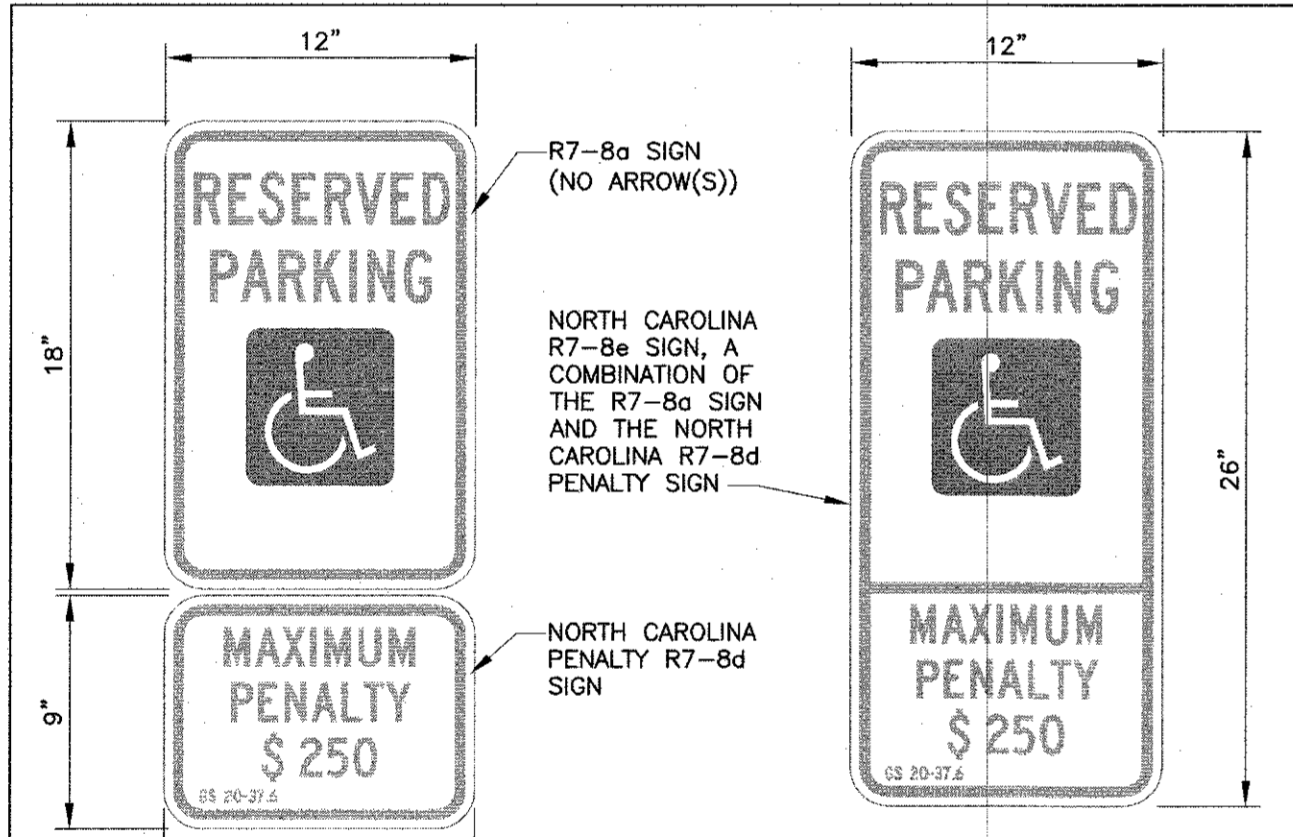
- WARNING DOME NOTES:
1. USE CONTRASTING COLORS, RED OR BLACK ON WHITE PAVEMENT.
 2. USE CAST IN PLACE PAVERS FOR NEW CONSTRUCTION.
 3. RUBBER MATS ARE PERMITTED FOR RETROFITS.
 4. LANDING AND RAMP WIDTH MAY BE REDUCED TO 3' WHERE SPACE IS LIMITED AND DESIGN IS APPROVED BY THE CITY ENGINEER.

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

STANDARD DETAIL
PERPENDICULAR CURB RAMP ADJACENT TO WALKING SURFACE

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

SD 3-07

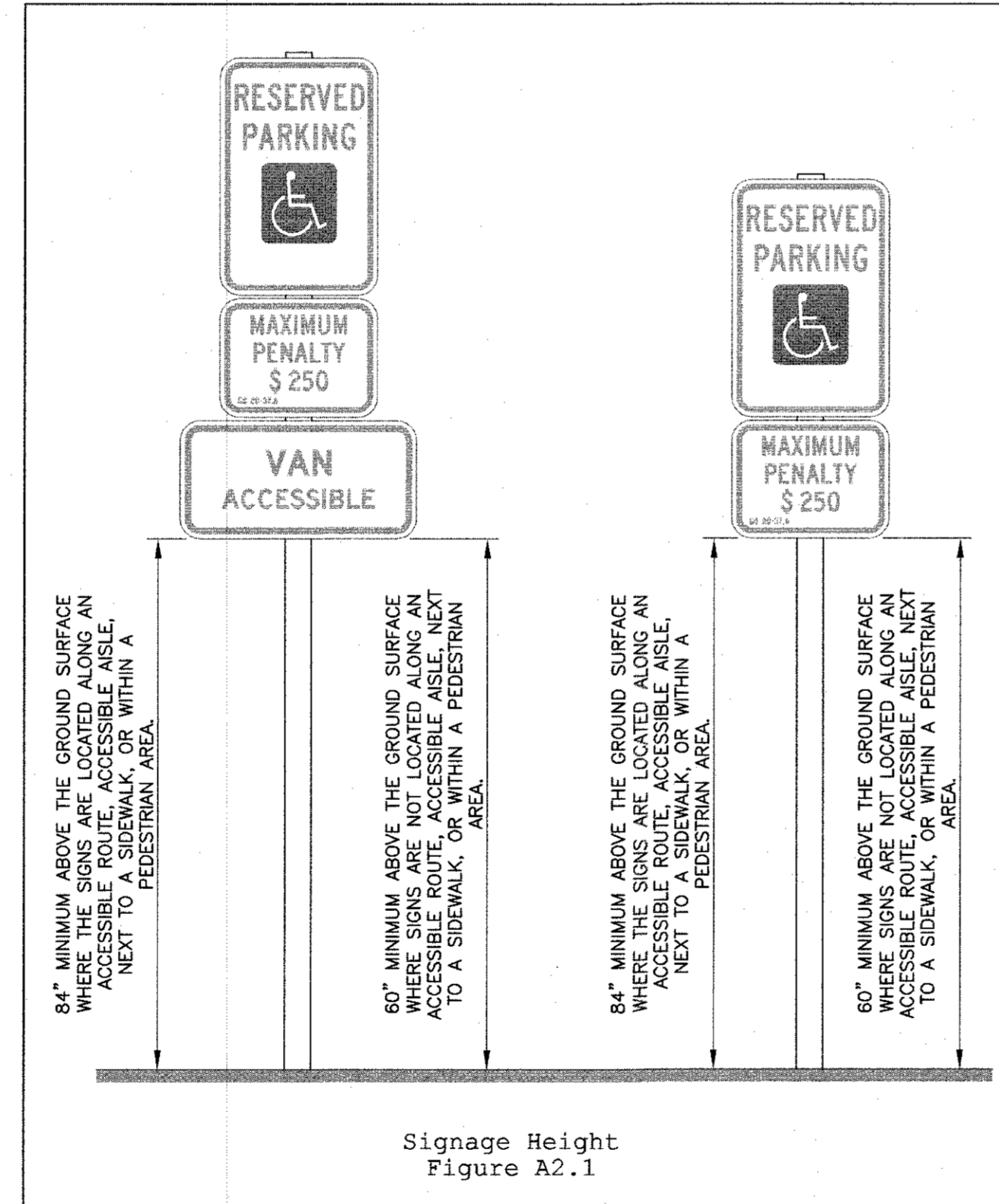


- FIGURE A1.1
R7-8a and R7-8d Signage
- FIGURE A1.2
R7-8e Signage
- FIGURE A1.3
R7-8P Signage
- FOR DESIGN OF ACCESSIBLE SIGNS, SEE THE FOLLOWING:
- 2009 MUTCD OR LATEST EDITION.
 - 2004 EDITION OF THE STANDARD HIGHWAY SIGNS AND THE 2012 SUPPLEMENT OR LATEST EDITION.
 - NORTH CAROLINA 2009 SUPPLEMENT 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

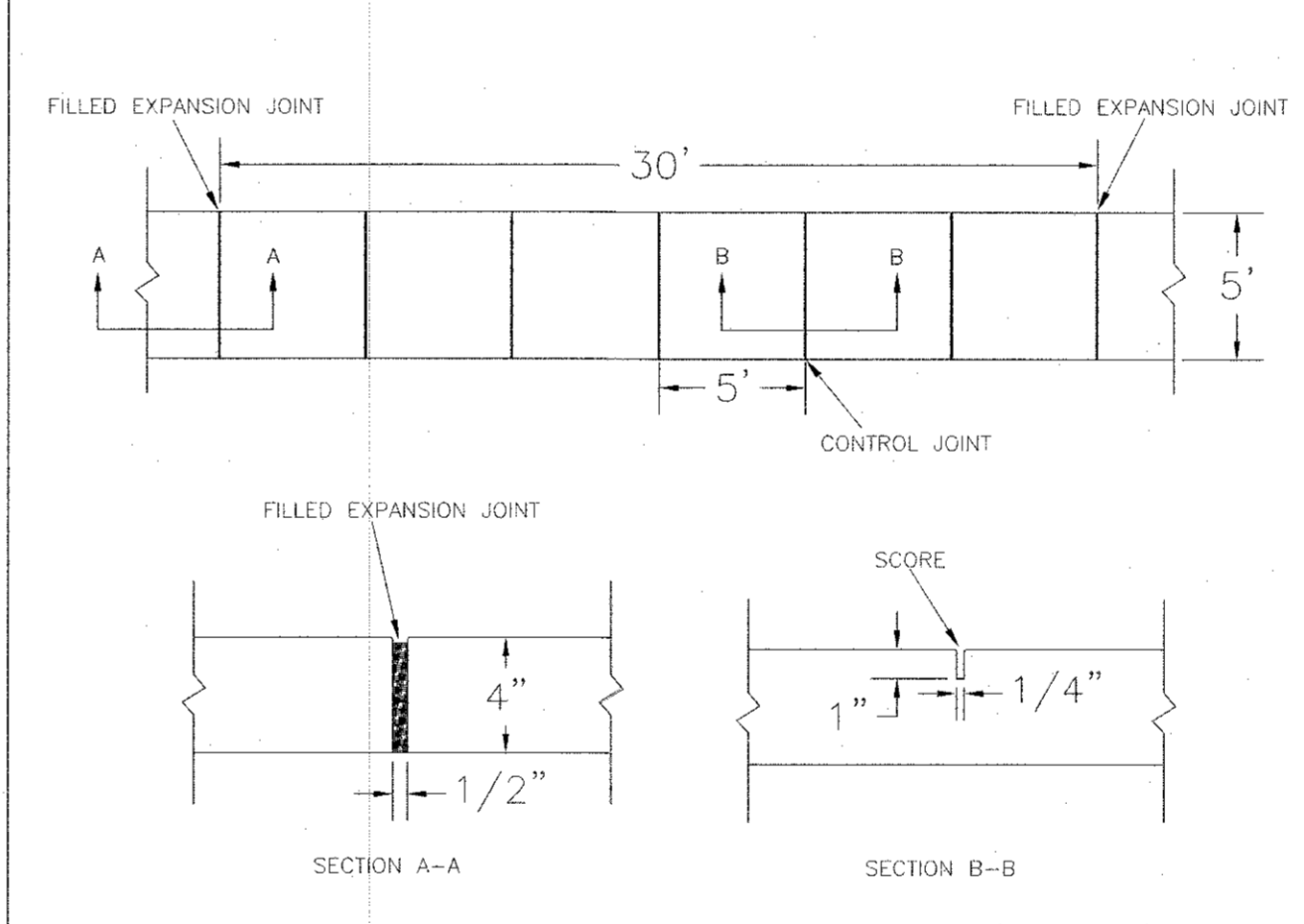
WILMINGTON NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807



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

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



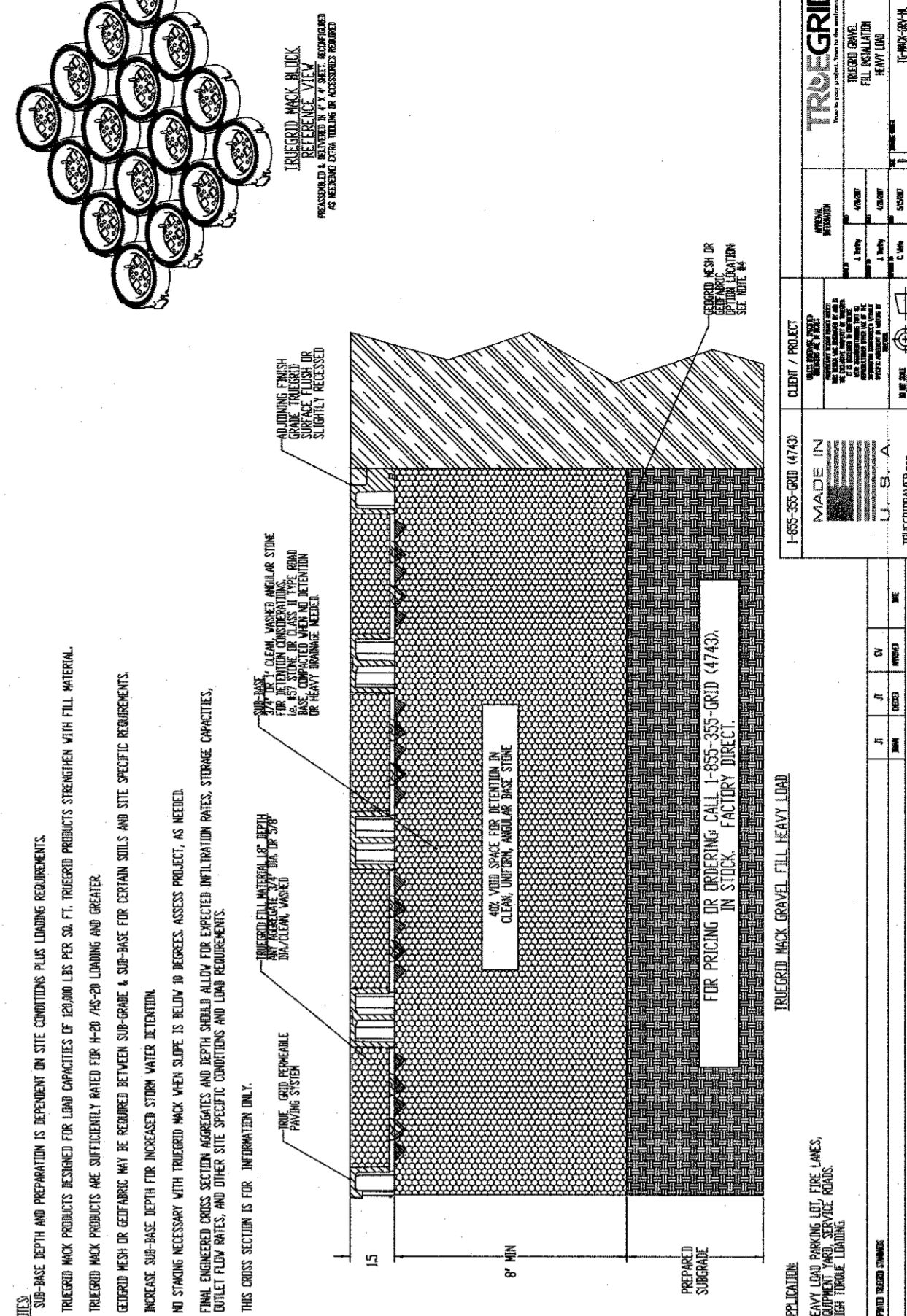
- NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
 2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
 3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
 4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION 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

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

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

DETAILS AND NOTES

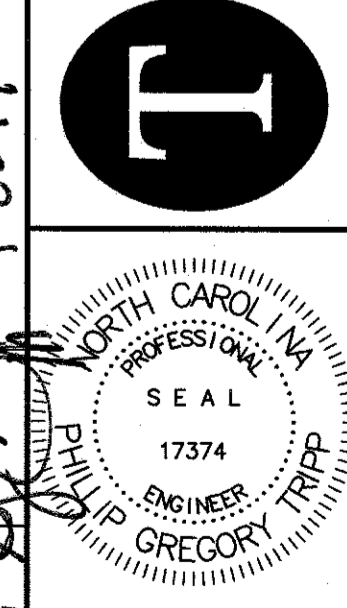
TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5681
© 2018 TRIPP ENGINEERING, P.C.
LICENSE NO. 35-127

PARKWAY VOLVO
OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC
ADDRESS: 5620 MARKET ST., WILMINGTON, NC

DATE: 01-23-19
DESIGN: PGT
DRAWN: EJW

C6

SHEET 6 OF 6
17069



REVISIONS

NO.	DATE	DESCRIPTION
1	2/19/19	REVISED PER CITY COMMENTS

OWNER:
WILMINGTON AUTO GROUP PROPERTIES LLC
 5920 MARKET STREET
 WILMINGTON, NC 28405
 Phone: 1-877-835-8274 Fax: 1-910-791-6121

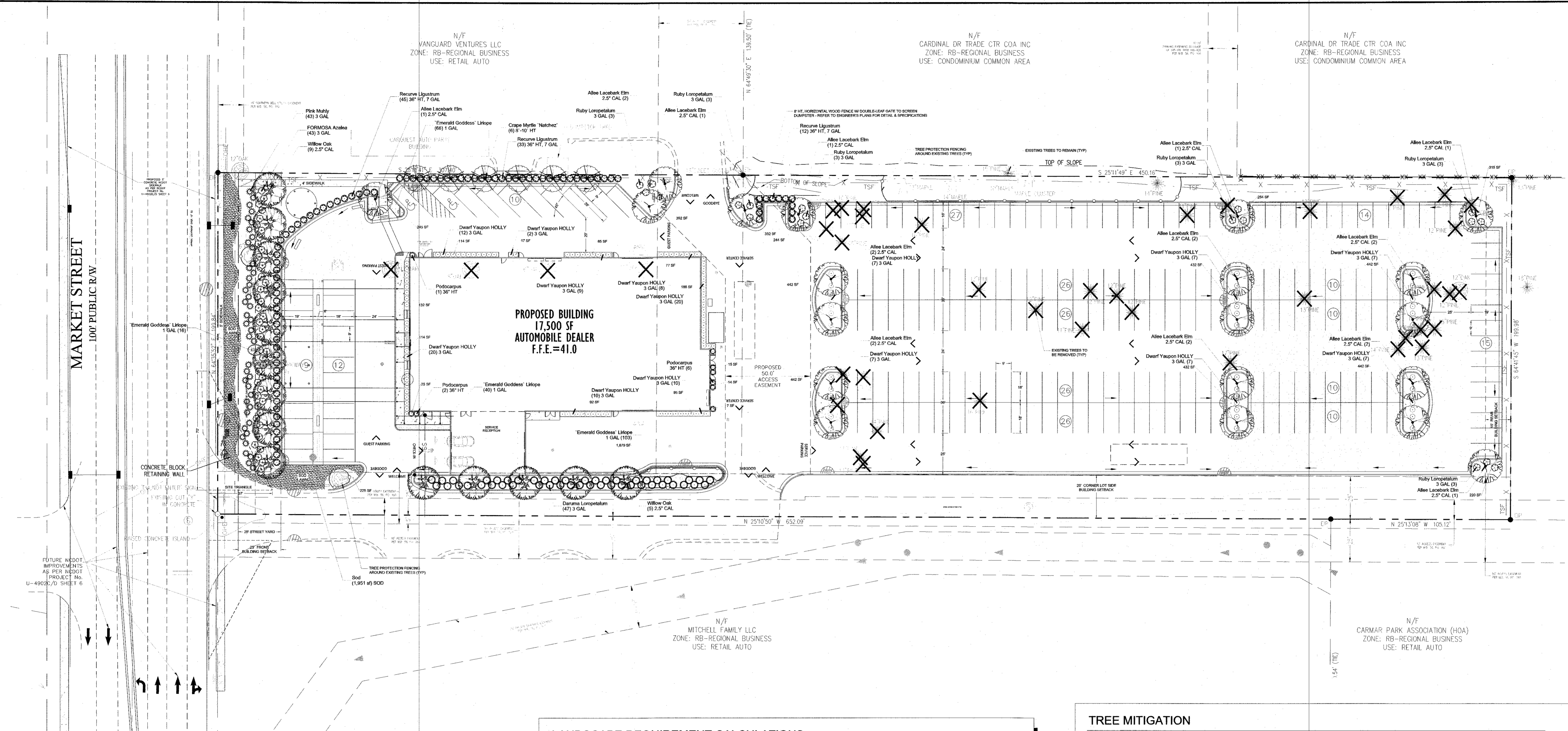
PROJECT:
PARKWAY VOLVO
 5820 MARKET STREET
 WILMINGTON, NC 28405
 LANDSCAPE PLAN

SHEET INFO

LANDSCAPE PLANTING PLAN

DATE: 2018.04.20
 DESIGNED BY: MC/PF
 DRAWN BY: GD3
 CHECKED BY: MC
 SHEET: **1.1**
 1 OF x

PROGRESS SET - NOT FOR CONSTRUCTION



PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	QTY
	LAGERSTROEMIA 'NATCHEZ' / CRAPE MYRTLE 'NATCHEZ'	8'-10' HT	6
	QUERCUS PHELLOS / WILLOW OAK	2.5" CAL	14
	ULMUS PARVIFOLIA 'ALLEE' / ALLEE LACEBARK ELM	2.5" CAL	20
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY
	AZALEA FORMOSA / FORMOSA AZALEA	3 GAL	43
	ILEX VOMITORIA 'NANA' / DWARF YAUPON HOLLY	3 GAL	133
	LIGUSTRUM JAPONICUM 'RECURVIFOLIUM' / RECURVE LIGUSTRUM	36" HT, 7 GAL	90
	LOROPETALUM CHINENSE 'DARUMA' / DARUMA LOROPETALUM	3 GAL	47
	LOROPETALUM CHINENSE 'RUBY' / RUBY LOROPETALUM	3 GAL	18
	MUHLENBERGIA CAPILLARIS / PINK MUHLY	3 GAL	43
	PODOCARPUS MACROPHYLLUS / PODOCARPUS	36" HT	9
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	QTY
	LIRIOPE MUSCARI 'EMERALD GODDESS' / 'EMERALD GODDESS' LIRIOPE	1 GAL	225
	SOD TBD / SOD	SOD	1,951 SF

LANDSCAPE REQUIREMENT CALCULATIONS

PARKING LOT INTERIOR LANDSCAPING:

TOTAL DRIVE ISLE / PARKING AREA: 73,669 SF

REQUIRED: 73,669 SF (IMPERVIOUS) x 20% = 14,734 SF SHADING
 14,734 / 707 SF = 21 TREES REQUIRED

PROVIDED: 14,734 SF TOTAL SHADING
 25 TREES PROVIDED

STREET YARD LANDSCAPING:

MULTIPLIER: 25 (FOR RB ZONING)
 200 LF - 4 (SIDEWALK) - 14.6 (ROAD) = 181.4 LF

181.4 LF * 25 = 4,535 SF REQUIRED
 4,535 SF PROVIDED

REQUIRED PLANTING
 4,535 / 600 = 8 CANOPY SHADE TREES REQUIRED
 46 SHRUBS REQUIRED

100 SF (SIDEWALK) + 453 SF (ROAD) = 553 SF IMPERVIOUS INSIDE STREET YARD
 553 SF / 4,995 SF = 11% IMPERVIOUS INSIDE STREET YARD

FOUNDATION PLANTINGS:

FOUNDATION PLANTINGS: (NORTH)
 253 SF REQUIRED (96"22"12%)
 291 SF PROVIDED

FOUNDATION PLANTINGS: (SOUTH)
 164 SF REQUIRED (62"22"12%)
 186 SF PROVIDED

FOUNDATION PLANTINGS: (EAST)
 182 SF REQUIRED (69"22"12%)
 224 SF PROVIDED

FOUNDATION PLANTINGS: (WEST)
 217 SF REQUIRED (82"22"12%)
 246 SF PROVIDED

BUFFER YARDS:

NO BUFFER YARDS REQUIRED

NOTES:

REFER TO ENGINEER'S PLANS FOR ADDITIONAL SITE DATA & ALL OTHER INFORMATION REGARDING TREE MITIGATION, GRADING & DRAINAGE, STORMWATER, UTILITIES, PAVING & ROADWAY IMPROVEMENTS

ALL MULCH TO BE: PINE STRAW & HARDWOOD

* ALL REQUIRED TREES SHALL BE A MINIMUM OF 2.5" CAL AND MEET THE AMERICAN NURSERYMEN ASSOCIATION STANDARDS

TREE MITIGATION

REGULATED TREES TO BE REMOVED	TREES TO BE PRESERVED / CREDITS
PINE 12" OAK 12"	TREE DBH CREDIT
PINE 13" OAK 10"	PINE 14" 3
PINE 14" OAK 8"	OAK 30" 5
PINE 15"	OAK 6" 2
PINE 16"	MAPLE 14" 3
PINE 17"	MAPLE 13" 3
PINE 19"	MAPLE 10" 2
TOTAL 106"	SEET GUM 13" 13
TOTAL 30"	TOTAL CREDITS 31

x 50% MITIGATION = 53
 53/3 = 18 TREES REQUIRED

x 50% MITIGATION = 15
 15/3 = 5 TREES REQUIRED

TOTAL NUMBER OF REG TREES REQUIRED: 23
 TOTAL NUMBER OF REG TREES PROVIDED: 34

Approved Construction Plan

Name	Date
Planning	
Public Utilities	
Traffic	
Fire	

STORMWATER MANAGEMENT PLAN

APPROVED

CITY OF WILMINGTON
 ENGINEERING DEPARTMENT
 DATE _____ PERMIT # _____
 SIGNED _____

WRIGHTSVILLE BEACH LANDSCAPING INC.
 NCLC License #CL0083

NOTE:
 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.

