

NOTES:

ZONING

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY MICHAEL UNDERWOOD AND ASSOCIATES, P.A.
- 2) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
- 3) EXISTING EASEMENTS AS SHOWN
- 4) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 5) ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 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.

SOLID WASTE

- 1) SITE TO USE ROLL-OUT TYPE CARS.

TRAFFIC

- 1) PLEASE COORDINATE WITH CITY TRAFFIC SIGNS AND MARKINGS MANAGER PRIOR TO INSTALLATION OF ANY TRAFFIC SIGNS.
- 2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- 3) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
- 4) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 5) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 6) 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 SUBDIVISOR 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 910-341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- 7) CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.
- 8) CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 9) NO PARKING SPACES, FENCES, WALLS, POSTS, LIGHT, SHRUBS, TREES, OR OTHER TYPE OF OBSTRUCTIONS NOT SPECIFICALLY EXEMPTED SHALL BE PERMITTED IN THE SPACE BETWEEN 30 INCHES AND ABOVE GROUND AND 10 FEET ABOVE GROUND LEVEL WITHIN A TRIANGULAR SIGHT DISTANCE.

LANDSCAPING

- 1) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND THE PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.
- 2) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT FROM 30'-10'.
- 3) PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 4) 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.
- 5) NO EQUIPMENT IS ALLOWED ON SITES 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.
- 6) ALL CURBING AROUND LANDSCAPE ISLAND TO BE MINIMUM 6" IN HEIGHT.
- 7) TREE PRESERVATION/REMOVAL PERMIT IS REQUIRED PRIOR TO CLEARING AND LAND DISTURBANCE.
- 8) LABEL PROTECTIVE FENCING WITH SIGNS TO BE PLACED EVERY 50 LINEAR FEET OR AT LEAST TWO (2) PER AREA IN BOTH ENGLISH AND SPANISH "TREE PROTECTION AREA: DO NOT ENTER".

CFPIA

- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPIA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CFPIA GROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 3) IF THE CONTRACTOR DESIRES CFPIA 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 CFPIA WATER SHALL COMPLY WITH THE CFPIA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPIA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOCHR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST WITHIN WRIGHTSVILLE AVE. R/W. NO RECORDS OF INDIVIDUAL EASEMENTS EXIST.
- 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-652-4949 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) STORMWATER PROVIDED BY INFILTRATION BASIN.

FIRE AND LIFE SAFETY NOTES

- 1) FIRE HYDRANT MUST BE WITHIN 150' OF THE FDC MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE.
- 2) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- 3) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3'-FOOT CLEAR SPAN SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- 4) IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 5) 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.
- 6) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 7) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- 8) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0696.
- 9) CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

SITE LIGHTING

- 1) SITE LIGHTING PLAN TO BE PROVIDED BY OTHERS.
- 2) ANY EXTERIOR LIGHTING SHALL BE LIMITED TO CUT-OFF OR SHIELDED TYPE LUMINAIRES AND SHALL BE DIRECTED TOWARDS THE CENTER OF THE PROPERTY. IN NO CASE SHALL SITE LIGHTING BE LOCATED OR INSTALLED SO AS TO SHINE DIRECTLY ONTO NEIGHBORING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY. THE HEIGHT OF ANY EXTERIOR LIGHTING SHALL NOT EXCEED TEN (10) FEET IN HEIGHT AND SHALL MAINTAIN A CLEARANCE OF AT LEAST EIGHT (8) FEET ABOVE ANY PEDESTRIAN AREA.

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

REVISIONS		
No./Date	Description	By

LOCATION MAP

NTS

SITE INVENTORY NOTES:

1. PREPARER OF THE PLAN: TRIPP ENGINEERING, P.C.
2. APPLICANT NAME: FOREST PARK ILM, LLC
3. SITE ADDRESS OF THE DEVELOPMENT: 430 FOREST PARK ROAD
4. PROPERTY OWNER: FOREST PARK ILM, LLC
5. DEVELOPER: FOREST PARK ILM, LLC
6. PROPERTY BOUNDARY: SEE PLAN
7. TAX PARCEL INFORMATION: R06209-002-021-000
8. PROPERTY ZONING: R-5
9. ADJACENT PROPERTY OWNER INFORMATION: SEE PLAN
10. VICINITY MAP: SEE PLAN
11. TOPOGRAPHY: SEE PLAN
12. 100-YEAR FLOOD BOUNDARY: N/A
13. EXISTING DITCHES, CREEKS AND STREAMS: SEE PLAN
14. SOIL: BE: BAYMADE FINE SAND, SE: SEAGATE FINE SAND
15. CAMA AEC: N/A
16. CAMA LAND CLASSIFICATION: URBAN WATERSHED RESOURCE PROTECTION
17. CONSERVATION RESOURCES: NONE ASSOCIATED SETBACKS: N/A
18. HISTORIC OR ARCHAEOLOGICAL SITE: N/A
19. CEMETERIES, BURIAL SITES/GROUNDS: N/A
20. FORESTED AREAS, HABITAT AND DOMINANT SPECIES: N/A
21. WETLANDS: NONE
22. PROTECTED SPECIES OR HABITAT: N/A
23. EXISTING OR PROPOSED THOROUGHFARES, BIKE ROUTES, PEDESTRIAN SIDEWALKS OR TRAILS AND TRANSIT FACILITIES: SEE SITE PLAN

SITE INVENTORY AND TREE DEMOLITION PLAN
FOREST PARK TOWNHOMES
 430 FOREST PARK ROAD
 WILMINGTON, NORTH CAROLINA

INVENTORY OF SIGNIFICANT TREES TO BE MITIGATED

TREE TYPE	TREE SIZE	QUANTITY	TOTAL DBH	MITIGATION INCHES
MAGNOLIA	12"	1	12	24
LAUREL OAK	20"	1	20	40
LOBLOLLY PINE	26"	1	26	52

TOTAL INCHES: 116"
TOTAL MITIGATION REQUIRED: 232"
*SEE LANDSCAPE PLAN

- Legend:**
- Notes:**
- * All Pines are Loblolly. No Long-leaf Pines were identified.
 - * Oak trees of species "Live-Oak" are labeled as such.
 - * No Specimen trees were found within the development area.
- Ex. Regulated & Significant Trees to be Protected & Retained
(1 Flowering / 11 Hardwoods / 3 Pines)
(1) 24" MAGNOLIA (1) 19" OAK
(1) 11" SYCAMORE (1) 20" OAK
(1) 14" GUM (1) 20" LIVE OAK
(1) 14" OAK (1) 21" LIVE OAK
(1) 15" OAK (1) 19" LOBLOLLY PINE
(1) 17" OAK (2) 21" LOBLOLLY PINE
 - Ex. Regulated Trees to be Removed for Essential Site Improvements
(3 Flowering / 19 Hardwoods / 15 Pines)
(2) 5" MAGNOLIA (1) 13" OAK (2) 18" LOBLOLLY PINE
(1) 6" MAGNOLIA (1) 16" OAK (2) 20" LOBLOLLY PINE
(1) 5/10" TWIN OAK (1) 6/8" TWIN LIVE OAK (1) 22" LOBLOLLY PINE
(1) 7/9" TWIN OAK (1) 15" LIVE OAK (1) 23" LOBLOLLY PINE
(1) 15/18" TWIN OAK (2) 12" LOBLOLLY PINE
(3) 8" OAK (1) 13" LOBLOLLY PINE
(3) 9" OAK (1) 14" LOBLOLLY PINE
(1) 10" OAK (1) 15" LOBLOLLY PINE
(2) 11" OAK (1) 16" LOBLOLLY PINE
(3) 12" OAK (3) 17" LOBLOLLY PINE
 - Ex. Significant Trees to be Removed for Essential Site Improvements & Mitigated

WILMINGTON
NORTH CAROLINA

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631
© 2021 TRIPP ENGINEERING, P.C.
LICENSE NO. 25-1277

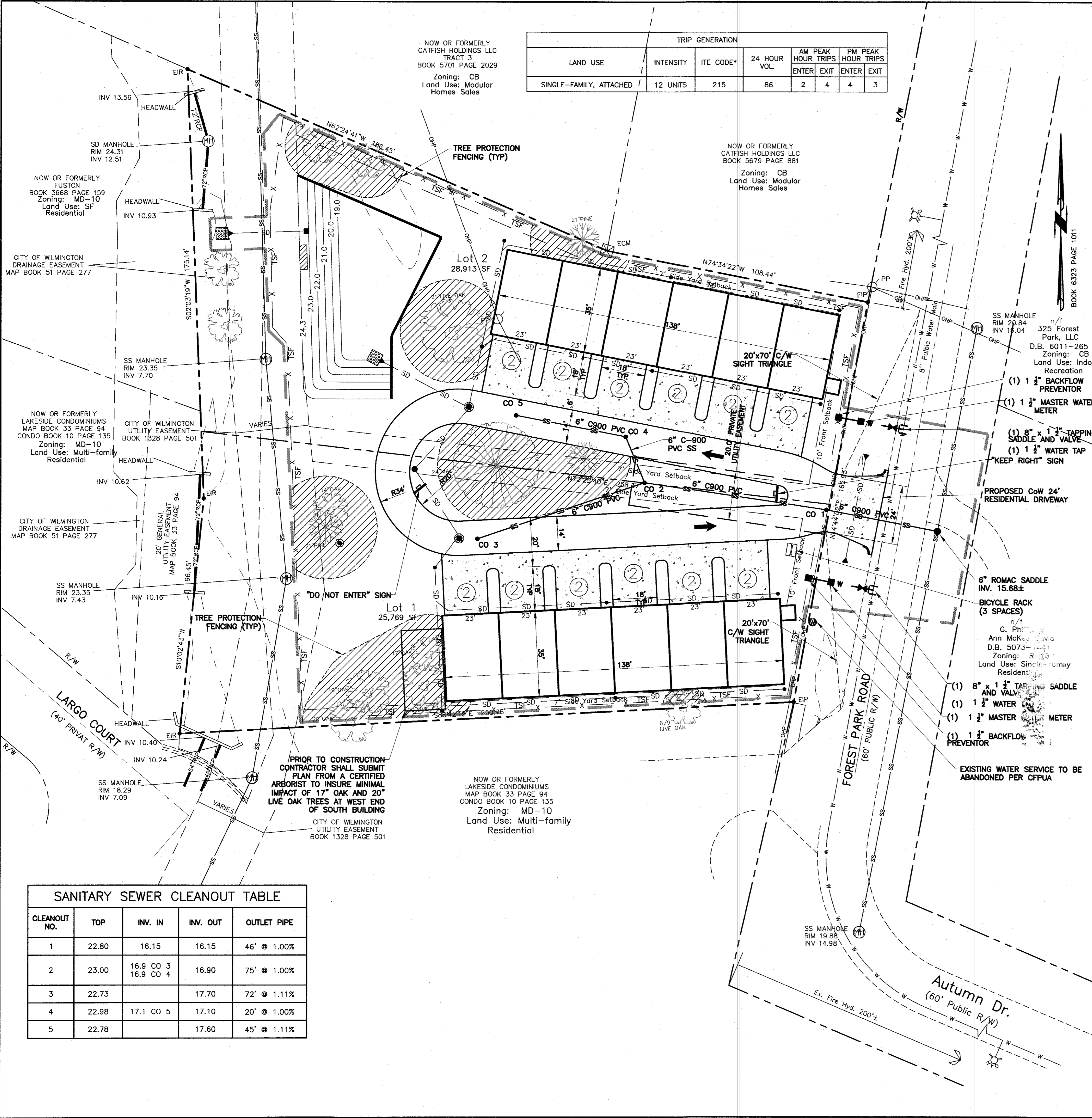
PROGRESS DRAWING
DO NOT USE FOR CONSTRUCTION

DATE 06-05-23
DESIGN PGT
DRAWN EJW

C1

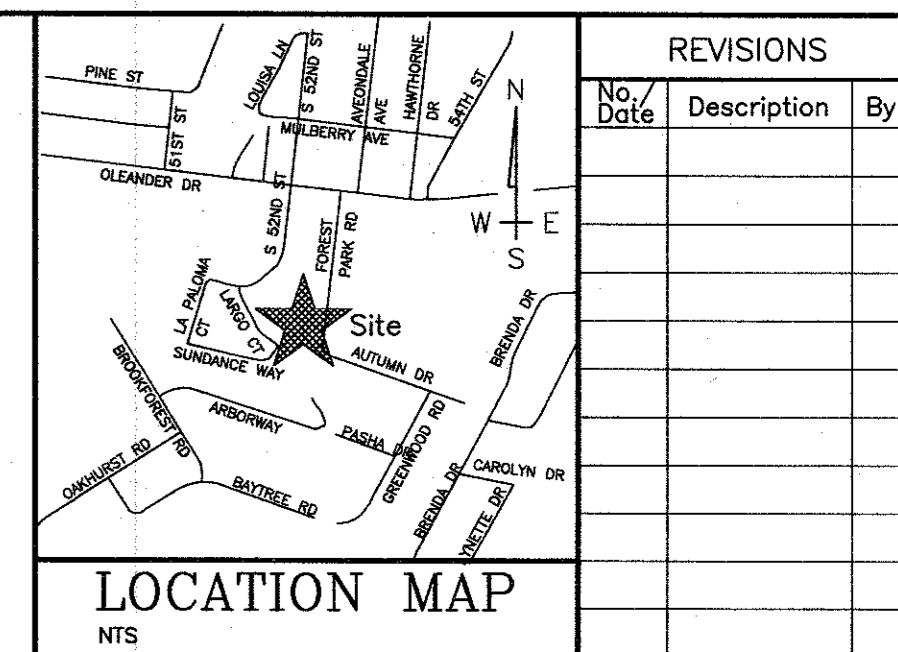
22011

SITE PLAN
BAR SCALE 1"=20'



TRIP GENERATION							
LAND USE	INTENSITY	ITE CODE*	24 HOUR VOL.	AM PEAK HOUR TRIPS		PM PEAK HOUR TRIPS	
				ENTER	EXIT	ENTER	EXIT
SINGLE-FAMILY, ATTACHED	12 UNITS	215	86	2	4	4	3

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SITE DATA:

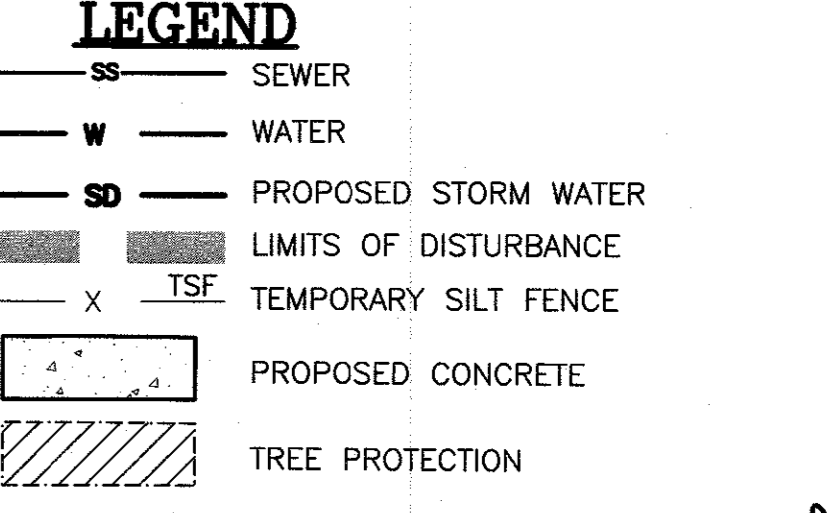
PROPERTY OWNER	FOREST PARK ILM, LLC
PROJECT ADDRESS	430 FOREST PARK ROAD
PIN NUMBER	ROB209-002-021-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	R-5
ZONING DISTRICT	1.1 AC
DISTURBED AREA	FRONT: 10' REAR: 15' SIDE: 7'
SETBACKS REQUIRED	FRONT: 5.15' / 10.5' REAR: 101.5' / 119.5' SIDE: 7.5'
TRACT AREA	54,682 SF (1.25 AC)
BUILDING USE	RESIDENTIAL
BUILDING CONSTRUCTION TYPE	5B
EXISTING BUILDING AREA	0 SF
TOTAL PROPOSED BUILDING AREA (GROSS)	9,732 SF
BUILDING LOT COVERAGE (9,732/54,682)	17.8%
NUMBER OF BUILDINGS	2
NUMBER OF UNITS	12
NUMBER OF BEDROOMS/UNIT	3
MAXIMUM BUILDING HEIGHT	3
NUMBER OF STORIES	3
SF PER FLOOR (GROSS)	
LOT 1 BUILDING	4,830 SF
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
LOT 2 BUILDING	4,830 SF
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
EXISTING IMPERVIOUS AREAS:	
EXISTING BUILDING	0 SF
EXISTING ASPHALT	0 SF
EXISTING CONCRETE	0 SF
EXISTING IMPERVIOUS AREA	0 SF (0%)
PROPOSED ONSITE IMPERVIOUS AREA:	
PROPOSED BUILDING FOOTPRINT	9,732 SF
PROPOSED ASPHALT ACCESS	5,523 SF
PROPOSED CONCRETE PARKING	5,505 SF
FUTURE IMPERVIOUS AREA	3,720 SF
TOTAL IMPERVIOUS AREA	24,480 SF (44.8%)
PROPOSED OFFSITE IMPERVIOUS AREA:	
ONSITE + OFFSITE	25,745 SF
PARKING REQUIRED: (12) 3-BEDROOM UNITS	
MINIMUM: (2.25/UNIT)	27 SPACES
MAXIMUM: (2.75/UNIT)	33 SPACES
PARKING PROVIDED:	33 SPACES
BICYCLE SPACES REQUIRED (1 SPACE/5 DWELLING UNITS)	
BICYCLE SPACES PROVIDED	3 BICYCLE SPACES
1 SPACE/5 DWELLING UNITS=12 UNITS	3 BICYCLE SPACES
PUBLIC WATER AND SEWER BY CFPWA	0 GPD
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	4,800 GPD
(400 GPD/UNIT x 12 UNITS)	
PROPOSED SEWER FLOW:	4,320 GPD
(360 GPD/UNIT x 12 UNITS)	
CAMA LAND USE: URBAN WATERSHED RESOURCE PROTECTION	
SOLID WASTE HANDLING:	ROLL-OUT CARTS

- LEGEND**
- SS SEWER
 - W WATER
 - SD PROPOSED STORM WATER
 - LIMITS OF DISTURBANCE
 - X TSF
 - PROPOSED CONCRETE
 - TREE PROTECTION

- DRAINAGE**
- 1) STORMWATER PROVIDED BY INFILTRATION BASIN.
- FIRE AND LIFE SAFETY NOTES**
- 1) FIRE HYDRANT MUST BE WITHIN 150' OF THE FDC MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE.
 - 2) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
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- SITE LIGHTING**
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SANITARY SEWER CLEANOUT TABLE

CLEANOUT NO.	TOP	INV. IN	INV. OUT	OUTLET PIPE
1	22.80	16.15	16.15	46" @ 1.00%
2	23.00	16.9 CO 3 16.9 CO 4	16.90	75" @ 1.00%
3	22.73		17.70	72" @ 1.11%
4	22.98	17.1 CO 5	17.10	20" @ 1.00%
5	22.78		17.60	45" @ 1.11%

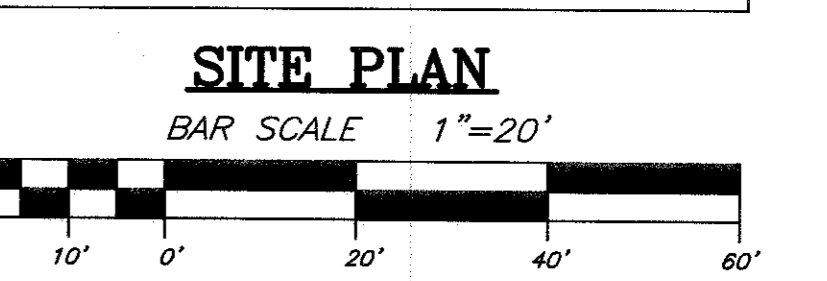


- FOR EACH OPEN UTILITY CUT OF CITY STREETS, A \$325 PERMIT SHALL BE REQUIRED FROM THE CITY PRIOR TO OCCUPANCY AND/OR PROJECT ACCEPTANCE.**



PROGRESS DRAWING

DATE 06-05-23
DESIGN PGT
DRAWN EJW



REVISIONS

No.	Date	Description	By

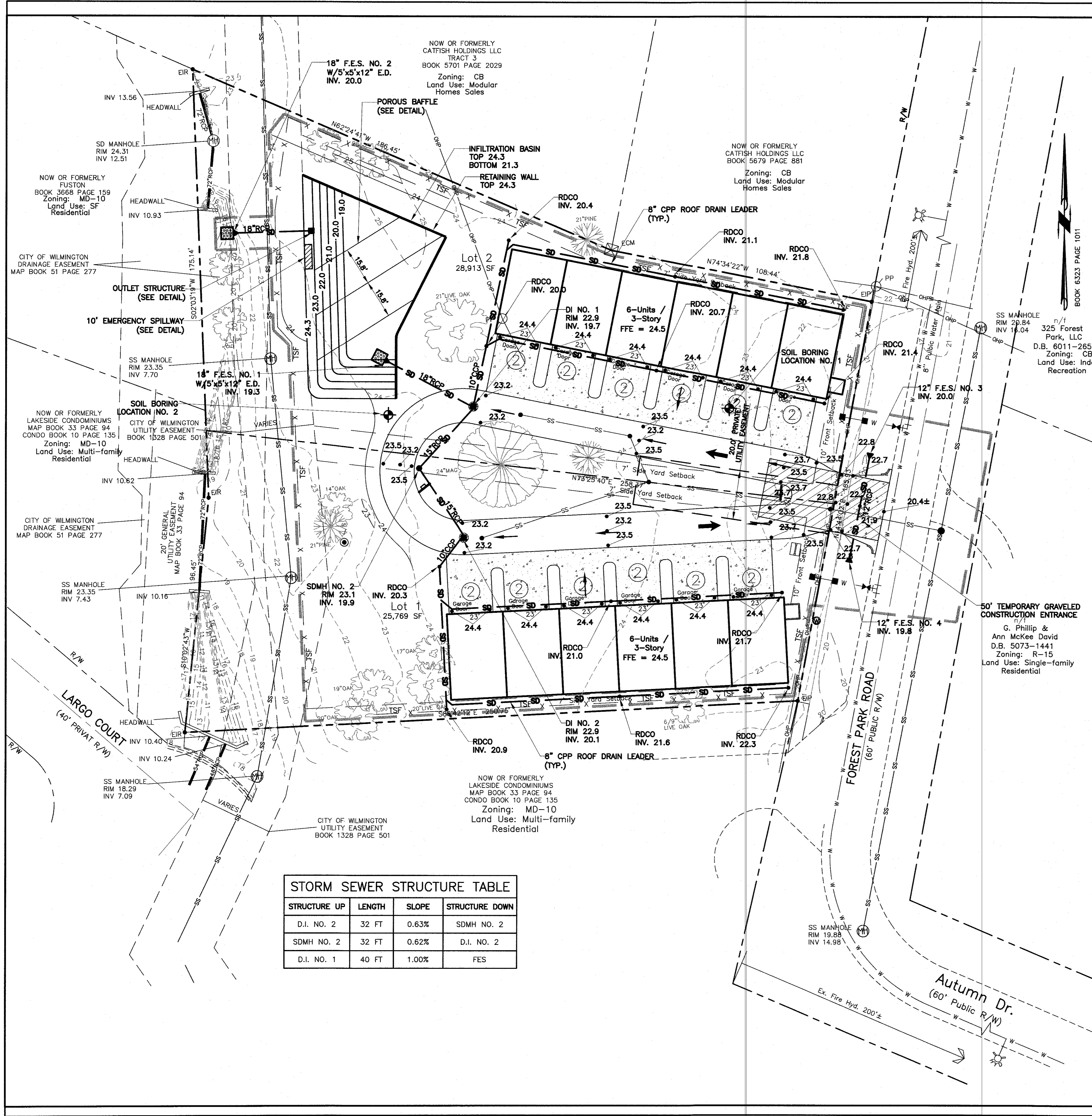
TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5681
© LICENSE NO. 06-127

6-5-23

DO NOT USE FOR CONSTRUCTION

C2

22011



STORM SEWER STRUCTURE TABLE

STRUCTURE UP	LENGTH	SLOPE	STRUCTURE DOWN
D.I. NO. 2	32 FT	0.63%	SDMH NO. 2
SDMH NO. 2	32 FT	0.62%	D.I. NO. 2
D.I. NO. 1	40 FT	1.00%	FES

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- 1) SITE TO USE ROLL-OUT TYPE CARTS.

TRAFFIC

- 1) PLEASE COORDINATE WITH CITY TRAFFIC SIGNS AND MARKINGS MANAGER PRIOR TO INSTALLATION OF ANY TRAFFIC SIGNS.
- 2) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- 3) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
- 4) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 5) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 6) 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 910-341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- 7) CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.
- 8) CONTACT TRAFFIC ENGINEERING AT (910) 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 9) NO PARKING SPACES, FENCES, WALLS, POSTS, LIGHT, SHRUBS, TREES, OR OTHER TYPE OF OBSTRUCTIONS NOT SPECIFICALLY EXEMPTED SHALL BE PERMITTED IN THE SPACE BETWEEN 30 INCHES AND ABOVE GROUND AND 10 FEET ABOVE GROUND LEVEL WITHIN A TRIANGULAR SIGHT DISTANCE.

LANDSCAPING

- 1) A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND THE PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN.
- 2) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL LINES FROM 30'-10'.
- 3) PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 4) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARREADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAKING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 5) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SIGHT 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.
- 6) ALL CURBING AROUND LANDSCAPE ISLAND TO BE MINIMUM 6" IN HEIGHT.
- 7) TREE PRESERVATION/REMOVAL PERMIT IS REQUIRED PRIOR TO CLEARING AND LAND DISTURBANCE.
- 8) LABEL PROTECTIVE FENCING WITH SIGNS TO BE PLACED EVERY 50 LINEAR FEET, OR AT LEAST TWO (2) PER AREA, IN BOTH ENGLISH AND SPANISH "TREE PROTECTION AREA DO NOT ENTER".

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 METERS(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 DOWNFLOW 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 USCFOCCR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST WITHIN WRIGHTSVILLE AVE. R/W. NO RECORDS OF INDIVIDUAL EASEMENTS EXIST.
- 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) STORMWATER PROVIDED BY INFILTRATION BASIN.

FIRE AND LIFE SAFETY NOTES

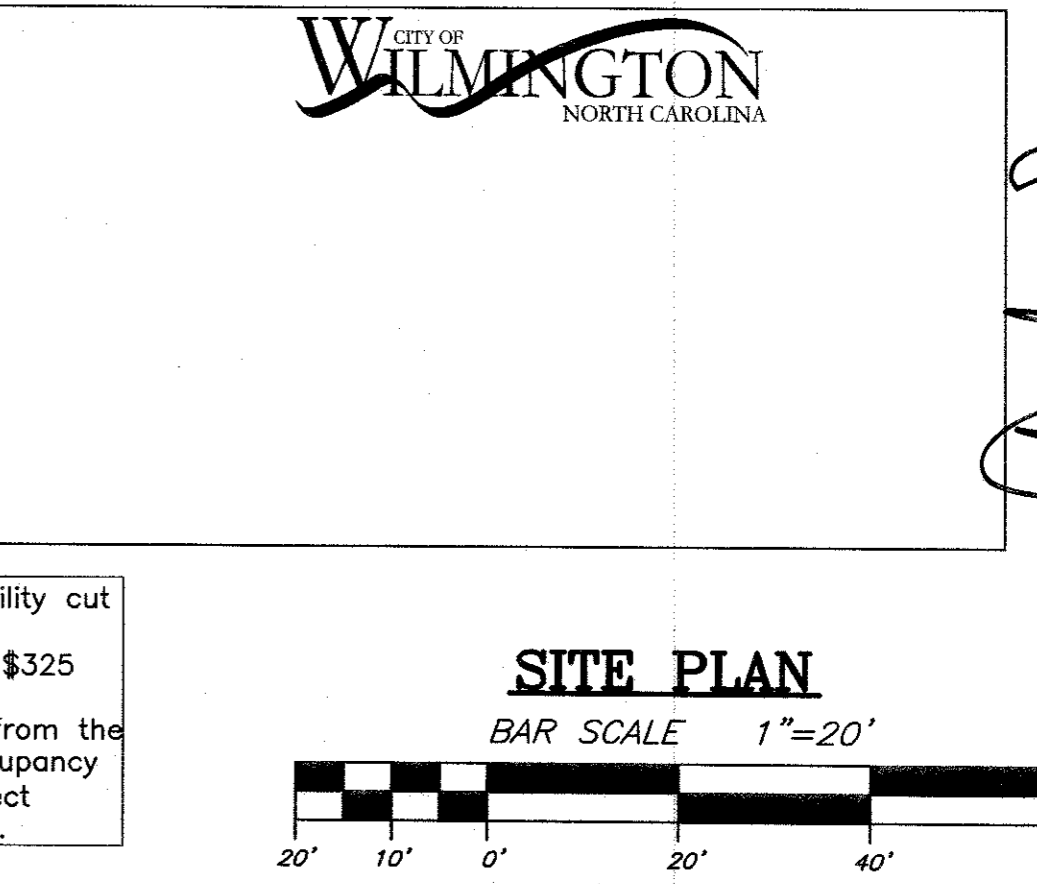
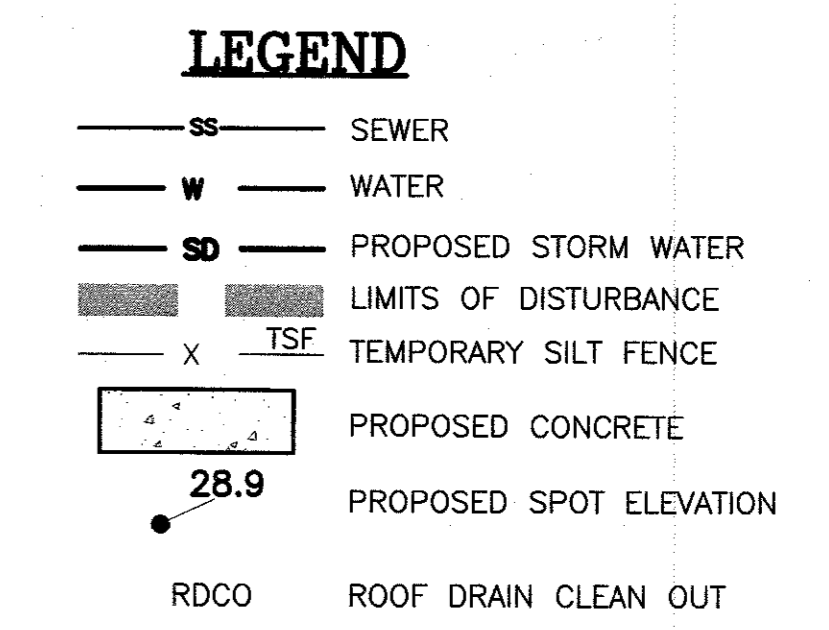
- 1) FIRE HYDRANT MUST BE WITHIN 150' OF THE FDC MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE.
- 2) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- 3) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3'-FOOT CLEAR SPAN SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- 4) IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 5) 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.
- 6) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 7) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- 8) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0686.
- 9) CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

SITE LIGHTING

- 1) SITE LIGHTING PLAN TO BE PROVIDED BY OTHERS.
- 2) ANY EXTERIOR LIGHTING SHALL BE LIMITED TO CUT-OFF OR SHIELDED TYPE LUMINAIRES AND SHALL BE DIRECTED TOWARDS THE CENTER OF THE PROPERTY. IN NO CASE SHALL SITE LIGHTING BE LOCATED OR INSTALLED SO AS TO SHINE DIRECTLY ONTO NEIGHBORING PROPERTIES OR THE PUBLIC RIGHT-OF-WAY. THE HEIGHT OF ANY EXTERIOR LIGHTING SHALL NOT EXCEED TEN (10) FEET IN HEIGHT AND SHALL MAINTAIN A CLEARANCE OF AT LEAST EIGHT (8) FEET ABOVE ANY PEDESTRIAN AREA.

SITE DATA:

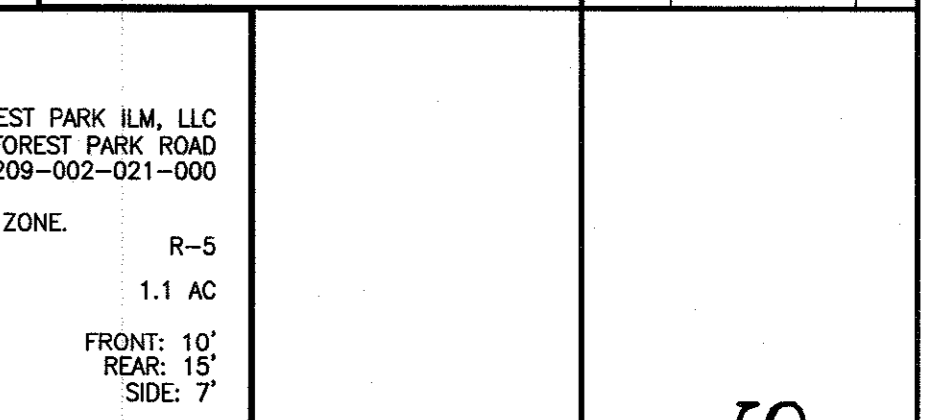
PROPERTY OWNER	FOREST PARK ILM, LLC
PROJECT ADDRESS	430 FOREST PARK ROAD
PERMITS	RS-209-02-021-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	R-5
ZONING DISTRICT	RESIDENTIAL
DISTURBED AREA	1.1 AC
SETBACKS REQUIRED	FRONT: 10' REAR: 15' SIDE: 7'
PROPOSED SETBACKS: LOT1/LOT2	FRONT: 5.17'/10.5' REAR: 101.5'/118.5' SIDE: 7.5'
TRACT AREA	54,682 SF (1.25 AC)
BUILDING USE	RESIDENTIAL
BUILDING CONSTRUCTION TYPE	5B
EXISTING BUILDING AREA	0 SF
TOTAL PROPOSED BUILDING AREA (GROSS)	9,732 SF
BUILDING LOT COVERAGE (9,732/54,682)	17.8%
NUMBER OF BUILDINGS	12
NUMBER OF UNITS	12
NUMBER OF BEDROOMS/UNIT	3
MAXIMUM BUILDING HEIGHT	35'
NUMBER OF STORIES	3
SF PER FLOOR (GROSS)	
LOT 1 BUILDING	
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
LOT 2 BUILDING	
1ST FLOOR	4,830 SF
2ND FLOOR	4,830 SF
3RD FLOOR	4,830 SF
EXISTING IMPERVIOUS AREAS:	
EXISTING BUILDING	0 SF
EXISTING ASPHALT	0 SF
EXISTING CONCRETE	0 SF (0%)
EXISTING IMPERVIOUS AREA	0 SF (0%)
PROPOSED ONSITE IMPERVIOUS AREA:	
PROPOSED BUILDING FOOTPRINT	9,732 SF
PROPOSED ASPHALT ACCESS	5,523 SF
PROPOSED CONCRETE PARKING	5,505 SF
FUTURE IMPERVIOUS AREA	3,720 SF
TOTAL IMPERVIOUS AREA	24,480 SF (44.8%)
PROPOSED OFFSITE IMPERVIOUS AREA:	
ONSITE + OFFSITE	1,265 SF
TOTAL PROPOSED IMPERVIOUS AREA:	
ONSITE + OFFSITE	25,745 SF
PARKING REQUIRED: (12) 3-BEDROOM UNITS	
MINIMUM: (2.25/UNIT)	37 SPACES
MAXIMUM: (2.75/UNIT)	33 SPACES
PARKING PROVIDED:	33 SPACES
BICYCLE SPACES REQUIRED	
(1 SPACE/5 DWELLING UNITS)	3 BICYCLE SPACES
(1 SPACE/5 DWELLING UNITS)*12 UNITS	3 BICYCLE SPACES
PUBLIC WATER AND SEWER BY CFPUA	0 GPD
EXISTING WATER FLOW:	0 GPD
PROPOSED WATER FLOW:	4,800 GPD
(400 GPD/UNIT x 12 UNITS)	
PROPOSED SEWER FLOW:	4,320 GPD
(360 GPD/UNIT x 12 UNITS)	
CAMA LAND USE:	URBAN WATERSHED RESOURCE PROTECTION
SOLID WASTE HANDLING:	ROLL-OUT CARTS



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

REVISIONS

No./Date	Description	By



GRADING, DRAINAGE, EROSION CONTROL, AND STORMWATER MANAGEMENT

TRIPP ENGINEERING, P.C.
419 Chestnut Street
Wilmington, North Carolina 28401
Phone 910-769-5100
Fax 910-769-5631
© LICENSE NO. CE-1527

PROGRESS DRAWING
DO NOT USE FOR CONSTRUCTION

DATE 06-05-23
DESIGN PGT
DRAWN EJW

C3

22011

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCGO1 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCGO1 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control Plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION Table with columns: Site Area Description, Required Ground Stabilization Timeframes, Timeframe variations. Rows include Perimeter dikes, swales, ditches, and perimeter slopes; High Quality Water (HQW) Zones; Slopes steeper than 3:1; Slopes 3:1 to 4:1; Areas with slopes flatter than 4:1.

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity.

GROUND STABILIZATION SPECIFICATION Table with columns: Temporary Stabilization, Permanent Stabilization. Lists various methods like straw mulch, hydroseeding, geotextiles, etc.

EQUIPMENT AND VEHICLE MAINTENANCE

- 1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- 1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

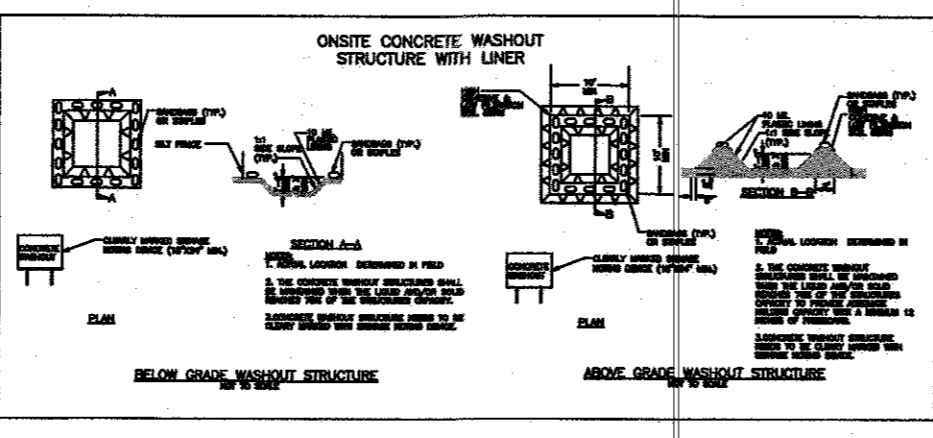
- 1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- 1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available.
2. If no alternative, install on a paved surface, or other alternative that prevents seepage into a gravel pad and surround with sand bags.
3. Monitor portable toilets for leaking and properly dispose of any leaked material.
4. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHER STOCKPILE MANAGEMENT

- 1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpiles with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access paths when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

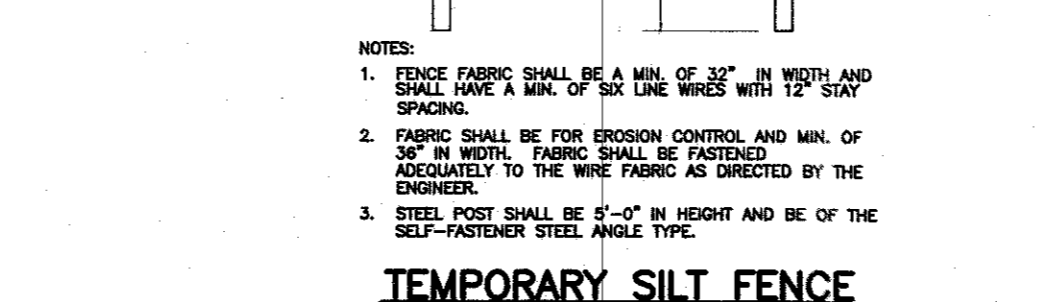
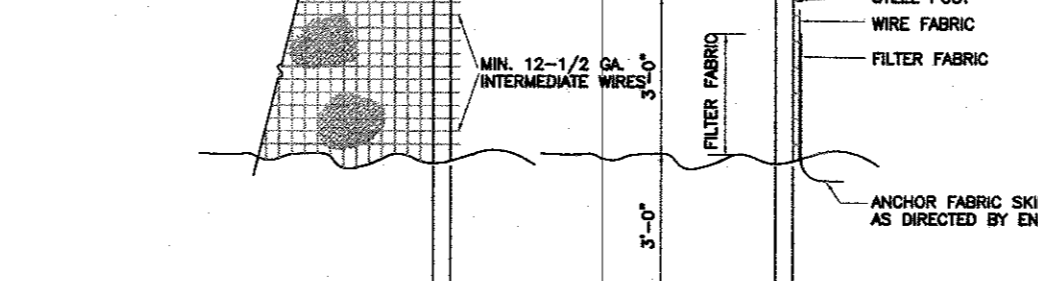
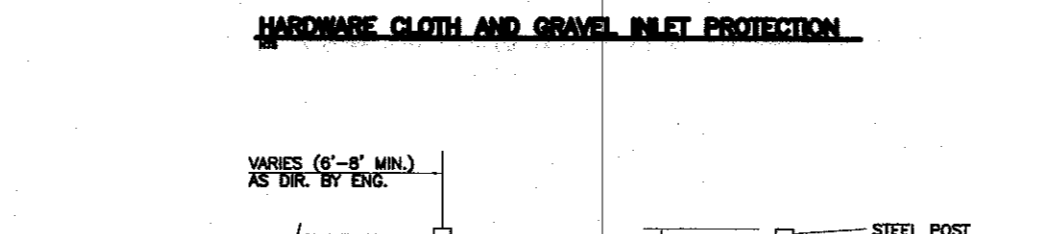
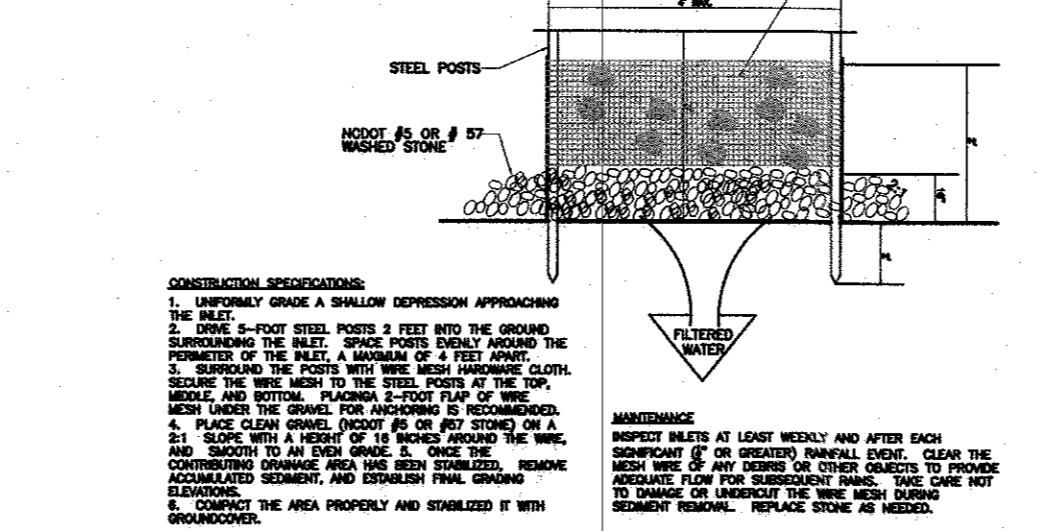
- 1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within 10 perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- 1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

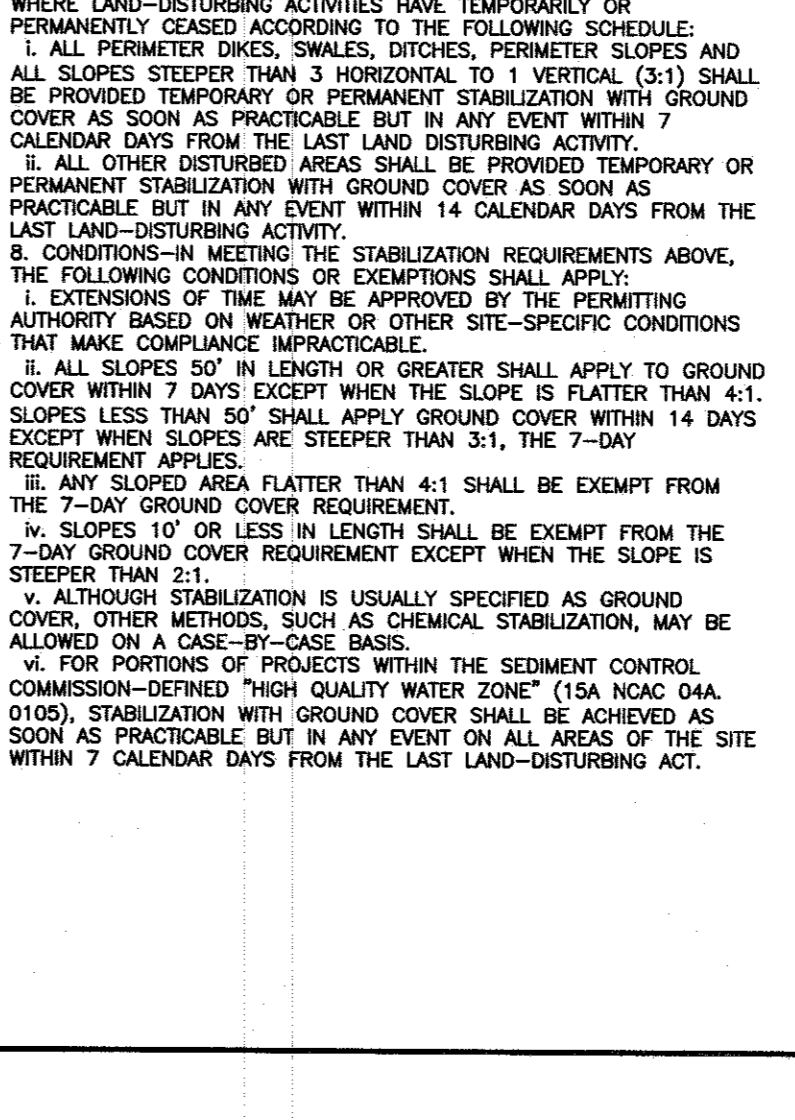
- 1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.



TEMPORARY SEEDING SPECIFICATION table with columns: Species, Rate (lb./acre), Summer, Fall, Late Winter & Early Spring. Includes sections for SOIL AMENDMENTS and MAINTENANCE.

PERMANENT GRASSING DETAIL table with columns: Species, Rate (lb./acre), Summer, Fall, Late Winter & Early Spring. Includes sections for SOIL AMENDMENTS, MAINTENANCE, and SEEDING NOTES.

NPDES GROUND STABILIZATION CRITERIA table with columns: Site Area Description, Stabilization Timeframe, Stabilization Timeframe Exceptions. Includes sections for SITE POLLUTANTS NOTES and BASIC INSTALLATION GUIDELINES.



REVISIONS table, DETAILS AND NOTES section, TRIPP ENGINEERING, P.C. contact information, and a large 'PROGRESS DRAWING' stamp with 'DO NOT USE FOR CONSTRUCTION' text.

NCGO1 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION table with columns: Inspection Frequency, Inspection Records Must Include. Lists inspection items like Rain gauge, EESC measures, Stormwater discharge, Perimeter of site, Streams or wetlands, Ground stabilization measures.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING table with columns: Item to Document, Documentation Requirements. Lists items like EESC Plan Documentation, Ground cover, Maintenance and repair, Corrective actions.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING table with columns: Occurrences that Must be Reported, Reporting Timeframes. Lists occurrences like sediment deposition, oil spills, hazardous waste, and noncompliance.

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

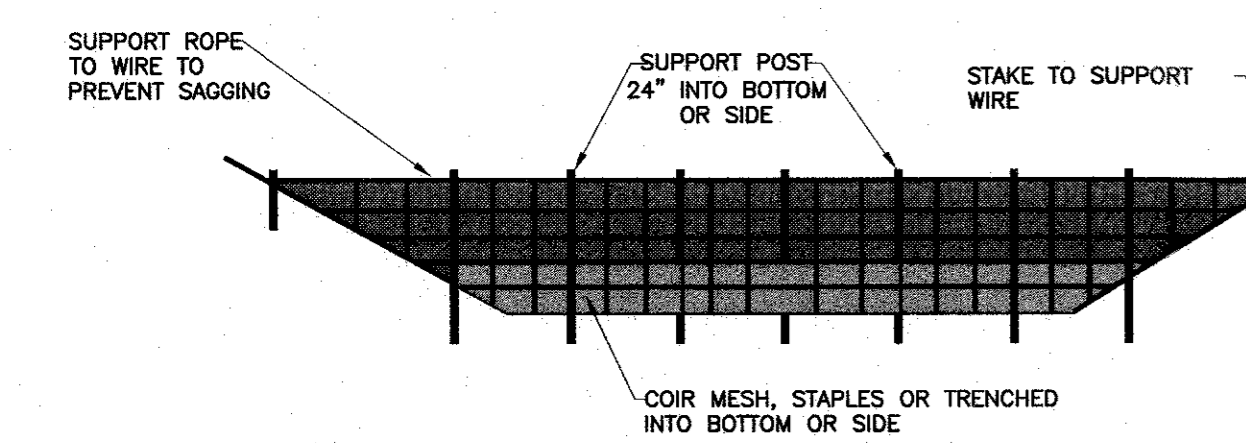
- Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn for maintenance or close out unless this is infeasible.
(a) The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur.
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2(c) and (d) of this permit.
(c) Dewatering discharges are treated with controls to minimize discharge of pollutants from dewatering basins, wet tanks, and filtration systems.
(d) Vegetated, upland areas of the site or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices.
(f) Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

PART III, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy copies.
3. Documentation to be Retained for Three Years
All data used to complete the permit and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41.]

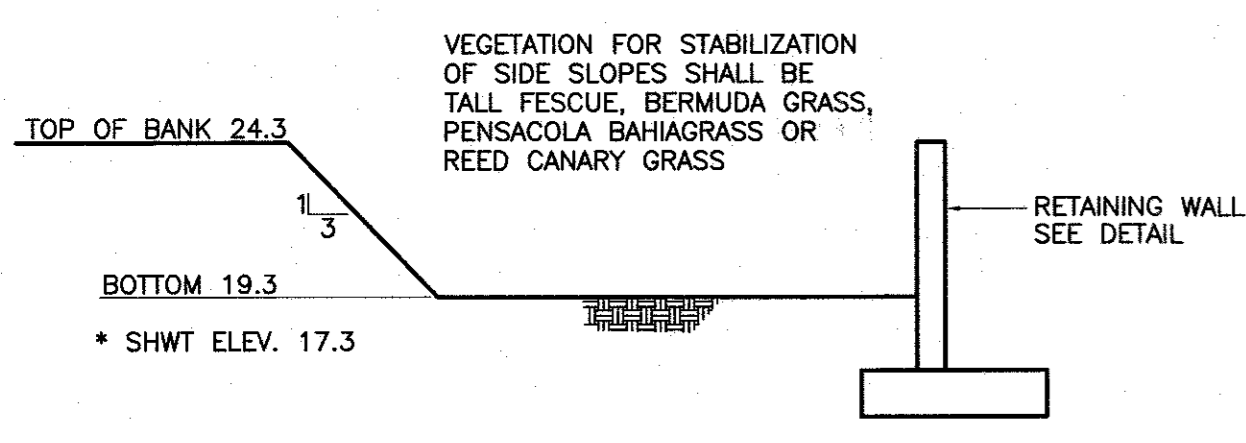
NCGO1 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19

Logo for the City of Wilmington, North Carolina, and a note: 'For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.'

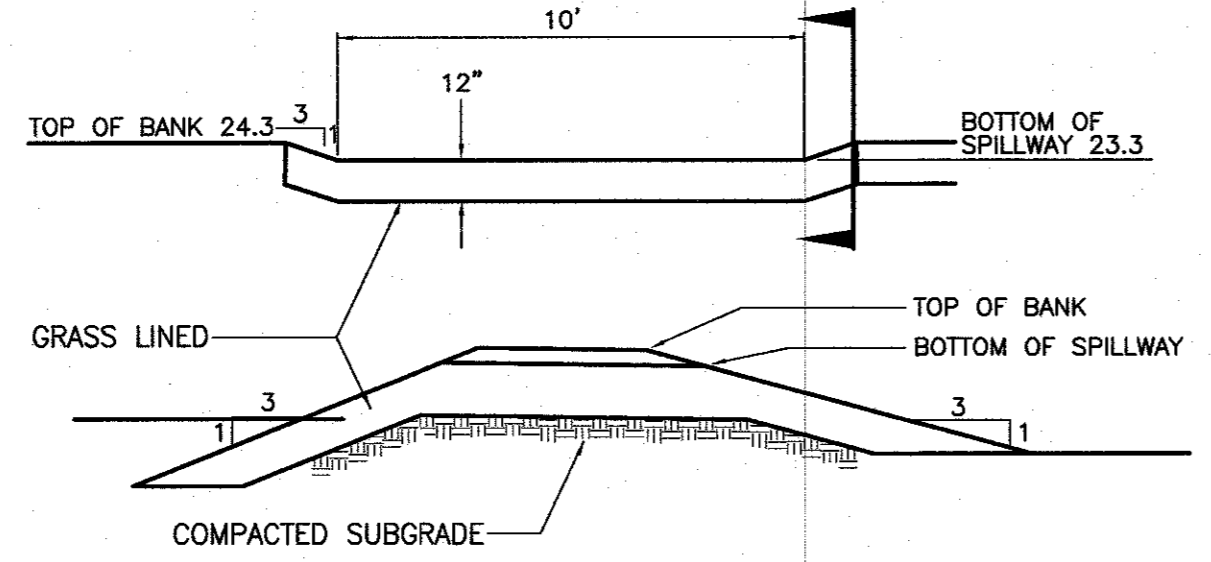


CROSS SECTION OF POROUS BAFFLE
NTS

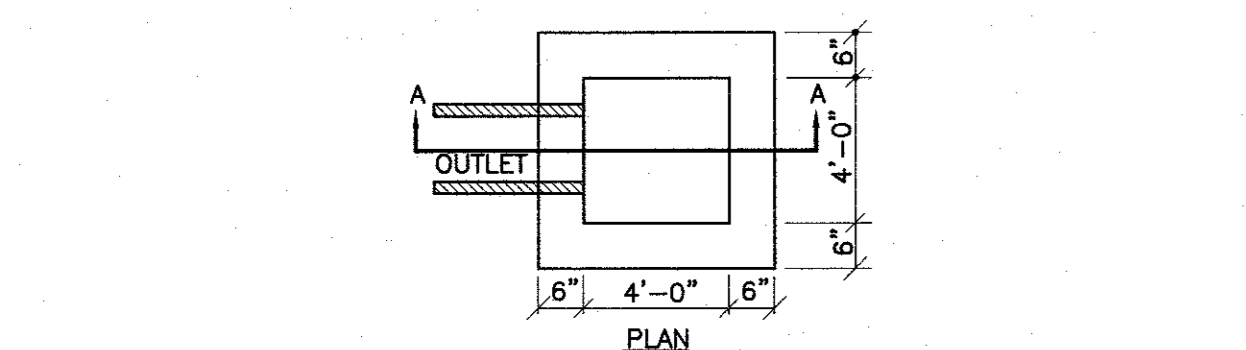
- BAFFLE CONSTRUCTION SPECIFICATION:**
1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
 2. INSTALL THE COIR FIBER BAFFLES IMMEDIATELY UPON EXCAVATION OF THE BASIN.
 3. INSTALL POSTS ACROSS THE WIDTH OF THE SEDIMENT TRAP. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES AND SPACED A MAXIMUM OF 4 FEET APART. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE EARTHEN EMBANKMENT.
 4. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES.
 5. ATTACH A 9 GAUGE HIGH TENSION WIRE STRAND TO THE STEEL POSTS AT A HEIGHT OF 6 INCHES ABOVE THE SPILLWAY ELEVATION WITH PLASTIC TIES OR WIRE FASTENERS TO PREVENT SAGGING. IF THE TEMPORARY SEDIMENT BASIN WILL BE CONVERTED TO A PERMANENT STORMWATER BASIN OF A GREATER DEPTH, THE BAFFLE HEIGHT SHOULD BE BASED ON THE POOL DEPTH DURING USE AS A TEMPORARY SEDIMENT BASIN.
 6. EXTEND 9 GAUGE MINIMUM HIGH TENSION WIRE STRAND TO SIDE OF BASIN OR INSTALL STEEL T-POSTS TO ANCHOR BAFFLE TO SIDE OF BASIN AND SECURE TO VERTICAL END POSTS.
 7. DRAPE THE COIR FIBER MAT OVER THE WIRE STRAND MOUNTED AT A HEIGHT OF 6 INCHES ABOVE THE SPILLWAY ELEVATION. SECURE THE COIR FIBER MAT TO THE WIRE STRAND WITH PLASTIC TIES OR WIRE FASTENERS. ANCHOR THE MATTING TO THE SIDES AND FLOOR OF THE BASIN WITH 12 INCH WIRE STAPLES, APPROXIMATELY 1 FT APART. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.
 8. ADJUSTMENTS MAY BE REQUIRED IN THE STAPLING REQUIREMENTS TO FIT INDIVIDUAL SITE CONDITIONS.



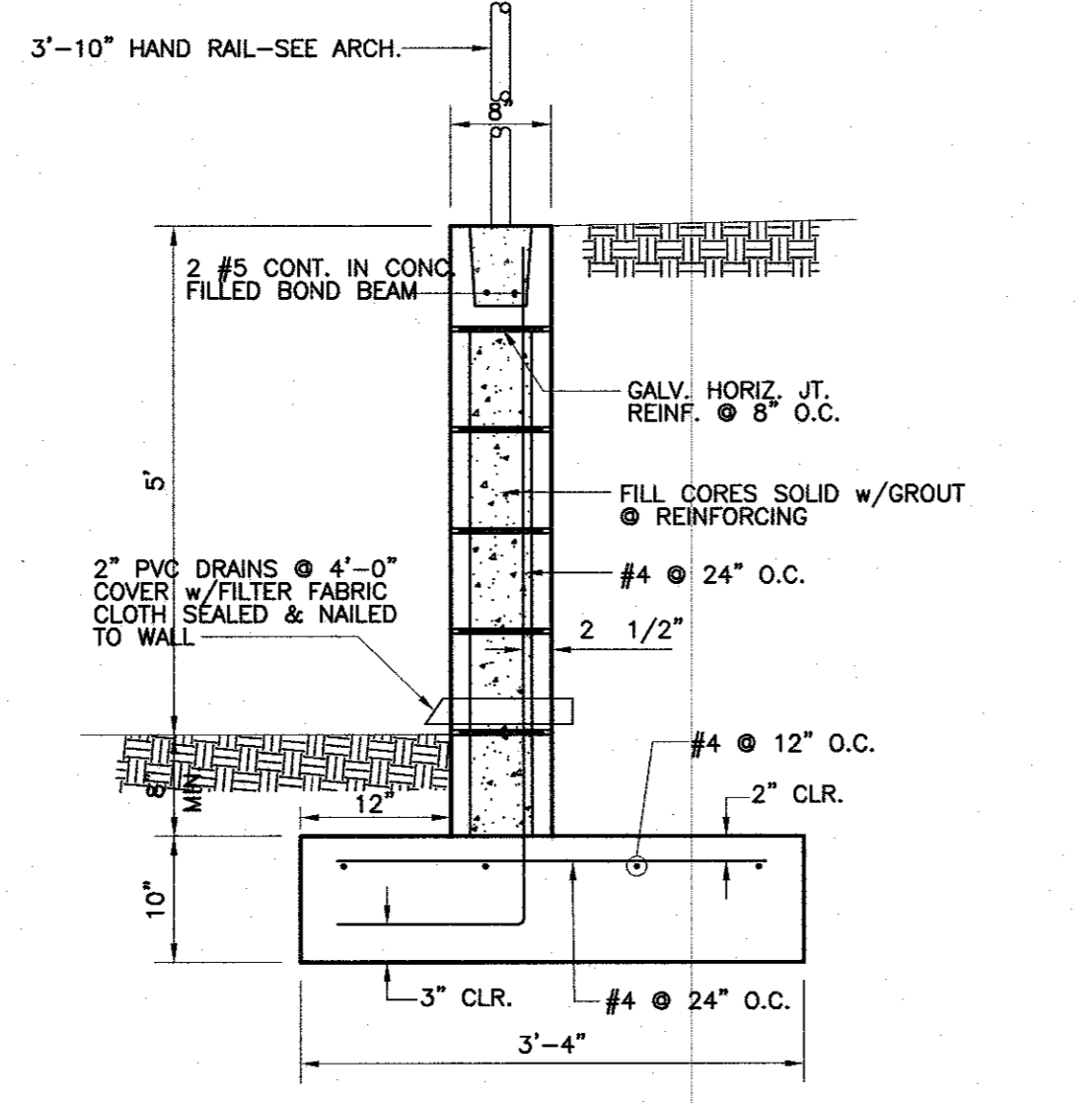
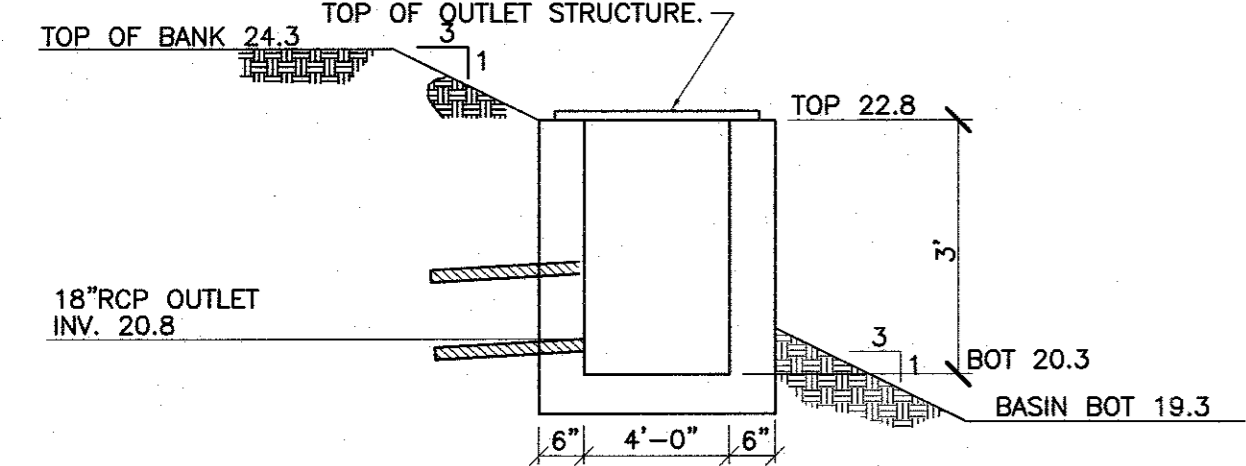
INFILTRATION BASIN SECTION
NTS



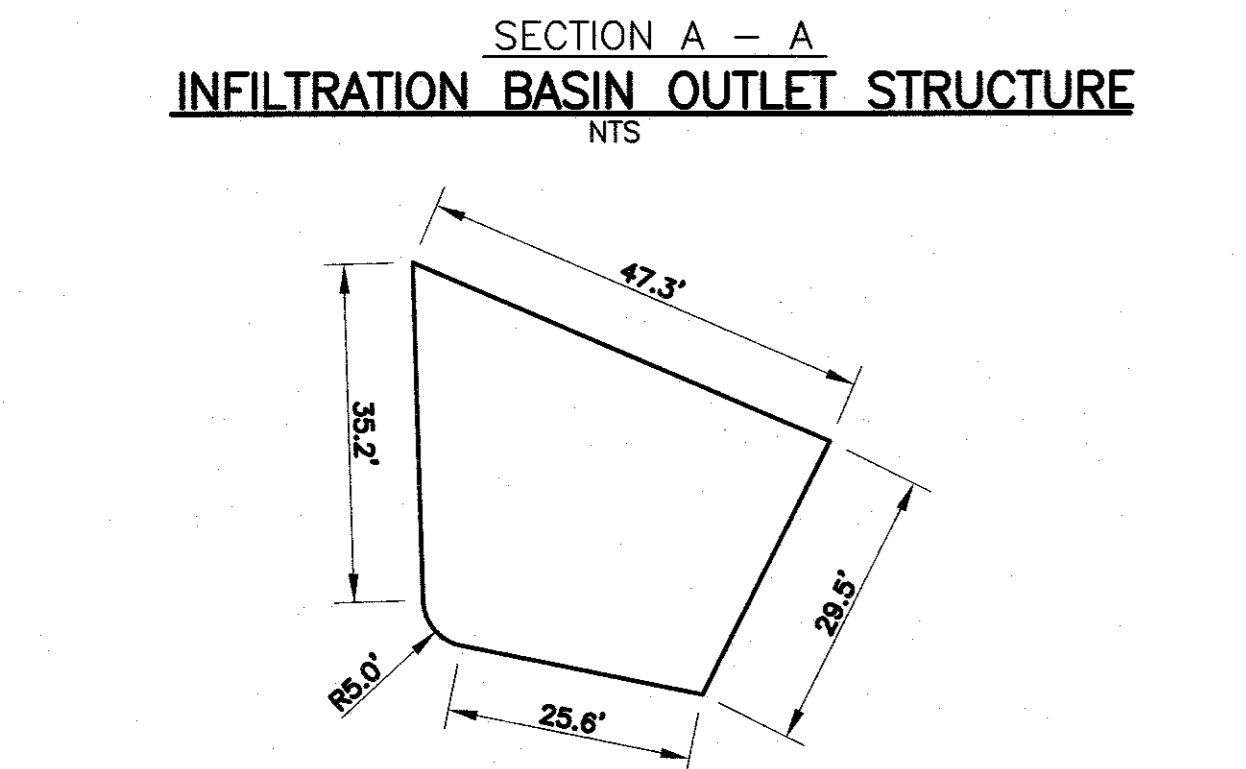
EMERGENCY SPILLWAY DETAIL
NTS



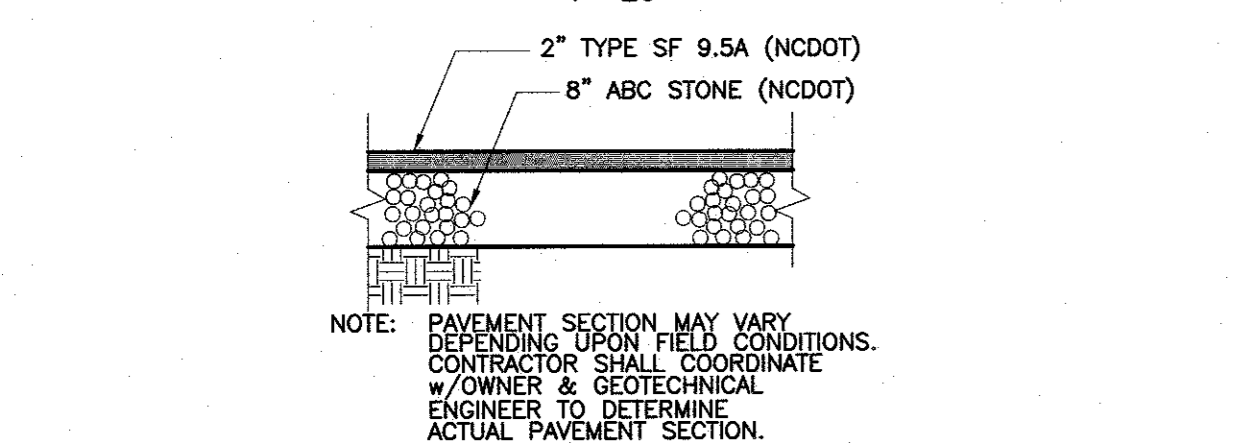
SECTION A - A INFILTRATION BASIN OUTLET STRUCTURE
NTS



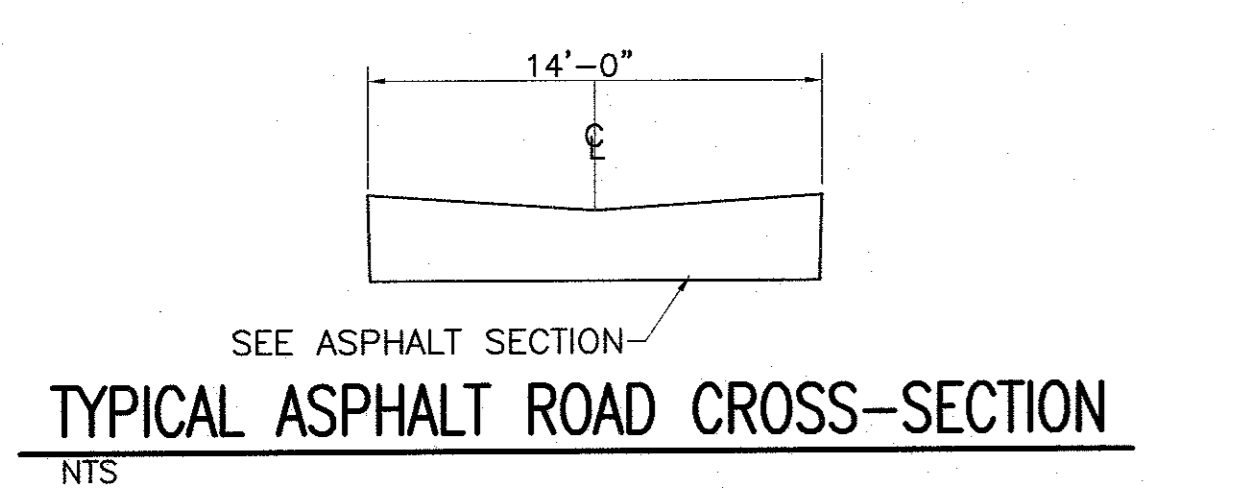
TYPICAL RETAINING WALL SECTION
NTS



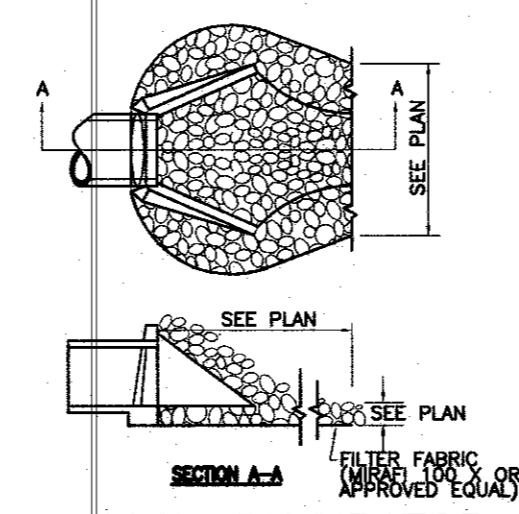
INFILTRATION BASIN BOTTOM DIMENSIONS
NTS



ASPHALT SECTION
NTS

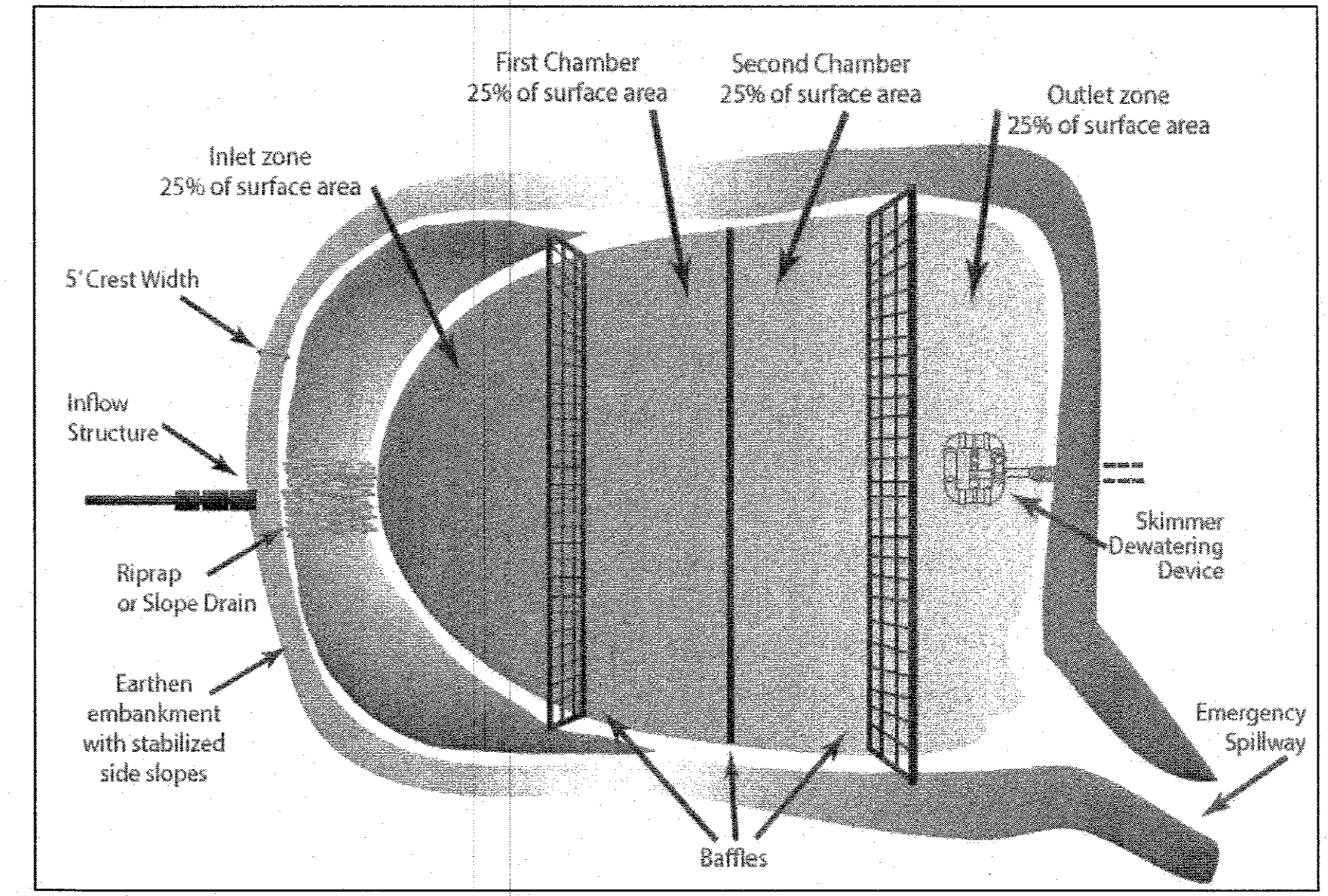


TYPICAL ASPHALT ROAD CROSS-SECTION
NTS

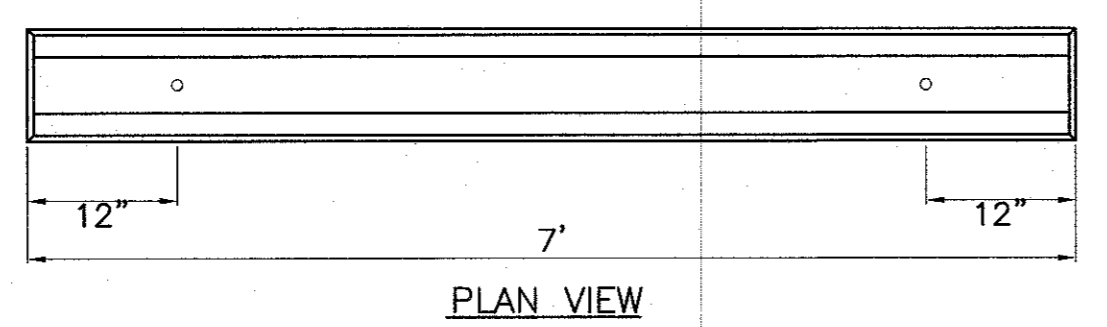


ENERGY DISSIPATOR
NTS

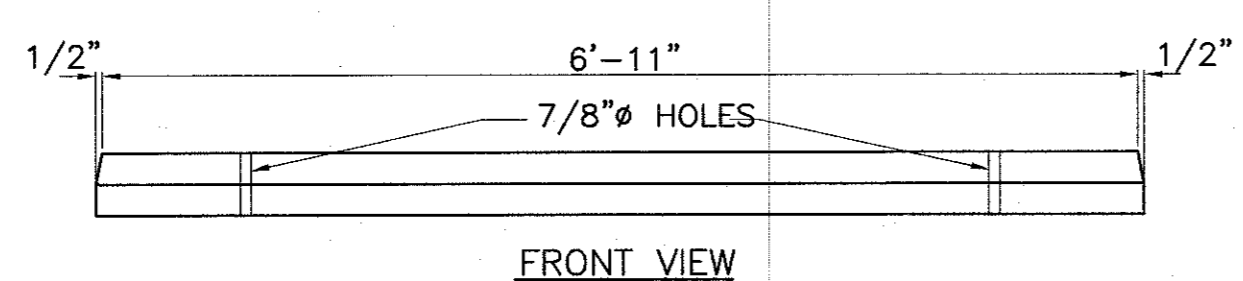
ENERGY DISSIPATOR DATA								
STR. #	Q10 (CFS)	V (FPS)	PIPE SIZE (INCH)	L (FT)	W (FT)	D (FT)	LENGTH	WIDTH
1	3.36	2.7	18"	5'	5'	12"	3xD	6xD
2	4.12	3.9	18"	5'	5'	12"	3xD	4xD
3	0.31	0.4	12"	-	-	-	3xD	6xD
4	0.35	0.5	12"	-	-	-	3xD	4xD



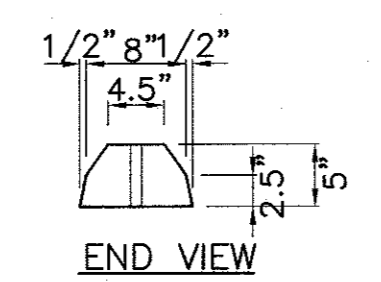
BAFFLE SPACING DETAIL
NTS



PLAN VIEW



FRONT VIEW



END VIEW

WHEEL STOP DETAIL
NTS

REINFORCING:
4 - #4 REBAR
CONCRETE:
4000 PSI @
28 DAYS
WIDTH x LENGTH x HEIGHT
9' x 7'-0" x 5"

REVISIONS		
No./Date	Description	By
03.02.22	REVISED	EW

DETAILS AND NOTES

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

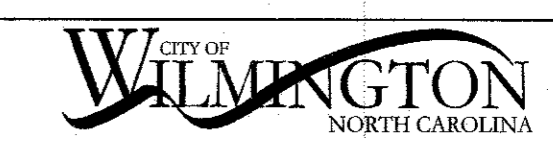
FOREST PARK TOWNHOMES
430 FOREST PARK ROAD
WILMINGTON, NORTH CAROLINA



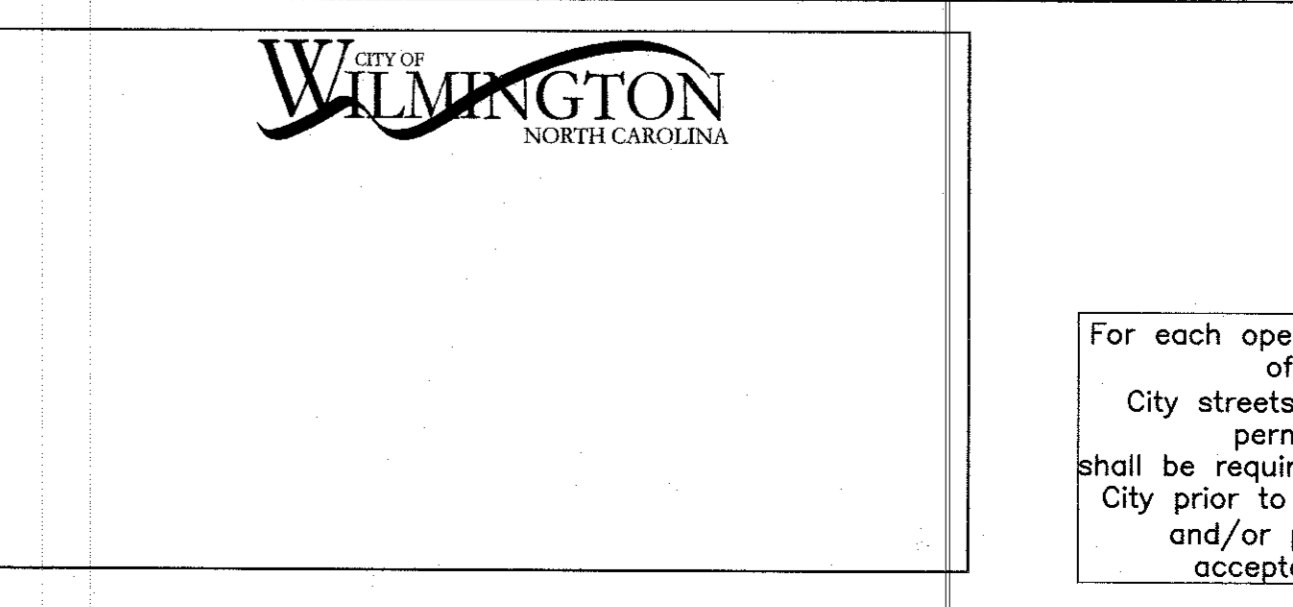
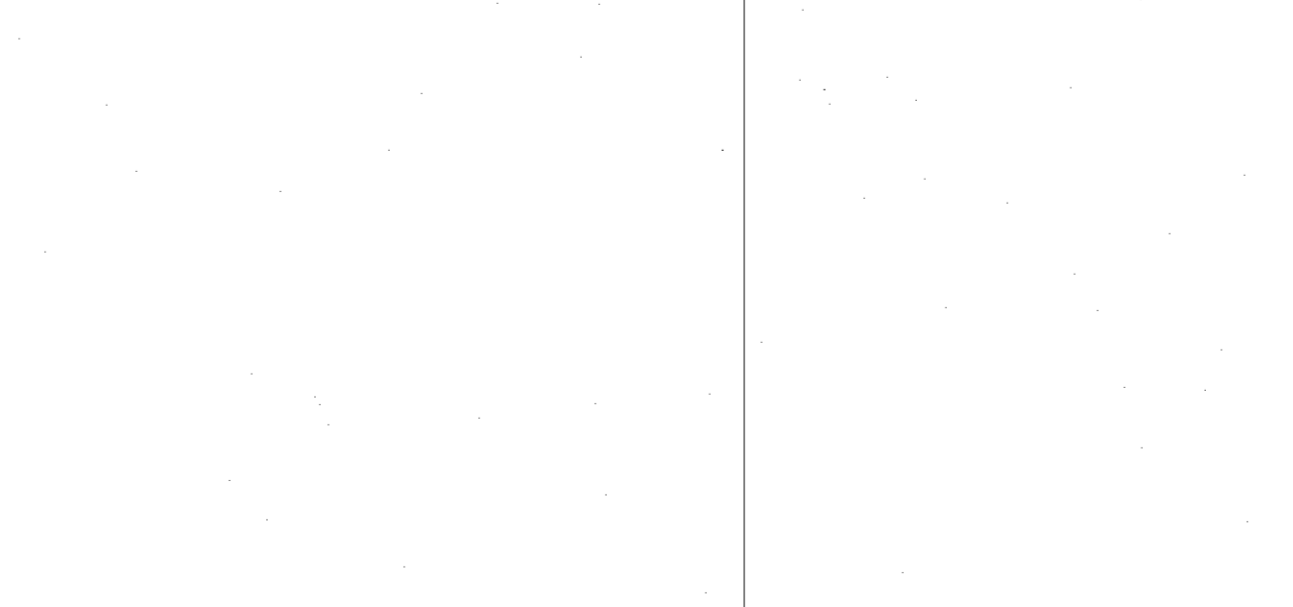
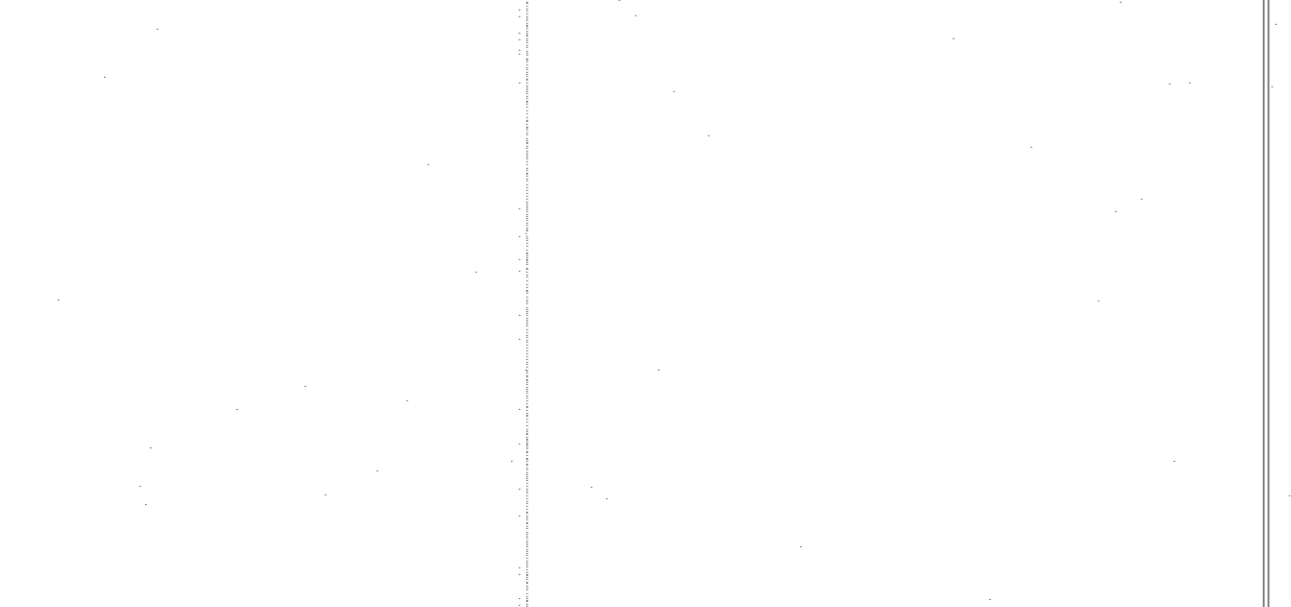
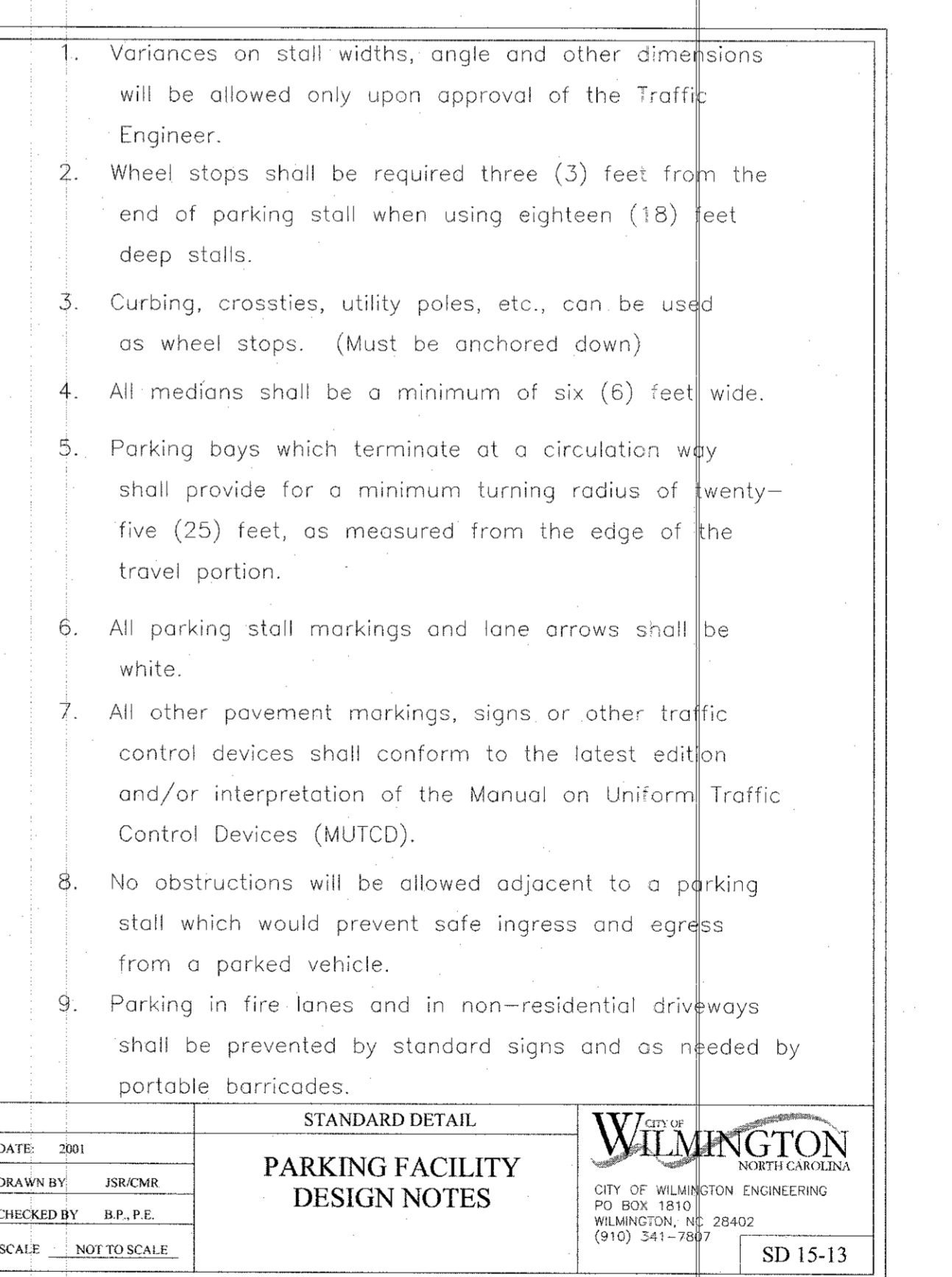
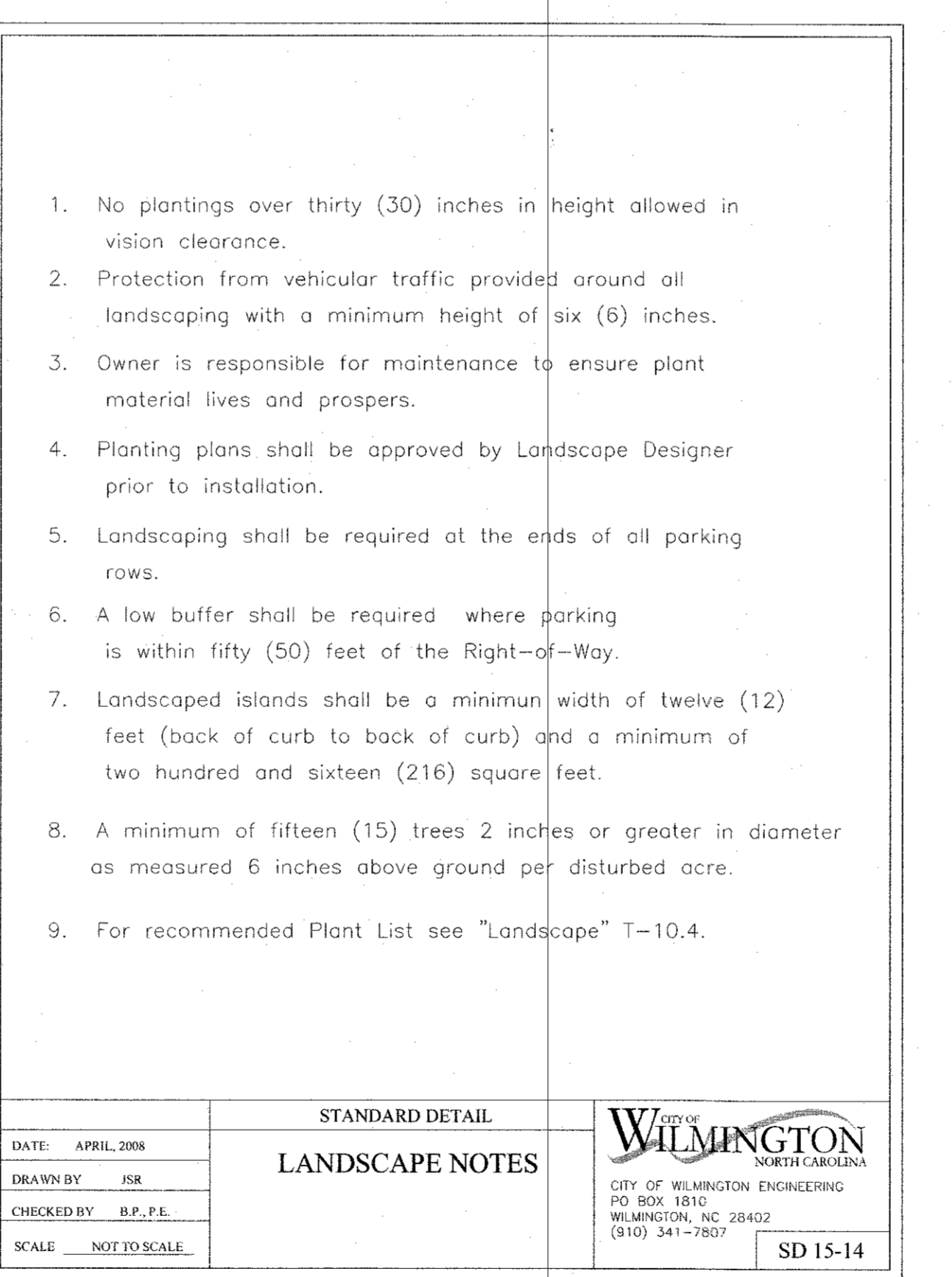
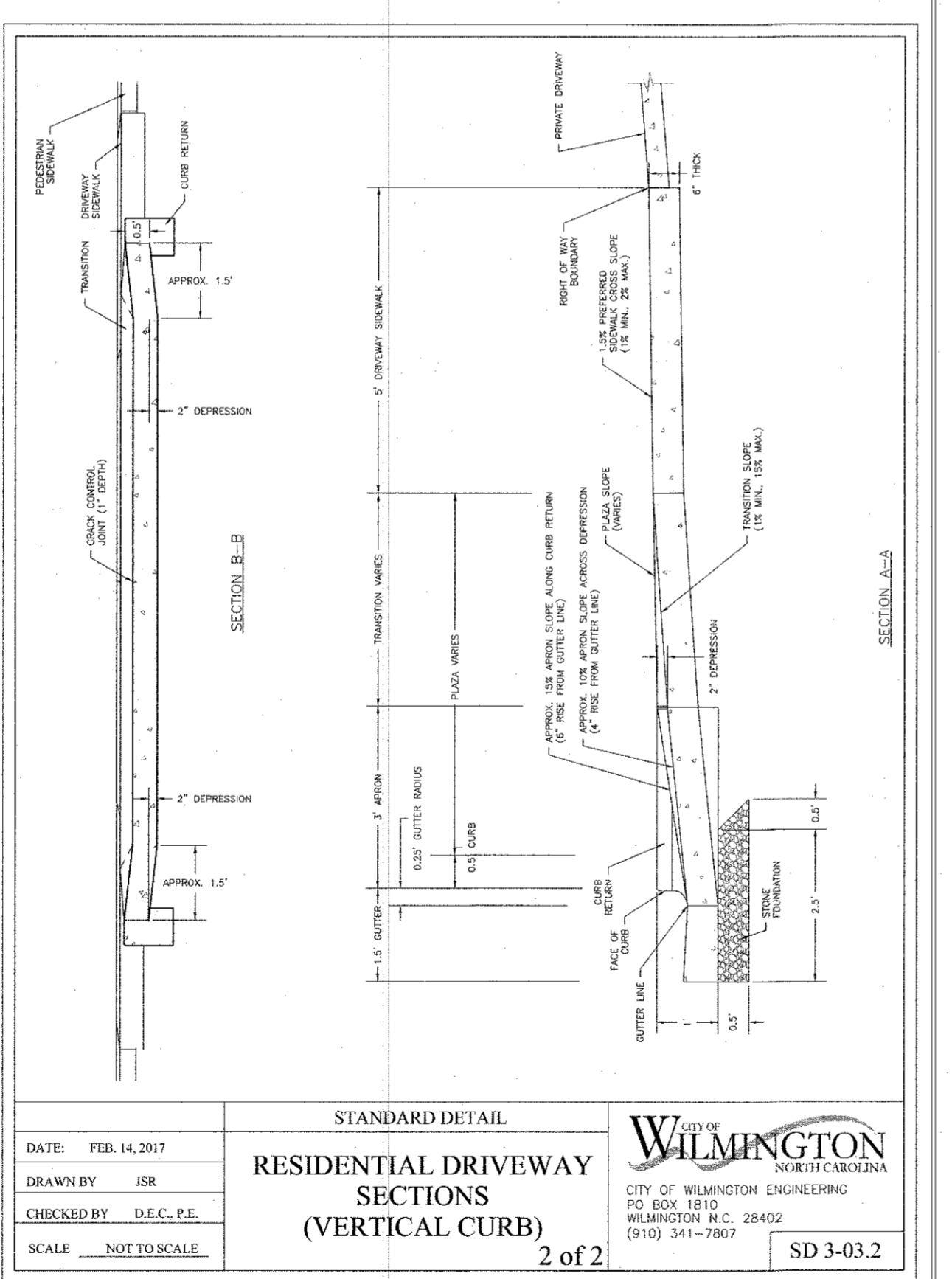
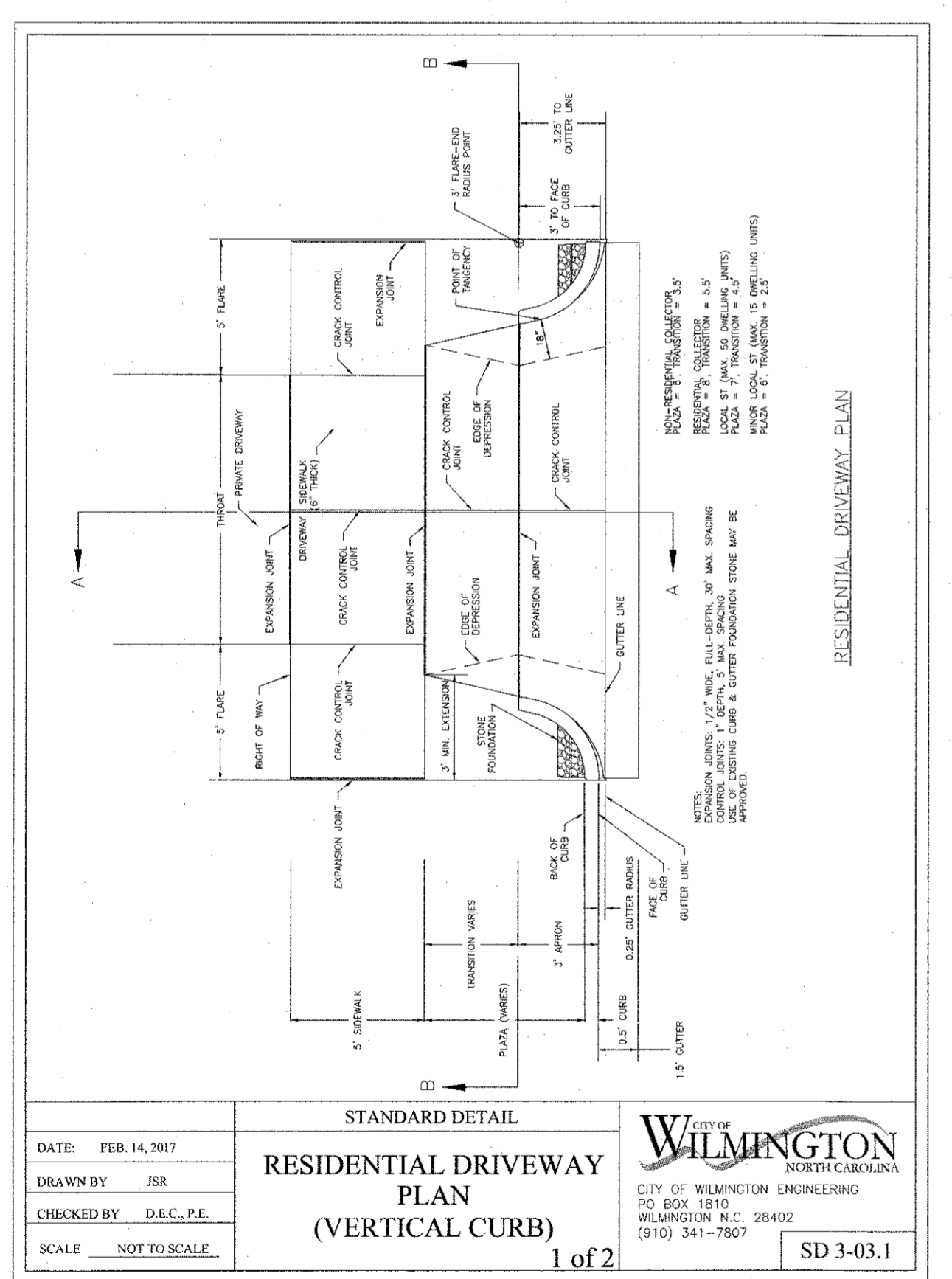
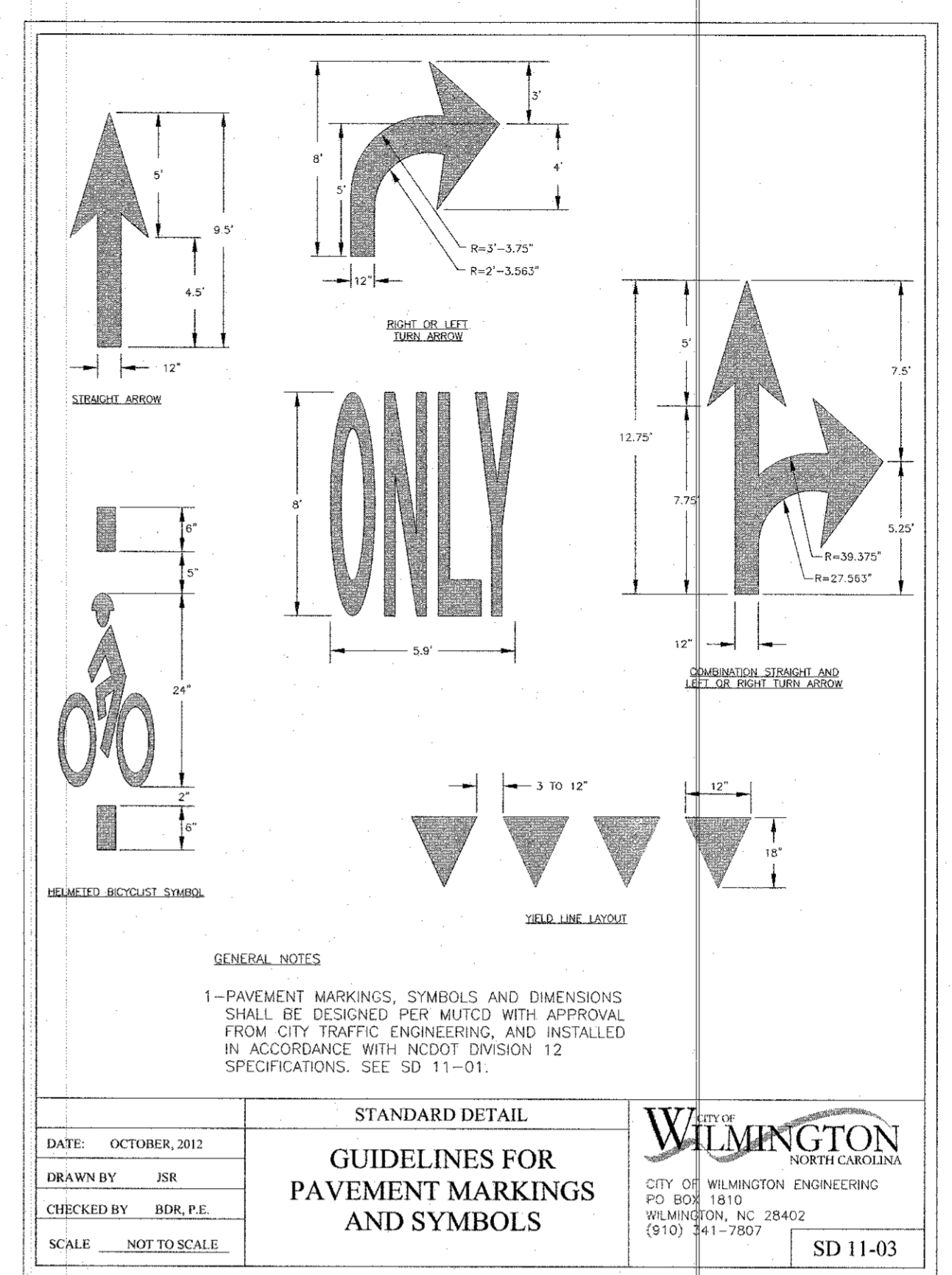
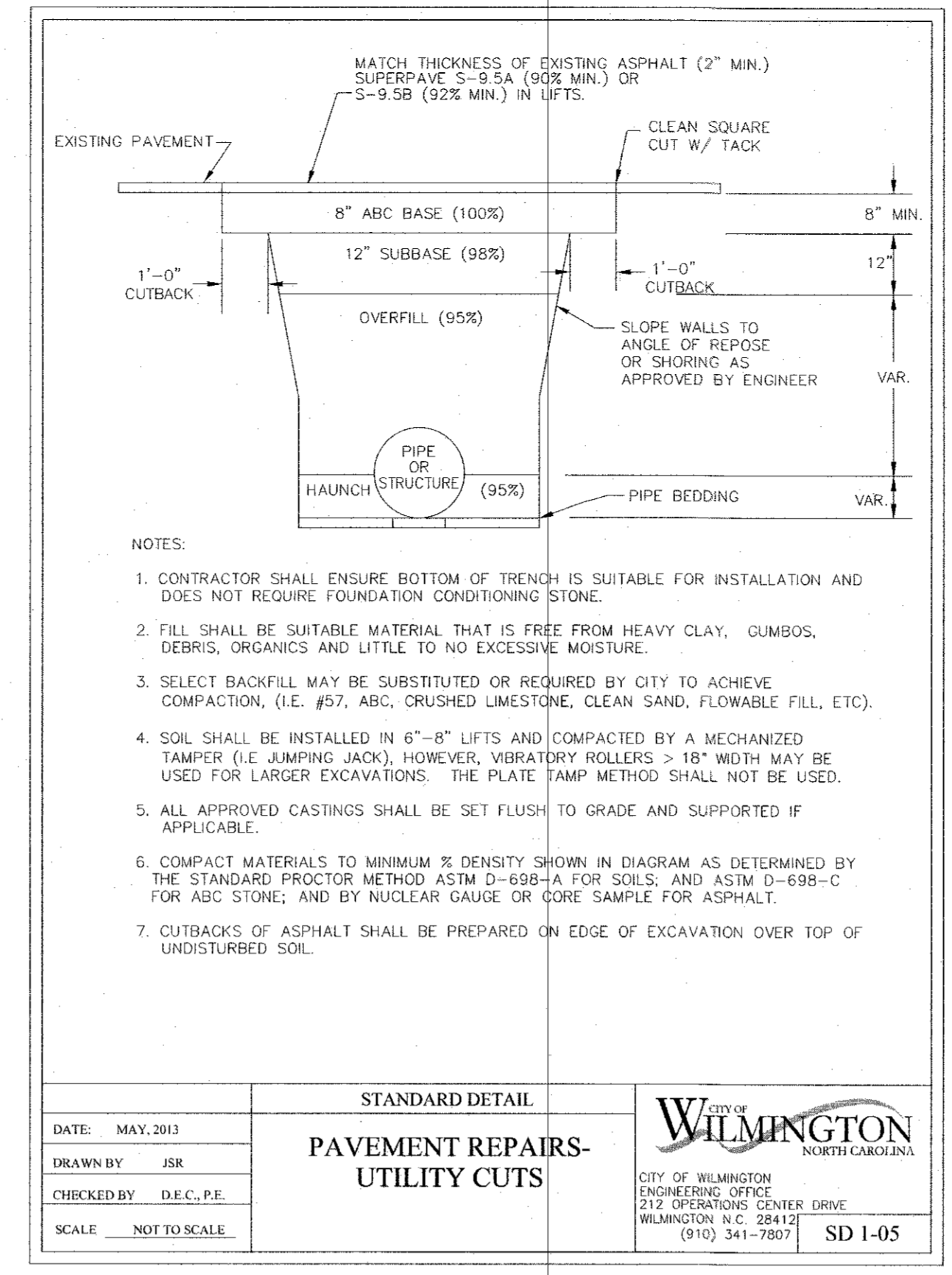
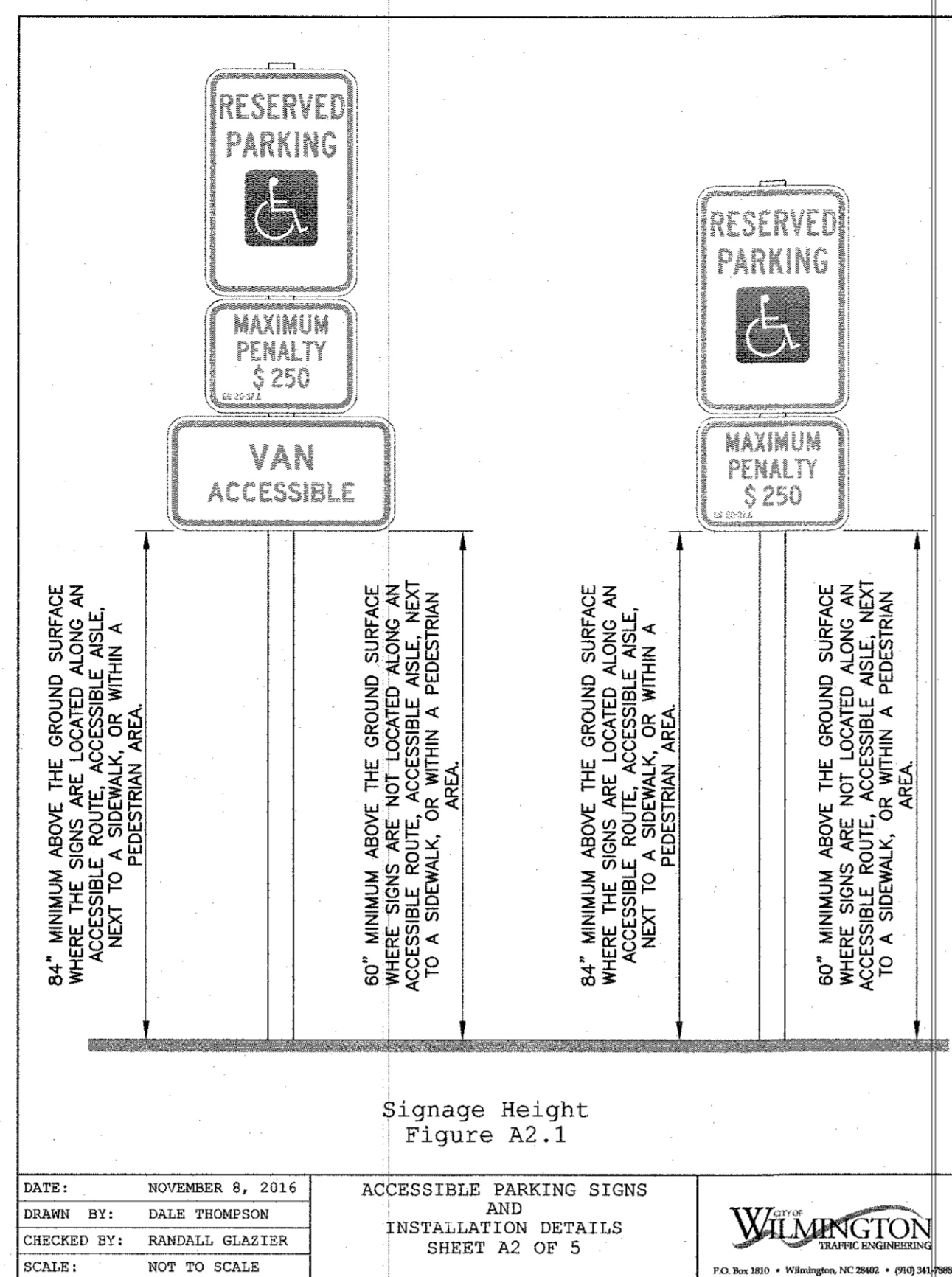
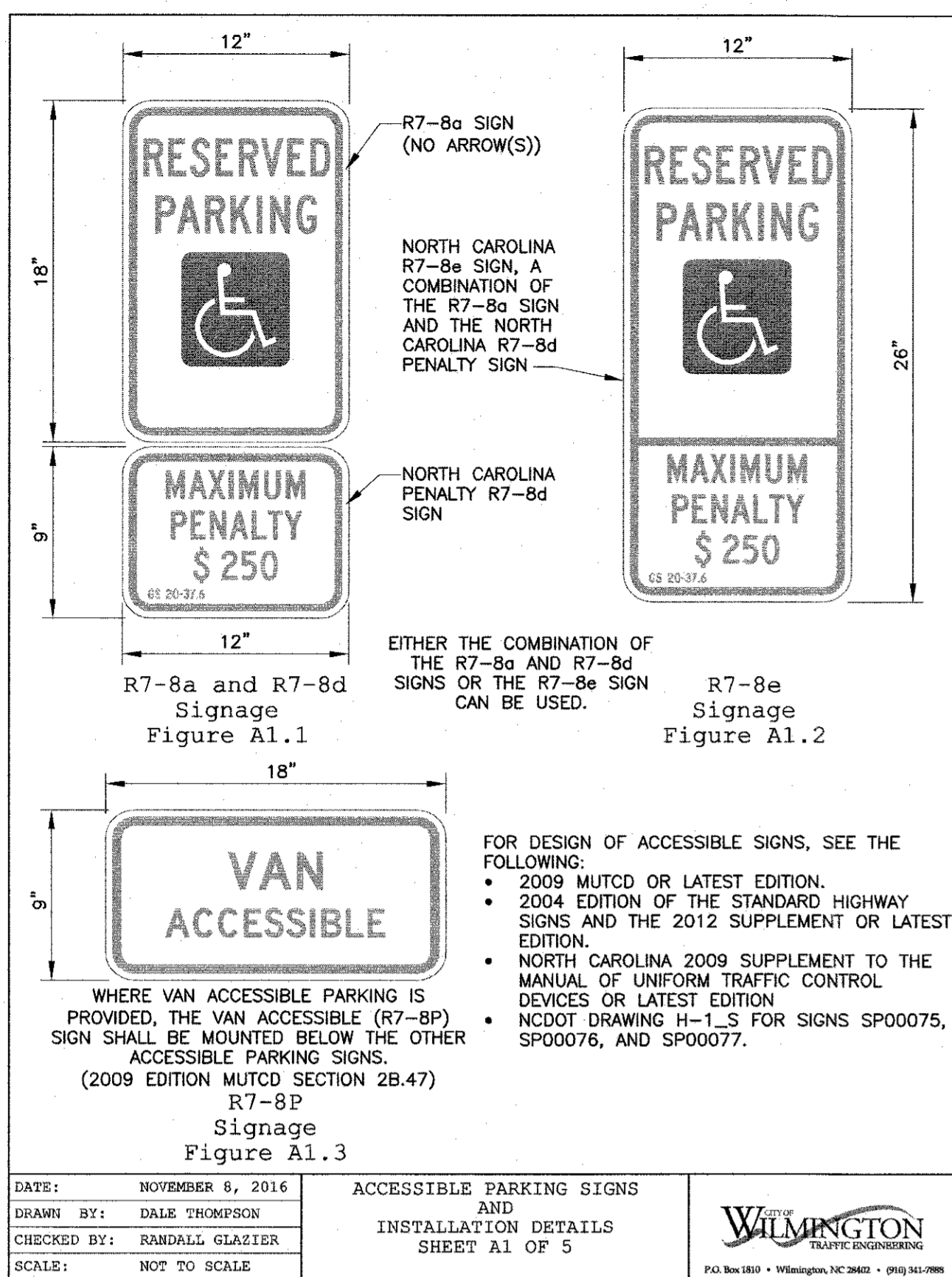
PROGRESS DRAWING
DO NOT USE FOR CONSTRUCTION

DATE 06-05-23
DESIGN PGT
DRAWN EJW

C5
22011



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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REVISIONS		
No./Date	Description	By

DETAILS AND NOTES

TRIPP ENGINEERING, P.C.
419 Chestnut Street
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REVISIONS

No.	Date	Description	By
1	01.02.22	LOW TRENCH DETAIL	EJW

NOTE: FRAME AND GRATE TO BE STANDARD CITY OF WILMINGTON CAST IRON FRAME AND GRATE PER SD 14-04

STANDARD DETAIL
DROP INLET

DATE: 2001	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR	PO BOX 1810
CHECKED BY: B.P., P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 3-02

MINIMUM AVERAGE WEIGHT
FRAME 195 LBS.
GRATE 145 LBS.

STANDARD DETAIL
DROP INLET CASTINGS

DATE: 2001	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR/CMB	PO BOX 1810
CHECKED BY: B.P., P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 14-04

STANDARD DETAIL
PRECAST MANHOLE

DATE: 2001	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR/CMB	PO BOX 1810
CHECKED BY: B.P., P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 14-11

STANDARD DETAIL
SIDEWALK

DATE: OCTOBER 2010	CITY OF WILMINGTON ENGINEERING
DRAWN: PRJ/SR	PO BOX 1810
CHECKED: DBC	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 3-10

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.

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION

DATE: JAN 2015	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR	PO BOX 1810
CHECKED BY: RDL/P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 15-09

STANDARD DETAIL
TREE PROTECTION DURING CONSTRUCTION

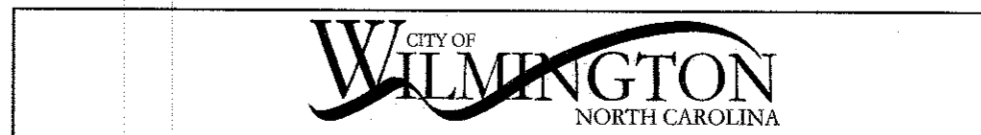
DATE: JAN 2015	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR	PO BOX 1810
CHECKED BY: RDL/P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 15-09

STANDARD DETAIL
TYPICAL STORM WATER FACILITY LANDSCAPING PLAN

DATE: JULY 2003	CITY OF WILMINGTON ENGINEERING
DRAWN BY: JSR	PO BOX 1810
CHECKED BY: B.P., P.E.	WILMINGTON, NC 28402
SCALE: NOT TO SCALE	(910) 341-7807
	SD 15-16

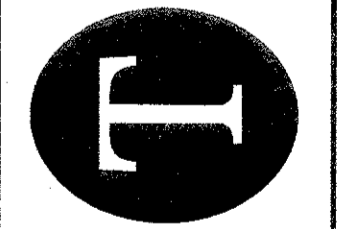
Along with soil preparation, following proper planting techniques and maintenance will ensure healthy, durable vegetation, and increase the rate of growth. The following recommendations apply to inground and container plantings. General practices include:

- The planting hole should be a minimum of twice as wide as the root ball.
- The depth of the planting hole should be approximately two inches less than the bottom of the root system. Do not dig deeper than the root ball.
- Remove any strapping, wire, plastic, or paper and remove the top half of any burlap, fabric or wire basket from the root ball.
- Loosen, cut, or remove roots that have become pot bound (compacted, matted, kinked, or are circled around the root ball) and ensure the root flare is exposed.
- Fill 1/3 of the hole and pack soil around the base of the root ball.
- Instead of compacting soil with a shovel or foot, use water to settle the soil by adding a layer of soil and then watering. Repeat with a layer of soil and watering until the hole has been completely backfilled.
- Mulch to a depth of 2-3 inches.



DETAILS AND NOTES

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Wilmington, North Carolina 28401
Phone 910-763-5100
Fax 910-763-5631



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