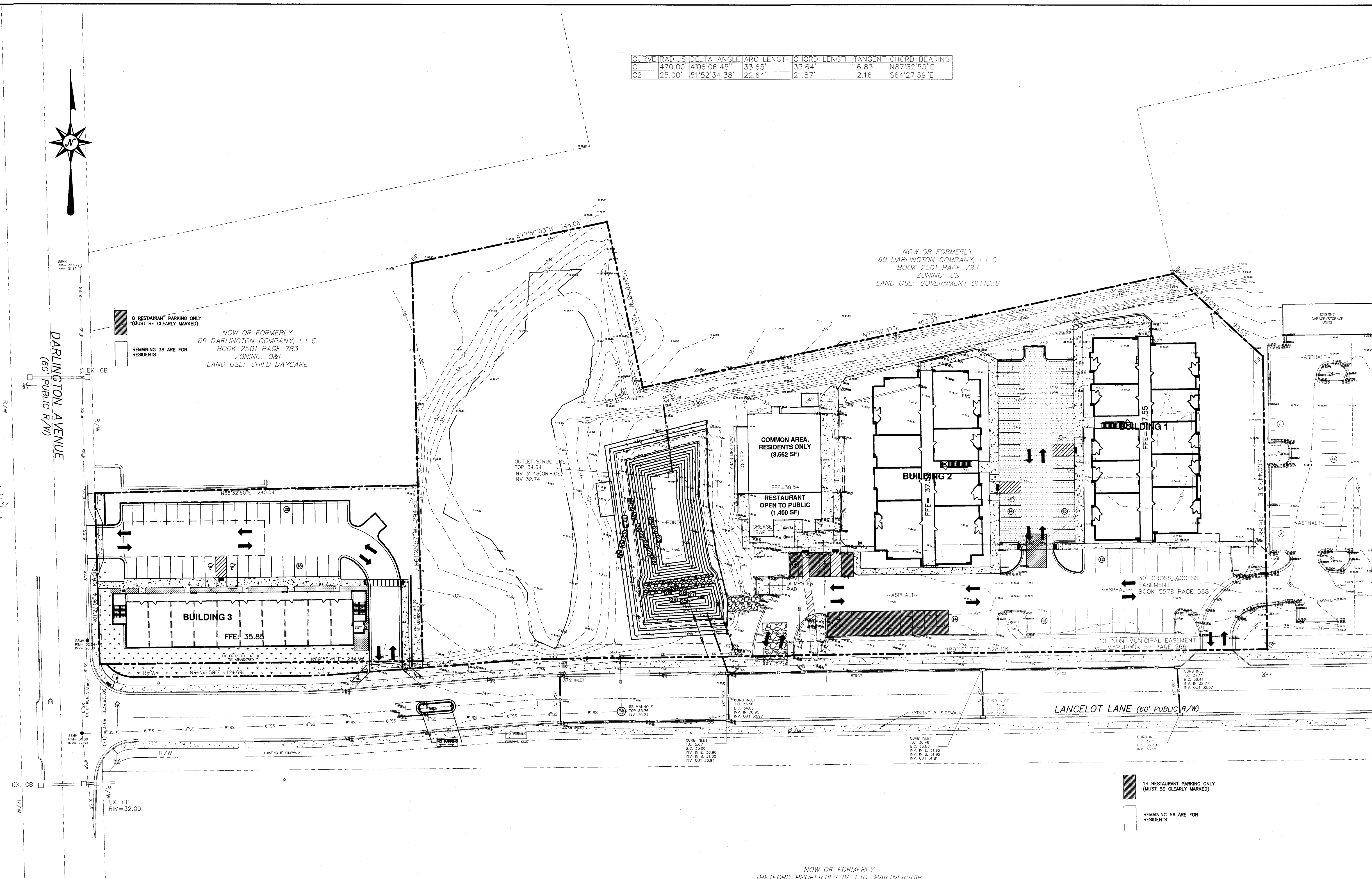


# VICINITY MAP

N.T.S.

COMBINED PARKING TABLE	
ZONE: CDMU	
MINIMUM PARKING REQUIREMENTS	
BUILDING 1 : 30 UNITS @ 1 PARK/UNIT = 30	
BUILDING 2 : 24 UNITS @ 1 PARK/UNIT = 24	
BUILDING 3 : 30 UNITS @ 1 PARK/UNIT = 30	
MINIMUM REQUIRED FOR APARTMENTS = 84	
EXISTING BUILDING	
1,400 SF RESTAURANT SPACE	
* 1,200 SF @ 1 PARK/80 SF = 14(MIN)	
* 1 PARK/65 SF = 17(MAX)	
*(NOT INCLUDING KITCHEN & RESTROOMS)	
MINIMUM PARKING REQUIRED = 98 PARKS	
(NOTE: THE REMAINING 3,562 SF OF THE EXISTING BUILDING WILL BE A COMMON AREA/BUSINESS CENTER FOR APARTMENT RESIDENTS ONLY, NOT FOR PUBLIC USE.)	
PROVIDED PARKING (TOTAL) = 108 PARKS	
5 HANDICAP PARKS PROVIDED	
(4 VAN ACCESSIBLE, WITH A MINIMUM OF 1 FOR RESTAURANT)	
14 PARKS MUST BE LABELED AS FOR RESTAURANT USE ONLY (SEE PLAN) OR 94 PARKS MUST BE MARKED CLEARLY FOR RESIDENTS ONLY.	

NOW OR FORMERLY  
DBNC HOLDINGS LLC  
BOOK 5774 PAGE 1037  
ZONING: O&I  
LAND USE: VACANT



CURVE	RADIUS	DELTA ANGLE	ARC LENGTH	CHORD LENGTH	TANGENT	CHORD BEARING
C1	470.00'	406°06'45"	33.65'	33.64'	16.83'	N87°32'55"E
C2	25.00'	151°52'34.38"	22.64'	21.87'	12.16'	S64°27'59"E

NOW OR FORMERLY  
69 DARLINGTON COMPANY, L.L.C.  
BOOK 2501 PAGE 783  
ZONING: CS  
LAND USE: GOVERNMENT OFFICES

NOW OR FORMERLY  
69 DARLINGTON COMPANY, L.L.C.  
BOOK 2501 PAGE 783  
ZONING: O&I  
LAND USE: CHILD DAYCARE

NOW OR FORMERLY  
THETFORD PROPERTIES IV, LTD. PARTNERSHIP  
BOOK 1314 PAGE 438  
ZONING: MF-M  
LAND USE: MULTI-FAMILY RESIDENTIAL

SITE DATA TABLE BUILDINGS 1 & 2			
PARCEL NUMBER:	R04917-004-017-000	EX. IMPERVIOUS SURFACES	
PARCEL AREA:	161,869 SF = 3.715 AC	EX. BUILDINGS:	5,712 SF
PROPOSED DENSITY	UNITS/AC	EX. ASPHALT:	22,139 SF
ZONING DISTRICT:	O&I (CDMU)	EX. CONCRETE:	5,327 SF
CAMA LAND CLASSIFICATION:	URBAN	EX. PAVERS:	2,789 SF
REQ'D SETBACKS:		EX. TOTAL:	35,967 SF
20' FRONT		EX. IMP. TO BE REMOVED:	8,649 SF
20' CORNER		EX. IMP. TO BE REMAIN:	27,318 SF
20' REAR		NEW IMPERVIOUS SURFACES	
10' INTERIOR SIDE		BUILDING:	22,516 SF (NEW)
TOTAL UNITS:	54	ASPHALT PAVEMENT:	7,231 SF
30 x 1 BR		CONCRETE WALK:	4,769 SF
12 x 2 BR		FUTURE:	1,000 SF
12 x 3 BR		NEW TOTAL:	35,516 SF (NEW)
BUILDING HEIGHT: BUILDING 1 - 30 UNIT = 47'-8" - 3 STORY (11,608 SF/FLOOR)		TOTAL IMPERVIOUS:	62,834 SF (NEW & EXIST)
BUILDING 2 - 24 UNIT = 47'-8" - 3 STORY (10,999 SF/FLOOR)			38.8%
BUILDING TYPE (BUILDING 1): 5A		STREET YARD:	
BUILDING TYPE (BUILDING 2): 5B		PRIMARY (LANCLOT LN.)	
BIKE PARKING:		(628-55) 18 = 10,314 SF REQUIRED	10,450 SF PROVIDED
REQUIRED: 5 MIN / 100 SPACES		FOUNDATION PLANTINGS:	
PROVIDED: 5 SPACES		BUILDING 1:	
UTILITY CAPACITY REQUEST:		REQUIRED (FRONT): (131'x30.5'),12 = 480 SF	
PROPOSED SEWER CAPACITY:		PROVIDED = 895 SF	
30 - 1 BR @ 240 GPD/BR:	7,200 GPD (NEW)	REQUIRED (SIDE): (81'x30.5'),12 = 297 SF	
12 - 2 BR @ 240 GPD/BR:	2,880 GPD (NEW)	PROVIDED = 309 SF	
12 - 3 BR @ 360 GPD/BR:	4,320 GPD (NEW)	BUILDING 2:	
1,400 SF RESTAURANT @	1,000 GPD (NEW)	REQUIRED (FRONT): (131'x30.5'),12 = 480 SF	
40 GPD/SEAT (25 SEATS)		PROVIDED = 998 SF	
TOTAL:	15,400 GPD TOTAL	REQUIRED (SIDE): (81'x30.5'),12 = 297 SF	
OPEN SPACE PROVIDED:	.32 AC+/-	PROVIDED = 410 SF	
TOTAL AMOUNT OF WETLANDS:	.4 AC		

SITE DATA TABLE BUILDING 3			
PARCEL NUMBER:	R04917-004-017-000	TOTAL AMOUNT OF WETLANDS:	0 AC
PARCEL AREA:	32,735 SF = .751 AC	NEW IMPERVIOUS SURFACES	
PROPOSED DENSITY	40 UNITS/AC	BUILDING:	7,377 SF
ZONING DISTRICT:	O&I (CDMU)	ASPHALT PAVEMENT:	12,914 SF
CAMA LAND CLASSIFICATION:	URBAN	CONCRETE WALK:	1,912 SF (115' of R.O.W. SIDEWALK WITHIN PROPERTY LIMITS NOT DIRECTED TO POND)
REQ'D SETBACKS:		FUTURE:	1,000 SF
20' FRONT		NEW TOTAL:	23,203 SF
20' CORNER			70.9%
20' REAR		OPEN SPACE PROVIDED:	.12 AC+/-
10' INTERIOR SIDE		PROPOSED SEWER CAPACITY:	
TOTAL UNITS:	30	30 - 1 BR @ 240 GPD/BR:	7,200 GPD (NEW)
BUILDING HEIGHT: BUILDING 3 - 30 UNIT = 40'-0.25" - 3 STORY (7,377 SF/FLOOR)		TOTAL:	7,200 GPD TOTAL
BUILDING TYPE (BUILDING 3): 5B		FOUNDATION PLANTINGS:	
BIKE PARKING:		REQUIRED = 203' X 30.5' (FACADE) X 0.12 = 743 SF	
REQUIRED: 5 MIN / 100 SPACES		PROVIDED = 833 SF	
PROVIDED: 5 SPACES		STREET YARD:	
		PRIMARY (LANCLOT LN.)	
		(243-25) 18 = 3,924 SF REQUIRED	3,955 SF PROVIDED
		SECONDARY (DARLINGTON AVE.)	
		(126-25) 9 = 909 SF REQUIRED	909 SF PROVIDED

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: _____	

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

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
© 2020 NORRIS & TUNSTALL			

OVERALL SITE PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

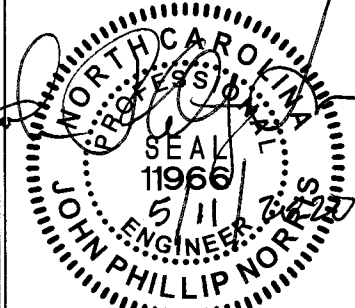
NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.  
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

Licence #C-3641

19004

DES. TJC  
CKD. JPN  
DRWN. NSB

DATE 05/11/20

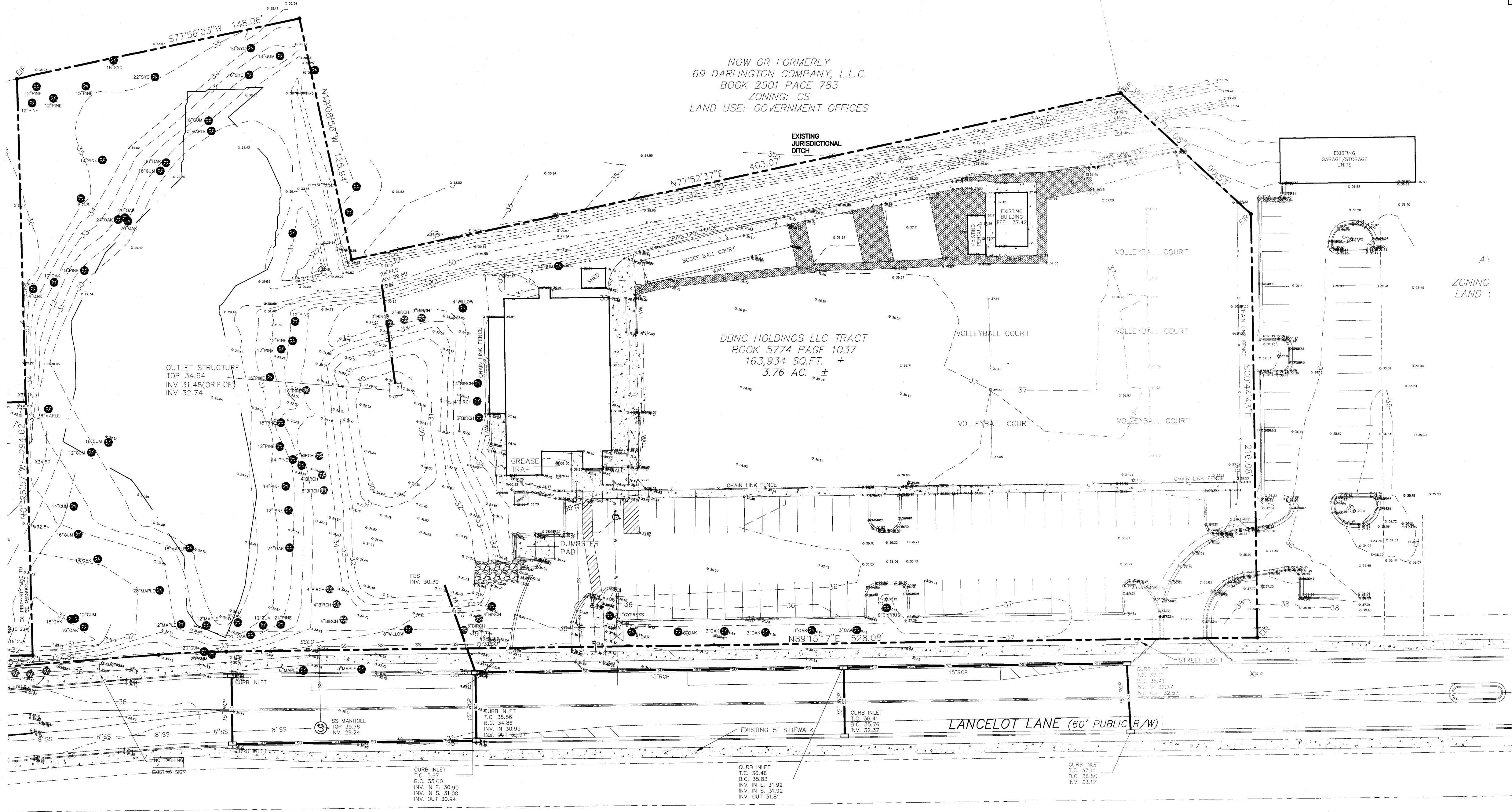


RECEIVED  
By waltonj at 4:48 pm, May 12, 2020

SCALE: 1" = 40'  
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C0





# C1

SCALE: 1" = 30'

A horizontal graphic scale bar with alternating black and white segments. It is marked with the numbers 0, 30, 60, and 90, representing feet.

MARKET ST.

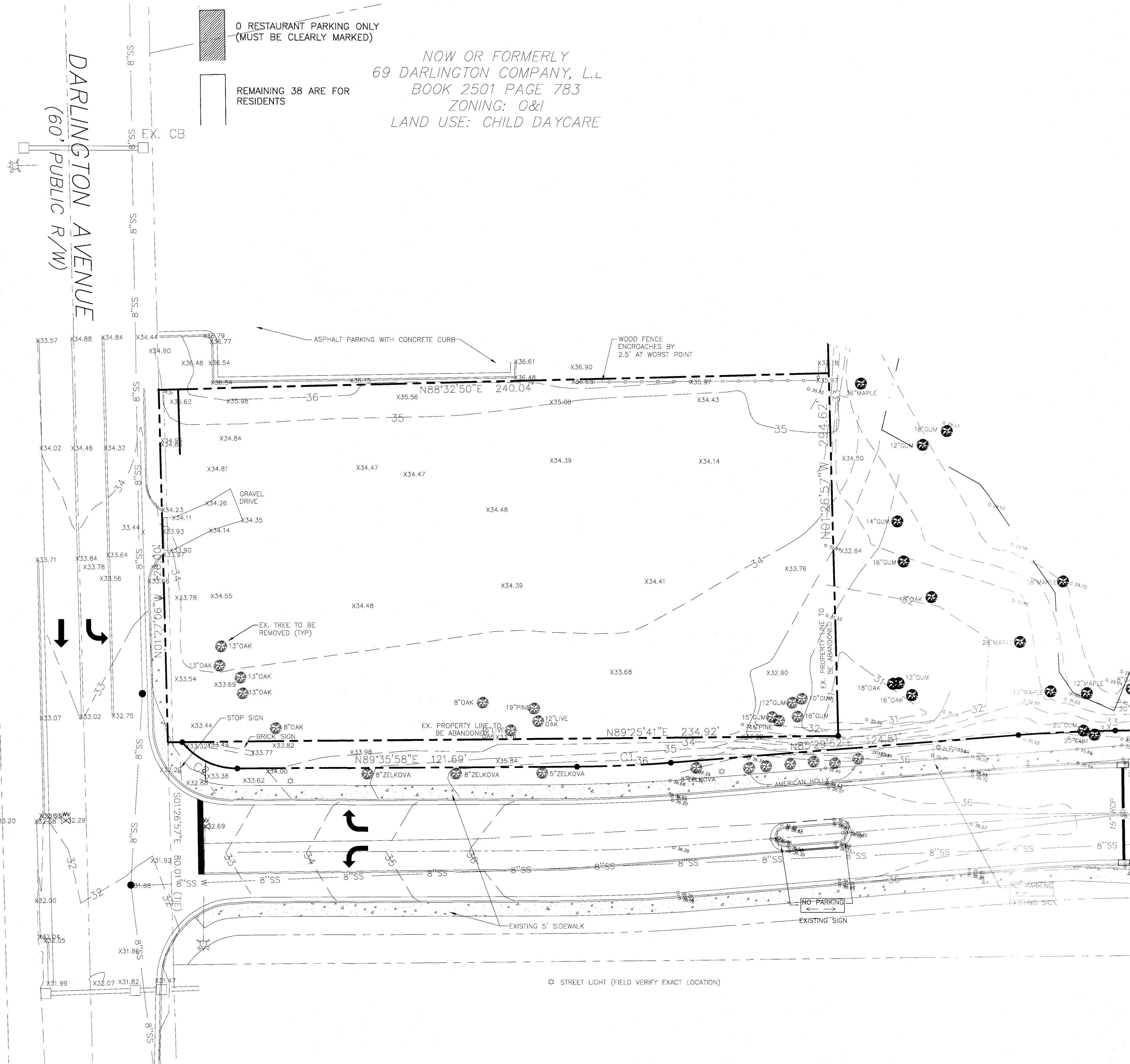
DARLINGTON AVE.

★ SITE

LANCELOT LN

VICINITY MAP

N.T.S.



WILMINGTON

NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

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

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

NCDENR PWSS WATER PERMIT # \_\_\_\_\_

WATER CAPACITY: \_\_\_\_\_ GPD

DWQ SEWER PERMIT # \_\_\_\_\_

SEWER CAPACITY: \_\_\_\_\_ GPD

SEWER SHED # AND PLANT: \_\_\_\_\_

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan

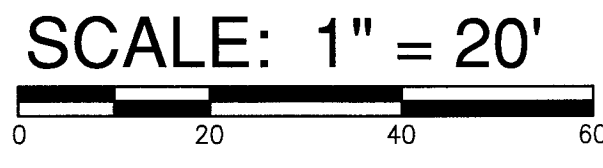
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning: \_\_\_\_\_

Traffic: \_\_\_\_\_

Fire: \_\_\_\_\_

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



EXISTING CONDITIONS

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:

Chris Bufalino

DBNC Holdings, LLC

439 Whitebridge Road

Hamstead, NC 28443

910-795-8674

NORRIS & TUNSTALL

CONSULTING ENGINEERS P.C.

2602 IRON GATE DR., SUITE 102

WILMINGTON, NC 28412

PHONE: (910) 343-0653

19004

DES. TJC

CHKD. JPN

DRWN. NSB

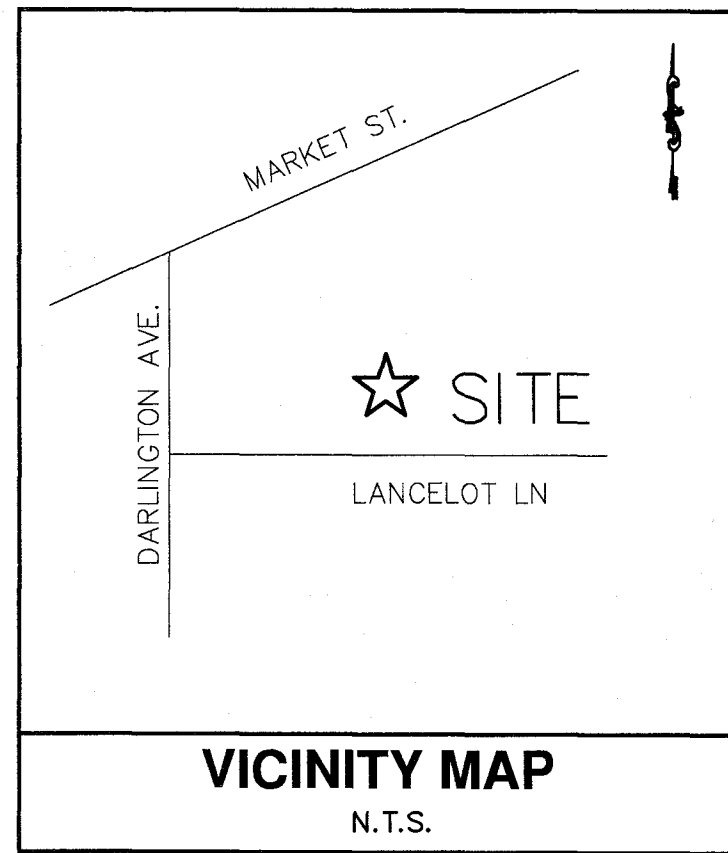
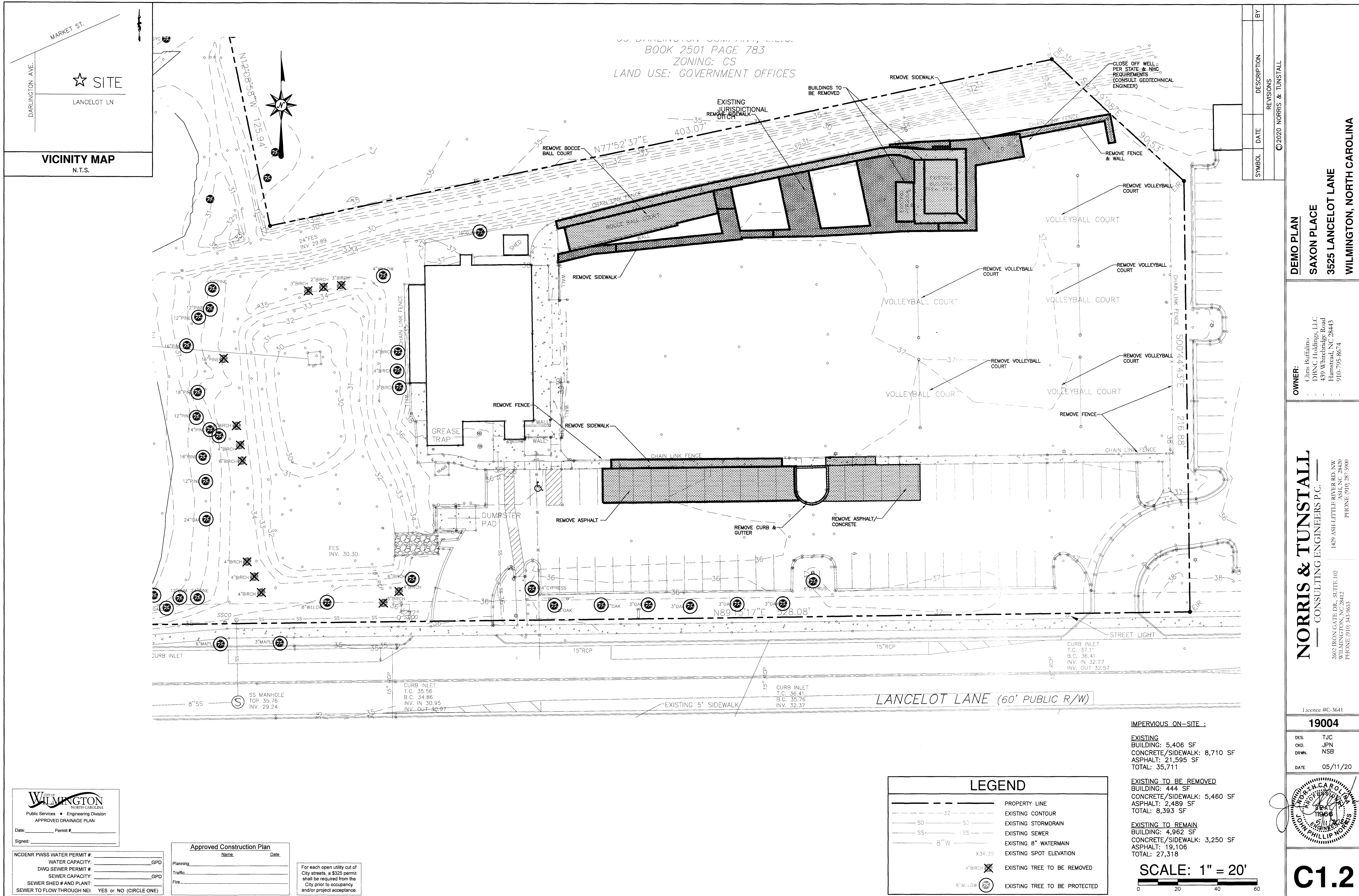
DATE 05/11/20

11966

PHILLIP NORRIS

C1.1





BOOK 2501 PAGE 783  
ZONING: CS  
LAND USE: GOVERNMENT OFFICES

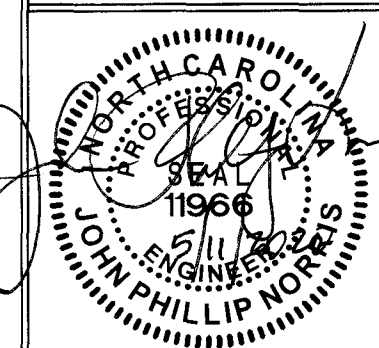
REVISIONS	DATE	DESCRIPTION	BY

DEMO PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
1429 ASH LITTLE RIVER RD, NW  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

DES.	TJC
OKD.	JPN
DRWN.	NSB
DATE	05/11/20



**C1.2**

City of WILMINGTON  
Public Services • Engineering Division  
APPROVED DRAINAGE PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

NC DENR PWSS WATER PERMIT # \_\_\_\_\_  
WATER CAPACITY: \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_  
SEWER CAPACITY: \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

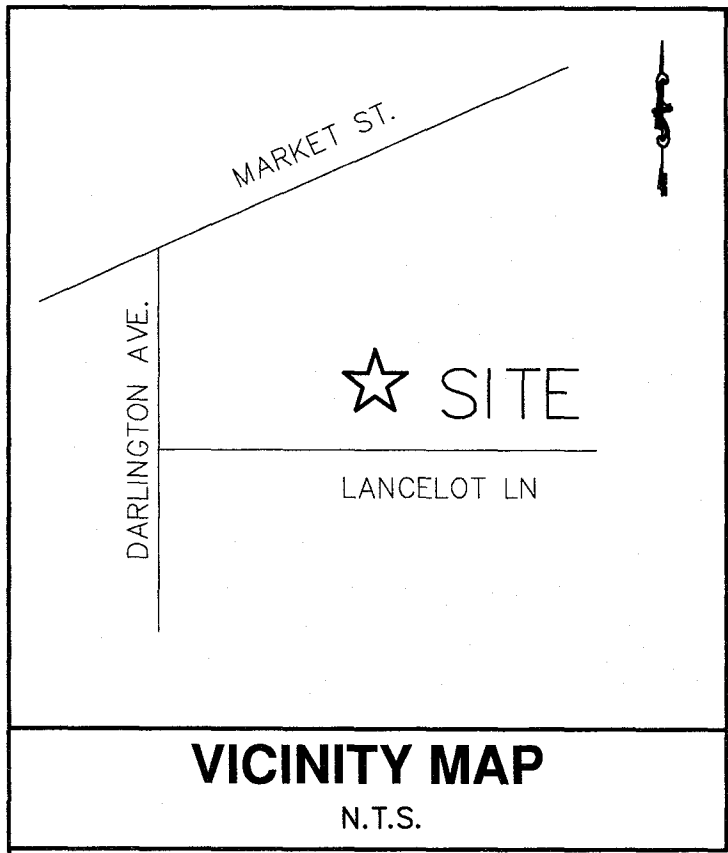
Approved Construction Plan  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Planning: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_

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

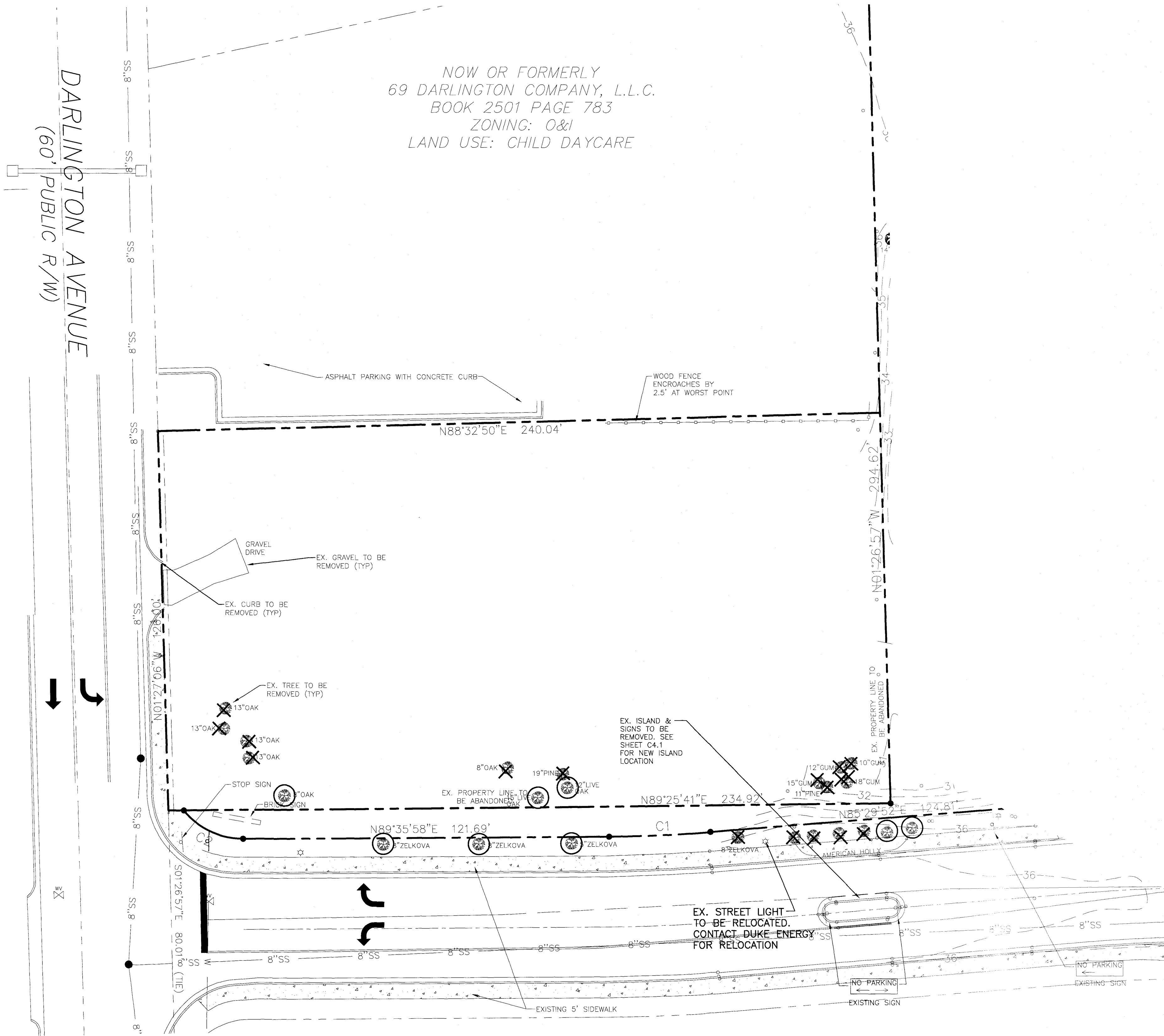
LEGEND	
	PROPERTY LINE
	EXISTING CONTOUR
	EXISTING STORMDRAIN
	EXISTING SEWER
	EXISTING SPOT ELEVATION
	EXISTING TREE TO BE REMOVED
	EXISTING TREE TO BE PROTECTED

IMPERVIOUS ON-SITE :  
  
EXISTING  
BUILDING: 5,406 SF  
CONCRETE/SIDEWALK: 8,710 SF  
ASPHALT: 21,595 SF  
TOTAL: 35,711  
  
EXISTING TO BE REMOVED  
BUILDING: 444 SF  
CONCRETE/SIDEWALK: 5,460 SF  
ASPHALT: 2,489 SF  
TOTAL: 8,393 SF  
  
EXISTING TO REMAIN  
BUILDING: 4,962 SF  
CONCRETE/SIDEWALK: 3,250 SF  
ASPHALT: 19,106  
TOTAL: 27,318

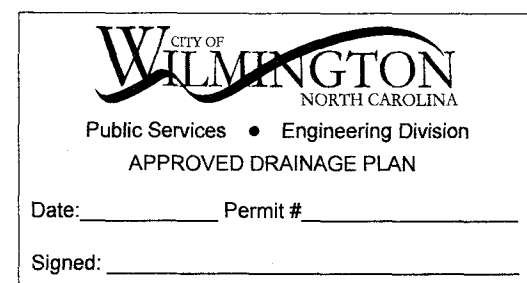
SCALE: 1" = 20'  
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NOW OR FORMERLY  
69 DARLINGTON COMPANY, L.L.C.  
BOOK 2501 PAGE 783  
ZONING: O&I  
LAND USE: CHILD DAYCARE



NC DENR PWSS WATER PERMIT # \_\_\_\_\_  
WATER CAPACITY: \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_  
SEWER CAPACITY: \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

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

LEGEND	
	PROPERTY LINE
	EXISTING CONTOUR
	EXISTING STORMDRAIN
	EXISTING SEWER
	EXISTING 8\"/>
	EXISTING SPOT ELEVATION
	EXISTING TREE TO BE REMOVED
	EXISTING TREE TO BE PROTECTED

IMPERVIOUS ON-SITE :

EXISTING  
BUILDING: 5,406 SF  
CONCRETE/SIDEWALK: 8,710 SF  
ASPHALT: 21,595 SF  
TOTAL: 35,711

EXISTING TO BE REMOVED  
BUILDING: 444 SF  
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ASPHALT: 19,106  
TOTAL: 27,318

SCALE: 1" = 20'

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
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DEMO PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

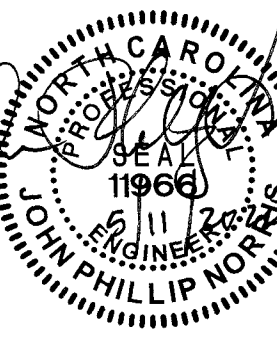
OWNER:  
Chris Bufalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.  
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

Licence #C-3641

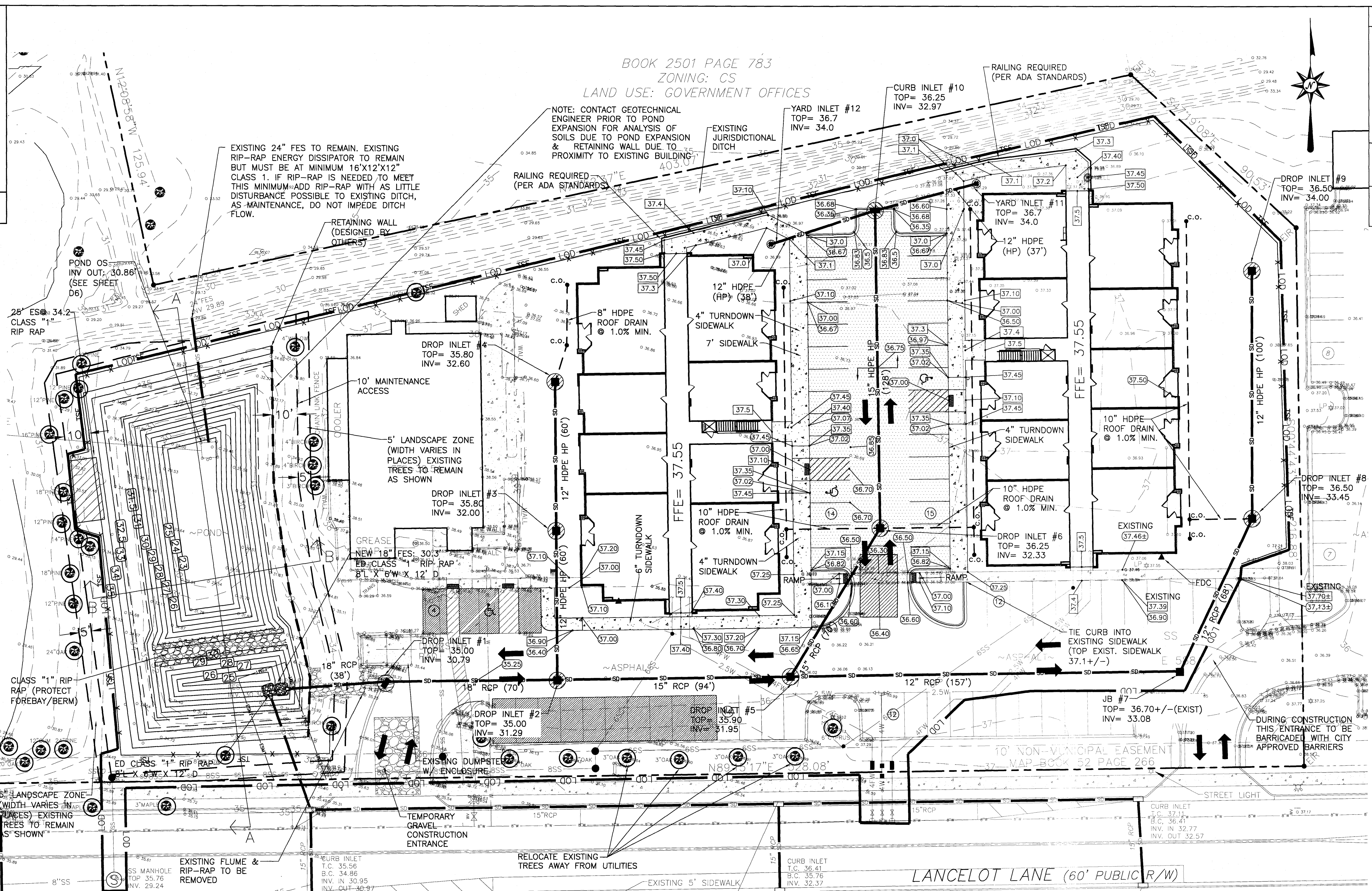
19004

DES. TJC  
CHK. JPN  
DRWN. NSB  
DATE 05/11/20



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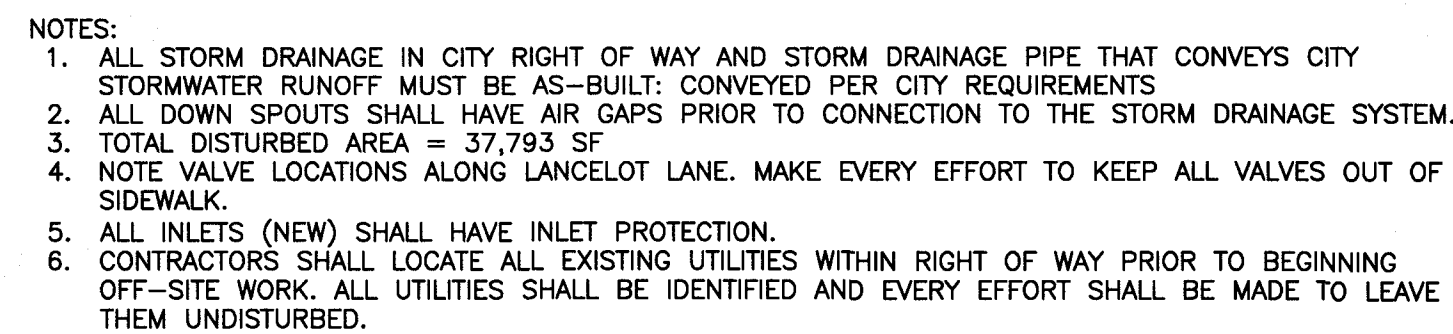




## C2

DES.	TJC
CKD.	JPN
DRWN.	NSB
DATE	05/11/20





SCALE: 1" = 20'

## C2.1

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

<u>Approved Construction Plan</u>	
<u>Name</u>	<u>Date</u>
Planning _____	
Traffic _____	
Fire _____	

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

MARKET ST.

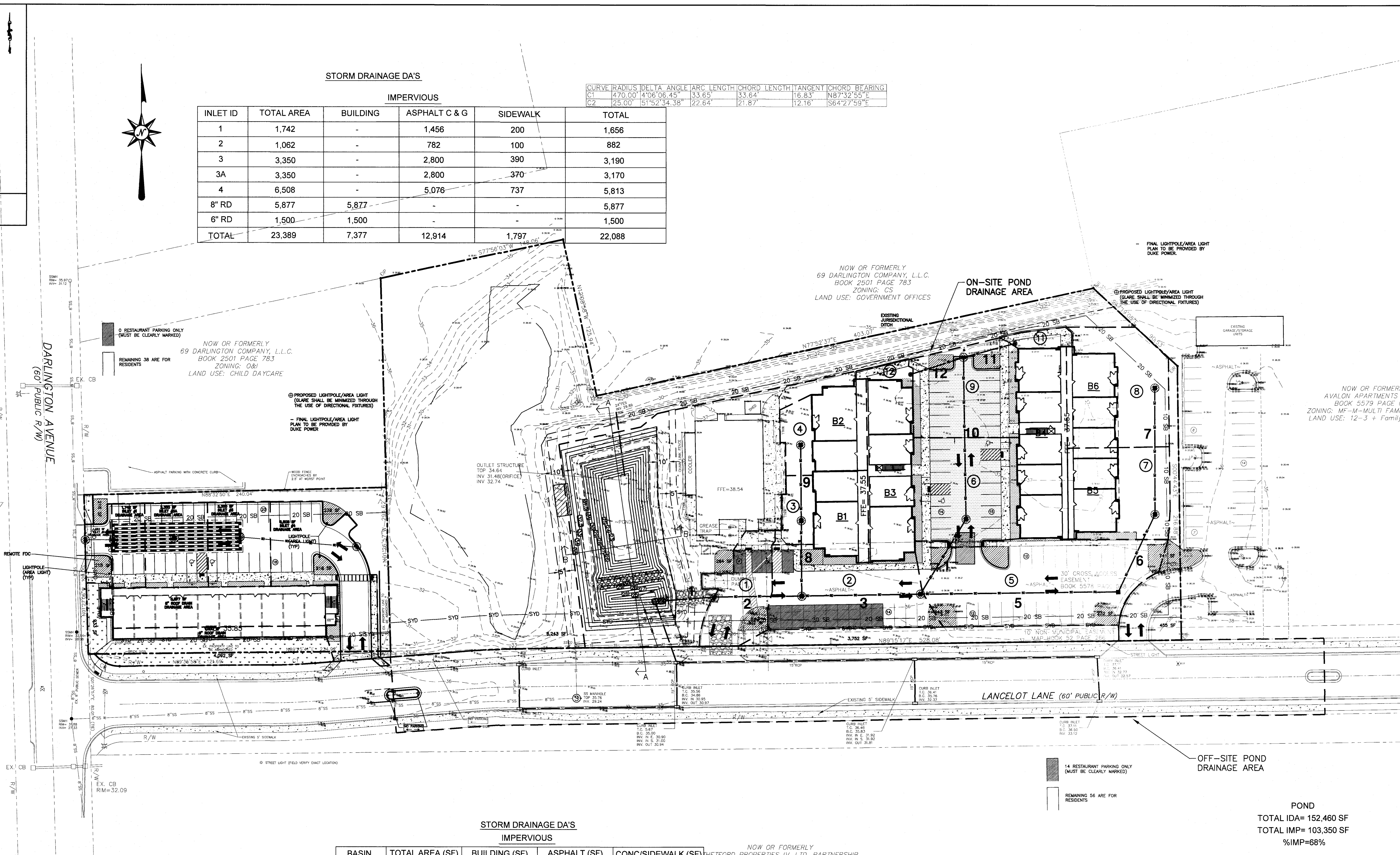
DARLINGTON AVE.

★ SITE

LANCELOT LN

VICINITY MAP

N.T.S.



STORM DRAINAGE DA'S					
IMPERVIOUS					
INLET ID	TOTAL AREA	BUILDING	ASPHALT C & G	SIDEWALK	TOTAL
1	1,742	-	1,456	200	1,656
2	1,062	-	782	100	882
3	3,350	-	2,800	390	3,190
3A	3,350	-	2,800	370	3,170
4	6,508	-	5,076	737	5,813
8" RD	5,877	5,877	-	-	5,877
6" RD	1,500	1,500	-	-	1,500
TOTAL	23,389	7,377	12,914	1,797	22,088

CURVE	RADIUS	DELTA	ANGLE	ARC LENGTH	CHORD LENGTH	TANGENT	CHORD BEARING
C1	470.00'	4'06.06.45"	33.65°	33.64'	16.83'	N87°32'55"E	
C2	25.00'	51°52'34.38"	22.64°	21.87'	12.16'	S64°27'59"E	

STORM DRAINAGE DA'S				
IMPERVIOUS				
BASIN	TOTAL AREA (SF)	BUILDING (SF)	ASPHALT (SF)	CONC/SIDEWALK (SF)
1	3,786	0	3,006	305
2	7,275	0	5,941	693
3	1,410	0	0	74
4	1,387	0	0	0
5	11,765	0	9,458	878
6	6,840	0	4,735	1,223
7	3,221	0	0	0
8	4,308	0	0	0
9	5,962	0	3,197	1,021
11	677	0	0	353
12	553	0	0	222
B1	2,915	2,915	0	0
B2	2,886	2,886	0	0
B3	5,114	5,114	0	0
B4	5,946	5,946	0	0
B5	2,667	2,667	0	0
B6	2,988	2,988	0	0

ON-SITE AREA		IMPERVIOUS					
TOTAL AREA (SF)	102,825	EXISTING			NEW		
		BUILDING (SF)	CONC/SIDEWALK (SF)	ASPHALT (SF)	BUILDING (SF)	CONC/SIDEWALK (SF)	ASPHALT (SF)
		4,962	3,250	19,106	22,516	4,769	7,231
							1,000

OFF-SITE AREA		IMPERVIOUS			
TOTAL AREA (SF)	49,635	EXISTING (SF)		NEW	
		BUILDING (SF)	CONC/SIDEWALK (SF)	BUILDING (SF)	CONC/SIDEWALK (SF)
				0	0
					0

SCALE: 1" = 40'

0 40 80 120

WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

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

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

NCDENR PWSS WATER PERMIT #: \_\_\_\_\_ GPD

WATER CAPACITY: \_\_\_\_\_

DWQ SEWER PERMIT #: \_\_\_\_\_

SEWER CAPACITY: \_\_\_\_\_ GPD

SEWER SHED # AND PLANT: \_\_\_\_\_

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan

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

Planning: \_\_\_\_\_

Traffic: \_\_\_\_\_

Fire: \_\_\_\_\_

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

BY	DATE	DESCRIPTION
		REVISIONS
		© 2020 NORRIS & TUNSTALL

DRAINAGE AREA PLAN

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:

Chris Buffalino

DBNC Holdings, LLC

439 Whitebridge Road

Hamstead, NC 28445

910-795-8674

NORRIS & TUNSTALL

CONSULTING ENGINEERS P.C.

2602 IRON GATE DR., SUITE 102

WILMINGTON, NC 28412

PHONE (910) 343-9653

License #C-3641

19004

DES. TJC

KD. JPN

DRWN. NSB

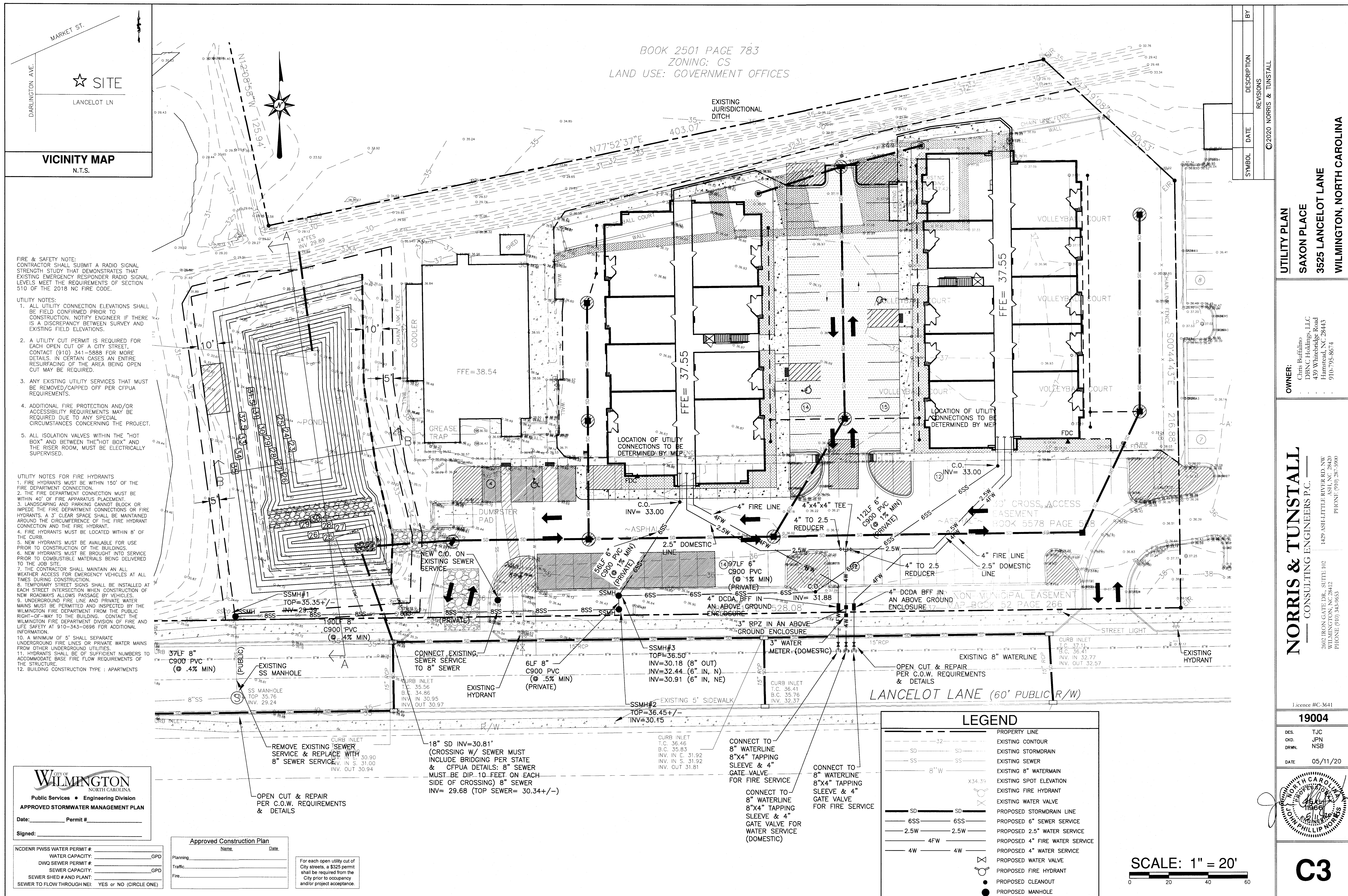
DATE 05/11/20

SEAL 11966

PHILLIP NORRIS

C2.2







VICINITY MAP  
N.T.S.

MARKET ST.  
DARLINGTON AVE.  
★ SITE  
LANCELOT LN

FIRE & SAFETY NOTE:  
CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.

- UTILITY NOTES:
1. ALL UTILITY CONNECTION ELEVATIONS SHALL BE FIELD CONFIRMED PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF THERE IS A DISCREPANCY BETWEEN SURVEY AND EXISTING FIELD ELEVATIONS.
  2. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910) 341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
  3. ANY EXISTING UTILITY SERVICES THAT MUST BE REMOVED/CAPPED OFF PER GFPUA REQUIREMENTS.
  4. ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
  5. ALL ISOLATION VALVES WITHIN THE "HOT BOX" AND BETWEEN THE "HOT BOX" AND THE RISER ROOM, MUST BE ELECTRICALLY SUPERVISED.

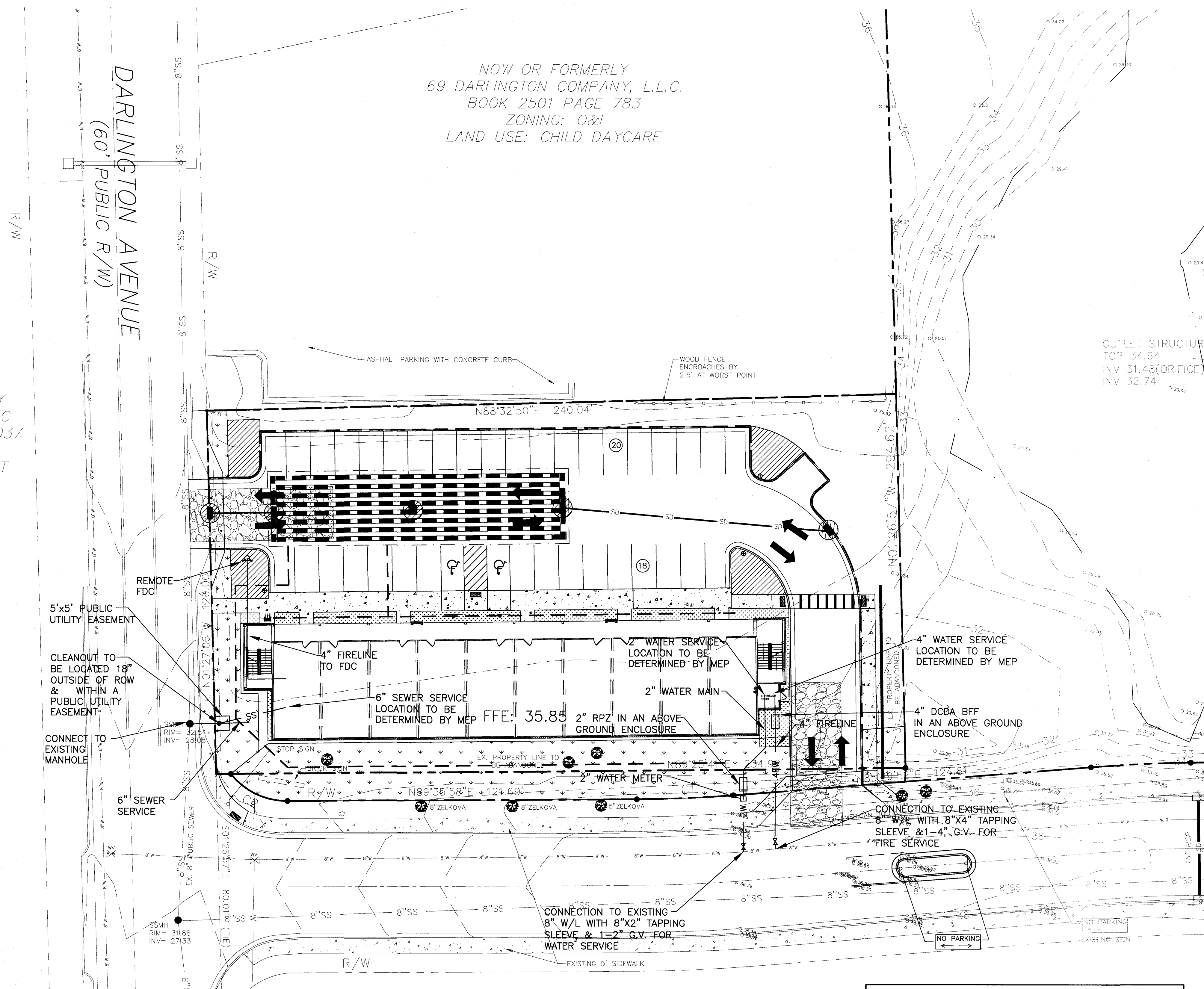
- UTILITY NOTES FOR FIRE HYDRANTS
1. FIRE HYDRANTS MUST BE WITHIN 150' OF THE FIRE DEPARTMENT CONNECTION.
  2. THE FIRE DEPARTMENT CONNECTION MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
  3. LANDSCAPING AND PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTIONS OR FIRE HYDRANTS. A 3' CLEAR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

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

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

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

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



LEGEND

---	PROPERTY LINE
---	EXISTING CONTOUR
---	EXISTING STORMDRAIN
---	EXISTING SEWER
---	EXISTING 8" WATERMAIN
---	EXISTING SPOT ELEVATION
---	EXISTING FIRE HYDRANT
---	EXISTING WATER VALVE
---	PROPOSED STORMDRAIN LINE
---	PROPOSED 6" SEWER SERVICE
---	PROPOSED 2" WATER SERVICE
---	PROPOSED WATER VALVE
---	PROPOSED FIRE HYDRANT
●	PROPOSED CLEANOUT
●	PROPOSED MANHOLE

SCALE: 1" = 20'

0 20 40 60

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
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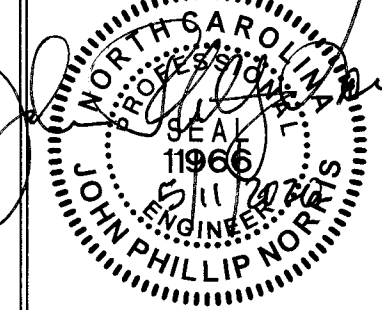
UTILITY PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Bufalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hawstead, NC 28443  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.  
1429 ASHLITTLE RIVER RD NW  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

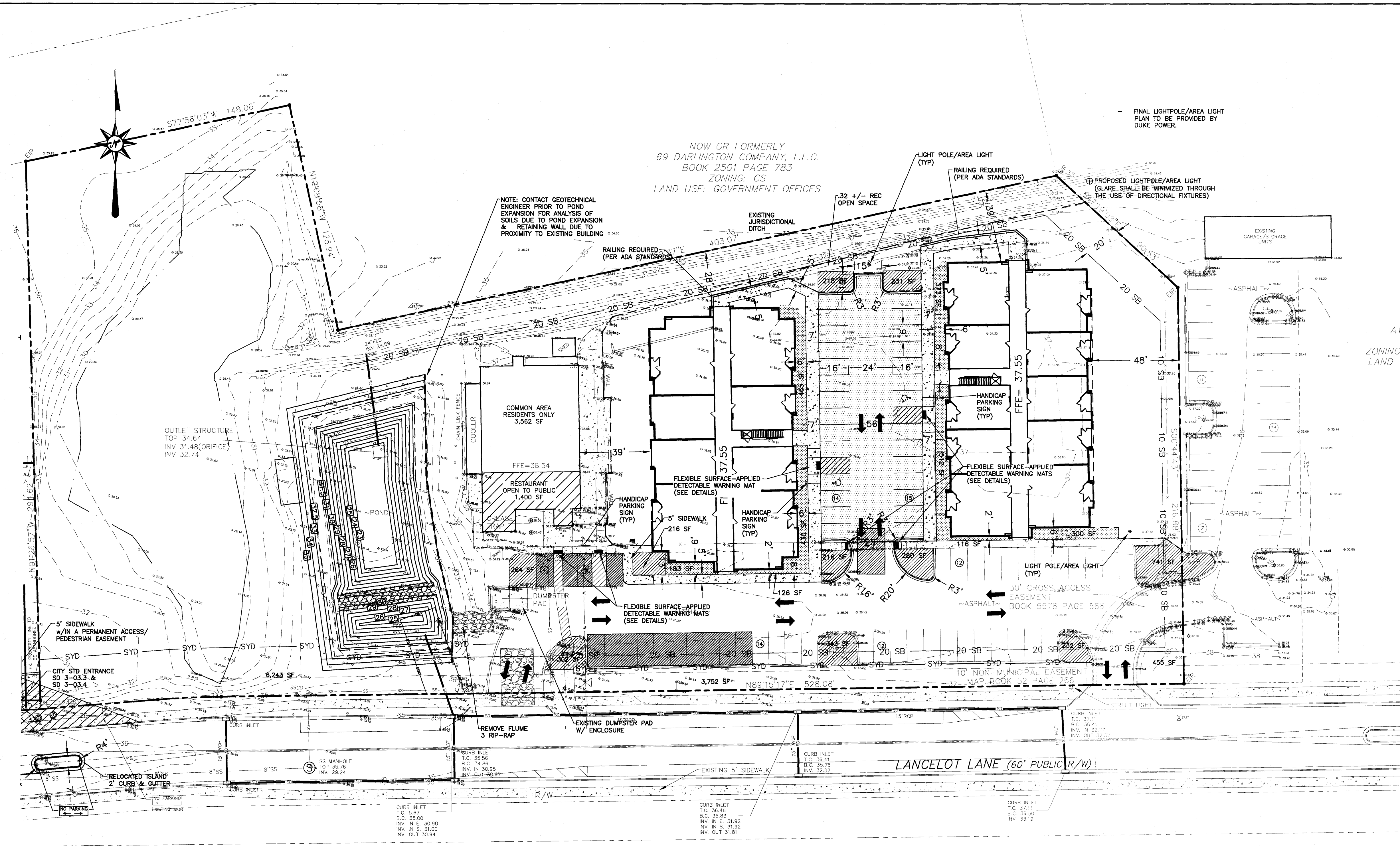
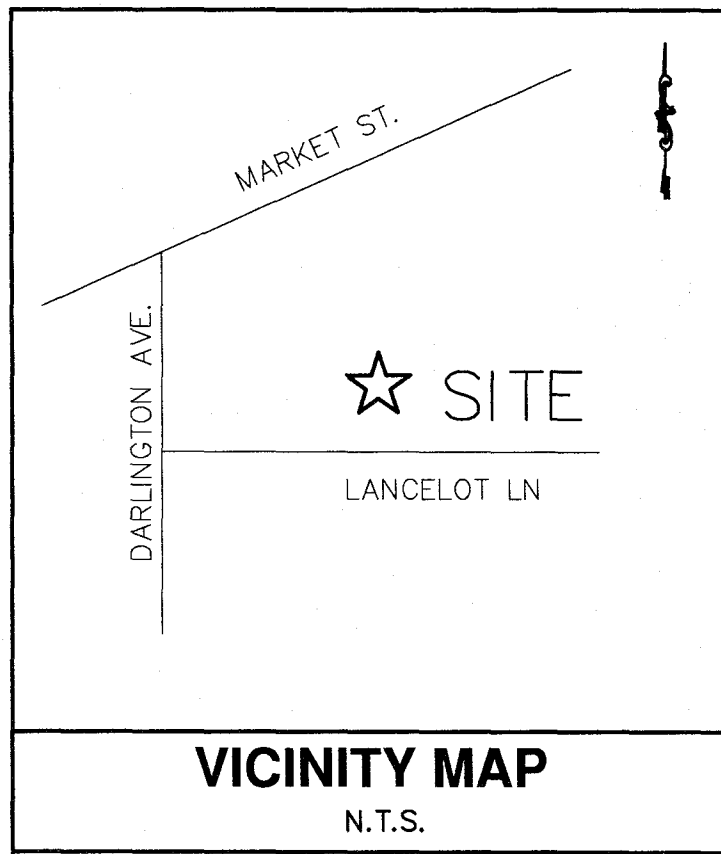
License #C-3641

DES.	TJC
CHK.	JPN
DRWN.	NSB
DATE	05/11/20



C3.1





- NOTES:
1. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
  2. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
  3. ANY BROKEN OR MISSING SIDEWALK, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
  4. CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.

LEGEND	
	PROPERTY LINE
	EXISTING CONTOUR
	EXISTING STORMDRAIN
	EXISTING SEWER
	EXISTING 8" WATERMAIN
	EXISTING SPOT ELEVATION
	PROPOSED STORMDRAIN LINE
	PROPOSED 6" SEWER SERVICE
	PROPOSED 2" WATER SERVICE

SCALE: 1" = 30'

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

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

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

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

Approved Construction Plan

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

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

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

SYMBOL	DATE	DESCRIPTION	BY
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LAYOUT PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBSC Holdings, LLC  
439 Whitebridge Road  
Harrisburg, NC 28345  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.  
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

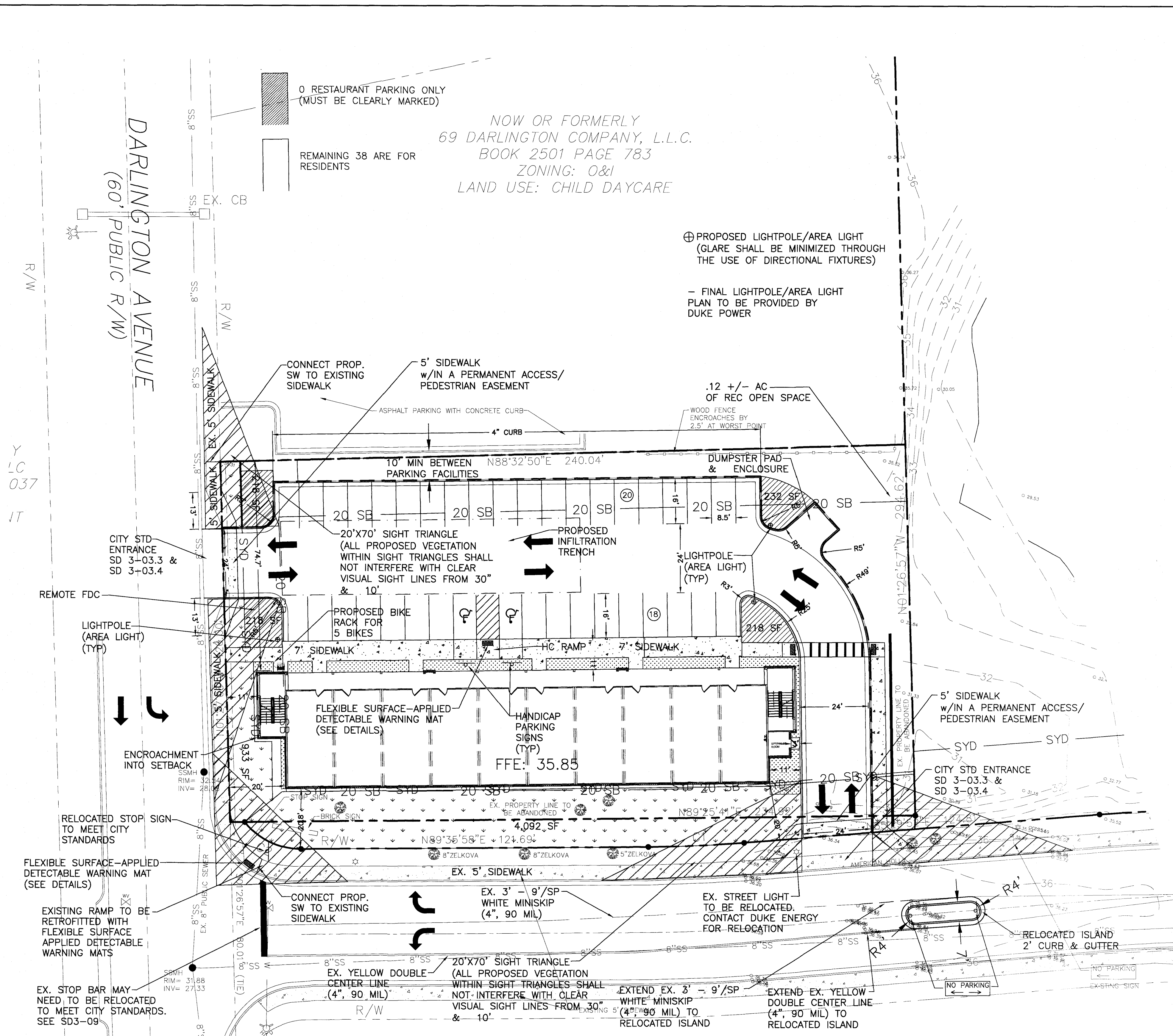
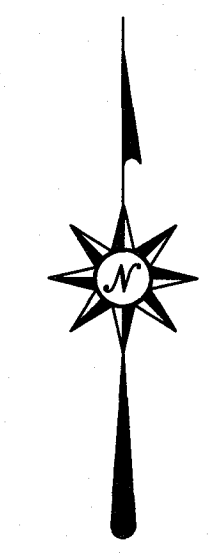
License #C-3641  
19004  
DES: TJC  
CHK: JPN  
DRWN: NSB  
DATE: 05/11/20

PHILLIP NORRIS  
Professional Engineer  
No. 19668  
State of North Carolina

C4



MARKET ST.  
DARLINGTON AVE.  
★ SITE  
LANCELOT LN  
VICINITY MAP  
N.T.S.



- NOTES:
1. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
  2. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
  3. ANY BROKEN OR MISSING SIDEWALK, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
  4. CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN ROW.
  5. PARKING SPACES MUST BE AVAILABLE TO OCCUPANTS AT ALL TIMES AND CLEARLY DESIGNATED AS RESERVED.

NOTE: REMOVE EXISTING PAVEMENT MARKINGS & REPLACE AS REQUIRED.

LEGEND	
---	PROPERTY LINE
---	EXISTING CONTOUR
---	EXISTING STORMDRAIN
---	EXISTING SEWER
---	EXISTING 8" WATERMAIN
---	EXISTING SPOT ELEVATION
---	PROPOSED STORMDRAIN LINE
---	PROPOSED 6" SEWER SERVICE
---	PROPOSED 2" WATER SERVICE

SCALE: 1" = 20'

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_  
NCDENR PWSS WATER PERMIT # \_\_\_\_\_  
WATER CAPACITY: \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_  
SEWER CAPACITY: \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

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

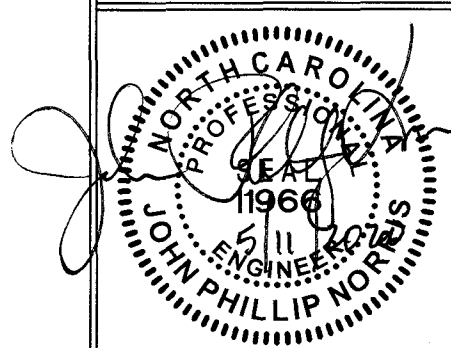
SYMBOL	DATE	DESCRIPTION	REVISIONS

LAYOUT PLAN  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

Licence #C-3641  
**19004**  
DES. TJC  
CHK. JPN  
DRWN. NSB  
DATE 05/11/20



**C4.1**



VICINITY MAP  
N.T.S.

★ SITE  
LANCELOT LN

DARLINGTON AVE.

MARKET ST.

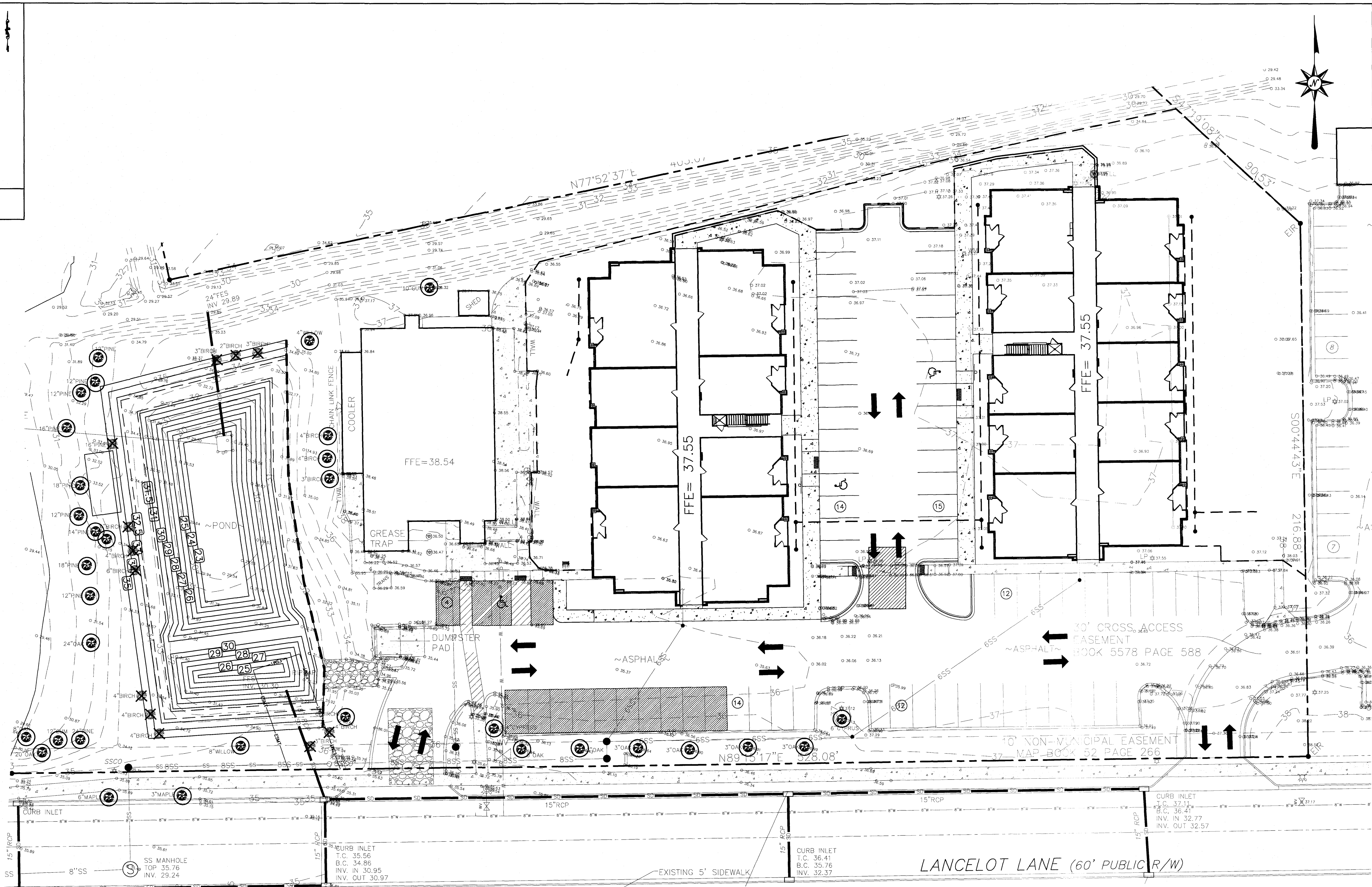
TREE REMOVAL TABLE

EXISTING TREES TO REMAIN

- 6- 12" PINE
- 2- 14" PINE
- 1- 16" PINE
- 2- 18" PINE
- 1- 24" PINE
- 5- 3" OAK
- 1- 5" OAK
- 1- 8" OAK
- 1- 20" OAK
- 1- 24" OAK
- 1- 10" GUM
- 1- 12" GUM
- 1- 3" MAPLE
- 1- 6" MAPLE
- 1- 4" CYPRESS
- 1- 6" CYPRESS
- 1- 4" WILLOW
- 1- 8" WILLOW
- 3- 4" BIRCH
- 1- 6" BIRCH

REMOVED TREES

- 1- 16" PINE
- 5- 4" BIRCH
- 1- 6" BIRCH
- 4- 3" BIRCH
- 1- 2" BIRCH



BY	DESCRIPTION
REVISIONS	
SYMBOL	DATE

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TREE REMOVAL PLAN

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

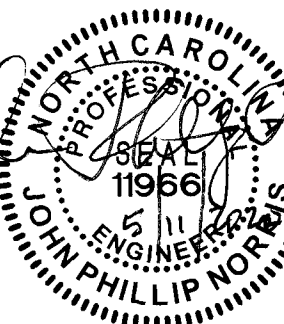
NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.

2609 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653

Licence #C-3641

19004

DES. TJC  
CHK. JPN  
DRWN. NSB  
DATE 05/11/20



C5

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

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

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

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

LEGEND

- EXISTING TREE TO BE SAVED
- EXISTING TREE TO BE REMOVED

SCALE: 1" = 20'

0 20 40 60



VICINITY MAP  
N.T.S.

MARKET ST.  
DARLINGTON AVE.  
★ SITE  
LANCELOT LN

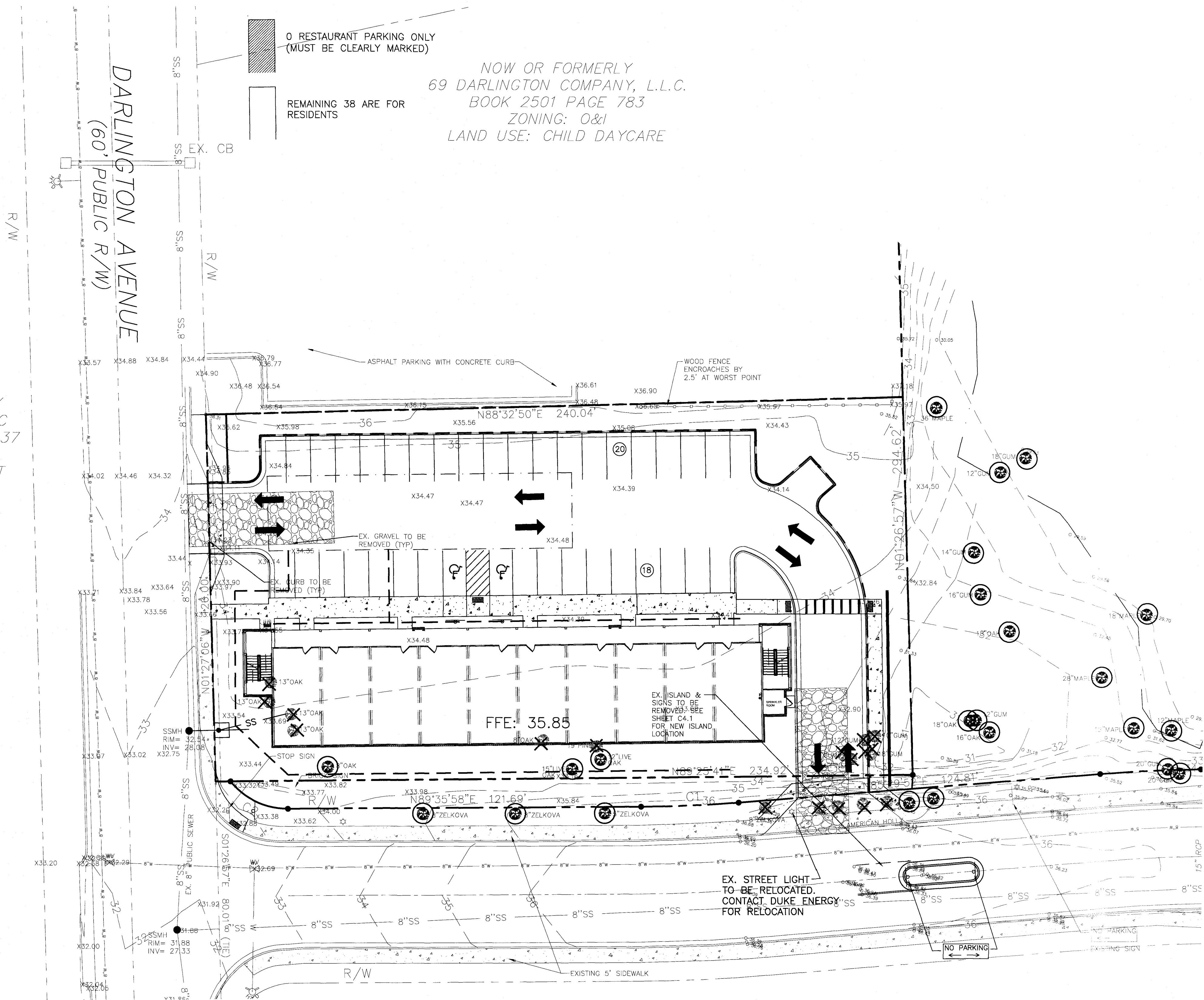
TREE REMOVAL TABLE

EXISTING TREES TO REMAIN

- 2- 8" ZELKOVA
- 2- 5" ZELKOVA
- 2- AMERICAN HOLLY
- 1- 12" LIVE OAK
- 1- 15" LIVE OAK
- 1- 8" OAK
- 1- 15" OAK
- 1- 16" OAK
- 2- 18" OAK
- 1- 23" OAK
- 2- 12" GUM
- 1- 14" GUM
- 1- 16" GUM
- 1- 18" GUM
- 2- 20" GUM
- 2- 12" MAPLE
- 1- 18" MAPLE
- 1- 28" MAPLE
- 1- 36" MAPLE

REMOVED TREES

- 1- 8" OAK
- 4- 13" OAK
- 1- 11" PINE
- 1- 19" PINE
- 1- 8" ZELKOVA
- 4- AMERICAN HOLLY
- 1- 10" GUM
- 1- 12" GUM
- 1- 15" GUM
- 1- 18" GUM

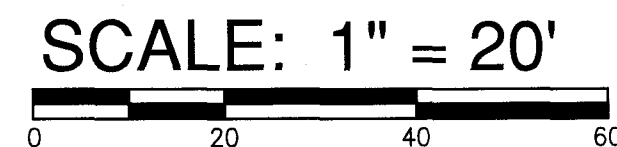


CITY OF WILMINGTON  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

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

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

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



SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
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TREE REMOVAL PLAN

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Bufalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.

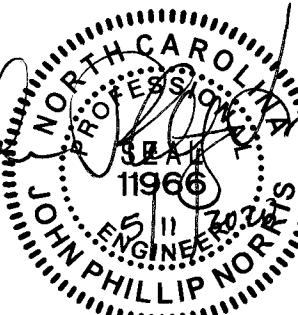
2603 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9633

Licence #C-3641

19004

DES. TJC  
CKD. JPN  
DRWN. NSB

DATE 05/11/20



C5.1



COORDINATION NOTES

1. THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.

2. ALL WORK IS TO BE IN ACCORDANCE WITH CITY OF WILMINGTON, NEW HANOVER COUNTY, THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CPFA) AND THE STATE OF NORTH CAROLINA.

3. THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).

4. ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.

GENERAL NOTES:

1. EXISTING TOPOGRAPHY, BOUNDARY AND UTILITIES, HAVE BEEN PREPARED BY FIELD SURVEY BY ROBERT SESSOMS & ASSOCIATES, PLLC., APPROVED PLANS BY WITKINS & RAVENEL, INC. AND OTHER AVAILABLE INFORMATION.

2. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF ALL EXISTING UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF DITCHING OPERATIONS BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES. IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF TRENCHING OPERATIONS SO AS TO ELIMINATE OR MINIMIZE DAMAGE TO EXISTING UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING LOSS OF UTILITY REVENUES. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC.,...

3. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.

4. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAGMEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE DOT.

5. ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.

6. ALL WORK BY THE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR AFTER THE OWNER ACCEPTS THE WORK.

7. CONTRACTOR SHALL CALL THE NORTH CAROLINA ONE-CALL CENTER AT 1 (800) 632-4949 AND ALLOW THE CENTER TO LOCATE EXISTING UTILITIES BEFORE DIGGING.

8. CONTRACTOR SHALL REMOVE ASPHALT, AGGREGATE BASE COURSE, AND CONCRETE CURB & GUTTER WITHIN LIMITS OF DEMOLITION AS SHOWN ON PLAN.

DEMOLITION NOTES:

1. CONTRACTOR TO COORDINATE WITH THE OWNER TO PROPERLY MAINTAIN OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.

2. CONTRACTOR IS TO WALK THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS WILL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.

3. DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF CONCRETE PADS, CONCRETE DITCHES, FOUNDATIONS, SLABS, STEPS, AND STRUCTURES; ABANDONED UTILITIES, BUILDINGS, PAVEMENTS AND ALL MATERIALS CLEARED AND STRIPPED TO THE EXTENT NECESSARY AS DIRECTED BY THE SOILS ENGINEER FOR THE INSTALLATION OF THE NEW IMPROVEMENTS AND WITHIN THE LIMITS OF CLEARING AND GRADING AND AS SHOWN ON THESE PLANS.

4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO OWNER.

5. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM SEWER UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS BY THE CONTRACTOR.

6. EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.

7. ALL EXISTING IMPROVEMENTS INDICATED OR REQUIRED TO BE DEMOLISHED SHALL INCLUDE REMOVAL FROM THE PROPERTY AND PROPER DISPOSAL.

8. CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING OVER HEAD AND UNDERGROUND UTILITIES INCLUDING CABLE, GAS, TELEPHONE AND ELECTRIC AND ANY OTHER UTILITIES THROUGH THE SITE WITH THE RESPECTIVE COMPANIES.

9. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTERS AND SIDEWALKS TO BE DEMOLISHED.

10. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AS WELL AS OSHA REGULATIONS.

11. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL NOTES:

1. CLEAR AND REMOVE FROM SITE ALL TREES, ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN DESIGNATED CLEARING LIMITS.

2. PLANT GRASS OVER ALL GRADED AREAS AS SHOWN IN THE TABLE ON THIS SHEET OF CEASE OF ANY GRADING ACTIVITY.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUCTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION MEASURES.

4. DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION CONTROL MEASURES UNTIL FINAL INSPECTION AND APPROVAL BY NEW HANOVER COUNTY.

5. WATER, FERTILIZER, MOW AND MAINTAIN SPRIGGED, SOODED AND PLANTED AREAS UNTIL FINAL APPROVAL BY NEW HANOVER COUNTY.

6. ANY BORROW MATERIAL BROUGHT ONTO SITE MUST BE FROM A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

7. ANY EXCESS MATERIAL REMOVED FROM SITE MUST BE HAULED TO A LEGALLY OPERATED MINE OR OTHER APPROVED SOURCE.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.

2. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.

3. SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. SILT FENCE STAKES WILL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8 FOOT STAKE SPACING.

4. INSPECT INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE THE SILT SACK DURING SEDIMENT REMOVAL. REPLACE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

5. INSPECT SILT SACKS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE SILT SACK OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE THE SILT SACK DURING SEDIMENT REMOVAL. REPLACE AS NEEDED.

6. INSPECT SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ONE-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH.

7. INSPECT EXCESSOR MATING AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT REPAIR IMMEDIATELY. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE MATTING. ANY AREAS OF THE MATTING THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED. MONITOR AND REPAIR THE MATTING AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

STABILIZATION NOTES

1. ALL DISTURBED AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY AND SLOPES WITHIN 21 CALENDAR DAYS.

PERMANENT SEEDING SCHEDULE - MIXTURE 5CP

SPECIES	RATE (LB/ACRE)
CENTPEDE GRASS	10-20

Seeding Dates  
MARCH - JUNE

Soil Amendments  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

Mulch  
DO NOT MULCH.

Maintenance  
FERTILIZE VERY SPARINGLY LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING

WINTER AND EARLY SPRING

SPECIES	RATE (LB/ACRE)
Rye (GRAIN)	120
*ANNUAL LESPEDEZZA (KOSBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50
*OMIT ANNUAL LESPEDEZZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXCEED BEYOND JUNE.	

Seeding dates  
COASTAL PLAIN - DEC.1-APR. 15 - LATE WINTER AND EARLY SPRING  
APRIL 15 - AUG. 15 - SUMMER  
AUG. 15 - DEC. 30 - FALL

Soil amendments  
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

Mulch  
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

Maintenance  
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

GENERAL GRADING NOTES

1. REASONABLE CARE HAS BEEN EXERCISED IN SHOWING THE LOCATION OF EXISTING UTILITIES ON THE PLANS. THE EXACT LOCATION OF SUCH UTILITIES IS NOT KNOWN IN ALL CASES. THE CONTRACTOR SHALL EXPLORE THE AREA AHEAD OF THE DITCHING OPERATION BY OBSERVATIONS, ELECTRONIC DEVICES, HAND DIGGING AND BY PERSONAL CONTACT WITH THE UTILITY COMPANIES IN ORDER TO LOCATE EXISTING UTILITIES IN ADVANCE OF THE TRENCHING OPERATIONS SO AS TO AVOID AND PREVENT DAMAGE TO THE EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST RESULTING FROM ANY DAMAGE TO THE EXISTING UTILITY LINES INCLUDING BUT NOT LIMITED TO REPAIRS AND LOSS SERVICE REVENUE. CONTRACTOR SHALL ARRANGE FOR TEMPORARY SUPPORT OF EXISTING UTILITIES, SUCH AS POLES, CONDUITS, FIBER OPTIC CABLES, TELEPHONE CABLES, WATER LINES, ETC.,...

2. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT.

3. CONTRACTOR SHALL PLAN AND CONSTRUCT WORK SO AS TO CAUSE MINIMUM INCONVENIENCE TO THE OWNER AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN AT ALL TIMES DURING THE PROGRESS OR TEMPORARY SUSPENSION OF WORK, SUITABLE BARRIERS, FENCES, SIGNS OR OTHER ADEQUATE PROTECTION, INCLUDING FLAG MEN AND WATCHMEN AS NECESSARY TO INSURE THE SAFETY OF THE PUBLIC AS WELL AS THOSE ENGAGED IN THE CONSTRUCTION WORK. CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "CONSTRUCTION AND MAINTENANCE OPERATIONS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE MCDOT.

4. ALL MATERIAL CLEARED AND GRUBBED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK, SUCH AS TREES, VEGETATION, FENCING, ETC., SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF OFF-SITE OR BURNED IF PROPER PERMITS ARE RECEIVED.

EXISTING UTILITY NOTES

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.

2. EXISTING UTILITIES AND STRUCTURES SHOWN, BOTH UNDERGROUND AND ABOVE GROUND, ARE BASED ON A FIELD SURVEY AND THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

UTILITY CONTACTS:

1. CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING AND DIGGING. 1-800-632-4949

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO ANY EXCAVATION OR DEMOLITION.

CONTACT "CAROLINA ONE CALL" AT 1-800-632-4949

EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

SITE NOTES

1. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO START OF CONSTRUCTION. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.

2. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND R.O.W.'S PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.

3. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.

4. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ETC., SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH THE RESPECTIVE UTILITY.

5. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.

6. THE GENERAL CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.

7. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.

8. CONTRACTOR SHALL MAINTAIN AN "AS-BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.

9. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE GIVEN TO THE OWNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENT SHALL BE MADE WITHOUT THE PERMISSION OF THE OWNER.

10. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COST HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE OTHER OBSTRUCTIONS OR FROM DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. CONTACT NORTH CAROLINA ONE CALL TOLL FREE 1-800-632-4949 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES.

11. ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION

12. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY, AND LOCAL CODES.

13. FOR BUILDING DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.

14. ALL DIMENSIONS AND RADII ARE TO OUTSIDE FACE OF BUILDING OR TO FACE OF CURB UNLESS OTHERWISE NOTED.

15. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC., THAT MAY BE REQUIRED.

16. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.

GENERAL STORM SEWER NOTES

1. ALL STORM SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WILMINGTON AND THE STATE OF NORTH CAROLINA REQUIREMENTS AS SPECIFIED ON THE DRAWINGS AND IN THE PROJECT SPECIFICATIONS.

2. BEDDING FOR ALL STORM SEWER PIPE SHALL BE AS SPECIFIED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND MANUFACTURER SPECIFICATIONS.

3. ALL STORM SEWER PIPES TO BE HDPE ADS N-12 OR EQUIVALENT, UNLESS OTHERWISE SPECIFIED.

4. ALL STORM SEWER PIPES SHOWN AS RCP ON THE PLANS SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, UNLESS INDICATED OTHERWISE ON PLANS.

GROUND STABILIZATION

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

DETAILS & NOTES

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:

Chris Barbalino  
DBSC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.

2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9653  
1429 ASHLITTLE RIVER RD. NW  
ASH, NC 28420  
PHONE (910) 287-5900

License #C-3641

19004

DES. TJC  
CHKD. JPN  
DRWN. NSB

DATE: 05/11/20

D1

CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: Permit #

Signed:

Approved Construction Plan

Name Date

Planning

Traffic

Fire

NCDENR PWSS WATER PERMIT #

WATER CAPACITY: GPD

DWQ SEWER PERMIT #

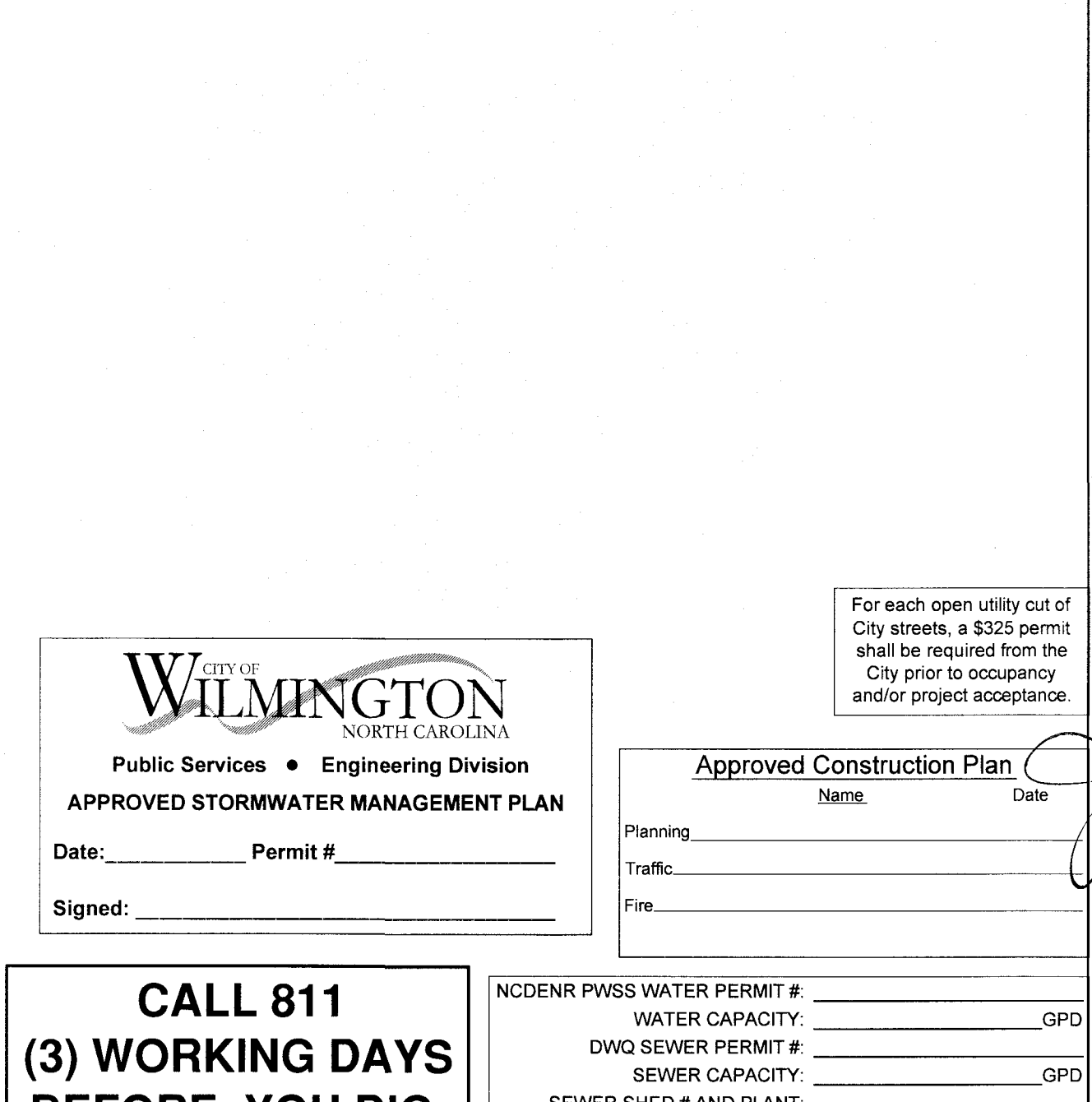
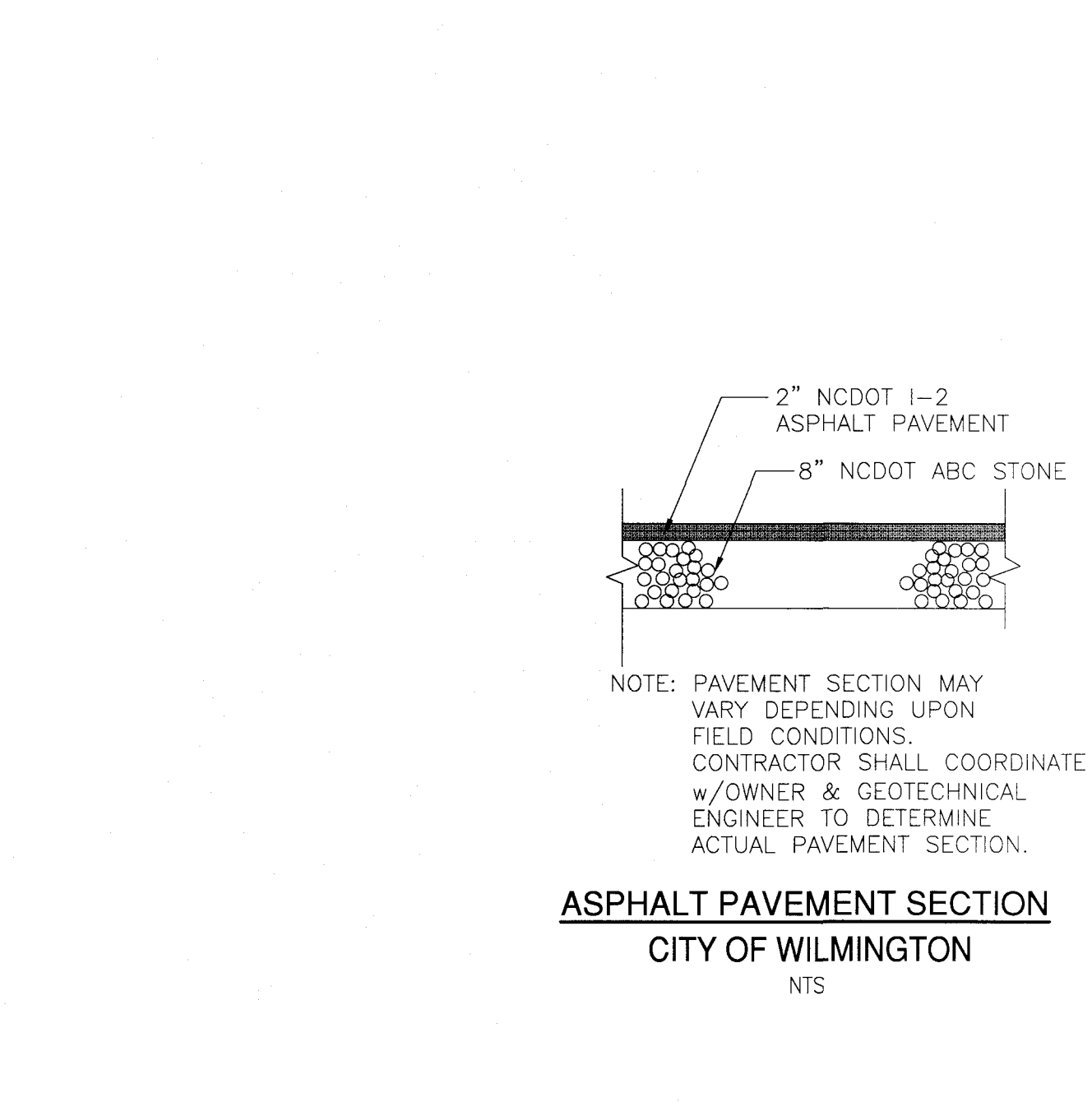
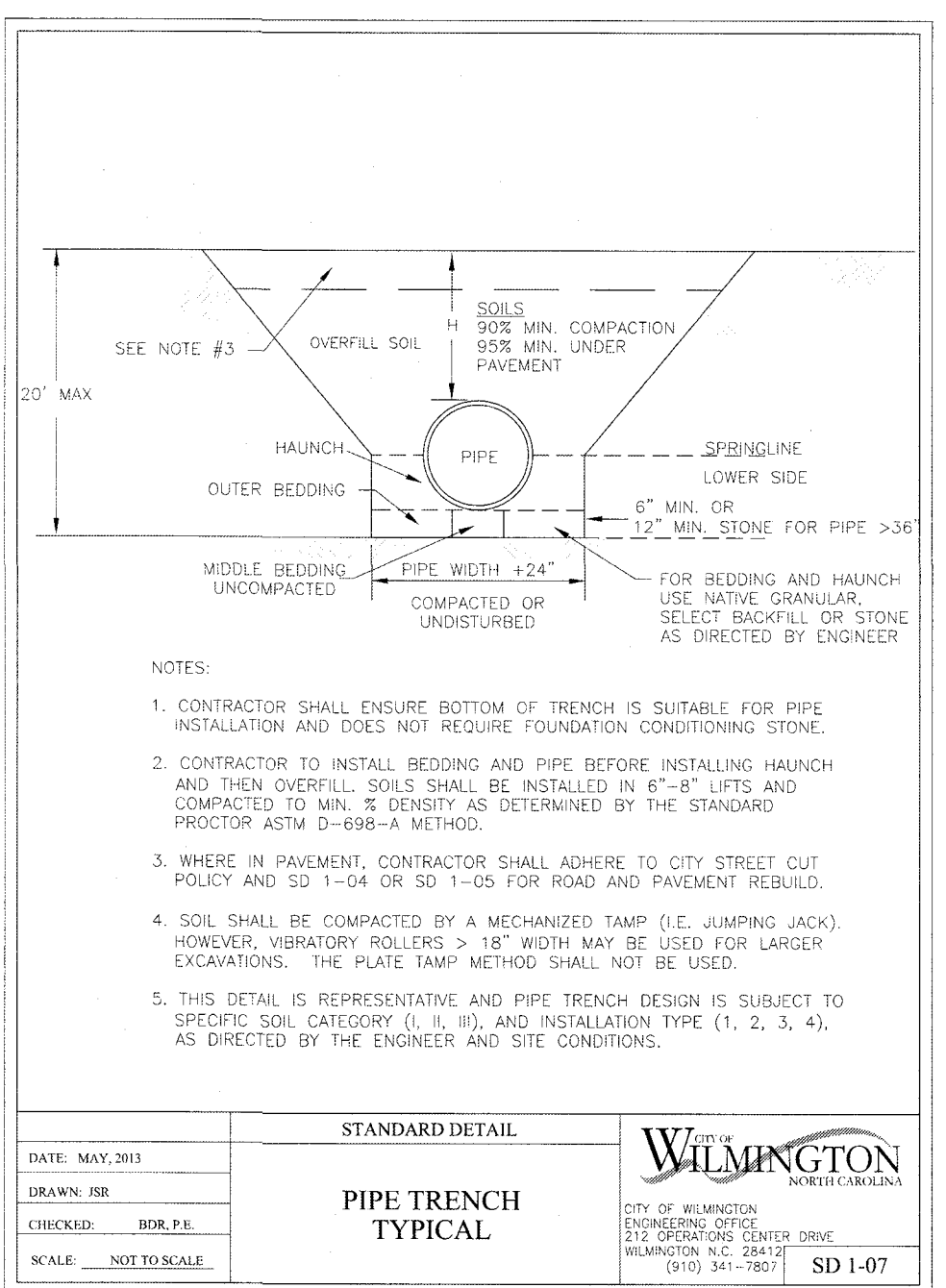
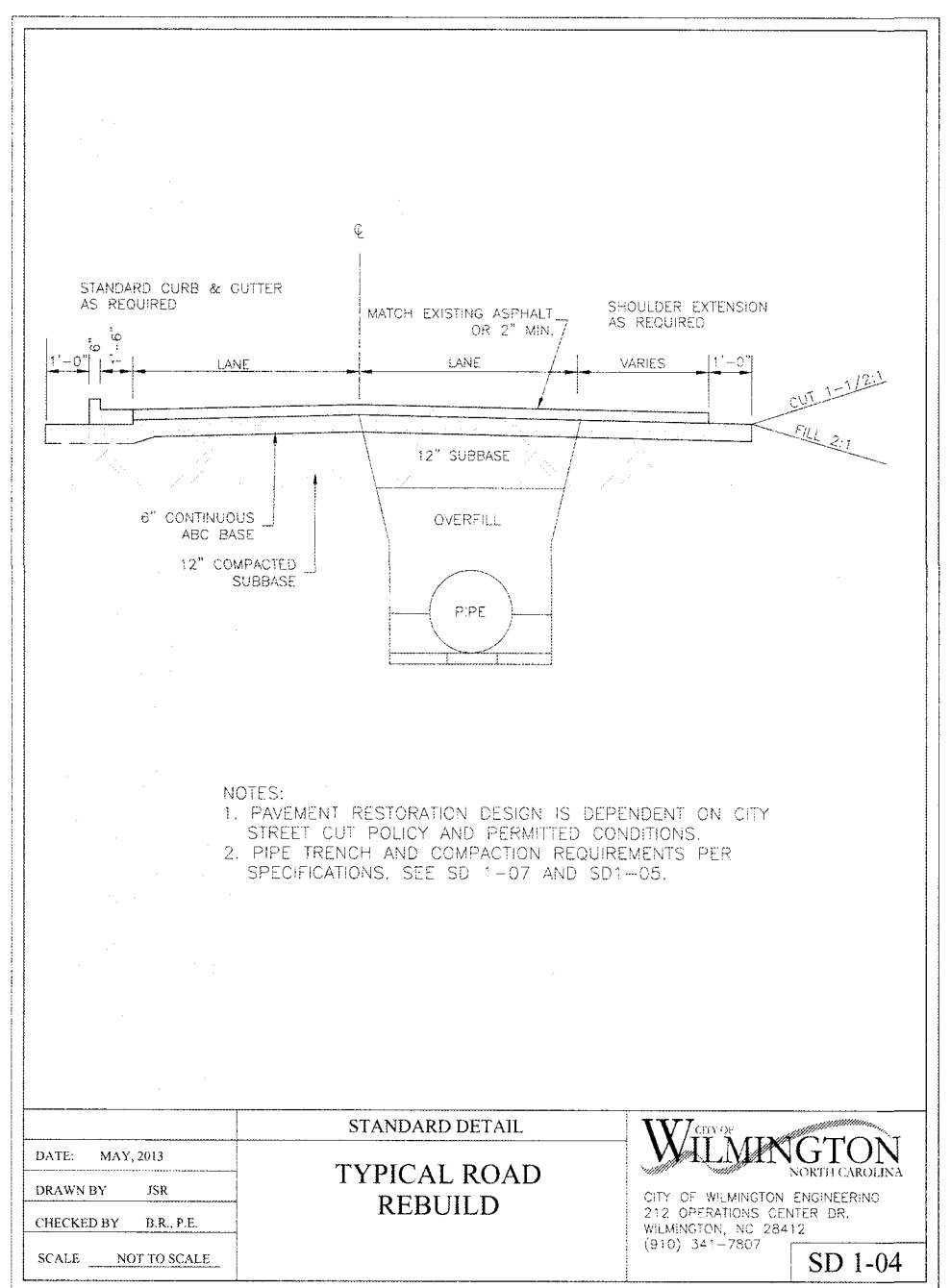
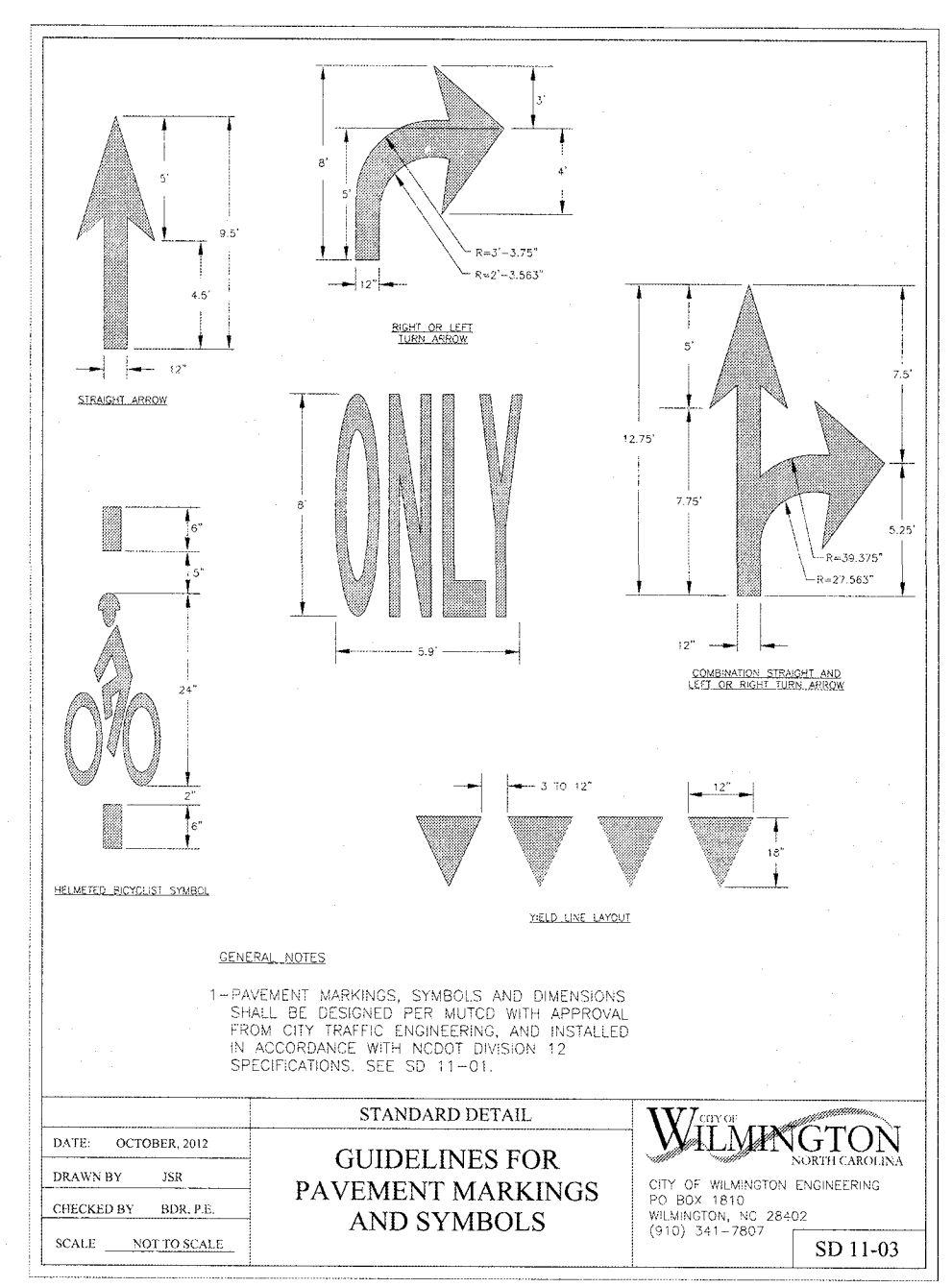
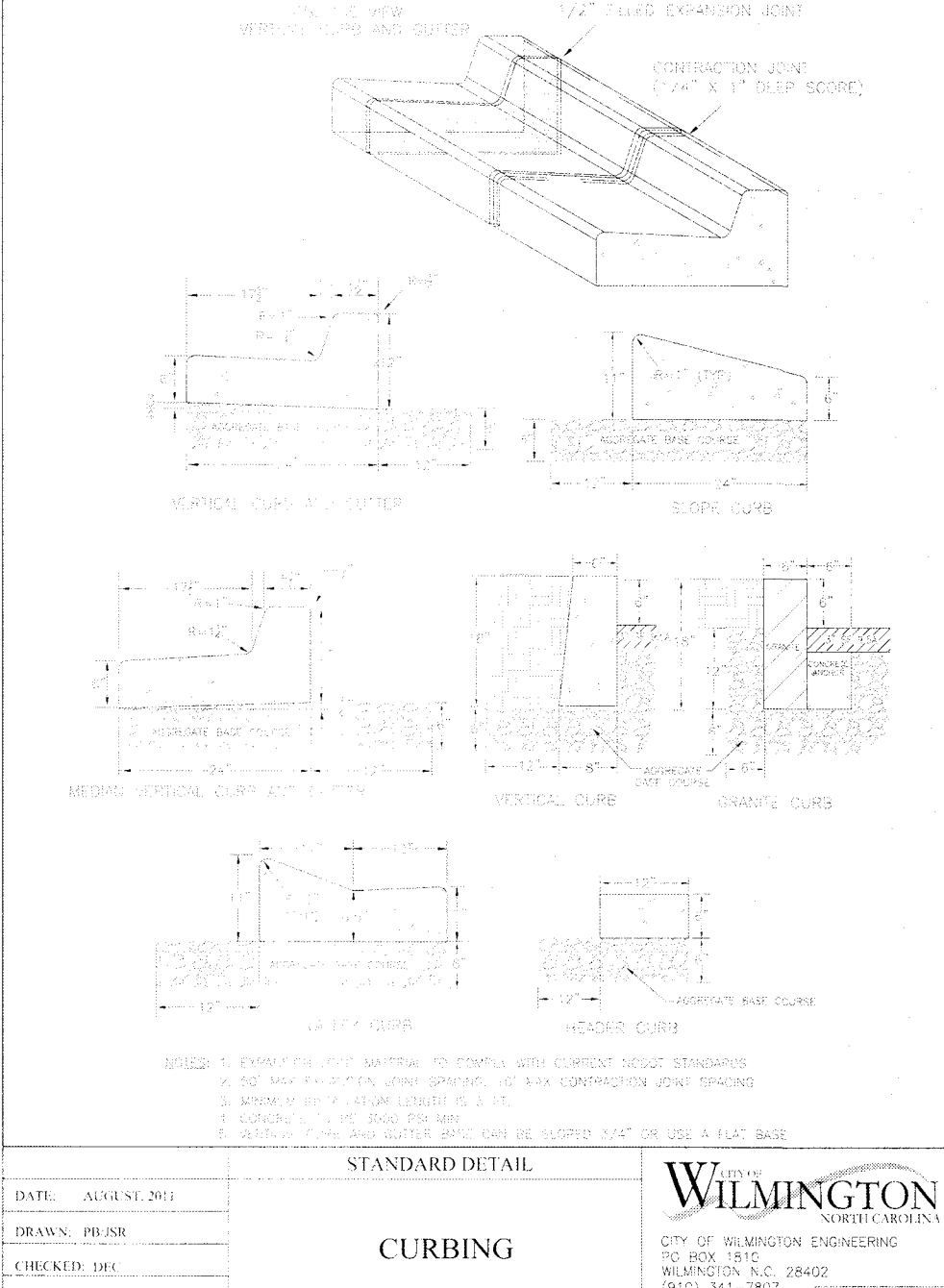
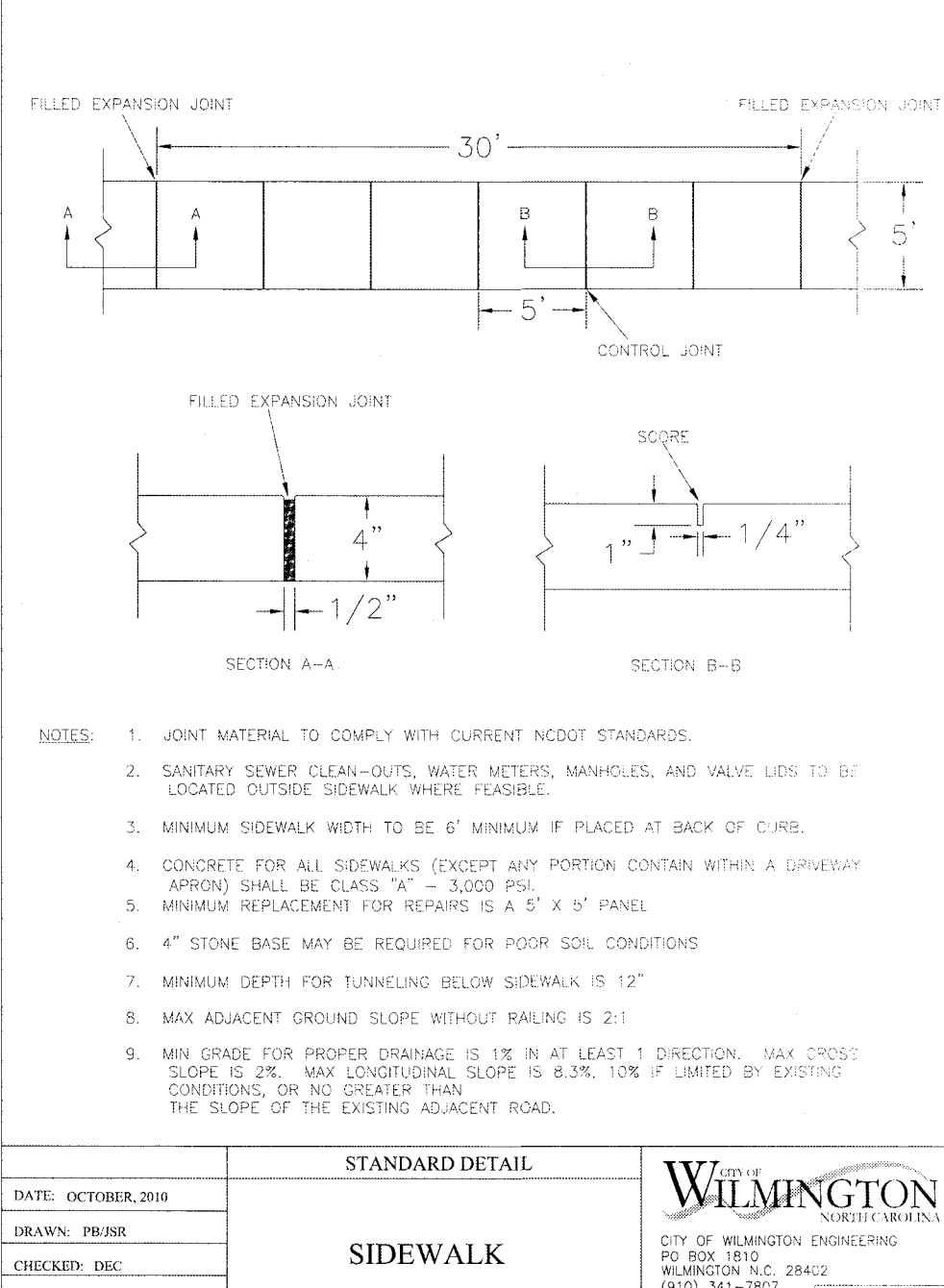
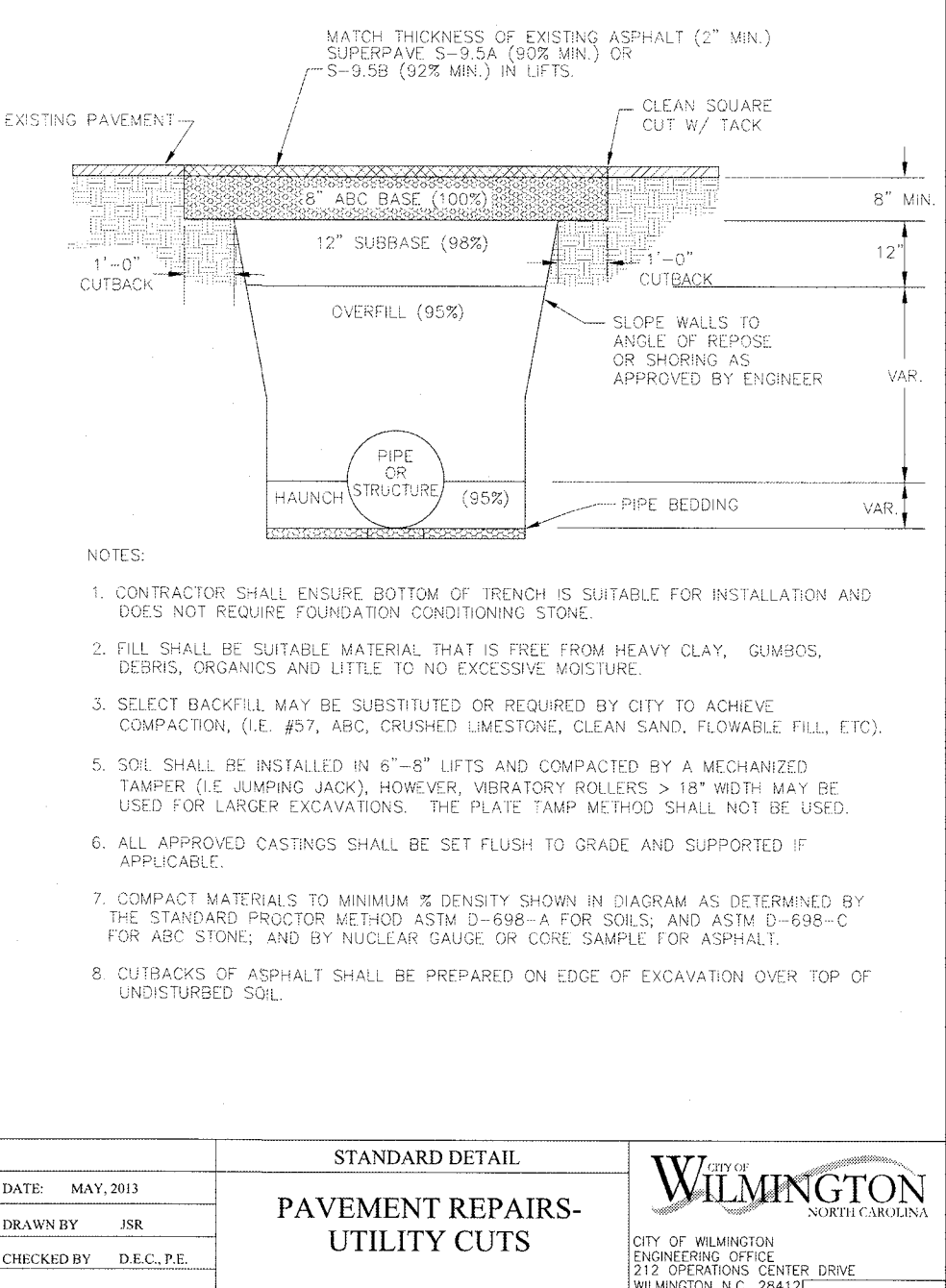
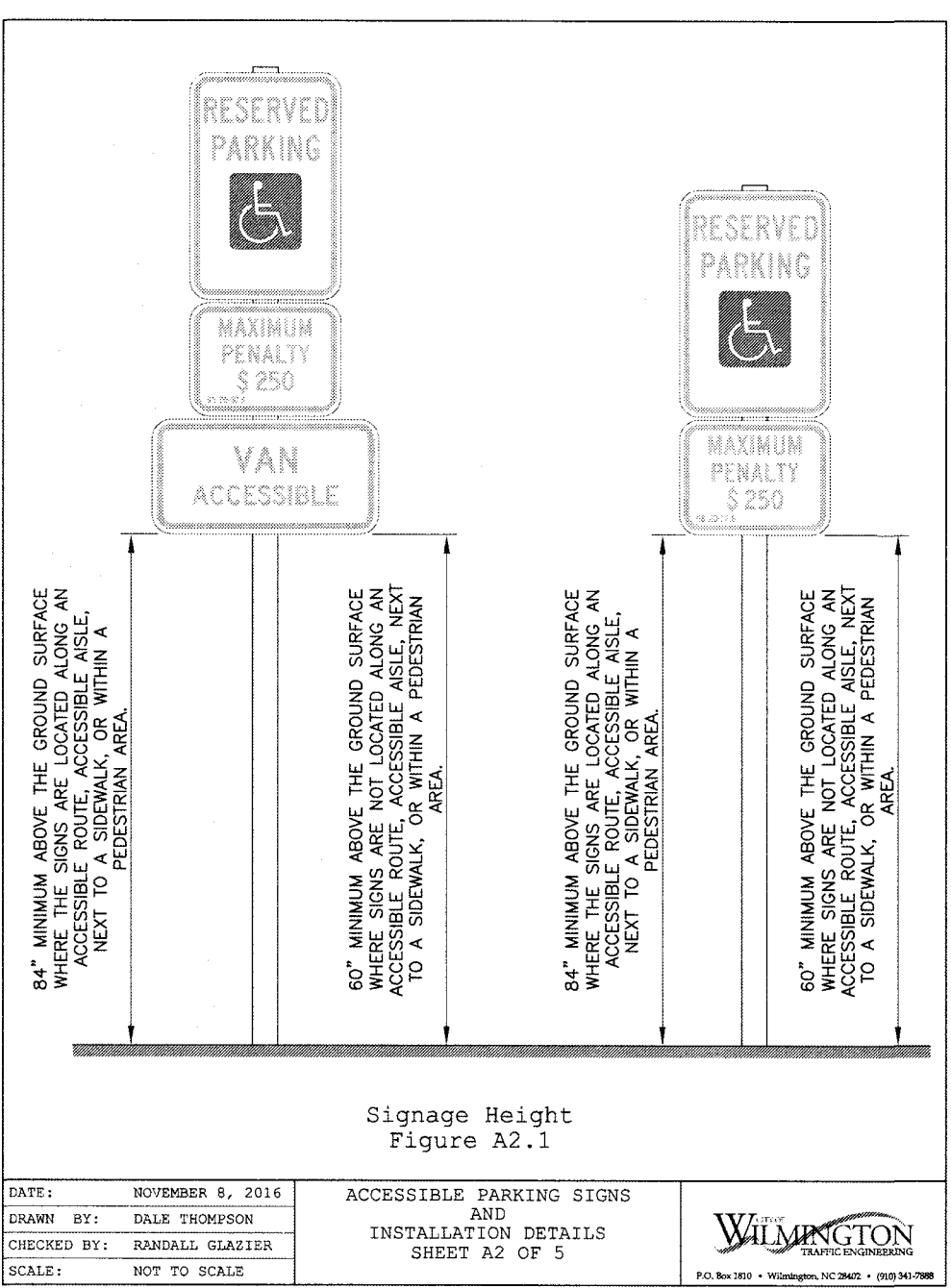
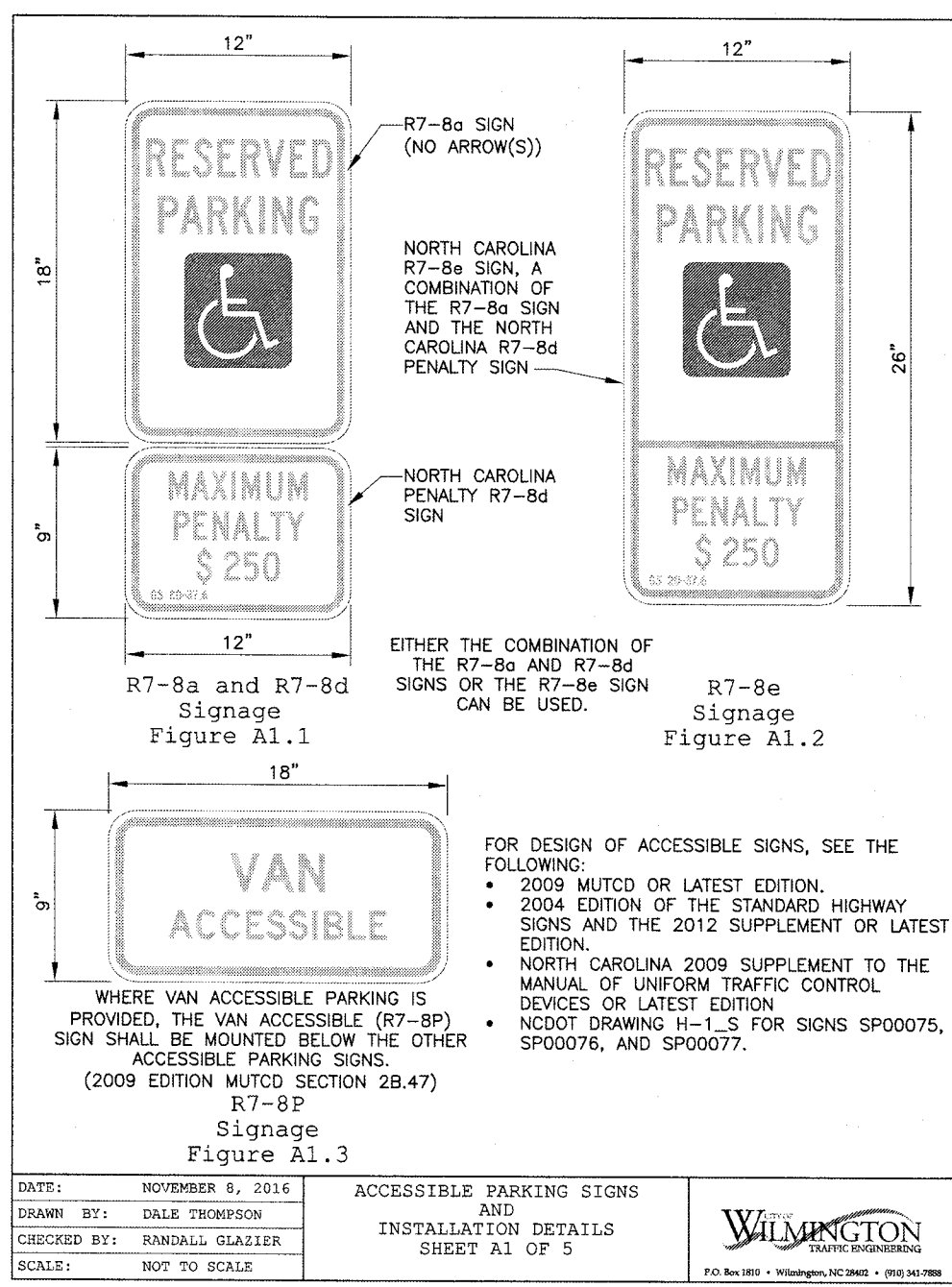
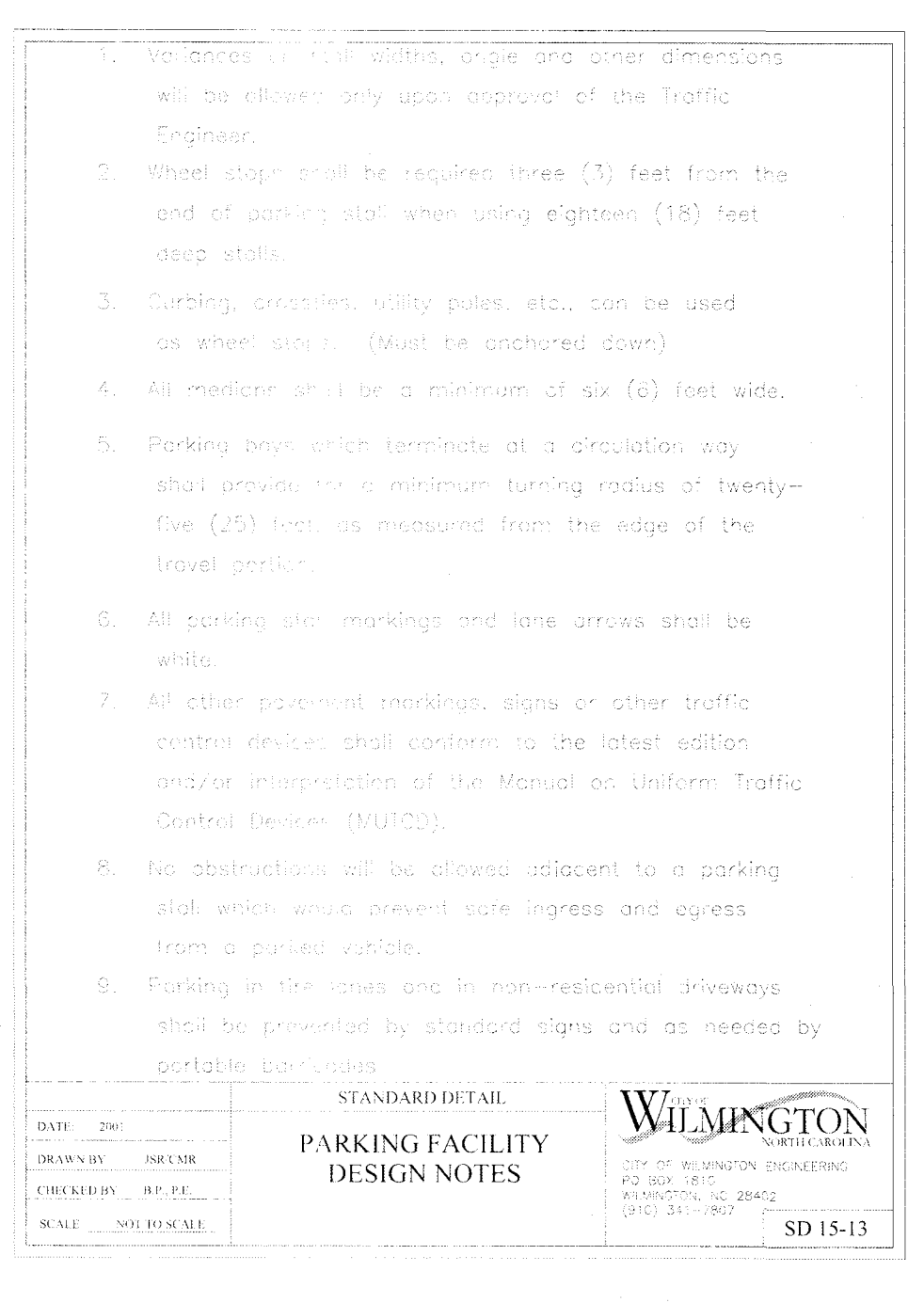
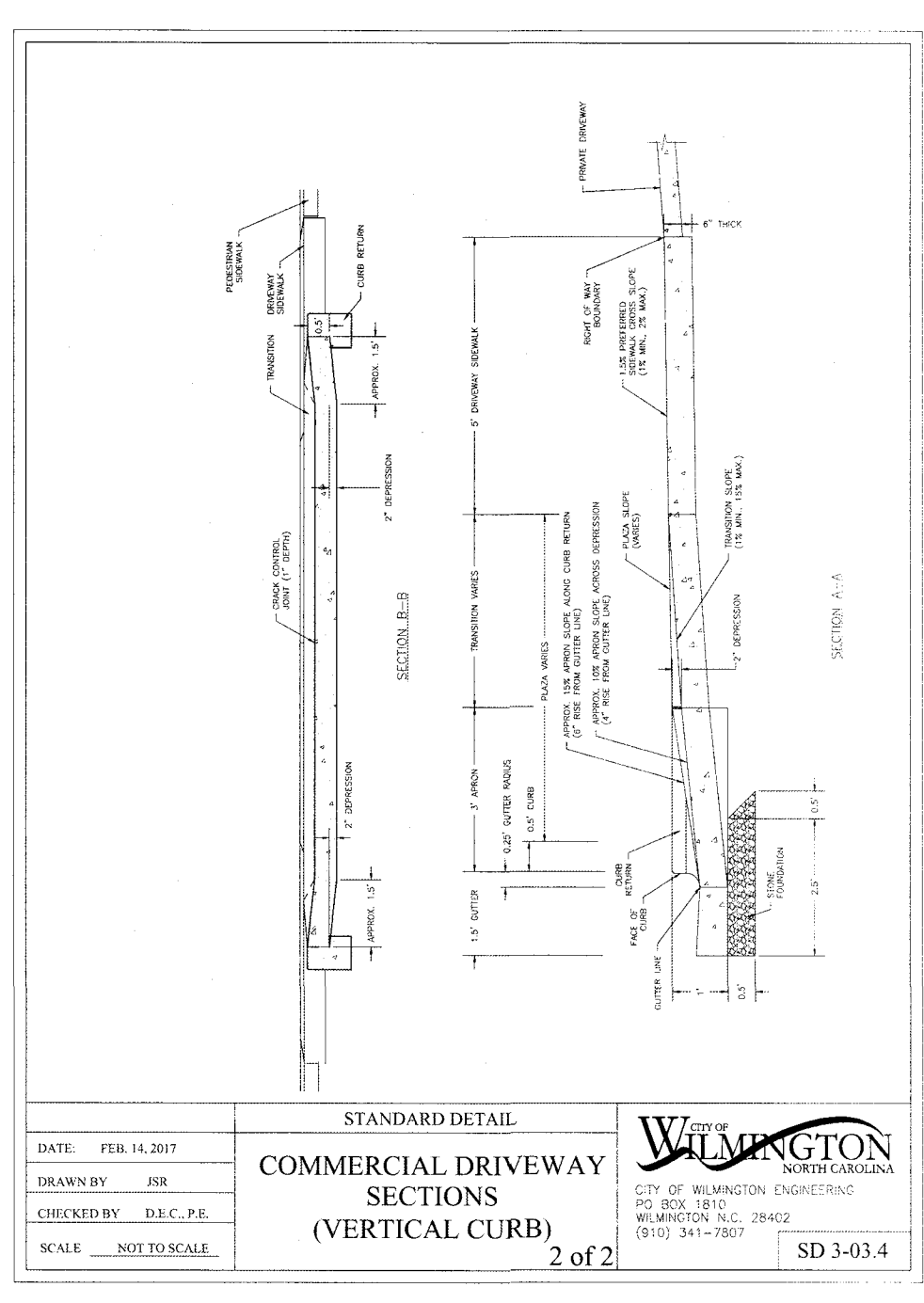
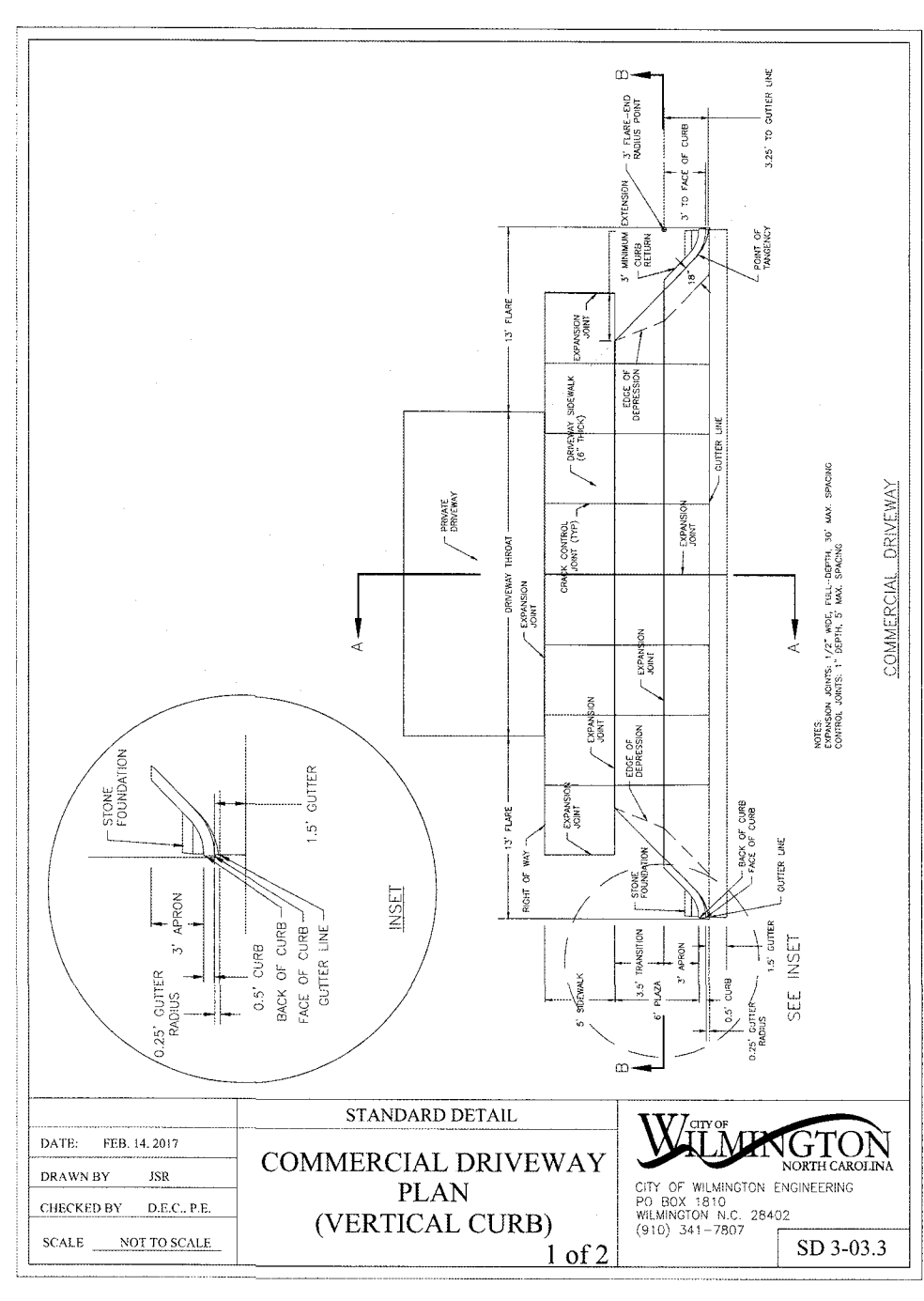
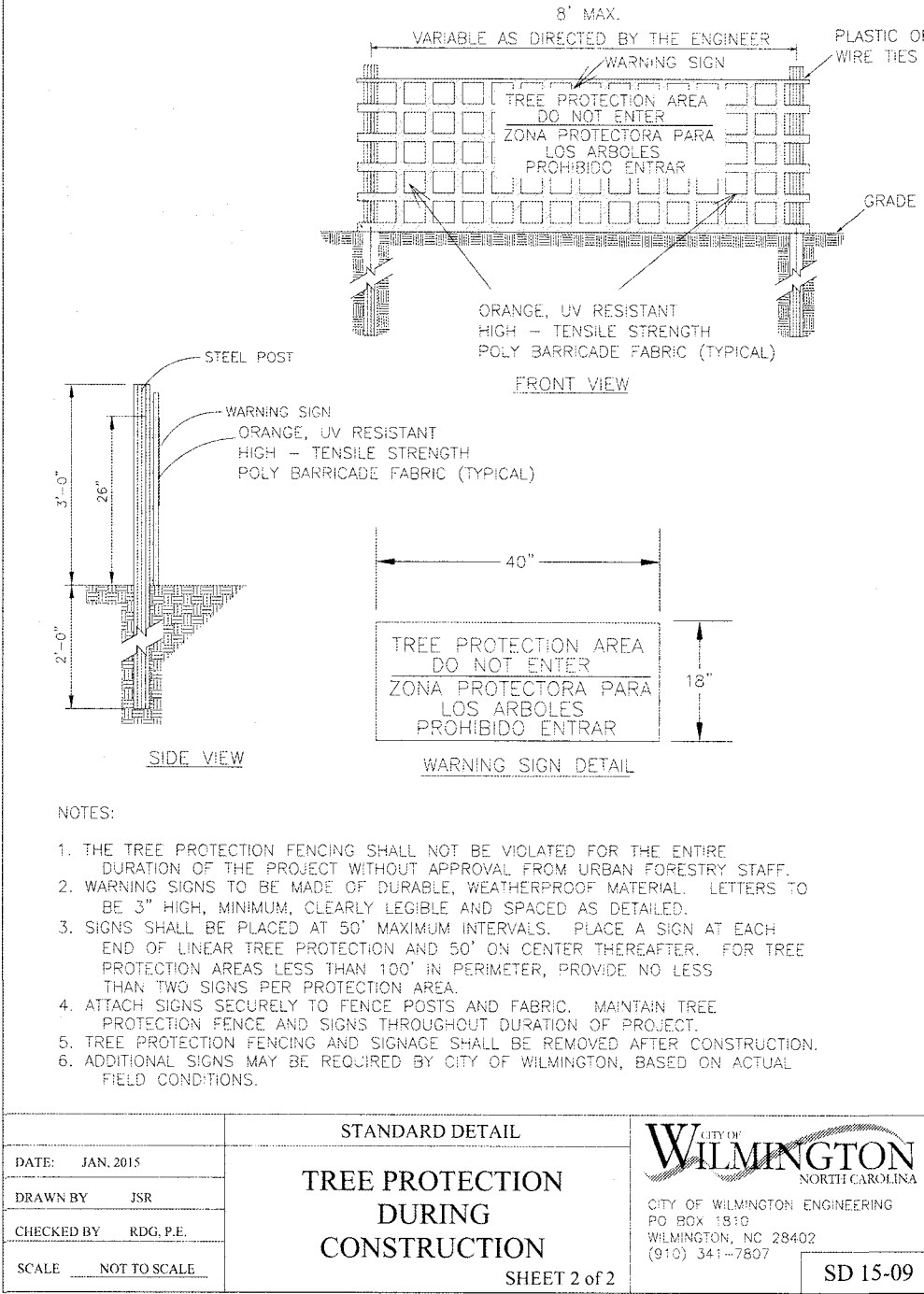
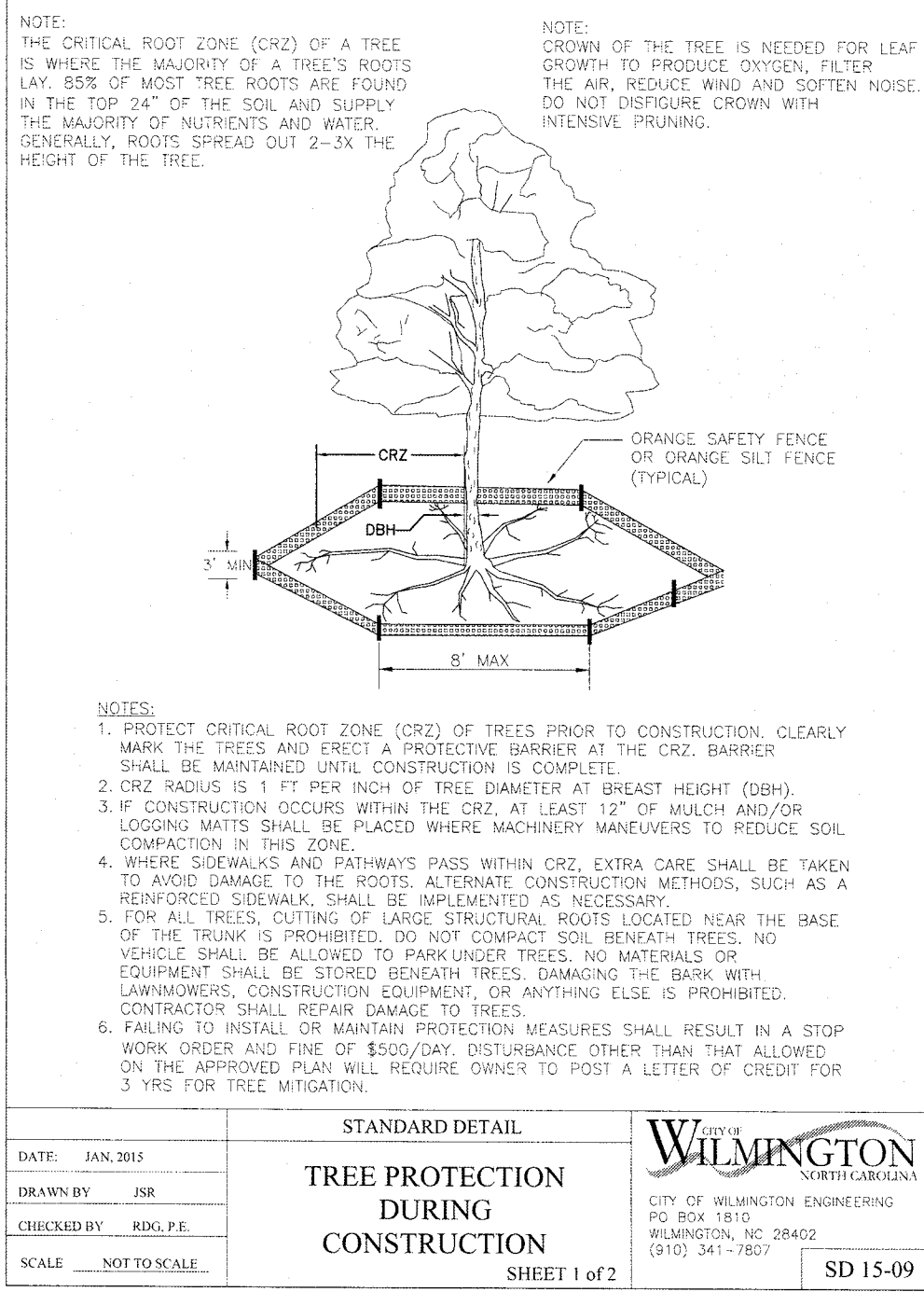
SEWER CAPACITY: GPD

SEWER SHED # AND PLANT:

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

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





**DETAILS**  
**SAXON PLACE**  
**3525 LANCELOT LANE**  
**WILMINGTON, NORTH CAROLINA**

**OWNER:**  
Chris Buffalino  
DRNG Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28445  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
1429 ASH LITTLE RIVER RD NW  
KSI, NC 28409  
PHONE (910) 343-9653

Licence #C-3641  
**16131**  
DES. TJC  
OKD. JPN  
DRWN. NSB  
DATE: 05/11/20  
FOR EACH OPEN UTILITY OUT OF CITY STREETS, A \$325 PERMITS SHALL BE REQUIRED FROM THE CITY PRIOR TO OCCUPANCY AND/OR PROJECT ACCEPTANCE.  
APPROVED CONSTRUCTION PLAN  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Planning: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_  
NCDENR PWSS WATER PERMIT # \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

**D2**



Technical drawing sheets for catch basins and drop inlets, including details 840.02, 840.03, 840.14, 840.15, 840.16, and 840.17. The sheets show various cross-sections (A-A, B-B, C-C, D-D, E-E, F-F, G-G, H-H, J-J, K-K, L-L, M-M, N-N, P-P, Q-Q, R-R, S-S, T-T, U-U, V-V, W-W, X-X, Y-Y, Z-Z) and plan views of the structures. They include dimensions, material specifications, and construction notes. A table of dimensions and quantities for drop inlets is provided on sheet 840.14.

PIPE SIZE	MIN. SPAN	MIN. WIDTH	MIN. HEIGHT	MIN. DEPTH	MIN. R.C.	MIN. C.W.	MIN. H.C.
12"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.215	0.208
15"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.215	0.208
18"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.215	0.208
24"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.215	0.208
30"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.215	0.208

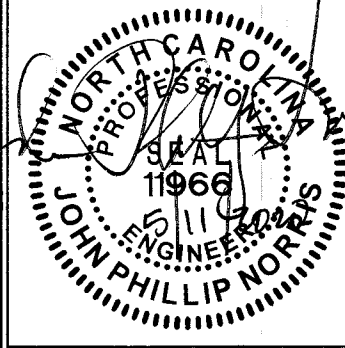
BY	DESCRIPTION	REVISIONS

© 2020 NORRIS & TUNSTALL  
SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Ruffalo  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
1429 ASHLITTLE RIVER RD. NW  
WILMINGTON, NC 28412  
PHONE (910) 345-5960  
Licence #C-3641

19004  
DES. TJC  
CHK. JPN  
DRWN. NSB  
DATE: 05/11/20



WILMINGTON  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

Approved Construction Plan  
Name \_\_\_\_\_ Date \_\_\_\_\_  
Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.  
NCDENR PWSS WATER PERMIT # \_\_\_\_\_  
WATER CAPACITY \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_  
SEWER CAPACITY \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

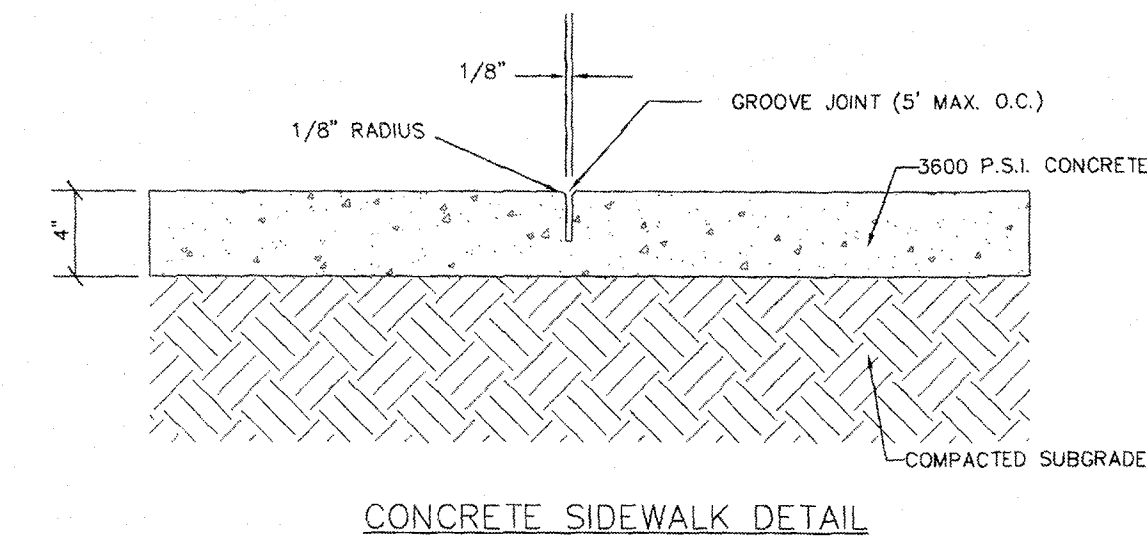
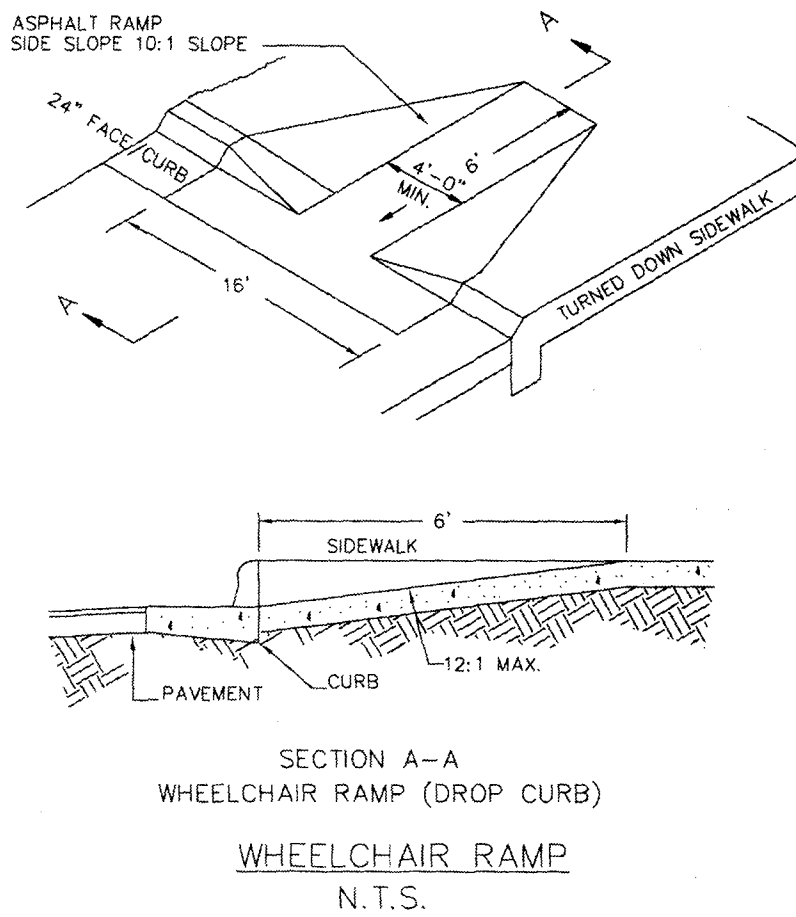
CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.

D3

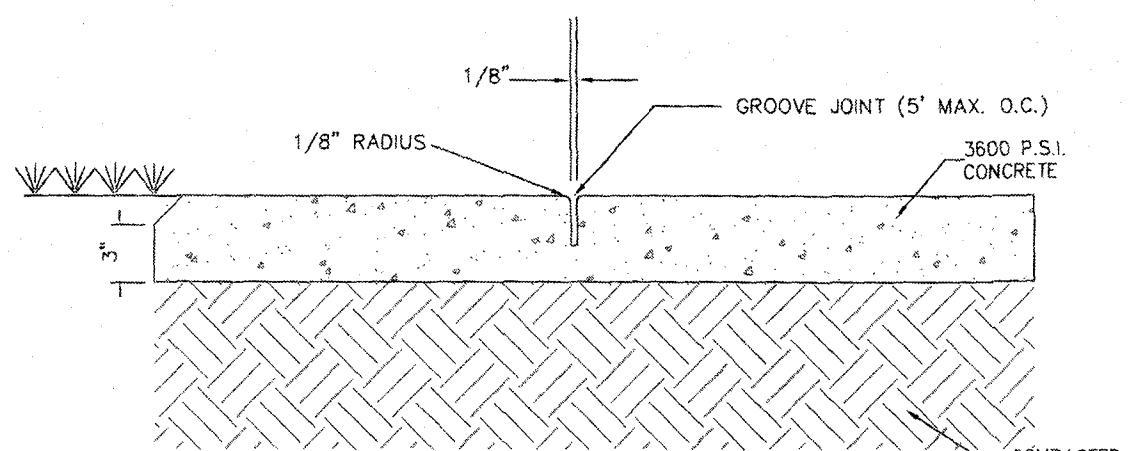


- GENERAL NOTES
1. LOCATION OF WHEELCHAIR RAMPS
  2. IN ACCORDANCE WITH THE RATIFIED HOUSE BILL 1296, ALL STREET CURBS IN NORTH CAROLINA BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIR, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY HANDICAPPED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTERS AND SIDEWALKS ARE PROVIDED AND AT OTHER MAJOR POINTS OF PEDESTRIAN FLOW.
  3. WHEELCHAIR RAMPS SHOULD BE LOCATED AS INDICATED IN DETAIL DRAWINGS, HOWEVER EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. MAY AFFECT PLACEMENT.
  4. CONSTRUCTION NOTES:
    1. NO SLOPE SHALL EXCEED 1" IN 12" (12:1) ON THE RAMP OR SIDEWALK.
    2. IN NO CASE SHALL THE WIDTH OF WHEELCHAIR RAMPS BE LESS THAN 4'0" (3'-4"). WIDTHS MAY EXCEED 4'0" IF NECESSARY.
    3. USE CLASS "A" CONCRETE WITH THE SURFACE HAVING A ROUGH, NON-SKID TYPE FINISH.
    4. 12" EXPANSION JOINT WILL BE REQUIRED WHERE THE CONCRETE WHEELCHAIR RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
    5. CONSTRUCTION METHODS SHALL CONFORM WITH THOSE OF THE GOVERNING BODY WHICH HAS JURISDICTION OF THE PARTICULAR STREET.
  5. ADDITIONAL NOTES:
    1. THE INSIDE PEDESTRIAN CROSSWALK LINES SHALL BE ESTABLISHED BY BISECTING THE INTERSECTION RADI WHERE MARKED (SEE NOTE 6).
    2. THE WHEELCHAIR RAMP SHALL BE LOCATED SO THAT THE BEGINNING OF THE WHEEL CHAIR RAMP WILL BE TWO FEET FROM THE INSIDE PEDESTRIAN CROSSWALK LINE.
    3. THE WIDTH OF THE PEDESTRIAN CROSSWALK SHALL BE 10 FEET UNLESS A GREATER WIDTH IS REQUIRED TO ACCOMMODATE THE PEDESTRIAN TRAFFIC.
    4. STOP BARS SHALL BE USED WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN, OR OTHER LEGAL REQUIREMENTS.
    5. PARKING SHALL BE ELIMINATED A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
    6. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. THIS IS AVAILABLE FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402.

#### GUIDELINES FOR WHEELCHAIR RAMPS



CONCRETE SIDEWALK DETAIL

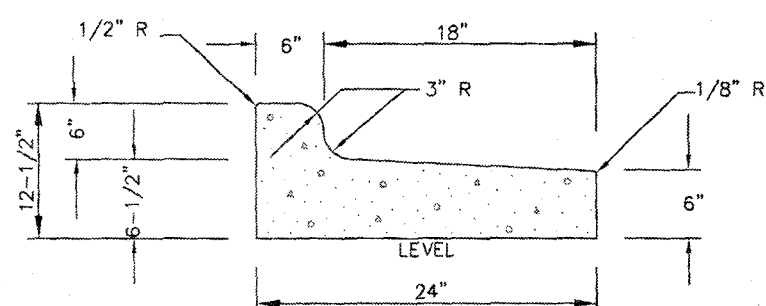


CONCRETE SIDEWALK DETAIL

#### CONCRETE SIDEWALK

N.T.S.

GENERAL NOTES:  
A GROOVE JOINT 1" DEEP WITH 1/8" RADI SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS. A 12" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK ABUTS ANY CURB & GUTTER AND ANY RIGID STRUCTURES. IN SIDEWALKS & PLAZA AREAS EXPANSION JOINTS ARE REQUIRED AT NO GREATER THAN 30' INTERVALS. CONCRETE SHALL BE 3600 PSI. IN 28 DAYS.



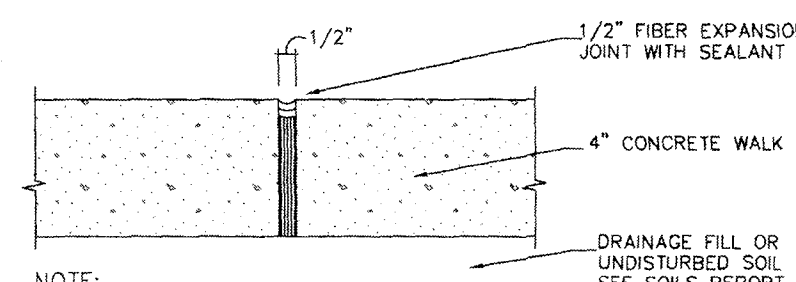
(TO BE USED WHEN PAVEMENT IS SLOPED AWAY FROM ISLAND 1/4" : 1'-0" SLOPE OR AS SHOWN ON PLANS)

24" CURB AND GUTTER (REVERSE SLOPE)

#### CURB AND GUTTER

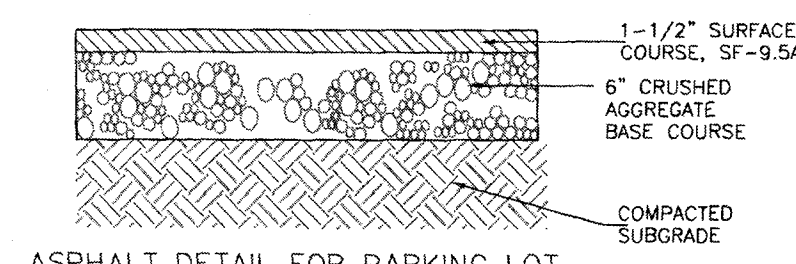
N.T.S.

GENERAL NOTES:  
CONTRACTION JOINTS SHALL BE SPACED AT MAX. 10' INTERVALS, EXCEPT THAT A 15 FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10 FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED. ALL CONTRACTION JOINTS EXCEPT IN 8" X 6" MEDIAN CURB SHALL BE FILLED WITH JOINT SEALER. EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



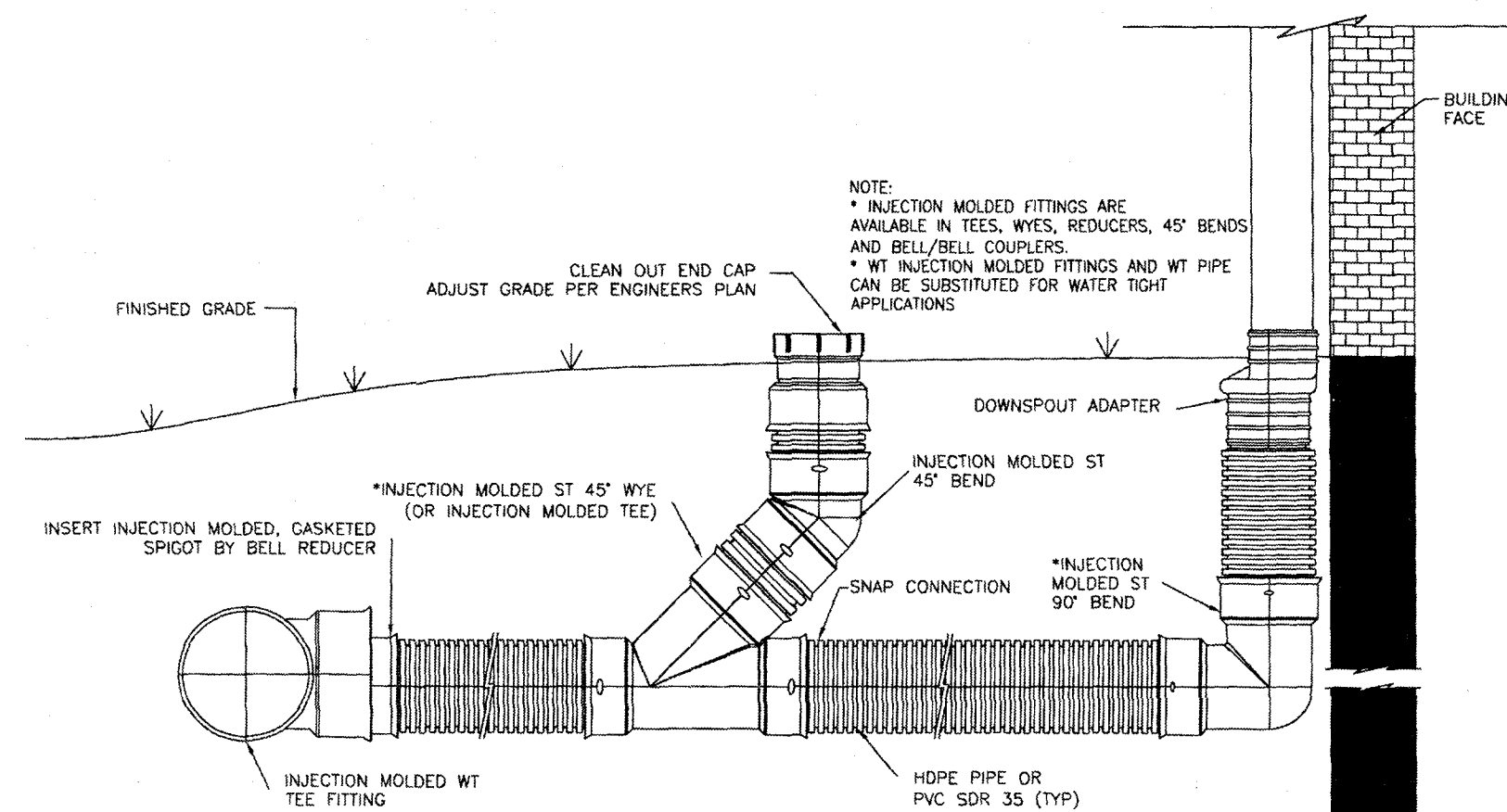
CONSTRUCTION JOINT

N.T.S.



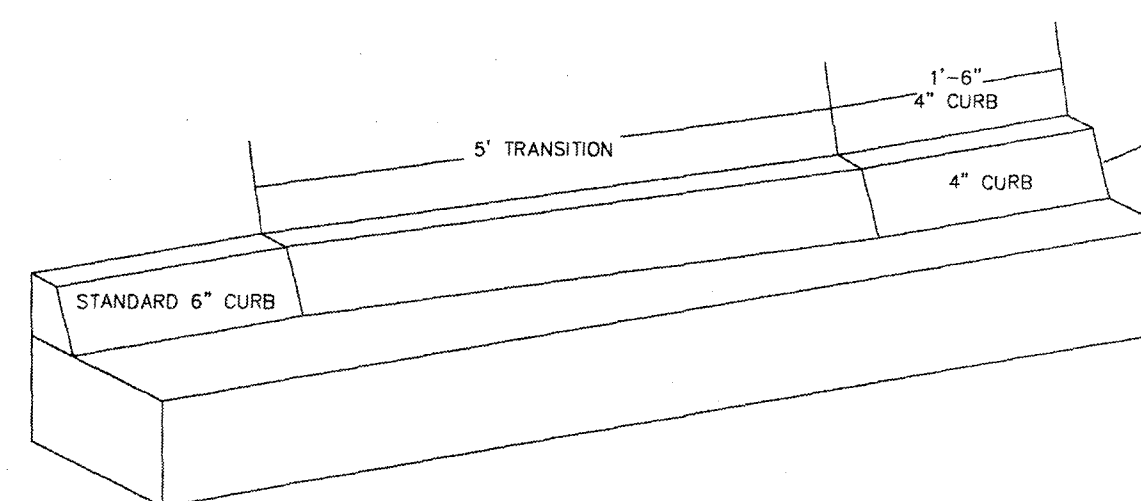
PAVEMENT DETAIL

N.T.S.



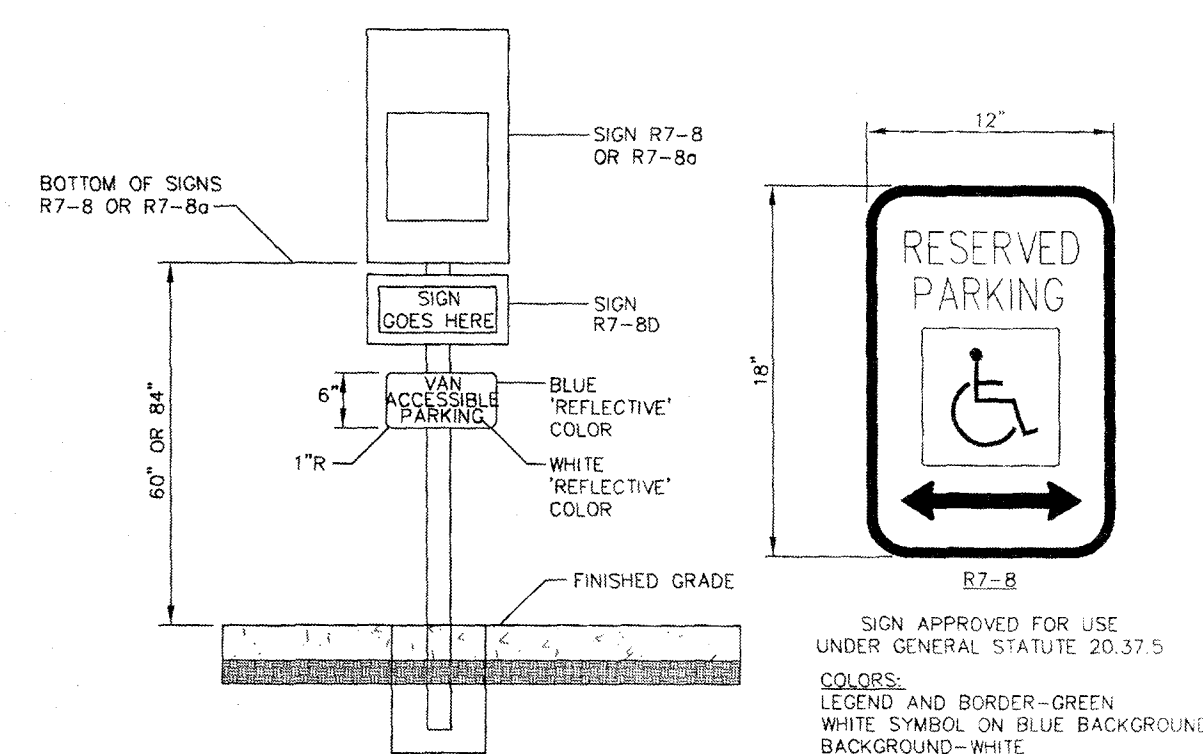
ROOF DRAIN DETAIL WITH CLEANOUT

N.T.S.



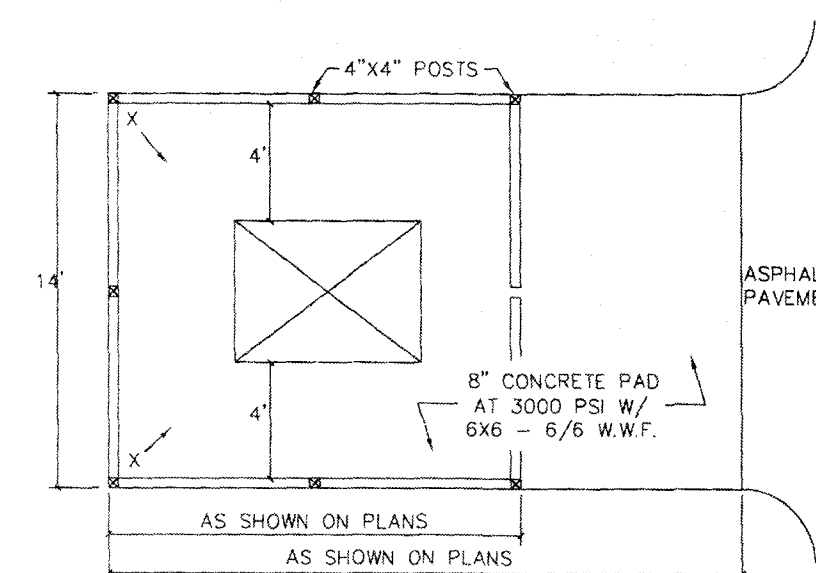
6" CURB TRANSITION TO 4" TURNDOWN SIDEWALK

N.T.S.



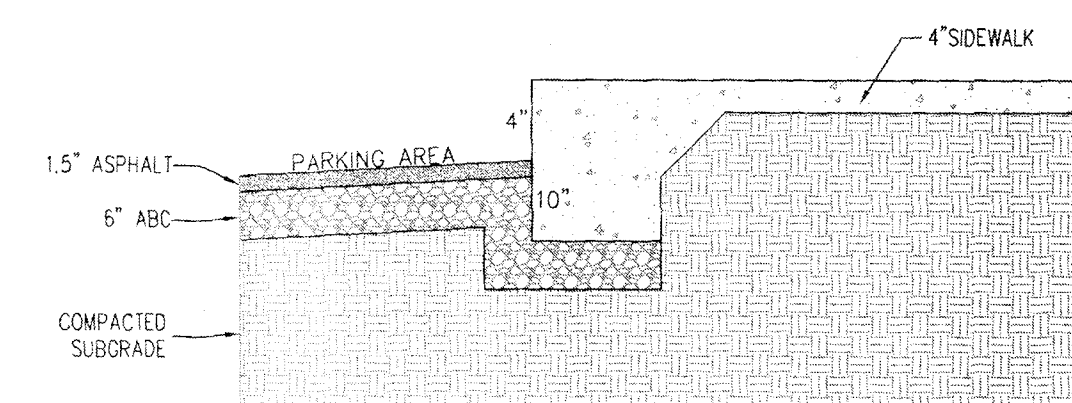
HANDICAP PARKING SIGNAGE

N.T.S.



DUMPSTER PAD & ENCLOSURE DETAIL

N.T.S.



TURNDOWN SIDEWALK DETAIL

N.T.S.

#### DETAILS & NOTES

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:  
Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.

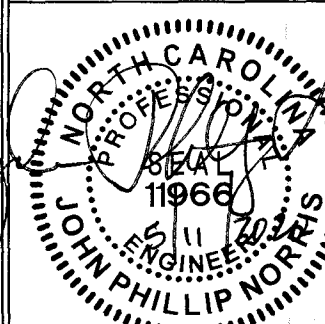
2002 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE: (910) 343-9653

Licence #C-3641

19004

DES. TJC  
CHK. JPN  
DRWN. NSB

DATE: 05/11/20



CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.

D4

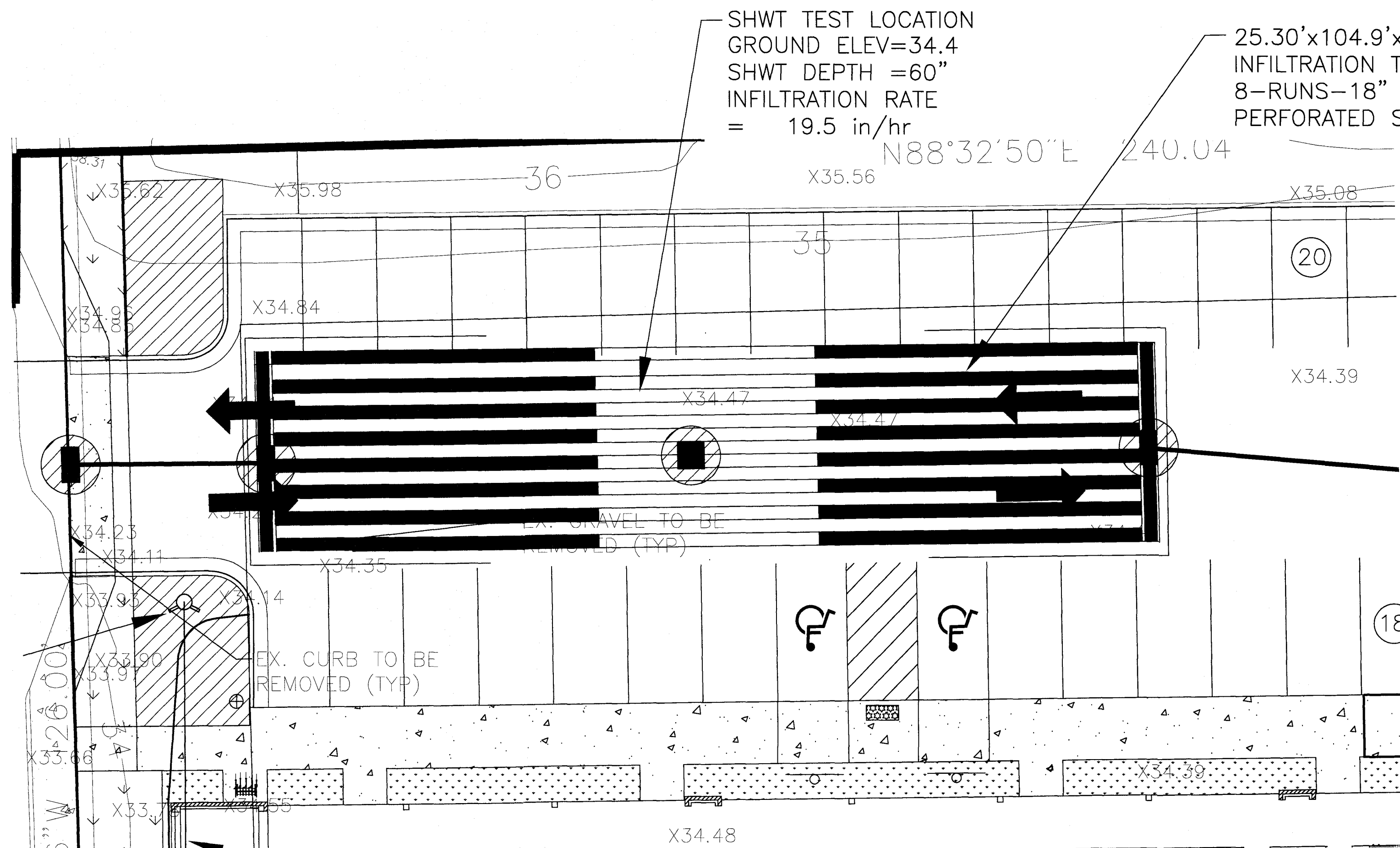
WILMINGTON  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

Approved Construction Plan  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Planning: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_

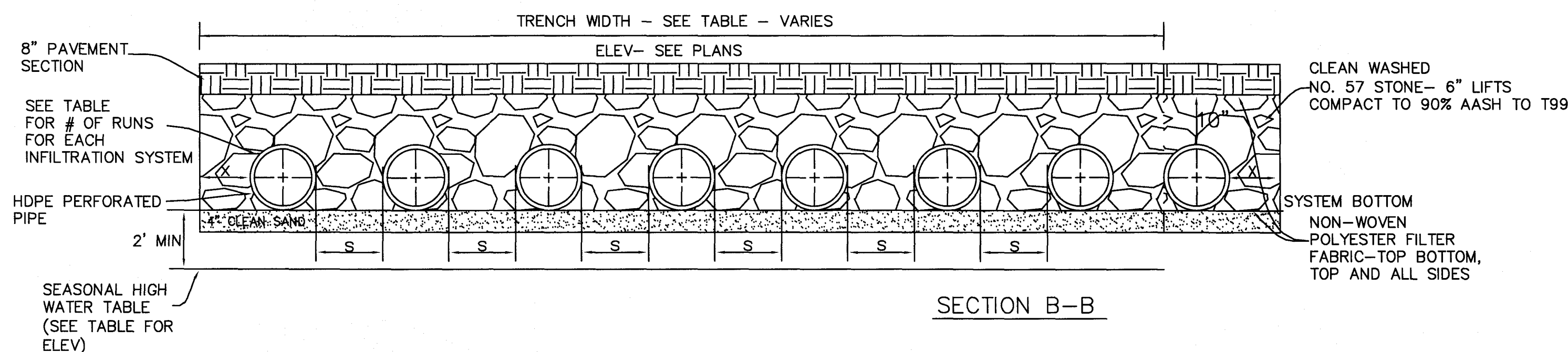
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

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



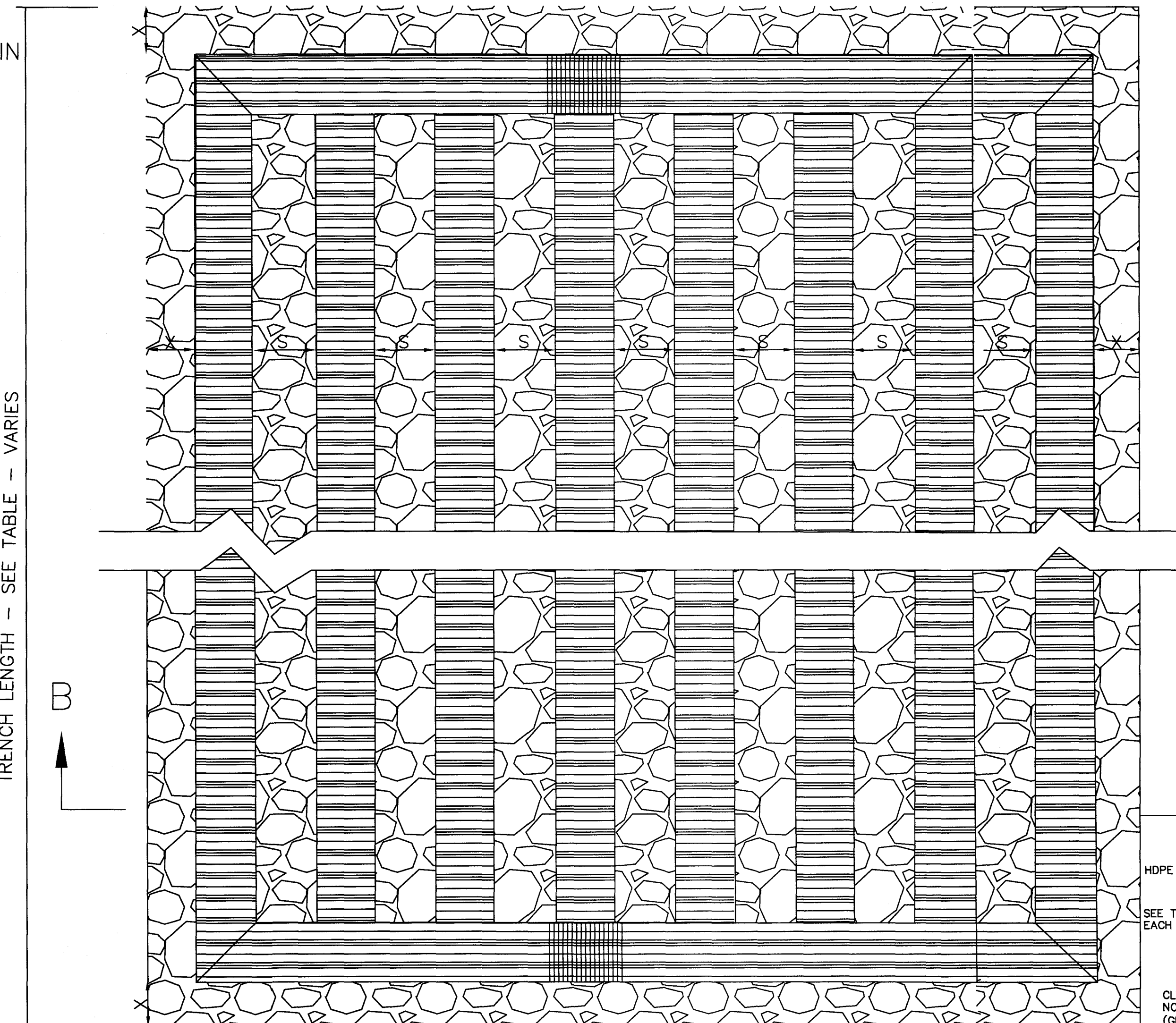


SCALE: 1" = 10'



INFILTRATION TRENCH TABLE								
TRENCH #	# OF RUNS	PIPE DIAMETER	MIN. X (in.)	MIN. S (in.)	TRENCH WIDTH (FT.)	TRENCH LENGTH (FT.)	SYSTEM BOTTOM ELEV.	SHWT ELEV.
1	8	18"	8.4	16.8	25.30	104.9	31.4	29.4

TRENCH LENGTH - SEE TABLE - VARIES



PLAN

INFILTRATION TRENCH  
N.T.S.

NOTE:  
ALL HDPE PIPE TO BE ADS N-12 PIPE (DESIGNED TO SUPPORT H-20 LIVE LOADS) OR EQUIVALENT & INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SOIL TIGHT OR BETTER.

HDPE PERFORATED PIPE  
SEE TABLE FOR # OF RUNS FOR EACH INFILTRATION SYSTEM  
CLEAN WASHED NO. 57 STONE (GRANITE)

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

For each open utility out 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: \_\_\_\_\_

**CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.**

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

**INFILTRATION TRENCH DETAILS**

**SAXON PLACE**  
**3525 LANCELOT LANE**  
**WILMINGTON, NORTH CAROLINA**

**OWNER:**  
Chris Bufalino  
DBNC Holdings, LLC  
430 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE: (910) 343-9653

Licence #C-3641

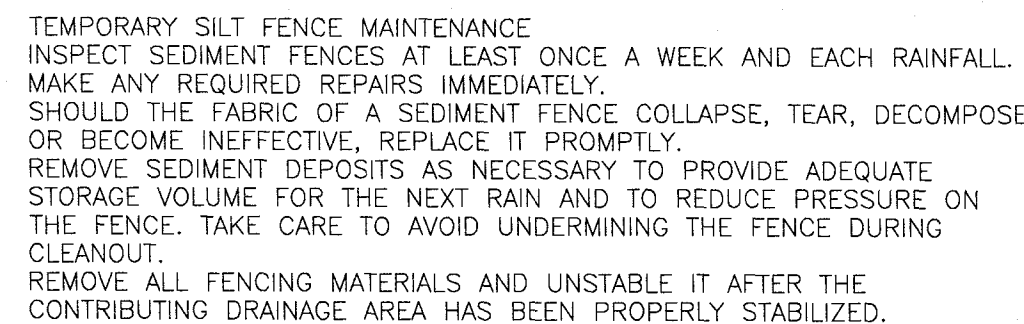
**19004**

DES. TJC  
CHK. JPN  
DRWN. NSB

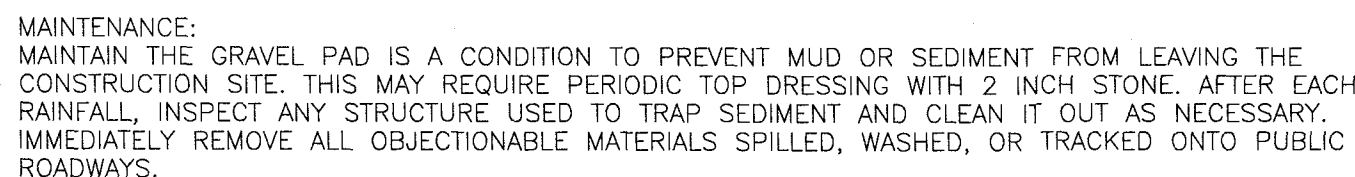
DATE: 05/11/20

**D5**

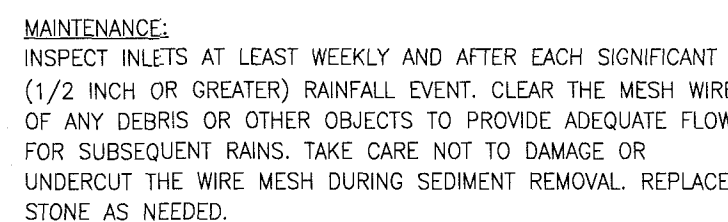




1 TEMPORARY SILT FENCE



2 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



### 3 HARDWARE CLOTH & GRAVEL INLET PROTECTION



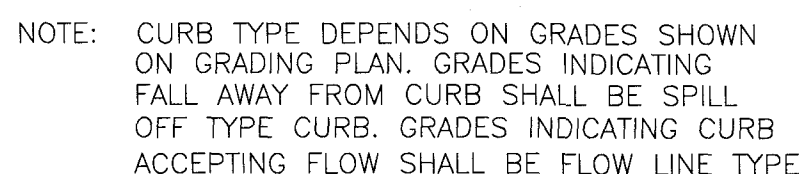
1. 8.33% (12:1) MAX. RAMP SLOPE
2. CROSS SLOPE: 2.00%
3. CURB RAMPS REQUIRE A (4'-0") MIN. LANDING WITH A MAX. CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



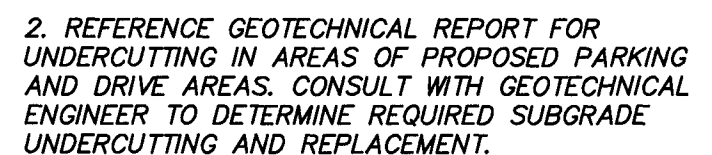
5 NCDOT TYPE 1 CURB RAMP



6 TURN DOWN WALK SECTION (FLUSH)



NOT TO SCALE



NOT TO SCALE

8 ASPHALT PAVEMENT SECTION



9 ENERGY DISSIPATOR DETAIL



NOTE:

1. RAMP SHALL HAVE A DETECTABLE WARNING COMPLYING WITH ADA GUIDELINES, "COLONIAL RED" COLOR FOR DOME.
2. THE DETECTABLE WARNINGS AT CURB RAMPS SHALL BE 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
3. MARKED CROSSINGS THAT ARE RAISED TO THE SAME LEVEL AS THE WALKING SURFACE SHALL BE PRECEDED BY A 24 INCH DEEP DETECTABLE WARNING EXTENDING THE FULL WIDTH OF THE MARKED CROSSING.
4. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF MINIMUM .9 IN (23 MM), A HEIGHT OF MINIMUM .02 IN (5 MM) AND A .02 IN (5 MM) SPACING BETWEEN DOMES. THE DOME SHALL BE .60 MM (1/64 IN) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70% USING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT.
5. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM THOSE USED ON EXTERIOR SURFACES.

NOT TO SCALE

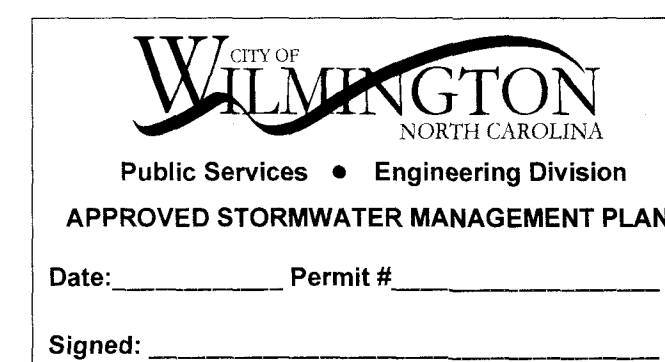
11 | DETECTABLE WARNING NOTES



12 | SIDEWALK, CURB CUT AND WHEEL CHAIR RAMP DETAIL



13 6" CURB TRANSITION TO 6" TURNDOWN SIDEWALK



**CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.**

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

Approved Construction Plan  
Name \_\_\_\_\_

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_

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

REVISIONS			
SYMBOL	DATE	DESCRIPTION	BY

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## DETAILS

**SAXON PLACE**

3525 LANCELOT LANE

**WILMINGTON, NORTH CAROLINA**

**NORRIS & TUNSTALL**  
— CONSULTING ENGINEERS P.C. —

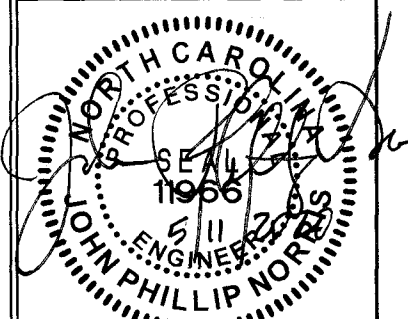
TITLE RIVER RD. NW  
ASH, NC 28420  
PHONE (910) 287-5900

Licence #C-364

19004

DES.  
CKD.  
DRWN.

DATE: 05/11/20



# D6



**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 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 NCG01 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**

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

**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. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"><li>Temporary grass seed covered with straw or other mulches and tackifiers</li><li>Hydroseeding</li><li>Rolled erosion control products with or without temporary grass seed</li><li>Appropriately applied straw or other mulch</li><li>Plastic sheeting</li></ul>	<ul style="list-style-type: none"><li>Permanent grass seed covered with straw or other mulches and tackifiers</li><li>Geotextile fabrics such as permanent soil reinforcement matting</li><li>Hydroseeding</li><li>Shrubs or other permanent plantings covered with mulch</li><li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li><li>Structural methods such as concrete, asphalt or retaining walls</li><li>Rolled erosion control products with grass seed</li></ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- 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**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 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.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

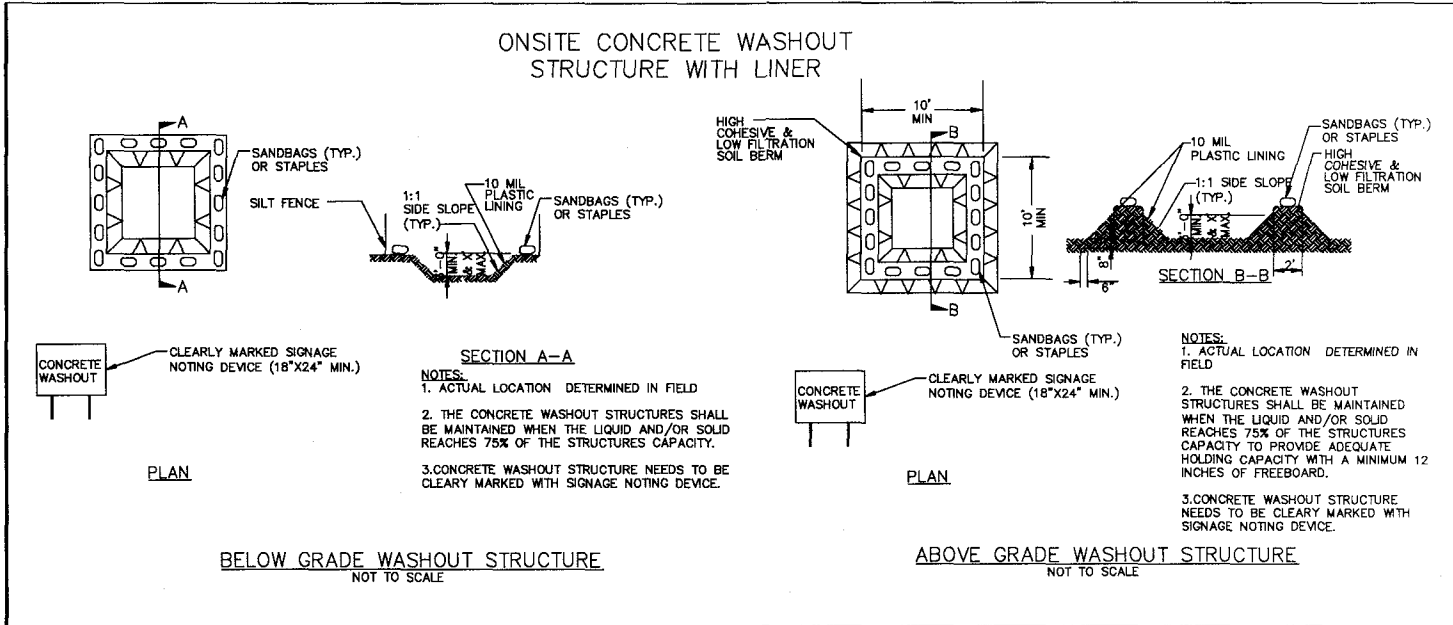
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled,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

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- 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.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- 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**

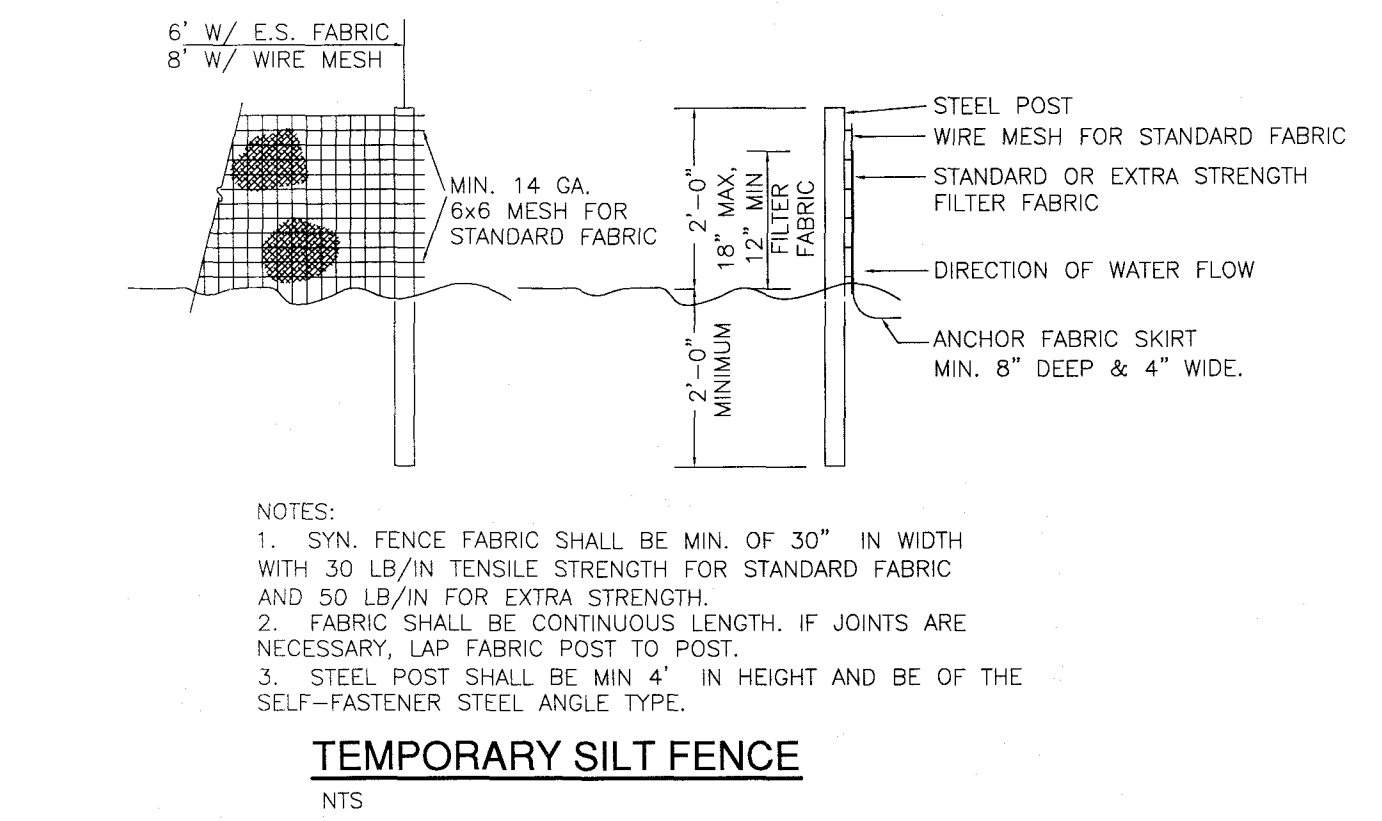
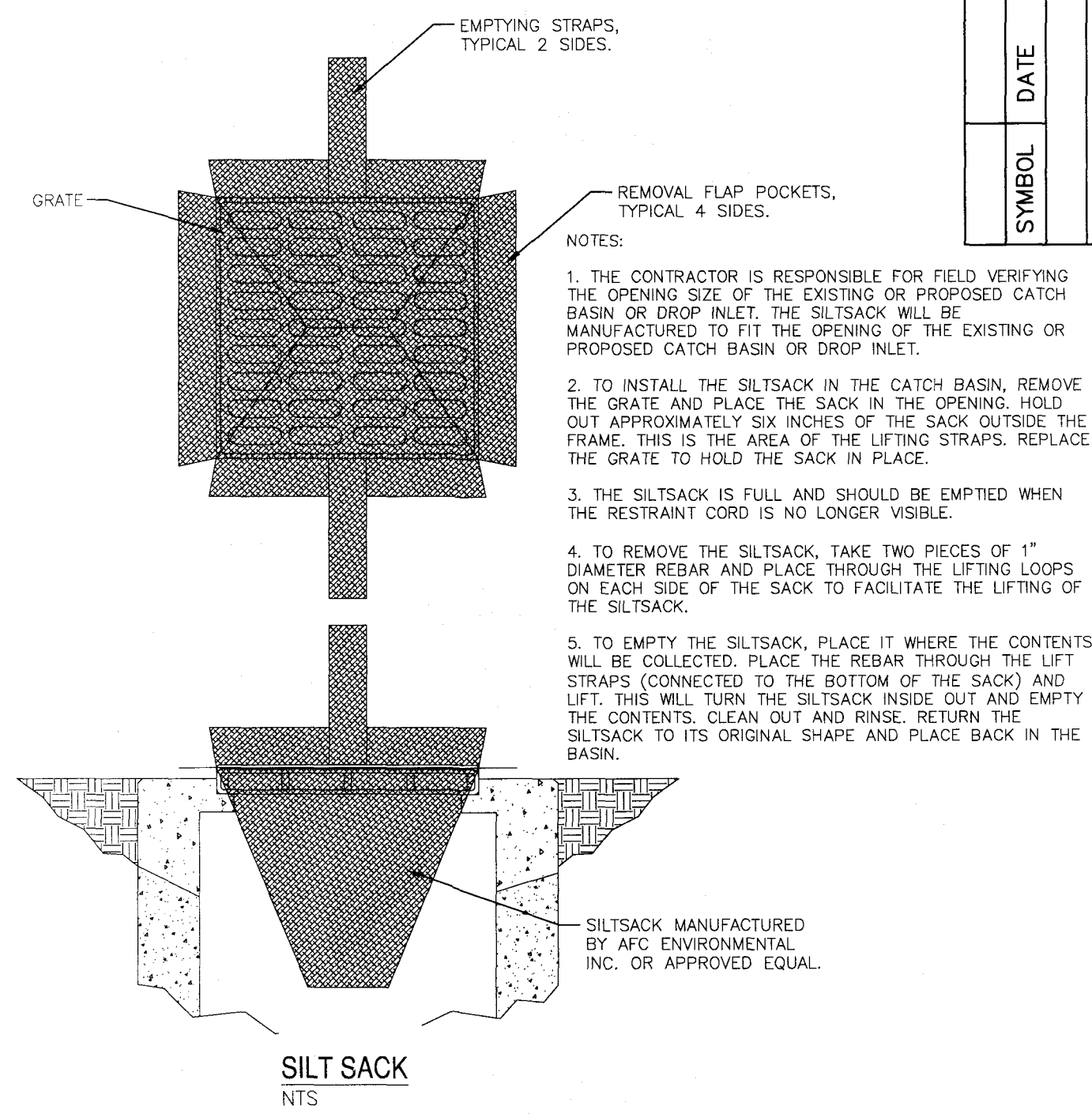
- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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**

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- 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.
- 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.
- Do not stockpile these materials onsite.

**HAZARDOUS AND TOXIC WASTE**

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



**TEMPORARY SILT FENCE MAINTENANCE**

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

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

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

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

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

**Approved Construction Plan**

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

Planning: \_\_\_\_\_

Traffic: \_\_\_\_\_

Fire: \_\_\_\_\_

NCENR PWSS WATER PERMIT #: \_\_\_\_\_

WATER CAPACITY: \_\_\_\_\_ GPD

DWO SEWER PERMIT #: \_\_\_\_\_

SEWER CAPACITY: \_\_\_\_\_ GPD

SEWER SHED # AND PLANT: \_\_\_\_\_

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

**CALL 811**  
**(3) WORKING DAYS**  
**BEFORE YOU DIG.**

**DETAILS**

**SAXON PLACE**

**3525 LANCELOT LANE**

**WILMINGTON, NORTH CAROLINA**

**OWNER:**

Chris Buffalno  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.

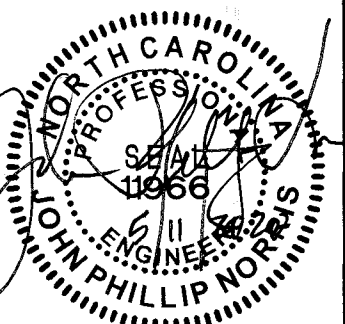
2002 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE (910) 343-9633

License #C-3641

**19004**

DES. TJC  
OKD. JPN  
DRWN. NSB

DATE: 05/11/20



**D7**



Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

**NOTE:** The rain inspection resets the required 7 calendar day inspection requirement.

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

(c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

## DETAILS

**SAXON PLACE**

3525 LANCELOT LANE

**WILMINGTON, NORTH CAROLINA**

**OWNER:**

Chris Buffalino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
— CONSULTING ENGINEERS P.C. —

LITTLE RIVER RD, NW

SUIITE 102

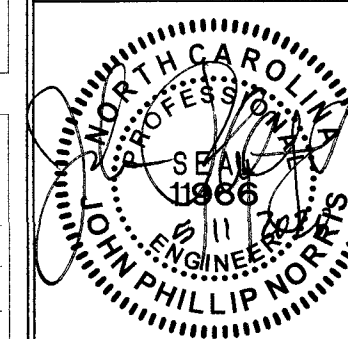
2602 IRON GATE DR.,

Licence #C-3641

19004

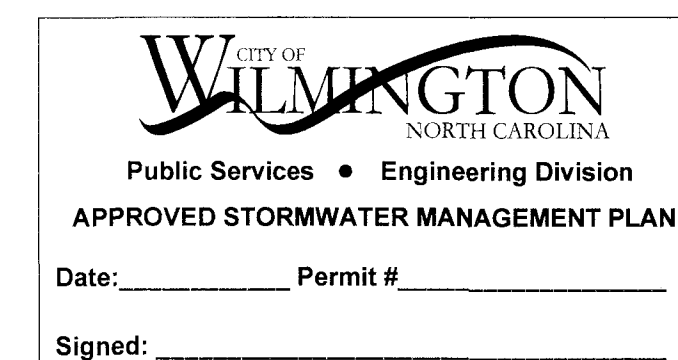
DES.	TJC
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DRWN	NSE

DATE: 05/11/20



D8

## EFFECTIVE: 04/01/19



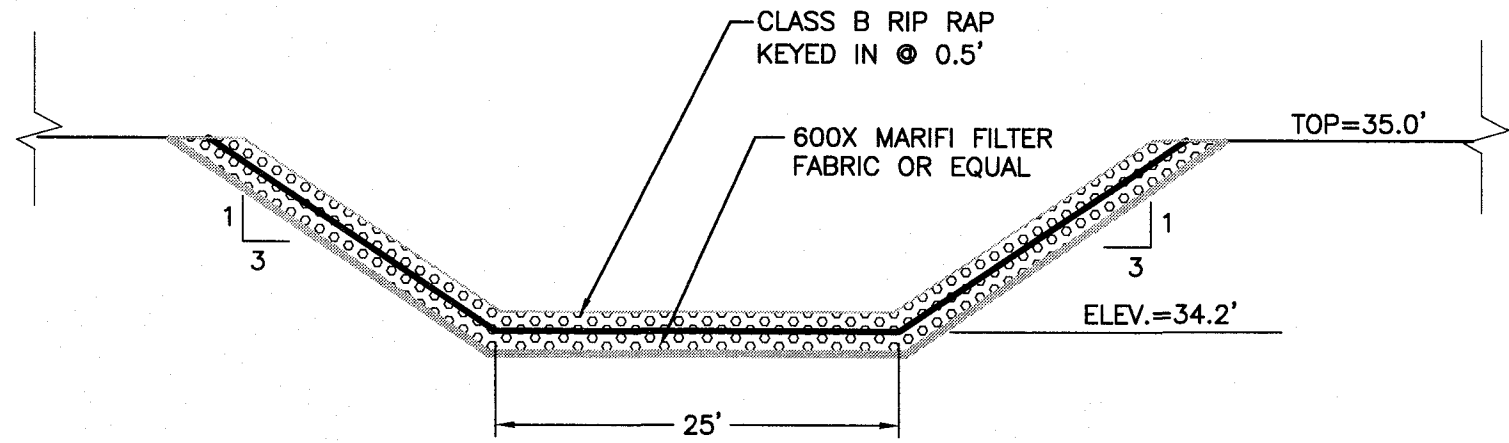
**CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.**

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

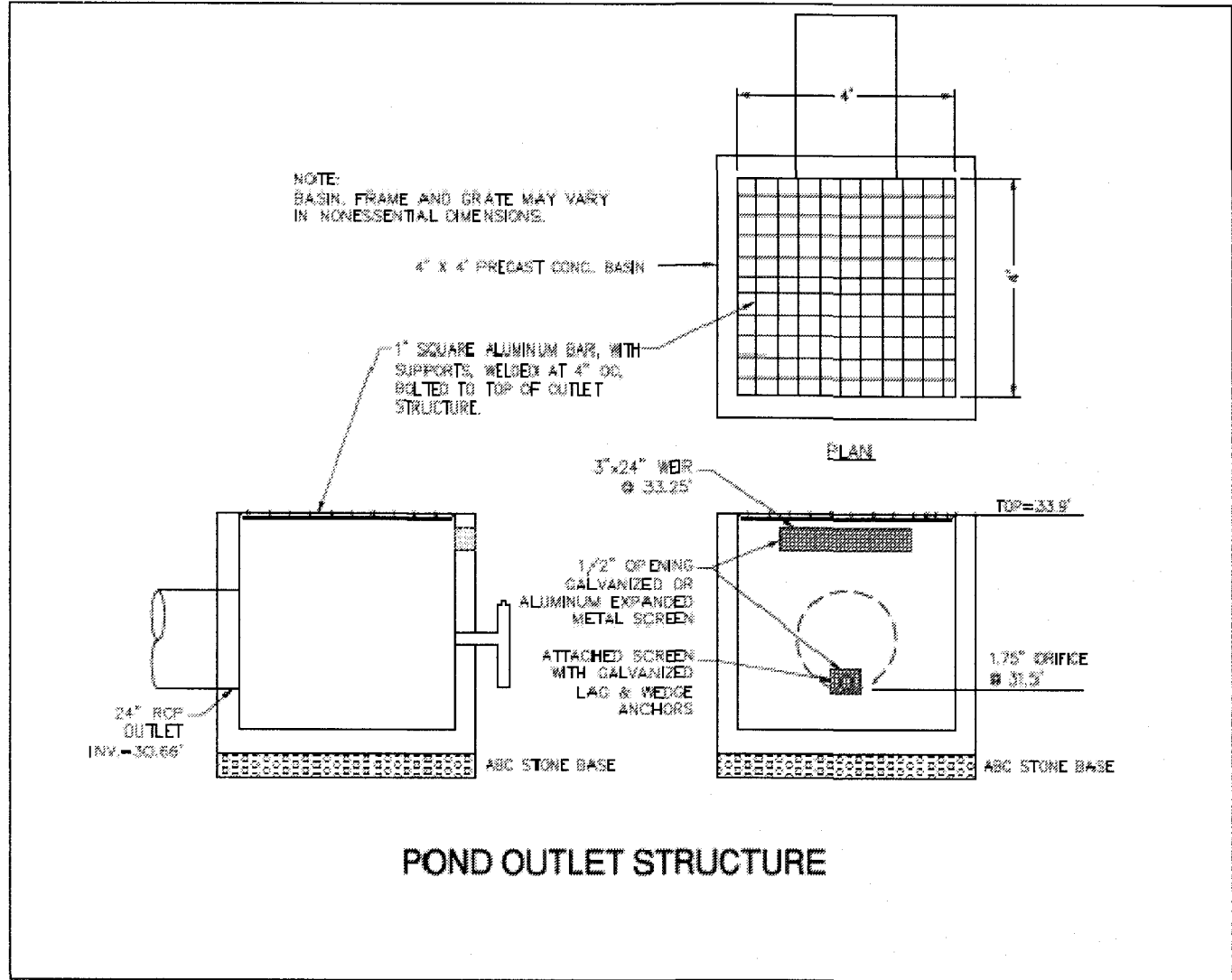
For each open utility cut on City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

<u>Approved Construction Plan</u>	
<u>Name</u>	<u>Date</u>
Planning _____	
Traffic _____	
Fire _____	

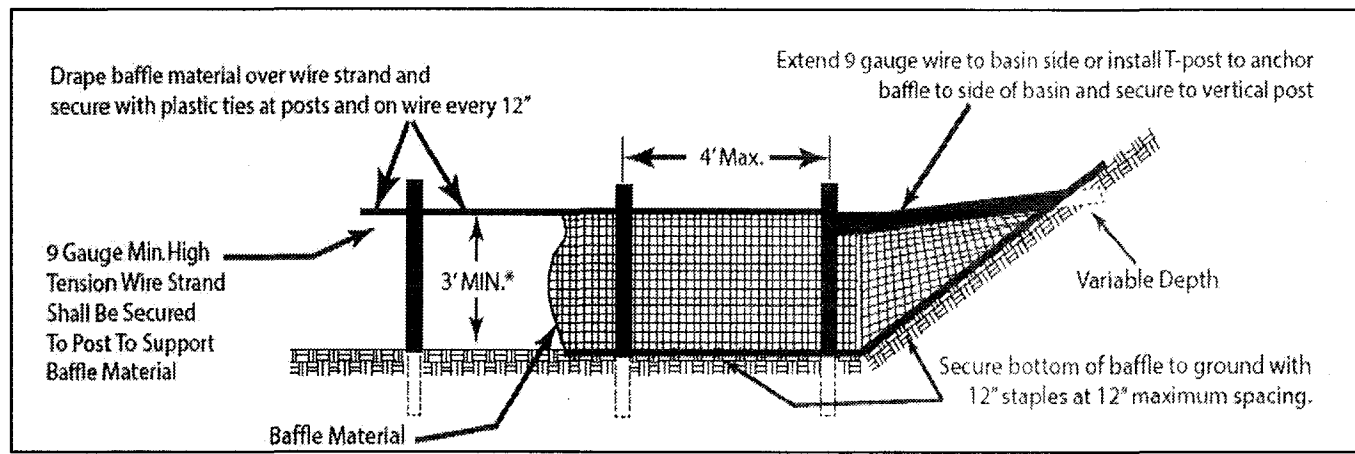




NOT TO SCALE



POND OUTLET STRUCTURE



NOT TO SCALE

1 SW POND EMERGENCY SPILLWAY DETAIL

2 POND OUTLET STRUCTURE

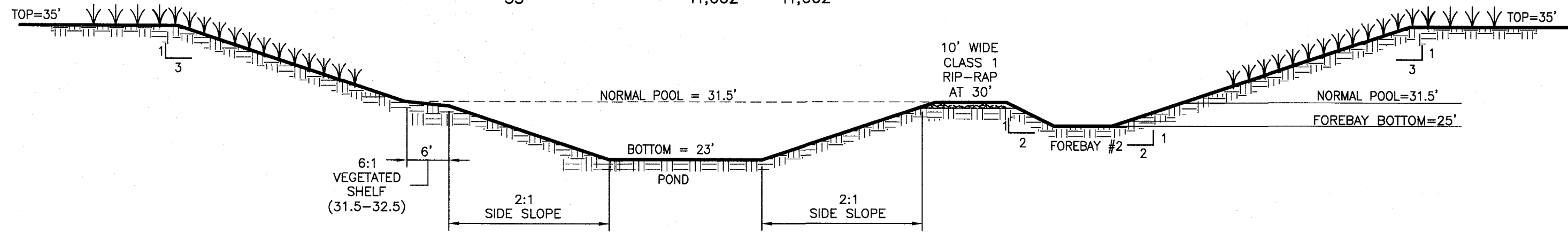
4 BAFFLE STAKE SPACING DETAIL

DETENTION POND NOTES:

- UPON STABILIZATION OF SITE, RESTORE POND TO DESIGN SIZE AND SHAPE.
- INSTALL TOPSOIL ON SIDE SLOPES ABOVE NORMAL POOL AND SEED WITH A MIX OF 20% CARPET GRASS, 24% BERMUDA, 20% FESCUE, 10% CREEPING RED FESCUE, AND 24% RYE. SEED AT A RATE OF 2-3 POUNDS PER 1000 SF.
- VEGETATED SHELF: THE CONTRACTOR SHALL INSTALL EQUAL NUMBERS OF THE LISTED SUITABLE SPECIES. GROUP SIMILAR SPECIES OF PLANTS TOGETHER (APPROX. 10-15 PLANTS PER GROUP). NO PLANTS SHALL BE PLANTED WITHIN 10 FEET OF THE OUTLET STRUCTURE.
- BOTTOM HALF OF VEGETATED SHELF SHALL BE PLANTED WITH SHALLOW WATER PLANT SPECIES, A MINIMUM OF (3) DIVERSE SPECIES, SEE TABLE.
- TOP HALF OF VEGETATED SHELF SHALL BE PLANTED WITH SHALLOW LAND PLANT SPECIES, A MINIMUM OF (3) DIVERSE SPECIES, SEE TABLE.
- THE VEGETATED SHELF SHALL BE PLANTED WITH PLUGS OR POTS (MIN. 2 CU IN) AT 24"-36" O.C. IN A CHECKERBOARD PATTERN. A MINIMUM OF 50 PLANTS PER 200 SF OF SHELF AREA SHALL BE PLANTED.
- NO CATTAILS SHALL BE PLANTED.
- POND CONTOURS ARE TO BE RESTORED TO DESIGN CONDITIONS ONCE THE SITE IS STABLE AND NO LONGER AN EROSION CONTROL SITE.

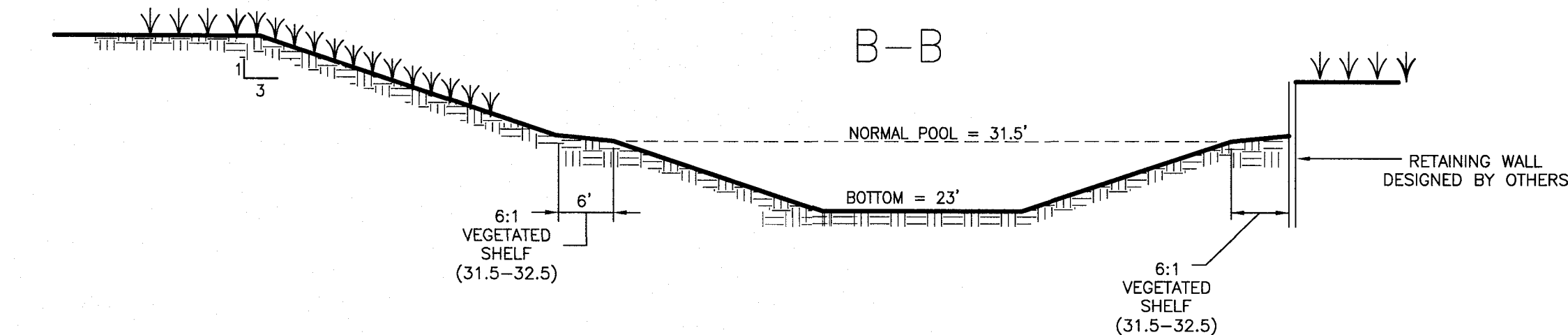
APPROVED SHALLOW WATER PLANTS	APPROVED SHALLOW LAND PLANTS
SWEETFLAG	SWAMP MILKWEED
WATER PLANTAIN	QUILL SEDGE
WATERPOD	WHITE TURTLEHEAD
BLUE FLAG IRIS	DWARF JOE-PYE WEED
SOFT RUSH	JOE-PYE WEED
ARROW ARUM	SPOTTED TRUMPETWEED
PRIMROSE WILLOW	SCARLET ROSE MALLOW
PICKERELWEED	HALBERDLEAF ROSEMALLOW
DUCK POTATO	SEASHORE MALLOW
BULLTONGUE	CARDINAL FLOWER
LIZARD'S TAIL	LONGLEAF LOBELIA
SOFT-STEM BULRUSH	GREAT BLUE LOBELIA
THREE-SQUARE BULRUSH	STARRUSH WHITETOP
WOOLGRASS	NARROW PLUMEGRASS
GIANT CUTGRASS	

ELEVATION	FOREBAY	MAIN POND	TOTAL
23	---	1,185	1,185
24	---	1,542	1,542
25	79	1,933	2,012
26	244	2,356	2,600
27	439	2,813	3,252
28	666	3,305	3,971
29	924	3,837	4,761
30	1,213	4,409	5,622
31	1,490	4,972	6,462
31.5	1,675	5,300	6,975
32.5	---	8,908	8,908
33	---	9,309	9,309
34	---	10,139	10,139
35	---	11,002	11,002



\* ENTRANCE OF FOREBAY SHALL BE DEEPER THAN THE EXIT

B-B



NOT TO SCALE

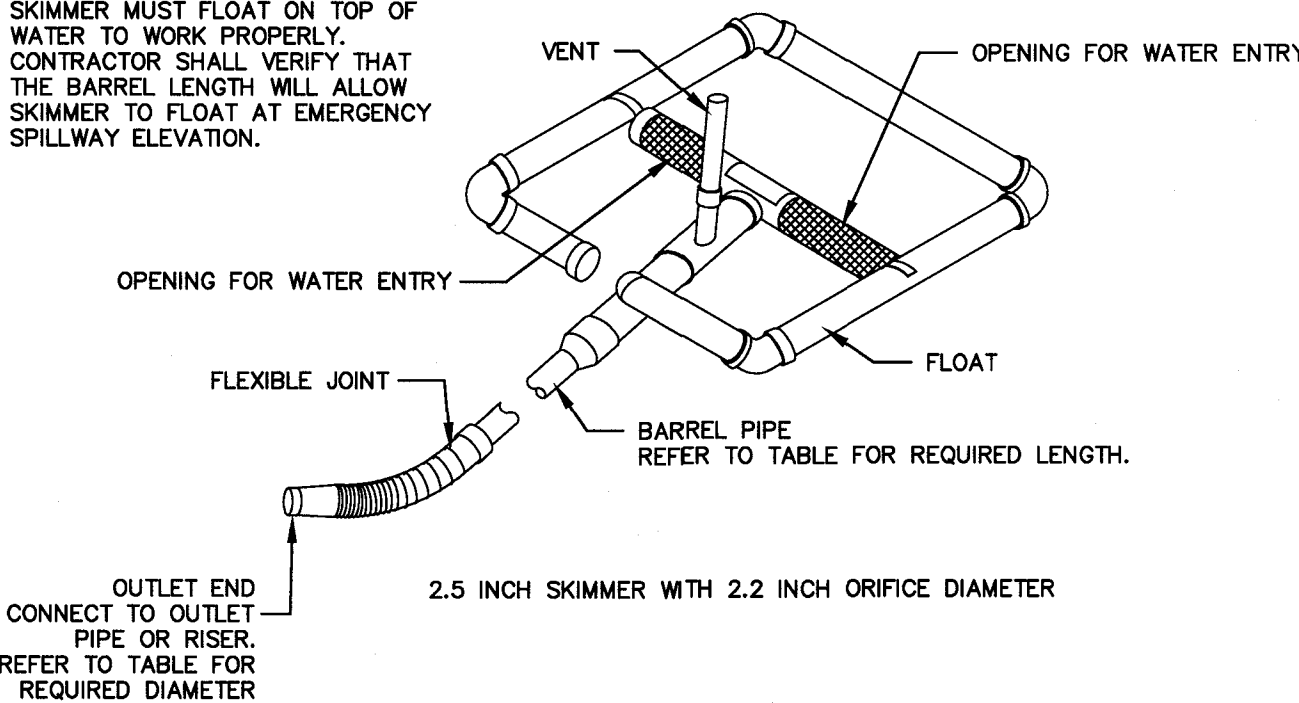
8 SW POND AND FOREBAY DETAIL SECTIONS

6 SUBMERGED ORIFICE OUTLET CONFIGURATION

SKIMMER MAINTENANCE NOTES:

- INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (ON-HALF INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.
- IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.
- IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.
- FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

SKIMMER NOTE:  
SKIMMER MUST FLOAT ON TOP OF WATER TO WORK PROPERLY. CONTRACTOR SHALL VERIFY THAT THE BARREL LENGTH WILL ALLOW SKIMMER TO FLOAT AT EMERGENCY SPILLWAY ELEVATION.



NOT TO SCALE

10 STANDARD SKIMMER DETAIL (FAIRCLOTH)

7 BAFFLE DETAIL

BAFFLE MAINTENANCE NOTES:

- INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL, TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT, AND REPLACE IF DAMAGED DURING CLEANOUT OPERATIONS. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.
- AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

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

CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.

NC DENR PWSS WATER PERMIT # \_\_\_\_\_ GPD  
DWQ SEWER PERMIT # \_\_\_\_\_ GPD  
SEWER SHED # AND PLANT: \_\_\_\_\_  
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

NORRIS & TUNSTALL  
CONSULTING ENGINEERS P.C.

OWNER:  
Chris Burfaino  
DBNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

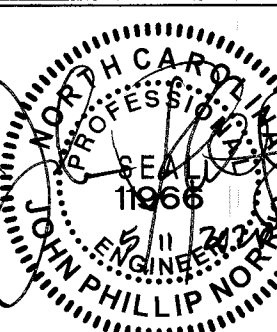
2602 IRON GATE DR., SUITE 102  
WILMINGTON, NC 28412  
PHONE: (910) 343-9653

Licence #C-3641

19004

DES. TJC  
CHK. JPN  
DRWN. NSB

DATE: 05/11/20



D9

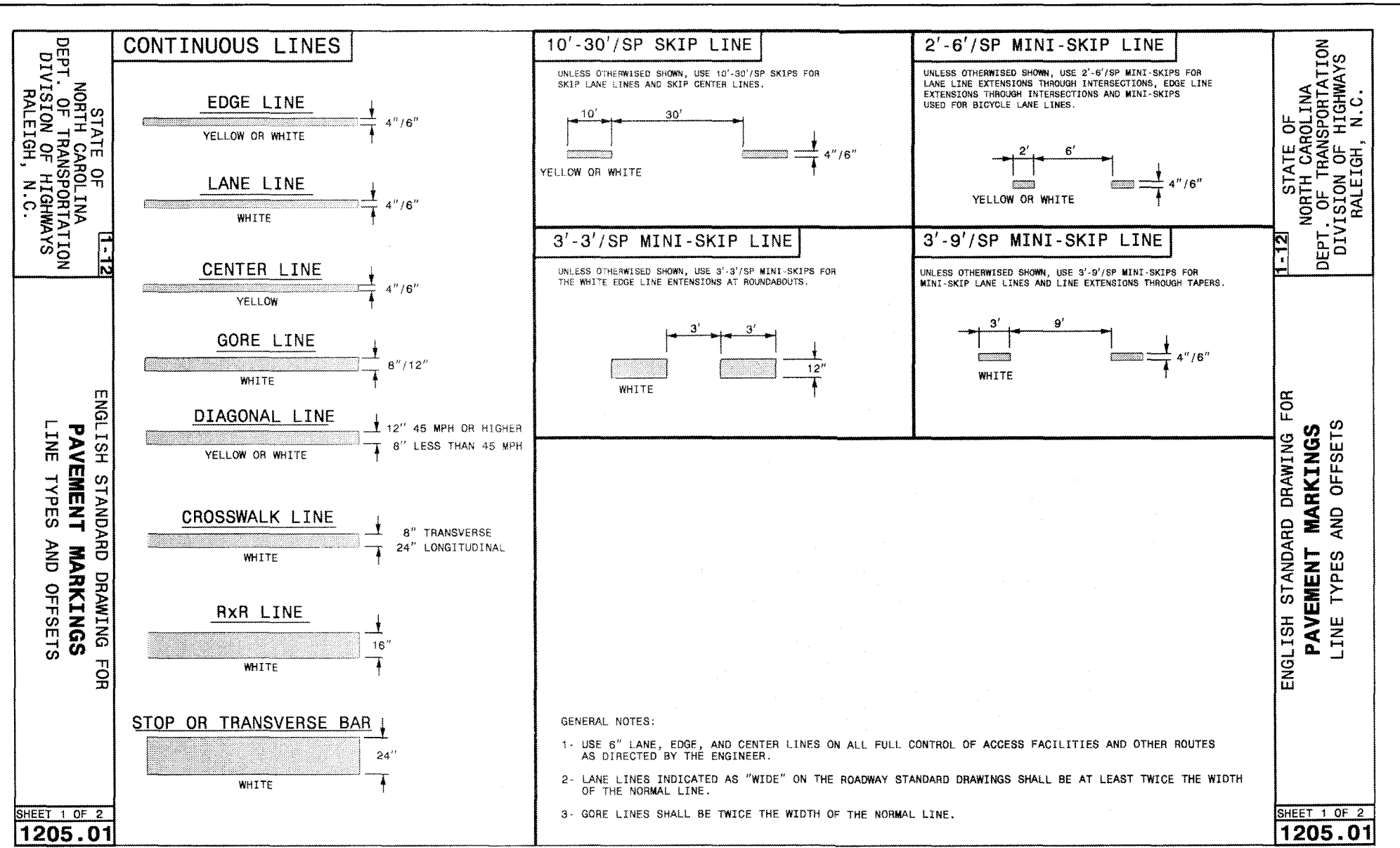
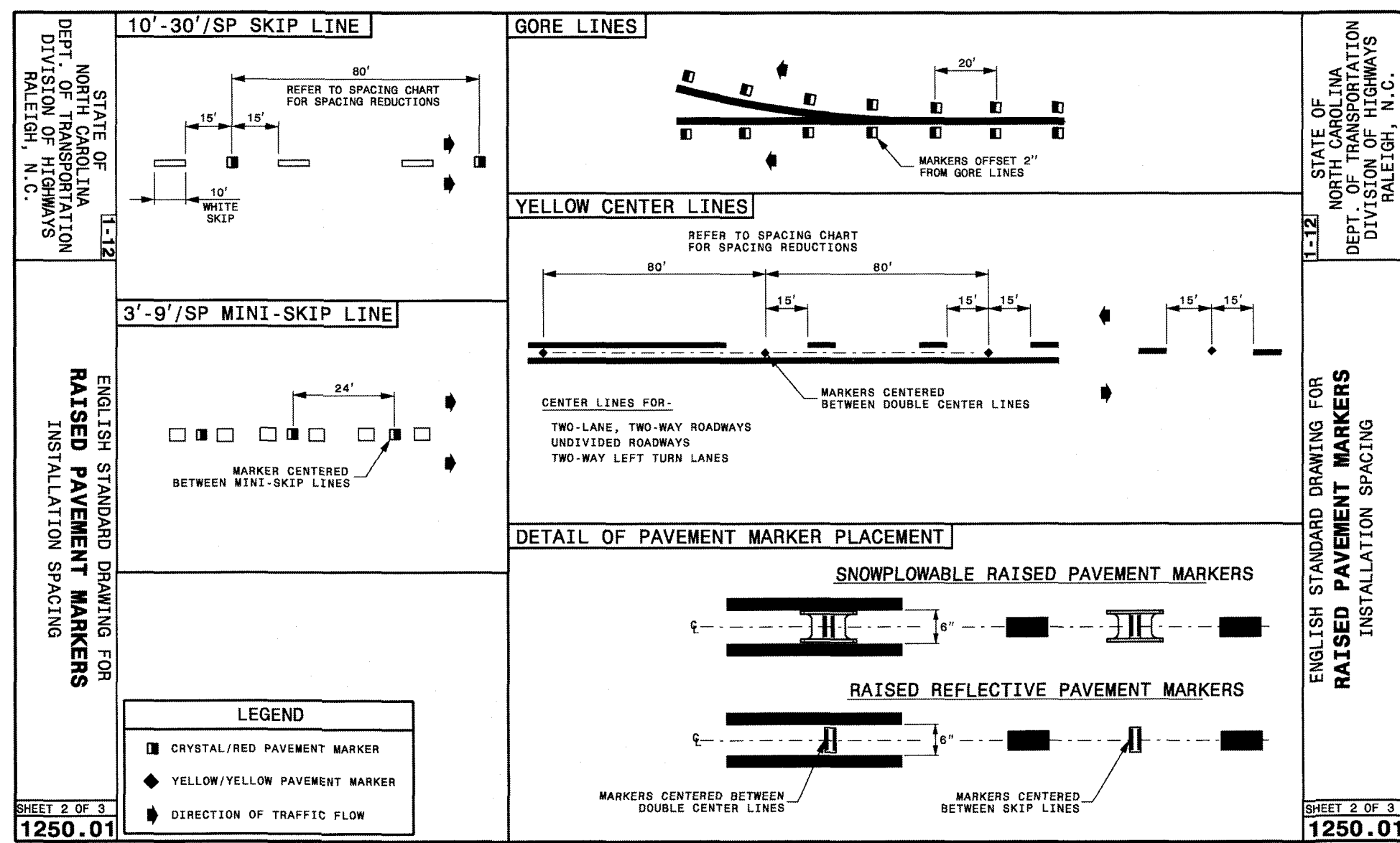
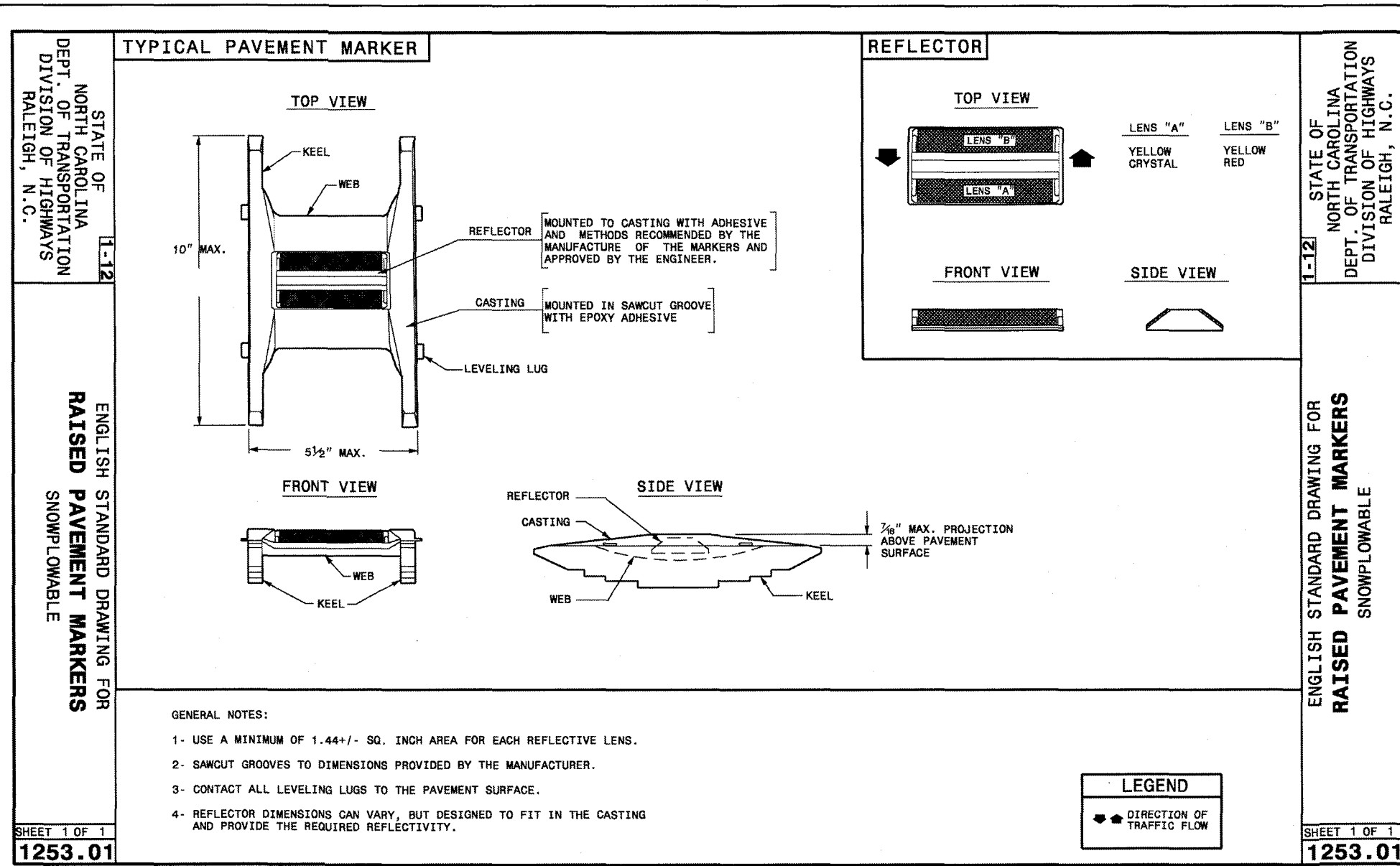
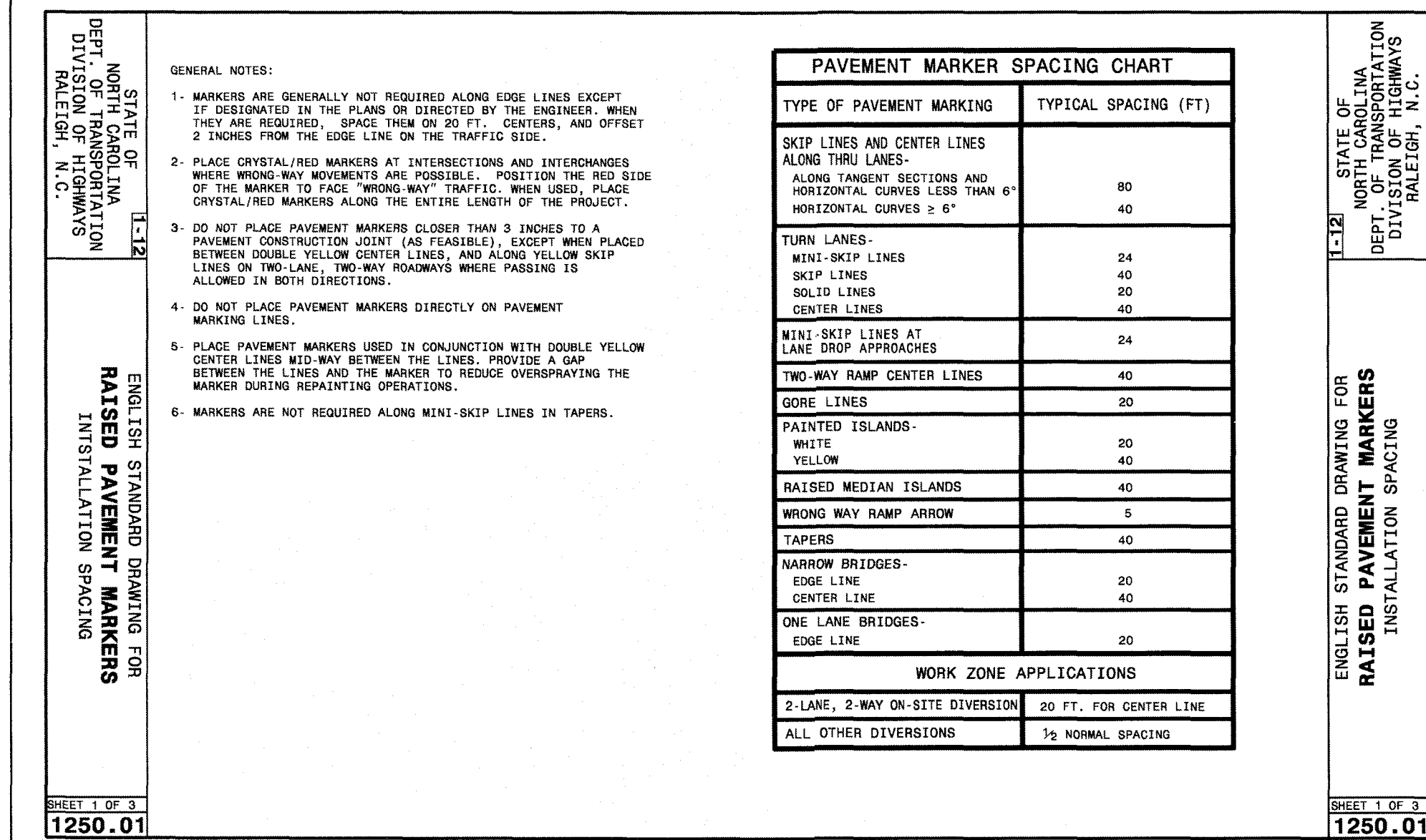
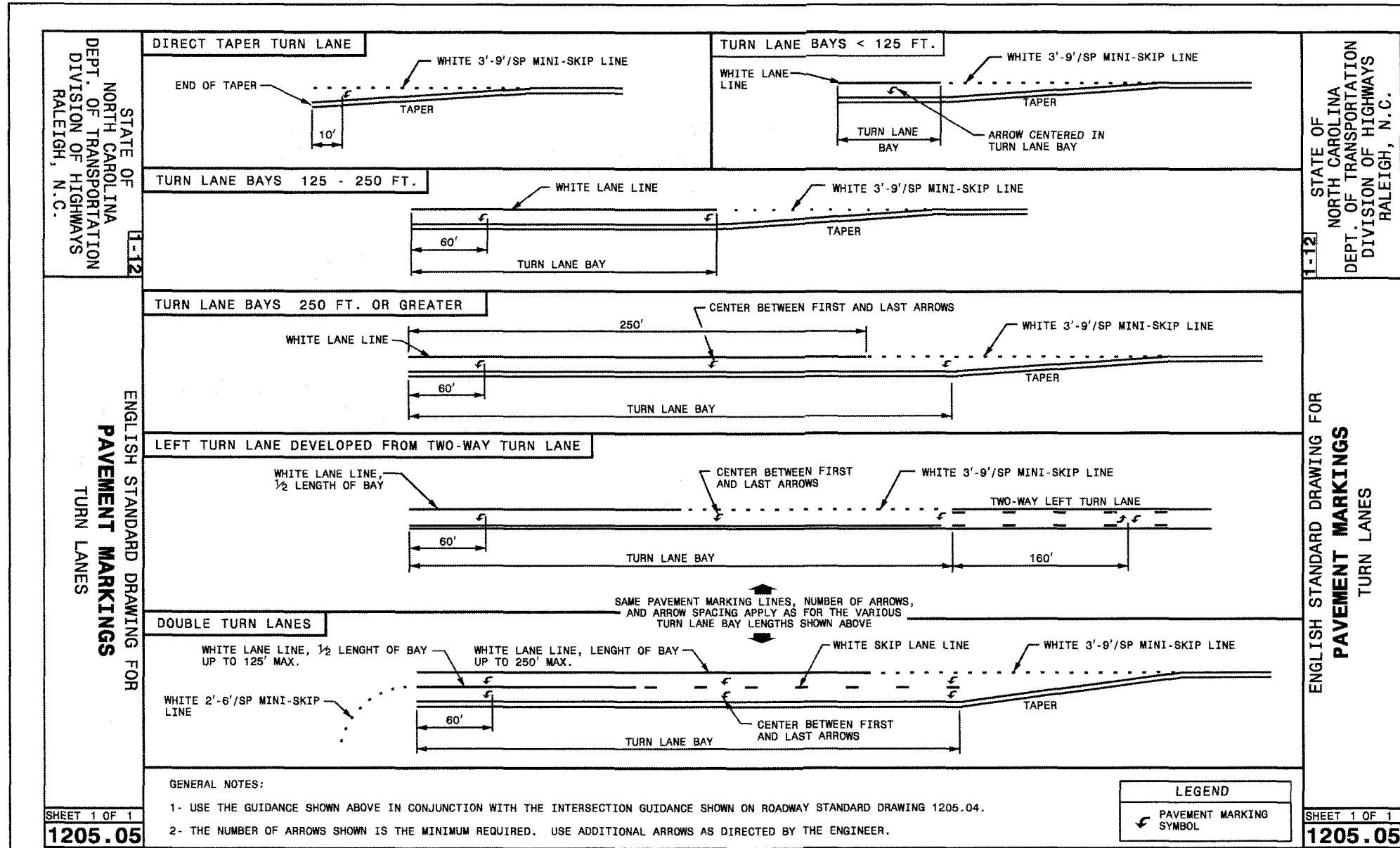
DETAILS

SAXON PLACE  
3525 LANCELOT LANE  
WILMINGTON, NORTH CAROLINA

REVISIONS  
© 2020 NORRIS & TUNSTALL

SYMBOL DATE DESCRIPTION BY





CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: Permit #

Signed:

CALL 811  
(3) WORKING DAYS  
BEFORE YOU DIG.

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

Approved Construction Plan

Name: Date:

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

DETAILS

SAXON PLACE

3525 LANCELOT LANE

WILMINGTON, NORTH CAROLINA

OWNER:

Chris Buffalino

DBNC Holdings, LLC

439 Whitebridge Road

Hamstead, NC 28443

910-795-8674

NORRIS & TUNSTALL

CONSULTING ENGINEERS P.C.

1420 ASH-LITTLE RIVER RD. NW

WILMINGTON, NC 28412

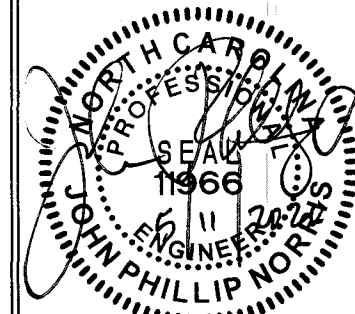
PHONE (910) 343-9653

Licence #C-341

19004

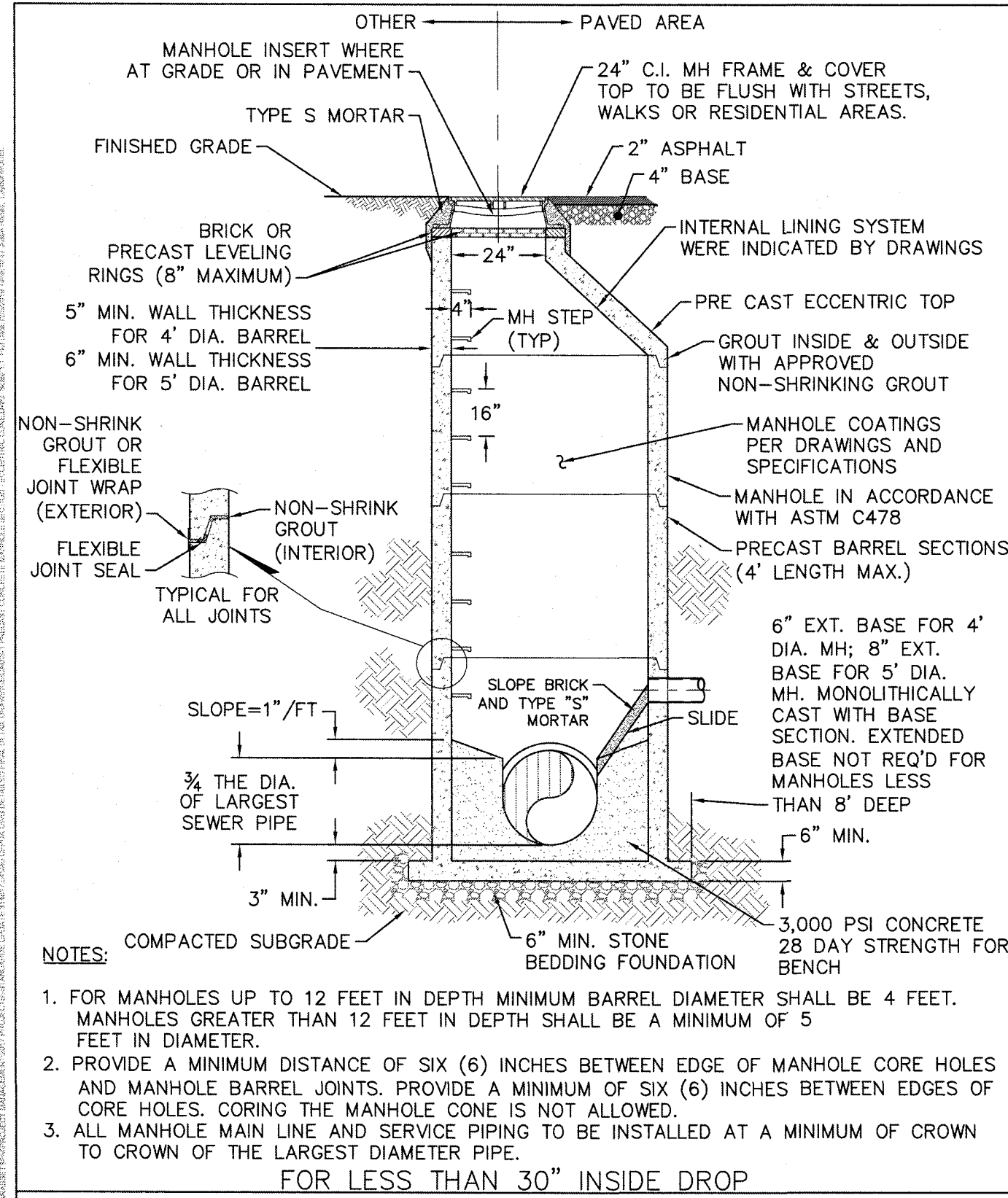
DES. TJC  
CHKD. JPN  
DRWN. NSB

DATE: 05/11/20

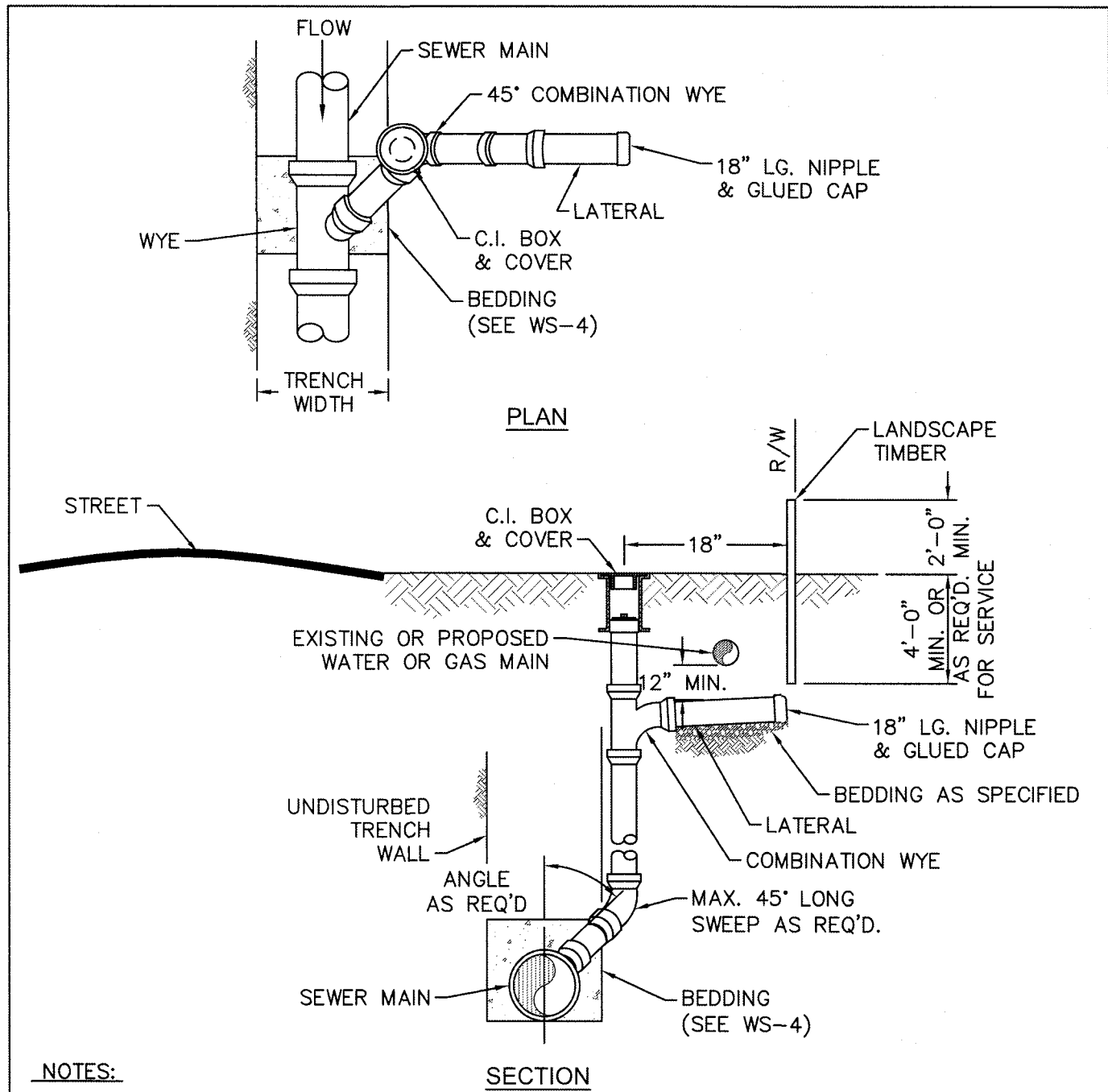


D10

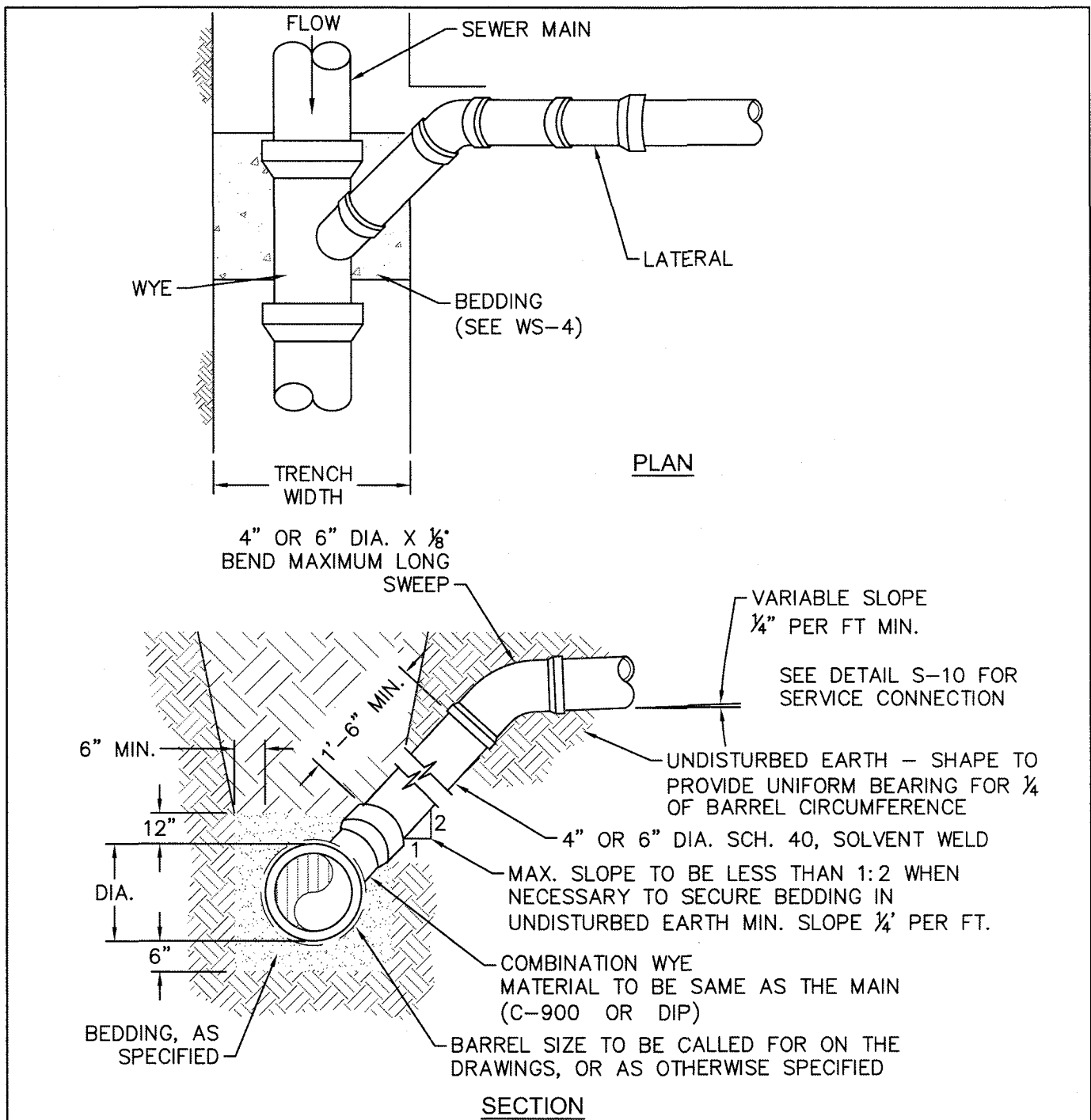




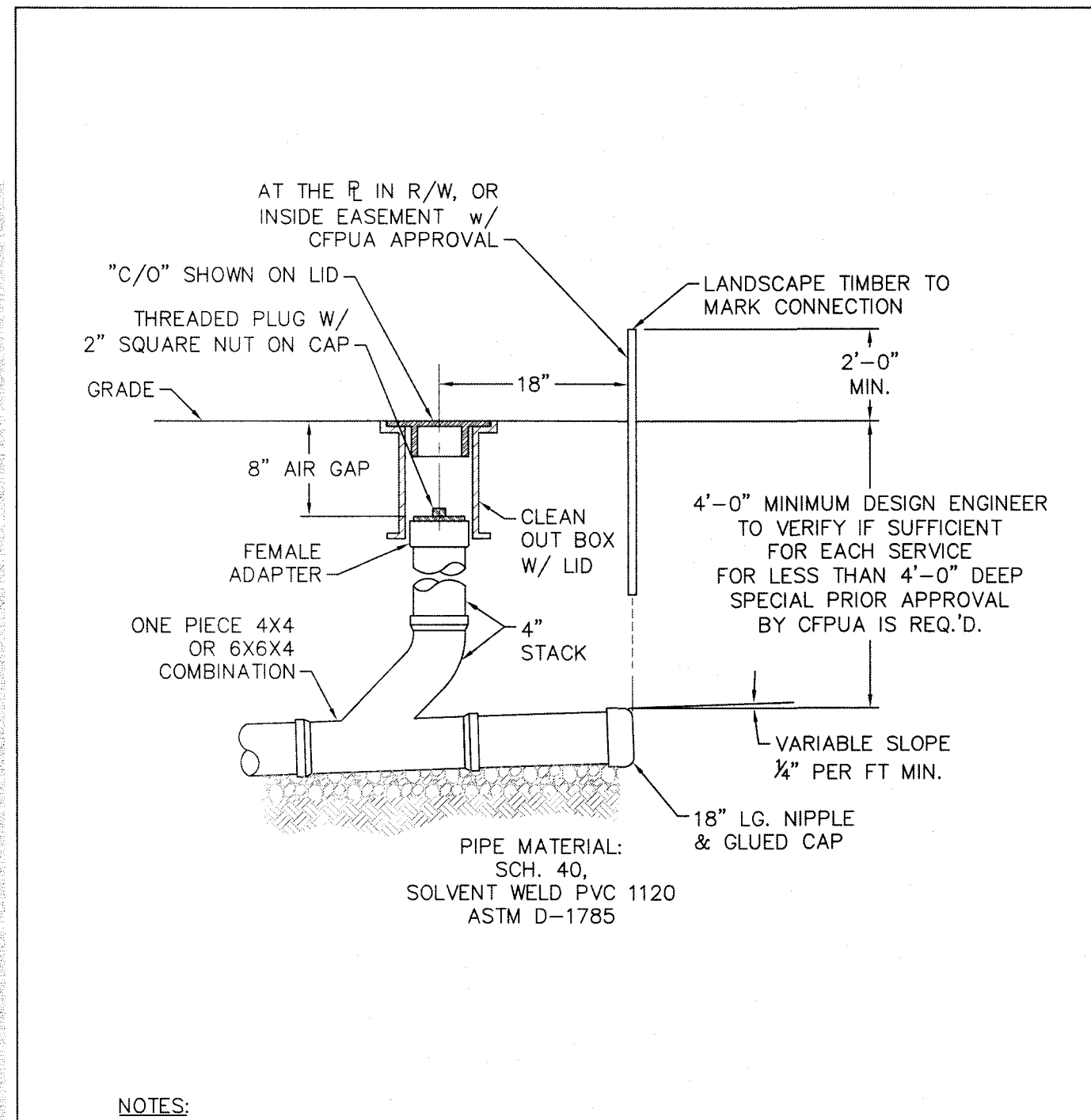
DETAIL: PRECAST CONCRETE MANHOLE SECTION - ECCENTRIC CORNER	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-1 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	



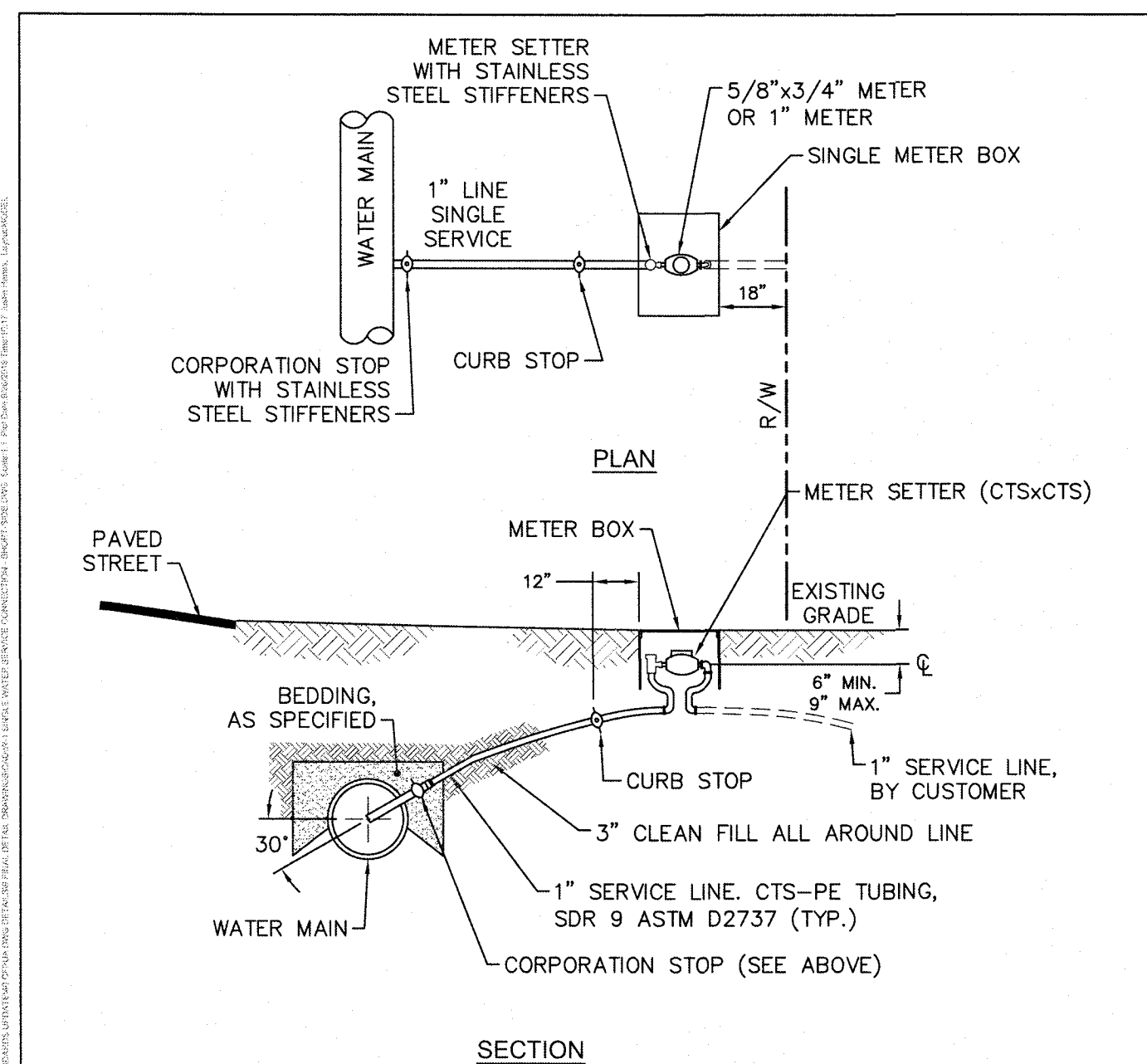
DETAIL: SEWER SERVICE CONNECTION - SHORT SIDE	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-9 SHEET NO: -
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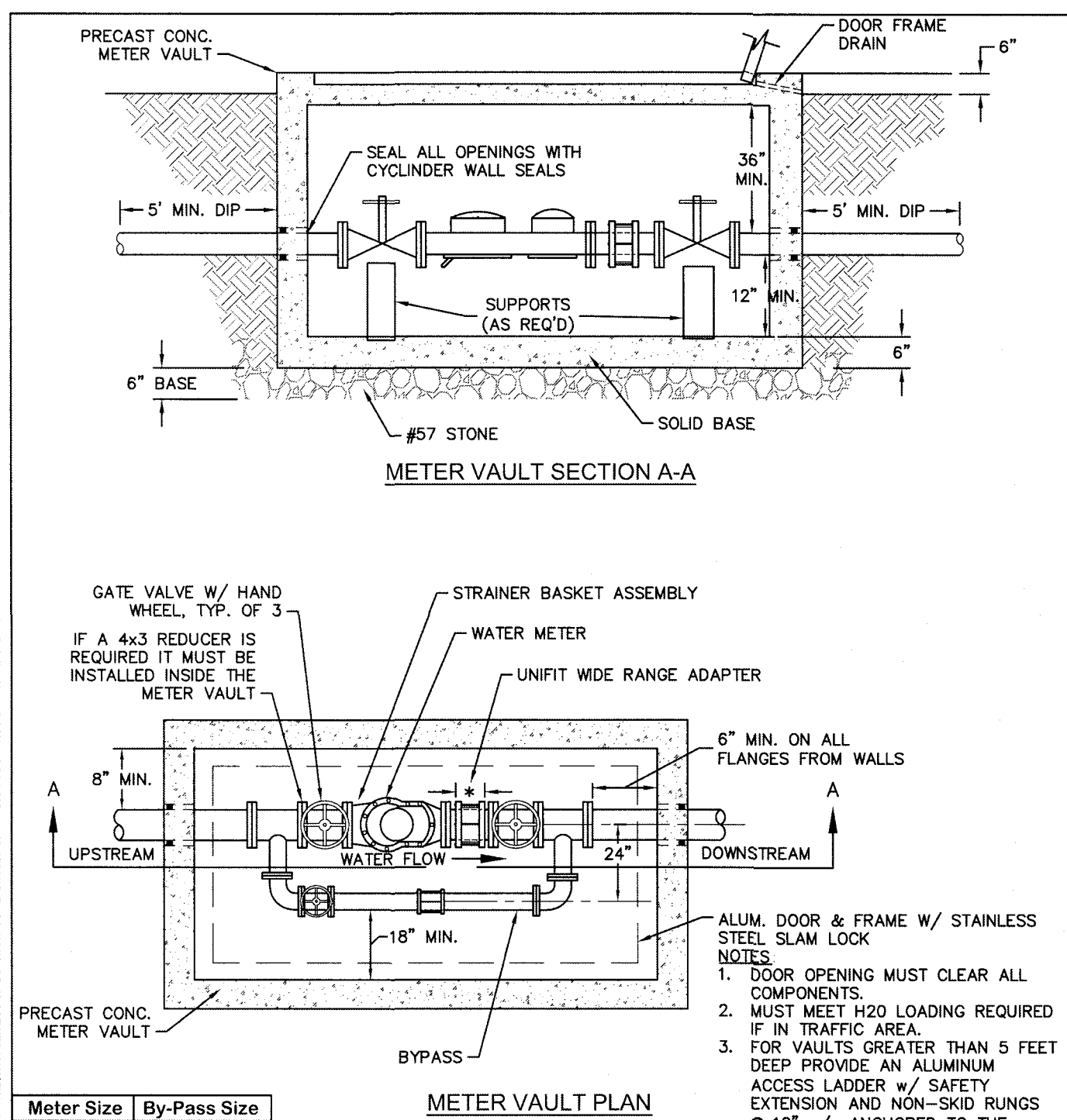
DETAIL: SEWER SERVICE CONNECTION - MAIN TO LATERAL (LESS THAN 8' DEEP)	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-11 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	



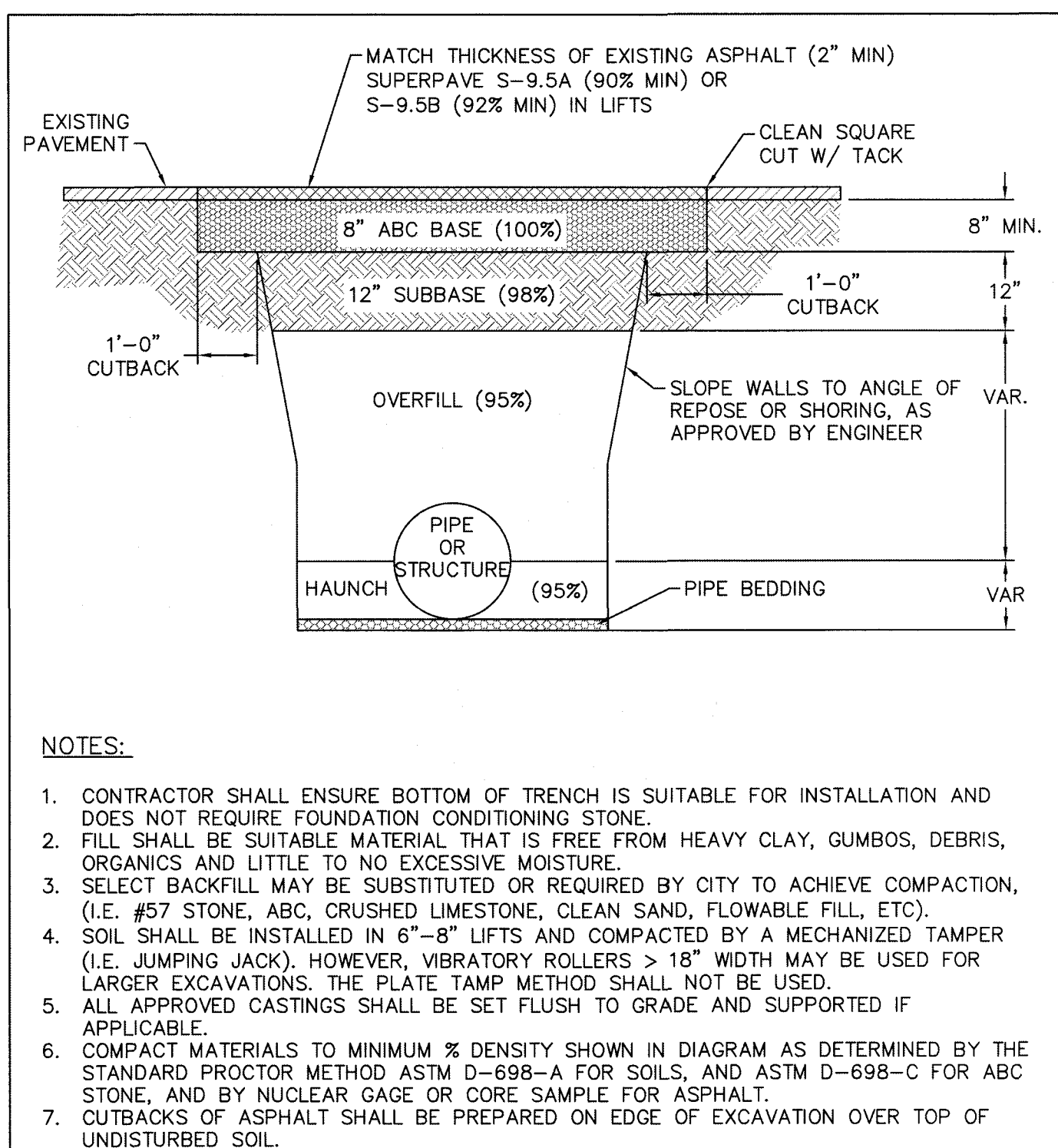
DETAIL: SEWER SERVICE CONNECTION - TYPICAL CLEAN OUT	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-13 SHEET NO: -
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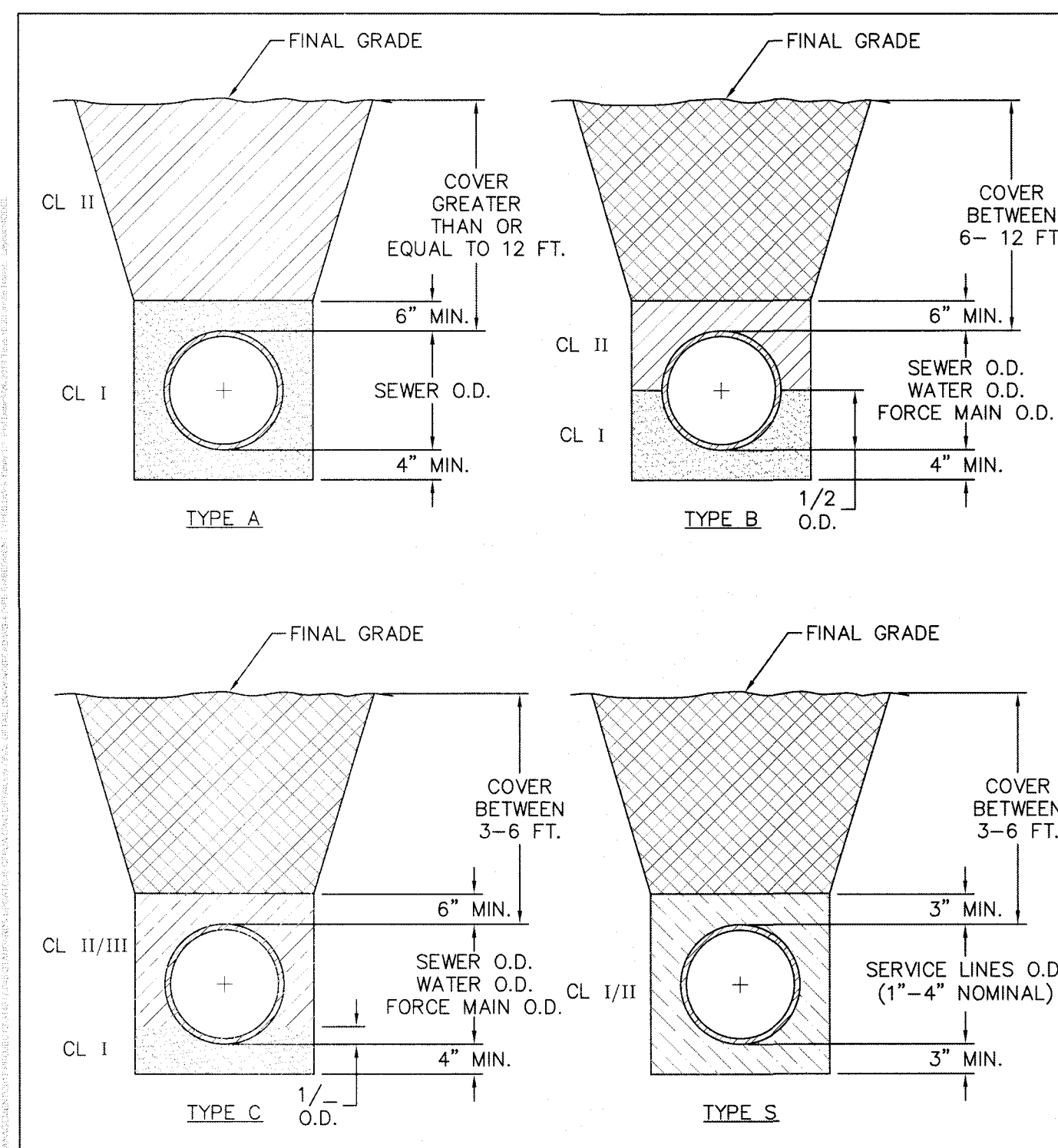
DETAIL: SINGLE WATER SERVICE CONNECTION - TYPICAL SHORT-SIDE CONNECTION	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: W-1 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	



DETAIL: COMMERCIAL WATER SERVICE - 3-INCH AND LARGER METERS	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: W-4 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	



DETAIL: CITY OF WILMINGTON PAVEMENT REPAIRS-UTILITY CUTS	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-1 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	



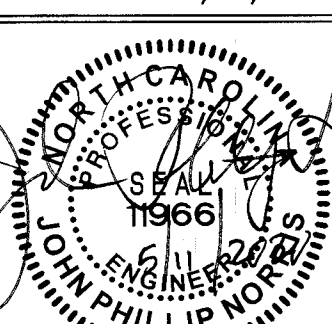
DETAIL: PIPE EMBEDMENT TYPES	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-4 SHEET NO: -
SCALE: NOT TO SCALE CFPUA REV. No: 2 01/01/20	Stewardship, Sustainability, Service.	

**DETAILS**  
**SAXON PLACE**  
**3525 LANCELOT LANE**  
**WILMINGTON, NORTH CAROLINA**

**OWNER:**  
Chris Ruffalo  
DRNC Holdings, LLC  
439 Whitebridge Road  
Hamstead, NC 28443  
910-795-8674

**NORRIS & TUNSTALL**  
CONSULTING ENGINEERS P.C.  
1429 ASH-LITTLE RIVER RD. NW  
ASH, NC 28420  
PHONE: (910) 343-9653

Licence #C-3641  
**19004**  
DES. TJC  
CHK. JPN  
DRWN. NSB  
DATE: 05/11/20

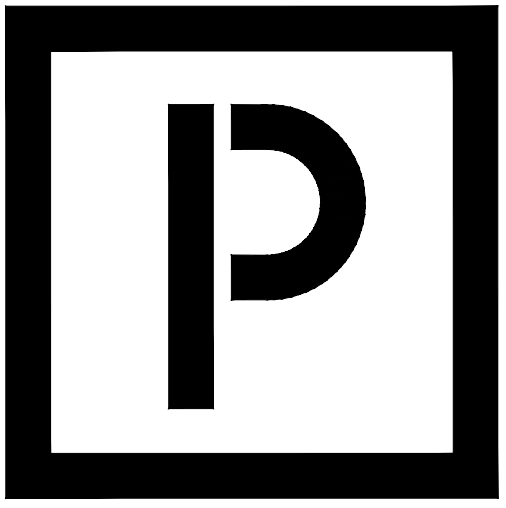


**D11**









**PLANWORX**  
ARCHITECTURE

5711 SIX FORKS ROAD, SUITE 100  
RALEIGH NC 27609  
website      www.planworx.com



Evolve at Avalon Apartments  
Evolve Companies  
Wilmington, NC  
DD Review Set

PROJECT NO:	02/07/20									
	ISSUE DATE:	REVISIONS:	INITIALS	DESCRIPTION	DATE					
		NUMBER								

PROJECT NO: 015318  
DRAWN BY: J.T./B.B.  
CHECKED BY: M.M.

SHEET TITLE:  
Exterior Elevations  
-Building Type 1

SHEET NUMBER:

A1.15



1 FRONT ELEVATION - BUILDING TYPE 1  
Scale: 1/8" = 1'-0"



ARCHITECTURAL PLANS  
EXTERIOR MATERIALS

= ASPHALT SHINGLE ROOF

= STANDING SEAM METAL ROOF

= \*HORIZONTAL VINYL SIDING

= FIBER CEMENT PANEL BD.  
SPACED PER ELEV.

= STONE PER BUILDER.

= BRICK VENEER.

= BRICK ROWLOCK/SOLDIER COURSE.

= STONE ROWLOCK/SOLDIER COURSE.

ELEVATION GENERAL NOTES

ROOFS

\*USE ICE AND WATER SHIELD AT ALL ROOF PLANES  
SLOPED BELOW 4:12.

ROOF VENTILATION

SEE ROOF PLANS FOR ATTIC VENTILATION  
CALCULATION REQUIREMENTS.

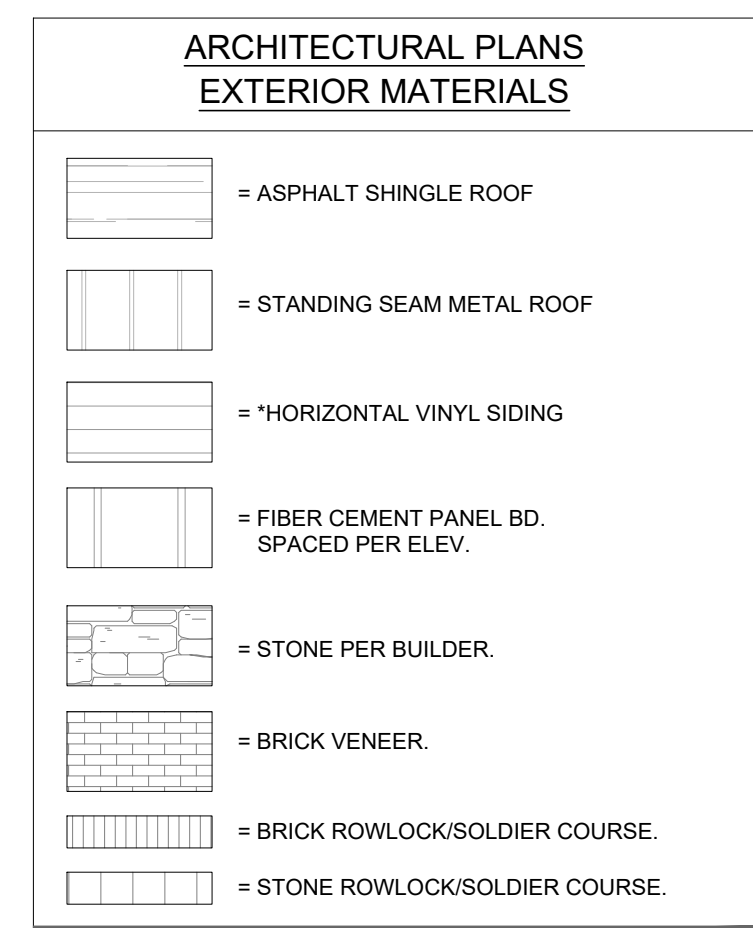
2 TYPICAL SIDE ELEVATION - BUILDING TYPE 1  
Scale: 1/8" = 1'-0"



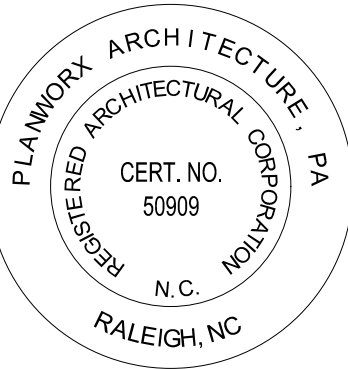
3 REAR ELEVATION - BUILDING TYPE 1  
Scale: 1/8" = 1'-0"

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2. Contractor is to notify architect immediately of conditions or items varying from depicted information. 4. Planworx Architecture, P.A. will not assume any liability for expenses associated with errors and omissions on these drawings unless offset by verified construction savings as a result of planworx architecture, P.A. Design. 6. Planworx Architecture, P.A. is not responsible for estimating, maintaining, or regulating construction costs associated with these plans.  
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2	TYPICAL SIDE ELEVATION - BUILDING TYPE 2
	Scale: 1/8" = 1'-0"



DD Review Set

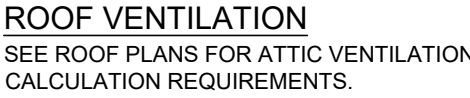
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Scale: 1/8" = 1'-0"



Scale: 1/8" = 1'-0"

## Progress Review Plan

PROJECT NO:	015318
DRAWN BY:	J.T./B.B.
CHECKED BY:	M.M.

SHEET NUMBER

## A1.36

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