BUY QUICK FOOD MART
7650 MARKET STREET, WILMINGTON NC.

CIVIL CONSTRUCTION PLANS

EAGLE ENGINEERING

FIRM LICENSE # :	C-0873
PROJECT ENGINEER:	MATTHEW C. KIRCHNER, P.E.
STREET ADDRESS:	2013A VAN BUREN AVENUE
CITY, STATE, ZIP	INDIAN TRAIL, NC 28079
PHONE:	704-882-4222
EMAIL:	MKIRCHNER@EAGLEONLINE.NET

PREPARED FOR:	BUY QUICK FOOD MART
CONTACT:	KHALID SALEH
STREET ADDRESS:	3811 COTTONWOOD DRIVE
CITY, STATE , ZIP:	DURHAM, NC 27705
PHONE:	919-599-0301
EMAIL:	KSALEH3350@AOL.COM

VICINITY MAP

NOT TO SCALE

SITE AND DEVELOPMENT DATA	
JURISDICTION	NEW HANOVER COUNTY, NC
TAX PARCEL(S):	R03600-005-037-000,001
SITE ADDRESS:	7650 MARKET ST.
ZONING	B-2
USE CLASSIFICATION	COMMERCIAL
TOTAL SITE AREA	65,193 SQ. FT. OR 1.50 AC.
DISTURBED AREA	58,054 SQ. FT. OR 1.33 AC.
EXISTING IMPERVIOUS AREA	29,498 SQ. FT. OR 0.68 AC.
IMPERVIOUS AREA TO BE REMOVED	29,498 SQ. FT. OR 0.68 AC.
PROPOSED IMPERVIOUS AREA	36,874 SQ. FT. OR 0.85 AC.
MINIMUM FRONT SETBACK	75 FEET
MINIMUM CORNER/SIDE SETBACK	0 FEET
MINIMUM REAR SETBACK	0 FEET
REQUIRED PARKING	1 SPACE / 400 SQ. FT. = 10 SPACES REQUIRED

811

Know what's **below.**
Call before you dig.
CALL 1-800-632-4949 OR 811
WWW.NC811.ORG
NC ONE-CALL CENTER
IT'S THE LAW!

DRAWING INDEX

		REVISION #	DESCRIPTION	09/23/20	1	2	3	4	5	6
	CIVIL DRAWINGS									
C-0.0	COVER SHEET			●						
C-1.0	EXISTING CONDITIONS (BY OTHERS)			●						
C-1.1	DEMOLITION PLAN			●						
C-2.0	SITE PLAN			●						
C-3.0	LANDSCAPE PLAN			●						
C-4.0	EROSION CONTROL PHASE 1			●						
C-4.1	GRADING / EROSION CONTROL PHASE 2			●						
C-5.0	UTILITY PLAN			●						
C-6.0	DETAILS			●						
C-6.1	DETAILS			●						
C-6.2	DETAILS			●						
C-6.3	DETAILS			●						
C-6.4	CONSTRUCTION NOTES AND SPECIFICATIONS			●						
C-6.5	NCG01 PERMIT NOTES			●						
	SITE LIGHTING PLAN (BY OTHERS)			●						

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NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER
09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

COVER SHEET

DESIGNED BY	JPC	CHECKED BY	JLR
DRAWN BY	JPC	JOB NUMBER	7057
SCALE	AS SHOWN	DATE	09/23/2020

Sheet
C–0.0

X:\Land Projects\7057\ - C Docs - Market St - Wilmington\DWG\Art\7057 - DBSKA 8X48.dwg

SURVEY REFERENCE:
DEED BOOK 1646 AT PAGE 1284
DEED BOOK 1214 AT PAGE 447
NEW HANOVER COUNTY REGISTRY

NOTES:
1. CORNERS ARE MARKED AS NOTED ON MAP.
2. ALL DISTANCES ARE HORIZONTAL FIELD MEASUREMENTS.
3. AREA COMPUTED BY THE COORDINATE METHOD.
4. THIS PROPERTY IS ZONED B-2.
5. THIS PROPERTY DOES NOT LIE WITHIN A FLOOD HAZARDOUS AREA.
6. NO KNOWN HORIZONTAL CONTROL WITHIN 2,000'.
7. BUILDING SET BACKS REQUIRED TO BE IN ACCORD WITH THE NEW HANOVER COUNTY ZONING ORDINANCE.
8. THIS PROPERTY IS SERVICED BY WELL.
9. **ALL ELEVATIONS ARE ASSUMED NOT TRUE ELEVATIONS.**

This map is subject to any easements, agreements or rights of way prior to the date of this map that were not visible at my time of inspection.

No complete title search was performed for this survey.

STATE OF NORTH CAROLINA **NEW HANOVER COUNTY**

I, _____ REVIEW OFFICER OF NEW HANOVER COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

REVIEW OFFICER _____ DATE _____

CERTIFICATION OF REGISTRATION BY REGISTER OF DEEDS

NEW HANOVER COUNTY NORTH CAROLINA

FILED FOR REGISTRATION ON THE _____ DAY OF _____ 2020.

AT _____ A.M./P.M. AND DULY RECORDED IN MAP BOOK _____ AT PAGE _____

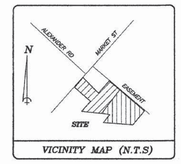
WITNESS MY HAND AND OFFICIAL STAMP OR SEAL THIS ___ DAY OF _____ 2020.

_____
REGISTER OF DEEDS

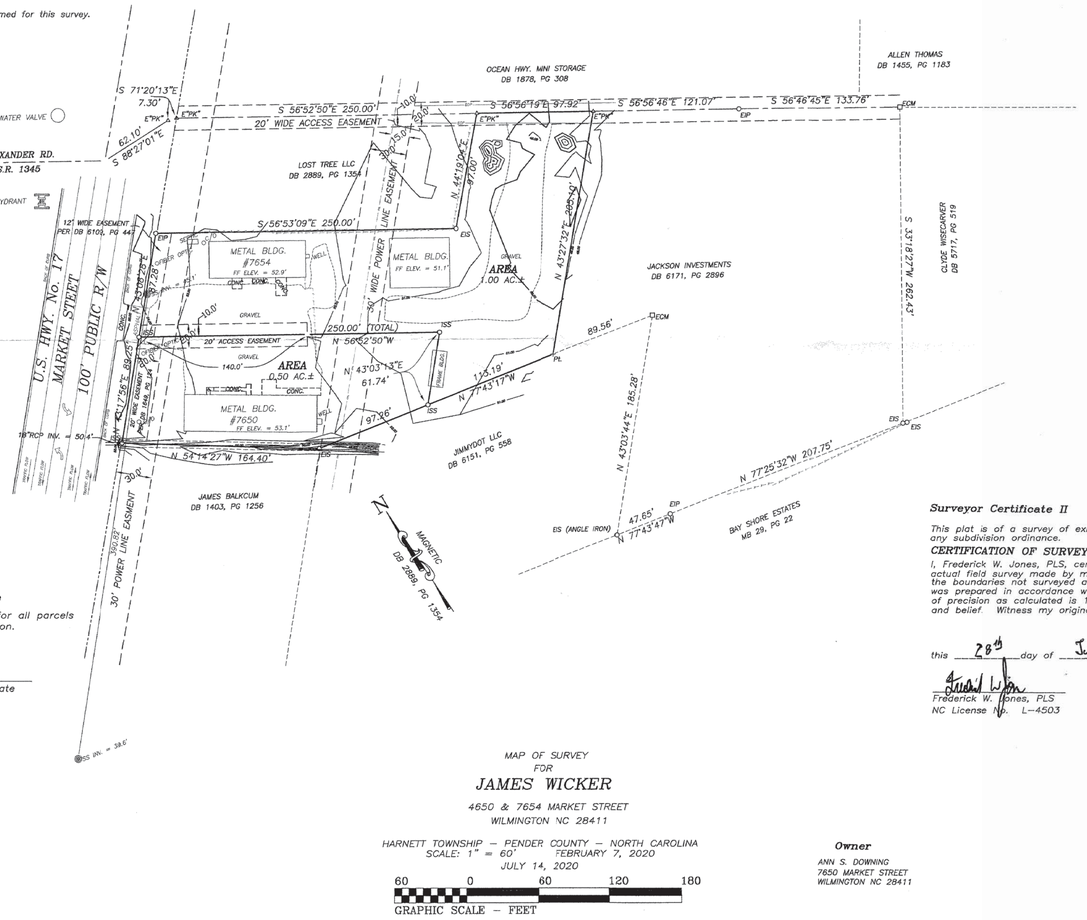
Certificate of Final Plat Approval

NEW HANOVER COUNTY PLANNING DEPARTMENT

_____ _____
Planning Director Date



VICINITY MAP (N.T.S)



LEGEND:

□	ECM (EXISTING CONCRETE MONUMENT)
○	EIP (EXISTING IRON PIPE) OR EIS (EXISTING IRON STAKE) OR ISS (IRON STAKE SET)
△	E"PK" (EXISTING PARKER-KALON NAIL)
+	PL (POINT)
Ⓟ	POWER/UTILITY POLE
———	PROPERTY LINE
- - - - -	NON-SURVEYED LINE
— — — —	EASEMENT LINE
—·—·—	DITCH LINE
— — — — —	℄ (CENTER LINE)
———————	R/W (RIGHT OF WAY)
----------	FENCE

Parcel Identifier Certificate

Parcel Identifiers will be issued for all parcels shown on this plat after recordation.
PID #R03600-005-037-000
PID #R03600-005-037-001

_____ _____
Tax Supervisor Date

_____
PARCEL ID #

_____
PARCEL ID #

Surveyor Certificate II

This plat is of a survey of existing parcels and is therefore exempt from any subdivision ordinance.

CERTIFICATION OF SURVEY AND ACCURACY

I, Frederick W. Jones, PLS, certify that this plat was drawn by me from an actual field survey made by me from information as noted hereon; that the boundaries not surveyed are clearly indicated as dashed lines; that this map was prepared in accordance with G.S. 47-30 as amended; that the ratio of precision as calculated is 1:10000+ and is correct to the best of my knowledge and belief. Witness my original Signature, License Number and Seal

this 28th day of July, AD, 2014.

Frederick W. Jones, PLS
NC License No. L-4503

NORTH CAROLINA PROFESSIONAL SEAL L-4503 LAND SURVEYOR FREDERICK W. JONES

MAP OF SURVEY
FOR
JAMES WICKER
4650 & 7654 MARKET STREET
WILMINGTON NC 28411

HARNETT TOWNSHIP – PENDER COUNTY – NORTH CAROLINA
SCALE: 1" = 60' FEBRUARY 7, 2020
JULY 14, 2020

60 0 60 120 180
GRAPHIC SCALE – FEET

Owner
ANN S. DOWNING
7650 MARKET STREET
WILMINGTON NC 28411

F.W. JONES Surveying Company
N.C. LICENSE No. F-1036
P.O. Box 1471
111 East Fremont Street
Burgaw, NC 28425
Ph: (910) 259-2954
Fx: (910) 259-9040
Em: janessurveying@bellsouth.net
File: NEW HANOVER WICKER JAMES 7665AND7654 MARKET STREET

SAFETY

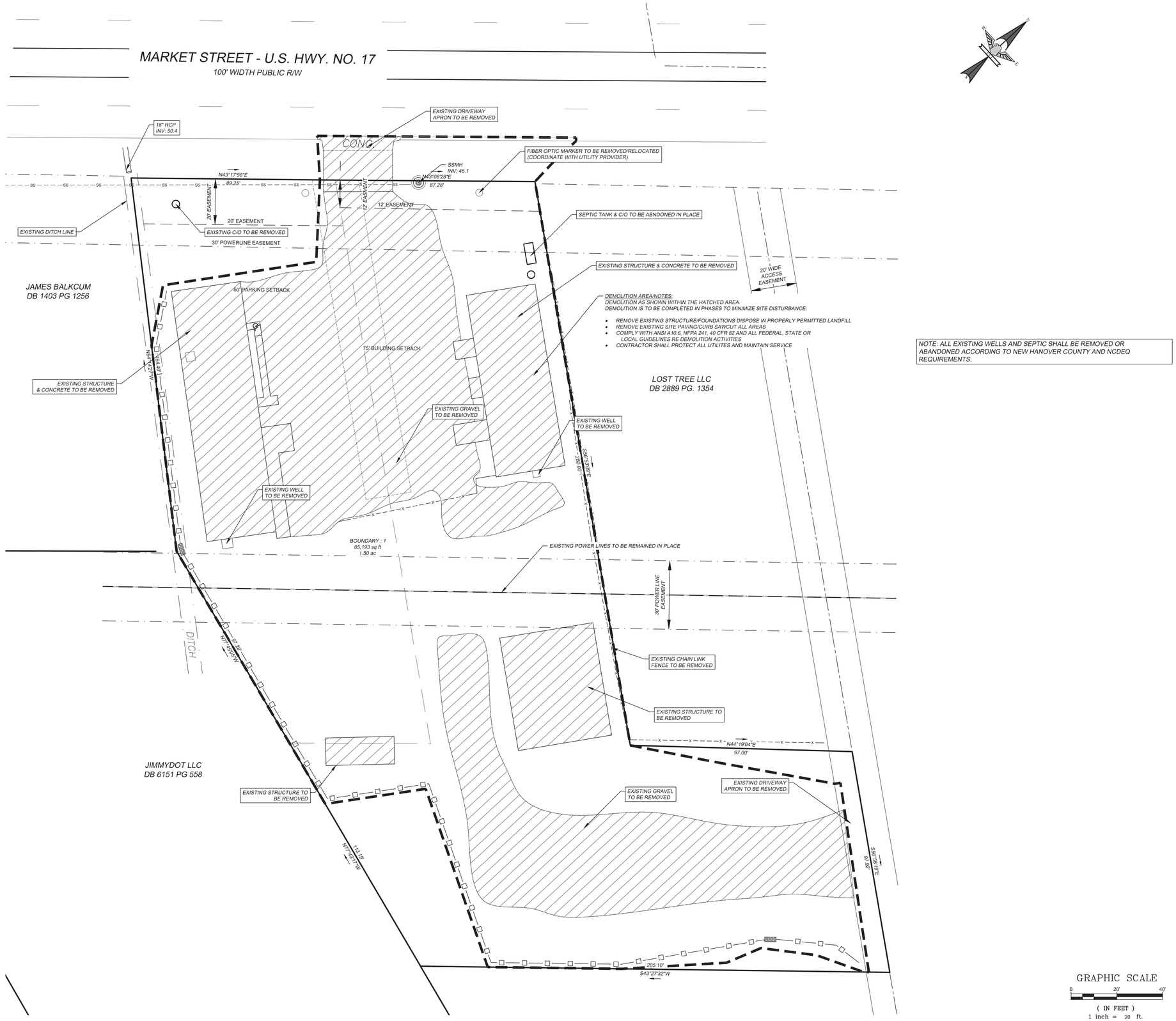
A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
B. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
C. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH AND SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
D. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS, PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
E. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (U.S. DOT) SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMAN FROM HAZARDOUS WITHIN THE PROJECT LIMITS.
F. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
G. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
H. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AL LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES.
I. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW THE GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

SITE PLAN AND COORDINATE GEOMETRY

J. DESIGN DATA PREPARED BY EAGLE ENGINEERING, INC.
K. ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.
L. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.
M. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM.
N. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACT SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
P. ALL DIMENSIONS SHOWN ON PLAN ARE TO FACE OF BUILDING, EDGE OF PAVEMENT, CENTERLINE OF STRUCTURE OR END OF PIPE UNLESS NOTED OTHERWISE.

SITE NOTES

A. A DEMOLITION PERMIT MUST BE ACQUIRED FROM NEW HANOVER COUNTY , A PRE-CONSTRUCTION MEETING MUST BE HELD AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION.
B. ALL CONSTRUCTION TO COMPLY WITH THE CITY OF WILMINGTON CONSTRUCTION STANDARDS AND SPECIFICATIONS
C. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY CITY OF WILMINGTON OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR APPROVAL OF ANY WETLAND AREA DISTURBANCE.
D. THIS PROPERTY IS NOT WITHIN A 100-YR FLOOD ZONE AS CURRENTLY MAPPED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM PANEL 3720316900K, EFFECTIVE DATE: AUGUST 28, 2018 .
E. SEE ARCHITECTURAL PLANS FOR BUILDING FLOOR PLAN DIMENSIONS, DOOR LOCATIONS AND OTHER ARCHITECTURAL DETAILS.
F. THE BUILDING AND ITS LOCATION RELATIVE TO PROPERTY LINES AND OTHER STRUCTURES SHALL COMPLY WITH THE CITY OF WILMINGTON STANDARDS.
G. THIS PROJECT IS TO BE SERVED BY PUBLIC GRAVITY SEWER.
H. ALL FILL AREAS MUST BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR.
I. MAXIMUM CUT OR FILL SLOPE 2H:1V.
J. ALL CONSTRUCTION WASTE MUST BE TAKEN TO AN APPROVED PROPERLY PERMITTED LANDFILL.
K. STRIPING (WHITE AND YELLOW) AND ARROW MARKING SHALL BE APPLIED USING NORTH CAROLINA D.O.T. STANDARD THERMOPLASTIC.
L. THE CONTRACTOR SHALL DISPOSE OF ALL CONSTRUCTION DEBRIS OFF-SITE. ON-SITE BURIAL OF TREES AND OTHER DEBRIS WILL NOT BE PERMITTED.
M. ALL WORK SHALL BE PERFORMED AND FINISHED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE OWNER AND ENGINEER OF RECORD.
N. ALL WORK SHALL BE TO THE LINES AND GRADES AS INDICATED IN THE PLANS. ANY DEVIATIONS WITHOUT THE PRIOR CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
O. THE (MAXIMUM SLOPE) OF THE ACCESSIBLE PARKING SPACES & ACCESS AISLES, SHALL BE 2% IN ALL DIRECTIONS.
P. ALL SIGNS SHALL CONFORM WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT AND PLACEMENT. ALL SIGNS MUST BE INSTALLED CONCURRENTLY WITH THE PERFORMANCE OF THE STRIPING WORK.
Q. THE SITE DOES NOT CONTAIN WETLANDS OR WATERS OF THE UNITED STATES NOR IS IT LOCATED WITHIN THE 100 YEAR FLOOD PLAIN.
R. ALL UTILITIES MUST BE UNDERGROUND.
S. THERE ARE NO STATE WATERS WITHIN 25 FEET OF THE SITE



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NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER
09/23/20

NO.	DATE	BY	ISSUE

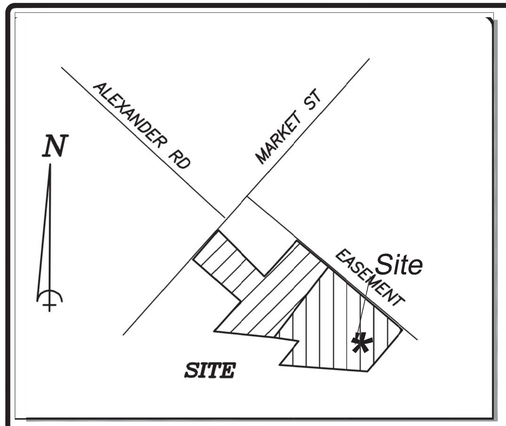
BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

DEMOLITION PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
JPC	JPC	JLR
SCALE	DATE	JOB NUMBER
AS SHOWN	09/23/2020	7057

Sheet
C-1.1



VICINITY MAP

NOT TO SCALE

SITE KEY NOTES:

[1] – PAINT WHITE TRAFFIC ARROWS PER DETAIL SHEET

[2] – CONSTRUCT CONCRETE PAVEMENT (SEE DETAIL ON THIS SHEET) (SAW CUTS AT 10'X10' MAX. & CONTROL JOINTS AT 50' X 50' MAX. SPACING)

[3] – CONSTRUCT 30" STANDARD CURB & GUTTER (SEE DETAIL)

[4] – CONSTRUCT 18" STANDARD CURB & GUTTER (SEE DETAIL)

[5] – TRANSITION FROM 18" STANDARD CURB TO 30" STANDARD CURB

[6] – PAINT 4" WIDE STRIPED PARKING @ 90°, WHITE

[7] – PAINT 4" WIDE STRIPES, WHITE @ 45° 2'-0" O.C.

[8] – INSTALL CONCRETE BOLLARD / H.C. SIGN PER DETAIL

[9] – CONSTRUCT CONVENIENCE STORE BUILDING (SEE ARCHITECTURAL PLANS FOR DETAILS)

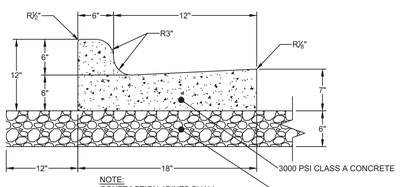
[10] – CONSTRUCT 4" CONCRETE BOLLARD (TYP.) (SEE DETAIL ON SHEET C-6.0)

[11] – CONSTRUCT DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAILS & DIMENSIONS)

[12] – PROPOSED MONUMENT SIGN (EXACT LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER, SIGNAGE TO BE PERMITTED BY OTHERS)

SITE NOTES:

1. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS 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 ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT NORTH CAROLINA ONE CALL AT 1-800-632-4949 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.
2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THESE PLANS ARE BASED ON THE AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY OWNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO STARTING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
4. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS. ACCESS SHALL BE LIMITED UNTIL PERMISSION IS GRANTED.
5. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
6. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE CONTRACT LIMITS DUE TO CONSTRUCTION OPERATIONS.
7. ALL SITE DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
8. THE GENERAL CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES AND REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT AND AT LEAST ONCE A WEEK DURING CONSTRUCTION.
9. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL REVIEW ALL PLANS AND SPECIFICATIONS AND THE JOB SITE. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER WHO PREPARED THE PLANS OF ANY DISCREPANCIES THAT MAY REQUIRE MODIFICATIONS TO THESE PLANS OR OF ANY FIELD CONFLICTS.
10. ALL PERMITS RELATIVE TO THE PROJECT MUST BE OBTAINED, PRIOR TO CONSTRUCTION. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE STATE, COUNTY AND LOCAL CODES.
11. ALL WORK IN RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH "THE CURRENT EDITION OF THE STATE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS".
12. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, ACCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.
13. SUBJECT PROPERTY IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE "X" AS DEFINED BY NFIP F.I.R.M. MAP NUMBER 3720316900K, EFFECTIVE DATE: AUGUST 28, 2018.



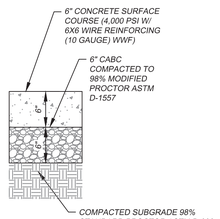
NOTE:
CONTRACTION JOINTS SHALL CONFORM TO NCDOT STANDARDS

18" CURB & GUTTER

NO SCALE

NOTE:
ALL PROPOSED CURB WITHIN THE NCDOT RIGHT OF WAY MUST BE 30" STANDARD CURB AND GUTTER

NOTE:
1. ABC STONE BASE COURSE TO BE COMPACTED TO 100% OF ITS MODIFIED PROCTOR MAXIMUM DRY DENSITY.



CONCRETE PAVEMENT SECTION DETAIL

(NTS)

GRAPHIC SCALE

0 20' 40'

(IN FEET)

1 inch = 20 ft.

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SITE PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
JPC	JPC	JLR
SCALE	DATE	JOB NUMBER
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Sheet
C–2.0

X:\Land Projects\7057 - C Store Market St - Wilmington\DWG\Arch\7057 - SITEDEMO.dwg

PLANT SCHEDULE

CODE	COMMON NAME	BOTANICAL NAME	QTY.	CALIPER AT PLANTING	HEIGHT	SPREAD	COMMENTS
TREES							
FT	FRINGE TREE	CHIONANTHUS VIRGINIANA	3	2"	10'-20'	15'-20'	SMALL MATURING
KD	KOUSA DOGWOOD	CORNUS KOUSA	3	2"	20'-30'	20'-30'	SMALL MATURING
LO	LIVE OAK	QUERCUS VIRGINIANA	4	2"	60'-80'	60'-80'	LARGE MATURING
SHRUBS							
DYH	DWARF YAUPON HOLLY	ILEX VOMITORIA	58	---	24" MIN	24" MIN.	SIZE AT TIME OF PLANTING

SEEDING SCHEDULE

FOR SHOULDERS, SIDE DITCHES & SLOPES (MAX 2:1)

DATE	TYPE	PLANTING RATE
AUG 15-NOV1	TALL FESCUE	300 #/AC
NOV 1-MAR 1	TALL FESCUE	300 #/AC
	AND ABRUZZI RYE	25 #/AC
MAR 1-APR 15	TALL FESCUE	300 #/AC
APR 15-JUN 30	HULLED COMMON BERMUDA GRASS	25 #/AC
JUL 15-AUG 15	TALL FESCUE	120 #/AC
	AND BROWNTOP MILLET	35 #/AC
	OR SORGHUM-SUDAN HYBRIDS	30 #/AC

FOR SLOPES (3:1 TO 2:1)

MAR1-JUN1	TALL FESCUE	50#/AC
(MAR 1-JUNE 30)	OR ADD WEEPING LOVEGRASS	10 #/AC
(MAR 1-JUNE 30)	OR ADD HULLED COMMON BERMUDA GRASS	25 #/AC
JUN 1-SEPT 1	***TALL FESCUE AND	120 #/AC
	***BROWNTOP MILLET	35 #/AC
	***OR SORGHUM-SUDAN HYBRIDS	30 #/AC
SEPT 1-MAR 1	TALL FESCUE	120 #/AC
(NOV 1-MAR 1)	ADD ABRUZZI RYE	25 #/AC

CONSULT CONSERVATION ENGINEER OR SCS FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY-RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

QUANTITIES

QUANTITIES SHOWN IN LIST ARE FOR THE CONVENIENCE OF CONTRACTORS AND BELIEVED TO BE SUBSTANTIALLY CORRECT, BUT THE ACCURACY OF QUANTITIES IN LIST ARE NOT GUARANTEED.

Call Before You Dig!!!
North Carolina One Call
1-800-632-4949
IT'S THE LAW
http://www2.ncocc.org

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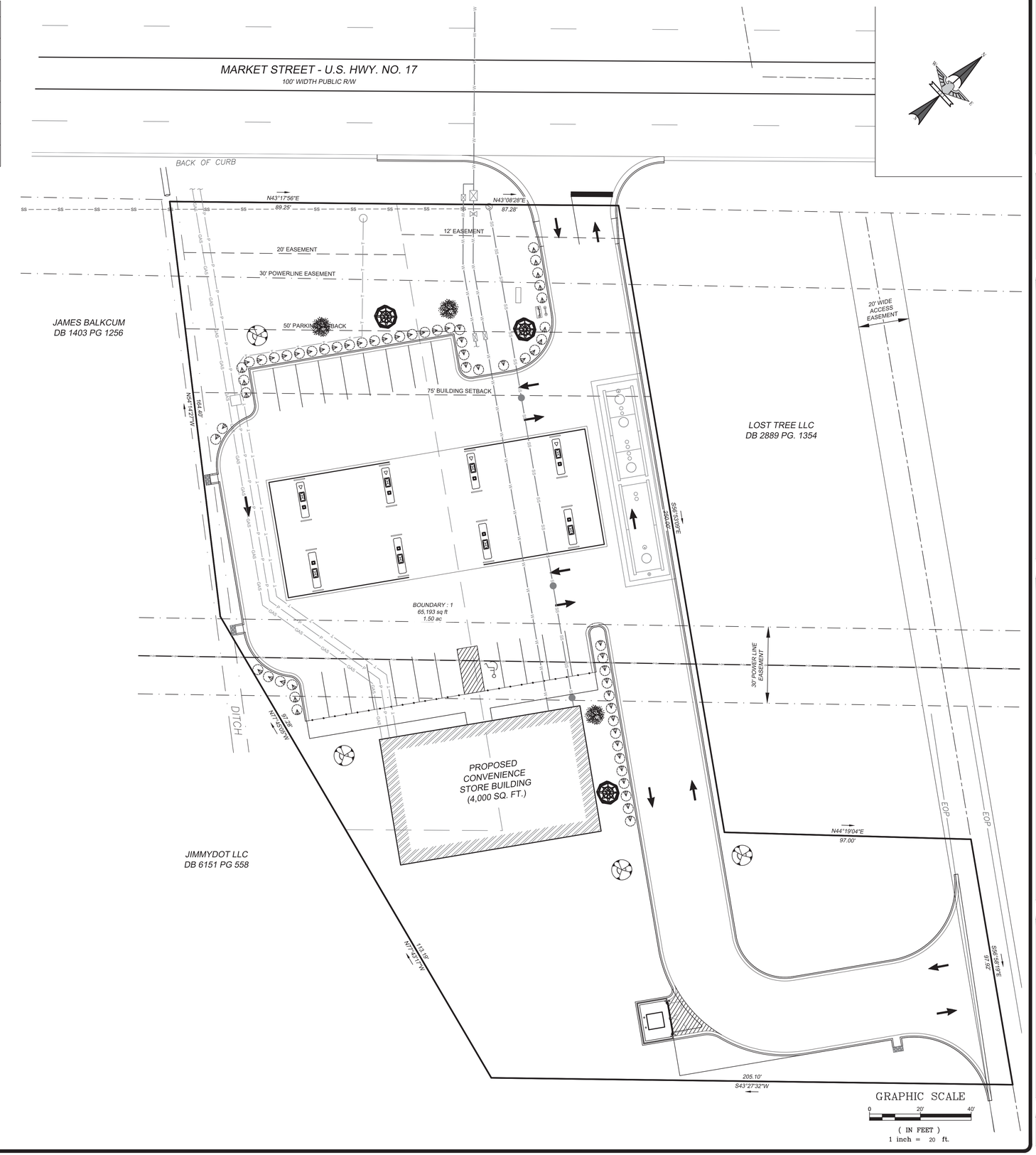
2. ENTIRE SITE SHALL BE SODDED UNLESS SPECIFIED ON PLAN OR REQUESTED BY CONSTRUCTION MANAGER USE LOCALLY ADAPTED SOD.
3. THE GENERAL CONTRACTOR SHALL LEAVE THIS SITE AT 6" FROM FINISHED GRADE. THE LANDSCAPE CONTRACTOR SHALL REVISE GRADES AT A MINIMUM TO ENSURE SMOOTH TRANSITIONS BETWEEN PLANTING BEDS AND LAWN AREAS.
4. PLANT GUARANTEE: ALL PLANTS SHALL BE GUARANTEED TO LIVE FOR TWELVE MONTHS. THE GUARANTEE SHALL COMMENCE UPON FINAL ACCEPTANCE OF THE PROJECT. IF ANY PLANTS ARE DEAD OR IN AN UNHEALTHY CONDITION BEFORE FINAL ACCEPTANCE, THE LANDSCAPE CONTRACTOR SHALL REPLACE DEAD OR DYING PLANT MATERIAL AT HIS EXPENSE. THIS REPLACEMENT SHALL NOT BE CONSIDERED A GUARANTEED REPLACEMENT.
5. ALL PLANTING SHALL BE PLACED WITHIN A MULCHED PLANTING BED. ALL STRAPPING AND THE TOP 2/3 OF WIRE BASKETS MUST BE CUT AWAY AND REMOVED FROM ROOT BALLS PRIOR TO BACKFILLING PLANTING PIT. REMOVE TOP 1/3 OF BURLAP FROM ROOT BALL.
6. ALL LANDSCAPE WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY STANDARD DETAILS AND SPECIFICATIONS.
7. ALL AREAS NOT MULCHED SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE AREA SPECIFIED ON PLANS WITH GRASS SPECIES RECOMMENDED FOR REGION AS PRESCRIBED IN THE SEEDING SCHEDULE AS SHOWN ON THIS SHEET.
8. SITE LIGHTING SHALL NOT BE PLACED IN CONFLICT WITH PLANTED TREES.
9. TREE PROTECTION FENCING TO BE PROVIDED AROUND TREE PRESERVATION AREAS IN ACCORDANCE WITH CITY STANDARDS.
10. COORDINATE ALL WORK WITH SITE LAYOUT AND SITE GRADING, DRAINAGE & UTILITIES PLAN.
11. MULCH ALL AREAS, THAT ARE NOT SEEDED OR SODDED, WITH SHREDDED HARDWOOD MULCH OR APPROVED EQUAL AS SPECIFIED TO A DEPTH OF 3"-4".
12. THE SELECTION AND INSTALLATION OF PLANTS AND PLANTING METHODS SHALL CONFORM WITH THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE CITY STANDARD DETAILS AND SPECIFICATIONS, WHICHEVER IS STRICTER.
13. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES. DRAWINGS SHALL RULE OVER PLANT LISTS.
14. SUBSTITUTIONS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL, PRIOR TO INSTALLATION, SUBSTITUTIONS MAY REQUIRE ADDITIONAL APPROVAL BY THE GOVERNING JURISDICTION.
15. ALL LANDSCAPING SOIL AND FILL SHALL BE FREE FROM WEEDS, REFUSE, AND DEBRIS AT ALL TIMES.
16. TREES AND LARGE SHRUBS SHALL BE ADEQUATELY SUPPORTED, AS NECESSARY, USING ARBORTIE FOR GUYS ON TREES. SUCH SUPPORTS SHALL BE DESIGNED SO AS TO PROTECT TREES AND SHRUBS FROM INJURY. TREES AND SHRUBS SHALL BE FASTENED TO THE SUPPORT WITH AN ACCEPTABLE COMMERCIAL TREE TIE OF PLASTIC OR HOSE COVERED WIRE.
17. CONTRACTOR SHALL RAKE OUT ALL STONES AND PROVIDE A MINIMUM OF 6" OF TOP SOIL IN LANDSCAPE AREAS PRIOR TO SEEDING/SODDING OR PLANTING.



EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER
09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

LANDSCAPE PLAN

DESIGNED BY	JPC	CHECKED BY	JLR
DRAWN BY	JPC	JOB NUMBER	7057
SCALE	AS SHOWN	DATE	09/23/2020

Sheet
C-3.0

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4. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AND REPAIRED AT A MINIMUM OF WEEKLY BASIS AND AFTER EVERY RAIN EVENT.
5. ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
6. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCES.
7. THE APPROXIMATE AREA OF THE LIMITS OF CLEARING, GRADING AND CONSTRUCTION IS 1.33 ACRES.
8. PROVIDE A GROUND COVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING FOR ANY DISTURBED AREAS AND 7 CALENDAR DAYS FOR ANY STEEP SLOPES > 3:1 AND PERIMETER AREAS.
9. ALL CUT AND FILL SLOPES AND CHANNEL SIDESLOPES WHICH ARE NOT TO BE PAVED, SHALL BE SEEDED UNTIL A GOOD STAND OF GRASS IS OBTAINED IN ACCORDANCE WITH:
   A. 100 LBS PER 1,000 SQUARE FOOT GROUND LIMESTONE OR EQUIVALENT. NO SOIL TEST REQUIRED FOR INITIAL ESTABLISHMENT.
   B. 20 LBS OF 10-10-10 FERTILIZER OR EQUIVALENT PEER 1,000 SQUARE FOOT.
   C. VARIETIES TO BE SEEDED:
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      3. ASPHALT MULCH 6 GALLONS PER 1,000 SQUARE FOOT. ALL SEEDING WILL BE MULCHED.
10. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.

MAINTENANCE NOTES:

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED AND MAINTAINED DAILY AND AFTER EACH RAINFALL GREATER THAN 0.5 INCHES. ANY SEDIMENT THAT HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

CONSTRUCTION ENTRANCE:

INSPECT CONSTRUCTION ROADS AND PARKING AREAS PERIODICALLY FOR CONDITION OF SURFACE. TOP DRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION. SEDIMENT PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY.

SILT FENCE:

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT IMMEDIATELY. 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 SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

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INSPECT SEDIMENT FENCE GRAVEL OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN. ANY RIP RAP DISPLACED MUST BE REPLACED IMMEDIATELY.

OUTLET STABILIZATION STRUCTURE:

INSPECT RIP RAP STRUCTURES WEEKLY AND AFTER SIGNIFICANT (0.5 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

BLOCK AND GRAVEL INLET PROTECTION:

INSPECT THE BARRIER OF AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

SEDIMENT TRAP:

INSPECT TEMPORARY SEDIMENT TRAPS AT LEAST WEEKLY AND AFTER RAINFALL EVENTS 0.5 INCHES OR MORE. REMOVE SEDIMENT AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA, AND REPLACE THE PART OF THE GRAVEL FACING THAT IS IMPAIRED BY SEDIMENT.

CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FEET BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY FILL ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE DESIGN GRADE. **ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.**

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3. ONCE EROSION CONTROL MEASURES HAVE BEEN APPROVED BY INSPECTOR BEGIN DEMOLITION AND GENERAL EXCAVATION ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PHASE/STAGE EROSION CONTROL TO ALLOW FOR CONSTRUCTION.
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5. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC.. SEED AND MULCH DENUDED AREAS WITHIN FOURTEEN (14) CALENDAR DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION;
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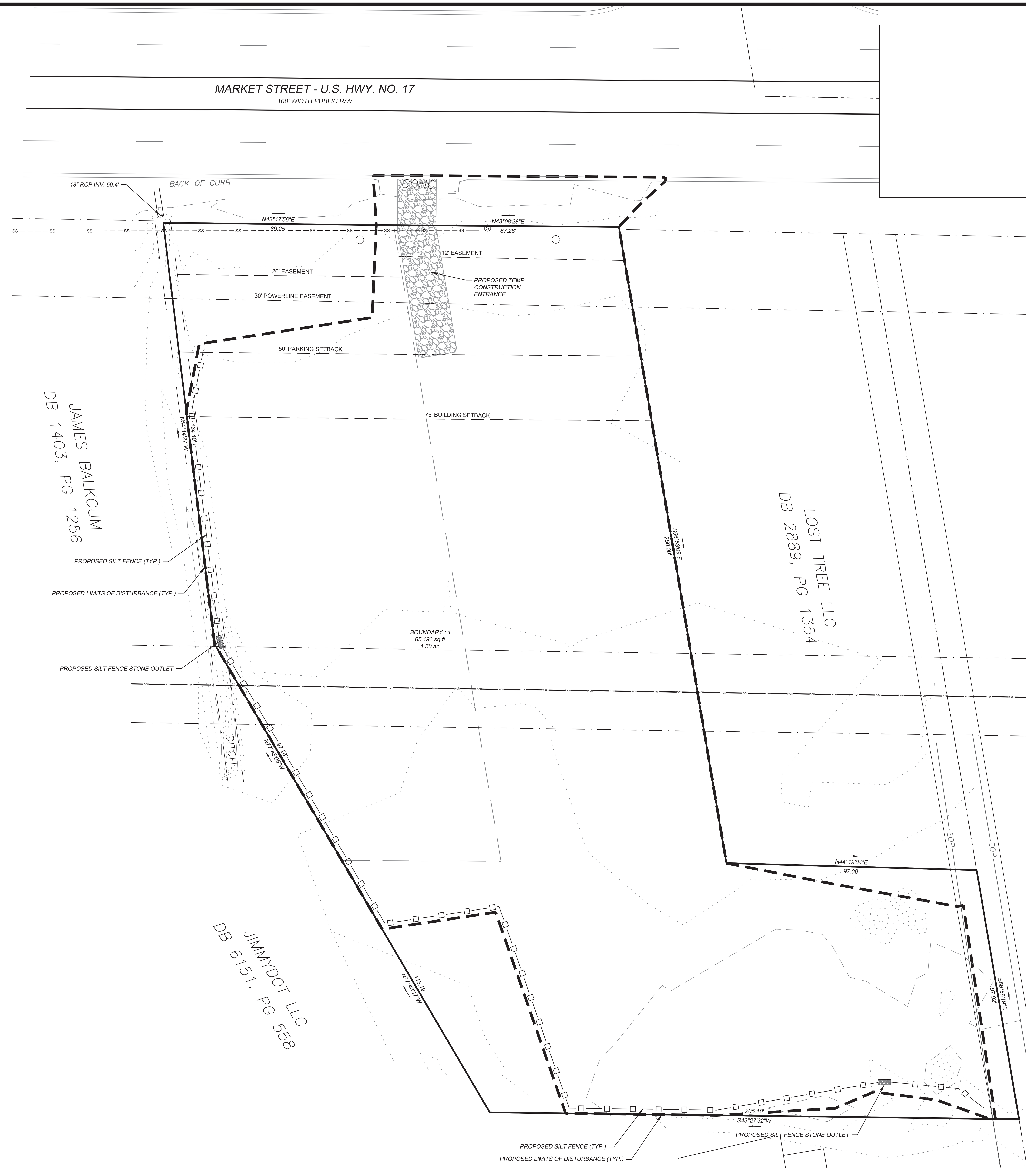

Disturbed Area: 1.33 AC.

EROSION CONTROL LEGEND

DESCRIPTION OF MEASURE (TIMEFRAME FOR STABILIZATION)	SYMBOL ON PLANS
TEMPORARY CONSTRUCTION ENTRANCE	▨
DENUDED LIMITS	— — —
TEMPORARY SILT FENCE	—□—□—□—
TEMPORARY DIVERSION DITCH (7-DAYS)	——TD——>——
INLET PROTECTION	⌑
RIP RAP APARON	▨
TEMPORARY CHECK DAM	◁
TEMPORARY SLOPE DRAIN	◖- - - -▨

NOTE: SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITHIN 7 DAYS.
SLOPES 3:1 OR FLATTER STABILIZATION SHALL BE PROVIDED WITHIN 14 DAYS.

GRAPHIC SCALE
0 20' 40'
(IN FEET)
1 inch = 20 ft.

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 045509
MATTHEW C KIRCHNER
09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

EROSION CONTROL PHASE 1 PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
JPC	JPC	JLR
SCALE	DATE	JOB NUMBER
AS SHOWN	09/23/2020	7057

Sheet
C-4.0

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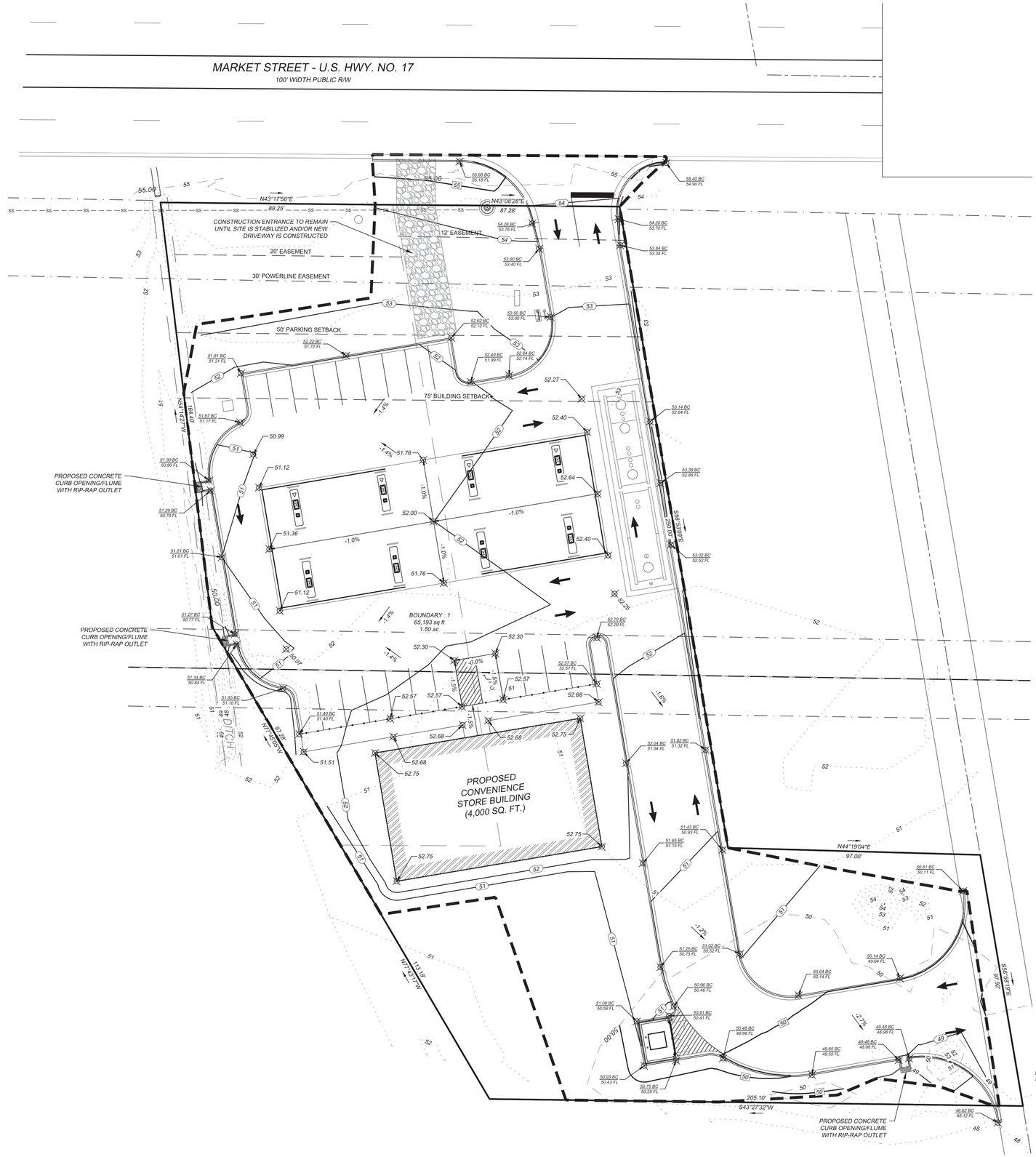

Disturbed Area: 1.33 AC.

EROSION CONTROL LEGEND

DESCRIPTION OF MEASURE (TIMEFRAME FOR STABILIZATION)	SYMBOL ON PLANS
TEMPORARY CONSTRUCTION ENTRANCE	
DENUDED LIMITS	
TEMPORARY SILT FENCE	
TEMPORARY DIVERSION DITCH (7-DAYS)	TD
INLET PROTECTION	
RIP RAP APARON	
TEMPORARY CHECK DAM	
TEMPORARY SLOPE DRAIN	SD

NOTE: SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITHIN 7 DAYS. SLOPES 3:1 OR FLATTER STABILIZATION SHALL BE PROVIDED WITHIN 14 DAYS.

GRAPHIC SCALE
0 20' 40'
(IN FEET)
1 inch = 20 ft.

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NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER
09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

GRADING, DRAINAGE, & EROSION CONTROL PHASE 2 PLAN

DESIGNED BY	DRAWN BY	CHECKED BY	JLR
JPC	JPC	JOB NUMBER	7057
SCALE	DATE		
AS SHOWN	09/23/2020		

Sheet
C-4.1

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UTILITY NOTES:

1.) THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS 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 ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT "NORTH CAROLINA ONE CALL" AT 1-800-632-4949 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 48 HOURS PRIOR TO ANY DIGGING.

2.) UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF EXISTING UTILITIES AND IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, EITHER PUBLIC OR PRIVATE, SHOWN HEREON OR NOT SHOWN HEREON. ANY REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY.

3.) THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY OWNERS.

4.) 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.

5.) MINIMUM COVER FOR CONDUITS SHALL BE 36 INCHES UNLESS OTHERWISE SHOWN OR NOTED ON THESE PLANS.

6.) ALL MANHOLES, VALVES AND MONUMENT FRAMES SHALL BE SET TO FINISH GRADE AFTER PAVING.

7.) THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA.

8.) OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING 5 FEET IN DEPTH. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.

9.) EQUIPMENT AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED PROVIDED PRIOR APPROVAL HAS BEEN OBTAINED FROM THE OWNER IN WRITING PRIOR TO ORDERING OR INSTALLATION. THE CONSTRUCTION SHALL WAIVE ANY CLAIM FOR ADDITIONAL COST RELATED TO THE SUBSTITUTION OF ALTERNATE EQUIPMENT.

10.) 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.

11.) ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CAPE FEAR PUBLIC UTILITIES AND CROSS CONNECTION CONTROL REGULATIONS AND STANDARDS.

12.) SITE UTILITY CONTRACTOR TO PROVIDE WATER, SANITARY SEWER, AND ROOF DRAIN LEADERS TO WITHIN 5 FEET OF THE BUILDING. CONTRACTOR SHALL COORDINATE SITE PLAN CONNECTIONS WITH THE ARCHITECTURAL BUILDING PLANS.

13.) RELATION OF WATER MAINS TO SEWERS:
A. LATERAL SEPARATION OF SEWER AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10 FOOT LATERAL SEPARATION, IN WHICH CASE:
1. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, OR
2. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER LINE WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND ABOVE THE TOP OF THE SEWER.
B. CROSSING A WATER MAIN OVER A SEWER MAIN:
WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER MAIN, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18 INCH VERTICAL SEPARATION - IN WHICH CASE BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
C. CROSSING A WATER MAIN UNDER A SEWER MAIN:
WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER MAIN BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
D. CROSSING A SEWER LINE OVER OR UNDER A STORM DRAIN:
WHENEVER IT IS NECESSARY FOR A SEWER LINE TO CROSS A STORM DRAIN PIPE, THE SEWER LINES SHALL BE LAID AT SUCH AN ELEVATION THAT THE OUTSIDE OF THE SEWER LINE NEAREST TO THE OUTSIDE OF THE STORM DRAIN PIPE SHALL MAINTAIN A 12 INCH CLEAR SEPARATION DISTANCES, OR ENCASED IN EITHER CONCRETE OR DUCTILE IRON PIPE FOR AT LEAST 5 FEET ON EITHER SIDE OF THE CROSSING.

14.) UNDERGROUND CONDUITS TO SIGNS, LOT LIGHTS, ETC., SHALL BE PLACED IN GRASS OR LANDSCAPE AREAS WHENEVER POSSIBLE. THE LOCATION OF THE CONDUIT AS SHOWN ON THESE PLANS SHALL BE CONSIDERED TO BE SCHEMATIC WITH ACTUAL LOCATION TO BE VERIFIED BY THE GENERAL CONTRACTOR, PVC SCH. 40 SLEEVES SHALL BE INSTALLED FOR ALL CONDUIT CROSSING UNDER PAVED AREAS.

15.) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AT EXISTING UTILITY. REFER TO THE BUILDING ELECTRICAL AND PLUMBING DRAWINGS FOR UTILITY SERVICE ENTRANCE LOCATIONS, SIZES AND CIRCUITING.

UTILITY KEY NOTES:

1 — PROPOSED 12" x 1-1/2" TAPPING SADDLE AND CORP STOP

2 — PROPOSED 1-1/2" DOMESTIC WATER METER, SEE DETAIL

3 — PROPOSED 1-1/2" DOMESTIC PVC WATER MAIN

4 — PROPOSED 1-1/2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLED ABOVE-GROUND WITHIN INSULATED ENCLOSURE. ENCLOSURE TO INCLUDE DRAIN PORTS FOR DISCHARGE WATER.

5 — PROPOSED 1-1/2" x 3/4" TAPPING SADDLE & CORP STOP (IRRIGATION LINE)

6 — PROPOSED 3/4" IRRIGATION WATER METER, SEE DETAIL

6A — PROPOSED 3/4" IRRIGATION PVC WATER MAIN

7 — PROPOSED 3/4" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLED ABOVE-GROUND WITHIN INSULATED ENCLOSURE. ENCLOSURE TO INCLUDE DRAIN PORTS FOR DISCHARGE WATER.

8 — PROPOSED 1-1/2" WATER TIE TO BUILDING (SEE PLUMBING PLANS FOR CONTINUATION)

9 — PROPOSED SANITARY SEWER CONNECTION TO EXISTING SEWER MANHOLE

10 — PROPOSED 6" PVC SANITARY SEWER LINE (1/8" PER 1' MINIMUM SLOPE)

11 — PROPOSED SANITARY SEWER CLEANOUT (75' O.C. MAX. & AT BENDS)

12 — SANITARY SEWER CONNECTION TO BUILDING

13 — PROPOSED LIGHT POLE LOCATION. POLE BASE TOP SHALL BE FORMED TO SHED WATER (SEE SITE LIGHTING PLAN BY CREE FOR DETAILS)

14 — PROPOSED TRANSFORMER PAD LOCATION (COORDINATE WITH POWER COMPANY PRIOR TO INSTALLATION - PAD BY GENERAL CONTRACTOR UNLESS OTHERWISE SPECIFIED BY POWER COMPANY)

15 — PROPOSED ELECTRICAL CONNECTION (COORDINATE WITH POWER COMPANY PRIOR TO INSTALLATION)

16 — PROPOSED ELECTRICAL SERVICE COORDINATE WITH PROVIDER (APPROX. 155 LF OF (2) - 6" CONDUITS FROM TRANSFORMER TO CT CABINET TO BE PROVIDED BY GENERAL CONTRACTOR)

17 — PROPOSED GAS SERVICE COORDINATE WITH PROVIDER

18 — PROPOSED INTERNET SERVICE COORDINATE WITH PROVIDER

LEGEND:

GAS — EXISTING GAS LINE
SS — EXISTING SANITARY SEWER LINE
W — EXISTING WATER LINE
P-OH — EXISTING OVERHEAD ELECTRIC
P-UG — EXISTING UNDERGROUND ELECTRIC
SD SD — EXISTING STORM DRAINAGE PIPE
— EXISTING CATCH BASIN
Ⓢ — EXISTING SANITARY SEWER MANHOLE
— EXISTING UTILITY POLE
— EXISTING WATER VALVE
— PROPOSED SANITARY SEWER LINE
● — PROPOSED SANITARY SEWER CLEANOUT
W — PROPOSED WATER SERVICE LINE
— PROPOSED WATER METER
⊠ — PROPOSED BACKFLOW PREVENTION ENCLOSURE
C — PROPOSED EMPTY CONDUIT
— PROPOSED LIGHT POLE
— PROPOSED STORM DRAINAGE PIPE
— PROPOSED CATCH BASIN

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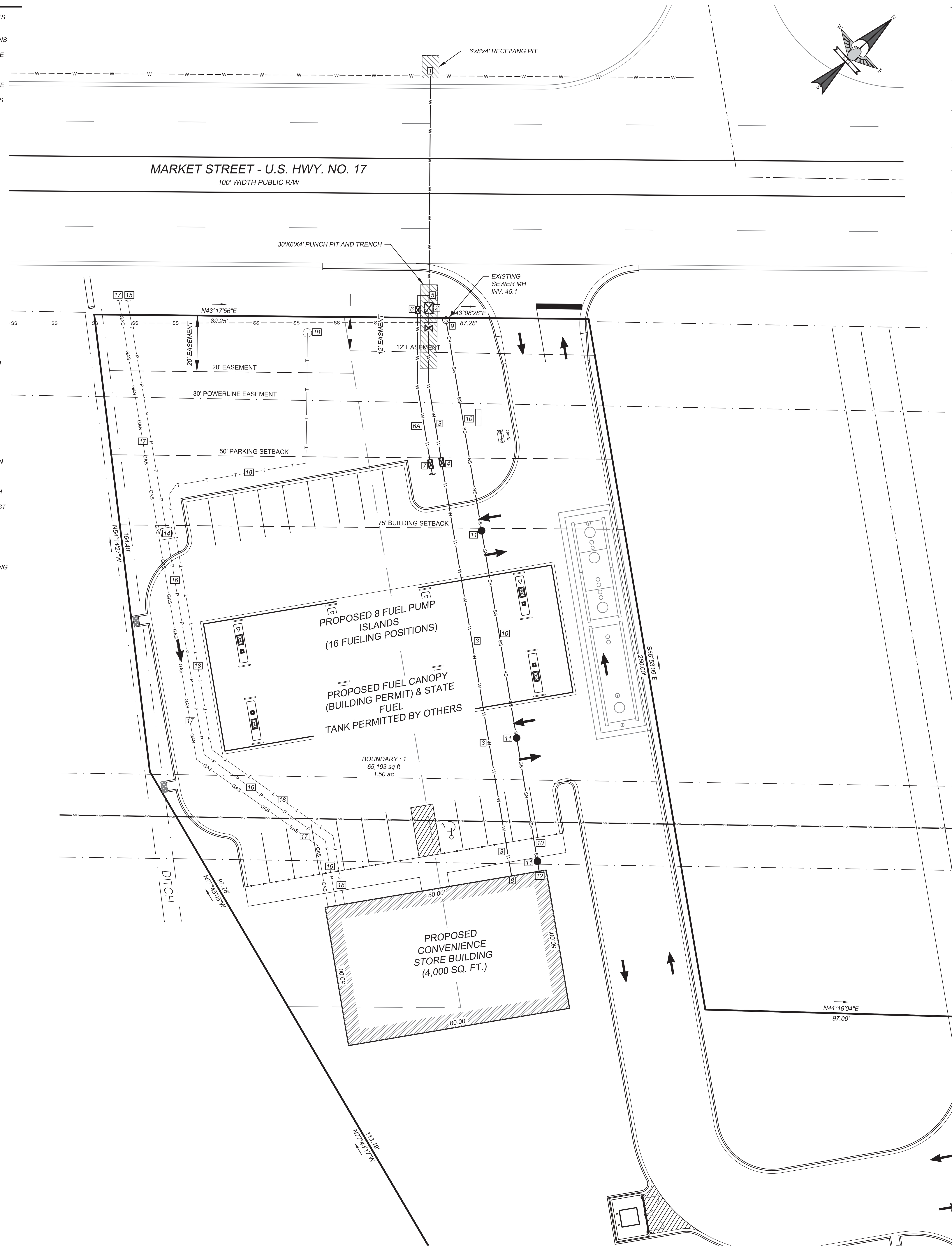

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

1. ALL PROPOSED ADDITIONS TO THE CAPE FEAR PUBLIC UTILITY ALL PROPOSED ADDITIONS TO THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) WATER DISTRIBUTION AND SANITARY SEWER COLLECTION SYSTEMS, AS SHOWN AND SPECIFIED HEREIN, SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO STATE RULES AND THE CFPUA'S MINIMUM TECHNICAL STANDARDS. THE CFPUA MINIMUM TECHNICAL STANDARDS ARE CONTAINED IN THE CURRENT DESIGN GUIDANCE MANUAL, MATERIAL SPECIFICATION MANUAL, TECHNICAL SPECIFICATIONS FOR CONSTRUCTION, AND STANDARD DRAWING DETAILS.
2. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
3. WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE.
4. ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL ALSO BE CONSTRUCTED OF DIP.
5. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
6. NO FLEXIBLE COUPLINGS SHALL BE USED. NO FLEXIBLE COUPLINGS SHALL BE USED.
7. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.
8. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 6 FEET FROM CLEANOUTS SHALL BE LOCATED A MINIMUM OF 6 FEET FROM ALL PROPERTY CORNERS.
9. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
10. UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
11. A MINIMUM OF 10' OF MAIN LINE, 5' UPSTREAM AND 5' A MINIMUM OF 10' OF MAIN LINE, 5' UPSTREAM AND 5' DOWNSTREAM SHALL BE REPLACED FOR NEW SEWER SERVICE CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.
12. A MINIMUM OF 20' OF MAIN LINE, 10' UPSTREAM AND 10' A MINIMUM OF 20' OF MAIN LINE, 10' UPSTREAM AND 10' DOWNSTREAM SHALL BE REPLACED FOR NEW CUT IN MANHOLES ON EXISTING CLAY GRAVITY SEWER MAINS
13. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN EDGE OF MANHOLE CORE HOLES AND MANHOLE BARREL JOINTS. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN EDGES OF CORE HOLES. CORING THE MANHOLE CONE IS NOT PERMITTED
14. WATER MAIN AND FORCE MAIN PIPE INSTALLED BY OPEN CUT WATER MAIN AND FORCE MAIN PIPE INSTALLED BY OPEN CUT SHALL BE BURIED AT A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF FIVE (5) FEET BELOW FINISHED GRADE. DEPTHS GREATER THAN FIVE (5) FEET MUST BE APPROVED BY CFPUA.
15. ALL MANHOLE MAIN LINE AND SERVICE PIPING TO BE ALL MANHOLE MAIN LINE AND SERVICE PIPING TO BE INSTALLED AT A MINIMUM OF CROWN TO CROWN OF THE LARGEST DIAMETER PIPE.

GRAPHIC SCALE
0 20' 40'
(IN FEET)
1 inch = 20 ft.

EAGLE ENGINEERING
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NORTH CAROLINA
PROFESSIONAL
SEAL
045509
GINEE
THEW C KIRCH
[illegible]
09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
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UTILITY PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
JPC	JPC	JLR
SCALE	DATE	JOB NUMBER
AS SHOWN	09/23/2020	7057

Sheet
C-5.0

DEFINITION
A TEMPORARY SEDIMENT CONTROL MEASURE CONSISTING OF FABRIC BURIED AT THE BOTTOM, STRETCHED, AND SUPPORTED BY POSTS.

PURPOSE
TO RETAIN SEDIMENT FROM SMALL DISTURBED AREAS BY REDUCING THE VELOCITY OF SHEET FLOWS TO ALLOW SEDIMENT DEPOSITION.

CONDITIONS WHERE PRACTICE APPLIES
- BELOW SMALL-DISTURBED AREAS THAT ARE LESS THAN 1/4 ACRE ER 100 FEET OF FENCE.
- WHERE RUNOFF CAN BE STORED BEHIND THE SEDIMENT FENCE WITHOUT DAMAGING THE FENCE OR THE SUBMERGED AREA BEHIND THE FENCE.
- DO NOT INSTALL SEDIMENT FENCES ACROSS STREAMS, DITCHES, OR WATERWAYS, OR OTHER AREAS OF CONCENTRATED FLOW.
- SEDIMENT FENCE SHOULD BE PLACED ALONG TOPOGRAPHIC ELEVATION CONTOURS, WHERE IT CAN INTERCEPT STORMWATER RUNOFF THAT IS IN DISPERSED SHEET FLOW. SEDIMENT FENCE SHOULD NOT BE USED ALONG BELOW GRADED SLOPES GREATER THAN 10 FEET IN HEIGHT.

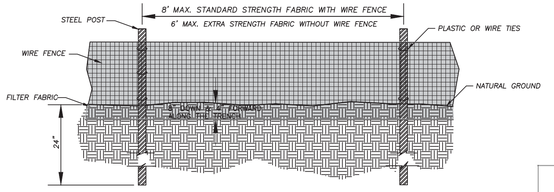
PLANNING CONSIDERATIONS
A SEDIMENT FENCE IS A SYSTEM TO RETAIN SEDIMENT ON THE CONSTRUCTION SITE. THE FENCE RETAINS SEDIMENT PRIMARILY BY RETARDING FLOW AND PROMOTING DEPOSITION. IN OPERATION, GENERALLY THE FENCE BECOMES CLOGGED WITH FINE PARTICLES, WHICH REDUCE THE FLOW RATE. THIS CAUSES A POND TO DEVELOP BEHIND THE FENCE. THE DESIGNER SHOULD ANTICIPATE PONDING AND PROVIDE SUFFICIENT STORAGE AREAS AND OVERFLOW OUTLETS TO PREVENT FLOWS FROM OVERTOPPING THE FENCE. SINCE SEDIMENT FENCES ARE NOT DESIGNED TO WITHSTAND HIGH WATER LEVELS, LOCATE THEM SO THAT ONLY SHALLOW POOLS CAN FORM. TIE THE ENDS OF A SEDIMENT FENCE INTO HIGHER GROUND TO PREVENT FLOW AROUND THE END OF THE FENCE BEFORE THE POOL REACHES DESIGN LEVEL. CURLING EACH END OF THE FENCE UPHILL IN A "J" PATTERN MAY BE APPROPRIATE TO PREVENT END FLOW. PROVIDE STABILIZED OUTLETS TO PROTECT THE FENCE SYSTEM AND RELEASE STORM FLOWS THAT EXCEED THE DESIGN STORM.

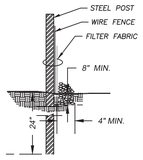
DEPOSITION OCCURS AS THE STORAGE POOL FORMS BEHIND THE FENCE. THE DESIGNER CAN DIRECT FLOWS TO SPECIFIED DEPOSITION AREAS THROUGH APPROPRIATE POSITIONING OF THE FENCE OR BY PROVIDING AN EXCAVATED AREA BEHIND THE FENCE. PLAN DEPOSITION AREAS AT ACCESSIBLE POINTS TO PROMOTE ROUTINE CLEANOUT AND MAINTENANCE. SHOW DEPOSITION AREAS IN THE EROSION AND SEDIMENTATION CONTROL PLAN. A SEDIMENT FENCE ACTS AS A DIVERSION IF PLACED SLIGHTLY OFF THE CONTOUR. A MAXIMUM SLOPE OF 2 PERCENT IS RECOMMENDED. THIS TECHNIQUE MAY BE USED TO CONTROL SHALLOW, UNIFORM FLOWS FROM SMALL DISTURBED AREAS AND TO DELIVER SEDIMENT-LADEN WATER TO DEPOSITION AREAS. THE ANCHORING OF THE TOE OF THE FENCE SHOULD BE REINFORCED WITH 12 INCHES OF NCDOT #5 OR #57 WASHED STONE WHEN FLOW WILL RUN PARALLEL TO THE TOE OF THE FENCE.

SEDIMENT FENCES SERVE NO FUNCTION ALONG RIDGES OR NEAR DRAINAGE DIVIDES WHERE THERE IS LITTLE MOVEMENT OF WATER. CONFINING OR DIVERTING RUNOFF UNNECESSARILY WITH A SEDIMENT FENCE MAY CREATE EROSION AND SEDIMENTATION PROBLEMS THAT WOULD NOT OTHERWISE OCCUR.

STRAW BARRIERS HAVE ONLY A 0-20% TRAPPING EFFICIENCY AND ARE INADEQUATE. STRAW BALES MAY NOT BE USED IN PLACE OF SEDIMENT FENCE. PREFABRICATED SEDIMENT FENCE WITH THE FABRIC ALREADY STAPLED TO THIN WOODEN POSTS DOES NOT MEET THE MINIMUM STANDARDS SPECIFIED LATER IN THIS SECTION.

ANCHORING OF SEDIMENT FENCE IS CRITICAL. THE TOE OF THE FABRIC MUST BE ANCHORED IN A TRENCH BACKFILLED WITH COMPACTED EARTH. MECHANICAL COMPACTION MUST BE PROVIDED IN ORDER FOR THE FENCE TO EFFECTIVELY POND RUNOFF.





SEDIMENT FENCE
(NCDEQ 6.62)
N.T.S.

CONSTRUCTION SPECIFICATIONS

MATERIALS
1. USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D6461, WHICH IS SHOWN IN PART IN TABLE 6.62b.

SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 - 120° F.

2. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LBS/LINEAR FT. STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.

3. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

CONSTRUCTON
1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE THE GROUND SURFACE. (HIGHT FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.)
3. CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTED THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN TEH WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPOR TFENCE. SECURE FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE A MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE BY 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER (FIG. 6.62a)
8. PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
10. DO NOT ATTACHE FILTER FABRIC TO EXISTING TREES.

INSTEAD OF EXCAVATING A TRENCH, PLACING FABRIC AND THEN BACKFILLING TRENCH, SEDIMENT FENCE MAY BE INSTALLED USING SPECIALLY DESIGNED EQUIPMENT THAT INSERTS THE FABRIC INTO A CUT SLICED IN THE GROUND WITH A DISC (FIG. 6.62b)

INSTALLATION SPECIFICATIONS
1. THE BASE OF BOTH END POSTS SHOULD BE AT LEAST ONE FOOT HIGHER THAN THE MIDDLE OF THE FENCE. CHECK WITH A LEVEL IF NECESSARY.
2. INSTALL POSTS 4 FEET APART IN CRITICAL AREAS AND 6 FEET APART ON STANDARD APPLICATIONS.
3. INSTALL POSTS 2 FEET DEEP ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT THE FABRIC FROM UPSTREAM WATER PRESSURE.
4. INSTALL POSTS WITH THE NIPPLES FACING AWAY FROM THE SILT FABRIC.
5. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8 INCHES OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1 INCH VERTICALLY APART. ALSO, EACH TIE SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
6. WRAP APPROXIMATELY 6 INCHES OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. NO MORE THAN 24 INCHES OF A 36 INCH FABRIC IS ALLOWED ABOVE GROUND LEVEL.
8. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION
9. COMPACTION IS VITALLY IMPORTANT FOR EFFECTIVE RESULTS. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POINTS PER SQUARE INCH. COMPACT THE UPSTREAM SIDE FIRST, AND THEN EACH SIDE TWICE FOR A TOTAL OF 4 TRIPS.

MAINTENANCE
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER 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 MATERIAL AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

Table 10.5 Stabilization Timeframes

Site Area Description	Stabilization	Timeframe Exceptions
Perimeter dikes, swales, ditches, and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

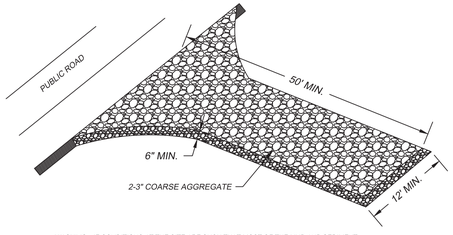
(amended 7/17/12, TA-2012-01)

DEFINITION
A GRAVELED AREA OR PAD LOCATED AT POINTS WHERE VEHICLES ENTER AND LEAVE A CONSTRUCTION SITE.

PURPOSE
TO PROVIDE A BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PUBLIC ROADS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.

CONDITIONS WHERE PRACTICE APPLIES
WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED OFF-SITE AREA. CONSTRUCTION PLANS SHOULD LIMIT TRAFFIC TO PROPERLY CONSTRUCTED ENTRANCES.

DESIGN CRITERIA
AGGREGATE SIZE—USE 2-3 INCH WASHED STONE.
DIMENSIONS OF GRAVEL PAD—
THICKNESS: 6 INCHES MINIMUM
WIDTH: 12-FEET MINIMUM OR FULL WIDTH AT ALL POINTS OF THE VEHICULAR ENTRANCE AND EXIT AREA, WHICHEVER IS GREATER
LENGTH: 50-FEET MINIMUM
LOCATION—LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT FROM LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES (FIGURE 6.06A). AVOID STEEP GRADES, AND ENTRANCES AT CURVES IN PUBLIC ROADS.

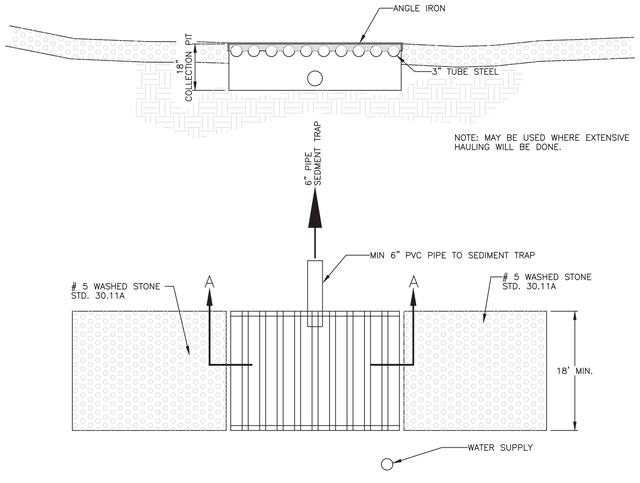


WASHING—IF CONDITIONS AT THE SITE ARE SUCH THAT MOST OF THE MUD AND SEDIMENT ARE NOT REMOVED BY VEHICLES TRAVELING OVER THE GRAVEL, THE TIRES SHOULD BE WASHED. WASHING SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO A SEDIMENT TRAP OR OTHER SUITABLE DISPOSAL AREA. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.

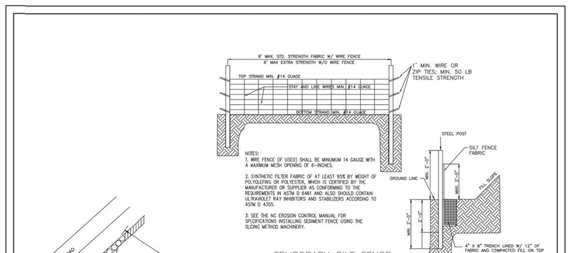
CONSTRUCTION SPECIFICATIONS
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE
MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

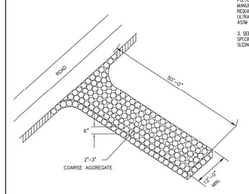
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT
(NCDEQ 6.06)
N.T.S.



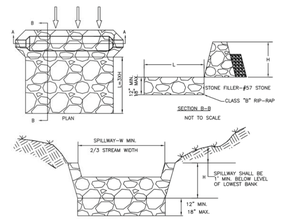
CONSTRUCTION ENTRANCE TRUCK TIRE WASH
(IF REQUIRED BY TOWN ENGINEER)



TEMPORARY SILT FENCE



TEMPORARY CONSTRUCTION ENTRANCE



ROCK CHECK DAM

LAND DISTURBING ACTIVITIES MUST BE MANAGED TO AVOID SEDIMENT RUN-OFF AND POLLUTION FROM CONSTRUCTION SITES.

WHERE PERMITTED LOCALLY BY NEW HANOVER COUNTY, AN EROSION AND SEDIMENT CONTROL (E&SC) PLAN WILL CONTAIN DETAILS AND GUIDANCE. E&SC PLANS ARE PERFORMANCE BASED AND OFTEN REQUIRE ADJUSTMENTS OR REPAIRS.

AS PERMITTED BY NCDENR, DIVISIONS OF WATER QUALITY AND LAND RESOURCES, A STORMWATER PERMIT WILL REQUIRE SELF-MONITORING REPORTS (WEEKLY, >1" RAIN EVENT) OR SELF-INSPECTION REPORTS AFTER EACH CONSTRUCTION PHASE, BASED ON ELEMENTS OF THE E&SC PLAN.

DATE:	SEPTEMBER, 2012
DRAWN BY	JSR
CHECKED BY	DEC, P.E.
SCALE	NOT TO SCALE

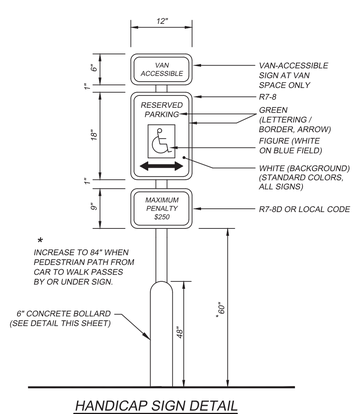
STANDARD DETAIL

GUIDELINES FOR SEDIMENT CONTROL BMPs

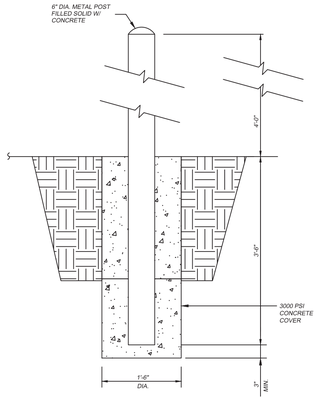
SHEET 1 OF 3

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

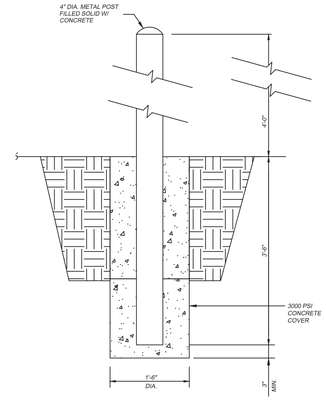
SD 3-104



HANDICAP SIGN DETAIL



6" BOLLARD DETAIL



4" BOLLARD DETAIL

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHER
10/23/20

NO.	DATE	BY	ISSUE

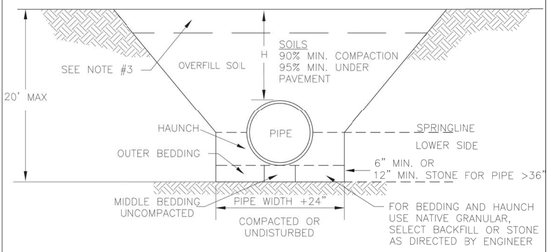
BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC
KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

DETAILS

DESIGNED BY	JPC	CHECKED BY	JLR
DRAWN BY	JPC	JOB NUMBER	7057
SCALE	AS SHOWN	DATE	09/23/2020

Sheet
C-6.0

X:\Land Projects\BJ\7057 - C Store - Market St - Wilmington\DWG\Civil\7057 - DETAILS.MAS.dwg



NOTES:

1. CONTRACTOR SHALL ENSURE BOTTOM OF TRENCH IS SUITABLE FOR PIPE INSTALLATION AND DOES NOT REQUIRE FOUNDATION CONDITIONING STONE.
2. CONTRACTOR TO INSTALL BEDDING AND PIPE BEFORE INSTALLING HAUNCH AND THEN OVERFILL. SOILS SHALL BE INSTALLED IN 6"–8" LIFTS AND COMPACTED TO MIN. % DENSITY AS DETERMINED BY THE STANDARD PROCTOR ASTM D–698–A METHOD.
3. WHERE IN PAVEMENT, CONTRACTOR SHALL ADHERE TO CITY STREET CUT POLICY AND SD 1–04 OR SD 1–05 FOR ROAD AND PAVEMENT REBUILD.
4. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMP (I.E. JUMPING JACK). HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
5. THIS DETAIL IS REPRESENTATIVE AND PIPE TRENCH DESIGN IS SUBJECT TO SPECIFIC SOIL CATEGORY (I, II, III), AND INSTALLATION TYPE (1, 2, 3, 4), AS DIRECTED BY THE ENGINEER AND SITE CONDITIONS.

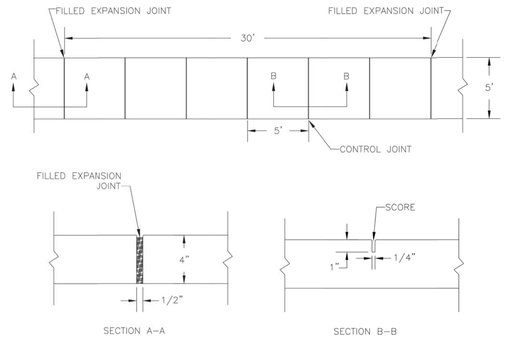
DATE:	MAY, 2013
DRAWN:	JSR
CHECKED:	BDR, P.E.
SCALE:	NOT TO SCALE

STANDARD DETAIL

PIPE TRENCH TYPICAL

CITY OF WILMINGTON ENGINEERING OFFICE
212 OPERATIONS CENTER DRIVE
WILMINGTON N.C. 28412
(910) 341–7807

SD 1-07



NOTES:

1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
2. SANITARY SEWER CLEAN–OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" – 3,000 PSI.
5. MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS
7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12"
8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1
9. MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

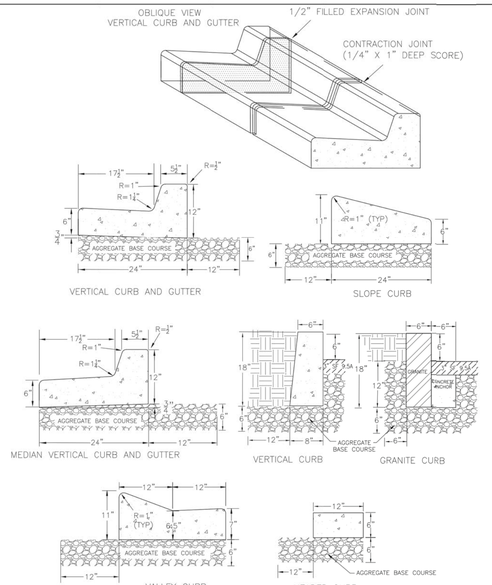
DATE:	OCTOBER, 2010
DRAWN:	PB/JSR
CHECKED:	DEC
SCALE	NOT TO SCALE

STANDARD DETAIL

SIDEWALK

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON N.C. 28402
(910) 341–7807

SD 3-10



NOTES:
1. EXPANSION JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS
2. 50' MAX EXPANSION JOINT SPACING, 10' MAX CONTRACTION JOINT SPACING
3. MINIMUM INSTALLATION LENGTH IS 5 FT.
4. CONCRETE TO BE 3000 PSI MIN
5. VERTICAL CURB AND GUTTER BASE CAN BE SLOPED 3/4" OR USE A FLAT BASE

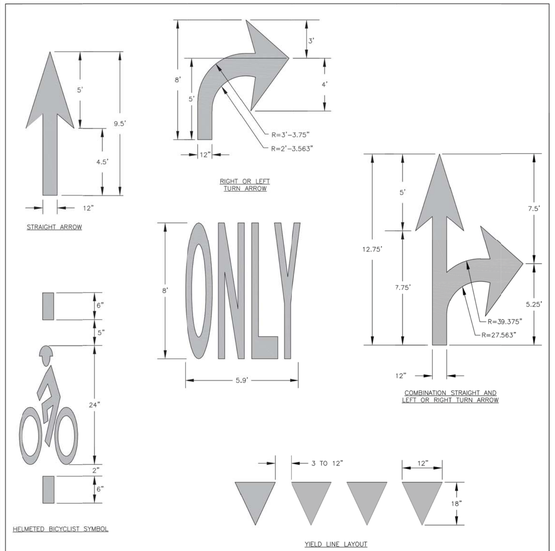
DATE:	AUGUST, 2011
DRAWN:	PB/JSR
CHECKED:	DEC
SCALE	NOT TO SCALE

STANDARD DETAIL

CURBING

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON N.C. 28402
(910) 341–7807

SD 3-11



GENERAL NOTES

1–PAVEMENT MARKINGS, SYMBOLS AND DIMENSIONS SHALL BE DESIGNED PER MUTCD WITH APPROVAL FROM CITY TRAFFIC ENGINEERING, AND INSTALLED IN ACCORDANCE WITH NCDOT DIVISION 12 SPECIFICATIONS. SEE SD 11–01.

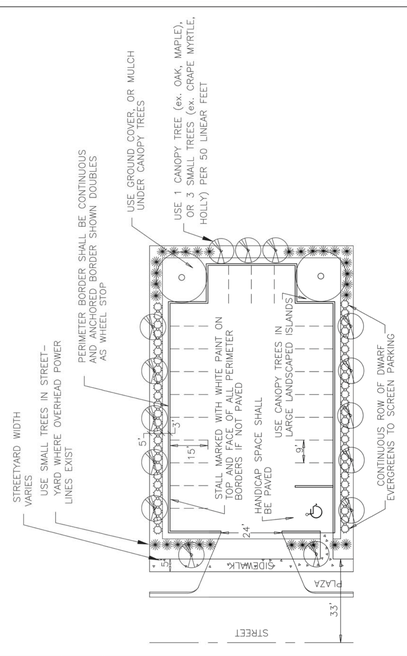
DATE:	OCTOBER, 2012
DRAWN BY	JSR
CHECKED BY	BDR, P.E.
SCALE	NOT TO SCALE

STANDARD DETAIL

GUIDELINES FOR PAVEMENT MARKINGS AND SYMBOLS

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341–7807

SD 11-03



DATE:	2001
DRAWN BY	JSR/CMR
CHECKED BY	B.P., P.E.
SCALE	NOT TO SCALE

STANDARD DETAIL

PARKING FACILITY UNDER 25 STALLS PAVED OR UNPAVED

SHEET 1 OF 2

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341–7807

SD 15-11

1. Variances on stall widths, angle and other dimensions will be allowed only upon approval of the Traffic Engineer.
2. Wheel stops shall be required three (3) feet from the end of parking stall when using eighteen (18) feet deep stalls.
3. Curbing, crossties, utility poles, etc., can be used as wheel stops. (Must be anchored down)
4. All medians shall be a minimum of six (6) feet wide.
5. Parking bays which terminate at a circulation way shall provide for a minimum turning radius of twenty–five (25) feet, as measured from the edge of the travel portion.
6. All parking stall markings and lane arrows shall be white.
7. All other pavement markings, signs or other traffic control devices shall conform to the latest edition and/or interpretation of the Manual on Uniform Traffic Control Devices (MUTCD).
8. No obstructions will be allowed adjacent to a parking stall which would prevent safe ingress and egress from a parked vehicle.
9. Parking in fire lanes and in non–residential driveways shall be prevented by standard signs and as needed by portable barricades.

DATE:	2001
DRAWN BY	JSR/CMR
CHECKED BY	B.P., P.E.
SCALE	NOT TO SCALE

STANDARD DETAIL

PARKING FACILITY DESIGN NOTES

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341–7807

SD 15-13

1. No plantings over thirty (30) inches in height allowed in vision clearance.
2. Protection from vehicular traffic provided around all landscaping with a minimum height of six (6) inches.
3. Owner is responsible for maintenance to ensure plant material lives and prospers.
4. Planting plans shall be approved by Landscape Designer prior to installation.
5. Landscaping shall be required at the ends of all parking rows.
6. A low buffer shall be required where parking is within fifty (50) feet of the Right–of–Way.
7. Landscaped islands shall be a minimun width of twelve (12) feet (back of curb to back of curb) and a minimum of two hundred and sixteen (216) square feet.
8. A minimum of fifteen (15) trees 2 inches or greater in diameter as measured 6 inches above ground per disturbed acre.
9. For recommended Plant List see "Landscape" T–10.4.

DATE:	APRIL, 2008
DRAWN BY	JSR
CHECKED BY	B.P., P.E.
SCALE	NOT TO SCALE

STANDARD DETAIL

LANDSCAPE NOTES

CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341–7807

SD 15-14

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045509 MATTHEW C KIRCHNER 09/23/20

NO.	ISSUE	BY	DATE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC
KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

DETAILS

DESIGNED BY	JPC
DRAWN BY	JPC
CHECKED BY	JLR
SCALE	AS SHOWN
DATE	09/23/2020
JOB NUMBER	7057

Sheet
C–6.1

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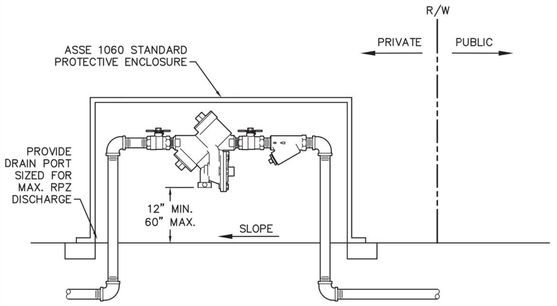
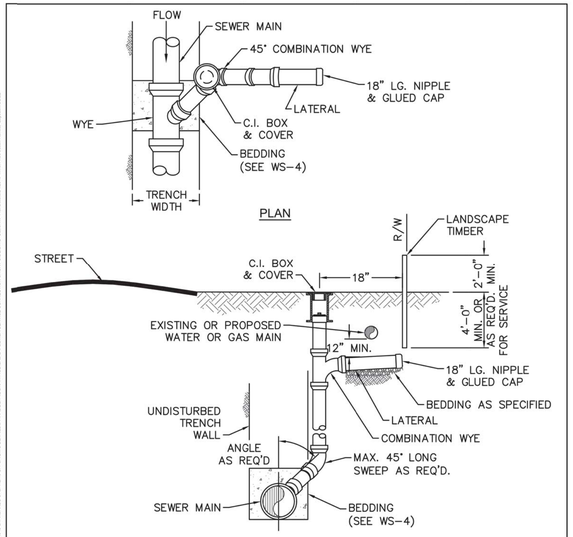


NOTES:
1. MUST BE MIN. 36" AWAY FROM ANY ELECTRICAL PANEL.
2. VALVE REQUIRED DOWNSTREAM OF BACKFLOW ASSEMBLY.
3. VERTICAL INSTALLATION SHALL BE DESIGNED AND SUBMITTED TO CFPUA EMD FOR APPROVAL.
4. LOCATE AS NEAR TO RIGHT-OF-WAY AS POSSIBLE.
5. MUST COMPLETE CFPUA'S BACKFLOW INSTALLATION FORM. CONTACT COMMUNITY COMPLIANCE AT 910-332-6558 OR COMMUNITY.COMPLIANCE@CFPUA.ORG.
6. ONLY IN-LINE TESTABLE ASSEMBLIES APPROVED BY THE USC FOUNDATION FOR CROSS CONNECTION CONTROL OR ASSE SHALL BE ACCEPTED.

OUTDOOR HORIZONTAL INSTALLATION

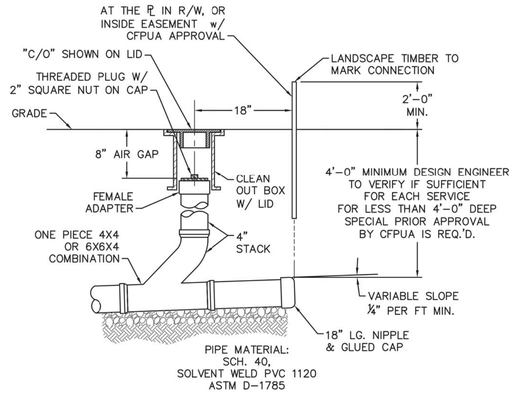
DETAIL: REDUCED PRESSURE PRINCIPLE ASSEMBLY		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: EM-1
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



NOTES:
1. SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
2. ALL SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF DIP, WITH PROTECTIVE LINING.
3. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
4. FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO MAIN.
5. A MINIMUM PIPING LENGTH OF 1' 6" SHALL BE USED BETWEEN FITTINGS.

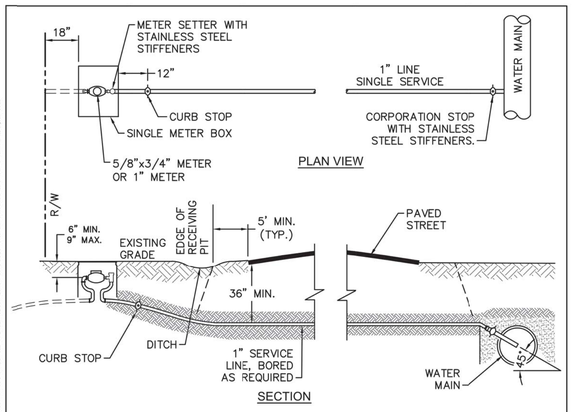
SECTION

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



NOTES:
1. FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO SYSTEM AND AT THE PROPERTY LINE, WITH REQUIRED EASEMENT.
2. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.

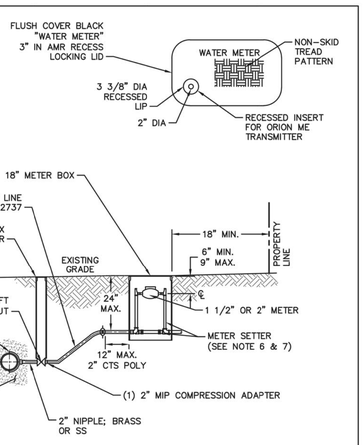
DETAIL: SEWER SERVICE CONNECTION - TYPICAL CLEAN-OUT		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: S-13
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



SECTION

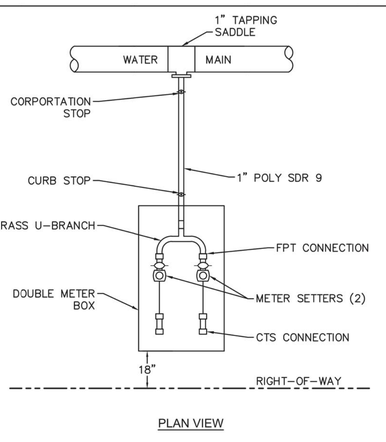
NOTES:
1. NO JOINT SHALL BE INSTALLED BETWEEN THE MAIN SERVICE TAP AND THE METER STOP. ALL SERVICES SHALL BE INSTALLED PERPENDICULAR TO MAIN.
2. SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY.
3. METER BOXES SUBJECT TO TRAFFIC LOADS SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO H20 LOAD RATING STANDARDS
4. WATER SERVICE LINE SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" WITHIN RIGHT-OF-WAY LINE.
5. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
6. SERVICE PIPING AND METER SETTER TO BE CENTERED IN THE METER BOX.

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



NOTES:
1. WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE THE RIGHT-OF-WAY LINE.
2. SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY.
3. METER BOXES SUSCEPTIBLE TO TRAFFIC SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO H20 LOAD RATING STANDARDS.
4. NON-TRAFFIC METER BOXES SHALL BE PER CFPUA STANDARD MATERIAL.
5. 3" CLEAN FILL REQUIRED ALL AROUND 2" POLY SERVICE LINE.
6. 1 1/2" METER - NL METER SETTER SHALL BE PER CFPUA STANDARD MATERIAL.
7. 2" METER - NL METER SETTER SHALL BE PER CFPUA STANDARD MATERIAL.
8. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNERS.
9. SERVICE PIPING AND METER SETTER TO BE CENTERED IN THE METER BOX.

DETAIL: COMMERCIAL WATER SERVICE - 1 1/2 OR 2-INCH METERS		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: W-3
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



PLAN VIEW

NOTES:
1. ALL WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE THE RIGHT OF WAY.
2. WATER SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY.
3. METER BOXES SUBJECT TO TRAFFIC SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO H20 LOAD RATING STANDARDS.
4. 3" CLEAN FILL REQUIRED ALL AROUND 1" POLY SERVICE LINE.
5. JOINT RESTRAINT SYSTEMS SHALL BE WEDGE ACTION STYLE FOR DI OR C-900 PVC PIPE.
6. METER BOXES SHALL BE LOCATED MINIMUM 5-FEET FROM THE PROPERTY CORNER.
7. ASSEMBLY TO BE CENTERED IN THE METER BOX.

DETAIL: DOUBLE WATER SERVICE - DOMESTIC AND IRRIGATION SPLIT		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: W-5
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER
3/23/20

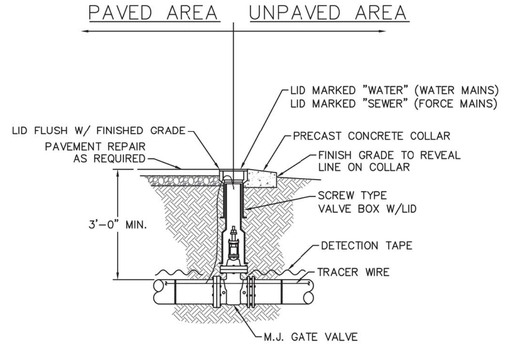
NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC
KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

DETAILS

DESIGNED BY: JPC	DRAWN BY: JPC	CHECKED BY: JLR
SCALE: AS SHOWN	DATE: 09/23/2020	JOB NUMBER: 7057

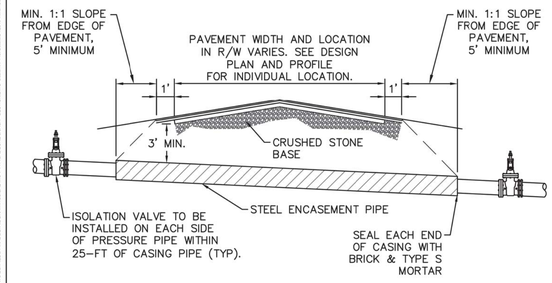
Sheet
C-6.2



NOTES:

1. TRACER WIRE SHALL PENETRATE VALVE BOX THROUGH DRILLED HOLE APPROX. 6" BELOW GRADE WITH MINIMUM 2-FEET EXTRA LENGTH COILED IN THE VALVE BOX. SEE WS-6.

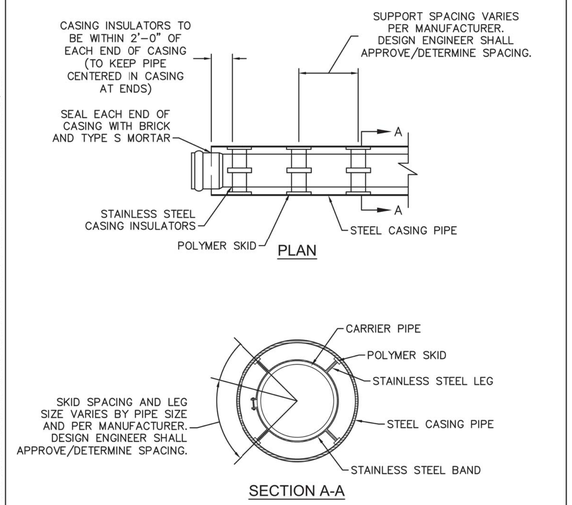
DETAIL: VALVE DETAIL		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: WS-5
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



NOTES:

1. CASING WILL BE INSTALLED AT LINE AND GRADE SHOWN ON INDIVIDUAL PROFILE FOR EACH CROSSING. BORING/JACKING TO LINE AND GRADE IS REQUIRED.
2. TRACER WIRE SHALL BE TAPED AT 12' INTERVALS THROUGHOUT THE CASING.
3. PRESSURE AND NON-PRESSURE PIPING THROUGH CASING SHALL BE RESTRAINED JOINT.
4. SEE DETAIL WS-8 FOR PIPE CASING SUPPORT DETAILS.

DETAIL: TYPICAL BORING & JACKING DETAIL		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: WS-7
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



NOTES:

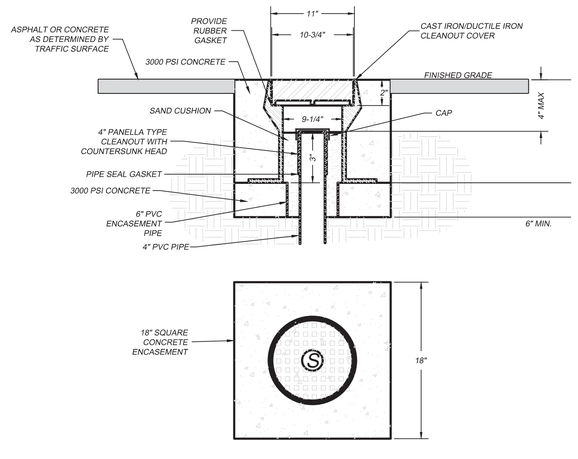
1. PIPE SUPPORTS TO BE PLACED TO PROVIDE PROPER SPACING, ALIGNMENT, AND GRADE AS SPECIFIED. OIL, GREASE, OR PETROLEUM PRODUCT MAY NOT BE USED AS LUBRICANT.

DETAIL: PIPE CASING SUPPORT DETAIL		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: WS-8
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

1. ALL PROPOSED ADDITIONS TO THE CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) WATER DISTRIBUTION AND SANITARY SEWER COLLECTION SYSTEMS, AS SHOWN AND SPECIFIED HEREIN, SHALL BE DESIGNED AND CONSTRUCTED TO CONFORM TO STATE RULES AND THE CFPUA'S MINIMUM TECHNICAL STANDARDS. THE CFPUA MINIMUM TECHNICAL STANDARDS ARE CONTAINED IN THE CURRENT DESIGN GUIDANCE MANUAL, MATERIAL SPECIFICATION MANUAL, TECHNICAL SPECIFICATIONS FOR CONSTRUCTION, AND STANDARD DRAWING DETAILS.
2. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
3. WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE.
4. ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL ALSO BE CONSTRUCTED OF DIP.
5. MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
6. NO FLEXIBLE COUPLINGS SHALL BE USED.
7. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.
8. CLEANOUTS SHALL BE LOCATED A MINIMUM OF 6 FEET FROM ALL PROPERTY CORNERS.
9. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
10. UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
11. A MINIMUM OF 10' OF MAIN LINE, 5' UPSTREAM AND 5' DOWNSTREAM SHALL BE REPLACED FOR NEW SEWER SERVICE CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.
12. A MINIMUM OF 20' OF MAIN LINE, 10' UPSTREAM AND 10' DOWNSTREAM SHALL BE REPLACED FOR NEW CUT IN MANHOLES ON EXISTING CLAY GRAVITY SEWER MAINS
13. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN EDGE OF MANHOLE CORE HOLES AND MANHOLE BARREL JOINTS. PROVIDE A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN EDGES OF CORE HOLES. CORING THE MANHOLE CONE IS NOT PERMITTED
14. WATER MAIN AND FORCE MAIN PIPE INSTALLED BY OPEN CUT SHALL BE BURIED AT A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF FIVE (5) FEET BELOW FINISHED GRADE. DEPTHS GREATER THAN FIVE (5) FEET MUST BE APPROVED BY CFPUA.
15. ALL MANHOLE MAIN LINE AND SERVICE PIPING TO BE INSTALLED AT A MINIMUM OF CROWN TO CROWN OF THE LARGEST DIAMETER PIPE.

DETAIL: STANDARD NOTES (REQUIRED ON ALL PLAN AND PROFILE SHEETS)		CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 Stewardship. Sustainability. Service.	DETAIL NO: WS-14
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/20		SHEET NO: -
CFPUA REV. No: 2			



CLEANOUT COVER ASSEMBLY TRAFFIC AREA

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Sheet
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CONSTRUCTION NOTES:

I. MISCELLANEOUS
A. CURRENT EDITIONS OF THE NORTH CAROLINA DOT ROADWAY STANDARD DRAWINGS AND SPECIFICATIONS MANUAL SHALL BE CONSIDERED PART OF THESE PLANS.
B. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES, THE ENGINEER, AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SHALL SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
C. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.
D. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
E. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
F. THE WATER AND SANITARY SEWER FACILITIES ARE SUBJECT TO REVIEW BY CAPE FEAR PUBLIC UTILITIES AND APPROVAL. STORM DRAINAGE FACILITIES ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE NEW HANOVER COUNTY AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE REQUIRED PERMITS TO PERFORM WORK IN THE PUBLIC RIGHT-OF-WAY.
G. GRADING OFF SITE WILL REQUIRE A LETTER OF PERMISSION FROM THE OWNER PRIOR TO ANY LAND DISTURBING ACTIVITIES.

II. SAFETY
A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
B. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY NCDOT AND EAGLE ENGINEERING PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.
C. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
D. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
E. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
F. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (U.S. DOT) SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
G. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
H. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
I. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES.
J. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.
K. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

III. SITE PLAN AND COORDINATE GEOMETRY
A. PRELIMINARY ARCHITECTURAL BUILDING, AND PLUMBING PLANS HAVE NOT BEEN RECEIVED BY EEI.
B. SITE PLAN PREPARED BY EEI.
C. STRUCTURAL PLANS HAVE NOT BEEN RECEIVED BY EEI.
D. ELECTRICAL, MECHANICAL, AND FIRE SAFETY PLANS HAVE NOT BEEN RECEIVED BY EEI.
E. BOUNDARY SURVEY & TOPOGRAPHIC SURVEY PREPARED BY F.W. JONES SURVEYING CO..
F. ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.
G. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.
H. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM.
I. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
J. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT INFORMATION SHALL BE PRODUCED ON AUTOCAD VERSION 12, OR LATER, AND UPON COMPLETION, THE CONTRACTOR SHALL FURNISH EAGLE ENGINEERING WITH DISKS OF ALL DRAWINGS, ONE SET OF REPRODUCIBLE MYLARS, AND FIVE SETS OF BLUEPRINTS. THE "AS-BUILT" INFORMATION SHALL CLEARLY AND ACCURATELY REPRESENT ALL CONSTRUCTED ITEMS INCLUDING, BUT NOT LIMITED TO:
1. ELEVATIONS OF ALL STORM SEWER AND SANITARY SEWER STRUCTURE BOTTOMS, TOPS, AND INVERTS.
2. FIELD MEASURED LENGTHS OF PIPES FOR ALL INSTALLED UTILITIES, CONDUITS, SLEEVES, ETC.
3. LOCATIONS OF ALL STRUCTURES, PIPES, CONDUITS, SLEEVES, ETC.
4. CALCULATED SLOPE OF ALL SANITARY SEWER AND STORM SEWER LINES.
5. HORIZONTAL AND VERTICAL CONTROL OF ALL WATER MAIN FITTINGS AND APPURTENANCES, AND HORIZONTAL AND VERTICAL CONTROL ON THE TOP OF WATER MAINS AT ALL CROSSINGS, AND A MINIMUM OF EVERY 200 LINEAR FEET OF PIPE.
6. HORIZONTAL AND VERTICAL CONTROL OF ALL TOP OF BANKS, TOE OF SLOPES, ALL GRADE BREAKS, BUILDINGS, PONDS, ETC.

K. ALL DIMENSIONS SHOWN ON PLAN ARE TO FACE OF BUILDING, EDGE OF PAVEMENT, CENTERLINE OF STRUCTURE, OR END OF PIPE UNLESS NOTED OTHERWISE.

IV. CLEARING/DEMOLITION
A. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
B. THE TOP 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER OR THE OWNER'S ENGINEER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.
C. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS OR AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER.

V. PAVING AND GRADING
A. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
C. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.
D. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
E. CONTRACTOR SHALL PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (SILT FENCE OR OTHER MEASURES) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS.
F. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
G. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS AS REQUIRED BY ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.
H. ENGINEERED FILL MATERIAL SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. SHALL BE NON-EXPANSIVE MATERIALS
I. IMPORTED SOILS FOR USE AS ENGINEERED FILL AND SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS.
J. AGGREGATE BASE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS.

SEIVE SIZE (PER ASTM D422)	% PASSING BY WEIGHT
1 INCH	100
3/4"	90 - 100
NO. 8	35 - 55
NO. 200	0 - 8

K. ALL AREAS TO RECEIVE FILL, AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. STRIPPED SOILS SHALL NOT BE USED IN ENGINEERED FILL, BUT MAY BE USED IN LANDSCAPE AREAS. ENGINEERED FILL MATERIAL SHALL BE COMPACTED TO AT LEAST THE FOLLOWING

* PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D-698 (STANDARD PROCTOR):

ENGINEERED FILL MATERIAL	MINIMUM % COMPACTION	MOISTURE CONTENT RANGE
NATIVE SOIL	92%	OPTIMUM TO OPTIMUM PLUS 3%
ENGINEERED FILL UNDER STRUCTURES AND BEHIND RETAINING WALLS	98%	OPTIMUM TO OPTIMUM PLUS 3%
ENGINEERED FILL UNDER PAVEMENT AREAS	100%	OPTIMUM PLUS OR MINUS 2%
FILL IN LANDSCAPE AREAS	92%	2 TO 5% ABOVE OPTIMUM

AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVED AREAS SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D-698 MODIFIED OR AASHTO EQUIVALENT.

MATERIAL	COMPACTION	RANGE
AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVEMENT AREAS	100%	OPTIMUM PLUS OR MINUS 2%

L. IF SUB GRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL THE SOILS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE ADJUSTED TO PREVENT PUMPING.
M. EXPOSURE TO THE ENVIRONMENT MAY REDUCE THE STRENGTH OF SOILS IN FOOTING, FLOOR SLAB, AND PAVED AREAS. IF THIS OCCURS, THE SOFTENED SOILS SHALL BE REMOVED AND REWORKED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. IF RAINFALL IS EXPECTED AT A TIME WHEN BEARING SOILS IN FOOTING AREAS ARE EXPOSED, A 2 TO 4 INCH THICK LAYER OF LEAN CONCRETE MAY BE PLACED IN SUCH AREAS. THE SITE SHALL BE GRADED TO TRANSPORT SURFACE RUNOFF AWAY FROM THE STRUCTURES AND PAVED AREAS. WATER SHALL NOT BE ALLOWED TO ACCUMULATE (POND) AROUND BUILDING PERIMETERS OR ON PAVED AREAS.
N. GENERAL ROCK EXCAVATION: ROCK SHALL BE DEFINED AS ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A SINGLE - TOOTH RIPPER DRAWN BY A CRAWLER TRACTOR HAVING A MINIMUM DRAW BAR PULL RATED AT NOT LESS THAN 56,000 POUNDS (CATERPILLAR D8K OR EQUIVALENT). THE VOLUME OF ROCK EXCAVATION SHALL BE DETERMINED BY A LICENSED SURVEYOR BY THE AVERAGE END AREA METHOD. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCALED PLAN WITH SUFFICIENT ELEVATION POINTS TO ACCURATELY DEFINE THE VOLUME OF ROCK EXCAVATED. THE DEPTH OF ROCK SHALL BE DEFINED AS FROM TOP OF ROCK TO THE CONTRACT SPECIFIED ELEVATION FOR EXCAVATION. CONTRACTOR SHALL BE COMPENSATED FOR ROCK EXCAVATION AS DEFINED HEREIN IN ACCORDANCE WITH CONTRACT UNIT PRICES.

VI. DRAINAGE:
A. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES AND PIPES IN NCDOT RIGHT OF WAY SHALL BE IN ACCORDANCE WITH NCDOT STANDARDS UNLESS OTHERWISE NOTED.

B. ONLY NCDOT STAMPED APPROVED PIPES AND STRUCTURES SHALL BE USED.

C. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE OR TO THE END OF THE PIPE. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO SUBMITTAL OF BID.

D. ALL DRAINAGE STRUCTURE GRATES AND COVERS SHALL BE AS PER NCDOT STANDARDS UNLESS OTHERWISE NOTED.

E. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE NCDOT ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.

F. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.

VII. EROSION/TURBIDITY CONTROL
A. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
B. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SILT FENCE TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
C. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE SPECIFICATIONS.
D. EXCEPT AS NECESSARY FOR CONSTRUCTION, EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN WETLANDS OR IN A POSITION CLOSE ENOUGH THERETO TO BE WASHED AWAY BY HIGH WATER OR RUNOFF.
E. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS, AND THE DURATION OF EXPOSED, UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PERFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
F. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL DISTURBED SOILS ARE STABILIZED.

NPDES NOTE:
REGULATIONS ADOPTED BY THE US ENVIRONMENTAL PROTECTION AGENCY (US EPA) AND BY THE NORTH CAROLINA DIVISION OF WATER QUALITY REQUIRE THAT A NATURAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT BE OBTAINED FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITH LAND DISTURBANCE OF 1 ACRE OR MORE.

CONTRACTOR SHALL CHECK EROSION CONTROL MEASURES WEEKLY AND/OR AFTER A 1" OR MORE RAIN. CONTRACTOR SHALL KEEP RECORDS OF EVERY INSPECTION.

EROSION CONTROL NOTES:
1. CONTRACTOR SHALL STABILIZE EXPOSED GROUND AS SOON AS INDIVIDUAL AREAS ARE COMPLETED.
2. CONTRACTOR SHALL NOT REMOVE ANY BASIN UNTIL ALL SEDIMENT-PRODUCING AREAS UPSTREAM HAVE BEEN PERMANENTLY STABILIZED AND REMOVAL IS APPROVED BY EROSION CONTROL COORDINATOR.
3. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLAN. ALL GRADED SLOPES MUST BE SEEDED AND MULCHED WITHIN 14 CALENDAR DAYS (7 CALENDAR DAYS FOR SLOPES STEEPER THAN 3:1).
4. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY LOCAL AUTHORITY.
5. NO SLOPES SHALL EXCEED 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
6. ALL SILT FENCE SHALL HAVE WIRE AND WASHED STONE.
7. A FILTER BERM SHALL BE PLACED TEMPORALLY AT THE END OF ALL FES UNTIL RIP RAP APRONS ARE INSTALLED.
8. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FOR THE ZONING ADMINISTRATOR.
9. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
10. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF NC LAW AND IS SUBJECT TO A FINE.
11. A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING THAT WAS NOT PREVIOUSLY APPROVED.
12. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNERS.
13. ALL STD. NUMBERS REFER TO THE NEW HANOVER COUNTY/WILMINGTON STANDARDS MANUAL UNLESS OTHERWISE NOTED.
14. STEEL POST WITH WIRE FENCE BACKING SHOULD BE USED INSTEAD OF WOODEN POST, BURIED OR DRIVEN TO A DEPTH OF 18" IN THE GROUND. PREFABRICATED SILT FENCE IS NOT ACCEPTABLE ON THIS PROJECT.
15. SEDIMENT TRAP AND BASINS SLOPES SHALL BE SEEDED IMMEDIATE AFTER CONSTRUCTION TO PROMOTE STABLE SLOPES AS SOON AS POSSIBLE.
16. WHERE TEMPORARY DIVERSIONS ENTER SEDIMENT TRAPS AND BASINS, TEMPORARY SLOPE DRAINS MAY BE NECESSARY BASED ON FIELD CONDITIONS.

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 DESIGNATED.
2. THE SEDIMENT BASIN WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 2.0 FT. BELOW THE TOP OF THE RISER. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
3. SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAP AND BLOCK AND GRAVEL INLET PROTECTION DEVICE WHEN STORAGE CAPACITY HAD BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
4. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES ABOUT 0.5 FT DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
5. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

TEMPORARY SEEDING REQUIREMENTS PER NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL

TABLE 6.10A
TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES

MOUNTAINS	ABOVE 2500 FEET: FEB. 15 - MAY 15 BELOW 2500 FEET: FEB. 1- MAY 1
PIEDMONT	JAN. 1 - MAY 1
COASTAL PLAIN	DEC. 1 - APR. 15

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.

TABLE 6.10B
TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE.

SEEDING DATES

MOUNTAINS	MAY 15 - AUG. 15
PIEDMONT	MAY 1 - AUG. 15
COASTAL PLAIN	APR. 15 - AUG. 15

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.

TABLE 6.10C
TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

SEEDING DATES

MOUNTAINS	AUG. 15 - DEC. 15
COASTAL PLAIN AND PIEDMONT	AUG. 15 - DEC. 30

SOIL AMENDMENTS
FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 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
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTENT TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

PERMANENT SEEDING REQUIREMENTS PER NCDENR EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL

TABLE 6.11K
PERMANENT SEEDING FOR STEEP SLOPES OR POOR SOILS; LOW MAINTENANCE

SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
TALL FESCUE	100
SERICEA LESPEDEZA	30
KOBE LESPEDEZA	10

SEEDING NOTES
1. IN EASTERN PIEDMONT ADD 25 LB/ACRE PENSACOLA BAHIAGRASS OR 10 LB/ACRE COMMON BERMUDAGRASS. USE COMMON BERMUDAGRASS ONLY WHERE IT IS UN- LIKELY TO BECOME A PEST
2. AFTER AUG. 15 USE UNSCARIFIED SERICEA SEED
3. WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND SUBSTITUTE 40 LB/ACRE BAHIAGRASS OR 15 LB/ACRE BERMUDAGRASS.
4. TO EXTEND SPRING SEEDING DATES INTO JUNE, ADD 15 LB/ACRE HULLED BER- MUDAGRASS. HOWEVER, IT IS PREFERABLE TO SEED TEMPORARY COVER AND SEED FESCUE IN SEPT.

NURSE PLANTS
BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15 AND 40 LB/ACRE RYE (GRAIN)

SEEDING DATES

	BEST	POSSIBLE
FALL:	AUG. 25 - SEPT. 15	AUG. 20 - OCT. 25
LATE WINTER:	FEB. 15 - MAR. 21	FEB. 1 - APR. 15

FALL IS BEST FOR TALL FESCUE AND LATE WINTER LESPEDEZAS. OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE. USE UNHULLED BERMUDAGRASS SEED IN FALL.

SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 4,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.

MULCH
APPLY 4,000-5000 LB/ACRE GRAIN STRAW, OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING, OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

MAINTENANCE
REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. MAY BE MOWED ONCE OR TWICE A YEAR, BUT MOWING IS NOT NECESSARY. RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

NOTES
DE-WATERING: THE CONTRACTOR SHALL AT ALL TIMES PROVIDE AND MAINTAIN AMPLE MEANS AND EQUIPMENT WITH WHICH TO REMOVE AND PROPERLY DISPOSE OF ANY AND ALL WATER ENTERING THE EXCAVATION OR OTHER PARTS OF THE WORK AND KEEP ALL EXCAVATIONS DRY UNTIL SUCH TIME AS PIPE LAYING AND GRADING IS COMPLETED AND STRUCTURES TO BE BUILT THEREIN ARE COMPLETED.

NO WATER SHALL BE ALLOWED TO RISE AROUND THE PIPE IN UNBACKFILLED TRENCHES NOR SHALL IT BE ALLOWED TO RISE OVER MASONRY UNTIL THE CONCRETE OR MORTAR HAS SET (MINIMUM 24 HOURS). ALL WATER PUMPED OR DRAINED FROM THE WORK SHALL BE DISPOSED OF IN SUCH A MANNER AS TO PREVENT SILTATION AND EROSION TO ADJACENT PROPERTY OR OTHER CONSTRUCTION.

VII. PROTECTION OF EXISTING UTILITIES
THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCY FOR THE EXACT FIELD LOCATIONS OF ALL WATER, SEWER, ELECTRIC, TELEPHONE, TELEVISION AND ANY OTHER UNDERGROUND AND OVERHEAD UTILITY BEFORE STARTING CONSTRUCTION. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATION ON THE CONTRACT DRAWINGS IS NOT TO BE CONSIDERED AS THE NON-EXISTANCE OF OR A DEFINITE LOCATION OF EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF WORK.

VII. SANITARY SEWER AND WATER DISTRIBUTION
A. SANITARY SEWERS AND STORM SEWERS SHOULD ALWAYS CROSS UNDER WATER MAINS. SANITARY SEWERS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE.

B. WHERE SANITARY SEWERS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING.

C. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

D. WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP AND THE CROSSING SHALL BE ARRANGED TO MEET THE REQUIREMENTS ABOVE.

E. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS.

F. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

G. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED) WITH A MINIMUM VERTICAL SEPARATION OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM THE JOINTS ON THE SEWER OR FORCE MAIN(STAGGERED JOINTS).

H. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.

I. ALL ON SITE P.V.C. GRAVITY SANITARY SEWER PIPE SHALL BE MADE OF MATERIAL HAVING A CELL CLASSIFICATION OF 12454 B, 12454 C OR 13354 B AS DEFINED IN ASTM D-1784 AND CONFORM TO THE REQUIREMENTS OF SDR 26. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED.

J. ALL ON SITE DUCTILE IRON PIPE SHALL BE CLASS 52 AND SHALL RECEIVE INTERIOR AND EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.6, A 21.8, OR A 21.51.

K. SANITARY SERVICE CONNECTION LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE.

L. ALL SANITARY SEWER WORK SHALL CONFORM TO CAPE FEAR PUBLIC UTILITIES (TYP.) STANDARDS AND SPECIFICATIONS.

M. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW SANITARY SEWER LINES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES NEAR THE POINT OF CONNECTION AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES WITH DESIGN INFORMATION SHOWN IN THESE PLANS. CONTRACTOR SHALL NOTIFY ENGINEER AND CAPE FEAR PUBLIC UTILITIES (TYP.) INSPECTOR AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED WORK.

N. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER AND CAPE FEAR PUBLIC UTILITIES PRIOR TO PLACEMENT OF AND PAVING AND AGAIN PRIOR TO OBTAINING CERTIFICATE OF OCCUPANCY. CONTRACTOR TO NOTIFY THE ENGINEER AND CAPE FEAR PUBLIC UTILITIES 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS.

O. THE CONTRACTOR SHALL PERFORM ALL NECESSARY TESTING IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITIES STANDARDS. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION OF TESTING AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

P. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.

Q. ALL WATER SYSTEM WORK SHALL CONFORM TO CAPE FEAR PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS.

R. ALL ON SITE PVC WATER MAINS 4 INCHES THROUGH 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900 AND SHALL BE CLASS 150 DR 18. ALL ON-SITE PVC WATER MAINS 2" TO 3" SHALL BE CLASS 1120 AND MEET REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241. WATER MAINS SMALLER THAN 1 1/2" SHALL BE CLASS 1120 OR 1220 SCHEDULE 80 AND MEET REQUIREMENTS OF ASTM D-1785.

S. PVC PIPE FOR FIRE PROTECTION AWWA C900 CLASS 200 WITH AN SDR OF 14 OR LESS

T. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI STANDARD A21.51, MINIMUM CLASS 50. JOINTS FOR DUCTILE IRON PIPE SHALL BE MECHANICAL OR PUSH-ON JOINTS. PIPE SHALL HAVE AN EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A21.51. PIPE INTERIOR SHALL HAVE A CEMENT MORTAR LINING WITH AN ASPHALTIC SEAL COAT CONFORMING TO AWWA/ANSI C104/A21.4. THE WEIGHT AND CLASS DESIGNATION SHALL BE PAINTED IN WHITE ON THE EXTERIOR SURFACE OF ALL PIPES AND FITTINGS. MANUFACTURER'S CODE OR SERIAL NUMBER SHALL BE PROVIDED ON THE BELL OF EACH PIPE JOINT.

U. ALL DUCTILE FITTINGS SHALL BE MECHANICAL JOINT WITH A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA STANDARD A21.10/C110. ALL FITTINGS SHALL BE COATED AND LINED AS SPECIFIED ABOVE FOR DUCTILE IRON PIPE.

V. CONTRACTOR SHALL INSTALL TEMPORARY BLOWOFFS AT THE END OF WATER SERVICE LATERALS TO BUILDINGS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.

W. THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITIES.

X. POINTS OF CONNECTION OF THE EXTERNAL WATER LINES ARE TO COINCIDE WITH THE BUILDING PLUMBING AS SHOWN ON THE BUILDING PLUMBING PLANS. CONNECTION LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE.

Y. FIRE LINES TO BUILDINGS SHALL BE INSTALLED BY A CONTRACTOR DULY LICENSED BY THE STATE FIRE MARSHALL'S OFFICE. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION.

Z. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY INSPECTED AND ACCEPTED BY THE OWNER'S ENGINEER AND THE CAPE FEAR PUBLIC UTILITIES. PRESSURE TESTS SHALL BE IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITIES SPECIFICATIONS. CONTRACTOR TO NOTIFY OWNER'S ENGINEER AND CAPE FEAR PUBLIC UTILITIES INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.

AA. CONTRACTOR TO PERFORM CHLORINATION AND BACTERIOLOGICAL SAMPLING AND OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OFF ALL BACTERIOLOGICAL TESTS TO BE SUBMITTED TO OWNER'S ENGINEER.

BB. WATER MAIN SHALL HAVE 14 GA. BLUE COATED TRACER WIRE ON ALL SERVICES AND MAINS BURIED OVER THE WATER MAIN.

CC. FIRE HYDRANTS SHALL BE PLACED A MINIMUM DISTANCE OF 6' BOC AND HAVE A CLEAR SPACE OF 3' FROM ANY PERMANENT STRUCTURES.

DD. OFFSITE SEWER R/W TO BE MOWED ONCE BY DEVELOPER/CONTRACTOR BEFORE FINAL.

EE. METERS WILL NOT BE SET IF WATER METER BOXES, SEWER CLEAN-OUTS, VALVE BOXES OR THEIR APPURTENANCES ARE DAMAGED OR IMPROPERLY POSITIONED.

FF. VERIFICATION HAS BEEN MADE BY EAGLE ENGINEERING INC. THAT EACH LOT IS CAPABLE OF HAVING GRAVITY SEWER SERVICE TO THE CENTER OF THE LOT AT THE FRONT SETBACK.

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER 09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

CONSTRUCTION NOTES AND SPECIFICATION

DESIGNED BY	DRAWN BY	CHECKED BY
JPC	JPC	JLR
SCALE	DATE	JOB NUMBER
AS SHOWN	09/23/2020	7057

Sheet
C-6.4

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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
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

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

EQUIPMENT AND VEHICLE MAINTENANCE

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

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

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

PAINT AND OTHER LIQUID WASTE

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

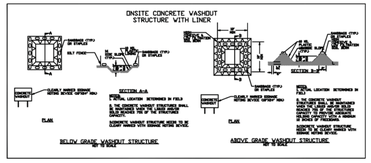
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. 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.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. 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

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

NORTH CAROLINA *Environmental Quality*



CONCRETE WASHOUTS

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

HERBICIDES, PESTICIDES AND RODENTICIDES

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

HAZARDOUS AND TOXIC WASTE

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

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

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 kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

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 Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours,*** an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible.*** The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

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

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NORTH CAROLINA *Environmental Quality*

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

EAGLE ENGINEERING
FIRM LICENSE # C-0873
2013A VAN BUREN AVENUE
INDIAN TRAIL, NC 28079
(704) 882-4222
WWW.EAGLEONLINE.NET

NORTH CAROLINA PROFESSIONAL SEAL 045509 ENGINEER MATTHEW C KIRCHNER 09/23/20

NO.	DATE	BY	ISSUE

BUY QUICK FOOD MART
7650 MARKET ST.
WILMINGTON, NC

KHALID SALEH
3811 COTTONWOOD DRIVE
DURHAM, NC 27705

NCG01
PERMIT NOTES

DESIGNED BY	DRAWN BY	CHECKED BY	JLR
JPC	JPC	JOB NUMBER	7057
SCALE	DATE		
AS SHOWN	09/23/2020		

Sheet
C-6.5

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