# PRELIMINARY SITE PLAN

FOR

# LIDL US OPERATIONS, LLC PROPOSED GROCERY STORE STORE #1181

LOCATION OF SITE

4301 S 17TH STREET

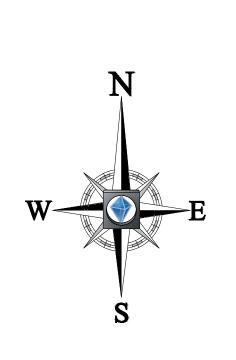
WILMINGTON, NC 28412

TAX PARCEL ID: 3135-37-9059.000 / 3135-56-8767.00 /

R06600-001-005-012

DB 5100 PG 288

NEW HANOVER COUNTY, NORTH CAROLINA





SCALE: 1" = 2000' SOURCE: GOOGLE MAPS

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#### UTILITY SERVICE CONTACTS

CONTACT INFORMATION

REFERENCES

ALTA/NSPS LAND TITLE SURVEY FOR LIDL US OPERATIONS, LLC"

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT - LIDL WILMINGTON, NC"

CITY OF WILMINGTON PLANNING, DEVELOPMENT & TRANSPORTATION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT)

NORTH CAROLINA OF ENVIONMENT AND NATURAL RESOURCES (NCDENR)

**ENVIRONMENTAL SITE ASSESSMENT:** 

GOVERNING AGENCIES

EMAIL: JOHN.FULLERTON@WILMINGTONNC.GOV

PREPARED BY ECS CAROLINAS, LLP

ECS PROJECT NO. 49-1612

WILMINGTON, NC 28402 CONTACT: JOHN FULLERTO PHONE: (910) 341-3247

WILMINGTON, NC 28412

300 DIVISION DRIVE

WILMINGTON, NC 2840<sup>o</sup> PHONE: (910) 251-2655

WILMINGTON, NC 28405 PHONE: (901) 796-7215

PO BOX 1810 209 COLEMAN DRIVE

CITY OF WILMINGTON STORMWATER SERVICES

SERVICE	UTILITY / GOVERNING AGENCY
WATER/SEWER	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 PHONE: (910) 332-6550 CAREL VANDERMEYDEN - DIRECTOR OF ENGINEERING
NATURAL GAS	PIEDMONT NATURAL GAS 1321 S 10TH ST. WILMINGTON, NC 28401 PHONE: (910) 799-7185
ELECTRIC	DUKE ENERGY 8645 TRADE ST. NE LELAND, NC 28451 PHONE: (800) 452-2777

## DEVELOPER

LIDL US OPERATIONS, LLC PROJECT #1181 1500 SUNDAY DRIVE, SUITE 101 RALEIGH, NC 27607 CONTACT: RYAN WEHMANN TELEPHONE: (703) 346-4654

# BOHLER BOHLER NCBELS P-1132

# 4011 WESTCHASE BLVD., SUITE 290 RALEIGH, NC 27607

Phone: (919) 578-9000 Fax: (919) 703-2665

NC@BohlerEng.com

CONTACT: WYATT BONE, P.E. - WBONE@BOHLERENG.COM

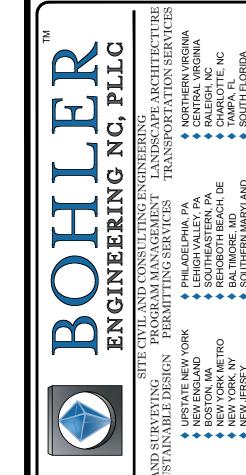
### SURVEYOR

ALLIED ASSOCIATES, P.A. 4720 KESTER MILL ROAD WINSTON-SALEM, NC PHONE: (336) 765-2377 FAX: (760) 760-8886

EMAIL : DALLEY@ALLIED-ENGSURV.COM

#### ALERT TO CONTRACTOR:

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS
REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL
BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION
AND THE FINAL CONNECTION OF SERVICES.



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# NOT APPROVED FOR CONSTRUCTION

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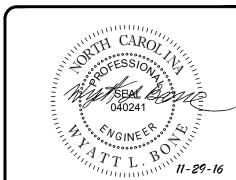
#### PROPOSED GROCERY

LIDL US
OPERATIONS,
LLC

LOCATION OF SITE 4301 S 17TH STREET WILMINGTON, NC 28412



PO11 WESTCHASE BLVD., SUITE 29
RALEIGH, NC 27607
Phone: (919) 578-9000
Fax: (919) 703-2665
NC@BohlerEng.com



SHEET TITLE:

COVER SHEET

C=1

IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJE

ORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUT COEPTANCE OF FILL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND

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#### GENERAL NOTES:

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE

- 1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
- SURVEY "ALTA/NSPS LAND TITLE SURVEY FOR LIDL US OPERATIONS, LLC", ALLIED ASSOCIATES, P.A. DATED 03/16/16. JOB NO. PA160303.
- GEOTECHNICAL REPORT "REPORT OF SUBSURFACE EXPLORATION LIDL WILMINGTON, NC", ECS CAROLINAS, LLP. PROJECT NO. 22-23971 DATED 03/22/16.
- ENVIRONMENTAL SITE ASSESSMENT "PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT LIDL WILMINGTON, NC", ECS CAROLINAS, LLP. DATED 03/25/16.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.
- 2. ALL ACCESSIBLE (A/K/A ADA) PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.
- 3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
- 4. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- 5. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS,. SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.
- 6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.
- 7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING, NC, PLLC BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, NC, PLLC, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
- 8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
- 9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
- 10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.
- 11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.
- 13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
- 15. ALL CONCRETE MUST BE AIR ENTRAINED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- 16. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEAN, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES. AT ANY TIME.
- 18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING, NC, PLLC, AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS DIRECTORS PARTNERS SHAREHOLDERS MEMBERS PRINCIPALS COMMISSIONERS AGENTS SERVANTS EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING, NC. PLLC WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER ENGINEERING, NC, PLLC AND ITS PAST, PRESENT AND FUTURE OWNERS. OFFICERS. DIRECTORS. PARTNERS. SHAREHOLDERS. MEMBERS. PRINCIPALS. COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS, ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
- 19. BOHLER ENGINEERING, NC, PLLC WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING, NC, PLLC'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM MUST NOT INDICATE THAT BOHLER ENGINEERING, NC, PLLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING, NC, PLLC WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING, NC, PLLC WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- 20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NC, PLLC, NOR THE PRESENCE OF BOHLER ENGINEERING, NC, PLLC AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING, NC, PLLC AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING, NC, PLLC SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE IN NOTE 19 FOR JOB SITE SAFETY.
- 21.IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE

- CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH PARAGRAPH 19 HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME
- 22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S
- 23. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.
- 24. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER
- 25. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN AND, FURTHER ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
- 26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.
- 27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.
- 28. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
- 29. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE.
- 30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS CERTIFY OR CERTIFICATION CONSTITUTES AN EXPRESSION OF "PROFESSIONAL OPINION" REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

#### GENERAL GRADING & UTILITY NOTES

- 1. ALL WATER, SEWER, AND OTHER COVERED INFRASTRUCTURE IS TO BE CONSTRUCTED IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITY AUTHORITY COUNTY WATER UTILITY DIVISION SPECIFICATIONS.
- 2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 3. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
- 5. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE
- 6. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- 7. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- 8. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE SITE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION. RESOLVE SAME.
- 9. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
- 10. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
- 11. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER. OR OWNER/DEVELOPER'S REPRESENTATIVE SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
- 12. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. FURTHER, CONTRACTOR IS FULLY RESPONSIBLE FOR EARTHWORK BALANCE.
- 13. THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.
- 14. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- 15. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- 16. DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE SITE PLAN,

- WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.
- 17. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE SITE PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.
- 18. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
- 19. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF .075% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.
- 20. REFER TO SITE PLAN FOR ADDITIONAL NOTES.
- 21. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.
- 22. CONTRACTOR MUST REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK ANY WORK.
- 23. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.
- 24. STORM DRAINAGE PIPE:
- UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH WATER TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M294 AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT TIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.
- SANITARY SEWER PIPE MUST BE POLYVINYL CHLORIDE (PVC) SDR 35 EXCEPT WHERE INDICATED OTHERWISE. SANITARY LATERAL MUST BE PVC SCHEDULE 40 OR PVC SDR 26 UNLESS INDICATED, IN WRITING, OTHERWISE.
- 25. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF STRUCTURE.
- 26. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.
- 27. SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT, OR WHERE SITE CONDITIONS SO INDICATE, MUST BE CONSTRUCTED OF STEEL, REINFORCED CONCRETE, DUCTILE IRON OR OTHER SUITABLE MATERIAL.
- SEWERS CONVEYING SANITARY FLOW COMBINED SANITARY AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.
- WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED.
- 28. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER PURVEYOR. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT-LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION.
- 29. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR NCDOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
- 30. LOCATION OF PROPOSED UTILITY POLE RELOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.
- 31. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
- 32. ALL PAVEMENT MARKINGS IN, OR LEADING TO, THE PUBLIC RIGHT-OF-WAY ARE TO BE THERMOPLASTIC WITH EMBEDDED GLASS BEADS.

#### ADA INSTRUCTIONS TO CONTRACTOR

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT ADA STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES SLOPE SHALL NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
- CURB RAMPS SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
- LANDINGS MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
- PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 48-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:30 (5.0%), ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (2.0%) FOR POSITIVE DRAINAGE.
- DOORWAYS MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR
  POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR
  ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY COD.)
- WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
- THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.
- IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

#### CITY OF WILMINGTON NOTES:

- 1. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 2. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 3. NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
- 4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
  5. ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING REGARDING THE INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED
- 6. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
- 7. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
  8. CALL TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- CALL TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
   TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
   ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
   STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.

STREET NAMES MUST BE APPROVED PRIOR TO INSTALL ATION OF STREET NAME SIGNS.

- TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
   A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET.
- 14. A OTILITY COT PERMIT IS REQUIRED FOR EACH OPEN COT OF A CITY STREET.
   15. ANY BROKEN OR MISSING SIDEWALK PANELS WILL BE REPLACED.
   16. CONTACT KAREN DIXON AT 910-341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 17. WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- 18. PROJECT SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 910-343-3910 FOR INFORMATION.
- 19. IF THE CONTRACTOR DESIRES CFPUA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- 20. ANY DRAFFICM SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REGULATIONS. CALL 919-343-3910 FOR I
- INFORMATION.
  21. ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 22. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCCCHR OR ASSE.
   23. CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
- 24. CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
   25. UNDERGROUND FIRE LINE(S) MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING.
- CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-341-0696.

  26. NO OBSTRUCTIONS ARE PERMITTED IN THE SPACE BETWEEN THIRTY (30) INCHES AND TEN (10) FEET ABOVE THE GROUND WITHIN THE TRIANGULAR SIGHT
- DISTANCE.
  27. CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING, OR GRADING.

ENGINEERING NC, PLLC

SITE CIVIL AND CONSULTING ENGINEERING
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PROGRAM MANAGEMENT
DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVI
TATE NEW YORK
PHILADELPHIA, PA
ENGLAND
LEHIGH VALLEY, PA
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CENTRAL VIRGINIA
PORK, NY
ENHOBOTH BEACH, DE
PAMPA, FL
JERSEY
SOUTHERN MARYLAND
STATIMORE, MD
TAMPA, FL
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TAMPA, FL
TAMPA, FL

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REVISIONS
REV DATE COMMENT BY



NOT APPROVED FOR CONSTRUCTION

It's fast. It's free. It's the law

DRAWN BY:
CHECKED BY:
DATE:
SCALE:
CAD I.D.:

PROPOSED CROCERY

GROCERY

LIDL US OPERATIONS LLC

LOCATION OF SITE

4301 S 17TH STREET

WILMINGTON, NC 28412

BOHLER

RALEIGH, NC 27607
Phone: (919) 578-9000
Fax: (919) 703-2665
NC@BohlerEng.com

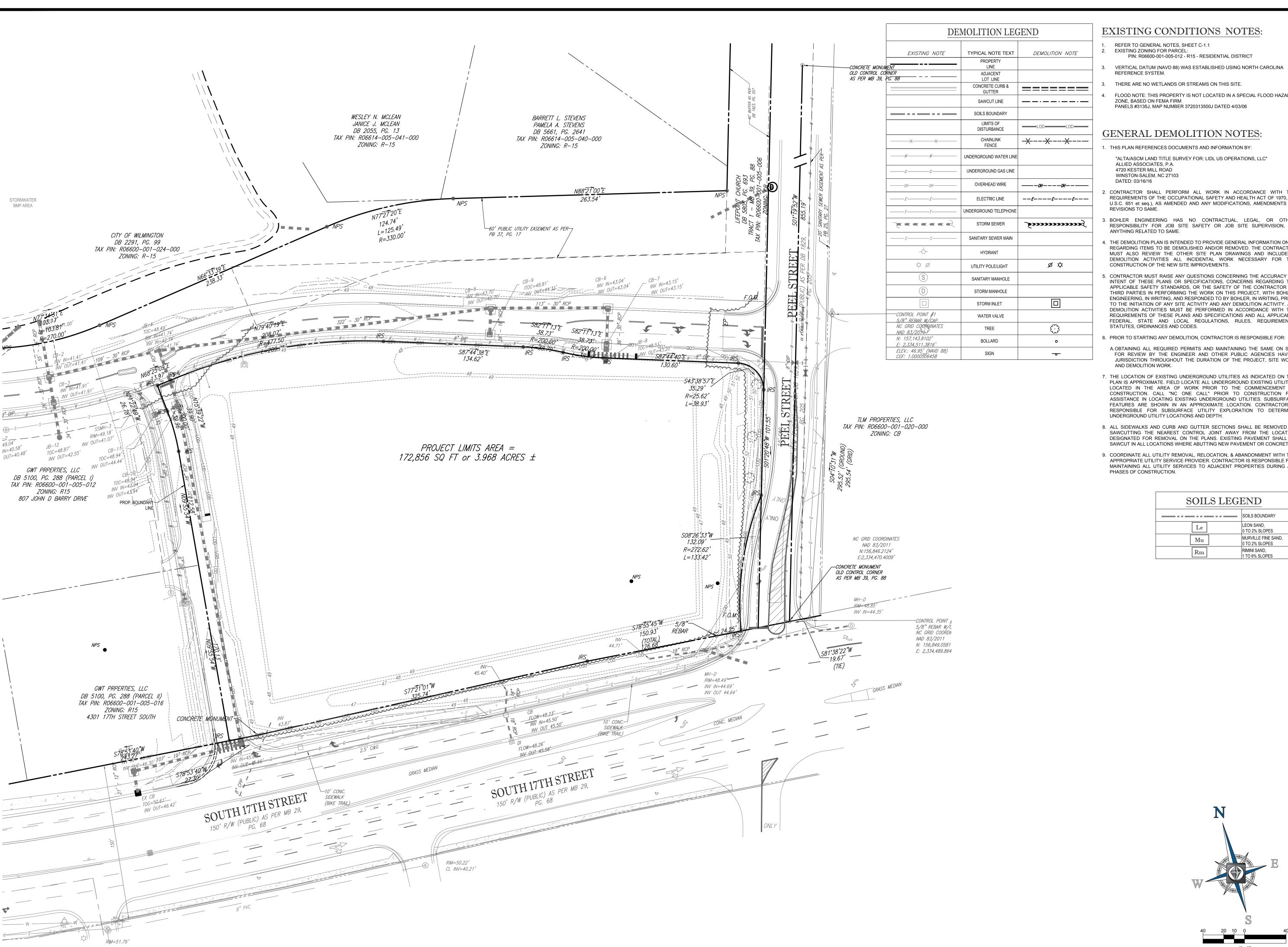
ENGINEERING NC, PLLC



SHEET TITLE:

GENERAL

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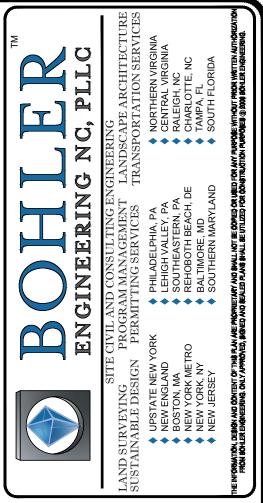
#### EXISTING CONDITIONS NOTES:

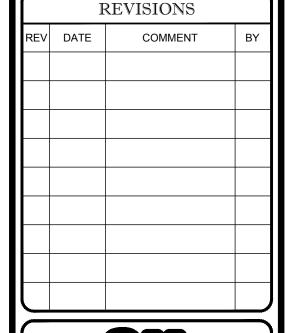
- REFER TO GENERAL NOTES, SHEET C-1.1
- PIN: R06600-001-005-012 R15 RESIDENTIAL DISTRICT
- VERTICAL DATUM (NAVD 88) WAS ESTABLISHED USING NORTH CAROLINA
- THERE ARE NO WETLANDS OR STREAMS ON THIS SITE.
- FLOOD NOTE: THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD PANELS #3135J, MAP NUMBER 3720313500J DATED 4/03/06

#### GENERAL DEMOLITION NOTES:

- . THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:
- "ALTA/ASCM LAND TITLE SURVEY FOR: LIDL US OPERATIONS, LLC"
- CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 et seq.), AS AMENDED AND ANY MODIFICATIONS, AMENDMENTS OR
- B. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR
- 4. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION ONLY, REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
- 5. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
- A.OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK
- 7. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS INDICATED ON THE PLAN IS APPROXIMATE. FIELD LOCATE ALL UNDERGROUND EXISTING UTILITIES LOCATED IN THE AREA OF WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL "NC ONE CALL" PRIOR TO CONSTRUCTION FOR ASSISTANCE IN LOCATING EXISTING UNDERGROUND UTILITIES. SUBSURFACE FEATURES ARE SHOWN IN AN APPROXIMATE LOCATION. CONTRACTOR IS RESPONSIBLE FOR SUBSURFACE UTILITY EXPLORATION TO DETERMINE
- 8. ALL SIDEWALKS AND CURB AND GUTTER SECTIONS SHALL BE REMOVED BY SAWCUTTING THE NEAREST CONTROL JOINT AWAY FROM THE LOCATION DESIGNATED FOR REMOVAL ON THE PLANS. EXISTING PAVEMENT SHALL BE SAWCUT IN ALL LOCATIONS WHERE ABUTTING NEW PAVEMENT OR CONCRETE.
- 9. COORDINATE ALL UTILITY REMOVAL, RELOCATION, & ABANDONMENT WITH THE APPROPRIATE UTILITY SERVICE PROVIDER. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL UTILITY SERVICES TO ADJACENT PROPERTIES DURING ALL

SOILS LEGEND		
	SOILS BOUNDARY	
Le	LEON SAND, 0 TO 2% SLOPES	
Mu	MURVILLE FINE SAND, 0 TO 2% SLOPES	
Rm	RIMINI SAND, 1 TO 6% SLOPES	







NOT APPROVED FOR CONSTRUCTION

It's fast. It's free. It's the law.

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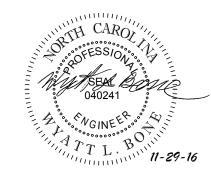
PROPOSED GROCERY

LIDL US OPERATIONS,

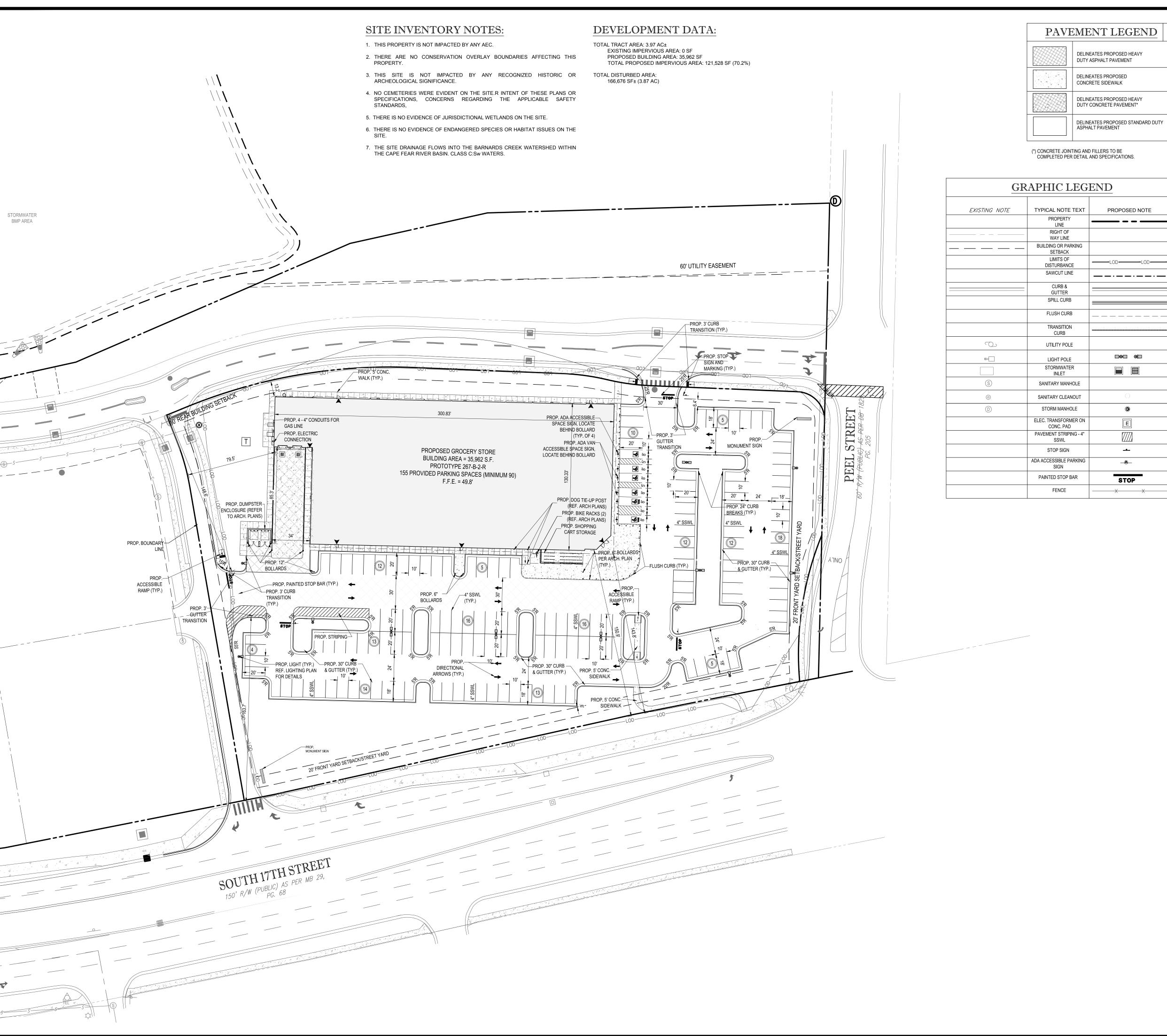
LLC LOCATION OF SITE 4301 S 17TH STREET WILMINGTON, NC 28412



1011 WESTCHASE BLVD., SUITE 29 RALEIGH, NC 27607 Phone: (919) 578-9000 Fax: (919) 703-2665 NC@BohlerEng.com



EXISTING CONDITIONS



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#### NOTES

- SEE SHEET C-1.1 SHEET FOR ALL GENERAL NOTES ALL DIMENSIONS ARE SHOWN FROM FACE OF CURB TO FACE OF
- CURB UNLESS OTHERWISE NOTED ALL CONSTRUCTION WITHIN THE NCDOT RIGHT-OF-WAY SHALL COMPLY WITH THE MOST CURRENT EDITION OF NCDOT CONSTRUCTION STANDARDS & SPECIFICATIONS

#### PAINTING STRIPING LEGEND

4" SSWL - 4" WIDE SINGLE SOLID WHITE LINE 4" SSBL - 4" WIDE SINGLE SOLID BLUE LINE

#### SITE PLAN & ZONING NOTES:

1. THIS PLAN REFERENCES THE FOLLOWING DOCUMENTS & INFORMATION BY:

"ALTA/ASCM LAND TITLE SURVEY FOR: LIDL US OPERATIONS, LLC"
PREPARED BY ALLIED ASSOCIATES, P.A.
4720 KESTER MILL ROAD
WINSTON-SALEM, NC 27103

EXISTING OWNER: PARCEL #1

APPLICANT:

PIN # 3135-37-9059,000 **GWT PROPERTIES LLC** DB 5100 PG 288 GROSS AREA: ± 8.23 AC

DATED 03/16/2016

PARCEL #2 PIN # 3135-36-8767.00 **GWT PROPERTIES LLC** GROSS AREA: ± 1.81 AC

PARCEL #3 PARCEL ID: R06600-001-005-006 NEW POINT CHURCH DB 5805 PG 693 GROSS AREA: ± 7.5 AC LIDL US OPERATIONS, LLC

1500 SUNDAY DRIVE, SUITE 101 RALEIGH, NC 27607 CONTACT: RYAN WEHMANN PHONE: (703) 346-4654 S. 17TH ST. AND PEEL ST.

WILMINGTON, NC 28412 GROSS AREA: ± 17.54 ACRES CB-COMMUNITY BUSINESS

GROCERY / FOOD SALES/RETAIL BUSINESS = PERMITTED

#### 5. CAMA LAND CLASSIFICATION: URBAN

6. <u>BULK REQUIREMENTS:</u>			
BUSINESS DISTRICT	CODE REFERENCE	REQUIRED	PROPOSED
MIN. LOT /LEASE AREA:		N/S	172,870 SF (3.97 AC)
MIN. LOT WIDTH		N/S	377.5'
BUILDING SETBACKS			
MIN. FRONT YARD SETBACK	ARTICLE 5, SEC.18-194	20'	143.8'
MIN. SIDE YARD SETBACK	ARTICLE 5, SEC.18-194	0 ft (20 ft when abutting Residential + 1' for every 1' over 20 ft of bldg hght)	79.5'
MIN. REAR YARD SETBACK	ARTICLE 5, SEC.18-194	10 ft (25 ft when abutting Residential + 1' for every 1' over 20ft of bldg hght)	13.2'
MAX BUILDING HEIGHT	ARTICLE 5, SEC.18-194	45'	

#### N/A = NOT APPLICABLE N/S = NOT SPECIFIED (V) = VARIANCE (W) = WAIVER (E) = EXISTING NON-CONFORMANCE TBD = TO BE DETERMINED (C) = COMPLIES

#### 6. PARKING SUMMARY:

NUMBER OF PARKING SPACES REQUIRED (CITY OF WILMINGTON - ARTICLE 9 SEC.18.526-18.533):

GROCERY STORE (MIN): 1.0 SPACE / 400 SF GFA x 35,962 SF = 90 SPACES
GROCERY STORE (MAX): 1.0 SPACE / 200 SF x35,962 SF =180 SPACES

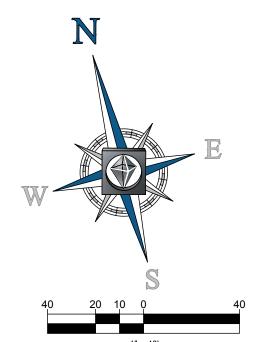
TOTAL PROPOSED PARKING = 155 SPACES (4.31/1,000 SF OF GROSS FLOOR AREA) (COMPLIES)

#### NUMBER OF ACCESSIBLE SPACES REQUIRED:

CODE REQUIREMENT (6 / 151-200 SPACES): 6 SPACES

6 SPACES (2 VAN) (COMPLIES)

	FOR 90 DEGREE PARKING SPACES:		
	ONE-WAY TRAFFIC FLOW	REQUIRED 20'	PROPOSED N/A
	TWO-WAY TRAFFIC FLOW	24'	24 FEET (COMPLIES)
	PARKING SPACE DIMENSION:	8.5' x 18'	10' x 20' (COMPLIES) 10' x 18' (PERIMETER
7.	LOADING REQUIREMENTS:	REQUIRED	PROPOSED
	NUMBER OF LOADING SPACES	2	2 (COMPLIES)
	SIZE OF LOADING SPACE (MIN.)	12' x 56'	10' x 96' (COMPLIES)



REVISIONS COMMENT EV DATE



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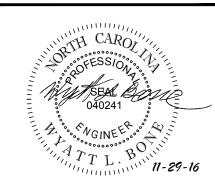
GROCERY

LIDL US OPERATIONS,

LOCATION OF SITE 4301 S 17TH STREET WILMINGTON, NC 28412



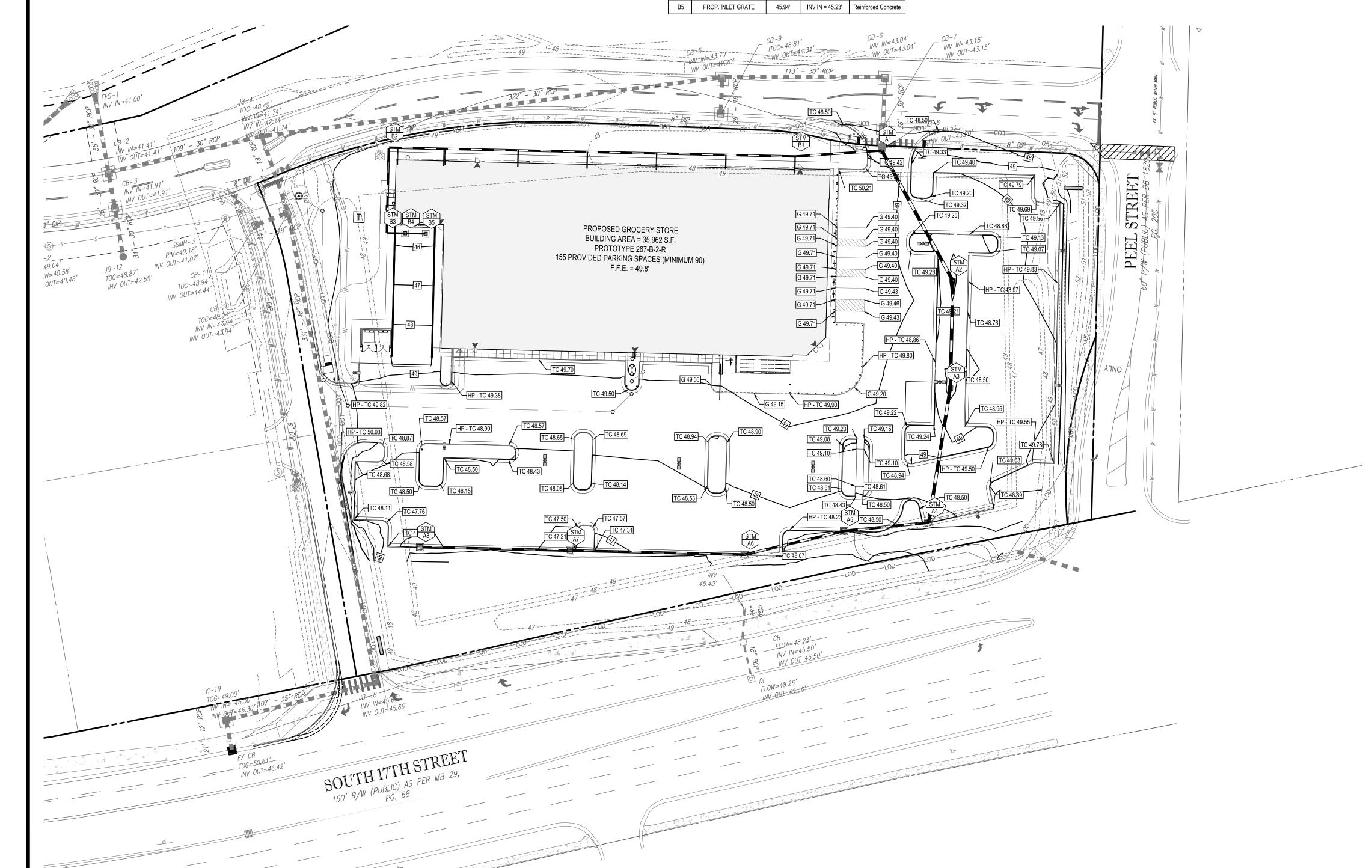
4011 WESTCHASE BLVD., SUITE 29 RALEIGH, NC 27607 Phone: (919) 578-9000 Fax: (919) 703-2665 NC@BohlerEng.com



SITE PLAN

NAME	TYPE	RIM ELEV.	INVERTS	COMMENTS
INAIVIL	1117	(FT.)	INVERTIS	COMMENTS
A1	EXST. STORM MANHOLE	48.65'	INV IN = 43.15' INV IN = 43.20'	Reinforced Concrete
A2	PROP. INLET GRATE	49.56'	INV IN = 43.73' INV OUT = 43.73'	Reinforced Concrete
A3	PROP. INLET GRATE	49.76'	INV IN = 44.10' INV OUT = 44.10'	Reinforced Concrete
A4	PROP. CURB INLET	1.96'	INV IN = 44.58' INV OUT = 44.58'	Reinforced Concrete
A5	PROP. CURB INLET	48.42'	INV IN = 44.88' INV OUT = 44.88'	Reinforced Concrete
A6	PROP. CURB INLET	49.14'	INV IN = 45.23' INV OUT = 45.23'	Reinforced Concrete
A7	PROP. CURB INLET	47.66'	INV IN = 45.85' INV OUT = 45.84'	Reinforced Concrete
A8	PROP. CURB INLET	47.75'	INV OUT = 46.36'	Reinforced Concrete
B1	PROP. STORM CLEANOUT	49.64'	INV IN = 43.47' INV OUT = 43.47'	Reinforced Concrete
B2	PROP. STORM CLEANOUT	49.42'	INV OUT = 43.71' INV OUT = 45.19'	Reinforced Concrete
В3	PROP. STORM CLEANOUT	49.72'	INV IN = 44.89' INV OUT = 45.23'	Reinforced Concrete
B4	PROP. INLET GRATE	45.90'	INV IN = 45.19' INV OUT = 45.27'	Reinforced Concrete
		l		

FROM	FROM INV	то	TO INV	DIAMETER (IN.)	SLOPE	PIPE LENGTH (FT.)
A2	43.73	A1	43.20	24"	0.52%	102.76'
A3	44.10	A2	43.73	24"	0.50%	74.23'
A4	44.58	A3	44.10	24"	0.51%	94.56'
A5	44.88	A4	44.58	18"	0.51%	59.04'
A6	45.23	A5	44.88	18"	0.49%	70.76'
A7	45.84	A6	45.23	18"	0.50%	121.06'
A8	46.36	A7	45.85	18"	0.49%	103.84'
B1	43.47	A1	43.15	15"	0.53%	60.18'
B2	45.19	В3	44.89	15"	0.51%	59,14'
B2	43.71	B1	43.47	15"	0.09%	281.68'
В3	45.23	B4	45.19	8"	0.30%	12.72'
B4	45.27	B5	45.23	8"	0.28%	14.26'



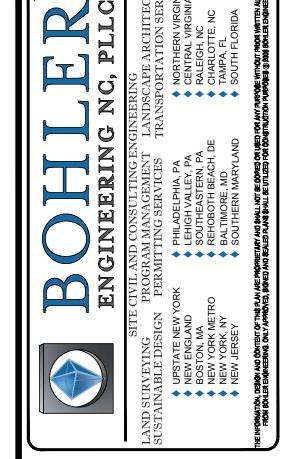
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#### ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAPPED) ACCESSIBLE COMPONENTS FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE NJ UNIFORM CONSTRUCTION CODE SUBCHAPTER 7 BARRIER FREE ACCESS. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/ EGRESS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES SLOPE SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
- 2. CURB RAMPS SLOPE SHALL NOT EXCEED 1:12 (8.3%) WITH A MAX. CHANGE OF ELEVATION OF 6".
- 3. LANDINGS SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) CROSS SLOPE IN ANY DIRECTION.
- 4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE-SHALL PROVIDE A 36 INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL, (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH), THE SLOPE SHALL BE NO GREATER THAN 1:20 (5.0% OR 5/8" PER FOOT) IN THE DIRECTION OF TRAVEL, AND SHALL NOT EXCEED 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM DISTANCE OF 30 FEET, SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
- 5. DOORWAYS SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE UP THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA SHALL BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCES INCORPORATED BY CODE).
- 6. THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	PROPERTY LINE	
/600/	CONTOUR & ELEVATION -	601
	CONTOUR & ELEVATION (DONE BY OTHERS)	601
WW	UNDERGROUND WATER LINE —	WW
	UNDERGROUND FIRE LINE	FF
	UNDERGROUND GAS LINE	
	OVERHEAD WIRE	
EE	UNDERGROUND ELECTRIC SERVICE	EE
	UNDERGROUND TELEPHONE	ттт
	STORM SEWER	
	SANITARY SEWER MAIN	
	LIMITS OF DISTURBANCE -	LOD—LOD—
	DRAINAGE FLOW ARROW	-2.5%
	TOP & BOTTOM OF WALL ELEVATION	TW 617.56 BW 615.29
	TOP OF CURB ELEVATION	TC 613.97
	HIGH POINT & FINISHED GRADE ELEVATION	HP 614.34 G 614.64
	FLUSH GRADE ELEVATION	FG 614.45
MH	TRANSFORMER ON CONC. PAD	E
\$	UTILITY POLE/LIGHT	
©	SANITARY CLEAN OUT	0
S	SANITARY MANHOLE	
0	STORM MANHOLE	<b>(©</b> )
	STORM CURB INLET	
	STORM INLET	
$\oplus$	WATER VALVE	
W	WATER METER	
	STORM STRUCTURE LABEL	



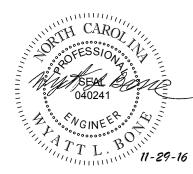
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PROPOSED GROCERY

LIDL US OPERATIONS, LLC

LOCATION OF SITE 4301 S 17TH STREET WILMINGTON, NC 28412





SHEET TITLE:

GRADING PLAN

C=4.0

N E S 40 20 10 0

SANITARY STRUCTURE SCHEDULE								
NAME	NAME TYPE RIM ELEV. (FT.)							
A1	EX. SANITARY MANHOLE	42.39	INV IN = 41.70'					
A2	PROP. SANITARY CLEANOUT	48.80	INV IN = 42.04' INV OUT = 42.04'					
A3	PROP. SANITARY CLEANOUT	43.80	INV IN = 43.11' INV OUT = 43.11'					
A4	PROP. SANITARY CLEANOUT	49.19	INV IN = 43.31' INV OUT = 43.31'					
A5	PROP. SANITARY CLEANOUT	48.59	INV IN = 45.02' INV OUT = 45.02'					
A6	PROP. SANITARY CLEANOUT	48.88	INV OUT = 45.15'					

PROP. 488/277 VOLT 1000kVa ELEC. TRANSFORMER PAD LOCATION WITH 1600 A METERING - PER POWER COMPANY STANDARDS

 $_{\sqsubset}$ (8) PROP. 4" EMPTY CONDUITS

BELOW GRADE FOR TELE AND CATV SERVICES. (REF. ARCH/MEP

-(16) PROP. 1" CONDUITS

BELOW GRADE FOR EV

▼ WATER SERVICE CONNECTION

CHARGING STATIONS (2X(3)),

SITE LIGHTING (2X(2)), AND PROP. (1,500 GALLON)—MONUMENT SIGNS (4X(2)). GREASE TRAP (REF.

(REF. ARCH/MEP PLANS) ARCH./MEP PLANS)

PROP. 6"Ø DIP FIRE SERVICE CONNECTION

PROP. 2"Ø "K" COPPER PIPE DOMESTIC

WITH KNOX BOX AND LOCKING KNOX PLUGS

V—PROP. HDPE ROOF— DRAIN AT 1%

INV.: 48.3 ' (TYP.)

PROPOSED GROCERY STORE

BUILDING AREA = 35,962 S.F.

PROTOTYPE 267-B-2-R

155 PROVIDED PARKING SPACES (MINIMUM 90)

F.F.E. = 49.8'

PROP. 4" GREASE WASTE

PROP. 4" DOMESTIC SAN.

(REF. ARCH / MEP PLANS)

(REF. ARCH / MEP PLANS)

PROP. 6" CONDENSATE WASTE

(REF. ARCH/MEP PLANS)

PROP. 4 - 4" CONDUITS FOR

PROP. ELECTRIC

DIP WATER

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SANITARY PIPE SCHEDULE							
FROM	ТО	SIZE IN.	TYPE	SLOPE %	LENGTI FT.		
A2	A1	8	PVC	1.75%	19.40		
А3	A2	8	PVC	0.91%	117.39		
A4	A3	8	PVC	0.82%	24.34		
A5	A4	8	PVC	0.93%	183.68		
A6	A5	8	PVC	0.72%	18.02		

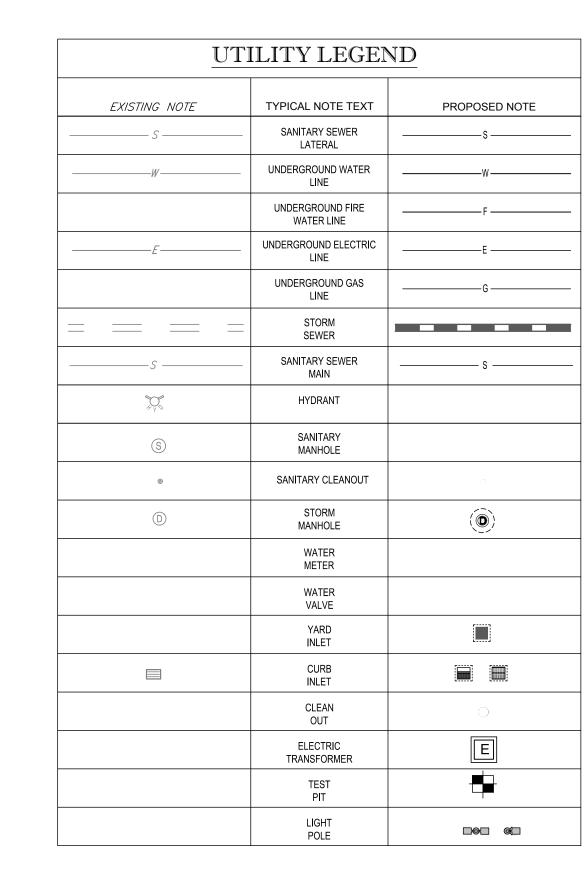
#### **UTILITY NOTES:**

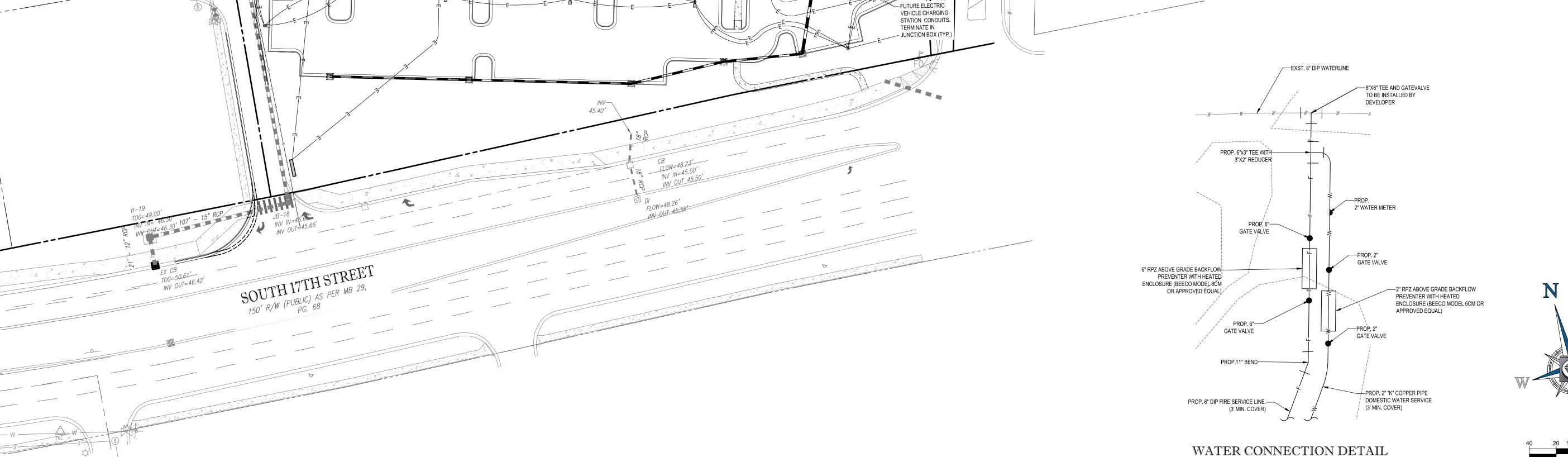
- WATER LINES SHALL BE BURIED AS SPECIFIED BY CITY OF WILMINGTON DEPARTMENT OF PUBLIC WORKS (DPW). WATER MAINS SHALL NOT BE PLACED UNDER BUILDINGS OR STRUCTURES EXCEPT TO SUPPLY A SPRINKLER SYSTEM. THE MINIMUM COVER FOR WATER MAINS WITH IS 36". ALL WATER LINES TO BE DUCTILE IRON PIPE.
- WATER MAINS SHALL BE PLACED NO CLOSER THAN 5 FEET FROM THE FACE OF
- CURB TOWARD THE STREET.

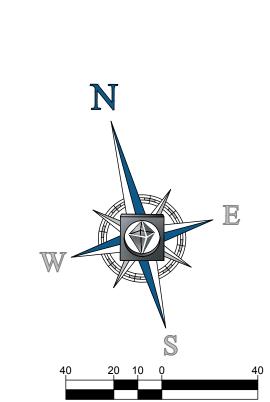
  3. WATER MAINS SHALL BE LOCATED AT LEAST 10 FEET LATERALLY FROM
- EXISTING AND PROPOSED SANITARY SEWERS.
  4. WHERE IT IS NECESSARY FOR WATER MAINS TO CROSS OVER SEWER MAINS, VERTICAL 18" CLEARANCE IS REQUIRED.
- 5. EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED MUST BE CAPPED AT THE MAIN
- 6. VALVES SHALL BE INSTALLED ON ALL BRANCHES FROM FEEDER MAINS AND BETWEEN MAINS AND HYDRANTS AS FOLLOWS:
- 6.1. PRIVATE WATER SYSTEMS MUST HAVE SUFFICIENT VALVE PLACEMENT AND NUMBER SO THE PRIVATE SYSTEM CAN BE ISOLATED FROM A PUBLIC WATER SYSTEM.
  7. THE CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DEPARTMENT PRIOR
- TO THE START OF CONSTRUCTION ON ANY WATER, SEWER, STORMWATER IMPROVEMENTS. THE CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DEPARTMENT TO INSPECT WATER AND SEWER SERVICE TAPS, DRIVEWAY AND SIDEWALK CONSTRUCTION, STORM DRAINAGE AND ROADWAY IMPROVEMENTS.

  8. SUBMIT AS-BUILT DRAWINGS OF THE WATER, SEWER AND STORM SEWER
- SYSTEMS TO THE ENGINEERING SERVICES DEPARTMENT UPON PROJECT COMPLETION. PLEASE INCLUDE WATER METER AND CLEANOUT LOCATIONS.

  9. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF







GINEERING NC, PLLC

AND CONSULTING ENGINEERING
CARAM MANAGEMENT
CAITTING SERVICES

\* PHILADELPHIA, PA

\* CONTHEAN VIRGINIA

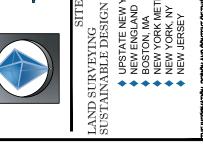
\* CONTHEAN VIRGINIA

\* SOUTHEASTERN, PA

\* REHOBOTH BEACH, DE

\* FRHOBOTH BEACH, DE

\* TAMPA, FL



REVISIONS						
DATE	COMMENT	BY				



NOT APPROVED FOR CONSTRUCTION

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CHECKED BY:
DATE: 4/25/16
SCALE: 1" = 40
CAD I.D.: SSO

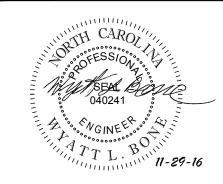
PROPOSED GROCERY

LIDL US OPERATIONS, LLC

LOCATION OF SITE 4301 S 17TH STREET WILMINGTON, NC 28412



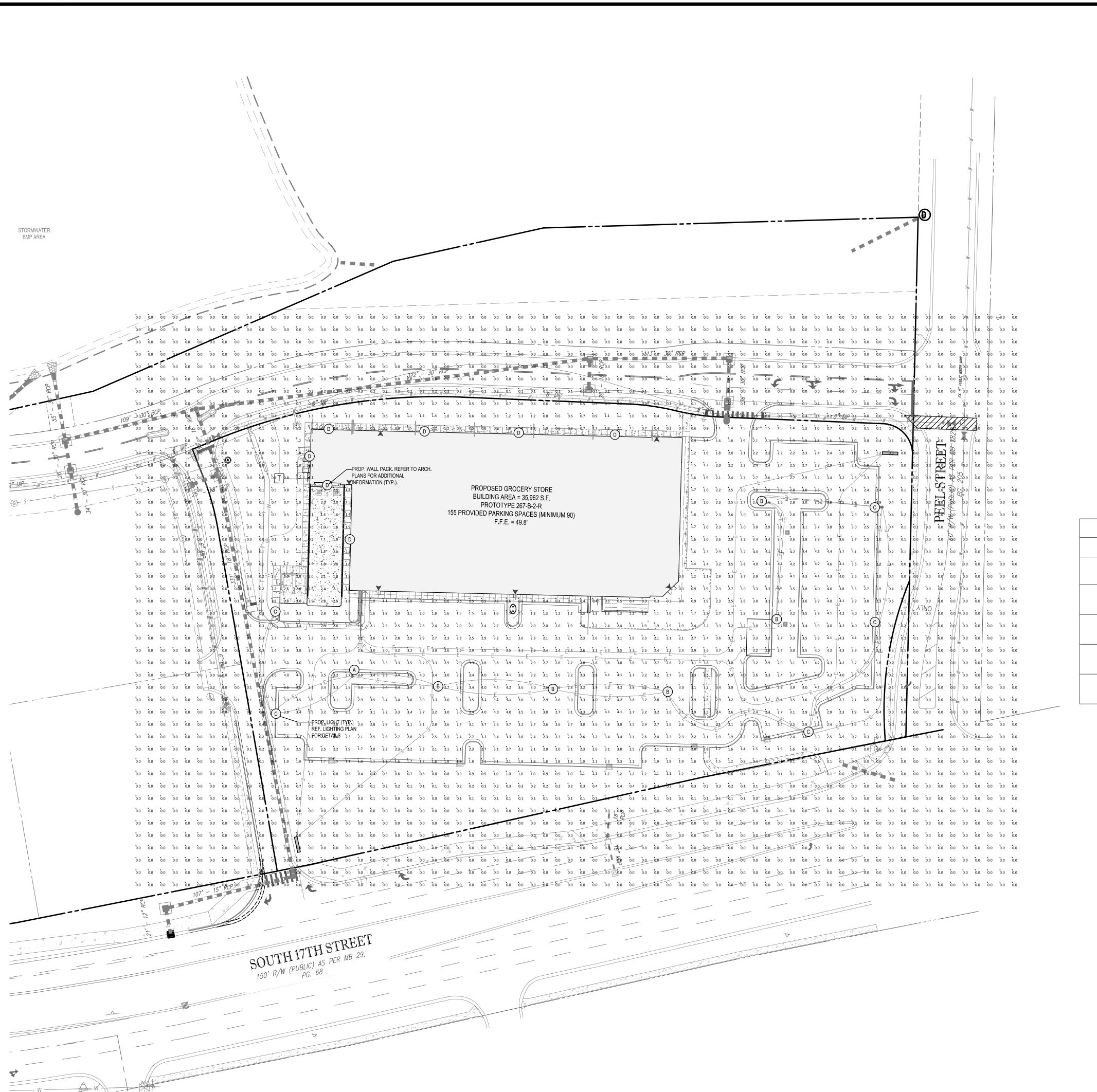
4011 WESTCHASE BLVD., SUITE 29
RALEIGH, NC 27607
Phone: (919) 578-9000
Fax: (919) 703-2665
NC@BohlerEng.com



HEET TITLE:

UTILITY PLAN

C = 5.0



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#### LIGHTING NOTES

1. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.

- 2. THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.85 FOR ALL LED LUMINAIRES, UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
- 3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
- 4. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINARIES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
- 5. WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC, ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- 6. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
- 7. CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
- 8. IT IS LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- 9. THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
- 10. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

#### GENERAL NOTES

- THIS PLAN IS TO BE UTILIZED FOR LIGHTING PURPOSES ONLY. REFER TO ELECTRICAL ENGINEERING PLANS FOR CIRCUITRY DESIGN AND SPECIFICATIONS.
- 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE PROJECT ENGINEER (BOHLER) FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE FIXTURE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
- 3. LIGHTING FIXTURE MANUFACTURER: PHILIPS LIGHTING.

CALCULATION SUMMARY						
LABEL UNITS AVG MAX MIN AVG/MIN MAX/MIN						
FULL SITE	FC	0.9	4.7	0.0	N/A	N/A
PARKING LOT	FC	2.98	4.7	1.1	2.71	4.27

	LUMINAIRE SCHEDULE							
			ED GROCERY STORE					
SYMBOL	SYMBOL LABEL QUANTITY MANUFACTURER DESCRIPTION LUMENS PER LIGHT LOSS FACTOR WATTAGE							
œ.	А	1	PHILIPS GARDCO	ECF-1-5-215LA-641A-NW @ 25' MOUNTING HEIGHT	20874	0.85	210.3	
	В	5	PHILIPS GARDCO	ECF-2-5-215LA-641A-NW @ 25' MOUNTING HEIGHT	20874	0.85	210.3	
œ.	С	5	PHILIPS GARDCO	ECF-1-4-215LA-641A-NW-IS @ 25' MOUNTING HEIGHT	15431	0.85	211.7	
-	D	7	PHILIPS GARDCO	121-16L-700-NW-G3-3 @ 14' MOUNTING HEIGHT	3421	0.85	38.4	





REVISIONS						
REV	DATE	COMMENT	BY			



NOT APPROVED FOR CONSTRUCTION

PROJECT No.: NCR151031
DRAWN BY: AWA
CHECKED BY:
DATE: 4/25/16
SCALE: 1" = 40
CAD I.D.: SSO

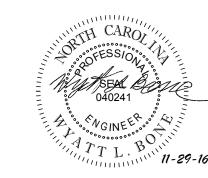
PROPOSED GROCERY

LIDL US
OPERATIONS,

LLC
LOCATION OF SITE
4301 S 17TH STREET
WILMINGTON, NC 28412



4011 WESTCHASE BLVD., SUITE 29 RALEIGH, NC 27607 Phone: (919) 578-9000 Fax: (919) 703-2665 NC@BohlerEng.com



SHEET TITLE:

LIGHTING PLAN

 $\mathbb{C}$ = $\mathbb{G}_{\bullet}\mathbb{O}$ 

		LANDSC	APE SCHEDULE		
		TY. BOTANICAL NAME  11 ACER RUBRUM	COMMON NAME  RED MAPLE	SIZE 2.5" CAL.	REMAF
$\setminus \setminus lacksquare$	QULA QUPH	7 QUERCUS LAURIFOLIA 9 QUERCUS PHELLOS 'HIGHTOWER'	LAUREL OAK HIGHTOWER' WILLOW OAK	2.5" CAL. 2.5" CAL.	B&B B&B
	MG	LAGERSTROEMIA INDICA 'SARAHS FAVORITE'  MAGNOLIA GRANDIFLORA	SRAHS FAVORITE CRAPEMYRTLE SOUTHERN MAGNOLIA	8-10' 2.5" CAL.	B+B B+B
		77 ABELIA X. 'EDWARD GOUCHER'  18 ILEX VOMITORIA 'STOKES DWARF'  16 ILEX CORNUTA 'DWARF BURFORD'	EDWARD GOUCHER ABELIA  STOKES DWARF YAUPON HOLLY  DWARF BURFORD HOLLY	18-24" 18"	3 GAL
		16 ILEX CORNUTA 'DWARF BURFORD'  18 MYRICA CERIFERA	WAX MYRTLE	24-30" 24-30"	5 GAL
	MC .	PLANTING NOTES:  1. ALL LANDSCAPED AREAS ARE TO RECEIVED. 2. ALL MULCHED PLANTING BEDS ADJACEN DEPTH PEA GRAVEL STRIP FOR FIRE SAF. 3. ALL PLANT MATERIAL SHALL BE HEALTHY. 4. ALL PLANT MATERIAL SHALL BE CONTAIN. 5. ALL TREES SHALL HAVE A STRAIGHT TRU. 6. ALL MATERIALS ARE SUBJECT TO THE AF. 7. ALL TREES MUST BE GUYED OR STAKED. 8. PRIOR TO CONSTRUCTION, THE CONTRA AVOID DAMAGE TO ALL UTILITIES DURING THE PLANS ARE BASED UPON BEST AN RESPONSIBILITY OF THE CONTRACTOR 1) PROTECT OF ALL UTILITY LINES DURING STRUCTURES, SITE APPURTENANCES, ETC. 9. THE CONTRACTOR SHALL BE RESPONSIBLE SPECIFICATIONS TO MAINTAIN HEALTHY PLOTE. WATERING, SPRAYING, MULCHING, FEMALL PLANT LIST SPECIFICATIONS. 13. STANDARDS SET FORTH IN "AMERICAN SET CONSTITUTE MINIMUM QUALITY REQUIREMENT OF TRIPLE SHRED HARDWOOD MULCH FROM THE SHEED HARDWOOD MULCH FROM THE SHEED HARDWOOD MULCH FROM THE SHEED HARDWOOD MULCH FROM ALL PLANTI MATERIAL QUANTITIES SHOWN ALL PLANTI MATERIAL QUANTITIES SHOWN ALL PLANTING BEDS AT SPACING SHOWN AREAS ARE COMPLETED AFTER GRADING. 18. THIS PLAN DOES NOT PRESENT ANY TEM	E A MINIMUM OF 4" OF TOPSOIL.  IT TO BUILDING SHALL BE SEPARATED FROM FACE FETY.  IT YOU BUILDING SHALL BE SEPARATED FROM FACE FETY.  IT YOU BUILDING SHALL BE SEPARATED FROM FACE FETY.  IT YOU BUILDING SHALL BE SEPARATED FROM FACE FETY.  IT YOU IN THE DETAILS.  IT YOU SHALL BE RESPONSIBLE FOR LOCATING ALL  IT THE COURSE OF THE WORK. LOCATIONS OF EXISTING  VALIABLE INFORMATION AND ARE TO BE CONSIDERED.  IT O VERIFY THE LOCATIONS OF UTILITY LINES AND A  NOR THE CONSTRUCTION PERIOD 3) TO REPAIR AN  INCH OCCURS AS A RESULT OF THE CONSTRUCTION.  IF FOR VERIFYING ALL QUANTITIES SHOWN ON THESE FOR DELIVERY SCHEDULE AND PROTECTION BETWE AND TO SET OF THE CONSTRUCTION.  SUARANTEE AND BE RESPONSIBLE FOR FULLY MAINTANT FOR THE PLANT MATERIALS AND  ED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SENTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND  ED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SENTILIZING, ETC.) ALL OF THE SAME SPECIES  INTERNATIONAL MATERIAL.  TAILS, PLANTING BEDS ARE TO BE COMPLETELY COVEN A LOCAL MULCH SOURCE HARVESTED IN A SUSTAINAND OF WEED MAT OR APPROVED EQUAL) SHALL BE RESPONNED TO THE SAME SPECIES OF THE SAME SPECIES AND THE SAME SPECIES OF TH	OF BUILDING WITH A 3' WIDE  O IN THE PLANT LIST. PECIFIED. RING, AND AFTER INSTALLATION.  UNDERGROUND UTILITIES AND NO BURIED UTILITY LINES SHO' O APPROXIMATE. IT SHALL E ADJACENT TO THE WORK AREA NY AND ALL DAMAGE TO UT ON. PLANS BEFORE PRICING THE NO EEN DELIVERY AND PLANTING AINING (INCLUDING BUT NOT IN D LAWN FOR A ONE YEAR GR SUBSTANTIAL COMPLETION) SHA STAGES FOR A MINIMUM 4" DEF BLE MANNER. ISIBLE FOR COMPLETE COVERA STAGES FOR SOIL STABILIZATI P PLAN.	N.  SHALL DWN ON BE THE A 2) TO UTILITIES,  WORK. NG PER  LIMITED GROWING HALL BE MEETING D SHALL PTH OF BUILDING MAGE OF
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SOUTH 17TH STA				Ŋ	
150 IV II PG. 60					
(ASPHALT ROADWAY)					, <b>M</b> 1
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$\overline{IEL}$ $\overline{V}$				40 30 10 0	

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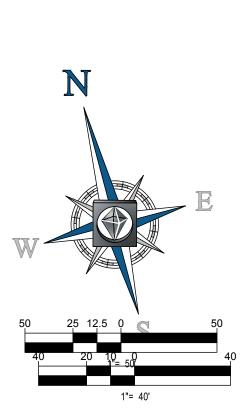
		LANDSCAF	PE SCHEDULE		
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AR	11	ACER RUBRUM	RED MAPLE	2.5" CAL.	B&B
QULA	7	QUERCUS LAURIFOLIA	LAUREL OAK	2.5" CAL.	B&B
QUPH	9	QUERCUS PHELLOS 'HIGHTOWER'	HIGHTOWER' WILLOW OAK	2.5" CAL.	B&B
LI	24	LAGERSTROEMIA INDICA 'SARAHS FAVORITE'	SRAHS FAVORITE CRAPEMYRTLE	8-10'	B+B
MG	11	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	2.5" CAL.	B+B
AXEG	77	ABELIA X. 'EDWARD GOUCHER'	EDWARD GOUCHER ABELIA	18-24"	3 GAL
ICC	18	ILEX VOMITORIA 'STOKES DWARF'	STOKES DWARF YAUPON HOLLY	18"	3 GAL.
ILBN	116	ILEX CORNUTA 'DWARF BURFORD'	DWARF BURFORD HOLLY	24-30"	5 GAL.
MC	48	MYRICA CERIFERA	WAX MYRTLE	24-30"	5 GAL

- EIVE A MINIMUM OF 4" OF TOPSOIL.
- CENT TO BUILDING SHALL BE SEPARATED FROM FACE OF BUILDING WITH A 3' WIDE X 4"
- THY, VIGOROUS, AND FREE OF PESTS AND DISEASE.

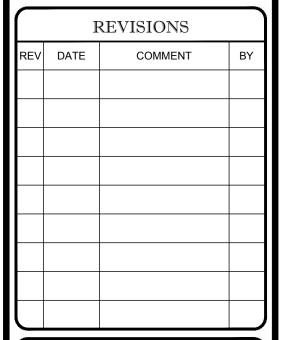
  TAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
- TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED.

  E APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- KED AS SHOWN IN THE DETAILS. TRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL RING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON T AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE
- OURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION. SIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER PLANT CONDITIONS.
- Y GUARANTEE AND BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR A ONE YEAR GROWING
- SEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE EAND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING
- N STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL EMENTS FOR PLANT MATERIAL.
- DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH A MINIMUM 4" DEPTH OF OM A LOCAL MULCH SOURCE HARVESTED IN A SUSTAINABLE MANNER.
- PRO WEED MAT OR APPROVED EQUAL) SHALL BE REQUIRED IN SHRUB BEDS AT BUILDING OWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF
- O COMPLETE TEMPORARY OR PERMANENT SEEDING IN STAGES FOR SOIL STABILIZATION AS
- TEMPORARY STABILIZATION REQUIRED AS PART OF SWPPP PLAN.

#### URBANCE CALCULATIONS:









NOT APPROVED FOR CONSTRUCTION

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> PROPOSED GROCERY

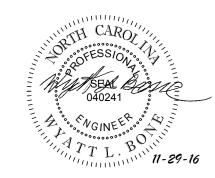
> > LIDL US

OPERATIONS, LLC LOCATION OF SITE

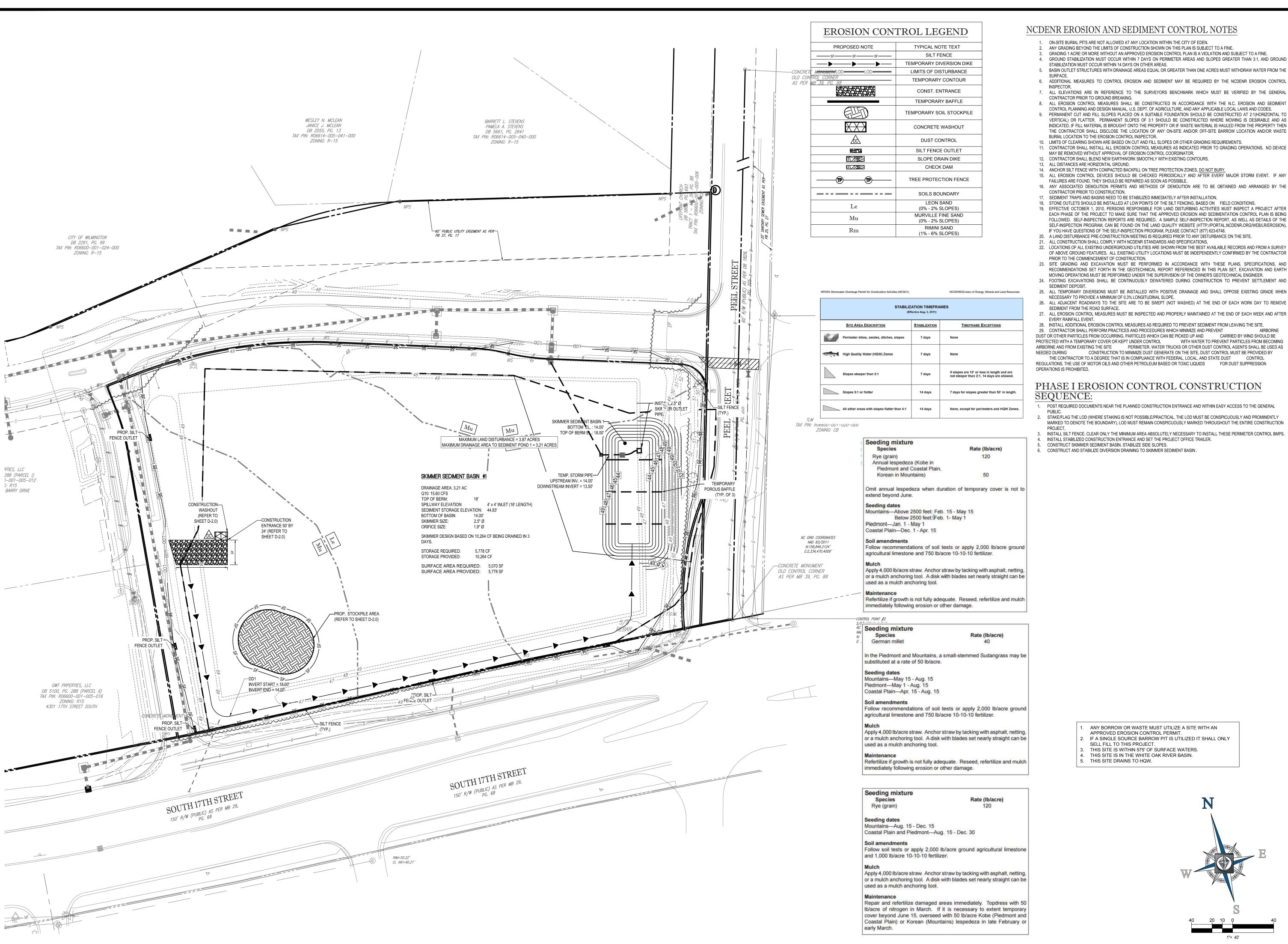
4301 S 17TH STREET WILMINGTON, NC 28412



4011 WESTCHASE BLVD., SUITE 290 RALEIGH, NC 27607
Phone: (919) 578-9000
Fax: (919) 703-2665 NC@BohlerEng.com



LANDSCAPE PLAN



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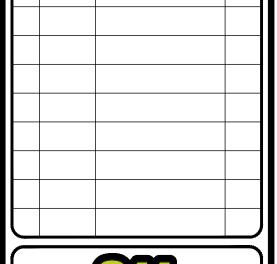
#### NCDENR EROSION AND SEDIMENT CONTROL NOTES

- 1. ON-SITE BURIAL PITS ARE NOT ALLOWED AT ANY LOCATION WITHIN THE CITY OF EDEN.
- 2. ANY GRADING BEYOND THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN IS SUBJECT TO A FINE.
- GRADING 1 ACRE OR MORE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND SUBJECT TO A FINE. 4. GROUND STABILIZATION MUST OCCUR WITHIN 7 DAYS ON PERIMETER AREAS AND SLOPES GREATER THAN 3:1, AND GROUND
- STABILIZATION MUST OCCUR WITHIN 14 DAYS ON OTHER AREAS.
  - 5. BASIN OUTLET STRUCTURES WITH DRAINAGE AREAS EQUAL OR GREATER THAN ONE ACRES MUST WITHDRAW WATER FROM THE 6. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY THE NCDENR EROSION CONTROL
- 7. ALL ELEVATIONS ARE IN REFERENCE TO THE SURVEYORS BENCHMARK WHICH MUST BE VERIFIED BY THE GENERAL
- CONTRACTOR PRIOR TO GROUND BREAKING.
- 8. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT
- CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND ANY APPLICABLE LOCAL LAWS AND CODES. 9. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHOULD BE CONSTRUCTED AT 2:1(HORIZONTAL TO
- THE CONTRACTOR SHALL DISCLOSE THE LOCATION OF ANY ON-SITE AND/OR OFF-SITE BARROW LOCATION AND/OR WASTE BURIAL LOCATION TO THE EROSION CONTROL INSPECTOR.
- 10. LIMITS OF CLEARING SHOWN ARE BASED ON CUT AND FILL SLOPES OR OTHER GRADING REQUIREMENTS. 11. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AS INDICATED PRIOR TO GRADING OPERATIONS. NO DEVICE
- 12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS
- 13. ALL DISTANCES ARE HORIZONTAL GROUND. 14. ANCHOR SILT FENCE WITH COMPACTED BACKFILL ON TREE PROTECTION ZONES, DO NOT BURY.
- 15. ALL EROSION CONTROL DEVICES SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM EVENT. IF ANY FAILURES ARE FOUND. THEY SHOULD BE REPAIRED AS SOON AS POSSIBLE.
- 16. ANY ASSOCIATED DEMOLITION PERMITS AND METHODS OF DEMOLITION ARE TO BE OBTAINED AND ARRANGED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- SEDIMENT TRAPS AND BASINS NEED TO BE STABILIZED IMMEDIATELY AFTER INSTALLATION. 18. STONE OUTLETS SHOULD BE INSTALLED AT LOW POINTS OF THE SILT FENCING, BASED ON FIELD CONDITIONS.
- 19. EFFECTIVE OCTOBER 1, 2010, PERSONS RESPONSIBLE FOR LAND DISTURBING ACTIVITIES MUST INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. SELF-INSPECTION REPORTS ARE REQUIRED. A SAMPLE SELF-INSPECTION REPORT, AS WELL AS DETAILS OF THE SELF-INSPECTION PROGRAM. CAN BE FOUND ON THE LAND QUALITY WEBSITE (HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION) IF YOU HAVE QUESTIONS OF THE SELF-INSPECTION PROGRAM, PLEASE CONTACT (877) 623-6748.
- 20. A LAND DISTURBANCE PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO ANY DISTURBANCE ON THE SITE. ALL CONSTRUCTION SHALL COMPLY WITH NCDENR STANDARDS AND SPECIFICATIONS.
- 22. LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF ABOVE GROUND FEATURES. ALL EXISTING UTILITY LOCATIONS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 23. SITE GRADING AND EXCAVATION MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, AND RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET, EXCAVATION AND EARTH MOVING OPERATIONS MUST BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S GEOTECHNICAL ENGINEER.
- 25. ALL TEMPORARY DIVERSIONS MUST BE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.3% LONGITUDINAL SLOPE.
- 26. ALL ADJACENT ROADWAYS TO THE SITE ARE TO BE SWEPT (NOT WASHED) AT THE END OF EACH WORK DAY TO REMOVE SEDIMENT FROM THE ROAD SURFACE.
- 27. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND PROPERLY MAINTAINED AT THE END OF EACH WEEK AND AFTER EVERY RAINFALL EVENT
- 28. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING THE SITE. 29. CONTRACTOR SHALL PERFORM PRACTICES AND PROCEDURES WHICH MINIMIZE AND PREVENT DUST OR OTHER PARTICLES FROM OCCURRING. PARTICLES WHICH CAN BE PICKED UP AND CARRIED BY WIND SHOULD BE WITH WATER TO PREVENT PARTICLES FROM BECOMING PROTECTED WITH A TEMPORARY COVER OR KEPT UNDER CONTROL
- THE CONTRACTOR TO A DEGREE THAT IS IN COMPLIANCE WITH FEDERAL, LOCAL, AND STATE DUST CONTROL REGULATIONS. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION

#### PHASE I EROSION CONTROL CONSTRUCTION

- 1. POST REQUIRED DOCUMENTS NEAR THE PLANNED CONSTRUCTION ENTRANCE AND WITHIN EASY ACCESS TO THE GENERAL
- STAKE/FLAG THE LOD (WHERE STAKING IS NOT POSSIBLE/PRACTICAL, THE LOD MUST BE CONSPICUOUSLY AND PROMINENTLY
- MARKED TO DENOTE THE BOUNDARY). LOD MUST REMAIN CONSPICUOUSLY MARKED THROUGHOUT THE ENTIRE CONSTRUCTION
- 3. INSTALL SILT FENCE. CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY TO INSTALL THESE PERIMETER CONTROL BMPS. 4. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SET THE PROJECT OFFICE TRAILER.
- CONSTRUCT SKIMMER SEDIMENT BASIN, STABILIZE SIDE SLOPES, 6. CONSTRUCT AND STABILIZE DIVERSION DRAINING TO SKIMMER SEDIMENT BASIN







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It's fast. It's free. It's the law

DRAWN BY: SCALE:

PROPOSED

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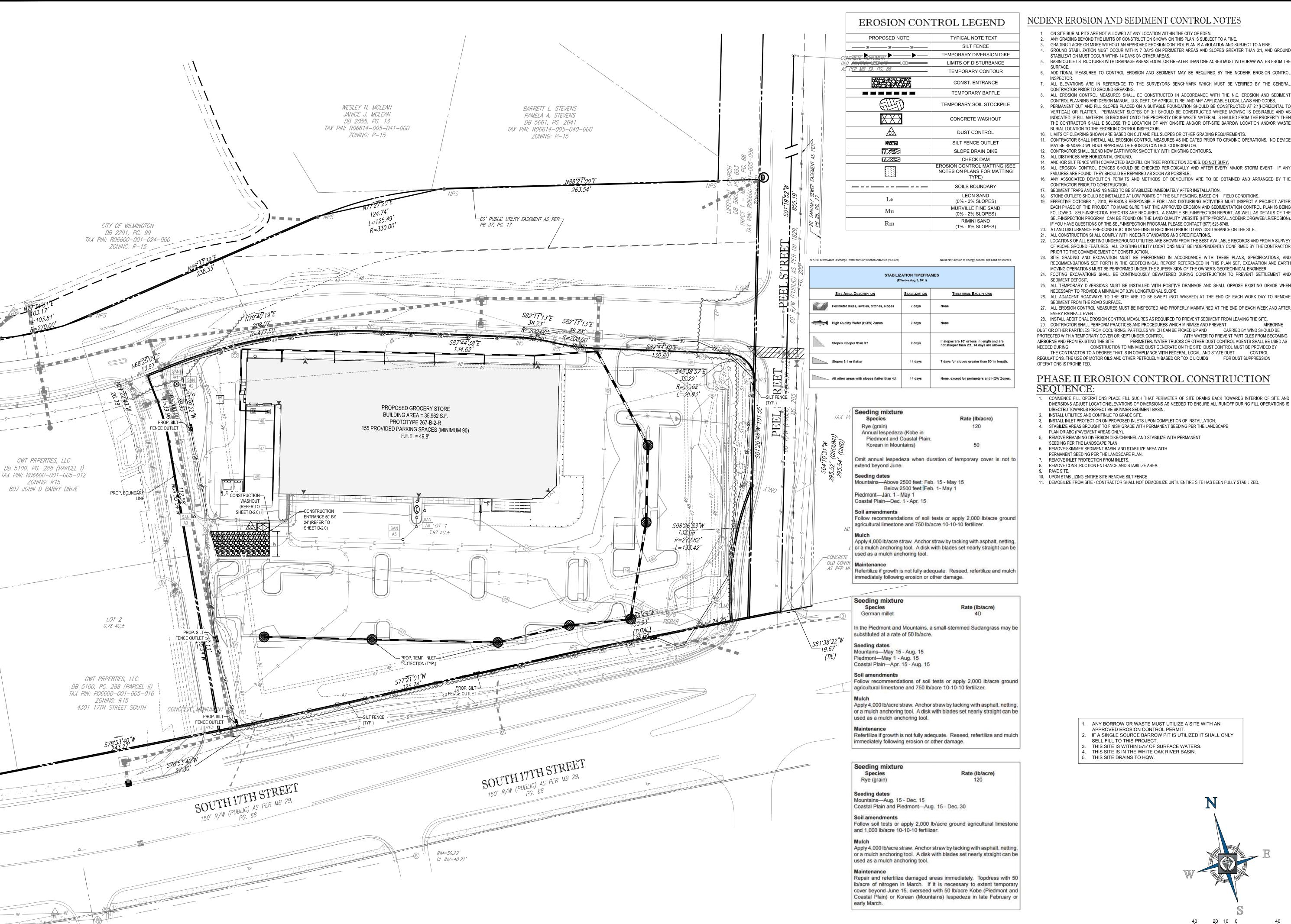
LOCATION OF SITE **4301 S 17TH STREET** WILMINGTON, NC 28412



4011 WESTCHASE BLVD., SUITE 290 RALEIGH, NC 27607 Phone: (919) 578-9000 Fax: (919) 703-2665 NC@BohlerEng.com



EROSION AND SEDIMENT CONTROL PHASE I



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- 8. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U.S. DEPT. OF AGRICULTURE, AND ANY APPLICABLE LOCAL LAWS AND CODES.
- 9. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHOULD BE CONSTRUCTED AT 2:1(HORIZONTAL TO VERTICAL) OR FLATTER. PERMANENT SLOPES OF 3:1 SHOULD BE CONSTRUCTED WHERE MOWING IS DESIRABLE AND AS INDICATED. IF FILL MATERIAL IS BROUGHT ONTO THE PROPERTY OR IF WASTE MATERIAL IS HAULED FROM THE PROPERTY THEN
- BURIAL LOCATION TO THE EROSION CONTROL INSPECTOR. LIMITS OF CLEARING SHOWN ARE BASED ON CUT AND FILL SLOPES OR OTHER GRADING REQUIREMENTS.
- CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AS INDICATED PRIOR TO GRADING OPERATIONS. NO DEVICE MAY BE REMOVED WITHOUT APPROVAL OF EROSION CONTROL COORDINATOR.
- 12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS. ALL DISTANCES ARE HORIZONTAL GROUND.
- ANCHOR SILT FENCE WITH COMPACTED BACKFILL ON TREE PROTECTION ZONES, DO NOT BURY. ALL EROSION CONTROL DEVICES SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM EVENT. IF ANY
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- 18. STONE OUTLETS SHOULD BE INSTALLED AT LOW POINTS OF THE SILT FENCING, BASED ON FIELD CONDITIONS. EFFECTIVE OCTOBER 1, 2010, PERSONS RESPONSIBLE FOR LAND DISTURBING ACTIVITIES MUST INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. SELF-INSPECTION REPORTS ARE REQUIRED. A SAMPLE SELF-INSPECTION REPORT, AS WELL AS DETAILS OF THE
- 20. A LAND DISTURBANCE PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO ANY DISTURBANCE ON THE SITE. ALL CONSTRUCTION SHALL COMPLY WITH NCDENR STANDARDS AND SPECIFICATIONS.
- 22. LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF ABOVE GROUND FEATURES. ALL EXISTING UTILITY LOCATIONS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 23. SITE GRADING AND EXCAVATION MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, AND RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET, EXCAVATION AND EARTH
- MOVING OPERATIONS MUST BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S GEOTECHNICAL ENGINEER. 24. FOOTING EXCAVATIONS SHALL BE CONTINUOUSLY DEWATERED DURING CONSTRUCTION TO PREVENT SETTLEMENT AND

CONSTRUCTION TO MINIMIZE DUST GENERATE ON THE SITE. DUST CONTROL MUST BE PROVIDED BY

- 25. ALL TEMPORARY DIVERSIONS MUST BE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.3% LONGITUDINAL SLOPE. 26. ALL ADJACENT ROADWAYS TO THE SITE ARE TO BE SWEPT (NOT WASHED) AT THE END OF EACH WORK DAY TO REMOVE
- SEDIMENT FROM THE ROAD SURFACE. 27. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND PROPERLY MAINTAINED AT THE END OF EACH WEEK AND AFTER
- EVERY RAINFALL EVENT.
- 28. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING THE SITE. 29. CONTRACTOR SHALL PERFORM PRACTICES AND PROCEDURES WHICH MINIMIZE AND PREVENT DUST OR OTHER PARTICLES FROM OCCURRING. PARTICLES WHICH CAN BE PICKED UP AND CARRIED BY WIND SHOULD BE PROTECTED WITH A TEMPORARY COVER OR KEPT UNDER CONTROL WITH WATER TO PREVENT PARTICLES FROM BECOMING
- THE CONTRACTOR TO A DEGREE THAT IS IN COMPLIANCE WITH FEDERAL, LOCAL, AND STATE DUST CONTROL REGULATIONS. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION

#### PHASE II EROSION CONTROL CONSTRUCTION

- 1. COMMENCE FILL OPERATIONS PLACE FILL SUCH THAT PERIMETER OF SITE DRAINS BACK TOWARDS INTERIOR OF SITE AND DIVERSIONS ADJUST LOCATION/ELEVATIONS OF DIVERSIONS AS NEEDED TO ENSURE ALL RUNOFF DURING FILL OPERATIONS IS DIRECTED TOWARDS RESPECTIVE SKIMMER SEDIMENT BASIN.
- INSTALL UTILITIES AND CONTINUE TO GRADE SITE. INSTALL INLET PROTECTION ON PROPOSED INLETS UPON COMPLETION OF INSTALLATION.
- 4. STABILIZE AREAS BROUGHT TO FINISH GRADE WITH PERMANENT SEEDING PER THE LANDSCAPE PLAN OR ABC (PAVEMENT AREAS ONLY).
- 5. REMOVE REMAINING DIVERSION DIKE/CHANNEL AND STABILIZE WITH PERMANENT SEEDING PER THE LANDSCAPE PLAN.
- 6. REMOVE SKIMMER SEDIMENT BASIN AND STABILIZE AREA WITH PERMANENT SEEDING PER THE LANDSCAPE PLAN.
- 7. REMOVE INLET PROTECTION FROM INLETS.
- . REMOVE CONSTRUCTION ENTRANCE AND STABILIZE AREA.
- 10. UPON STABILIZING ENTIRE SITE REMOVE SILT FENCE
- 11. DEMOBILIZE FROM SITE CONTRACTOR SHALL NOT DEMOBILIZE UNTIL ENTIRE SITE HAS BEEN FULLY STABILIZED.

ANY BORROW OR WASTE MUST UTILIZE A SITE WITH AN

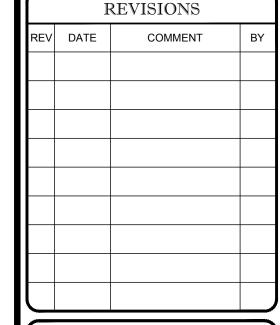
THIS SITE IS WITHIN 575' OF SURFACE WATERS. THIS SITE IS IN THE WHITE OAK RIVER BASIN.

SELL FILL TO THIS PROJECT.

THIS SITE DRAINS TO HQW.

APPROVED EROSION CONTROL PERMIT.

IF A SINGLE SOURCE BARROW PIT IS UTILIZED IT SHALL ONLY





NOT APPROVED FOR CONSTRUCTION

It's fast. It's free. It's the law.

DRAWN BY: SCALE:

PROPOSED

GROCERY

LIDL US OPERATIONS,

LLC LOCATION OF SITE 4301 S 17TH STREET

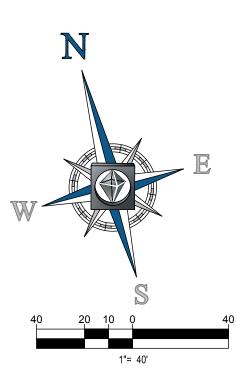
WILMINGTON, NC 28412

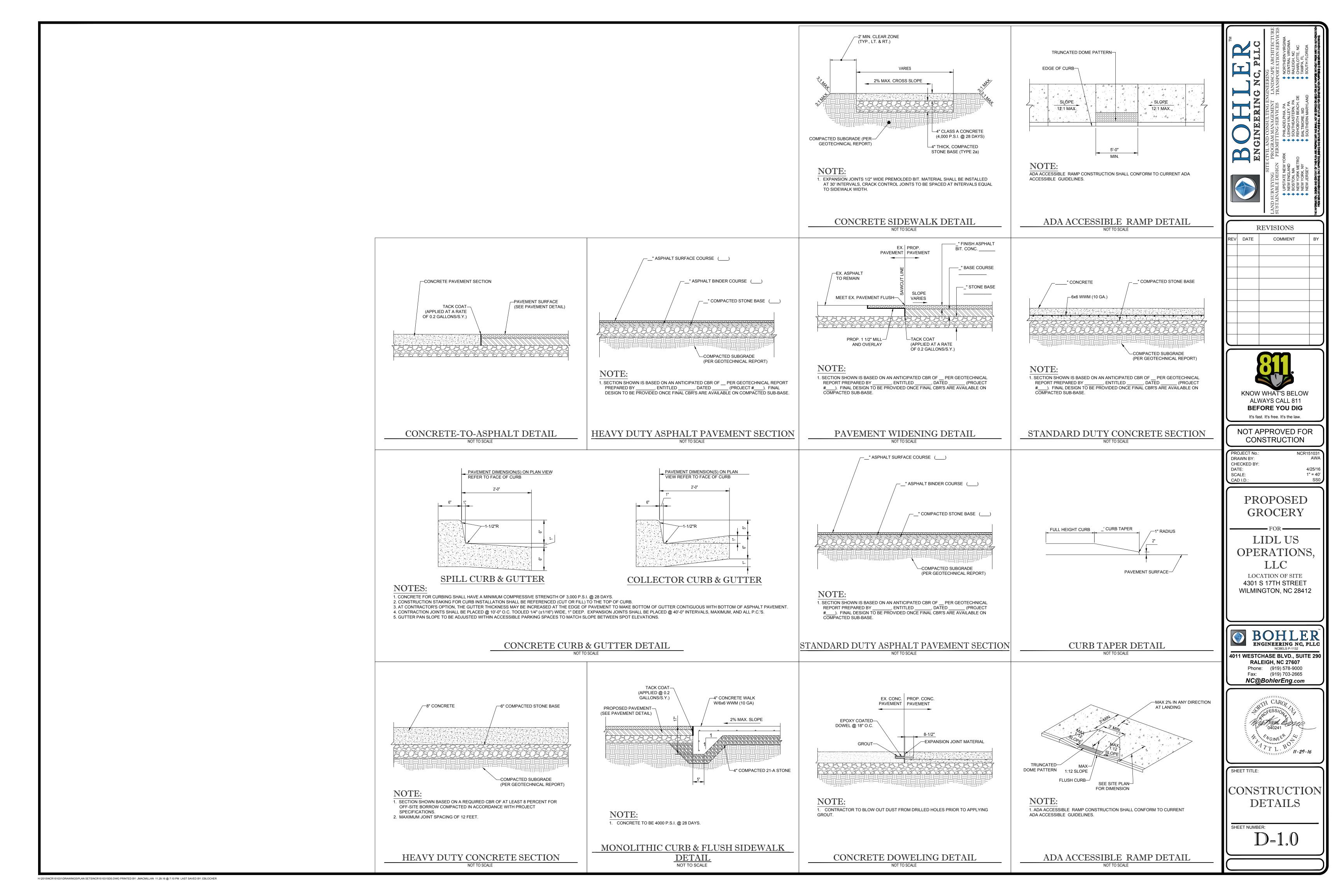


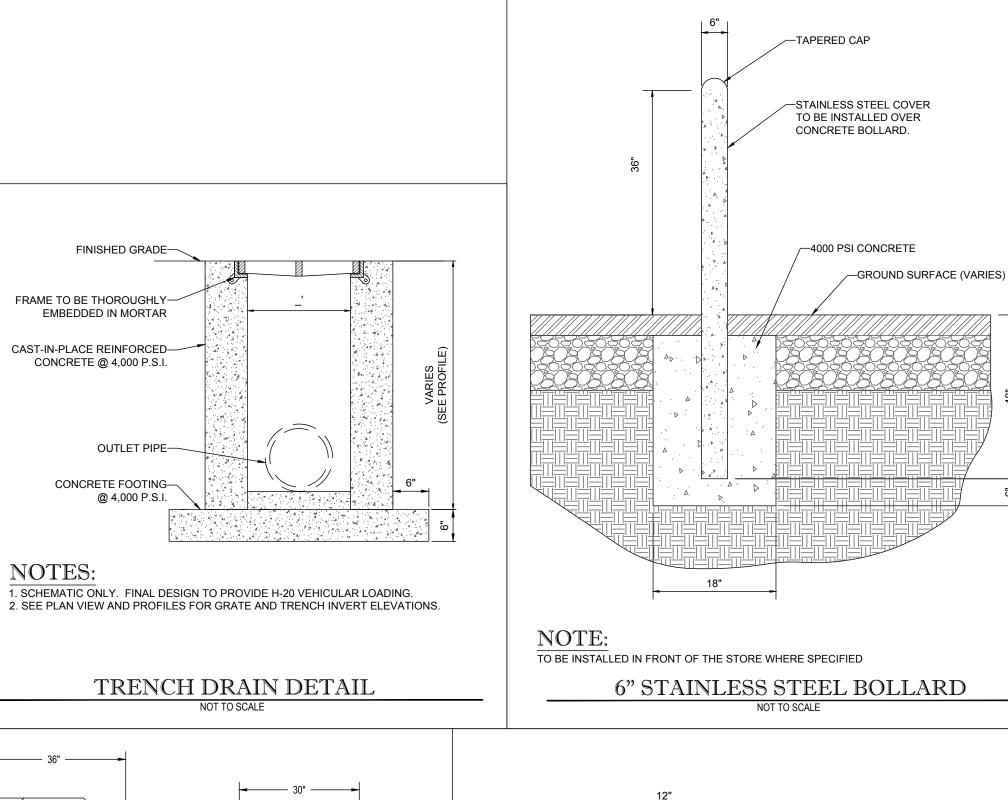
1011 WESTCHASE BLVD., SUITE 290 RALEIGH, NC 27607 Phone: (919) 578-9000 Fax: (919) 703-2665 NC@BohlerEng.com

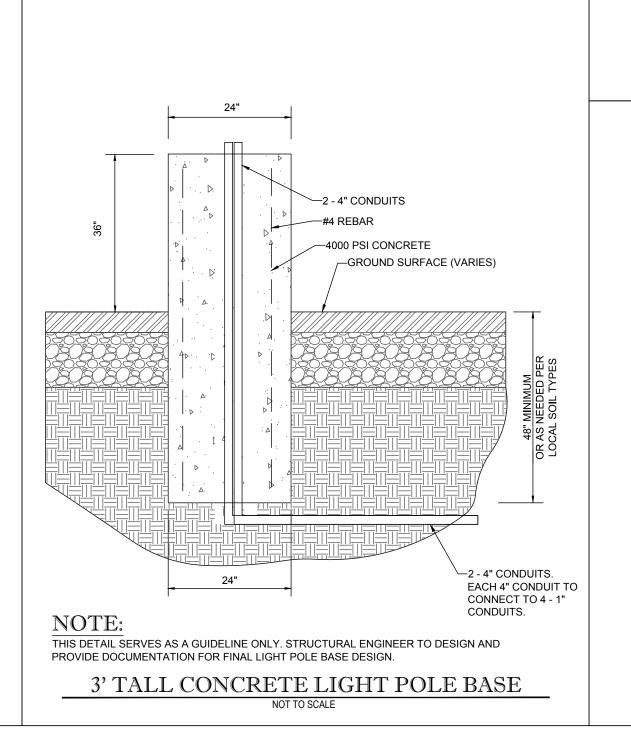


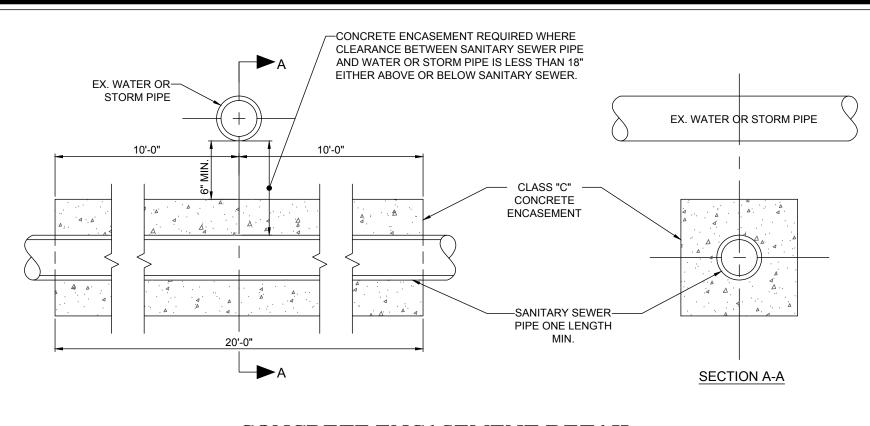
EROSION AND SEDIMENT CONTROL PHASE II



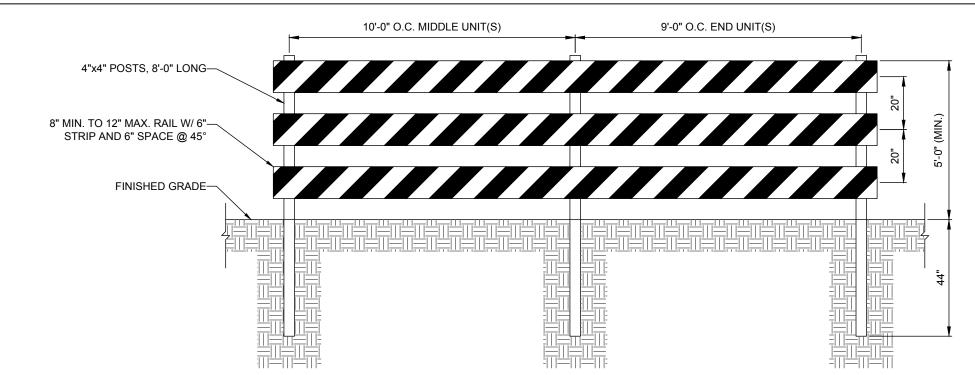








#### CONCRETE ENCASEMENT DETAIL

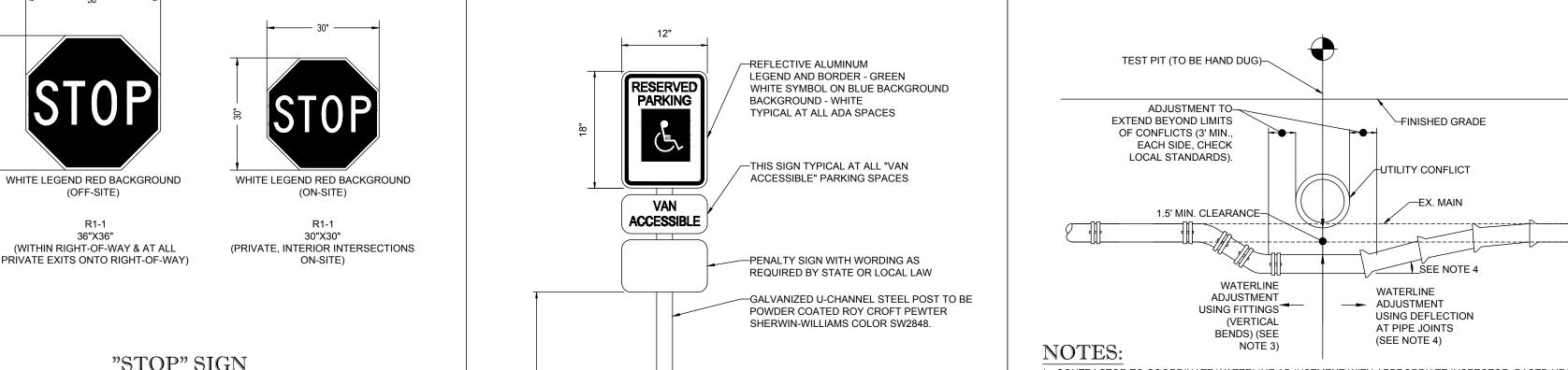


#### NOTES:

LENGTH OF THE BARRICADE.

- 1) SEE PLAN VIEW FOR TRAFFIC BARRIER LOCATION(S). 2) POSTS AND PLANKS SHALL BE PRESSURE TREATED LUMBER.
- 3) PLANKS SHALL BE PAINTED COMPLETELY WHITE. POSTS SHALL BE PAINTED WHITE ON ALL SIDES TO WITHIN SIX INCHES (6 IN.) OF THE GROUND LEVEL. 4) GOOD QUALITY OIL BASE EXTERIOR GRADE PAINT MUST BE USED. SIX INCH (6 IN.) HIGH INTENSITY REFLECTIVE ORANGE AND WHITE STRIPE TAPE ON ONE SIDE FOR THE FULL
- 5) EACH PLANK SHALL BE SECURED TO EACH POST WITH (2)-\(\frac{3}{8}\) IN. X 6-\(\frac{1}{2}\) IN. CARRIAGE BOLTS OR WITH (2) $\frac{7}{16}$  IN. x 4 IN. LAG SCREWS WITH WASHERS. BOLTS OR SCREWS ARE TO BE PLACED TWO INCHES (2 IN.) FROM EDGE OF PLANKS. 6) WHERE NECESSARY FOR SAFETY OF PEDESTRIAN TRAFFIC, A FULL EXTENSION OF
- THE BARRICADE MAY BE REQUIRED TO THE LIMITS OF THE RIGHT-OF-WAY. 7) WHERE PROVISION MUST BE MADE FOR ACCESS OF EQUIPMENT AND AUTHORIZED VEHICLES, LOCKABLE GATES MAY BE PROVIDED IN ONE SECTION OF

#### TRAFFIC BARRICADE DETAIL



ADA PARKING SIGN DETAIL

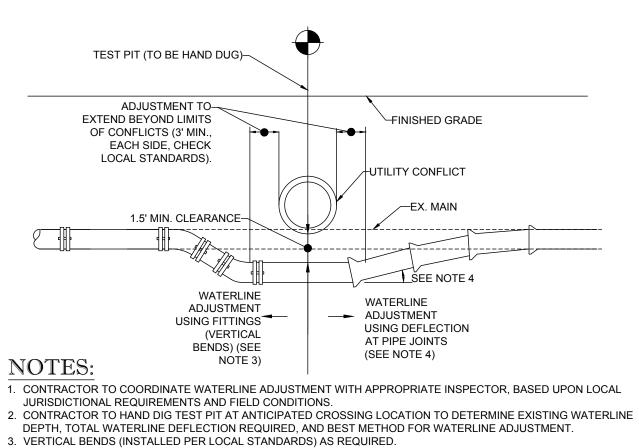
36"X36" (WITHIN RIGHT-OF-WAY & AT ALL PRIVATE EXITS ONTO RIGHT-OF-WAY) "STOP" SIGN ─8"Ø CONCRETE BASE /-PAVERS ←4000 PSI CONCRETE 4'-0" - 12" WIDE PAINTED WHITE STOP LINE (TYP.) <sup>-</sup> ONE AT EACH ADA SPACE BEHIND 6" BOLLARD. WHERE ADA SPACES FACE EACH OTHER

STOP SIGNAGE AND MARKING

NOT TO SCALE

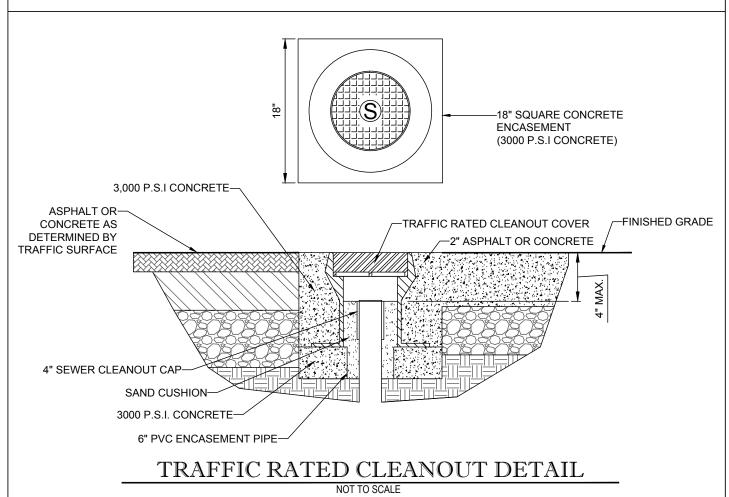
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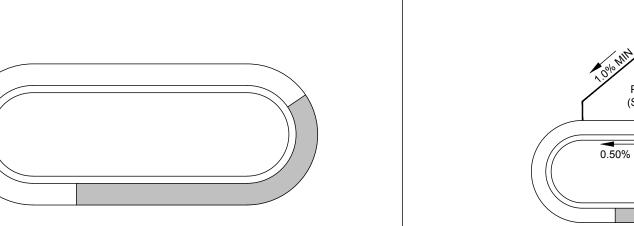
ASPHALT OR-CONCRETE AS DETERMINED BY TRAFFIC SURFACE 4" SEWER CLEANOUT CAP-SAND CUSHION-WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH ON SIDES.



4. PIPE DEFLECTION AT JOINTS (PER LOCAL STANDARDS)

#### WATERLINE ADJUSTMENT DETAIL



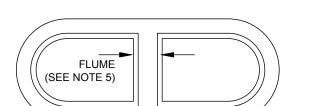


LIMITS OF PROP PVMT (SEE NOTE 4) 

EXAMPLE ONE

EXAMPLE TWO

#### **EXAMPLE 3**



EXAMPLE THREE

1. CONTRACTOR TO INSTALL CURB AND GUTTER AT ELEVATION OF EXISTING PAVEMENT (ELEVATION AT EDGE OF GUTTER PAN MATCHES ELEVATION AT EXISTING PAVEMENT, UNLESS PLANS AND/OR SCHEMATICS INDICATE

2. CONTRACTOR TO PROVIDE GUTTER PANS (COLLECTOR/SPILL) PER GRADING PLAN. SHADED GUTTER PAN REPRESENTS FULL SPILL SECTION, NON-SHADED IS COLLECTOR. CONTRACTOR TO PROVIDE 3 FOOT TRANSITIONS BETWEEN SPILL AND COLLECTOR SECTIONS.

3, PLAN INTENT IS TO PROVIDE A MINIMUM SLOPE OF 0.50% ALONG COLLECTOR CURB. IF FIELD CONDITIONS AND/OR PLAN REPRESENTATION DOES NOT PROVIDE MINIMUM SLOPE REQUIREMENTS, CONTRACTOR IS TO CONTACT ENGINEER PRIOR TO POURING CURB AND GUTTER. BOHLER ENGINEERING SHALL BE HELD HARMLESS FOR ANY CURB AND GUTTER POURED THAT DOES NOT MEET MINIMUM REQUIREMENTS.

4. IN THOSE SITUATIONS WHERE RE-GRADING OF PARKING AND PAVEMENT REMOVAL IS NECESSARY (SEE EXAMPLE 2), THE CONTRACTOR IS TO VERIFY THAT THE RESULTANT GRADIENT AT THE HIGH SIDE OF THE ISLAND PROVIDES 1% PAVEMENT SLOPE, PER PLAN INTENT.

5. IN ISLANDS WHERE FLUMES ARE INDICATED, THE CONTRACTOR SHALL PROVIDE A FLAT BOTTOMED FLUME AT THE SPECIFIED WIDTH. MINIMUM FLUME SLOPE SHALL BE 0.50%.

ENGINEERING NC, PLLO

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LIDL US

OPERATIONS,

LOCATION OF SITE

**4301 S 17TH STREET** 

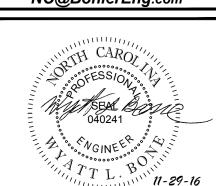
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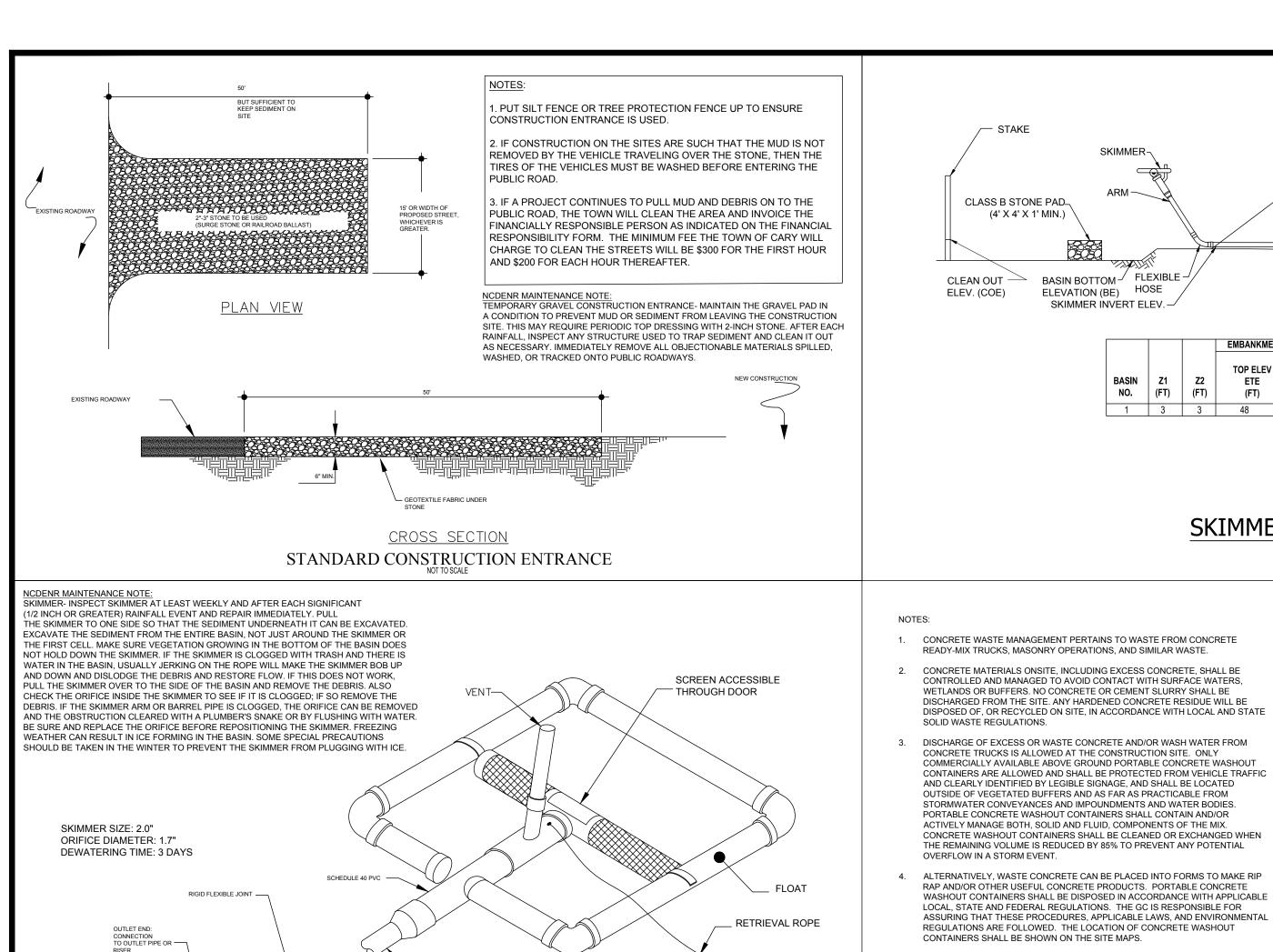
SCALE:

DATE

COMMENT



CONSTRUCTION DETAILS



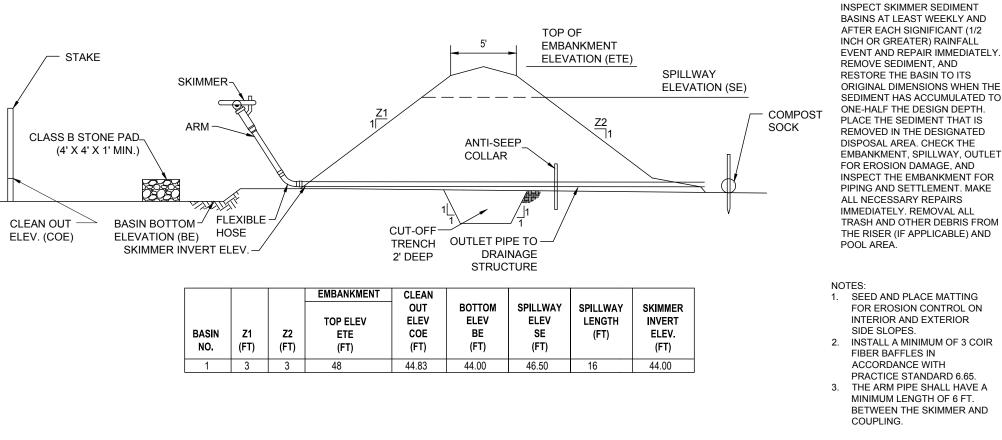
BARREL PIPE LONGER

NOT INCLUDED WITH

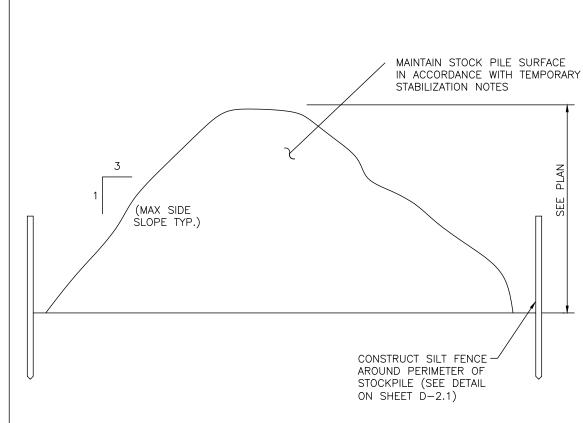
SKIMMER SUPPLIED

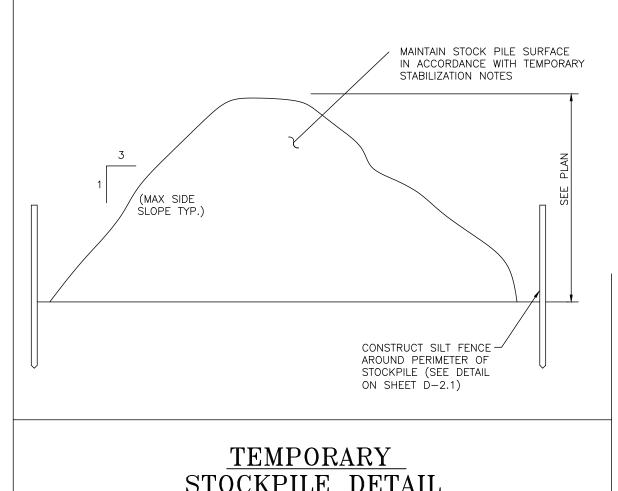
THAN SHOWN.

BY USER.

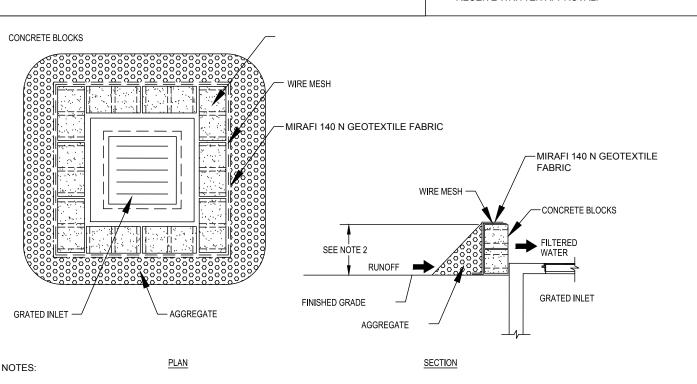


#### SKIMMER SEDIMENT BASIN









NCDENR MAINTENANCE NOTE SKIMMER SEDIMENT BASIN

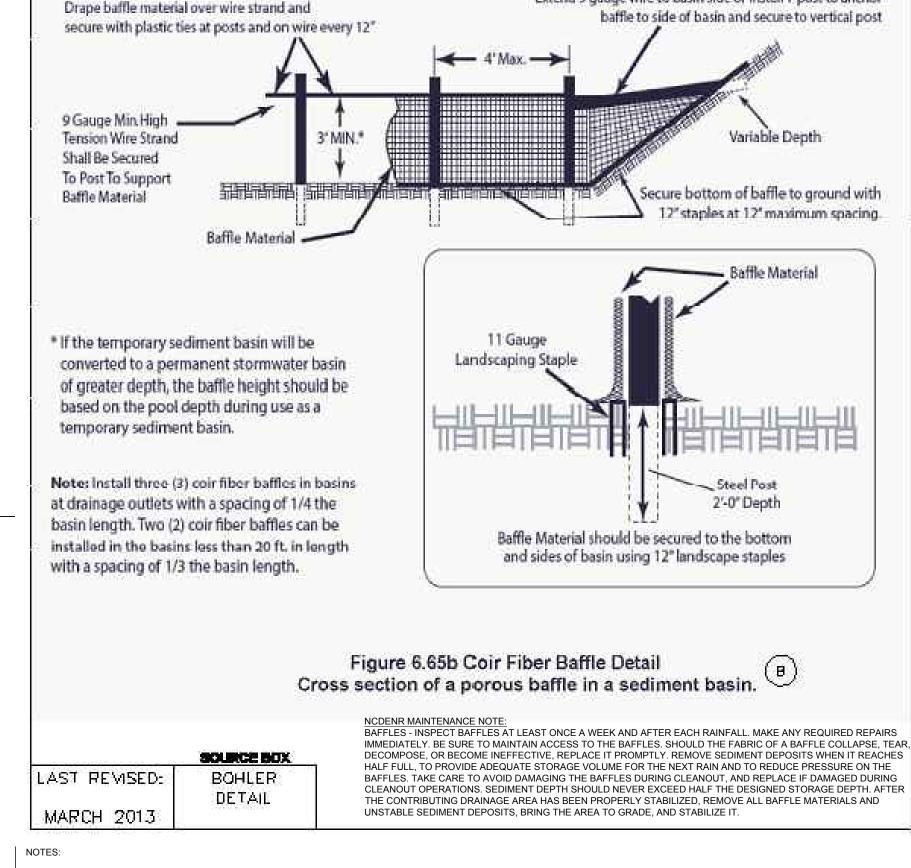
PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. MIN. HEIGHT OF BARRIER SHALL BE 12" AND MAX. HEIGHT SHALL BE 24". PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS. THE AGGREGATE SHALL BE 3/4"-2" ANGULAR CLEAN STONE, WHICH WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

MAINTENANCE NOTES: INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.

REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

NCDENR MAINTENANCE NOTE:
TEMPORARY BLOCK AND GRAVEL DROP INLET PROTECTION - INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLÚME 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.

BLOCK AND GRAVEL INLET PROTECTION



VERIFY WITH ENGINEER OF RECORD WHICH DISCHARGES FROM DEWATERING ACTIVITIES ARE ALLOWED OR ARE NOT ALLOWED NON-STORMWATER DISCHARGES UNDER THE GENERAL PERMIT AND OTHER REGULATIONS. CONTRACTOR SHALL OBTAIN ALL DEWATERING PERMITS AND AUTHORIZATIONS REQUIRED BY STATE AND LOCAL REGULATIONS. SEE THE REQUIRED DEWATERING PERMITS AND AUTHORIZATIONS TABLE BELOW. GC SHALL COMPLETE COLUMNS 3 AND 4.

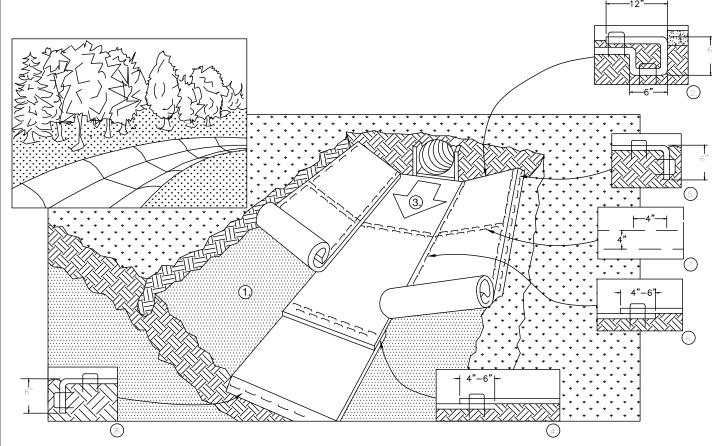
GC SHALL WAIT TO HAVE WRITTEN COPY OF ALL REQUIRED DEWATERING PERMITS AND AUTHORIZATIONS BEFORE PERFORMING DEWATERING ACTIVITIES

DISCHARGES FROM DEWATERING OPERATIONS SHALL BE DIRECTED THROUGH AN APPROPRIATE POLLUTION PREVENTION/TREATMENT SYSTEM OF CONTROL MEASURES, SUCH AS A SEDIMENT/FILTER BAG SEDIMENT TRAP OR SEDIMENT BASIN, AND OTHERS, AS NEEDED, PRIOR TO BEING DISCHARGED FROM THE SITE OR INTO A WATER BODY OF THE STATE. UNDER NO CIRCUMSTANCES ARE DISCHARGES FROM DEWATERING OPERATIONS TO BE DISCHARGED DIRECTLY INTO SANITARY SEWER SYSTEMS, STREAMS, RIVERS, LAKES OR OTHER AREAS BEYOND THE PERMITTED PROJECT AREA. LIKEWISE, DISCHARGES INTO STORM SEWER SYSTEMS THAT DO NOT DRAIN TO A SUITABLE ON-SITE TREATMENT FACILITY, SUCH AS A BASIN, ARE ALSO PROHIBITED. DISCHARGES FROM DEWATERING OPERATIONS MUST ALSO BE CONDUCTED IN A MANNER SUFFICIENT TO PREVENT EROSION FROM THE DISCHARGE RUNOFF

IN SEDIMENT TRAP OR BASIN OR POND DEWATERING OPERATIONS, WATER SHALL ONLY BE REMOVED FROM THE SURFACE OF THE CONTAINED WATER. A SKIMMER OR SIMILAR FLOATING DEVICE MUST BE USED, TO ONLY REMOVE THE WATER AT THE SURFACE.

DO NOT DISCHARGE ON A SLOPE GREATER THAN THREE PERCENT NOR WITHIN 20 FEET OF A SURFACE WATER BODY.

DEWATERING SHALL NOT OCCUR DURING OR IMMEDIATELY AFTER PRECIPITATION EVENTS, BUT EXCEPTIONS SHALL BE EVALUATED ON CASE BY CASE BASIS. CONTACT THE ENGINEER OF RECORD AND



. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. 2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12"APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12"PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES

IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S RECOMMENDATIONS. 4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF

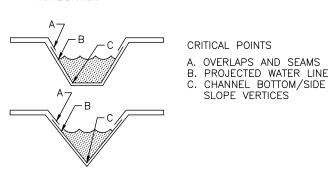
STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS. 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY

12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4"-6" (DEPENDING ON BLANKET TYPE) AND STAPLED.

TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE BLANKET BEING OVERLAPPED.

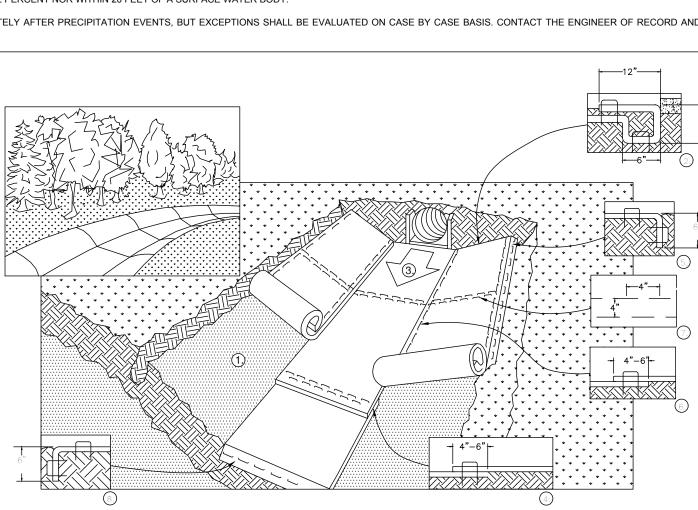
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL. 8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART

IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 9. PLACE STAPLE/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE CHANNEL FLOW OR SHORELINE



1. HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE. 2. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS. 3. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.

EROSION CONTROL LINING (CHANNEL INSTALLATION)



Extend 9 gauge wire to basin side or install T-post to anchor

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OPERATIONS,

LOCATION OF SITE 4301 S 17TH STREET

WILMINGTON, NC 28412

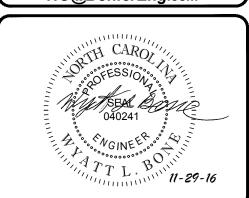
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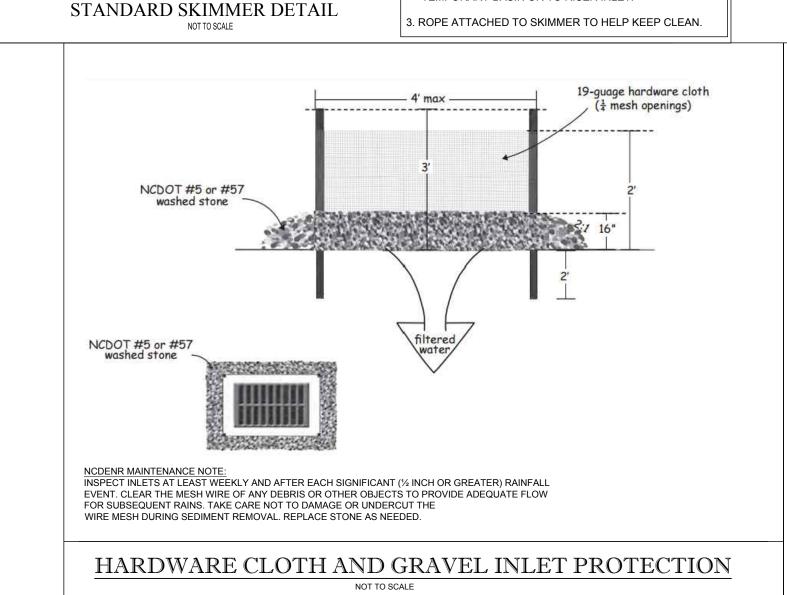
COMMENT

DATE

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EROSION AND SEDIMENT CONTROL **DETAILS** 

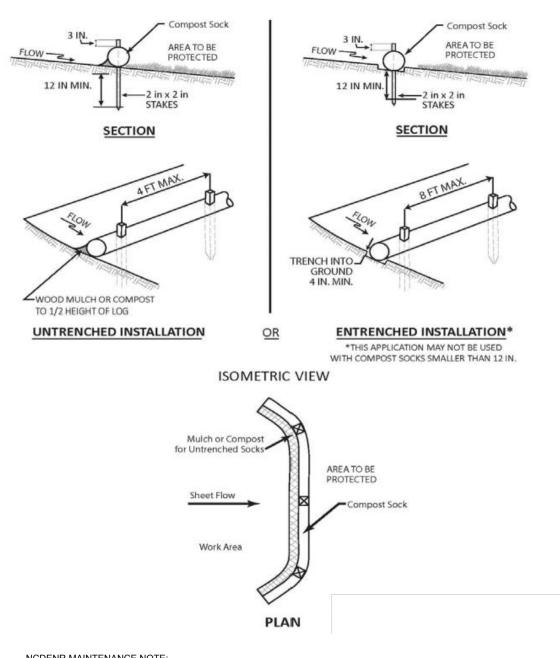


. SKIMMER IS TO BE A SURFACE DEWATERING DEVICE

SKIMMER SHOULD RISE TO LEVEL OF WEIR HEIGHT IN

SUCH AS BMP SKIMMER OR APPROVED DEVICE.

TEMPORARY BASIN OR TO RISER INLET.

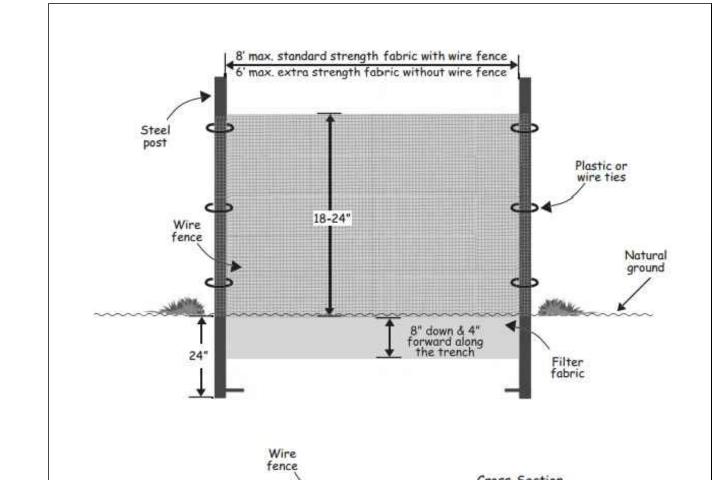


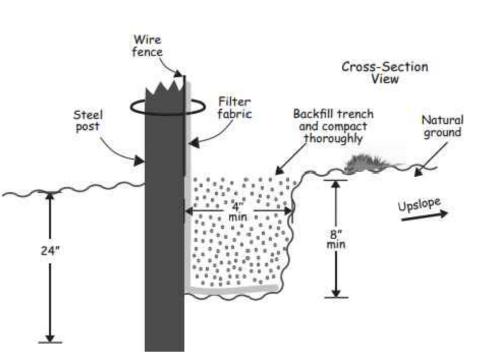
CEMENT AND CONCRETE WASHOUT

NCDENR MAINTENANCE NOTE: INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE. THE SOCK NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLODGED. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

8" COMPOST SOCK DETAIL

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

		Test Method	Units	Supported <sup>A</sup> Silt Fence	Unsupported <sup>A</sup> Silt Fence	Type of Value
		Test Method	Office 			
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X-Machine Direction			400 (90)	450 (90)	MARV
Permittivity B		ASTM D 4491	sec-1	0.05	0.05	MARV
Apparent Opening Size B		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV <i>C</i>
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of	70% after 500 h of	Typical

- Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent
- strength.

  These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.

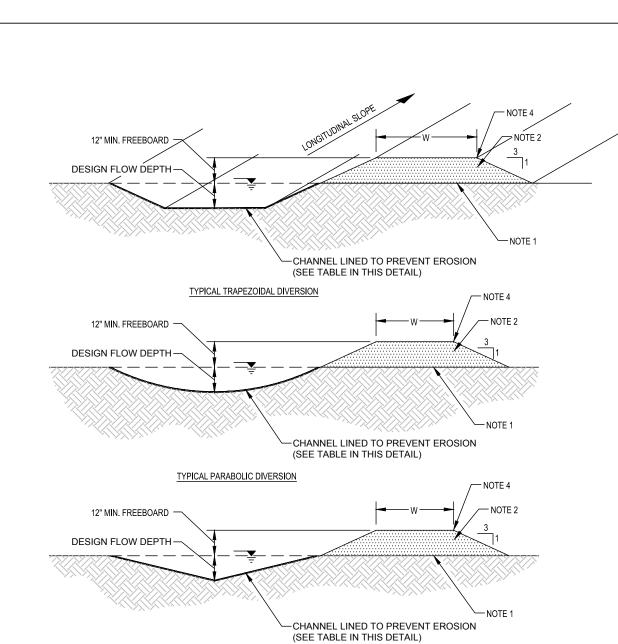
  As measured in accordance with Test Method D 4632.
- As measured in accordance with Test Method D 4632

  TABLE 1 TAKEN FROM ASTM D 6461-99 (2007)

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SILT FENCE DETAIL

NOT TO SCALE



#### TYPICAL VEE-SHAPED DIVERSION

- REMOVE ANY EXISTING VEGETATION AND SCARIFY OR BENCH ADJACENT SOILS PRIOR TO PLACING BERM.
   BERM MATERIALS MUST BE ADEQUATELY COMPACTED AND IMMEDIATELY STABILIZED.
   DIVERSION DITCHES/BERMS MUST BE IMMEDIATELY STABILIZED TO PREVENT EROSION AND TRANSPORT OF
- DIVERSION DITCHES/BERMS MUST BE IMMEDIATELY STABILIZED TO PREVENT EROSION AND TRANSPORT SEDIMENT.
   TOP SHALL BE NO LESS THAN 6" HIGHER THAN RECEIVING BASIN EMERGENCY SPILLWAY ELEVATION

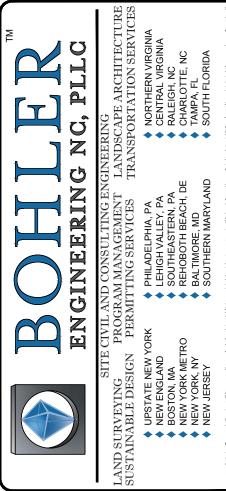
#### MAINTENANCE NOTES:

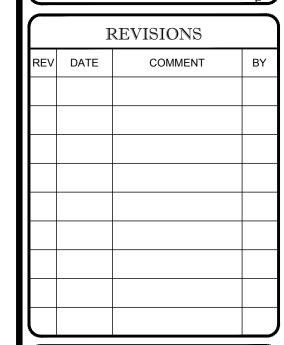
INSPECT DIVERSION CHANNELS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIKE.
 CHECK OUTLETS, AND MAKE TIMELY REPAIRS AS NEEDED TO AVOID GULLY FORMATION. WHEN THE AREA ABOVE THE TEMPORARY DIVERSION DIKE IS PERMANENTLY STABILIZED, REMOVE THE DIKE, AND FILL AND STABILIZE THE CHANNEL TO BLEND WITH THE NATURAL SURFACE.

DIVERSION DITCHES AND BERMS					
DIVERSION NAME AND SEGMENT	LENGTH (FT.)	LONGITUDINAL SLOPE	DESIGN FLOW DEPTH (IN.)	EROSION PROTECTION TYPE (I.E., MATTING, BLANKET, ETC.)	CHANNEL BOTTOM WIDTH (IN.)
DD1	670	0.50%	12	JUTE NET	24

DIVERSION CHANNEL

NOT TO SCALE







NOT APPROVED FOR CONSTRUCTION

PROJECT No.: NCR151031
DRAWN BY: AWA
CHECKED BY:
DATE: 4/25/16
SCALE: 1" = 40'
CAD I.D.: SS0

PROPOSED GROCERY

LIDL US
OPERATIONS,

LLC

LOCATION OF SITE

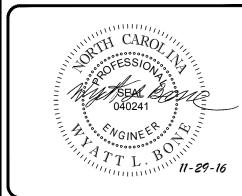
4301 S 17TH STREET

WILMINGTON, NC 28412



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NC@BohlerEng.com



EROSION AND
SEDIMENT
CONTROL
DETAILS

D-1.3