GRADING PLANS

PARCEL 7A, LLC/ZINN ASSET MANAGEMENT

PROJECT SUMMARY NOTES:

- PROJECT NARRATIVE: THE INTENT OF THIS PLAN IS TO PRESENT A GRADING DESIGN FOR A FUTURE COMMERCIAL/RETAIL PAD SITE. THE EXISTING SITE CONSISTS OF AN UNDEVELOPED ASSEMBLAGE OF +1.5 ACRES WITHIN THE BUCKWALTER PLANNED URBAN DEVELOPMENT, ALL AREAS ON SITE WILL BE MAINTAINED BY THE DEVELOPER. NO PUBLIC IMPROVEMENTS ARE PROPOSED FOR DEDICATION AND NO PRIVATE IMPROVEMENTS ARE PROPOSED UNLESS DEPICTED HEREIN.
- 2. THE PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH APPLICABLE PROVISIONS PROVIDED IN THE TOWN OF BLUFFTON UDO ARTICLE 5 DESIGN STANDARDS AND IS IN CONFORMANCE WITH THE BUCKWALTER PLANNED URBAN DEVELOPMENT AGREEMENT AND MASTER PLAN. NO PAST DEVELOPMENT PERMIT APPROVAL NUMBERS OR CONDITIONS WERE FOUND FOR THE SITE
- 3. THIS PLAN IS IN GENERAL COMPLIANCE WITH THE TOWN OF BLUFFTON STORMWATER DESIGN MANUAL
- 4. PARCEL IDENTIFICATION NUMBERS (PIN) NOT AVAILABLE FOR SUBJECT PROPERTY DUE TO RECENT PLAT

CONTACT INFORMATION

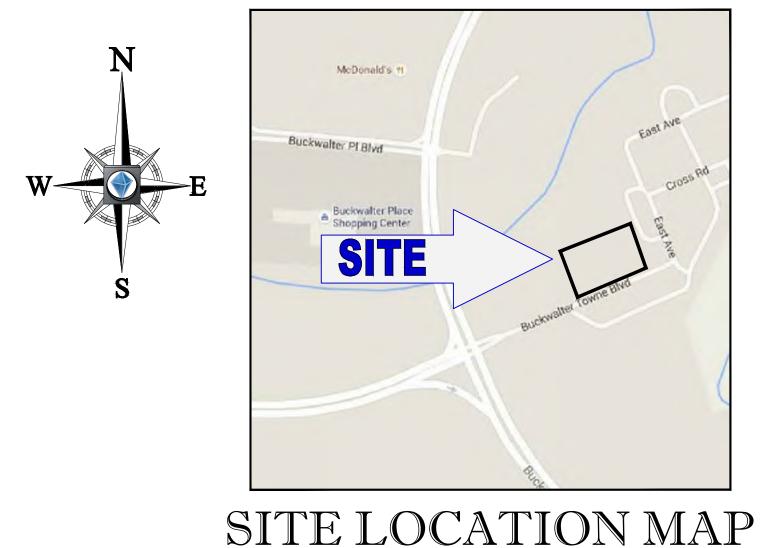
REFERENCES
SURVEY: TOPOGRAPHIC AND TREE SURVEY BY ATLAS SURVEYING INC. 49 BROWN'S COVE ROAD, SUITE 5 RIDGELAND, SC29936 PHONE: (843) 645-9277 DATED: 9/26/16
ALTA/ASCM LAND TITLE SURVEY OF BUCKWALTER COMMERCIAL BY GEOSURVEY, LTD. 1660 BARNES MILL ROAD MARIETTA, GEORGIA 30062 SEALED BY TRENTON D. TURK, S.C.R.L.S. NO.: 14820 PHONE: (770) 795-9900 DATED: 2/18/2016 REVISED: 5/04/16
GEOTECHNICAL INVESTIGATION REPORT: NRCS WEB SOIL SURVEY DATED: 11/21/16
GOVERNING AGENCIES
TOWN OF BLUFFTON - PLANNING COMMISSION 20 BRIDGE STREET BLUFFTON, SC 29910 PHONE: (843) 706-4561 EMAIL: eschumacher@townofbluffton.com
TOWN OF BLUFFTON - PUBLIC WORKS 2 RECREATION COURT BLUFFTON, SC 29910 CONTACT: KIM JONES - DIRECTOR OF ENGINEERING & PUBLIC WORKS PHONE: (843) 706-4593 EMAIL: kjones@townofbluffton.com
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC) COASTAL STORMWATER PERMITTING SECTION 1362 McMILLIAN AVE., SUITE 400 CHARLESTON, SC 29405

UTILITY SERVICE CONTACTS

SERVICE	UTILITY / GOVERNING AGENCY
WATER AND SEWER	BRIAN CHEMSAK - DIRECTOR OF ENGINEERING BEAUFORT - JASPER WATER & SEWER AUTHORITY 6 SNAKE ROAD OKATIE, SC 29909 EMAIL: DEBBIE HODGE (ADMIN. COORDINATOR) dottieh@bjwsa.org
STORMWATER AND EROSION CONTROL	SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC) COASTAL STORMWATER PERMITTING SECTION 1362 McMILLIAN AVE., SUITE 400 CHARLESTON, SC 29405
ELECTRIC	SC E&G 108 ROBERT SMALLS PKWY BEAUFORT, SC 29906 PHONE: (843) 525-7700
GAS	SC E&G LUCAS KINARD 108 ROBERT SMALLS PKWY BEAUFORT, SC 29906 PHONE: (843) 815-8816

LOCATION OF SITE

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910 TAX PARCELS: AS SHOWN ON BOOK OF MAPS 145, PAGE 105. BEAUFORT COUNTY, SOUTH CAROLINA



PARCEL 7A Tree DBH 2016-2020 Below is a table comparing a random sample of Tree DBH from plan page C-1.0 Dated 12/05/2016 to field Thank you, Hoft Environmental Service LLC Page | 1

ALERT TO CONTRACTOR:

ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS

AND THE FINAL CONNECTION OF SERVICES.

REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL

BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION

DRAWING SHEET INDEX

GENERAL NOTES

RADING & DRAINAGE PLAN

SITE & ESC DETAILS 1

XISTING CONDITIONS & DEMOLITION PLAN

ROSION & SEDIMENT CONTROL DETAILS 2

66 Crossings Blvd

ROSION & SEDIMENT CONTROL NOTES

ROSION & SEDIMENT CONTROL PLAN

(C-0.1)

(C-1.0)

(C-3.0)

(C-6.0)

(D-2.0)

(D-2.1)

(D-2.2)

Fed ID. #: 47-4416188

PREPARED BY

BOHLER//

4130 PARKLAKE AVE., SUITE 130 RALEIGH, NC 27612 Phone: (919) 578-9000 NC@BohlerEng.com

DEVELOPER

PARCEL 7A LLC/ZINN ASSET MANAGEMENT

PO BOX 1726
BLUFFTON, SC 29910
TELEPHONE (843) 384-1451
CONTACT: TOM ZINN

EMAIL: TZINN@ZAMSC.COM

CONTACT: ANDREW MORIARTY - AMORIARTY@BOHLERENG.COM

NC PLLC No.4810

COVER SHEET

SCALE: 1"=500'



REVISIONS SCDHEC REVISIONS REVISIONS



NOT APPROVED FOR CONSTRUCTION

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

> PARCEL 7A LLC GRADING PLANS

PARCEL 7A LLC/ZINN ASSET MGMT

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910

BOHLER //
BOHLER ENGINEERING NC, PLLC

4130 PARKLAKE AVENUE, SUIT RALEIGH, NC 27612

NC@BohlerEng.com



C-0.0

ORG. DATE - 12/05/2016

THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT K SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE $^\circ$ SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN TING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND I

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:

TOPOGRAPHIC AND TREE SURVEY BY ATLAS SURVEYING INC.

49 BROWN'S COVE ROAD, SUITE 5 RIDGELAND, SC 29936

PHONE: (843) 645-9277

ALTA/ASCM LAND TITLE SURVEY OF BUCKWALTER COMMERCIAL BY GEOSURVEY, LTD.

1660 BARNES MILL ROAD MARIETTA, GEORGIA 30062

SEALED BY TRENTON D. TURK, S.C.R.L.S. NO.: 14820 PHONE: (770) 795-9900

DATED: 2/18/2016 REVISED: 5/04/16 GS JOB NO: 20165144-01

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 sea.) 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 BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, 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
- 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
- 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
- 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 MEANS, 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
- 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, 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 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 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
- 19. BOHLER ENGINEERING 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'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 HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING 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 will not be REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN
- 20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING 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 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

- BOHLER ENGINEERING 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
- 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
- 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 SCDHEC 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
- 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. 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.
- . 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.
- . 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.
- 4. 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
- 5. 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.
- 6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.

OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. 14. 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,

- 15. 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.
- 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

16. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE

- 17. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT FLEVATIONS 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.
- 18. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF

19. REFER TO SITE PLAN FOR ADDITIONAL NOTES.

- 20.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.
- 21. CONTRACTOR MUST 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.
- 22. 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

23. STORM DRAINAGE PIPE

- UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH WATER TIGHT JOINTS UNLESS INDICATED OTHERWISE. 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 WATER TIGHT JOINT. PVC PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS
- 24. 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
- 28. 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
- 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.

29. 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. 30 CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER

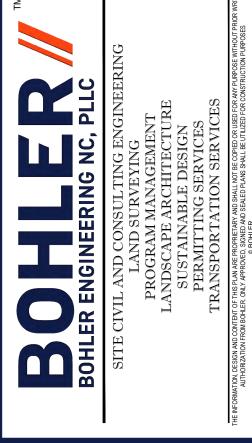
WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR

STATE DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK

- WITH THE AGENCY WITH JURISDICTION OVER SAME 31. LOCATION OF PROPOSED UTILITY POLE RELOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.
- 32. 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

3,	
	STANDARD ABBREVIATIONS

AC	ACRES	LP	LOW POINT
ADA	AMERICANS WITH DISABILITY ACT	L/S	LANDSCAPE
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ВС			MINIMUM
BF	BASEMENT FLOOR	MH	MANHOLE
ВК	BLOCK	MJ	MECHANICAL JOINT
BL	BASELINE	ос	ON CENTER
BLDG	BUILDING	PA	POINT OF ANALYSIS
ВМ	BUILDING BENCHMARK	PC	POINT CURVATURE
BRL	BUILDING RESTRICTION LINE	PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
CF	CUBIC FEET	PI	POINT OF INTERSECTION
CL	CENTERLINE	POG	POINT OF GRADE
CMP	CORRUGATED METAL PIPE	PROP	PROPOSED
CNPY	CANOPY	PT	POINT OF TANGENCY
CONN	CONNECTION	PTCR	POINT OF TANGENCY, CURB RETURN
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE PIPE
CPP	CORRUGATED PLASTIC PIPE	PVI	POINT OF VERTICAL INTERSECTION
CY	CUBIC YARDS	PVT	POINT OF VERTICAL TANGENCY
DEC	DECORATIVE	R	RADIUS
DEP	DEPRESSED	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	RET WALL	RETAINING WALL
DOM	DOMESTIC	R/W	RIGHT OF WAY
ELEC	ELECTRIC	S	SLOPE
ELEV	ELEVATION	SAN	SANITARY SEWER
EP	EDGE OF PAVEMENT	SF	SQUARE FEET
ES	EDGE OF SHOULDER	STA	STATION
EW	END WALL	STM	STORM
EX	EXISTING FLARED END	S/W	SIDEWALK
FES	SECTION	TBR	TO BE REMOVED
FF	FINISHED FLOOR	TBRL	TO BE RELOCATED
FH	FIRE HYDRANT	TC	TOP OF CURB
FG	FINISHED GRADE	TELE	TELEPHONE TREE PROTECTION
G	GRADE GARAGE FLOOR (AT	TPF	FENCE
GF	DOOR) GRADE HIGHER SIDE	TR	TO REMAIN
GH GL	OF WALL GRADE LOWER SIDE	TYP	TOP OF WALL
	OF WALL		
GRT GV	GRATE GATE VALVE	UG	UNDERGROUND UTILITY POLE
HDPE	HIGH DENSITY	w	WIDE
HP	POLYETHYLENE PIPE HIGH POINT	W/L	WATER LINE
HOR	HORIZONTAL	W/M	WATER METER
HW	HEADWALL	±	PLUS OR MINUS
INT	INTERSECTION	0	DEGREE
INV	INVERT	Ø	DIAMETER
LF	LINEAR FOOT	#	NUMBER
LOC	LIMITS OF CLEARING		L
LOD	LIMITS OF DISTURBANCE	-	



	REVISIONS			
RE	ZV DAT	ΓE	COMMENT	DRAWN B
1	01/11	/17	SCDHEC REVISIONS	ERB
2	01/06	6/21	CLIENT & TOWN REVISIONS	РМА
			-	
			044	



NOT APPROVED FOI CONSTRUCTION

AS NOTED

PROJECT No.: DRAWN BY: CHECKED BY:

CAD I.D.:

PROJECT PARCEL 7A LLC GRADING PLANS

PARCEL 7A

ASSET MGM7 **BUCKWALTER TOWNE BLVD**

BLUFFTON, SC 29910



4130 PARKLAKE AVENUE, SUITE RALEIGH, NC 27612

Phone: (919) 578-9000 NC@BohlerEng.com

SHEET TITLE:

GENERAI

DEMOLITION LEGEND:			
EXISTING NOTE	TYPICAL NOTE TEXT	DEMOLITION NOTE	
	PROPERTY LINE		
	COMMUNICATION LINE		
	BUFFER LINE		
14	CONTOUR		
	CONCRETE CURB & GUTTER	======	
	SAWCUT LINE		
	LIMITS OF DISTURBANCE	LODLOD	
W	UNDERGROUND WATER LINE		
	OVERHEAD ELECTRIC LINE		
EE	UNDERGROUND ELECTRIC LINE		
	SANITARY SEWER MAIN		
(S)	SANITARY MANHOLE		

WATER VALVE

LIGHT POLE

STORM INLET

TREE LINE

TREE

GRAPHIC LEGEND:			
	SOILS BOUNDARY		
Cs	COOSAW LOAMY FINE SAND		

AN	NOTATION LEGEND:
TRD.	TO BE DEMOVED

TREE SPECIES LEGEND

- LA LAUREL OAK WO WATER OAK
- MAP RED MAPLE BG BLACK GUM G SWEET GUM

LIMITS OF DISTURBANCE:
LOD = 1.50 ACRES (65,270 AF)

EXISTING CONDITIONS NOTES:

- 1. REFER TO GENERAL NOTES, SHEET C-0.1
- 2. EXISTING ZONING FOR PARCEL: PUD PIN: TO BE CONFIRMED WITH PLANNING DEPARTMENT LOT LINES DEPICTED AS SHOWN IN BOOK OF MAPS #145, PAGE 105. PUD - PLANNED UNIT DEVELOPMENT
- 3. THE HORIZONTAL REFERENCE FRAME IS NORTH AMERICAN DATUM OF 1983(2011)-STATE PLANE COORDINATE SYSTEM OF SOUTH CAROLINA ZONE, THE VERTICAL REFERENCE FRAME IS NORTH AMERICAN VERTICAL DATUM OF 1988(GEOID12B). ANY DIRECTIONS OR DIMENSIONS SHOWN ARE A RECTANGULAR, GROUND LEVEL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM. NGS MONUMENT PID CK0828 WAS CHECKED TO CONFIRM THE ACCURACY OF THE OPUS
- FLOOD NOTE: THIS PROPERTY IS LOCATED IN A FLOODPLAIN AREA ZONE C, "AREA OF MINIMAL FLOODING". COMMUNITY PANEL NUMBER: 450025-0085 D

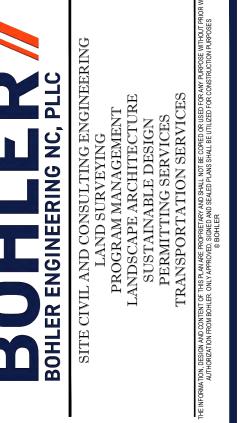
SOIL NOTES:

	COOSAW LOAMY FINE SAND (CS)
SLOPE	0% - 2%
DEPTH TO RESTRICTIVE FEATURE	MORE THAN 80 INCHES
NATURAL DRAINAGE CLASS	MODERATELY WELL DRAINED
RUNOFF CLASS	LOW
CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER (Ksat)	MODERATELY HIGH TO HIGH (0.57 TO 1.98 in/hr)
DEPTH TO WATER TABLE	24" - 36"
AVAILABLE WATER STORAGE IN PROFILE	MODERATE (ABOUT 7.0")
HYDROLOGIC SOIL GROUP	А

GENERAL DEMOLITION NOTES:

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:

- TOPOGRAPHIC AND TREE SURVEY BY ATLAS SURVEYING INC. 49 BROWN'S COVE ROAD, SUITE 5 RIDGELAND, SC29936 PHONE: (843) 645-9277 DATED: 9/26/16
- ALTA/ASCM LAND TITLE SURVEY OF BUCKWALTER COMMERCIAL, BEAUFORT COUNTY, SOUTH CAROLINA. DATE: 2/18/16 BY: TRENTON D. TURK S.C.R.L.S. NO.: 11079
- 2. 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 REVISIONS TO SAME.
- 3. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME.
- 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.
- 6. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR 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 AND DEMOLITION 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 "SOUTH CAROLINA 811" 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 UNDERGROUND UTILITY LOCATIONS AND DEPTH.
- 8. 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 PHASES OF



ATTACHMENT4

REV	DATE	COMMENT	CHECKED BY
1	01/11/17	SCDHEC REVISIONS	ERB
2	01/06/21	CLIENT & TOWN REVISIONS	PMA

REVISIONS



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

NOT APPROVED FOR

CONSTRUCTION

PROJECT No.: DRAWN BY: CHECKED BY: 12/05/16 1" = 30' DATE:

PROJECT:

CAD I.D.:

PARCEL 7A LLC GRADING PLANS

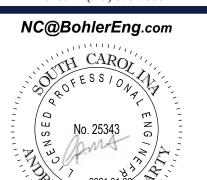
> PARCEL 7A LLC/ZINN

ASSET MGMT BUCKWALTER TOWNE BLVD

BLUFFTON, SC 29910



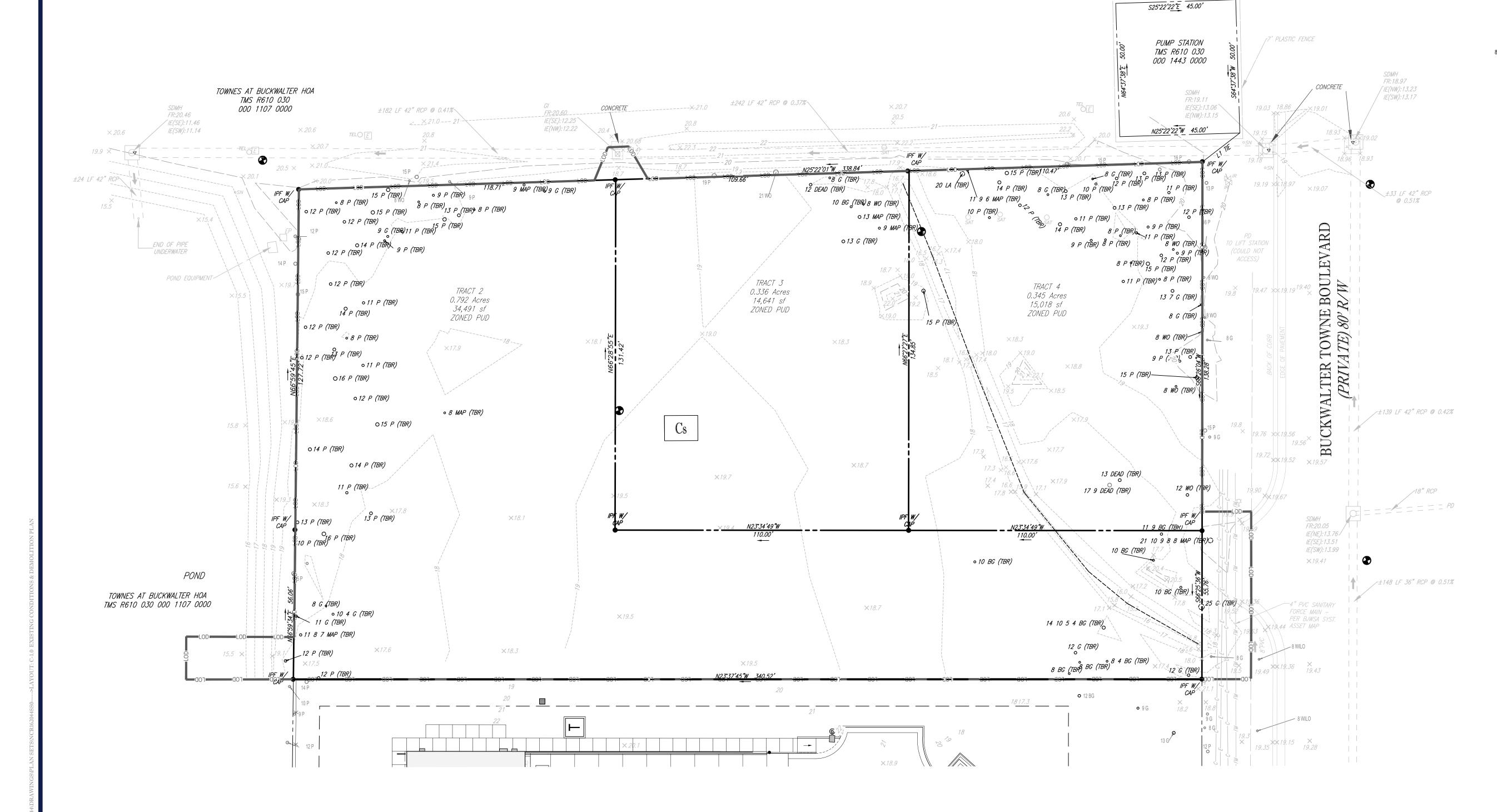
4130 PARKLAKE AVENUE, SUITE RALEIGH, NC 27612 Phone: (919) 578-9000

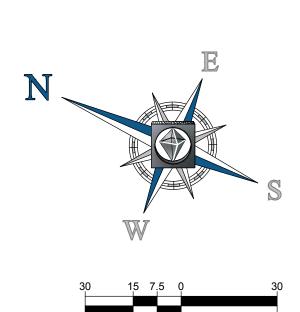


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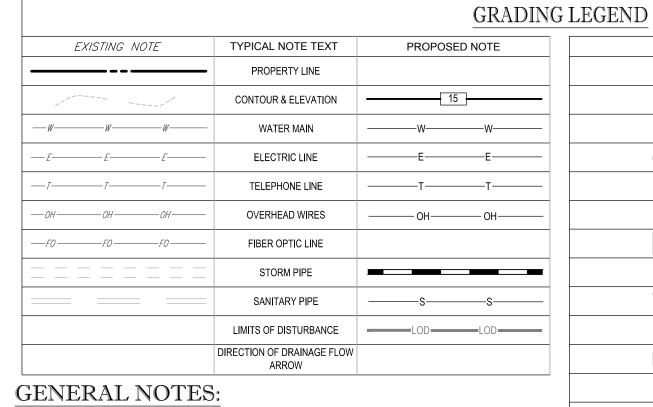
EXISTING CONDITIONS & DEMOLITION PLAN

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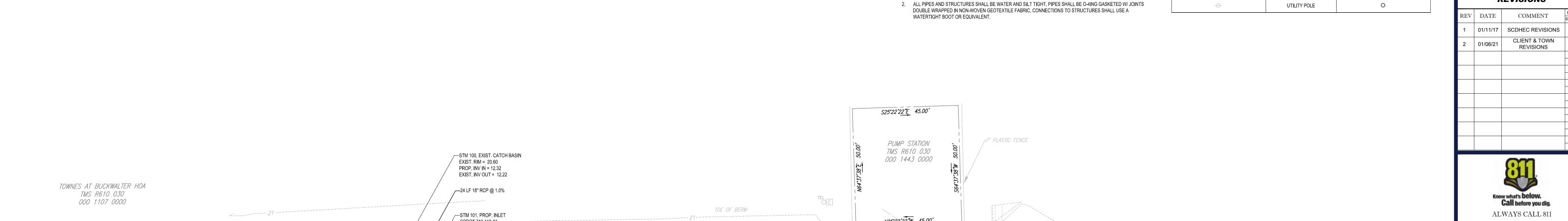
ATTACHMENT4

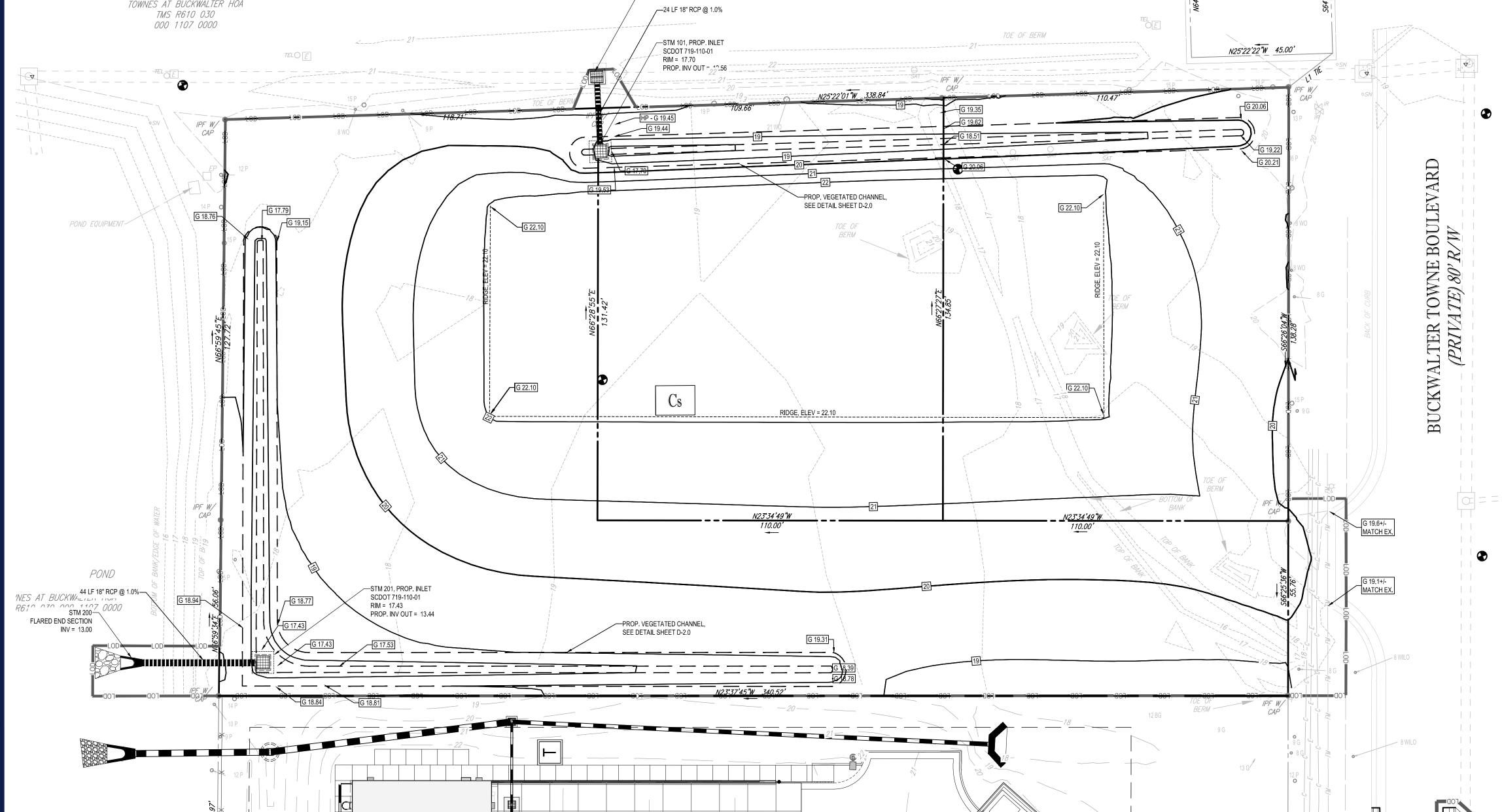


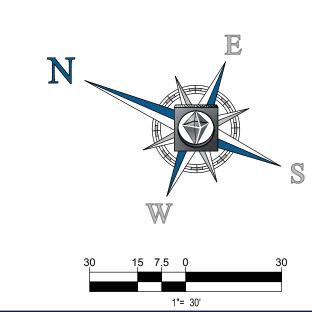
		TOP OF CURB GRADE ELEVATION	TC 11.73
_		HIGH POINT & FINISHED GRADE ELEVATION	HP 12.11 G 14.05
		FLUSH CURB ELEVATION	FG 14.23
	=	AREA/YARD LIGHT	
		SANITARY CLEAN OUT	O
	S	SANITARY MANHOLE	•
		STORM INLET	
		STORM MANHOLE	(b)
		FLARED END SECTION	
		ENDWALL	
	STM	STORM LABEL	
		FIRE HYDRANT	Q
F	\otimes	UTILITY VALVE	•

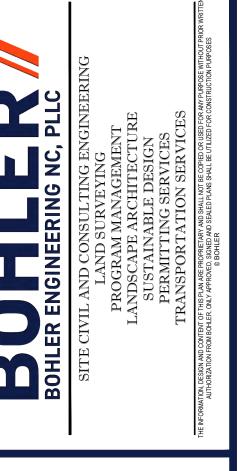
- 1. STORM SEWER
- STRUCTURE. 2. ALL PIPES AND DOUBLE WRAPF

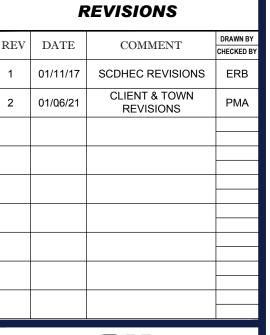
	ARROW			(SIM)	STORM LABEL	
RAL NOTES);				FIRE HYDRANT	
VER PIPE LENGTHS INDICATE	ED ARE NOMINAL AND MEASURED (CENTER OF STRUCTURE TO CENTER OF		\otimes	UTILITY VALVE	
	WATER AND SILT TIGHT, PIPES SH TEXTILE FABRIC, CONNECTIONS T	ALL BE O-4ING GASKETED W/ JOINTS O STRUCTURES SHALL USE A		-	UTILITY POLE	
T DOOT OD FOUND ALENT			_		•	













NOT APPROVED FOR CONSTRUCTION

12/05/16 1" = 30'

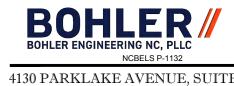
PROJECT No.: DRAWN BY: CHECKED BY: DATE: CAD I.D.:

PARCEL 7A LLC GRADING PLANS

PARCEL 7A

LLC/ZINN ASSET MGMT

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910



RALEIGH, NC 27612 Phone: (919) 578-9000

NC@BohlerEng.com



GRADING &

DRAINAGE PLAN

C = 3.0

EROSION CONTROL NOTES:

- 1. A LAND DISTURBANCE PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO ANY DISTURBANCE ON THE
- 2. ALL CONSTRUCTION SHALL COMPLY WITH SCDHEC STANDARDS AND SPECIFICATIONS. 3. 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
- 4. 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. 5. FOOTING EXCAVATIONS SHALL BE CONTINUOUSLY DEWATERED DURING CONSTRUCTION TO PREVENT
- SETTLEMENT AND SEDIMENT DEPOSIT 6. ALL TEMPORARY DIVERSIONS MUST BE INSTALLED WITH POSITIVE DRAINAGE AND SHALL OPPOSE
- EXISTING GRADE WHEN NECESSARY TO PROVIDE A MINIMUM OF 0.5% LONGITUDINAL SLOPE. 7. 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. 8. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AND PROPERLY MAINTAINED ONCE PER WEEK
- AND WITHIN 24 HOURS OF A STORM EVENT PRODUCING 0.5" OF PRECIPITATION OR GREATER.
- 9. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED TO PREVENT SEDIMENT FROM

	MAPPED SOIL TYPES	
SOIL TYPE	DESCRIPTION	SOIL GROUP
Ca	CAPE FEAR LOAM	C/D
Cs	COOSAW LOAMY FINE SAND	А

TAKEN FROM: USDA, NRCS WEB SOIL SURVEY FOR BEAUFORT COUNTY, SOUTH

TOWNES AT BUCKWALTER HOA

TMS R610 030

000 1107 0000

POND EQUIPMENT-

POND

PROP. DISSIPATER , SEE RIP RAP OUTLET

PROTECTION DETAIL,

BUCKWALTER HOA 130 000 1107 0000

PHASE I EROSION CONTROL CONSTRUCTION SEQUENCE:

- POST REQUIRED DOCUMENTS NEAR THE PLANNED CONSTRUCTION EXIT, AND WITHIN EASY ACCESS TO THE GENERAL PUBLIC WITHOUT ENTERING THE SITE. 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 PROJECT. INSTALL PERIMETER SEDIMENT CONTROL BMPS IN THE VICINITY OF, AND DOWN GRADIENT FROM, THE LOCATION OF THE PLANNED CONSTRUCTION ENTRANCE, CONSTRUCTION OFFICE TRAILER, AND TEMPORARY PARKING AND STORAGE AREAS. CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY
- TO INSTALL THESE PERIMETER CONTROL BMPS
- CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY TO INSTALL RIP RAP OUTLET PROTECTION, PIPE AND DRAINAGE STRUCTURES AS SHOWN IN
- INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SET THE PROJECT OFFICE TRAILER. INSTALL REMAINING PERIMETER SEDIMENT CONTROL BMPS, AS SHOWN ON THE SITE MAPS. CLEAR ONLY THE MINIMUM AREA NECESSARY TO INSTALL
- PERIMETER CONTROL BMPS ON-SITE AND OFF-SITE. CLEAR ONLY THE MINIMUM AREA ABSOLUTELY NECESSARY TO INSTALL STORM DRAIN INLETS AND PIPE, INCLUDING STOCKPILE AREAS NECESSARY FOR SPOIL FROM THESE REQUIRED STRUCTURAL SEDIMENT CONTROL BMPS.
- CONSTRUCT INLETS AND INLET PROTECTION WITH APPROPRIATE OUTFALL. AS SPECIFIED ON THE EROSION CONTROL PLANS. NOTE- DRAW DOWN OF EXISTING DETENTION POND MAY BE REQUIRED FOR TIE IN OF PROPOSED OUTFALL STRUCTURE STM 200. CONTRACTOR SHALL COORDINATE THAT ACTIVITY WITH LIKE IMPROVEMENTS ON ADJACENT PROPERTY.
- STABILIZE SIDE SLOPES, AND ALL SIDES OF EMBANKMENTS OR SLOPES IMMEDIATELY UPON COMPLETION, AS SPECIFIED ON THE EROSION CONTROL PLANS. 10. INSTALL TEMPORARY DIVERSION DIKES, CHANNELS, CHECK DAMS, ETC., AS SPECIFIED ON THE EROSION CONTROL PLANS. STABILIZE SIDE SLOPES AND FLOW LINE TEMPORARY DIVERSION DIKES AND CHANNELS WITH SEED, FERTILIZER AND ROLLED EROSION CONTROL PRODUCTS
- AS SPECIFIED IN THE EROSION CONTROL PLANS. 12. BEGIN CLEARING, GRUBBING, AND STRIPPING THE SITE. PHASE CLEARING AND GRUBBING TO EXTENT PRACTICAL TO MINIMIZE THE AMOUNT OF
- DISTURBANCE AT ANY POINT IN TIME. 13. BEGIN GRADING THE SITE, ADJUST TEMPORARY DIVERSION DIKES, CHANNELS AND OTHER BMP'S AS GRADES ARE ADJUSTED. GRADE THE BUILDING PAD
- AREA TO ENSURE RUNOFF FROM THE PAD IS DIRECTED TOWARD THE SEDIMENT TRAP. 14. TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING/GRADING
- ACTIVITY, ANY DISTURBED AREAS, INCLUDING MATERIAL STOCKPILES THAT ARE SCHEDULED OR LIKELY TO REMAIN IN ACTIVE FOR 7 DAYS OR MORE. 15. IMMEDIATELY PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
- 16. OBTAIN CONCURRENCE FROM THE OWNER THAT THE SITE HAS BEEN FULLY STABILIZED, ACCUMULATED SEDIMENT HAS BEEN REMOVED, AND ALL PROPOSED WORK HAS BEEN COMPLETED; THEN CONVERT DIVERSION DITCHES TO VEGETATED CHANNELS, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S AND STABILIZE ANY AREAS DISTURBED BY THOSE ACTIVITIES.
- 17. CONTINUE DAILY INSPECTIONS AND REPORTS UNTIL AN "NOT" IS ISSUED BY SCDHEC.

THE ESTIMATED DATES OF IMPLEMENTATION OF POLLUTION CONTROL MEASURES SHALL BE DOCUMENTED BY THE CONTRACTOR.

- PROP TEMP INLE

PROTECTION (TYP.)

ROCK CHLTK DAM,

SEE DETAIL SHEET D-2.1

SWPPP STATEMENT:

PROP. STOCKPILE AREA

SEE DETAIL SHEET D-2.0

DRAINAGE AREA TO INLET PROTECTION = 0.60 ACRES, C = 0.5

PROP. DIVERSION DITCH,-

SEE DETAIL SHEET D-2.0

QCK CHECK DAM, SEE DETAIL SHEET D-2.1

REGISTERED PROFESSIONAL ENGINEER, REGISTERED LANDSCAPE ARCHITECT OR TIER B LAND SURVEYOR

"I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER. I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48. CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF

PROP. DIVERSION DITCH,

SEE DETAIL SHEET D-2.0

N23°34'49"W

DRAINAGE AREA TO INLET

PROTECTION = 0.50 ACRES, C = 0.5

ERUSION CON	TRUL LEGEND
PROPOSED NOTE	TYPICAL NOTE TEXT
SFSF	SILT FENCE
—— DD —— DD ——	TEMPORARY DIVERSION DIKE
— > —— > —	TEMPORARY DIVERSION SWALE
LOD—LOD—	LIMITS OF DISTURBANCE
	PROP. CONST. ENTRANCE
	DRAINAGE AREA LIMITS
	TEMPORARY SOIL STOCKPILE
	STONE CHECK DAM
<u> </u>	DUST CONTROL
2000	SILT FENCE OUTLET
	COMPOST SOCK
	EROSION CONTROL MATTING (SEE NOTES ON PLANS FOR MATTING TYPE)
	SOILS BOUNDARY
Cs	COOSAW LOAMY FINE SAND (0% - 2% SLOPES)

S25°22'22"E 45.00"

PUMP STATION

TMS R610 030

000 1443 0000

N25°22'22"W 45.00'

PROP. SILT

ENCE OUTLET

EDOSION CONTROL LECEND

ANY BORROW OR WASTE MUST UTILIZE A SITE WITH AN APPROVED **EROSION CONTROL PERMIT**

SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING

- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR
- DAYS FROM THE LAST LAND DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING
- SILT FENCE OUTLETS ARE TO BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR TO INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

77' PLASTIC FENCE

#4 RECYCLED CONCRETE

FENCE OUTLET

CONSTRUCTION ENTRANCE 100' BY 24' (REFER TO SHEET D-2.0)

SC DHEC STANDARD NOTES:

- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
- A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT
- PORTION OF THE SITE. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODICINSPECTION OR OTHER INFORMATION INDICATES THAT A RMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO
- CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE
- WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE
- REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS
- MAY BE REQUIRED. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS. 7. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR
- INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS. 8. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED

OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE

- LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 9. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR

- GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS. 11. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. 12. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE
- WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE:
- 13. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN FILTER BAG ETC.)
- 14. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED: WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL:
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS:
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 15. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED
- UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. 16. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS. IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM

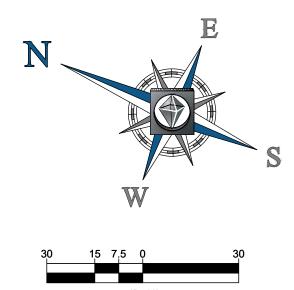
EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND

ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE. 17 A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS

WATER QUALITY MEASURES FOR FECAL COLIFORM IN SHELFFISH HABITAT:

- TEMPORARY RESTROOM FACILITIES (PORTA-JOHNS) ARE TO NOT BE PLACED NEAR THE EXISTING WET POND, PROPOSED DIVERSION CHANNELS, EXISTING AND PROPOSED STORMWATER STRUCTURES, AND WETLANDS.
- ANY WASTE FROM THE TEMPORARY RESTROOM FACILITIES THAT EXITS THE STORAGE CONTAINER OF THE FACILITY AND IS PLACED ONSITE SHALL BE IMMEDIATELY REMOVED AND PROPERLY DISPOSED OF.
- WASTE FROM THE TEMPORARY FACILITY IS TO BE REMOVED BY A PUMP TRUCK AND PROPERLY DISPOSED OF. SILT FENCE IS PLACED AROUND THE SITE TO ENSURE THAT WASTE FROM THE EMPORARY RESTROOM FACILITY WILL NOT ENTER THE WATERS OF THE STATE OF

PROJECT LIMIT OF $\overline{\text{DISTURBANCE (LOD)}} = 1.50 \text{ ACRES}$





REVISIONS						
REV	DATE	COMMENT	DRAWN BY CHECKED BY			
1	01/11/17	SCDHEC REVISIONS	ERB			
2	01/06/21	CLIENT & TOWN REVISIONS	PMA			



NOT APPROVED FOI

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

CONSTRUCTION

PROJECT No.: **DRAWN BY:** CHECKED BY:

CAD I.D.:

PARCEL 7A LLC GRADING PLANS

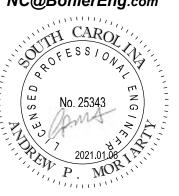
PARCEL 7A LLC/ZINN ASSET MGMT

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910



4130 PARKLAKE AVENUE, SUIT

RALEIGH, NC 27612 Phone: (919) 578-9000 NC@BohlerEng.com



EROSION & SEDIMENT CONTROL PLAN

CROSS SECTION A-A SPACING BETWEEN DITCH CHECK THRU STONE DITCH CHECK L = THE DISTANCE SUCH THAT POINTS A & B ARE OF EQUAL ELEVATION 1-FT, MIN. 12-INCH D50 RIPPAP OVERFLOW 2-FT. MAX. AT CENTER NON-WOVEN GEOTEXTILE FABRIC TYPICAL DITCH CHECK SECTION — 12−INCH D50 RIPRAP TOP OF BANK-1-INCH D50 WASHED STONE PLAN SYMBOL FLOW AREA WHERE SEDIMENT IS South Carolina Department of LENGTH AS REQUIRED IN FIELD TO KEY INTO SIDE OF SLOPES Health and Environmental Contro

OF DITCH

ROCK DITCH CHECK

NOT TO SCALE

CONSTR. ENTRANCE - INSPECTION & MAINTENANCE

frequent during long periods of wet weather.

1/2-inch or more of precipitation.

extend the useful life of stone pad.

sediment trap or basin.

repaired immediately.

post-construction.

. The key to functional construction entrances is weekly

2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended,

within 24—hours after each rainfall even that produces

inspections, routine maintenance, and regular sediment removal.

3. During regular inspections, check for mud and sediment buildup

4. Reshape the stone pad as necessary for drainage and runoff

5. Wash or replace stones as needed and as directed by site

inspector. The stone in the entrance should be washed or

replaced whenever the entrance fails to reduce the amount of

mud being carried off-site by vehicles. Frequent washing will

6. Immediately remove mud and sediment tracked or washed onto

7. During maintenance activities, any broken pavement should be

8. Construction entrances should be removed after the site has

reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed,

unless area will be converted to an impervious surface to serve

South Carolina Department of

Health and Environmental Control

CONSTRUCTION ENTRANCE

GENERAL NOTES

SC-06 PAGE 2 of 2

and pad integrity. Inspection frequencies may need to be more

SC-04 PAGE 1 of 2

- NON-WOVEN

CONSTRUCTION ENTRANCE - GENERAL NOTES

placed at a minimum depth of 6-inches.

8. Limestone may not be used for the stone pad.

provide positive drainage.

accommodate site constraints.

Stabilized construction entrances should be used at all points

public road or any impervious surfaces, such as parking lots.

where traffic will egress/ingress a construction site onto a

Install a non-woven geotextile fabric prior to placing any

Install a culvert pipe across the entrance when needed to

The entrance shall consist of 2—inch to 3—inch D50 stone

100—feet long, and may be modified as necessary to

road to prevent tracking at the edge of the entrance.

Minimum dimensions of the entrance shall be 24-feet wide by

The edges of the entrance shall be tapered out towards the

Divert all surface runoff and drainage from the stone pad to

a sediment trap or basin or other sediment trapping structure.

ROCK DITCH CHECK - GENERAL NOTES

the centerline of the channel.

- Rock Ditch Checks should not be placed in Waters of the State or USGS blue—line streams (unless approved by Federal Authorities).
- Rock Ditch Checks should be installed in steeply sloped channels where adequate vegetation cannot be established. This BMP measure should only be used in small open channels.
- A non-woven geotextile fabric shall be installed over the soil surface where the rock ditch check is to be placed.

The body of the rock ditch check shall be composed of

Rock Ditch Checks should not exceed a height of 2—feet at

12-inch D50 Riprap. The upstream face may be composed of

- Rock Ditch Checks should have a minimum top flow length of
- Riprap should be placed over channel banks to prevent water
- from cutting around the ditch check. The riprap should be placed by hand or mechanical placement (no dumping of rock to form dam) to achieve complete coverage of the channel. Doing so will also ensure that the center of the check is lower than the edges.
- The maximum spacing between the dams should be such that the toe of the upstream check is at the same elevation as the top of the downstream check.

ROCK DITCH CHECK - INSPECTION & MAINTENANCE

- 1. The key to functional rock ditch check is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of rock ditch checks shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the rock ditch check is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the rock ditch check.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Inspect Rock Ditch Checks' edges for erosion and evidence of runoff bypassing the installed check. If evident repair promptly as necessary to prevent erosion and bypassing.
- 7. In the case of grass—lined ditches, channels, and swales, rock ditch checks should be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4%.
- 8. After construction is completed and final stabilization is reached, the entirety of the rock ditch check should be removed if vegetation will be used for permanent erosion control measures. The area beneath the removed rock ditch check must be addressed with permanent stabilization

South Carolina Department of Health and Environmental Contro

ROCK DITCH CHECK SC-04 PAGE 2 of 2

GENERAL NOTES

Design bulla (att.) (4)247036" BROF (BEET FHAME AND GRASS) OSE RIPLEMONET LIST NO MUNICIPAD ©PRECAST DEM COMPONIUMS TO STO. OFFWHIST 744-105-00 DM (19-310-04 (4) 24 AND ORDER LACET FRAME AND URALE Table of the PLACE P950497 elláten enakerkts a keygrádg or refrest of the ENTREM GROW BRIDER GO PRECONSTRUCTION SUPPORT ENGINEER 2419361 DASIP (MAST 80250)N DUAGE أأتعام والعاد يعلنه بالأسطاء FRONT ELEVATION PRADE AND GRATE SECTION 17/00 (05) (ENERY NEY) 24"X36" DRCP INLET DESIGN STANDARDS OFFICE 955 PARK STREET ROOM 405 COLUMBIAN SC 2520: 37:43% TANDARD ORAWING DROP INLET (24"X36") DETAILS FRAME DETAIL 24"X36" 719-110-01 (221-2154) STANDARD FOR 1764 FOR 1764 (MAT)

719-110-01 (221-2154) (MAT)

621-2156 (MAT) ESPECTIVE LETTING DATE: SUY 2008 THIS DRAWING IS NOT TO SCALE

i, 1965 ito-105-an Bobiorop (meis trusto). For out in Place Construction to 966 casen basen Kolas Bostern Boniza Washing (melin out 71 de 610 ollas 1860) osposete was de Useo. For photoes Kolas Boot Suna A. Anterous de Calva Hooge Consette blast de 1860. 5. HE BOTTON OF ME OF THE GOA SHALL BE A MIRKEN OF 67 TRICK PENREAGED COMMENTE ICLASS 3000 DB GOODY HE'PS A REPORT OF STILL WHEN HE WAS SOLARS INDICES FOR MOST IN THE BOS BEST OF THE STILL AND A MILKEN HE SHALL PROVIDED A MILKEN HE DISC SOLARS WHEN PER FORT I'VE NOT. AC BERTAR STREET BE TYPE & OF BC

CONTINGTON MAY USE PAREASE ON BOILT ON PLACE CONSERVED HAY USE PAREAS ON COMMINE OFFICERS AS DESIDED SEE OUGLIFFED PRODUCT LIST AN FOR MAKARACTURERS OF

4°X16° ONOR TELET

O 34 X3EL BEST WEEL SOLUTION

5. AGINGGROING STEEL SHALL OF ACTU 4-TOOL LITH-ALLOY STEEL DEFICACED NAME FOR CONSIDERE HE INFORCEDENT, GRADE BOY MICH. MESH SHALL, GOSFORN IT AASHID WISS, AND M. 4. SEE STANGATO, GRANCHIG FIGHSSSI-OG FLAG STERS, WHICH ARE REQUIRED MICH STRUCTURE SERVICE. . LOCATION AND SIZE OF MIRES ARE SIDE SPECIFIC, ISSE DESIRADE PLANSE. THE MISTON OF THE WATCH CASES IS TO BE SECONDED TO THE LOWEST FLOW LINE ELCYLTION OF DUE WIFES. STITUS DUE IS CAST IN FLACE WITH FIRES INSTALLED, DUFFOM SLAS INICAMESS MOST BE ADSELVED SERVAD FIRE BUTSION BEAMETERS. d. THE PLEASE OF THE BASIN WAST SLEDE IN THE SIRESTION OF THE CHILET PIPE AS SHOWN AND THE INSTRUCTOR OF DATASET PIPE SHALL BE FLYSH WITH PLOOF OF BASIN. SMANS AND MRAYE NOTEST

11. ALE CASTENIO SHALL CONSORN TO ARSHED WINDS. THASE ISO AND THE SPECIFICATIONS OF AASHED MINDS. S. 10) STOCK CHAISS AND FRANCE HAN BE USED IN CITY OF CAST (BOH AS COME AS THE LONGING SECRET AND AND THE LONGING SECRET AND THE LONGING SECRET AND o) standasti resiliterastis sei steri standes and farines inist reest inististis et sistem in 1988 Mangraftaria gerins gerins for et filmen et his oppativent s com et en 1987 europea. Unit contact the initertal en and recentul engineer for favorocet. es. The condest dimensions of the eventho in the tron chare much as specified in the direction of flow, is equalificable. This couls is not splitted, you professious that the fig because once control of the specificable. 14. AS SHOWN BY THIS GRAPHED. THE PRIME IS SET LEVEL. BUT THE RESIDENT CONSTRUCTION ENGINEER WAY SET SEEN BY LIFE BY LONG GRAINAGE CONDITIONS: 15. AFTER THE FRANK IN SET IN 11% FINAL POSTCIEN, 17 19 TO BE ENGASED WITH CONCRETE AS ABBRER OF BRANCHING THE UNIVERSE OF THE PROPERTY AND SERVED WITH THE PROPERTY OF THE THE PROPERTY OF THE PROPERTY

TALL BUTT HILES AND/ON DEVICES DAY HE PLACED AS NECESSRY. BUT LETY HILES SHALL BE CHOIVED SHAT PHIGH TO SCHELETURE OF THE THE METALLATURE RULE LITTURE HERMODE WAST MEET HER METALLATURE. TO. THE CONTRACTOR SHALL USE A STRICLE SCIENCE NARROPACTURIES CHOSEN, FROM THE LIST BY CHARLEFTED PROPERTY CLIEF BY FRECAST STEMS ON THIS MINABLES. TOP POLICY THAN PEACHTED PRODUCT POLICY LE IN SERIES OF SELECTION OF BURNING PRODUCT LIST 14. 11. CONTRACTION MAY CONNEY DESIGN DRIANCEDS AND CALCALATIONS ON MODESCASIONS OF SELS LIEN ON A PROJECT OF PRODUCT DAVIST. MODEL PORTIONS TO TRESS LIENS WILL NOT BE LISTED ON ANY UNIT PIED PROPRIET LIST. SUBMIT ALL PROPRIETS FUR PROJECT SPECIFIC MODIFICATIONS. TO THE RESIDENT CHAINESS FOR HERICAL DAY THE ENGINEER SE DECORD. 93: JOSHAR RETWEEN BUSIALLED PIERES AND PHOCUSI JYANS TO BE FLACED SHALL HE SEALED WITH ANY CROSS LIST OR AN APPROXIMATE PLASTIC PREFERENCE DESKET IFROM SCALIFIED PRODUCT LIST 13.1

PRECARE INSTALLATION MOTES! 23. BED SHALL OF PREPARED AND COMPACIED FOR PRECAST DIAMETER STRUCTURE AS REQUIRE BY STORY STANDARD SPECIFICATIONS FOR PRECAST STANS. RECVATION OF REDGING MATERIAL CHOIL SE APPROVIDED TO ACCOMMENDATE ELEVATION OF ALL PIZES AND REDGING DOCK FOR ELEVATION OF ALL PIZES AND REDGING DOCK FOR ELEVATION.

24. FLACE AND LEVEL PRICCAST BOOK OF START 25. Papes Strait as installed and exputed by flacel DS. POPES AND BOX, SICKE, BE CHARKETCATO AND COMPECTED AS FRODUCED BY SCOUT STANDARD COMPTECTIONS. ed, precast concreté ciácular structures las shorm on 114-420-001 are recutato for for finalitatio APPLICATIONS EXASSA PREMIÒLIEC OF THE PLANS OR SPECIA, PROVISIONIS (a) ON SHA(SAGE STRUCTURES, WITHIN A CEPTO EQUAL TO OR OREATER THAN IN ESERT THE ON GRAINAGE SPACETURES WHERE THE FLOW LINE SCHWITTON OF THE THIEF PIPE IS COUNT TO GRAINGHE THAN THE INSTRUMENT OF THE OUTCET PIPE.

-| 4"-6" |-

1. HORIZONTAL STAPLE SPACING SHOULD BE ALTERED

3. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL

BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

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

SPECIFICATION FOR PRODUCT SELECTION.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE

OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES

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

5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY

7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9m-12m) INTERVALS. USE

9. PLACE STAPLE/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE CHANNEL FLOW OR SHORELINE

8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART

TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKÉT BEING INSTALLED ON TOP) EVEN

EROSION CONTROL LINING (CHANNEL INSTALLATION)

N.T.S.

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

4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF

6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4"-6" (DEPENDING ON BLANKET TYPE) AND STAPLED.

A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.

12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING

IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

CRITICAL POINTS

SLOPE VERTICES

A. OVERLAPS AND SEAMS

B. PROJECTED WATER LINE

C. CHANNEL BOTTOM/SIDE

2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH

SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET

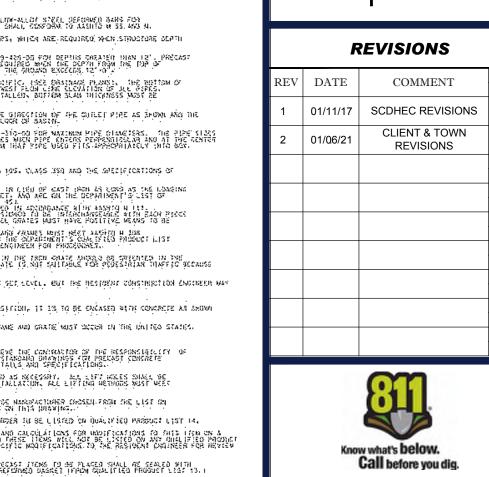
IN APPROPRIATE LOCATIONS AS PER MANUFACTURER'S RECOMMENDATIONS.

STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.

WITH THE SEAM STITCH ON THE BLANKET BEING OVERLAPPED.

SEE SICERS THRESHAD THROUGH THRESHOP FOR THES

(a) AN ARMITREO OF THE ARMIECT PLANS. THE PAY THAT THAT WEST TOTAL AND STREET



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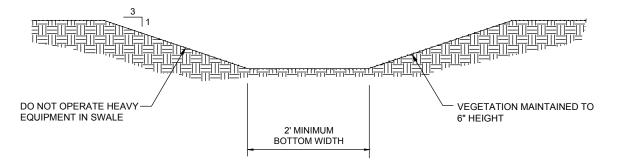
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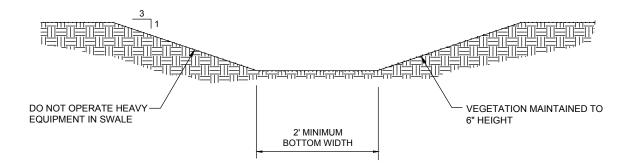
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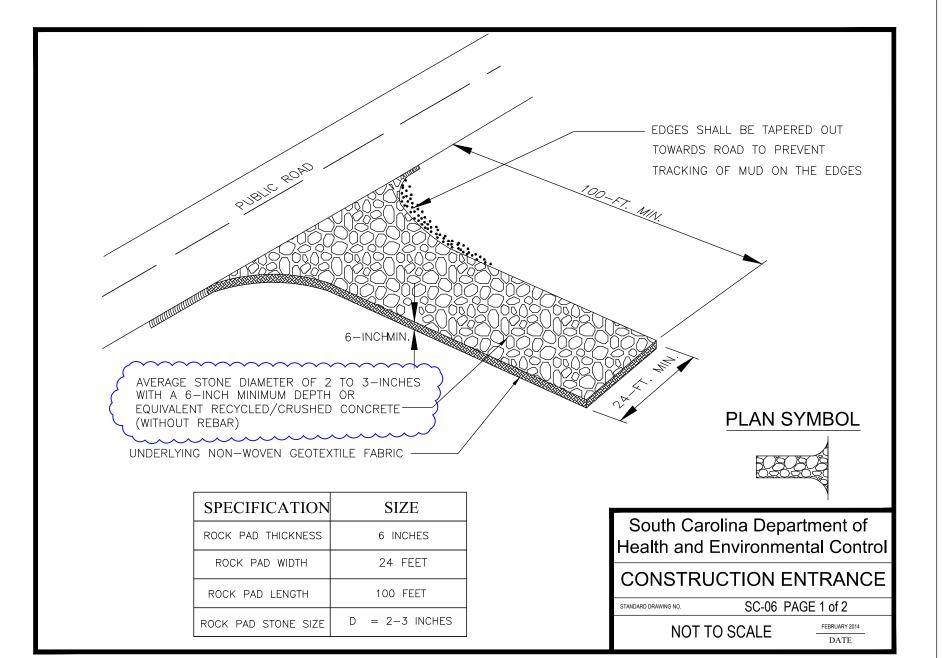
ORG. DATE - 12/05/2016



VEGETATED CHANNEL



adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED 2. BEGIN AT THE TOP OF THE SLOPE 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 AS SHOWN IN DETAIL 2. 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

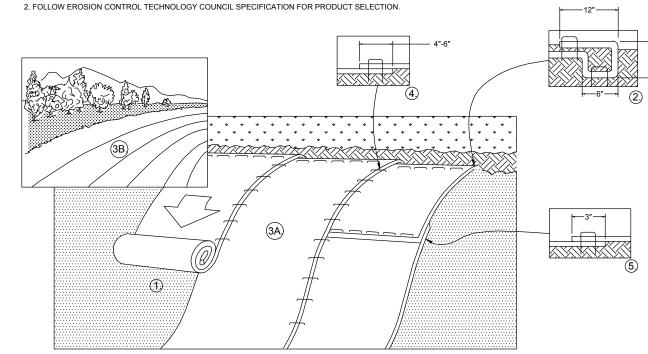
REFERENCES

3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. 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 MANUFACTURES RECOMMENDATION. 4 THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT

PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE

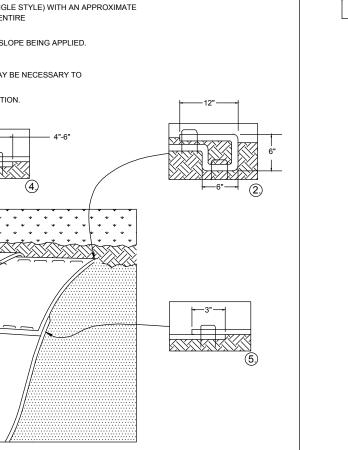
3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. 6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS. 2. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION.



MAINTENANCE NOTES:

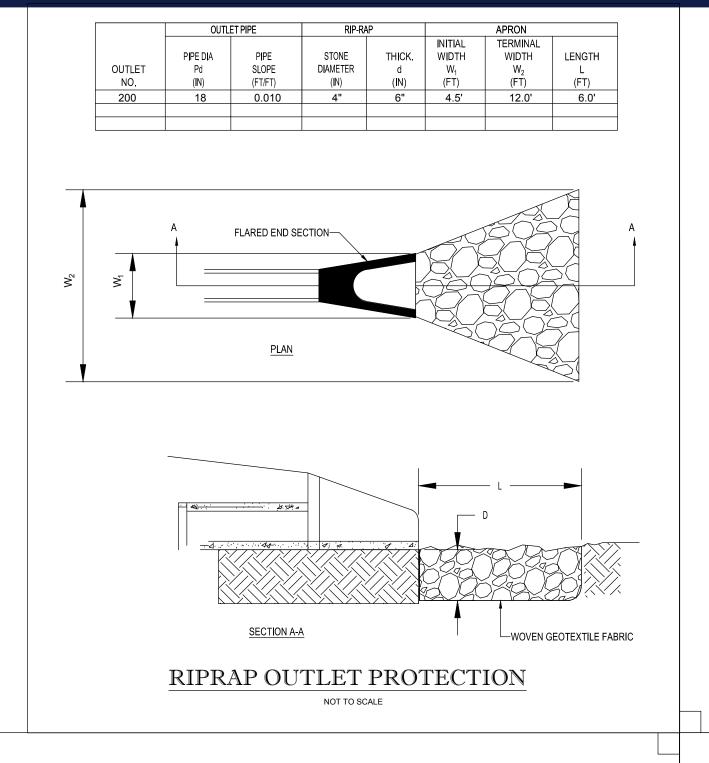
- 1. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2
- INCH OR GREATER) RAINFALL EVENT REPAIR IMMEDIATELY.
 2. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE
- 3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.

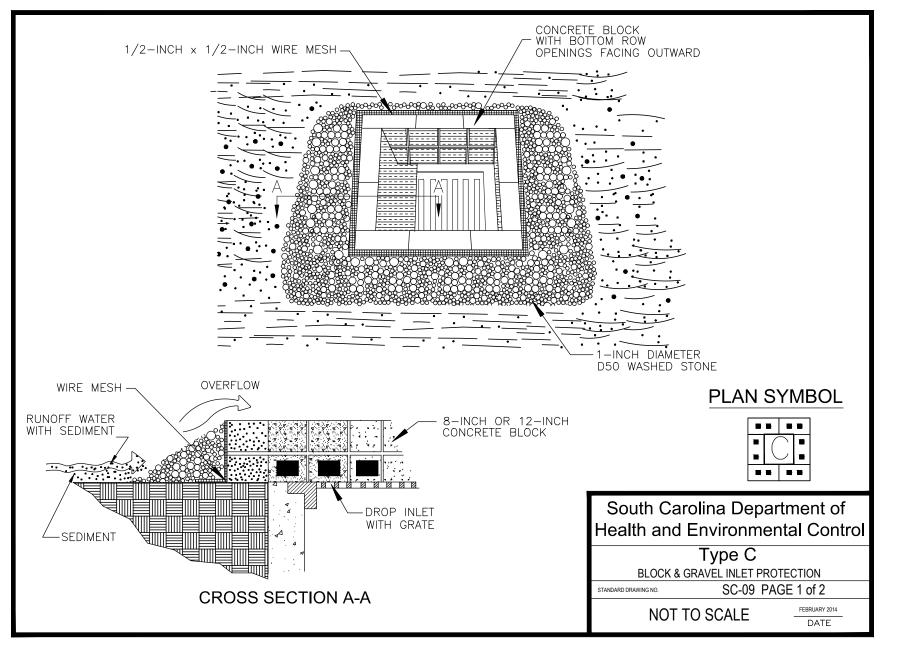


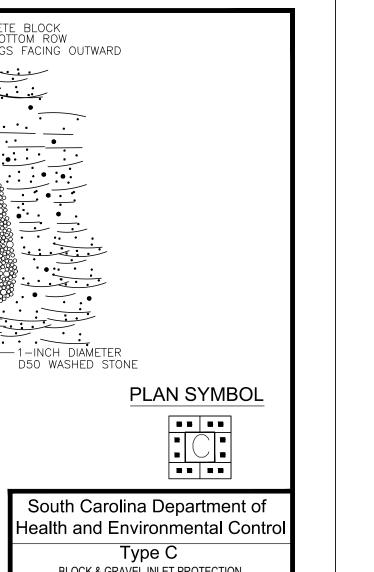
4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE

ERODED AREA PROTECTED.
5. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

EROSION CONTROL BLANKET (SLOPE INSTALLATION)







INSPECTION AND MAINTENACNE

BLOCK AND GRAVEL DROP INLET PROTECTION

GENERAL NOTES

1. Block and gravel filters can be used where heavy flows and higher velocities are expected and where an overflow capacity

2. Gravel shall consist of 1—inch D50 Washed Stone and should extend to height equal to the elevation of the top of the

3. Place the bottom row of the concrete blocks lengthwise on their side so that the open end faces outward, not upward.

4. The height of the barrier can be varied, depending upon design needs by stacking a combination of blocks that are 8- to 12-inches wide.

5. Wire mesh should be placed over the outside vertical face of the concrete blocks to prevent stones from being washed through the holes in the blocks. Hardware cloth or comparable wire mesh with $\frac{1}{2}$ -inch x $\frac{1}{2}$ -inch openings should

1. The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.

is necessary to prevent excessive ponding around the structure. 2. Regular inspections of all inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.

> 3. Attention to sediment accumulations in front of the inlet protection is extremely important. Accumulated sediment should be continually monitored and removed when necessary.

4.Remove accumulated sediment when it reaches 1/3 the height of the blocks. If a sump is used, sediment should be removed when it fills approximately 1/3 the depth of the hole.

5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.

6. Large debris, trash, and leaves should be removed from in front of tubes when found.

7. If the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced with fresh stone.

8. Inlet protection structures should be removed after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

> South Carolina Department of Health and Environmental Contro Type (**BLOCK & GRAVEL INLET PROTECTION**

SC-09 PAGE 2 of 2 GENERAL NOTES

REVISIONS REV DATE COMMENT

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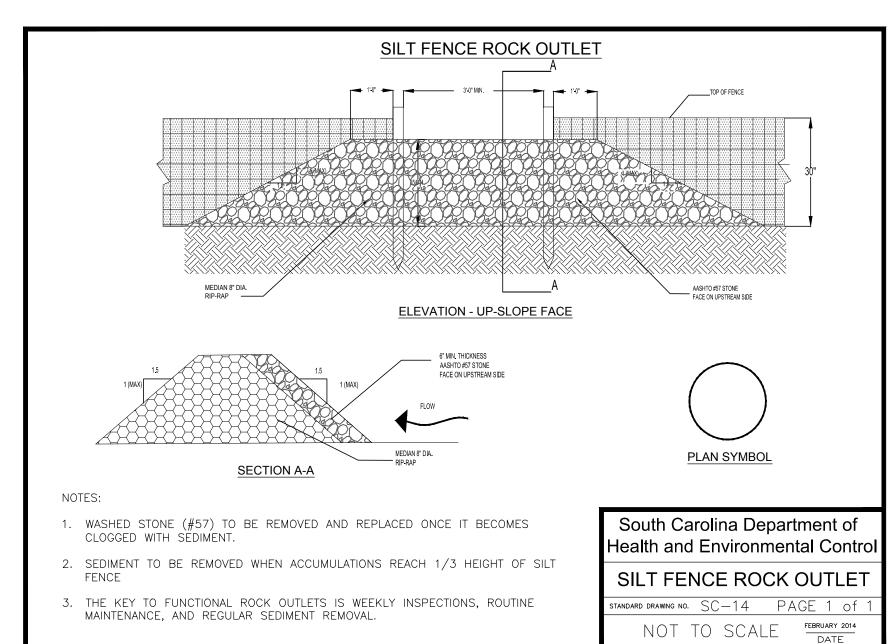
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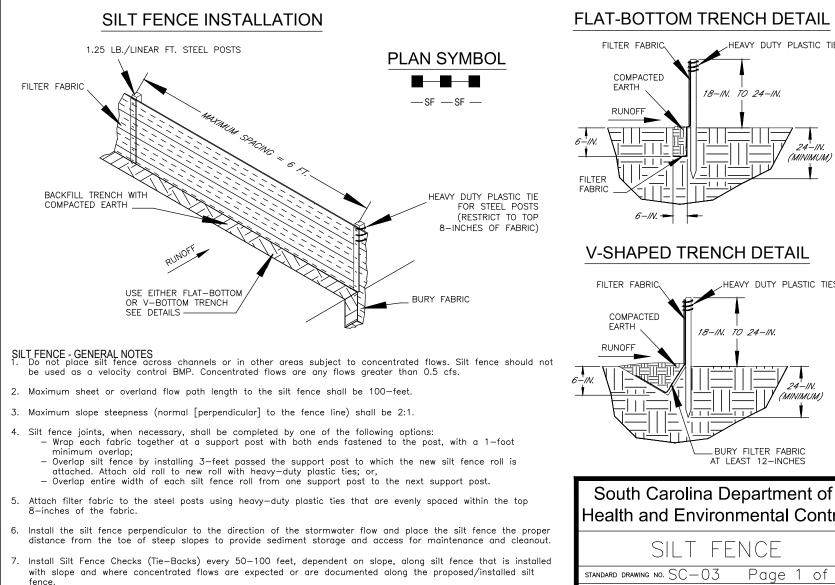
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FLAT-BOTTOM TRENCH DETAIL 6-IN. - V-SHAPED TRENCH DETAIL 18-IN. TO 24-IN. BURY FILTER FABRIC

South Carolina Department of Health and Environmental Contro SILT FENCE

NOT TO SCALE FEBRUARY 2014

DATE

SILT FENCE - POST REQUIREMENTS ilt Fence posts must be 48—inch long steel posts that meet, at a minimum, the following physical characteristics.

- Composed of a high strength steel with a minimum yield strength of 50,000 psi. - Include a standard "T" section with a nominal face width of 1.38—inches and a nominal "T" length of 1.48—inches. - Weigh 1.25 pounds per foot (± 8%) Posts shall be equipped with projections to aid in fastening of filter fabric.

Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be

Install posts to a minimum of 24-inches. A minimum height of 1- to 2inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.

Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE - FABRIC REQUIREMENTS

Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:

— Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability Free of any treatment or coating which might adversely alter its physica properties after installation; - Free of any defects or flaws that significantly affect its physical and/or

filtering properties; and, — Have a minimum width of 36—inches. . Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.

3. 12—inches of the fabric should be placed within excavated trench and toed in . Filter Fabric shall be purchased in continuous rolls and cut to the length of

the barrier to avoid joints. 5. Filter Fabric shall be installed at a minimum of 24—inches above the ground.

SILT FENCE - INSPECTION & MAINTENANCE

The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal. 2. Regular inspections of silt fence shall be conducted once every calendar week

and, as recommended, within 24-hours after each rainfall even that produces 1/2—inch or more of precipitation. 3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when

4. Remove accumulated sediment when it reaches 1/3 the height of the silt

5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated. Check for areas where stormwater runoff has eroded a channel beneath the

silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, 7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence

8. Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently

Health and Environmental Control

SILT FENCE

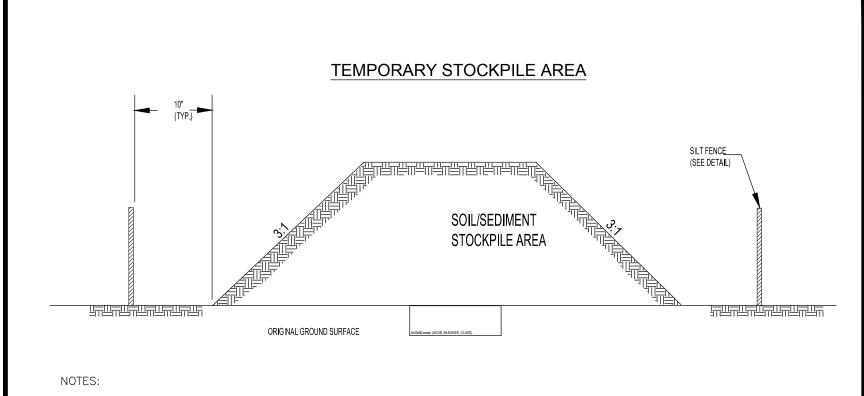
GENERAL NOTES

SC-03 PAGE 2 of 2

PARCEL 7A LLC GRADING PLANS South Carolina Department of

PARCEL 7A LLC/ZINN ASSET MGMT

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910

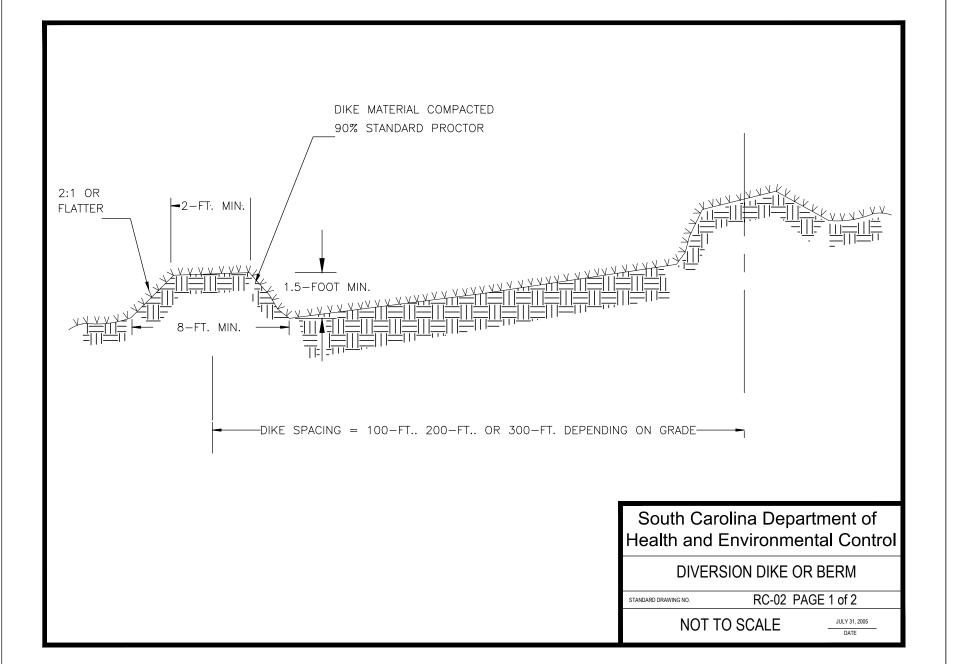


- 1. SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON/NEAR A SLOP THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN-GRADIENT AREA.
- 2. IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
- 3. SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVED OR PERMANENTLY STABILIZED. 4. THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

South Carolina Department of Health and Environmental Contro TEMPORARY STOCKPILE

andard drawing no. SC-15 PAGE 1 of

NOT TO SCALE FEBRUARY 2014
DATE



DIVERSION DIKES AND BERMS

Slopes shall be stabilized immediately using vegetation, sod, and erosion control blankets or turf reinforcement mats to prevent

The upslope side of the dike should provide positive drainage so no erosion occurs at the outlet. Provide energy dissipation measures Sediment-laden runoff must be released through a sediment trapping facility.

Sediment-laden runoff shall be directed to a sediment trapping facility.

Minimize construction traffic over diversion dikes and berms.

Inspection and Maintenance:

Dikes and Berms should be inspected, every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inches or more of precipitation and repairs made as necessary.

Damage caused by construction traffic or other activity must be repaired before the end of each working day.

South Carolina Department of Health and Environmental Control

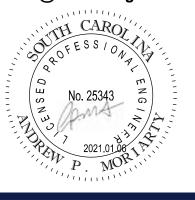
DIVERSION DIKE OR BERM

RC-02 PAGE 2 of 2 GENERAL NOTES JULY 31, 2005
DATE



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Phone: (919) 578-9000 NC@BohlerEng.com OFESSION A



EROSION & SEDIMENT CONTROL DETAILS 2

SHEET NUMBER:

GENERAL CONSERVATION NOTES

AND SPECIFICATIONS (SOURCE: SOUTH CAROLINA STATE NOTES)

I. GENERAL INFORMATION

A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE. B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED

C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY. D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.

E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED. F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE: THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES. IN SWALES AND AREAS OF CONCENTRATED FLOWS. STEEP SLOPES.

G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. H. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.

I. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE SCDHEC, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION. J. CONTRACTOR SHALL NOTIFY THE SCDHEC OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE. K STANDARD FOR DISPOSAL OF MATERIALS

ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.

II. STANDARD FOR LAND GRADING

A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT. 1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES.

2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS. B. INSTALLATION REQUIREMENTS 1. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF MATERIALS.

2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS 3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.

4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION. (SEE I. D.)

III. STANDARD FOR UTILITY TRENCH EXCAVATION

A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY B. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX. OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING

D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATELY. E. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION

F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

IV. STANDARD FOR TEMPORARY STABILIZATION

AND STABILIZATION OPERATIONS

A. STANDARD FOR TEMPORARY STABILIZATION WITH MULCH

1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING. IN ADDITION, STABILIZATION WITH MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.

2. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE. 3. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.

4. PROTECTIVE MATERIALS TO BE USED:

A. UNROTTED SMALL-GRAIN STRAW OR HAY AT 3.0 TONS PER ACRE SPREAD UNIFORMLY AT 135 POUNDS PER 1000 SQUARE FEET AND ANCHORED WITH LIQUID MULCH BINDER OR; WOOD-FIBER OR PAPER-FIBER MULCH AT A RATE OF 1500 POUNDS PER ACRE MAY BE APPLIED BY A

SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. IF EMULSIFIED ASPHALT - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1 AND CRS-2), APPLY 0.04 GAL./SQ. YD. OR 194 GAL./ACRE ON FLAT SLOPES LESS THAN 8' HIGH. ON SLOPES 8' OR MORE HIGH USE 0.075 GAL/SQ, YD, OR 363 GAL/ACRE.

B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED 1. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY COVER. 2. SEEDBED PREPARATION

A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.

B. APPLY GROUND LIMESTONE AT A RATE OF 1 TON/AC. C. APPLY 10-10-10 FERTILIZER A RATE OF 150 LB/AC

D. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.

C. SEEDING 1. SEED MIXTURE TEMPORARY: WINTER RYE SHALL BE APPLIED AT A RATE OF 168 LB/ACRE

2 APPLY SEED UNIFORMLY NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2" HYDROSEEDINGS (INCLUDING FERTILIZER AND SEED IN A SLURRY FORM), MAY BE LEFT ON THE SOIL SURFACE. SOIL CONSERVATION DISTRICT CAN REQUIRE SPECIFIC TECHNIQUES FOR HYDROSEEDING AND/OR HYDROMULCHING IN AREAS WITH DROUGHTY CONDITIONS, FOR MULCHING REQUIREMENTS, SEE STANDARD FOR STABILIZATION WITH MULCH.

V. STANDARD FOR PERMANENT STABILIZATION

A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER

1. SITE PREPARATION A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. B. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED TO PROVIDE A GOOD BOND WITH THE TOPSOIL.

APPLYING TOPSOIL A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE. B. ALL DISTURBED TOPSOIL ON-SITE IS TO BE REDISTRIBUTED ON-SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE TOWNSHIP. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR

3. SEEDBED PREPARATION

A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE. B. APPLY 10-20-10 OR EQUIVALENT RATED FERTILIZER AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1000 SQUARE FEET

C. APPLY 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN.

D. APPLY PULVERIZED DOLOMITIC LIMESTONE AT A RATE OF 1/3 TONS PER ACRES OR 15 POUNDS PER 1000 SQUARE FEET. E. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED. F. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE

G. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

SEEDING A. SEED MIXTURE PERMANENT: SAHARA BERMUDA GRASS AT A RATE OF 275 LB/ACRE IN ADDITION TO

TEMPORARY SEEDING (SEE ABOVE) 1. SEEDING DATES 3/1 TO 5/15 8/15 TO 10/1

2. SEED MIX SHALL HAVE A PURE LIVE SEED (PLS) RATING OF 60% OR GREATER B. APPLY SEED UNIFORMLY. NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2". HYDROSEEDINGS (INCLUDING FERTILIZER AND SEED IN A SCURRY FORM), WHICH ARE MULCHED, MAY BE LEFT ON THE SOIL SURFACE. SOIL CONSERVATION DISTRICT CAN REQUIRE SPECIFIC TECHNIQUES FOR HYDROSEEDING AND/OR HYDROMULCHING IN AREAS WITH DROUGHTY CONDITIONS. FOR MULCHING REQUIREMENTS SEE STANDARD FOR STABILIZATION WITH MULCH: PROTECTIVE MATERIALS TO BE USED.

UNROTTED SMALL-GRAIN STRAW OR HAY AT 3.0 TONS PER ACRE SPREAD UNIFORMLY AT 135 POUNDS PER 1000 SQUARE FEET AND ANCHORED WITH LIQUID MULCH BINDER OR; WOOD-FIBER OR PAPER-FIBER MULCH AT A RATE OF 1500 POUNDS PER ACRE MAY BE APPLIED BY A 5 IRRIGATION - (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER, A MINIMUM OF 1/4" TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED, ESPECIALLY WHEN SEEDING IS PERFORMED IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

B. STANDARD FOR PERMANENT STABILIZATION WITH SOD 1. METHODS AND MATERIALS

A. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.

B. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES. C. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).

D. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE E. FOR DROUGHTY SITES A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD

F. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. 2. SITE PREPARATION

SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER. APPLYING TOPSOIL

SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER. 4. SEEDBED PREPARATION

SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER. SOD PLACEMENT

A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY

PRIOR TO LAYING THE SOD. B. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION. : ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS

D. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES,

OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE). E. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK F. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE

SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS. 6. TOP DRESSING IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOP DRESSING IS NOT MANDATORY. A. SPRING INSTALLATION OF SOD WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-20-10

EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET BETWEEN SEPTEMBER 1 AND OCTOBER

B. FALL INSTALLATION OF SOD WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.

STANDARD EROSION CONTROL NOTES:

CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.

2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW • WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE. • WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED

ON THAT PORTION OF THE SITE. 3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY CONSTRUCTED. THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO

4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION, ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING. IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL. COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE

5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED

6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT. AS MAY BE REQUIRED

7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG. 72-300 ET SEQ. AND SCR100000.

8 TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE

9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS

10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

11. A COPY OF THE SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.

13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).

16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED: WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL: WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS: FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.

19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE TOWN OF BLUFFTON HAS APPROVED

20. CONTRACTORS ARE REQUIRED TO HAVE RAIN GAUGES AT THE CONSTRUCTION SITE AND THE RAIN TOTALS DOCUMENTED FOR REVIEW BY THE TOWN OF BILLIEFTON AND SCHIEC

21. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD WITH THE TOWN OF BLUFFTON AT LEAST 48 HOURS PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES. THE OWNER, DESIGN ENGINEER AND CONTRACTOR MUST BE PRESENT AND HAVE OBTAINED THE STORMWATER PERMIT, STAMPED APPROVED PLANS AND THE N.O.I APPROVAL LETTER FROM SCDHEC BEFORE CALLING THE TOWN OF BLUFFTON TO SCHEDULE THIS MEETING.

22. CONTRACTOR SHALL PERFORM PRACTICES AND PROCEDURES WHICH MINIMIZE AND PREVENT AIRBORNE DUST OR OTHER PARTICLES FROM OCCURING. PARTICLES WHICH CAN BE PICKED UP AND CARRIED BY WIND SHOULD BE PROTECTED WITH A EMPORARY COVER OR KEPT UNDER CONTROL WITH WATER TO PREVENT PARTICLES FROM BECOMING AIRBORNE AND FROM EXISTING THE SITE PERIMETER. WATER TRUCKS OR OTHER DUST CONTROL AGENTS SHALL BE USED AS NEEDED DURING CONSTRUCTION TO MINIMIZE DUST GENERATE ON THE SITE. DUST CONTROL MUST BE PROVIDED BY 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 TOXIS LIQUIDS FOR DUST SUPRESSION OPERATIONS IS PROHIBITED.

HAZARDOUS MATERIAL

MANAGEMENT & SPILL REPORTING

ANY HAZARDOUS OR POTENTIALLY HAZARDOUS MATERIAL THAT IS BROUGHT ONTO THE CONSTRUCTION SITE SHALL BE HANDLED PROPERLY TO REDUCE THE POTENTIAL FOR STORMWATER POLLUTION. ALL MATERIALS USED ON THIS CONSTRUCTION SITE SHALL BE PROPERLY STORED. HANDLED. DISPENSED AND DISPOSED OF FOLLOWING ALL APPLICABLE LABEL DIRECTIONS. FLAMMABLE AND COMBUSTIBLE LIQUIDS SHALL BE STORED AND HANDLED ACCORDING TO APPLICABLE REGULATIONS, AND, AT A MINIMUM, ACCORDING TO 29 CFR 1926.152. ONLY APPROVED CONTAINERS AND PORTABLE TANKS SHALL BE USED FOR STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS.

MATERIAL SAFETY DATA SHEETS (MSDS) INFORMATION SHALL BE KEPT ON SITE FOR ANY AND ALL APPLICABLE MATERIALS. HOWEVER, MSDS MAY ALSO BE ACCESSED VIA TELEPHONE OR OTHER ELECTRONIC MEANS OR

IN THE EVENT OF AN ACCIDENTAL SPILL, IMMEDIATE ACTION SHALL BE TAKEN BY THE GC TO CONTAIN AND REMOVE THE SPILLED MATERIAL. THE SPILL SHALL BE REPORTED TO THE APPROPRIATE AGENCIES IN THE REQUIRED TIME FRAMES. AS REQUIRED UNDER THE PROVISIONS OF THE CLEAN WATER ACT, ANY SPILL OR DISCHARGE ENTERING WATERS OF THE UNITED STATES SHALL BE PROPERLY REPORTED.

ALL HAZARDOUS MATERIALS, INCLUDING CONTAMINATED SOIL AND LIQUID CONCRETE WASTE, SHALL BE DISPOSED OF BY THE CONTRACTOR IN THE MANNER SPECIFIED BY FEDERAL, STATE AND LOCAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.

THE GC SHALL PREPARE A WRITTEN RECORD OF ANY SPILL AND ASSOCIATED CLEAN-UP ACTIVITIES OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF 1 GALLON OR REPORTABLE QUANTITIES. WHICHEVER IS LESS. ON THE DAY OF THE SPILL. THE GC SHALL PROVIDE NOTICE TO OWNER IMMEDIATELY UPON IDENTIFICATION OF ANY

ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES AS DEFINED BY EPA OR THE STATE OR LOCAL AGENCY REGULATIONS, SHALL BE IMMEDIATELY REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) AND THE TOWN OF BLUFFTON.

THE STATE REPORTABLE QUANTITY FOR PETROLEUM PRODUCTS IS:

IS 25 GALLONS OR MORE. OR CAUSES A SHEEN ON NEARBY SURFACE WATER, OR

IF THE PETROLEUM DISCHARGED, RELEASED OR SPILLED:

IS 100 FEET OR LESS FROM SURFACE WATER BODY,

THEN THE PERSON OWNING OR HAVING CONTROL OVER THE OIL MUST IMMEDIATELY TAKE MEASURE TO COLLECT AND REMOVE THE DISCHARGE, AND REPORT THE DISCHARGE TO SCDHEC AT 1-888-481-0125 WITHIN 24 HOURS OF DISCHARGE, AND BEGIN TO RESTORE AREA AFFECTED BY DISCHARGE.

IF THE PETROLEUM RELEASED OR SPILLED: IS LESS THAN 25 GALLONS OR MORE.

PRODUCT LABEL AND REGULATIONS.

DOES NOT CAUSES A SHEEN ON NEARBY SURFACE WATER, AND IS MORE THAN 100 FEET OR LESS FROM SURFACE WATER BODY

THEN THE PERSON WHO OWNS OR HAS CONTROL OVER THE OIL MUST IMMEDIATELY TAKE MEASURE TO COLLECT AND REMOVE THE DISCHARGE. IF IT CANNOT BE CLEANED UP WITHIN 24 HOURS OF THE DISCHARGE OR CAUSE A SHEEN ON NEARBY SURFACE WATER, THE PERSON MUST IMMEDIATELY NOTIFY SCDHEC AT

IF THE PETROLEUM RELEASED OR SPILLED IN ANY CIRCUMSTANCES DOES NOT MEET ONE OF THE ABOVE REQUIREMENTS, OR IS NOT PERMITTED UNDER THE GENERAL PERMIT SCR 100000, OR IT IS NOT PURSUANT TO A RULE ADOPTED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION OR, A REGULATION OF USEPA, IT MUST BE REPORTED TO SCDHEC IMMEDIATELY AT 1-888-481-0125. THE REPORTABLE QUANTITY FOR HAZARDOUS MATERIALS CAN BE FOUND IN THE FEDERAL REPORTING **REQUIREMENTS OF 40 CFR 302**

TO MINIMIZE THE POTENTIAL FOR A SPILL OF PETROLEUM PRODUCT OR HAZARDOUS MATERIALS TO COME IN CONTACT WITH STORMWATER, THE FOLLOWING STEPS SHALL BE IMPLEMENTED:

1) ALL MATERIALS WITH HAZARDOUS PROPERTIES, SUCH AS PESTICIDES, PETROLEUM PRODUCTS, FERTILIZERS, SOAPS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, BASES, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE, CURING COMPOUNDS AND ADDITIVES, ETC., SHALL BE STORED IN A SECURE LOCATION. UNDER COVER AND IN APPROPRIATE. TIGHTLY SEALED CONTAINERS WHEN NOT IN USE

2) THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL.

3) A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND ITS LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGE AND SHOWN ON SITE MAPS. a. THE SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME. b. CONTENTS SHALL BE INSPECTED DAILY DURING THE DAILY STORMWATER INSPECTION.

4) ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE.

6) THE DISPOSAL OF EXCESS OR USED PRODUCTS SHALL BE IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE

5) ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL.

CHECKED BY:

REVISIONS REV DATE COMMENT 01/11/17 | SCDHEC REVISIONS **CLIENT & TOWN** 01/06/21 REVISIONS



NOT APPROVED FOI CONSTRUCTION

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

ENCY REVIEW AND APPROVAL. IT IS NOT INTEN

CONSTRUCTION DOCUMENT UNLESS INDICA

PROJECT No.: NCR162044 DRAWN BY: CAD I.D.: AS NOTED

PROJECT:

PARCEL 7A LLC GRADING PLANS

PARCEL 7A

BUCKWALTER TOWNE BLVD BLUFFTON, SC 29910



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