SOIL EROSION AND SEDIMENTATION NARRATIVE NOTES:

REFER TO CHAPTER 6 OF "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MINIMUM STANDARDS AND SPECIFICATIONS FOR DESIGN AND INSTALLATION OF EROSION AND SEDIMENT CONTROL

- CONSTRUCTION EXIT: A STONE STABILIZED PAD LOCATED AT ANY POINT WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION TO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, PARKING AREA, OR ANY OTHER AREA WHERE THERE IS A TRANSITION FROM BARE SOILS TO A PAVED
- 2. (Sd1) SEDIMENT BARRIER: SILT FENCE SHALL BE INSTALLED WHERE INDICATED ON THE PLANS TO CONTROL SEDIMENT CARRIED BY SHEET FLOWING RUNOFF. THE FENCE MUST BE PROPERLY INSTALLED ACCORDING TO DETAILS PROVIDED IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (CHAPTER 6). THE FENCE FABRIC MUST MEET GEORGIA D.O.T. STANDARD
- (Sd2) INLET SEDIMENT TRAP, A TEMPORARY SEDIMENT BARRIER PLACED AROUND A STORM DRAIN INLET TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA
- (\$k) SKIMMER, A BUOYANT DEVICE THAT RELEASES/DRAINS WATER FROM THE SURFACE OF SEDIMENT PONDS. TRAPS, OR BASINS AT A CONTROLLED RATE OF FLOW
- 5. St STORM OUTLET PROTECTION: A PAVED OR SHORT SECTION OR RIP RAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF
- 6. Ds1 ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDING MAY NOT AVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER
- 7. Ds2 ESTABLISHMENT OF TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDING FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS

GRADING AND SHAPING EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE

SEEDBED PREPARATION
WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.

WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO

LIME AND FERTILIZER
AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY
AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE, GRADED AREAS REQUIRE LIME APPLICATION, SOILS CAN BE TESTED TO DETERMINE IF THE FERTILIZER IS NEEDED, ON REASONABLY FERTILE SOILS OR SOIL MATERIAL FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 LBS/1,000 SQ.FT.) SHALL BE APPLIED, FERTILIZER SHOULD BE APPLIED BEFORE LAND

SEEDING SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR, SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER), DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP, APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER, SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.

MULCHING
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO Ds1 DISTURBED AREA STABILIZATIONS WITH MULCHING ONLY

PLEASE REFER TO TABLE 6-4 1OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA FOR TEMPORARY COVER AND COMPANION CROPS. NOTE: BAHIA GRASS SHALL NOT BE USED ON THE PROJECT

8. Ds3 PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

GRADING AND SHAPING GRADING MAY NOT SE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZER EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT

WHEN CONVENTIONAL SEEDING AND FERTILIZER ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION SEEDING MUICHING AND MAINTENANCE OF THE VEGETATION CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS

LIME AND FERTILIZER RATES AND ANALYSIS
AGRICULTURAL LIME IS REQUIRED AT A RATE OF ONE TO TWO TONES PER ACRE UNLESS. TESTS INDICATE OTHERWISE, GRADED AREAS REQUIRE LIME APPLICATION, II WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION NOT REQUIRED, AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICAL DEPARTMENT OF AGRICULTURE

LIME AND FERTILIZER APPLICATION

REFER TO CHAPTER 6 PAGE 42 FOR FURTHER DIRECTION ON THE LIME AND

PLANT SELECTION
REFER TO TABLE 6-4.1, 6-5.2, 6-5.3, 6-5.4, FOR API SPECIES NOT LESTED SHALL BE APPROVED BY THE STATE HE NATURAL RESOURCES CONSERVATION SERVICE RES G PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-CO R PERMANENT PERENNIAL

SEEDBED PE

WHERE HYDRAULIC SEEDING AND FERTILIZING NAL SEEDING IS TO BE USED, SEEDBED

. E SEED (INOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY /ED THE THE TREATED APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE IG: SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED R BROADCAST PLANTING, USE A CULTIPACKER SEEDED, DRILL, ROTARY SEEDED. OTHER MECHANICAL SEEDED OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO THE TREATED, COVER THE SEED LIGHTLY WITH \$\frac{1}{2}\$ TO \$\frac{1}{2}\$ INCH OF SOIL FOR SMALL SEED AND \$ TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT

SEED MIXTURES

RATES 1/ACRE		DATES
ERMUDA (HULLED) ALONE WITH OTHER PERENNIALS	10 LBS. 6 LBS.	3/15 - 6/1 3/15 - 6/1
ERMUDA (UNHULLED) WITH TEMPORARY COVER WITH OTHER PERSONNALS	10 LBS. 61 BS.	9/1 - 3/1 10/15 - 2/1

REFER TO CHAPTER 6 (TABLE 6-5.2) OF THE MANUAL FOR SOIL EROSION AND SEDIMENT CONTROL IN GEORGIA FOR THE ADDITIONAL TYPES OF VEGETATION AND TIME OF APPLICATION. ALSO REFER TO SHEET 12 FOR SEEDING TABLE

GENERAL NOTES

IT IS THE INTENT OF THE OWNER TO CONSTRUCT A RETAIL STORE AND PARKING LOT. WITH ASSOCIATED DRAINAGE

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL. REQUIRED PERMITS ARE OBTAINED AND IN

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY,

WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED AND DO NOT BIND THE ENGINEER IN ANY WAY.

PRIOR TO INSTALLATION OF ANY UTILITY LINES, THE CONTRACTOR SHALL GIVE THE UTILITY COMPANIES THREE (3) WORKING DAYS NOTICE TO ALLOW TIME FOR EXISTING UTILITIES TO BE STAKED. BEFORE CALLING (811) THE

CONTRACTOR SHALL HAVE THE FOLLOWING INFORMATION READY: COUNTY, TOWN, LOCATION, NEAREST STREET

ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON THE PLANS AND ARE NOT NECESSARILY ACCURA

TO BE PAVED, S

EMC ENGINEERING

THE PROJECT IS 2.0 ACRES

HE PROJECT IS: 2.1 ACRES

D PAVEMENT ELEVATION SHOWN (EX. +312.57) ARE PROPOSED ASPHALT OR CONCRETE FINISH GRADE

ALL STRIPING AND SIGNS SHALL BE IN CONFORMITY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR

THERE ARE NO WETLANDS OR STATE WATERS WITHIN 200 FEET OF PROJECT SITE. THERE ARE NO IMPAIRED STREAM SEGMENTS WITHIN ONE MILE OF THE PROJECT SITE. THE PROJECT RECEIVING WATER IS AN UNNAMED TRIBUTARY OF

ACCORDING TO FEMA ELOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 13515899655. DATED SEPTEMBER 5, 2007.

OLUMBUS, MUSCOGEE COUNTY, GEORGIA

IMENTS OR THE FIELD CONDITIONS, THE <u>CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY,</u> IENCE OPERATION UNTIL CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS

HER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE

ONS DOE

ERMANENT VEGETATION.

3.3NC ON MARCH 12, 2017, THE VERTICAL

OT IN THIS CONTRACT

TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN OF

PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES, EXCEPT AS NOTED BELOW. THE WILL NOT BE RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UTILITY FACILITIES OTHER THANK

FROM STREET MAINS TO PROPERTY WHEN SUCH ABUTTING FACILITIES ARE NOT SHOWN ON THE PLAN IS UNKNOWN TO THEIR THE CONTRACTOR PRIOR TO THE DAMAGES OCCURRING PROVIDING THE ENG THE CONTRACTOR HAS OTHERWISE FULLY COMPLIED WITH THE SPECIFICATIONS.

ANY VARIANCES PRIOR TO COMMENCEMENT OF WORK OR PURCHASING ANY MATERIALS.

IT IS THE OBLIGATION OF THE CONTRACTOR TO MAKE HIS OWN INTERPRETATI

DATA THAT IS AVAILABLE AS TO THE NATURE AND EXTENT OF THE MATERIAL ST

GRADED AND COMPACTED. THE INFORMATION SHOWN ON THESE PLANS AND SP

GUARANTEE THE AMOUNT OR NATURE OF THE MATERIAL WHICH MAY BE ENCO

FILL MATERIAL SHALL BE CLEAN AND FREE OF ALL DEBRIS AND

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING A

OF CURB UNLESS OTHERWISE NOTE

THE CONSTRUCTION OF THIS PROJECT.

AN EXISTING CONDITION SURV

ICHECKLIST #61

ALL DISTURBED EARTH AREAS, NOT DESIGNA

STREETS AND HIGHWAYS, LATEST EDITION

THE BEST TIME TO CONTACT YOU. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND

THERE ARE NO KNOWN ZONING CONDITIONS FOR THIS PROPERTY

MULCHING
MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS, MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER, REFER TO CHAPTER 6 PAGE 44 OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA TO DETERMINE THE TYPE OF MULCH AND THE METHOD OF APPLICATION.

APPLYING AND ANCHORING MULCH

REFER TO CHAPTER 6 PAGE 44-45 OF THE MANUAL FOR SOIL EROSION AND SEDIMENT CONTROL IN GEORGIA, FOR FURTHER DIRECTION ON THE APPLICATION AND ANCHORING OF THE DESIRED

SECOND YEAR AND MAINTENANCE FERTILIZER
SECOND YEAR FERTILIZER RATES AND MAINTENANCE FERTILIZER RATES ARE LISTED IN TABLE

SOIL TESTS CAN BE CONDUCTED TO DETERMINE MORE ACCURATE REQUIREMENT IF DESIRED.

 $\underline{\text{USE}}$ and Maintenance Mow sericea Lespedeza only after frost to ensure that seeds area mature. Mow

BETWEEN NOVEMBER AND MARCH.
BERMUDA GRASS, BAHIA GRASS AND TALL FESCUE MAY BE MOWED AS DESIRED. MAINTAIN AT LEAST 6 INCHES OF TOP GROWTH UNDER ANY USE AND MANAGEMENT, MODERATE USE OF THE TOP GROWTH IS BENEFICIAL AFTER ESTABLISHMENT. EXCLUDE TRAFFIC UNTIL THE PLANTS AREA WELL ESTABLISHED, BECAUSE OF THE QUAIL

NESTING SEASON, MOWING SHOULD NOT TAKE PLACE BETWEEN MAY AND SEPTEMBER. 9. Ds4 PERMANENT VEGETATIVE COVER USING SOD ON HIGHLY ERODIBLE OR CRITICALLY ERODED

CONSTRUCTION SPECIFICATIONS
BRING SOIL SURFACE TO FINISH GRADE. CLEAR SURFACE OF TRASH, WOODY DEBRIS, STONES AND CLODS LARGER THAN 1". APPLY SOD TO SOIL SURFACES ONLY AND NOT FROZEN SURFACES OR GRAVEL TYPE SOILS, TOPSOIL PROPERLY APPLIED WILL HELP GUARANTEE A STAND. DON'T USE TOPSOIL RECENTLY TREATED WITH HERBICIDES OR SOIL STERILANTS, MIX FERTILIZER INTO SOIL SURFACE. FERTILIZE BASED ON SOIL TESTS OR TABLE 6-6.1 ON PAGE 6-57.

LAY SOD WITH TIGHT JOINTS AND IN STRAIGHT LINES, DON'T OVERLAP JOINTS. STAGGER JOINTS. 13. AND DO NOT STRETCH SOD. ON SLOPES STEEPER THAN 3:1, SOD SHOULD BE ANCHORED WITH PINS OR OTHER APPROVED METHODS. INSTALLED SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE GOOD CONTACT BETWEEN SOD AND SOIL IRRIGATE SOD AND SOIL TO A DEPTH OF 4° IMMEDIATELY AFTER INSTALLATION, SOD SHOULD NOT BE CUT OR SPREAD IN EXTREMELY WET OR DRY WEATHER. IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL FOR A MININ 2-3 WEEKS

MATERIALS SOD SELECTED SHOULD BE CERTIFIED. SOD GROWN IN THE GENERAL AREA O

SOD SHOULD BE MACHINE OUT AND CONTAIN 3/4" (+ OR - 1/4") OF SOJ OR THATCH.

SOD SHOULD BE CUT TO THE DESIRED SIZE WITHIN + OR - 5%. TORN OF

SOD SHOULD BE CUT AND INSTALLED W

AVOID PLANTING WHEN SUBJECT 1 ATHER IF IRRIGATION IS NOT

THE SOD TYPE SHOULD BE SHOW CCORDING TO TABLE 6-6.2

SOD PLANTING REQUIREMENTS

COLD WEATHER

REAS WHERE AND ADEQUATE STAND OF SOD IS NOT OBTAINED. NEW SOD SHOULD BE WED SPARINGLY. GRASS HEIGHT SHOULD NOT BE CUT LESS THAN 2"-3" OR AS SPECIFIED (SEE FIGURE 6-8.2). APPLY ONE TON OF AGRICULTURAL LIME AS INDICATED BY SOIL TEST OR EVERY 4-6 YEARS. FERTILIZE GRASSES IN ACCORDANCE WITH SOIL TESTS OR TABLE 6-6.3

COLD WEATHER

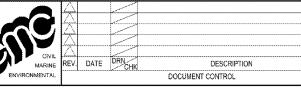
- 10. Du DUST CONTROL: CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE,
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES, ADDITIONAL EROSION AND SEDIMENT CONTROL WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPEC
- THE POINT OF CONTACT FOR CIVIL SITE WORK FOR THIS PROJECT IS. JOEL D. WOMACK, P.E. EMC ENGINEERING SERVICES INC. 3575 MACON ROAD, SUITE 15
- COLUMBUS, GEORGIA 31907 ICHECKLIST #51 DEVELOPER/OWNER CLARK, GEER, LATHAM & ASSOCIATES, INC. 3901 SPRINGHILL AVENUE

MOBILE, ALABAMA 36608

ICHECKLIST #41 TWENTY-FOUR HOUR CONTACT RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL: TO BE DETERMINED (XXX) XXX-XXXX







LEGEND DESCRIPTION EXISTING PROPOSED ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF COLUMBUS AND/OR GEORGIA DEPARTMENT OF TRANSPORTATION UILDING SETBACK LINE NORETE PAVIN SAMETARY SEVIES -(9) INTERSECTIONS, TYPE OF WORK (SEWER, WATER, PAVING, ETC.) YOUR COMPANY NAME, TELEPHONE NUMBER, OWNER'S NAME, DATE AND TIME YOU EXPECT TO COMMENCE CONSTRUCTION, AND WHERE AND HOW YOU CAN BE REACHED AND UTILITY, WHETHER SHOWN ON THE PLAN OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES, AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF r=______1 + _____(sqq) _______1 + _____ C CONDUIT (LIGHTING) HED, 40 PVC CONDUIT (ELECTRIC) DEMOLITION

(N.E.T.C.)

