

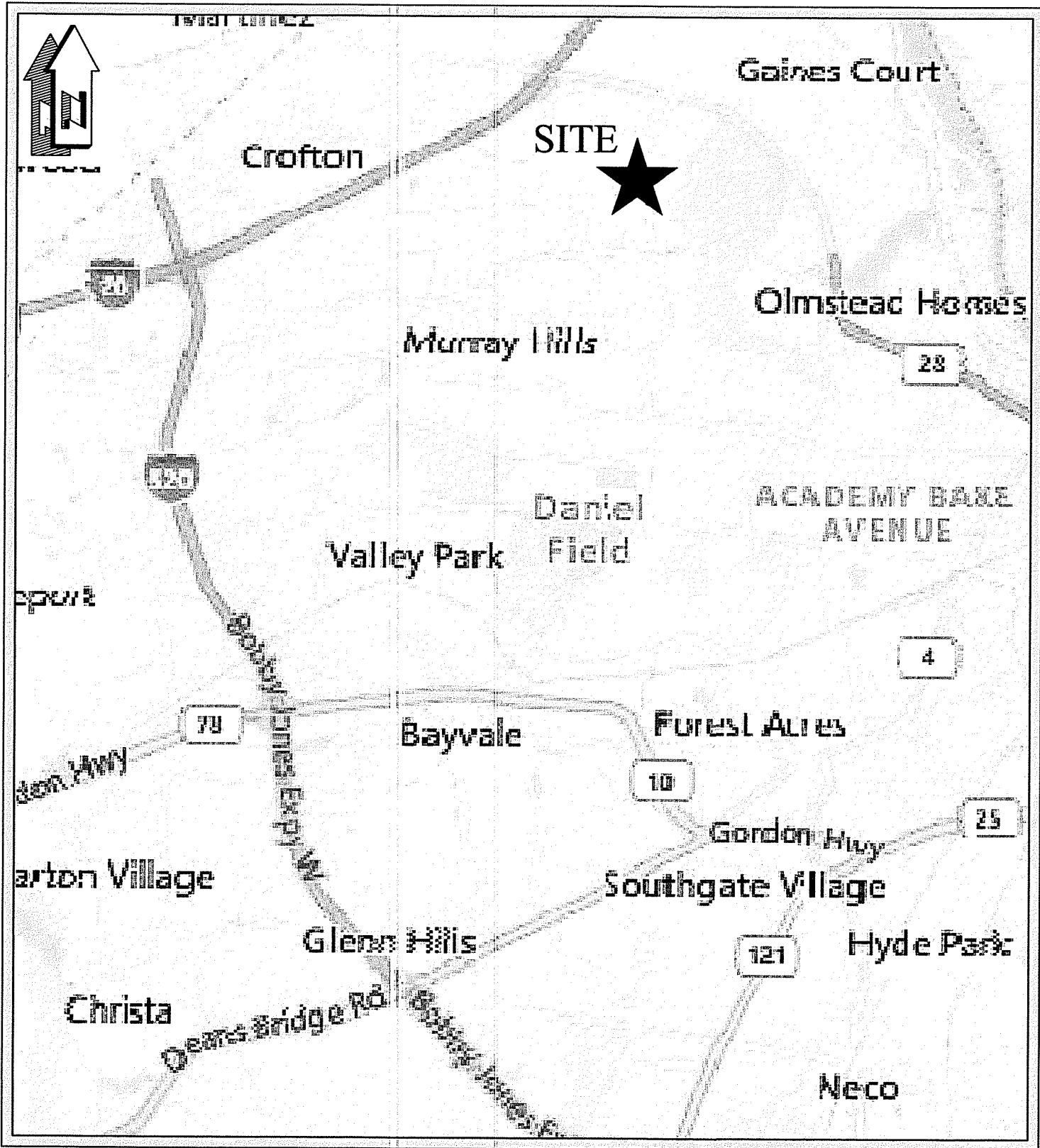
CONSTRUCTION PLANS FOR

# ANGC - 2021 Demolition & Stabilization Phase I

PREPARED FOR

**ANI**

2604 WASHINGTON RD  
AUGUSTA GA, 30904



VICINITY MAP  
N.T.S.

**MAYOR**

HARDIE DAVIS, JR., MAYOR

## BOARD OF COMMISSIONERS

DISTRICT 1  
JORDAN JOHNSON

DISTRICT 2  
DENNIS WILLIAMS

DISTRICT 3  
CATHERINE SMITH MCNIGHT

DISTRICT 4  
SAMMIE SIAS

DISTRICT 5  
BOBBY WILLIAMS

DISTRICT 6  
BEN HASAN

DISTRICT 7  
SEAN FRANTOM

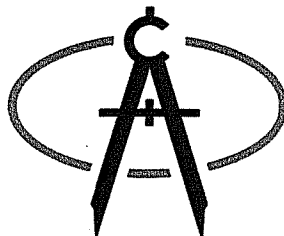
DISTRICT 8  
BRANDON GARRETT

DISTRICT 9  
FRANCINE SCOTT

DISTRICT 10  
JOHN CLARKE

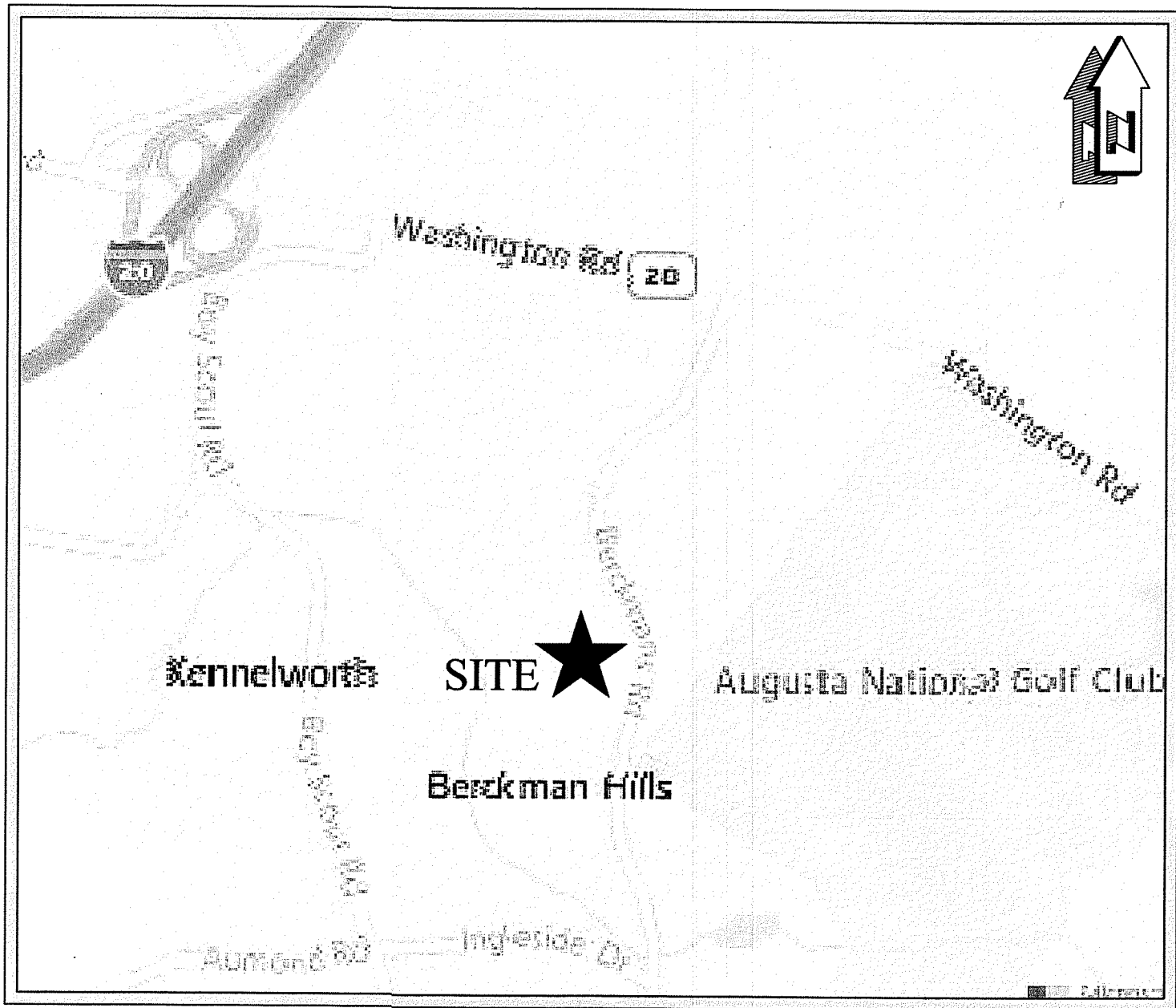
AUGUSTA ENGINEERING DEPARTMENT  
DR. HAMEED MALIK, Ph.D, P.E.  
DIRECTOR ENGINEERING

PREPARED BY



**CRANSTON**

10-20-2021



LOCATION MAP  
N.T.S.

## PROJECT DATA:

1. ACREAGE OF PROPERTY: 6.80 ACRES
2. ACREAGE OF DEVELOPMENT: 6.80 ACRES
3. OWNER/DEVELOPER/PRIMARY PERMITEE:

ANI  
2604 WASHINGTON ROAD  
AUGUSTA, GA 30904  
PHONE: 706-667-6301  
24 HOUR CONTACT:  
NAME: JEFF SMITH  
PHONE: 706-667-6301  
EMAIL: JQSMITH@AUGUSTANATIONAL.COM

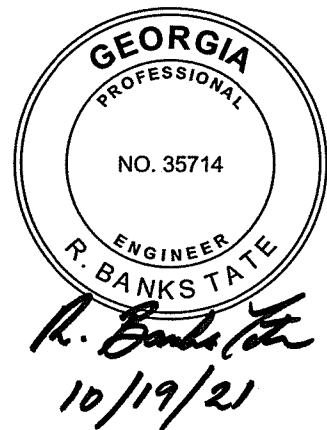
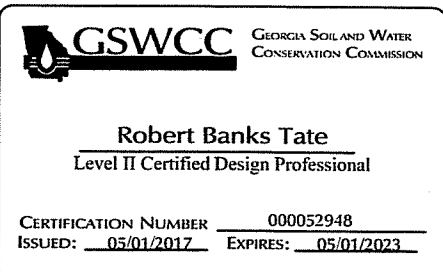
4. TAX MAP & PARCEL NUMBERS: 018-0-180-00-0; 018-0-181-00-0;  
018-0-182-00-0; 018-0-183-00-0;  
018-0-184-00-0; 018-0-185-00-0;  
018-0-186-00-0; 018-0-188-00-0;  
018-0-189-00-0; 018-0-190-00-0;  
018-0-191-00-0; 018-0-192-00-0;  
018-0-193-00-0; 018-0-195-00-0;  
018-0-196-00-0; 018-0-214-00-0;  
018-0-216-00-0; 018-0-217-00-0;  
018-0-218-00-0; 018-0-219-00-0;  
018-0-220-00-0; 018-0-221-00-0
5. ZONING: R1
6. STORM WATER OUTFALL: EXISTING STORM SYSTEM
7. DRAINAGE AREA THIS PROJECT: 6.80 ACRES
8. IMPERVIOUS AREA:

EXISTING: 1.83 ACRES  
PROPOSED: 0.00 ACRES

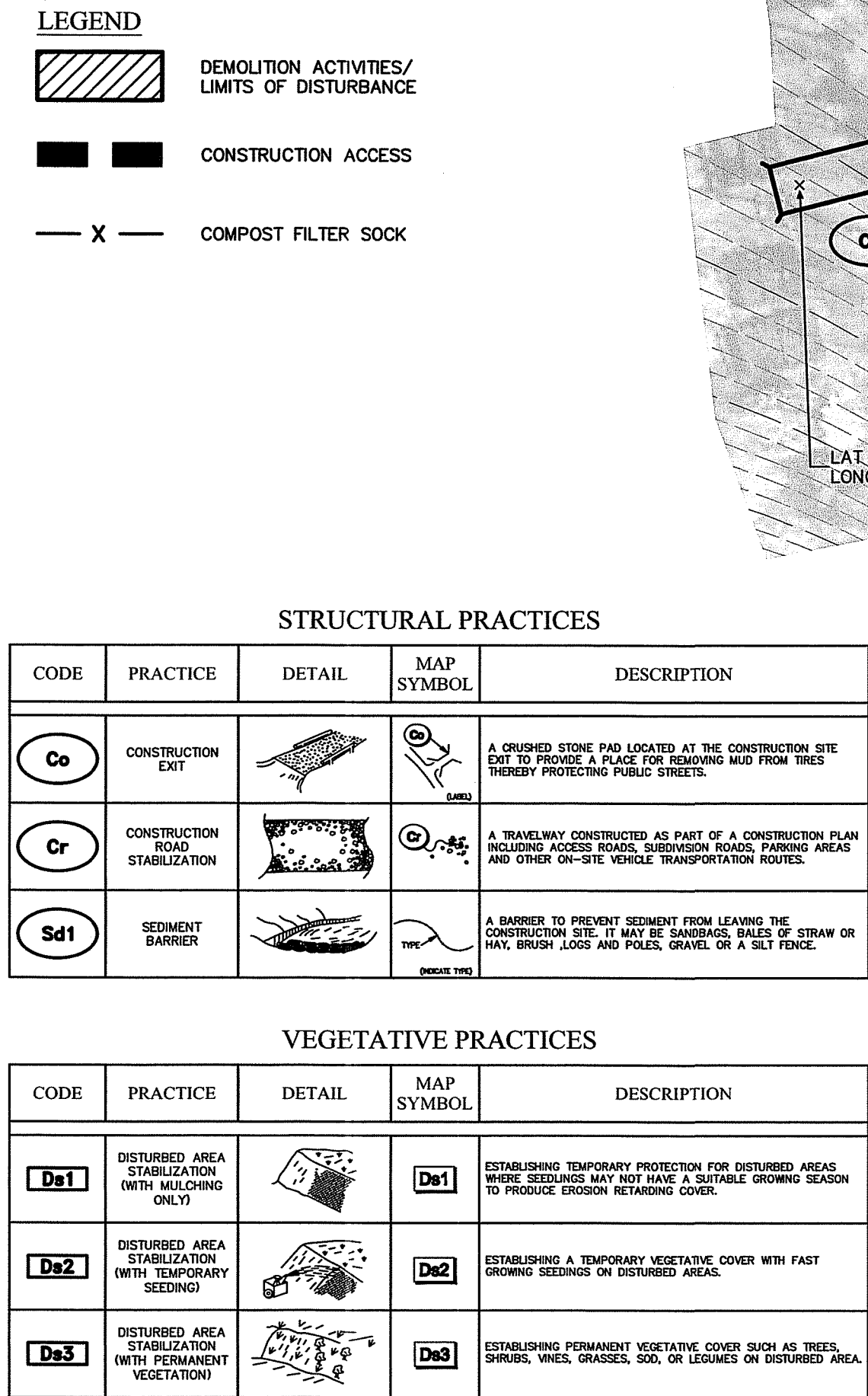
9. PERVIOUS AREA:

EXISTING: 4.97 ACRES  
PROPOSED: 6.80 ACRES

10. RECEIVING STREAM: RAE'S CREEK
11. ULTIMATE STREAM: SAVANNAH RIVER
12. EXISTING LAND USE: RESIDENTIAL
13. PROPOSED LAND USE: GRAVEL & GRASS PARKING FOR MASTERS TOURNAMENT





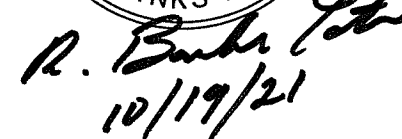


MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE

39. NO PRACTICES TO PROVIDE BUILDING MATERIALS WILL BE INSTALLED ON THIS SITE

**NOTES:**  
1. ALL DISTURBED AREAS NOT INTENDED FOR PAVING SHALL BE STABILIZED USING TEMPORARY MEASURES D<sub>s2</sub> AND PERMANENT MEASURES D<sub>s3</sub>.

# CRANSTON

[illegible]

## Overall Erosion Control & Site Access Plan

|              |            |
|--------------|------------|
| DRAWN BY:    | MAB        |
| CHECKED BY:  | SMS        |
| APPROVED BY: | RBT        |
| DATE:        | 10-20-2021 |
| SCALE:       | 1" = 60'   |
| JOB No.      | 2021-0001  |
| DRAWING No.  |            |

# C200







GSWCC AND NPDES NOTES (CONTINUED):

36. A DESCRIPTION OF APPROPRIATE EROSION CONTROL MEASURES TO BE IMPLEMENTED (CONTINUED):

INITIAL PHASE:

- ALL STAGING AREAS, MATERIAL STORAGE AREAS, CONCRETE WASH-OUT AREAS, SHALL BE LOCATED AT SETBACK DISTANCES FROM DESIGNATED TREE PROTECTION AREAS AND/OR STREAM BUFFERS AS REQUIRED BY LOCAL AND STATE REGULATIONS.
- A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. POST ON DAY ONE.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DELINEATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
- PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION EXIT (C<sub>0</sub>) SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY AS SHOWN ON THE PLANS.
- IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXITS, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE INITIAL PHASE OF THE EROSION CONTROL PLAN.
- SILT FENCE OR APPROVED EQUAL SHALL BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA OR AS SHOWN ON THE PLAN. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES HALF THE HEIGHT OF THE BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
- INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLAN.
- TREE PROTECTION FENCING AND STREAM BUFFER LIMITS SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPE IS INSTALLED. THE TREE PROTECTION FENCING SHOULD BE INSPECTED DAILY. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
- AFTER INSTALLATION OF INITIAL EROSION CONTROL MEASURES, THE SITE CONTRACTOR SHALL SCHEDULE AN INSPECTION BY THE PROJECT DESIGN PROFESSIONAL WITHIN 7 DAYS AFTER INSTALLATION. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTION WITH CONSULTATION WITH THE DESIGN PROFESSIONAL.
- AFTER APPROVAL OF THE INITIAL EROSION CONTROL INSTALLATION, THE CONTRACTOR MAY PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT STORAGE DEVICES AS SHOWN ON THE INITIAL PHASE PLAN TO CONTROL EROSION AND STORMWATER RUNOFF.
- INITIAL PHASE BMPs UTILIZED IN THIS PLAN(S) ARE AS FOLLOWS:  
CO, SD1-CS, DS1

INTERMEDIATE PHASE:

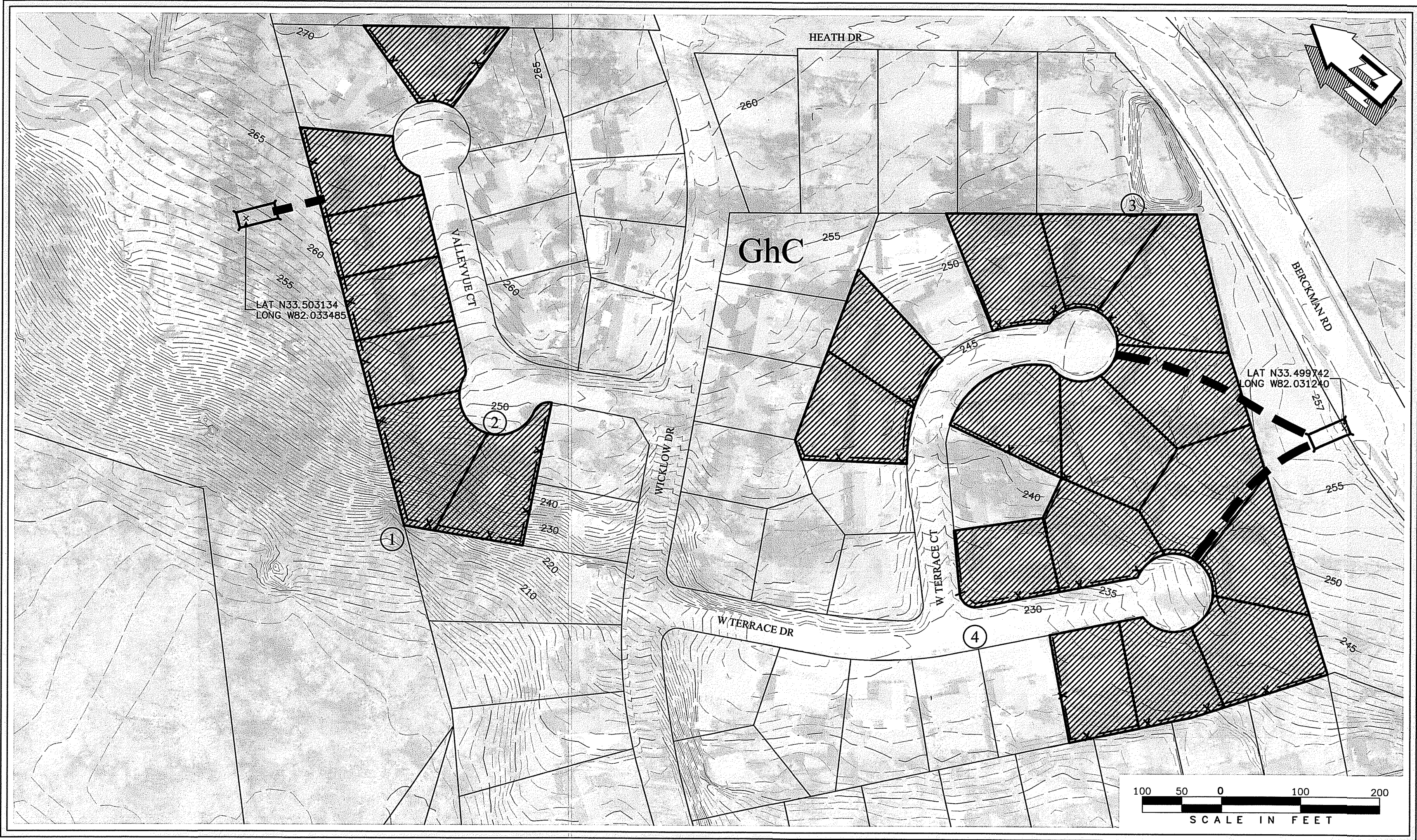
- MAINTAIN PREVIOUSLY INSTALLED BMPs.
- SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
- GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION AND SEDIMENTATION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
- THE SILT FENCE SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES HALF OF THE HEIGHT OF THE BARRIER.
- SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS.
- AFTER PRELIMINARY CLEARING AND GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT ENTRAPMENT DEVICES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE DEVICES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT WHEN IT REACHES THE CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
- SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED WEEKLY AND AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF OF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.
- INTERMEDIATE PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:  
CO, SD1-CS, DS1, DS2

FINAL PHASE:

- THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT DEVICES AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF EACH DEVICE WHEN IT REACHES THE REQUIRED CLEAN-OUT ELEVATION SHOWN ON THE PLANS.
- AFTER CURBING AND PAVEMENT HAS BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON THE EXISTING INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION.
- FINAL STABILIZATION OF PERMANENT GRASS MUST MEET 100% COVERAGE, 70% DENSITY RULE.
- FINAL PHASE BMPs UTILIZED ON THIS PLAN(S) ARE AS FOLLOWS:  
DS3, SD2-P, WATER QUALITY FEATURE
- GRAPHIC SCALE AND NORTH ARROW PROVIDED ON PLAN SHEET C200.
- THE CONTOUR INTERVAL ON PLAN SHEET C200 IS 1'.
- ARE ALTERNATE BMPs TO BE USED ON THIS PROJECT: NO
- IF ALTERNATE BMPs ARE USED, THE USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA LATEST EDITION. SEE CALC SHEET N/A
- THE DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY CAN BE FOUND ON PLAN SHEET(S) N/A.
- THE DELINEATION OF ALL ON-SITE WETLANDS AND ALL STATE WATERS LOCATED WITHIN 200 FEET OF THE PROJECT SITE, IF APPLICABLE, CAN BE FOUND ON PLAN SHEET(S) N/A.
- DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE CAN BE FOUND ON THE PLAN SHEET(S) N/A.
- HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH THE PRE-DEVELOPED AND POST-DEVELOPED CONDITIONS ARE PROVIDED ON SHEET N/A.
- ESTIMATE OF RUNOFF COEFFICIENT OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: PRE: 0.50 POST: 0.30
- STORM DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION: STORM DRAIN PIPE Q, V, L, W, D, AND SIZE PROVIDED ON SHEET N/A.
- SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION IS PROVIDED ON SHEET C200 & C301.
- THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION IS PROVIDED ON PLAN SHEET C200.
- SEE CALCULATIONS PROVIDED ON THIS SHEET FOR SEDIMENT STORAGE REQUIREMENTS.
- THE LOCATION OF BEST MANAGEMENT PRACTICES ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND ARE PROVIDED ON SHEETS C200, C302 & C303.
- DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES ARE PROVIDED ON SHEET(S) C302.

52. VEGETATIVE PRACTICES:

- SEPTEMBER 15 - FEBRUARY 15, A MIXTURE OF UNHULLED COMMON BERMUDA 6 LBS./ACRE AND RYE GRASS SEED 28 LBS./ACRE APPLIED SIMULTANEOUSLY.
- OCTOBER 1 - MARCH 1, UNHULLED COMMON BERMUDA 10 LBS./ACRE.
- APRIL 1 - JUNE 1, HULLED COMMON BERMUDA 10 LBS./ACRE.
- FERTILIZER GRADE WILL BE A COMMERCIAL 6-12-12 INCORPORATED INTO THE SOIL AT 1500 LBS./ACRE, ALSO 1500 LBS. DOLOMITIC LIME.
- NOT LESS THAN 30 DAYS AFTER SEEDING, APPLY AMMONIUM NITRATE (NOT LESS THAN 20% NITRATE) AT A RATE EQUAL TO 60 LBS. OF AVAILABLE NITROGEN /ACRE. APPLICATION BETWEEN JUNE THRU AUGUST.
- ALL SEEDING AREAS WILL BE MULCHED WITH STRAW OR HAY MULCH AT A RATE OF 2.5 TONS/ACRE.
- FOR ALL DATES NOT COVERED UNDER THE GRASSING SCHEDULE THE DISTURBED SOIL SHALL BE TEMPORARILY STABILIZED USING POLYACRYLAMIDE.
- CONTRACTOR TO ENSURE THAT EXISTING ON SITE VEGETATION OUTSIDE THE LIMITS OF CONSTRUCTION IS PRESERVED AND THAT ALL DISTURBED PORTIONS OF THE SITE ARE STABILIZED.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF 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.



MONITORING PLAN & SOILS MAP  
1"=100'

MONITORING POINTS

MONITORING POINT LOCATIONS ARE SHOWN ABOVE:

- EXISTING DITCH DOWNSTREAM OF DEMOLITION WORK
- EXISTING INLET UPSTREAM OF DEMOLITION WORK
- EXISTING SWALE UPSTREAM OF DEMOLITION WORK
- EXISTING INLET DOWNSTREAM OF DEMOLITION WORK

SOILS

GhC

GEORGEVILLE-URBAN LAND COMPLEX,  
2 TO 8 PERCENT SLOPES

ANGC - 2021 Demolition &  
Stabilization Phase I

Erosion Control Notes

|              |            |
|--------------|------------|
| DRAWN BY:    | MAB        |
| CHECKED BY:  | SMS        |
| APPROVED BY: | RBT        |
| DATE:        | 10-20-2021 |
| SCALE:       | NO SCALE   |
| JOB No.      | 2021-0001  |
| DRAWING No.  | C301       |

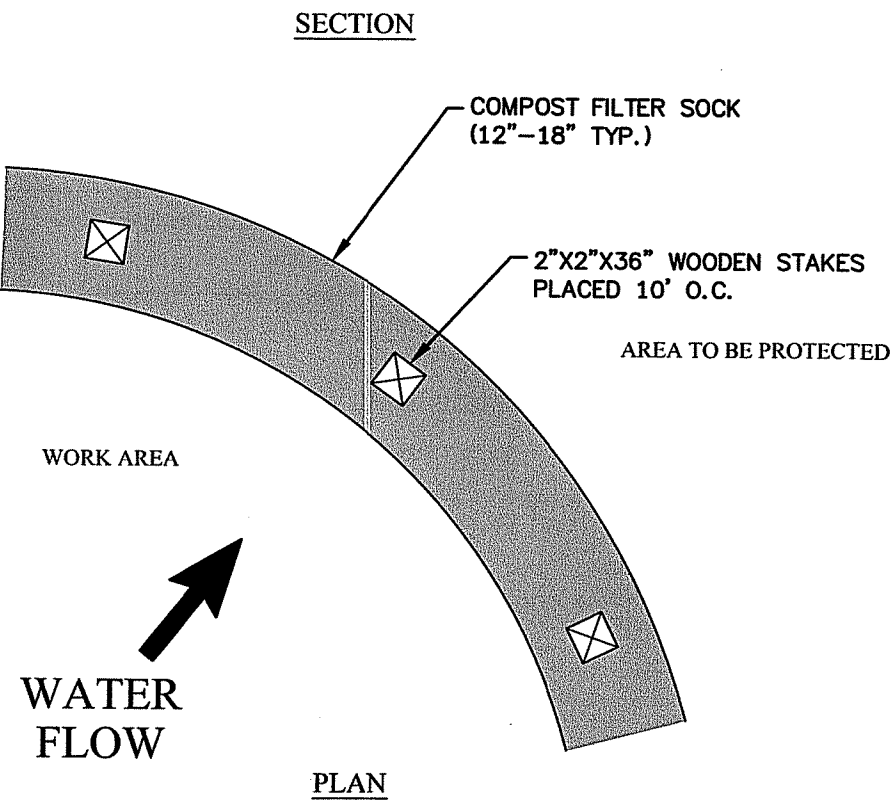
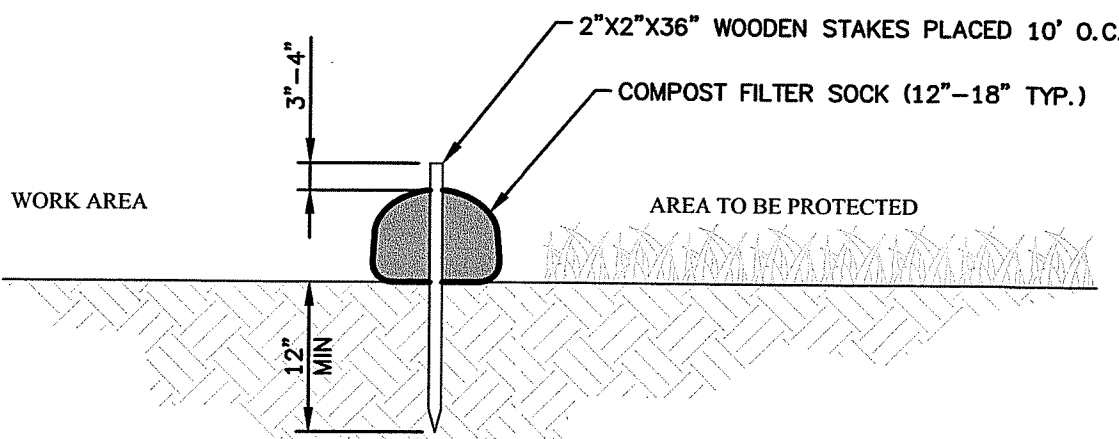


STRUCTURAL PRACTICES

| CODE | PRACTICE                        | DETAIL | MAP SYMBOL | DESCRIPTION  |
|------|---------------------------------|--------|------------|--|
| Co   | CONSTRUCTION EXIT               |        |            | A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.                      |
| Cr   | CONSTRUCTION ROAD STABILIZATION |        |            | A TRAVELWAY CONSTRUCTED AS PART OF A CONSTRUCTION PLAN INCLUDING ACCESS ROADS, SUBDIVISION ROADS, PARKING AREAS AND OTHER ON-SITE VEHICLE TRANSPORTATION ROUTES. |
| Sd1  | SEDIMENT BARRIER                |        |            | A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL OR A SILT FENCE.      |

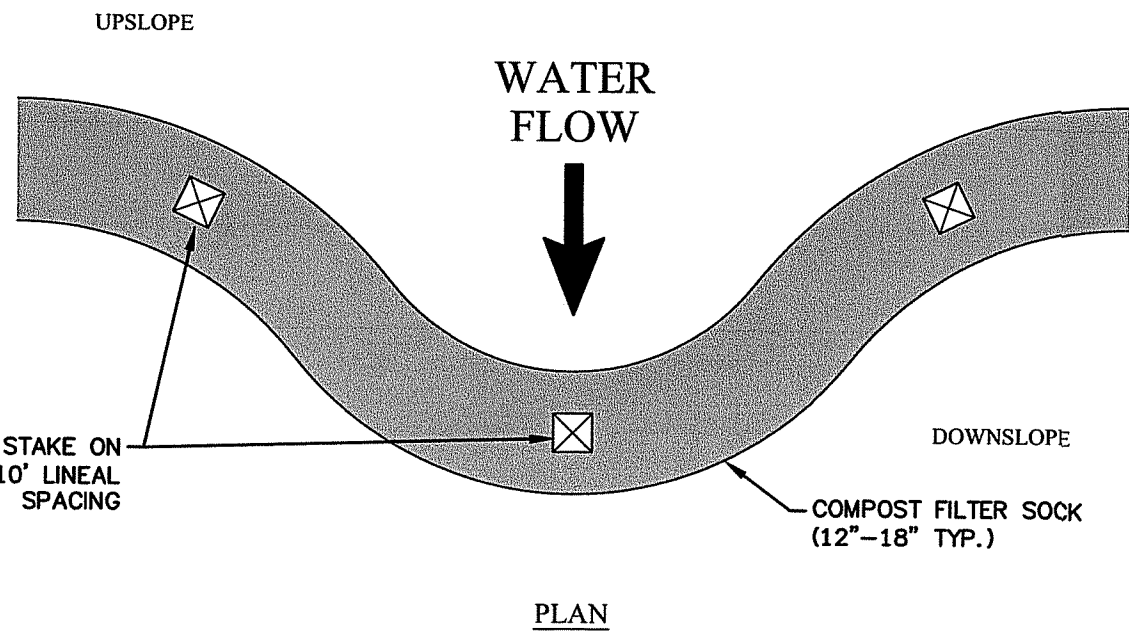
VEGETATIVE PRACTICES

| CODE | PRACTICE   | DETAIL | MAP SYMBOL | DESCRIPTION   |
|------|--|--------|------------|---|
| Ds1  | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)        |        |            | ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE EROSION RETARDING COVER. |
| Ds2  | DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)    |        |            | ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.  |
| Ds3  | DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) |        |            | ESTABLISHING PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON DISTURBED AREA.                               |



| SLOPE     |                   | PERIMETER MAXIMUM DRAINAGE AREA BASED ON SLOPE LENGTH AND RECOMMENDED DIAMETER SOCK |     |     |     |
|-----------|-------------------|---|-----|-----|-----|
| 0% - 2%   | FLATTER THAN 50:1 | 8"  | 12" | 18" | 24" |
| 2% - 10%  | 50:1 - 10:1       | 125   | 125 | 300 | 350 |
| 10% - 20% | 10:1 - 5:1        | 100   | 125 | 200 | 250 |
| 20% - 35% | 5:1 - 2:1         | 75  | 100 | 150 | 200 |
| > 35%     | > 2:1             | 50*   | 50  | 75  | 100 |
|           |                   | 25*   | 25  | 50  | 75  |

REPLACES TYPE "A" SILT FENCE  
REPLACES TYPE "B" SILT FENCE  
REPLACES TYPE "C" SILT FENCE  
LENGTHS SHOWN IN FEET  
\*ONLY TO BE USED IN CONJUNCTION WITH COMPOST BLANKETS



SILT FENCE - COMPOST FILTER SOCK (Sd1-Cs)  
N.T.S.



JOB #

2021-0001

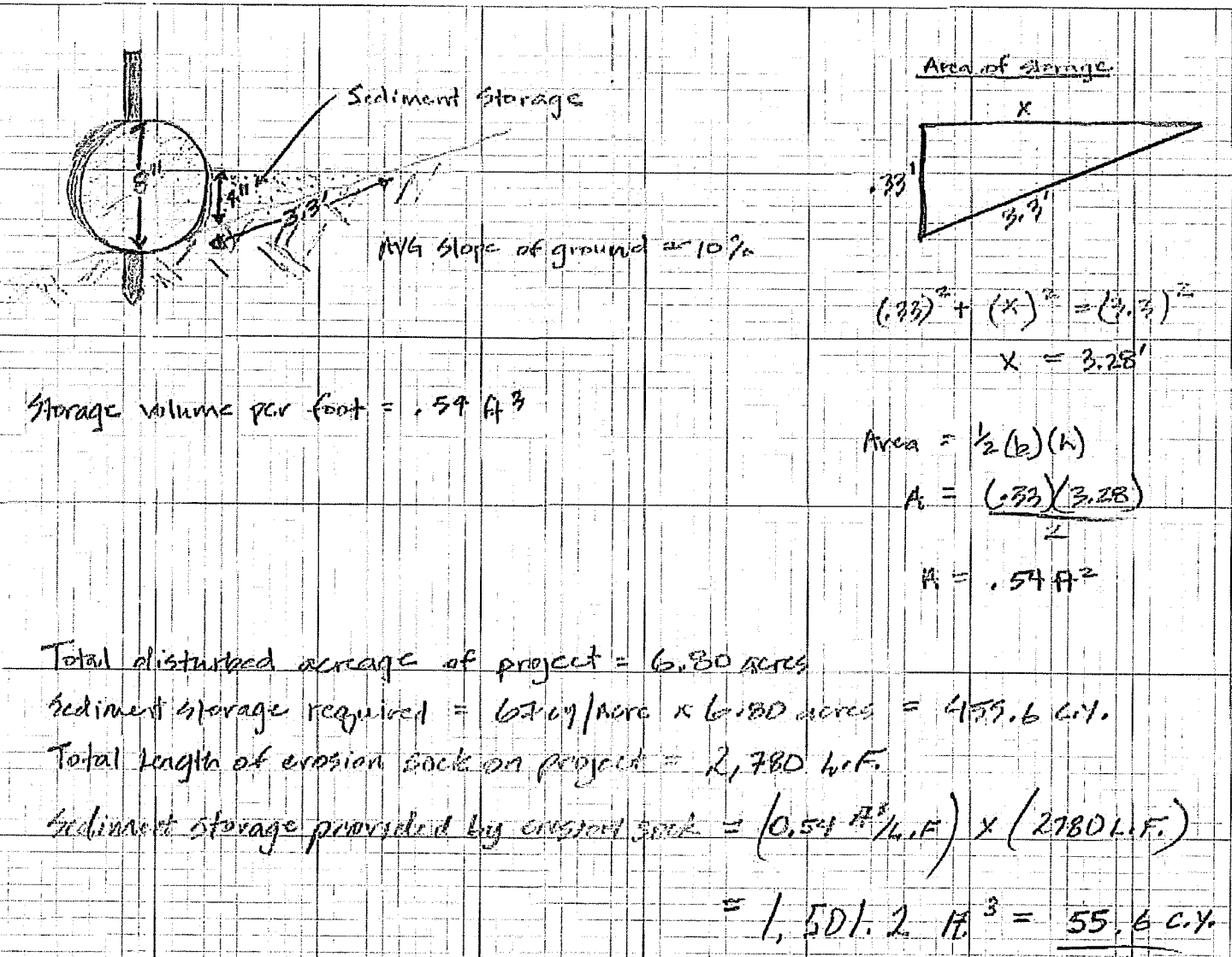
PROJECT TITLE: ANG - 2021 Demolition & Stabilization

PAGE 1 OF 1 PAGES

COMP: R.B.T. DATE: 10/19/21

WORK DESCRIPTION: Erosion Sock Sediment Storage Calculations

CHECKED: DATE:



JOB #

2021-0001

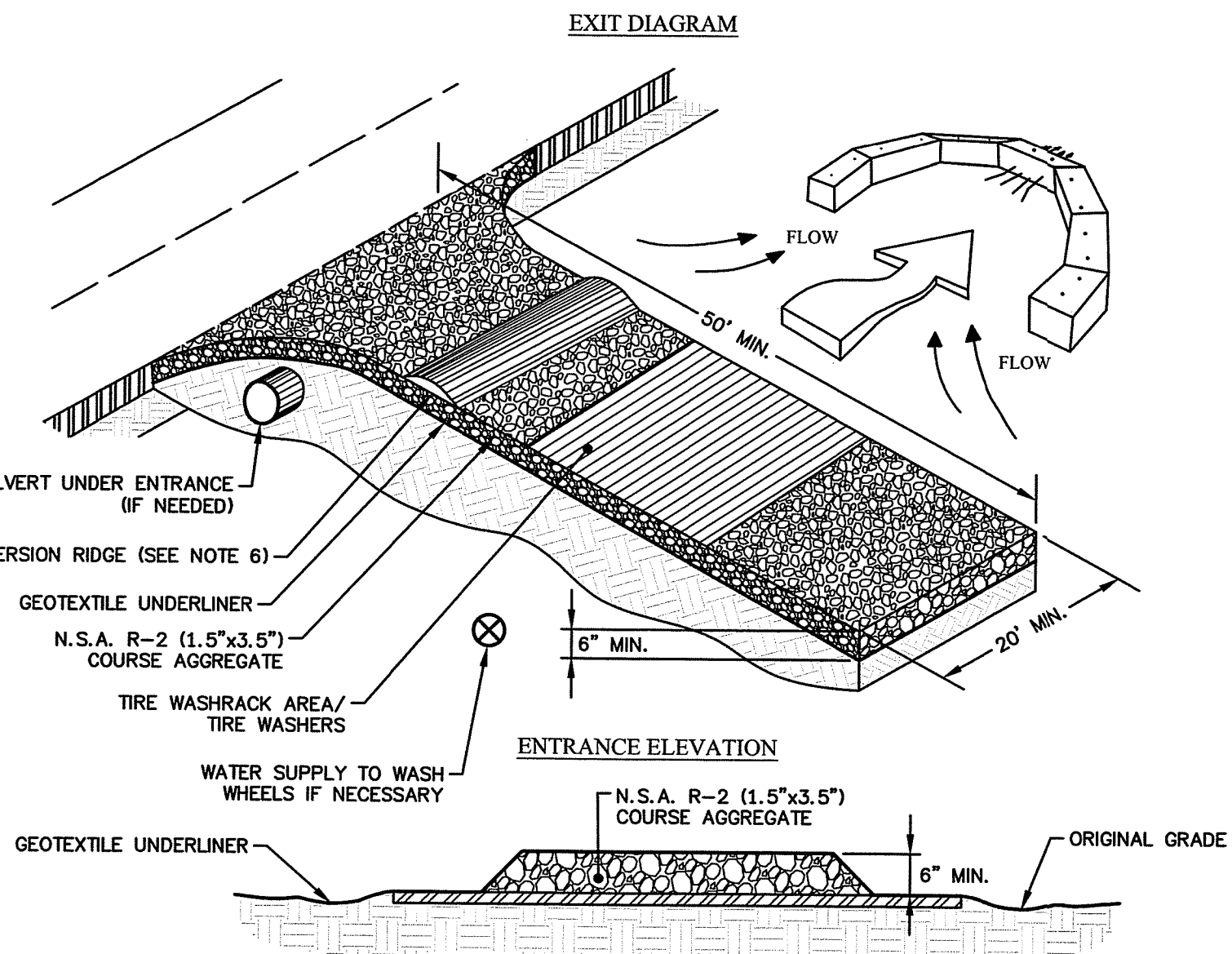
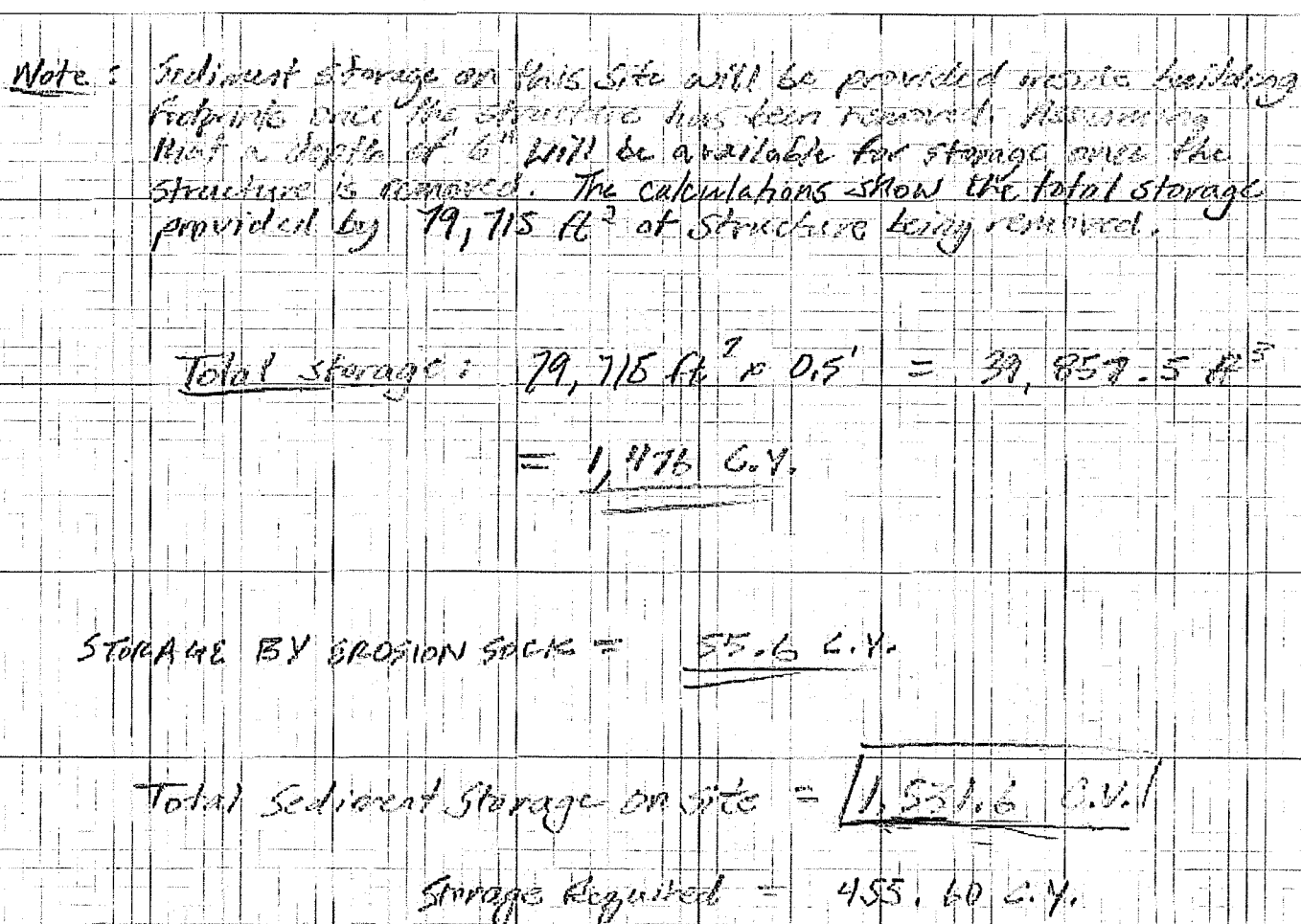
PROJECT TITLE: ANG - 2021 Demolition & Stabilization

PAGE 1 OF 1 PAGES

COMP: R.B.T. DATE: 10/19/21

WORK DESCRIPTION: Sediment Storage Calculations

CHECKED: DATE:



- NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
  2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
  3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" SIZES).
  4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
  5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
  6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
  7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
  8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (INVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
  9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
  10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

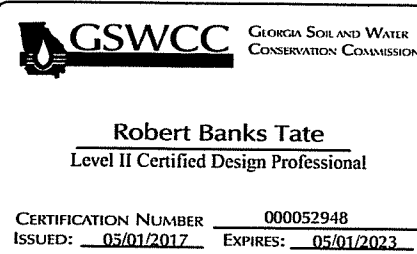
CRUSHED STONE  
CONSTRUCTION OUTLET  
N.T.S.

Co

ANGC - 2021 Demolition & Stabilization Phase I

Erosion Control Details

DRAWN BY: MAB  
CHECKED BY: SMS  
APPROVED BY: RBT  
DATE: 10-20-2021  
SCALE: AS SHOWN  
JOB No. 2021-0001  
DRAWING No. C302





C:\G\AAA-ACTIVE\GBS\2021\2021-0001-ANGC MISC CONSULTS\2021\AA-DRAWINGS\DWG 10/19/2021 3:41 PM

INSTALLATION:

- APPLY MULCH OR TEMPORARY GRASSING TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE.
- APPLICABLE TO GRADED OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER.
- MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO 6 MONTHS. APPLY AT THE APPROPRIATE DEPTH. REFER TO TABLE 1 FOR SPECIFIC MATERIALS.

|                  |  |
|------------------|--|
| SITE PREPARATION | <ul style="list-style-type: none"><li>• GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH</li><li>• INSTALL NEEDED EROSION CONTROL MEASURES SUCH AS DIKES, BERMS, AND SEDIMENT BARRIERS.</li><li>• LOOSEN COMPACTED SOIL TO A MINIMUM DEPTH OF 3".</li></ul>   |
| APPLYING MULCH   | <ul style="list-style-type: none"><li>• APPLY DRY STRAW OR HAY AND WOOD CHIPS UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.</li><li>• APPLY 20-30 LBS OF NITROGEN/ACRE IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION.</li><li>• APPLY POLYETHYLENE FILM ON EXPOSED AREAS.</li></ul>   |
| ANCHORING MULCH  | <ul style="list-style-type: none"><li>• PRESS STRAW OR HAY INTO THE SOIL WITH A DISK HARROW IMMEDIATELY AFTER APPLICATION. TACKIFIERS MAY BE USED WHEN SPREADING MULCH WITH BLOWER-TYPE EQUIPMENT.</li><li>• ANCHOR WOOD WASTE USING THE APPROPRIATE SIZE NETTING.</li><li>• TRENCH POLYETHYLENE AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.</li></ul> |

MULCHING APPLICATION REQUIREMENTS:

| MATERIAL                         | RATE                               | DEPTH    |
|----------------------------------|------------------------------------|----------|
| STRAW OR HAY                     |                                    | 2" TO 4" |
| WOOD WASTE, CHIPS, SAWDUST, BARK |                                    | 2" TO 3" |
| POLYETHYLENE FILM                | SECURE WITH SOIL ANCHORS, WEIGHTS  |          |
| WOOD WASTE, CHIPS, SAWDUST, BARK | SEE MANUFACTURER'S RECOMMENDATIONS |          |

MAINTENANCE

THE APPROPRIATE DEPTH AND 90% COVER SHALL BE MAINTAINED AT ALL TIMES.

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

Ds1

INSTALLATION:

- APPLY MULCH OR TEMPORARY GRASSING TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE.
- APPLICABLE TO ROUGH GRADED THAT WILL BE EXPOSED FOR LESS THAN 6 MONTHS.
- COORDINATE WITH PERMANENT MEASURES TO ENSURE ECONOMICAL AND EFFECTIVE STABILIZATION.
- TAKE NOTE OF WHICH SPECIES ARE NOT APPROPRIATE FOR COMPANION CROP PLANTINGS.
- WHEN THE SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, SCARIFY THE SOIL IN ORDER PROVIDE A PLACE FOR THE SEED TO LODGE AND GERMINATE.
- APPLY AGRICULTURAL LIME AT THE RATE DETERMINED BY THE SOIL PH TEST.
- APPLY LIME BEFORE LAND PREPARATION AND INCORPORATE WITH A DISK, RIPPER, OR CHISEL.
- ON STEEP SLOPES, APPLY FERTILIZER HYDRAULICALLY.
- SELECT GRASS, OR GRASS-LEGUME MIXTURES BASED ON THE AREA AND SEASON OF THE YEAR.
- APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER DRILL, CULTI-PACKER-SEEDER, OR HYDRAULIC SEEDER.
- APPLY IRRIGATION AT A RATE THAT WILL NOT CAUSE RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO INSURE GERMINATION OF THE SEED.

TEMPORARY PLANT SPECIES, SEEDING RATES & PLANTING DATES

| SPECIES                | RATES PER 1000 SQ. FT. | RATES PER ACRE | PLANTING DATES BY REGION |            |             |
|------------------------|------------------------|----------------|--------------------------|------------|-------------|
|                        |                        |                | M-L                      | P          | C           |
| BARLEY, ALONE          | 3.30 LBS               | 0 BU           | 9/1-10/31                | 9/15-11/15 | 10/1-12/31  |
| BARLEY, IN MIXTURES    | 0.50 LBS               | 0.5 BU         |                          |            |             |
| LESPEDEZA, ANNUAL      | 0.90 LBS               | 40 LBS         | 3/1-3/31                 | 3/1-3/31   | 2/1-2/28    |
| LESPEDEZA, IN MIXTURES | 0.05 LBS               | 10 LBS         |                          |            |             |
| LOVEGRASS, ALONE       | 0.10 LBS               | 4 LBS          | 4/1-5/31                 | 4/1-5/31   | 3/1-5/31    |
| LOVEGRASS, IN MIXTURES | 0.05 LBS               | 2 LBS          |                          |            |             |
| MILLET, IN BROWNTOP    | 0.90 LBS               | 40 LBS         | 4/15-6/15                | 4/15-6/30  | 4/15-6/30   |
| MILLET, IN MIXTURES    | 0.20 LBS               | 10 LBS         |                          |            |             |
| MILLET, PEARL          | 1.10 LBS               | 50 LBS         | 5/15-7/15                | 5/1-7/31   | 4/15-8/15   |
| OATS, ALONE            | 2.99 LBS               | 4 LBS          | 9/15-11/15               | 9/15-11/15 | 9/15-11/15  |
| OATS, IN MIXTURES      | 0.70 LBS               | 1.0 LBS        |                          |            |             |
| RYE (GRAIN), ALONE     | 3.90 LBS               | 3 BU           | 8/15-10/31               | 9/15-11/30 | 10/1-12/31  |
| RYE, IN MIXTURES       | 0.50 LBS               | 0.5 BU         |                          |            |             |
| RYEGRASS               | 0.90 LBS               | 40 LBS         | 8/15-11/15               | 9/1-12/31  | 9/15-12/31  |
| SUDANGRASS             | 1.40 LBS               | 60 LBS         | 5/1-7/31                 | 5/1-7/31   | 4/1-7/31    |
| TRITICALE, ALONE       | 3.30 LBS               | 3 BU           | N/A                      | N/A        | 10/15-11/30 |
| TRITICALE, IN MIXTURES | 0.50 LBS               | 0.5 BU         |                          |            |             |
| WHEAT, ALONE           | 4.10 LBS               | 3 BU           | 9/15-11/30               | 10/1-12/15 | 10/15-12/31 |
| WHEAT, IN MIXTURES     | 0.70 LBS               | 0.5 BU         |                          |            |             |

1. UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.
2. SEEDING DATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL CONDITIONS.
3. SEEDING RATES ARE BASED ON PURE LIVE SEED (PLS).

FERTILIZER REQUIREMENTS FOR TEMPORARY VEGETATION

| TYPES OF SPECIES                   | PLANTING YEAR | FERTILIZER (N-P-K) | RATE (LBS/ACRE) | N TOP DRESSING RATES (LBS/ACRE) |
|------------------------------------|---------------|--------------------|-----------------|---------------------------------|
| COOL SEASON GRASSES                | FIRST         | 6-12-12            | 1500            | 50-100                          |
|                                    | SECOND        | 6-12-12            | 1000            | ----                            |
|                                    | MAINTENANCE   | 10-10-10           | 400             | 30                              |
| COOL SEASON GRASSES & LEGUMES      | FIRST         | 6-12-12            | 1500            | 50-100                          |
|                                    | SECOND        | 10-10-10           | 1000            | ----                            |
|                                    | MAINTENANCE   | 10-10-10           | 400             | ----                            |
| TEMPORARY COVER CROPS SEEDED ALONE | FIRST         | 10-10-10           | 500             | 30                              |
| WARM SEASON GRASSES                | FIRST         | 6-12-12            | 1500            | 50-100                          |
|                                    | SECOND        | 6-12-12            | 800             | 50-100                          |
|                                    | MAINTENANCE   | 10-10-10           | 400             | 30                              |

MAINTENANCE:

- RESEED AREAS WHERE AN ADEQUATE STAND OF TEMPORARY VEGETATION FAILS TO EMERGE.
- IF OPTIMUM CONDITIONS FOR TEMPORARY VEGETATION IS LACKING, MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

Ds2

INSTALLATION:

- USE CONVENTIONAL PLANTING METHODS WHERE POSSIBLE.
- FINAL STABILIZATION MEANS THAT 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION AND WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDINGLY TO THE PLAN (UNIFORMLY COVERED LANDSCAPING MATERIAL IN PLANNED LANDSCAPING AREAS), OR THE EQUIVALENT PERMANENT STABILIZATION METHODS.
- SELECT PLANTS SPECIES BASED ON SITE AND SOIL CONDITIONS, PLANNED USE, MAINTENANCE OF THE AREA, TIME OF YEAR, METHOD OF PLANTING, AND THE NEEDS OF THE LAND USER.
- APPLY AGRICULTURAL LIME AT A RATE OF 1-2 TONS/ACRE UNLESS SOIL TEST INDICATE OTHERWISE. PLEASE REFER TO PERMANENT PLANT SPECIES, SEEDING RATES & PLANTING DATES TABLE BELOW FOR INITIAL FERTILIZATION, NITROGEN, TOPDRESSING, AND MAINTENANCE FERTILIZER REQUIREMENT FOR EACH SPECIES.
- APPLY SEED HYDRAULICALLY, IF USING CONVENTIONAL METHODS, USE A CULTI-PACKER SEEDER, DRILL, ROTARY SEEDER, OR BY HAND.
- COVER THE SEED LIGHTLY WITH 1/8"-1/4" OF SOIL FOR SMALL SEED AND 1 1/2"-1" OF SOIL FOR LARGE SEED WHEN USING A CULTI-PACKER.
- CHECK SEED TAGS FOR % GERMINATION & % PURITY IN ORDER TO CALCULATE PURE LIVE SEED (PLS), WHICH IS THE PERCENTAGE OF THE SEEDS THAT ARE PURE AND WILL GERMINATE.
- MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. PLEASE REFER TO Ds1 FOR APPLICATION RATES AND ANCHORING METHODS FOR DIFFERENT MATERIALS FOR DIFFERENT MATERIALS.
- IRRIGATE WHEN THE SOIL IS DRY AND AT A RATE THAT WILL NOT CAUSE RUNOFF.

MAINTENANCE:

- RE-SEED AREAS WHERE AN ADEQUATE STAND OF VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- MAINTAIN AT LEAST 6" OF TOP GROWTH UNDER ANY USE AND MANAGEMENT.
- EXCLUDE TRAFFIC UNTIL THE PLANTS ARE ESTABLISHED.
- REFER TO FERTILIZER REQUIREMENTS FOR PERMANENT VEGETATION TABLE FOR SECOND YEAR AND MAINTENANCE FERTILIZER RATES.
- APPLY ONE TON OF AGRICULTURAL LIME EVERY 4-6 YEARS AS INDICATED BY SOIL TESTS.
- MOW BERMUDA GRASS, BAHAI GRASS, AND TALL FESCUE AS DESIRED.
- MOW SERICIA LESPEDEZA ONLY AFTER FROST INSURES THAT THE SEEDS ARE MATURE.

PERMANENT PLANT SPECIES, SEEDING RATES & PLANTING DATES

| SPECIES   | RATES PER<br>1000<br>SQ. FT. | RATES PER ACRE              | PLANTING DATES BY REGION     |           |            | REMARKS   |
|---|------------------------------|-----------------------------|------------------------------|-----------|------------|---|
|   |                              |                             | M-L                          | P         | C          |   |
| BAHIA, PENSACOLA<br><br>ALONE OR WITH TEMPORARY COVER<br>WITH OTHER PERENNIALS                | 60 LBS.<br>30 LBS.           | 1.4<br>LBS.<br>0.7<br>LBS.  | ----                         | 4/1-5/31  | 3/1-5/31   | LOW GROWING, SOD PRODUCING;<br>WILL SPREAD INTO BERMUDA LAWNS.  |
| BAHIA, WILMINGTON<br><br>ALONE OR WITH TEMPORARY COVER<br>WITH OTHER PERENNIALS               | 60 LBS.<br>30 LBS.           | 1.4<br>LBS.<br>0.7<br>LBS.  | 3/15-5/31                    | 3/1-5/31  | ----       | LOW GROWING, SOD PRODUCING;<br>WILL SPREAD INTO BERMUDA LAWNS.  |
| BERMUDA, COMMON (HULLED SEED)<br><br>ALONE OR WITH TEMPORARY COVER<br>WITH OTHER PERENNIALS   | 10<br>LBS.<br>6 LBS.         | 0.2<br>LBS.<br>0.1<br>LBS.  | ----                         | 4/1-5/31  | 3/15-8/15  | QUICK COVER; LOW GROWING; SOD FORMING; NEEDS FULL SUN.  |
| BERMUDA, COMMON (UNHULLED SEED)<br><br>ALONE OR WITH TEMPORARY COVER<br>WITH OTHER PERENNIALS | 10<br>LBS.<br>6 LBS.         | 0.2<br>LBS.<br>0.1<br>LBS.  | ----                         | 10/1-2/28 | 11/1-1/31  | PLANT WITH WINTER ANNUALS. PLANT WITH TALL FESCUE.  |
| BERMUDA SPRINGS COMMON LAWN<br>AND FORAGE HYBRIDS   | 40 CU.<br>FT.                | 0.9 CU.<br>FT.              | 4/15-6/15                    | 4/1-6/15  | 4/1-5/31   | 1 CU. FT. = 650 SPRIGS 1 BU. =<br>1.25 CU. FT. OR 800 SPRIGS  |
|   | SOD PLUGS 3x3                |                             |                              |           |            |   |
| CENTIPEDE   | BLOCK SOD<br>ONLY            | BLOCK SOD<br>ONLY           |                              |           |            | DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE.  |
|   |                              |                             | ----                         | 11/1-5/31 | 11/1-5/31  |   |
| CROWN VETCH<br><br>WITH WINTER ANNUALS<br>OR COOL SEASON GRASSES                              | 15<br>LBS.                   | 0.3<br>LBS.                 | 9/1-10/15                    | 9/1-10/15 | ----       | MIX WITH 30 LBS. TALL FESCUE OR 15 LBS. RYE; INOCULATED<br>SEED; PLANT ONLY NORTH OF ATLANTA.   |
| FESCUE, TALL<br><br>ALONE<br>WITH OTHER PERENNIALS  | 50 LBS.<br>30 LBS.           | 1.1<br>LBS.<br>0.7<br>LBS.  | 3/1-4/15<br>OR<br>8/15-10/15 | 9/1-10/15 | ----       | CAN BE MIXED WITH PERENNIAL LESPEDEZES OR CROWN VETCH;<br>NOT FOR DROUGHTY SOILS OR HEAVY USE AREAS.  |
| LESPEDEZA, SERICEA  |                              |                             |                              |           |            | WILDLY ADAPTED AND LOW MAINTENANCE; TAKES 2-3 YEARS TO<br>ESTABLISH; INOCULATE SEED WITH EL INOCULANT; MIX WITH<br>WEEPING LOVEGRASS; COMMON BERMUDA; BAHAI; OR TALL FESCUE.  |
| SCARIFIED   | 60 LBS.                      | 1.4<br>LBS.                 | 4/1-5/31                     | 3/15-5/31 | 3/1-5/15   | MIX WITH TALL FESCUE OR WINTER ANNUALS.   |
| UNSCARIFIED   | 75 LBS.                      | 1.7<br>LBS.                 | 9/1-2/28                     | 9/1-2/28  | 9/1-2/28   |   |
| SEED BEARING HAY  | 3 TONS                       | 138<br>LBS.                 | 10/1-2/28                    | 10/1-1/31 | 10/15-1/15 | CUT WHEN SEED IS MATURE BUT BEFORE IT SHATTERS. ADD TALL<br>FESCUE OR WINTER ANNUALS.   |
| LESPEDEZA AMBRO VIGATA<br>OR APPALOW  |                              |                             |                              |           |            | SPREADING GROWTH WITH HEIGHT 18"-24"; GOOD IN URBAN<br>AREAS; SLOW TO DEVELOP GOOD STANDS; MIX WITH WEEPING<br>LOVEGRASS; COMMON BERMUDA, BAHIA, TALL FESCUE, OR<br>WINTER ANNUALS; DO NOT MIX WITH SERICEA LESPEDEZA,<br>INOCULATE SEED WITH EL INOCULANT. |
| SCARIFIED   | 60 LBS.                      | 1.4<br>LBS.                 | 4/1-5/31                     | 3/15-5/31 | 3/1-5/15   |   |
| UNSCARIFIED   | 75 LBS.                      | 1.7<br>LBS.                 | 9/1-2/28                     | 9/1-2/28  | 9/1-2/28   |   |
| LESPEDEZA, SHRUB (LESPEDEZA<br>BICOLOR OR LESPEDEZA<br>THUMBERGII) PLANTS                     | 3'x3' SPACING                |                             | 10/1-3/31                    | 11/1-3/15 | 11/15-2-28 | PLANT IN SMALL CLUMPS FOR WILDLIFE FOOD AND COVER.  |
| LOVEGRASS, WEEPING<br><br>ALONE<br>WITH OTHER PERENNIALS                                      | 4 LBS.<br>2 LBS.             | 0.1<br>LBS.<br>0.05<br>LBS. | 4/1-5/31                     | 3/15-5/31 | 3/1-5/31   | QUICK COVER; DROUGHT TOLERANT; GROWS WELL WITH SERICEA<br>LESPEDEZA, ON ROAD BANKS AND OTHER STEEP SLOPES; SHORT LIVED.   |
| MAIDENCANE SPRIGS   | 2'x3' SPACING                |                             | 2/1-3/31                     | 2/1-3/31  | 2/1-3/31   | FOR VERY WET SITES SUCH AS RIVER BANKS AND SHORELINES. DIG<br>SPRIGS LOCALLY  |
| PANICGRASS, ATLANTIC COSTAL   | 20 LBS.                      | 0.5<br>LBS.                 | ----                         | 3/1-4/30  | 3/1-4/30   | GROWS WELL ON COSTAL SAND DUNE; MIX WITH SERICEA<br>LESPEDEZ, BUT NOT ON THE SAND DUNE.   |
| RED CANARY GRASS<br><br>ALONE<br>WITH OTHER PERENNIALS  | 50 LBS.<br>30 LBS.           | 1.1<br>LBS.<br>0.7<br>LBS.  | 8/15-10/15                   | 9/1-10/15 | ----       | GROWS SIMILAR TO TALL FESCUE; FOR WET SITES.  |
| SUNFLOWER, AZTEC MAXIMILLAN   | 10<br>LBS.                   | 0.2<br>LBS.                 | 4/15-5/31                    | 4/15-5/31 | 4/1-5/31   | MIX WITH WEEPING LOVEGRASS OR OTHER LOW GROWING<br>GRASSES OR LEGUMES.  |

1. RATES ARE FOR BROADCASTED SEED. IF A SEED DRILL IS USED, REDUCE THE RATES BY ONE-HALF.
2. PLS IS AN ABBREVIATION FOR PURE LIVE SEED. REFER TO GLOSSARY IN GSWCC FIELD MANUAL FOR AN EXPLANATION OF THIS TERM.
3. SEEDING RATES ARE BASED ON PURE LIVE SEEDS (PLS).

DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)

Ds3

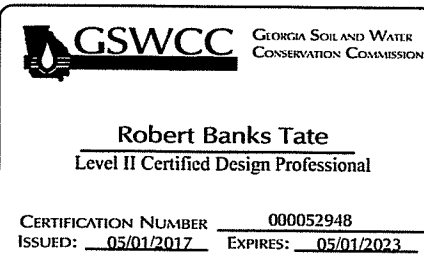
FERTILIZER REQUIREMENTS FOR TEMPORARY VEGETATION

| TYPES OF SPECIES              | PLANTING YEAR | FERTILIZER (N-P-K) | RATE (LBS/ACRE) | N TOP DRESSING RATES (LBS/ACRE) |
|-------------------------------|---------------|--------------------|-----------------|---------------------------------|
| COOL SEASON GRASSES           | FIRST         | 6-12-12            | 1500            | 50-100                          |
|                               | SECOND        | 6-12-12            | 1000            | ----                            |
|                               | MAINTENANCE   | 10-10-10           | 400             | 30                              |
| COOL SEASON GRASSES & LEGUMES | FIRST         | 6-12-12            | 1500            | 0-50                            |
|                               | SECOND        | 0-10-10            | 1000            | ----                            |
|                               | MAINTENANCE   | 0-10-10            | 400             | ----                            |
| WARM SEASON GRASSES           | FIRST         | 6-12-12            | 1500            | 50-100                          |
|                               | SECOND        | 6-12-12            | 800             | 50-100                          |
|                               | MAINTENANCE   | 10-10-10           | 400             | 30                              |
| WARM SEASON GRASSES & LEGUMES | FIRST         | 6-12-12            | 1500            | 50                              |
|                               | SECOND        | 0-10-10            | 1000            | ----                            |
|                               | MAINTENANCE   | 0-10-10            | 400             | ----                            |

PURE LIVE SEED (PLS) EXAMPLE:

TALL FESCUE  
85% GERMINATION & 95% PURITY  
PLS = 0.85 (GERMINATION) x 0.95 (PURITY)  
PLS = 80.75%

SEEDING RATE = 50 LBS. PLS/ACRE = 61.92 LBS/ACRE  
PLS 80.75% PLS



ANGC - 2021 Demolition & Stabilization Phase I

Erosion Control Details

DRAWN BY: MAB  
CHECKED BY: SMS  
APPROVED BY: RBT  
DATE: 10-20-2021  
SCALE: AS SHOWN  
JOB No. 2021-0001  
DRAWING No.

C303

