## ANTICIPATED ACTIVITY SCHEDULE

| | ACTIVITY | MONTH 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | INSTALL SEDIMENT CONTROLS | (SILT AND/OR TREE PROTECTION FENCE @ PERIMETER OF SITE AND STORMWATER BASIN) | | | | | | | | | | | |
| 2 | CLEARING AND GRUBBING | | | | | | | | | | | | |
| 3 | MASS GRADING | | | | | | | | | | | | |
| 4 | STORM DRAINAGE INSTALLATION | | | | | | | | | | | | |
| 5 | INSTALL SEDIMENT TRAPS @ STRS | | | | | | | | | | | | |
| 6 | SANITARY SEWER INSTALLATION | | | | | | | | | | | | |
| 7 | UTILITY INSTALLATION | | | | | | | | | | | | |
| 8 | BLDG CONST & PAVING | | | | | | | | | | | | |
| 9 | DESILTING OF STORM BASIN | | | | | | | | | | | | |
| 10 | GRASS (TEMP) & (PERM) | | | | | | | | | | | | |
| 11 | FINAL LANDSCAPING | | | | | | | | | | | | |
| 12 | MAINTAIN EROSION CONTROL | | | | | | | | | | | | |
| 13 | CLEAN UP | | | | | | | | | | | | |

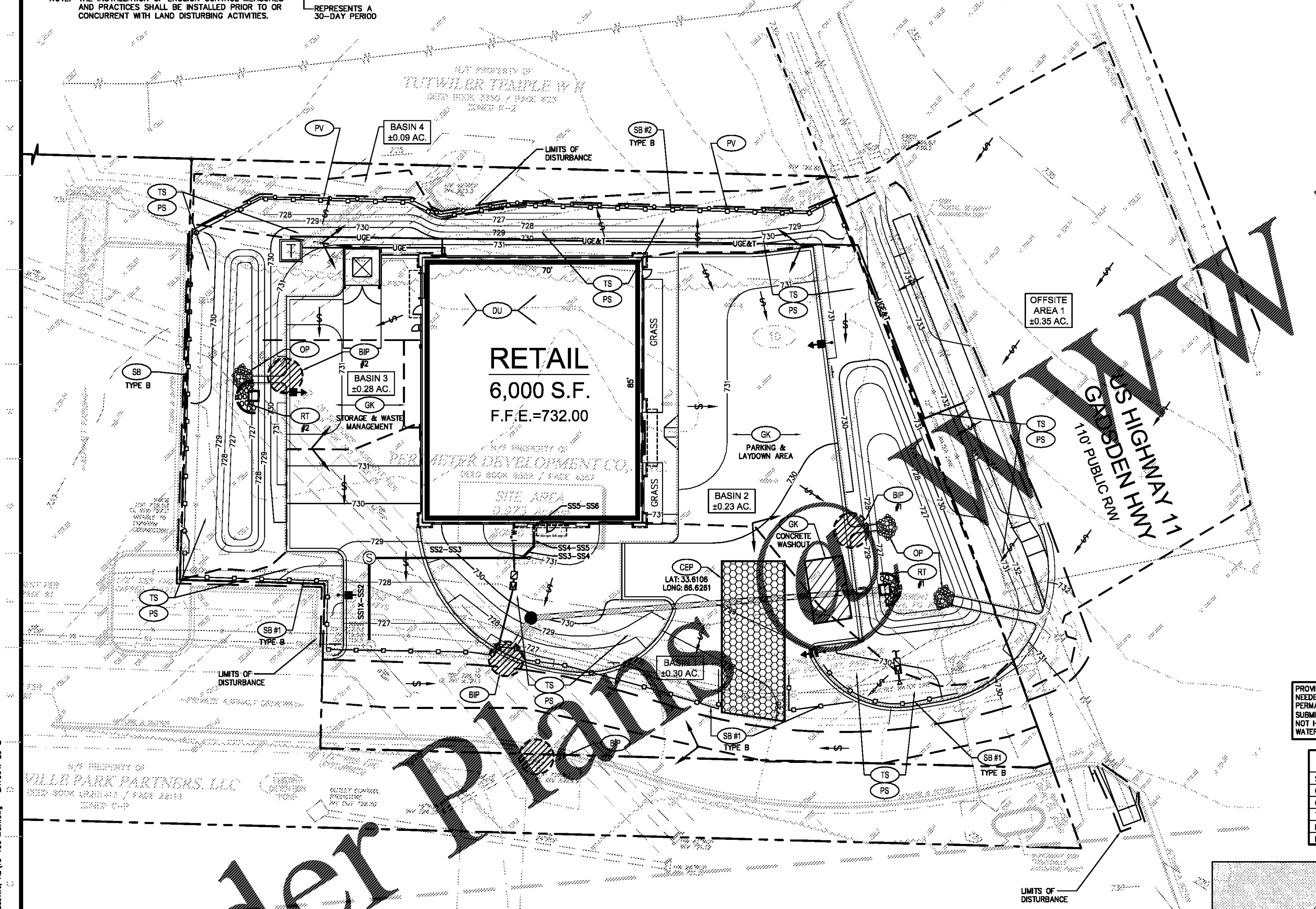
NOTE: THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

REPRESENTS A 30-DAY PERIOD

## INLET SEDIMENT STORAGE CALCULATIONS

| TRAP NAME | (1) DRAINAGE AREA (AC) | (2) REQ'D SEDIMENT (C.Y.) | (3) PROVIDED STORAGE (C.Y.) | (4) DEPTH (FEET) | (5) SIDE SLOPE | (6) SURFACE AREA (S.F.) | (7) SHAPE | (8) DIMENSIONS (FEET) |
|---|---|---|---|---|---|---|---|---|
| BIP #1 | 0.23 | 15.41 | 18 | 2' | 2:1 | 252 | RECT. | 14'X18' |
| BIP #2 | 0.28 | 18.76 | 21 | 2' | 2:1 | 285 | RECT. | 15'X19' |

NOTE: CONTRACTOR TO ADJUST ABOVE DIMENSIONS BASED ON CONSTRUCTION PROGRESS TO ENSURE MINIMUM STORAGE VOLUMES ARE MET AT ALL TIMES.
NOTE: REQUIRED SEDIMENT STORAGE IS 67 CY/AC DRAINED.




| SILT FENCE (SB) #1 SEDIMENT STORAGE |
|---|
| SEDIMENT STORAGE REQUIRED = 0.30 X 67 = 20.1 C.Y. |
| SILT FENCE HEIGHT = 2.5' MIN. STORAGE HEIGHT FOR CALC. 1.25' AVERAGE SLOPE 16% 288 L.F. OF SILT FENCE SEDIMENT STORAGE PROVIDED = 28.8 C.Y. |

| SILT FENCE (SB) #2 SEDIMENT STORAGE |
|---|
| SEDIMENT STORAGE REQUIRED = 0.09 X 67 = 6.03 C.Y. |
| SILT FENCE HEIGHT = 2.5' MIN. STORAGE HEIGHT FOR CALC. 1.25' AVERAGE SLOPE 33% 208 L.F. OF SILT FENCE SEDIMENT STORAGE PROVIDED = 10.4 C.Y. |

Know what's below Call before you dig

USER Glynch - Feb 14, 2019 - 9:56am
P:\Project Drawing Files\Site Department\2018\18-188 Trussville, AL\18-188 Main.dwg - LAYOUT: ES-2

### SOIL SERIES LEGEND

10 — DECATUR SILT LOAM, 2 TO 8 PERCENT SLOPES

### EROSION CONTROL LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- XXX — CONTOUR ELEVATIONS
- STORM DRAIN
- OR X.XX% — DIRECTION OF OVERLAND FLOW
- LIMITS OF DRAINAGE SUB-BASIN
- SOIL SERIES BOUNDARY
- SILT FENCE
- TREE PROTECTION FENCE
- SWPPP INFORMATION SIGN
- TEMPORARY BARRICADE

## PHASE I

1. INSTALL STABILIZED CONSTRUCTION EXIT PAD.
2. INSTALL SEDIMENT BARRIERS ON THE SITE. (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE).
3. INSTALL INLET PROTECTION ON EXISTING DRAINAGE STRUCTURES AS SHOWN.
4. FOLLOW GROUNDS KEEPING BMP'S THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL DENOTE ON SITE MAPS LOCATIONS OF PARKING, LAYDOWN AREAS, PORTA POTTYS AND MATERIAL STORAGE AREAS WHEN INSTALLED.
5. BEGIN GRADING ACTIVITIES.

## PHASE II

1. STABILIZE ANY DISTURBED AREAS WITHIN 14 DAYS OF STOPPING CONSTRUCTION IN THAT AREA.
2. PREPARE BUILDING PAD AND START BUILDING CONSTRUCTION.
3. INSTALL UTILITIES, STORM SEWERS, CURBS AND GUTTERS.
4. INSTALL RIP-RAP AROUND OUTLET STRUCTURES AS EACH OUTLET STRUCTURE IS INSTALLED.
5. INSTALL INLET PROTECTION ON INLETS AFTER INSTALLATION.
6. CONTRACTOR TO MAINTAIN TEMPORARY ACCESS SHOWN UNTIL NORTH PARKING LOT IS PAVED OR INSTALL A 2ND CONSTRUCTION ENTRANCE.
7. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
8. PREPARE SITE FOR PAVING.
9. PAVE SITE.
10. INSTALL APPROPRIATE INLET PROTECTION AS SITE IS PAVED.
11. INSTALL FINAL LANDSCAPING.
12. OBTAIN CONCURRENCE WITH THE OWNER THAT THE SITE HAS BEEN FINALLY STABILIZED THEN:
    A. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES,
    B. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMP'S.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND-DISTURBING ACTIVITIES.

ALL EROSION & SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY AFTER ONSITE INSPECTION BY THE ISSUING AUTHORITY.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

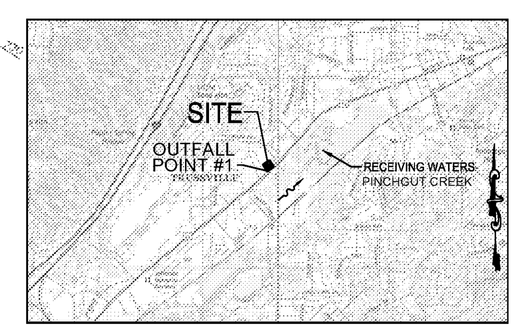
## EROSION CONTROL NOTES

1. SILT FENCE MUST MEET THE REQUIREMENTS OF THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS..
2. ADDITIONAL EROSION CONTROL MEASURES WILL BE EMPLOYED BY CONTRACTOR WHERE DETERMINED NECESSARY BY ACTUAL SITE CONDITIONS TO ENSURE COMPLIANCE WITH REGULATIONS. ANY MEASURES IMPLEMENTED REQUIRING HYDRAULIC CALCULATIONS ARE TO BE COORDINATED WITH AND CERTIFIED BY THE DESIGN PROFESSIONAL PRIOR TO COMMENCEMENT.
3. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE, AT A MINIMUM, IN CONFORMANCE WITH THE REQUIREMENTS OF THE CITY EROSION AND SEDIMENTATION ORDINANCE AND THE SEDIMENT CONTROL REGULATIONS, AND ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS.
4. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM THE SITE. ALL OTHER DRIVEWAYS WITHOUT A CONSTRUCTION EXIT SHALL BE BARRICADED TO PROHIBIT INGRESS AND EGRESS TRAFFIC.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE FROM THE SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED.
6. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL DEVICES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.
7. EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE 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 DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
8. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 1/2 OF THE ORIGINAL HEIGHT OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.
9. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO LOCAL AND STATE STANDARDS.
10. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
11. SILT BARRIERS ARE TO BE PLACED AT DOWNSTREAM TOE OF ALL FILL SLOPES.
12. ALL SLOPES AND AREAS DISTURBED DURING CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF AMENDED TOPSOIL APPLIED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL A HEALTHY STAND OF PERMANENT VEGETATION HAS BEEN ESTABLISHED FOR ALL DISTURBED AREAS.
13. ABSOLUTELY NO SEDIMENT SHALL BE PERMITTED TO LEAVE THE SITE DURING CONSTRUCTION. IF HEAVY RAINS AND UNUSUAL SITE CONDITIONS RESULT IN THE POLLUTION OF ROADWAYS OR ADJACENT PARCELS THEN THE GRADING CONTRACTOR SHALL CLEAN THE DISTURBED AREAS IMMEDIATELY AND RESTORE THE AREAS TO THE ORIGINAL CONDITION.
14. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE GOVERNING OFFICIALS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE INTIMATE WITH THE LOCAL EROSION CONTROL LAWS AND TO REFLECT THIS KNOWLEDGE IN HIS/HER ACTIONS AND QUOTATIONS.
15. REFERENCE THE CONSTRUCTION SEQUENCE FOR THE RELATIONSHIP BETWEEN THE INSTALLATION OF EROSION CONTROL FEATURES AND GENERAL CONSTRUCTION.
16. MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER AND THE CONTRACTOR.
17. ALL GRADED SLOPES STEEPER THAN 3:1 OR OVER 5' IN HEIGHT REGARDLESS OF SLOPE MUST BE HYDRA SEEDED AND COVERED WITH EXCELSIOR CURLEX BLANKETS OR APPROVED EQUAL FIBER MATTING. IF NOT HYDRA SEEDED, APPROVED MATTING THAT HAS BEEN IMPREGNATED WITH SEED AND FERTILIZER MUST BE USED. ALL SLOPES MUST BE PROPERLY PROTECTED UNTIL A PERMANENT VEGETATIVE STAND IS ESTABLISHED.
18. ALL DISTURBED AREAS MUST BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED. THESE DISTURBED AREAS MUST BE PROTECTED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
19. CONTRACTOR MUST HAUL OFF ALL SOLID WASTE TO AN APPROVED LAND FILL. SOLID WASTE BURNING ON SITE IS PROHIBITED.
20. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.
21. NO WASTE MATERIALS SHALL BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
22. THERE ARE NO STATE WATERS LOCATED ON AND WITHIN 200 FT. OF THE SITE.
23. THERE ARE NO WETLANDS LOCATED ON THIS SITE.
24. NO CONCRETE TRUCK DRUMS CAN BE WASHED OUT ON A CONSTRUCTION SITE. ONLY CHUTES CAN BE WASHED OFF ONSITE.

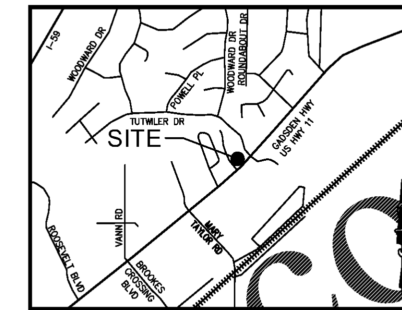
PROVIDE TEMPORARY IRRIGATION OR WATERING, VIA WATER TRUCK, AS NEEDED TO ESTABLISH TEMPORARY AND PERMANENT VEGETATION UNTIL THE PERMANENT IRRIGATION SYSTEM IS FULLY FUNCTION OR UNTIL THE NOT IS SUBMITTED IF A PERMANENT IRRIGATION SYSTEM ISN'T PLANNED. AREAS NOT HAVING A PERMANENT IRRIGATION SYSTEM SHALL BE IRRIGATED OR WATERED UNTIL THE NOT HAS BEEN SUBMITTED AND ACCEPTED.

### ACREAGE SUMMARY (IN ACRES)

| | |
|---|---|
| SITE AREA | 00.97 AC± |
| ON-SITE DISTURBED AREA | 00.83 AC± |
| OFF-SITE DISTURBED AREA | 00.09 AC± |
| TOTAL DISTURBED AREA | 00.92 AC± |
| IMPERVIOUS AREA AT COMPLETION | 00.58 AC± |
| PERVIOUS AREA AT COMPLETION | 00.39 AC± |




U.S.G.S. QUADRANGLE MAP
NOT TO SCALE




LOCATION MAP
NOT TO SCALE

### STRUCTURAL PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| CEP | 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. |
| Rt | RETRO FITTING | | | A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. |
| SB | 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. |
| FIP | FABRIC DROP INLET PROTECTION | | | An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities. |
| BIP | BLOCK AND GRAVEL INLET PROTECTION | | | A barrier to temporarily pond runoff water at a storm sewer inlet allowing suspended solids to settle minimizing sediment entering storm drains during construction. |
| OP | OUTLET PROTECTION | | | A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. |

### VEGETATIVE PRACTICES

| CODE | PRACTICE | DETAIL | MAP SYMBOL | DESCRIPTION |
|---|---|---|---|---|
| MU | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) | | MU | Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion retarding cover. |
| TS | DISTURBED AREA STABILIZATION (WITH TEMP SEEDING) | | TS | Establishing a temporary vegetative cover with fast growing seedings on disturbed areas. |
| PS | DISTURBED AREA STABILIZATION (WITH PERM SEEDING) | | PS | Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas. |
| SOD | DISTURBED AREA STABILIZATION (SODDING) | | SOD | A permanent vegetative cover using sods on highly erodable or critically eroded lands. |
| DU | DUST CONTROL ON DISTURBED AREAS | | DU | Controlling surface and air movement of dust on construction site, roadways and similar sites. |
| TP | TREE PLANTING ON DISTURBED AREAS | | TP | Planting desirable trees on construction sites or other disturbed areas. |
| GK | GROUNDS KEEPING | | GK | Activities, measures, and BMP's that are essential during construction for the protection of environmental quality. |
| PV | PRESERVATION OF EXISTING VEGETATION | | PV | To protect desirable trees from injury during construction activity. |

NOTE: CONTRACTOR MAY SUBSTITUTE SODDING (SOD) FOR SEEDING AT THEIR OPTION.

NOTE: SEE SURVEY FOR EXISTING LEGEND SYMBOLS

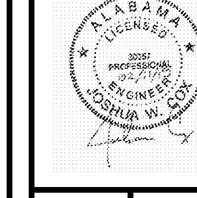
| 24 HR LOCAL EMERGENCY CONTACT | |
|---|---|
| KELLY WAGONER<br>BUCKEL DESIGN GROUP, LLC | (404)567-5701 |
| (CONTRACTOR'S NAME) | (PHONE NUMBER) |

NOTE: CONTRACTOR TO PROVIDE UPDATED INFORMATION ONCE CONTRACT IS AWARDED.

# PHASE II - SITE MAP
# EROSION SEDIMENTATION & POLLUTION CONTROL PLAN

SCALE IN FEET
20' 10' 0 20' 40' 60'


BDG Buckel Design Group, LLC.
3471 DONNAVILLE ST
DULUTH, GA 30096
PHONE: 404-567-5701
FAX: 404-567-5703
WWW.BDGSE.COM


STAMP



PROPOSED COMMERCIAL DEVELOPMENT
TRUSSVILLE, JEFFERSON COUNTY, AL

FOR: GEMCAP DEVELOPMENT
WINSTON-SALEM, NORTH CAROLINA

| REVISION | BY |
|---|---|
| | |

DRAWN GDL
CHECKED ADB
ISSUED DATE 2/11/2019
ISSUED FOR PERMIT REVIEW
PROJECT NO. 18-188
FILE 18-188 Main
SHEET ES-2