100% CONSTRUCTION DOCUMENTS

# TURF FIELD CONVERSION

ASHFORD PARK ELEMENTARY SCHOOL

PREPARED FOR: CITY OF BROOKHAVEN PARKS AND RECREATION DEPARTMENT

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**GENERAL NOTES** 

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ESCP NOTES

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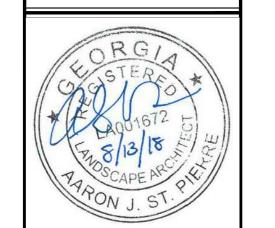
DETAILS UTILITY PLAN

GRADING & DRAINAGE PLAN

DRAINAGE AND ESCP DETAILS

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# **DESIGNER**

OWNER/DEVELOPER

CITY OF BROOKHAVEN

PARKS AND RECREATION DEPARTMENT

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# LOSE DESIGN

LANDSCAPE ARCHITECTURE/ARCHITECTURE/CIVIL ENGINEERING/PLANNING

> 220 WEST CROGAN ST. LAWRENCEVILLE, GA 30046

PHONE: 770-338-0017 CONTACT: AARON ST. PIERRE

# LOCATION MAP



NTS

VERSION TARY SCHOOL TURF

SUBMITTALS / REVISIONS

ISSUED FOR BID

COVER

CHECKED BY MB

C0.00

- THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, DIMENSIONS, LEVELS, PLAN ELEVATIONS, INVERTS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME. REMEDIAL WORK RESULTING
- FROM LACK OF VERIFICATION WILL BE AT CONTRACTOR'S SOLE EXPENSE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE DAMAGE OR LOSS OF ANY REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS/HER WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY. THE SOILS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION/PROJECT MANAGER OF ANY DISCREPANCY BETWEEN SOILS REPORT AND PLANS, ETC.
- 4. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC, WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH PROPERTY.
- 5. THE SITE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR LOCATING IMPROVEMENTS PER THESE PLANS.
- 6. UPON RECEIPT OF POINT COORDINATE DATA, THE CONTRACTOR SHALL RUN AN INDEPENDENT VERTICAL CONTROL TRAVERSE TO CHECK BENCHMARKS AND A HORIZONTAL CONTROL TRAVERSE THROUGH GIVEN POINTS TO CONFIRM GEOMETRIC DATA AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY CONSTRUCTION.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLAN ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS/HER WORK FORCE.
- 8. PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 9. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE/SHE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, WATER MAINS, SEWERS, BLASTING, PUBLIC STRUCTURES, ETC.
- 10. THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT THE WORK IS ENTIRELY AT THE CONTRACTOR'S RISK UNTIL SITE IS ACCEPTED, AND THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR PROTECTION OF THE PROJECT AND PUBLIC SAFETY. THE CONTRACTOR WILL INDEMNIFY THE OWNER AND LOSE DESIGN FROM LIABILITY AT THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
- 11. ALL DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON SITE SURVEY PROVIDED BY OTHERS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION/PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 12. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS OR OTHER DEVICES SOLELY AT THE DETERMINATION OF THE
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES. OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY THE CONTRACTOR, SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF THEIR EMPLOYEES.
- 14. ALL PAY ITEMS HAVE BEEN EXPLICITLY SET FORTH AS SUCH IN THE PROPOSAL, ALL OTHER ITEMS OF COST ARE TO BE INCLUDED IN THE PRICE OF THE ITEMS ACTUALLY BID
- 15. ALL WORK WITHIN THE RIGHTS OF WAY SHALL BE IN ACCORDANCE WITH THE GOVERNING JURISDICTION AND SPECIFICATIONS.
- 16. THE CONTRACTOR SHALL PROVIDE SUCH BRACING, SHEETING AND SHORING, BLASTING PROTECTION, WARNING LIGHTS AND BARRICADES, ETC. AS MAY BE NECESSARY FOR THE PROTECTION OF LIFE AND PROPERTY FOR EMPLOYEES AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY STATUTES AND RULES REQUIRING CERTAIN PROTECTIVE PERSONAL APPAREL SUCH AS HARD HATS, EAR PLUGS, EYE SHIELDS, PROTECTIVE SHOES, ETC. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY OR LIABILITY FOR ACTIONS TAKEN BY THE CONTRACTOR WHICH ENDANGER LIFE OR PROPERTY.
- 17. THE CONTRACTOR WILL, UPON BECOMING AWARE OF SUBSURFACE OR LATENT PHYSICAL CONDITIONS DIFFERING FROM THOSE DISCLOSED BY THE ORIGINAL SOIL EXPLORATION WORK. PROMPTLY NOTIFY THE OWNER VERBALLY TO PERMIT VERIFICATION OF THE CONDITIONS AND IN WRITING, AS TO THE NATURE OF THE DIFFERING CONDITIONS. NO CLAIM BY THE CONTRACTOR FOR ANY CONDITIONS DIFFERING FROM THOSE ANTICIPATED IN THE PLAN AND SPECIFICATIONS AND DISCLOSED BY THE SOIL STUDIES WILL BE ALLOWED UNLESS THE CONTRACTOR HAS SO NOTIFIED THE OWNER, VERBALLY AND IN WRITING AS REQUIRED ABOVE. OF SUCH DIFFERING CONDITIONS.
- 18. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE LAND OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
- 19. ALL SURPLUS EXCAVATION SHALL BE PLACED ON-SITE IN A LOCATION DESIGNATED BY
- 20. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO INSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
- 21. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION AT ALL TIMES. DAILY, AND MORE OFTEN IF NECESSARY, INSPECT & AND PICK UP ALL SCRAP, DEBRIS, & WASTE MATERIAL.
- 22. THE CONTRACTOR SHALL PROVIDE PROTECTION TO ALL FINISHED WORK. MAINTAIN SURFACES CLEAN, UNMARRED, AND SUITABLY PROTECTED UNTIL ACCEPTANCE BY
- 23. UPON COMPLETION OF PROJECT, CONTRACTOR SHALL CLEAN THE PAVED AREAS PRIOR TO REMOVAL OF TEMPORARY SEDIMENT CONTROLS, AS DIRECTED BY THE CITY AND/OR CONSTRUCTION/PROJECT MANAGER. IF POWER WASHING IS USED, NO SEDIMENT LADEN WATER SHALL BE WASHED INTO THE STORM SYSTEM. ALL SEDIMENT LADEN MATERIAL ON PAVEMENT OR WITHIN THE STORM SYSTEM SHALL BE COLLECTED AND REMOVED FROM THE SITE AT CONTRACTOR'S EXPENSE.
- 24. CONTRACTOR SHALL AT ALL TIMES ENSURE THAT SWPPP MEASURES PROTECTING EXISTING DRAINAGE FACILITIES BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY PHASE OF THE SITE CONSTRUCTION OR LAND ALTERATION.
- 25. THE CONTRACTOR SHALL COORDINATE ALL ROAD CLOSURES, EXCAVATIONS, ETC. WITH LOCAL JURISDICTIONS. ALL TEMPORARY LANE CLOSURES, EXCAVATIONS, BORINGS, TRAFFIC CONTROL, ETC. SHALL BE DONE IN COMPLIANCE WITH LOCAL REQUIREMENTS.
- 26. THE CONTRACTOR SHALL PERFORM ALL QUANTITY TAKEOFFS REQUIRED FOR BIDDING AND CONSTRUCTION OF THIS PROJECT. LOSE DESIGN ACCEPTS NO RESPONSIBILITY NOR LIABILITY FOR QUANTITY TAKEOFFS PERFORMED FOR THIS PROJECT.

## DEMOLITION

- 1. DEMOLITION INCLUDES THE FOLLOWING WITHIN THE PROPERTY LINES:
- 1.1. TRANSFER BENCHMARK CONTROL TO NEW LOCATIONS OUTSIDE THE DISTURBED AREA PRIOR TO COMMENCING DEMOLITION OPERATIONS (WHEN APPLICABLE).
- PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO DEMOLITION WORK.
- DEMOLITION AND REMOVAL OF SITE IMPROVEMENTS.
- DISCONNECTING, CAPPING OR SEALING, AND ABANDONING/REMOVING SITE UTILITIES IN PLACE (WHICHEVER IS APPLICABLE).

## **DEMOLITION (CONT.**

- 2. ALL DEMOLISHED MATERIALS (EXCLUDING FOREIGN ITEMS AS LISTED IN 'GENERAL') BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED BY THE OWNER'S REP. DISPOSE OF OFF THE OWNER'S PROPERTY AT NO ADDITIONAL COST.
- 3. ALL PAVEMENT, BASE COURSES, SIDEWALKS, CURBS, ETC., THAT ARE REMOVED SHALL BE REMOVED TO FULL DEPTH. ALL PAVEMENT, SIDEWALK, AND CURB SHALL BE SAW CUT IN ORDER TO OBTAIN NEAT LINES AND SMOOTH TRANSITIONS TO NEW SURFACES.
- 4. ALL ITEMS OF CONSTRUCTION REMAINING AND NOT SPECIFICALLY MENTIONED THAT INTERFERES WITH THE NEW CONSTRUCTION SHALL BE REMOVED AS DIRECTED BY THE
- OWNERS REPRESENTATIVE AT NO ADDITIONAL COST. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL STREETS, TREES, UTILITIES, AND STRUCTURES THAT ARE TO REMAIN. CONTRACTOR-CAUSED DAMAGE WILL BE REPAIRED
- TO LOCAL STANDARDS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS
- PRIOR TO BEGINNING WORK. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR DEMOLITION PURPOSES AND ONLY WITH PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE.
- OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE.
- STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE WILL NOT BE PERMITTED. 10. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTING AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING.
- 11. REMOVE: REMOVE AND LEGALLY DISPOSE OF ITEMS EXCEPT THOSE INDICATED TO BE REINSTALLED, SALVAGED, OR TO REMAIN.
- 12. REMOVE, REINSTALL, AND RELOCATE: REMOVE ITEMS INDICATED; CLEAN, SERVICE, AND OTHERWISE PREPARE THEM FOR REUSE; STORE AND PROTECT AGAINST DAMAGE. REINSTALL ITEMS IN LOCATIONS INDICATED.
- 13. EXISTING TO REMAIN: PROTECT ITEMS INDICATED TO REMAIN AGAINST DAMAGE AND SOILING THROUGHOUT CONSTRUCTION. WHEN PERMITTED BY THE ENGINEER, ITEMS MAY BE REMOVED TO A SUITABLE. PROTECTED STORAGE LOCATION THROUGHOUT CONSTRUCTION AND THEN CLEANED AND REINSTALLED IN THEIR ORIGINAL LOCATIONS.
- 14. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- 15. CONTRACTOR SHALL SCHEDULE DEMOLITION ACTIVITIES WITH THE CONSTRUCTION/PROJECT MANAGER INCLUDING THE FOLLOWING:
- 15.1. DETAILED SEQUENCE OF DEMOLITION AND REMOVAL WORK, INCLUSIVE OF STARTING AND ENDING DATES FOR EACH ACTIVITY.
- 15.2. DATES FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES. IDENTIFY AND ACCURATELY LOCATE UTILITIES AND OTHER SUBSURFACE
- STRUCTURAL, ELECTRICAL, OR MECHANICAL CONDITIONS. 16. MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM
- AGAINST DAMAGE THROUGHOUT CONSTRUCTION OPERATIONS 16.1. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY ENGINEER AND AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO
- EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND TO GOVERNING AUTHORITIES. 17. UTILITY REQUIREMENTS: LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF INDICATED UTILITY SERVICES SERVING THE SITE.
- 17.1. ARRANGE TO SHUT OFF AND CAP UTILITIES WITH UTILITY COMPANIES AND FOLLOW THEIR RESPECTIVE UTILITY KILL AND CAP POLICIES.
- 17.2. ALL EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE TO BE VERIFIED BY CONTRACTOR. LOSE DESIGN DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES INDICATED ON THE CONSTRUCTION DOCUMENTS. VERIFY LOCATION OF EXISTING UTILITIES AND EXERCISE EVERY PRECAUTION WHEN WORKING ON OR NEAR THESE AREAS TO AVOID DAMAGE TO THESE EXISTING FACILITIES. UTILITY LINES MAY BE ENCOUNTERED IN EXCAVATION THAT WERE NOT KNOWN OR SHOWN TO EXIST, SO CAUTION SHALL BE TAKEN IN ALL EXCAVATIONS. ACTIVE OR INACTIVE UTILITIES ENCOUNTERED BY THE CONTRACTOR SHALL BE HANDLED IN ACCORDANCE WITH THE REQUIREMENTS OR THE UTILITY
- COMPANIES. 18. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE
- AROUND DEMOLITION AREA. 18.1. ERECT TEMPORARY PROTECTION, BARRICADES AS PER LOCAL GOVERNING
- 18.2. PROTECT EXISTING SITE IMPROVEMENTS AND APPURTENANCES TO REMAIN.
- 19. EXPLOSIVES: USE OF EXPLOSIVES WILL NOT BE PERMITTED. 20. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON
- ADJACENT SURFACES AND AREAS. 21. CLEAN ADJACENT BUILDINGS AND IMPROVEMENT OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE
- START OF DEMOLITION. 22. DAMAGES: PROMPTLY REPAIR DAMAGES TO ADJACENT FACILITIES CAUSED BY
- DEMOLITION OPERATIONS AT THE CONTRACTORS COST. 23. GENERAL: PROMPTLY DISPOSE OF DEMOLISHED MATERIALS, DO NOT ALLOW DEMOLISHED
- MATERIALS TO ACCUMULATE ON-SITE 24. BURNING: DO NOT BURN DEMOLISHED MATERIALS.
- 25. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH EXISTING FACILITIES.
- 25.1. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED
- TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS. 25.2. PROVIDE TEMPORARY FENCES, BARRICADES, COVERINGS OR OTHER PROTECTIONS TO PRESERVE EXISTING ITEMS INDICATED TO REMAIN AND TO PREVENT INJURY OR DAMAGE TO PERSONS OR PROPERTY. APPLY PROTECTIONS TO ADJACENT PROPERTIES AS REQUIRED.

## **CLEARING & GRUBBING**

- 1. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES INDICATED
- ON THE PLANS. 2. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS.
- 3. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN.
- DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST TREES TO REMAIN. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. WITHIN CLEARING LIMITS AND DISPOSE OFF SITE IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL
- REGULATIONS. 6. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK.
- 7. ALL EROSION CONTROL SEDIMENT BARRIERS. SILT FENCES. AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING OPERATIONS.
- 8. CONTRACTOR TO STAKE TRAIL CENTERLINES (WHEN APPROPRIATE) & LIMITS OF CLEARING FOR REVIEW BY LOSE DESIGN PRIOR TO BEGINNING CLEARING OPERATIONS; TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH
- TRANSITION OF GRADES AROUND ALL TREES. 9. SEE SPECIFICATIONS FOR TREE CLEARING REQUIREMENTS AND PENALTIES FOR
- DAMAGES TO TREES DESIGNATED TO REMAIN. 10. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 14 CALENDAR DAYS PER STATE PERMITS.

## **EXISTING UTILITIES**

- 1. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, LOSE DESIGN, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL 811 TO HAVE EXISTING UTILITIES MARKED
- 2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE
- AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN. LOSE DESIGN ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE BASE SURVEY INFORMATION PROVIDED BY OTHERS.

## **DEVELOPMENT**

- NOTIFY OWNER AND LOSE DESIGN AT 50, 95, AND 100 PERCENT COMPLETION OF EVERY
- PHASE OF CONSTRUCTION ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED BY FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
- ALL CONSTRUCTION TO COMPLY WITH LOCAL/COUNTY ZONING AND CODES STANDARDS AND STATE OF TENNESSEE STORMWATER REGULATIONS.

## GRADING

- 1. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNERS REPRESENTATIVE AND OUTSIDE AREAS PRONE TO FLOODING. DRAINAGE SHALL ROUTE AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT LOSS OF TOPSOIL MATERIAL.
- UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS COVERED WITH TOPSOIL, AND VEGETATED PER DRAWINGS.
- 3. FILL AREAS SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RECOMPACTION OF THESE SOILS TO 98 PERCENT MAXIMUM DRY DENSITY (AS PER ASTM D698 STANDARD PROCTOR) WILL BE ALLOWED, UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER.
- CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RECOMPACTED TO 98 PERCENT MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).
- CONFIRMATION OF ALL COMPACTION REQUIREMENTS SHALL BE CONFIRMED BY A QUALIFIED SOILS ENGINEER. SEE SPECIFICATION FOR SOIL COMPACTION RATES.
- ALL FILL AREAS SHALL BE RAISED IN LIFTS NOT EXCEEDING 6 INCHES. ALL AREAS WILL BE GRADED TO PROVIDE PROPER DRAINAGE AND PREVENT STANDING
- ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 14 CALENDAR
- DAYS OF ACHIEVING OPTIMUM SUBGRADE COMPACTION. 10. ALL GRADING OPERATIONS SHALL BE COMPLETED IN COMPLIANCE OF CITY, COUNTY, AND STATE LAND DISTURBANCE PERMITS AS REQUIRED.

## LAYOUT

- ALL LAYOUT MEASUREMENTS ARE TO CENTERLINE UNLESS OTHERWISE NOTED. COORDINATE POINTS SHOWN ARE TAKEN FROM BASE INFORMATION PROVIDED BY OTHERS. CONTRACTOR SHALL CROSS CHECK BETWEEN COORDINATE LAYOUT AND PLAN
- DIMENSIONS PRIOR TO COMMENCING WORK. LOSE DESIGN, ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE BASE INFORMATION AS PROVIDED. CONTRACTOR IS TO VERIFY ALL BASE INFORMATION AS NECESSARY AND TO ADVISE THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO ANY
- 4. ALL WORK SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ALL DAMAGED AND/OR
- DISTURBED MONUMENTS, STAKES, ETC.
- CONTRACTOR SHALL NOT SCALE DRAWINGS. CONTRACTOR SHALL USE DIMENSION, COORDINATES, AND OTHER INFORMATION PROVIDED ON LAYOUT PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING REQUIRED ON THE PROJECT. THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN EXISTING FACILITIES AND PROPOSED FACILITIES PRIOR TO BEGINNING CONSTRUCTION
- 8. CONTRACTOR SHALL NOTIFY LOSE DESIGN WITHIN 24 HOURS OF ANY LAYOUT DISCREPANCIES PRIOR TO PROCEEDING WITH WORK. ALL ADDITIONAL COSTS INCLUDING BUT NOT LIMITED TO REMEDIAL CONSTRUCTION, ADDITIONAL SITE VISITS, OR ENGINEERING SERVICES AND FEES, ETC., INCURRED DUE TO THE FAILURE TO FOLLOW THIS PROCEDURE WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE ADEQUATE LAYOUT INFORMATION TO DEMONSTRATE, TO THE MAXIMUM EXTENT PRACTICAL. THAT NO CONFLICTS BETWEEN VARIOUS TRADES
- 10. DRAINAGE STRUCTURES ARE SHOWN TO INDICATE CASTING TYPE AND LOCATION CONTRACTOR SHALL STAKE PROPOSED PAVING, STRUCTURES, CURBS, ETC. TO ENSURE DRAINAGE STRUCTURES ARE PLACED TO AVOID CONFLICTS. DRAINAGE STRUCTURES ARE NOT DRAWN TO SCALE.

## ADA REQUIREMENTS

- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN FULL COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT ("ADA") AND ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD, FEDERAL REGISTER 36CFR PARTS 1190 AND 1191, ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES
- CONTRACTOR TO COORDINATE ALL INSPECTIONS AS REQUIRED BY THE LOCAL ADA
- COMPLIANCE OFFICE. AT ALL INTERSECTION OF TRAILS, SIDEWALKS, PLAZAS, AND OTHER INSTANCES WHERE 90 DEGREE TURNS CAN TAKE PLACE, THE MAX. SLOPE IN ALL DIRECTIONS IS 2 PERCENT.

## TREE PROTECTION / REMOVAL

- EXISTING TREES ON-SITE TO BE REMOVED HAVE BEEN MARKED ON THE SITE PLANS WITH AN "X". ONLY THOSE MARKED TREES SHALL BE REMOVED. CONTRACTOR SHALL PROCEED WITH THE FOLLOWING FOR TREES TO BE REMOVED ONLY:
- ORGANIZED AND SAFE MATTER BEING CAREFUL NOT TO DAMAGE ANY TREES TO REMAIN OR OTHER SITE FEATURES. 1.2. ALL STUMPS OF TREES BEING REMOVED SHALL BE COMPLETELY EXCAVATED AND REMOVED. ALL EXCAVATED HOLES, FROM REMOVAL OF TREE ROOTS, REMAINING

1.1. REMOVE THE TOP OF ALL TREES INCLUDING BRANCHES AND TRUNK IN AN

- ON-SITE SHALL BE REMEDIATED WITH ENGINEERED FILL AND COMPACTED TO MEET SPECIFICATIONS. 1.3. ALL TREE WASTE, INCLUDING LIMBS, BRANCHES, TRUNKS, ROOTS OR OTHER, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF IN A
- LEGAL MANNER. 2. ALL TREES THAT HAVE NOT BEEN MARKED ON THESE PLANS WITH AN "X" SHALL BE PROTECTED ON SITE DURING CONSTRUCTION FROM ANY AND ALL DAMAGE. CONTRACTOR SHALL PROCEED WITH THE FOLLOW FOR TREES TO BE PROTECTED ONLY:
- 2.1. ALL PROTECTED TREES THAT ARE LOCATED NEAR OR WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED BY TREE PROTECTION FENCING PER DETAILS. 2.2. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY PROTECTED TREES THAT
- ARE DAMAGED DURING CONSTRUCTION. 2.3. IF PROTECTED TREES ARE LOCATED WITHIN THE LIMITS OF CONSTRUCTION, THEY
- MUST BE PROTECTED DURING SITE CONSTRUCTION. 2.4. IF GRADING, EXCAVATION OR PAVING IS SHOWN TO OCCUR NEAR THE PROTECTED TREE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING WITH A LOCAL
- TREE SURGEON FOR RECOMMENDATIONS ON TREE PROTECTION. 2.5. IF DISCREPANCIES OCCUR AND IT IS ANTICIPATED THAT THE PROTECTED TREES WILL BE DAMAGED DUE TO PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY
- THE DESIGNER IMMEDIATELY OF ANY CONFLICT. 2.6. THE CONTRACTOR SHALL ALSO SUBMIT RECOMMENDATIONS TO THE DESIGNER
- FROM THE TREE SURGEON FOR PROTECTION MEASURES. CONTRACTOR SHALL BE RESPONSIBLE FOR IN-FIELD COORDINATION WITH THE DESIGNER TO RESOLVE ANY CONFLICTS THAT MAY ARISE DUE TO PROTECTED
- 2.8. IF THE CONTRACTOR LOCATES TREES IN THE FIELD THAT ARE NOT SHOWN ON THESE PLANS OR THAT ARE MISLOCATED, THE CONTRACTOR SHALL NOTIFY THE DESIGNER
- FOR REVIEW OF THE TREE AND ITS LOCATION. 2.9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH SUB-CONSULTANTS AND UTILITY PROVIDERS DURING CONSTRUCTION TO ENSURE THE PROTECTION OF THE TREES TO REMAIN.

## TREE PROTECTION / REMOVAL (CONT.)

- 2.10. IN THE EVENT OF UTILITY LINE ADJUSTMENTS, ADDITIONS OR RELOCATIONS, THE CONTRACTOR SHALL WORK WITH THE UTILITY PROVIDER AND INSTALLER TO ROUTE THE UTILITY LINES OUTSIDE OF THE TREE PROTECTION ZONE. IF THIS IS NOT POSSIBLE, RECOMMENDATIONS MUST BE OBTAINED FROM A LOCAL TREE SURGEON FOR REMEDIATION OPTIONS.
- CONTRACTOR MUST SUBMIT ALL REPORTS OR RECOMMENDATIONS FOR TREE PRUNING OR ALTERING TO THE LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO

## **ABBREVIATIONS**

HW - HEADWALL

HYD - HYDRANT

JUNC - JUNCTION

LF - LINEAR FEET

ME - MATCH EXISTING

MAX - MAXIMUM

ID - INSIDE DIAMETER

LOC - LIMITS OF CLEARANCE

L.O.D. - LIMITS OF DISTURBANCE

ASPH - ASPHALT MPH - MILES PER HOUR NIC - NOT IN CONTRACT @ - AT BOC - BOTTOM OF CURB - NUMBER BFP - BACKFLOW PREVENTER O.C. - ON CENTER - OUTSIDE DIAMETER BS - BOTTOM OF STEP OD BW - BOTTOM OF WALL - PERFORATED DRAIN CENTERLINE PL - PROPERTY LINE - CONTROL JOINT POB - POINT OF BEGINNING - POWER POLE - COMPANY CONT - CONTINUOUS - RADIUS CY - CUBIC YARD ROW - RIGHT OF WAY DIA - DIAMETER SERV - SERVICE DR - DRIVE SCH - SCHEDULE EJ - EXPANSION JOINT SQUARE FEET ELEC - ELECTRIC S.F. - SILT FENCE ELEV - ELEVATION SQ - SQUARE FH - FIRE HYDRANT - SQARE YARD EX - EXISTING SIG - SIGNAL FT - FEET SPEC - SPECIFICATION(S) FL - FLOW LINE STA - STATION GALV - GALVANIZED ST - STREET HP - HIGH POINT - TELEPHONE HT - HEIGHT - TOP OF CASTING

TOC - TOP OF CURB

TW - TOP OF WALL

WS - WATER SERVICE

TYP. - TYPICAL

W - WATER

**VERT - VERTICAL** 

- TOP OF FOOTING

- TOP OF PAVEMENT

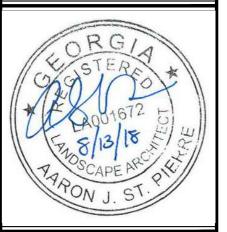
TOP OF STEP

MIN - MINIMUM WV - WATER VALVE MH - MANHOLE WWF - WELDED WIRE FABRIC BVCS - BEGINNING OF VERTICAL CURVE STATION BVCE - BEGINNING OF VERTICAL CURVE ELEVATION EVCS - ENDING OF VERTICAL CURVE STATION **EVCE - ENDING OF VERTICAL CURVE ELEVATION** 

PVI - POINT OF VERTICAL INTERSECTION

NOTE: THESE ABBREVIATIONS ARE GENERAL; INDIVIDUAL SHEETS MAY INCLUDE OTHERS.

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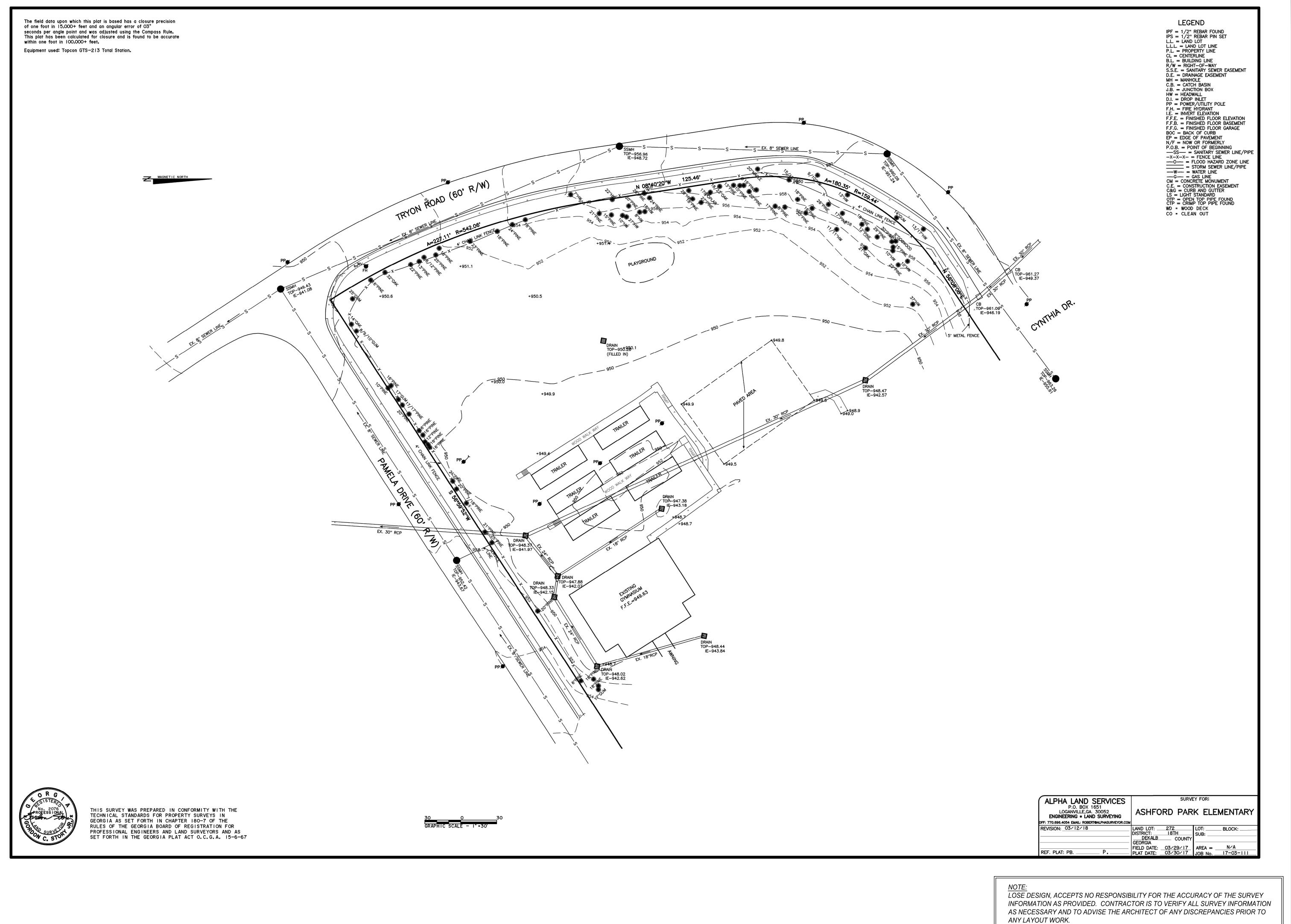
GENERAL NOTES

PROJECT NO. DATE 18081-1 RAWN BY SCALE CHECKED BY Know what's **below**.

**Call** before you dig.

SHEET NO. C0.01

08/13/2018



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TURF FIELD CONVERSION ASHFORD PARK ELEMENTARY SCHOOL

CITY OF BR ROOKHAVEN

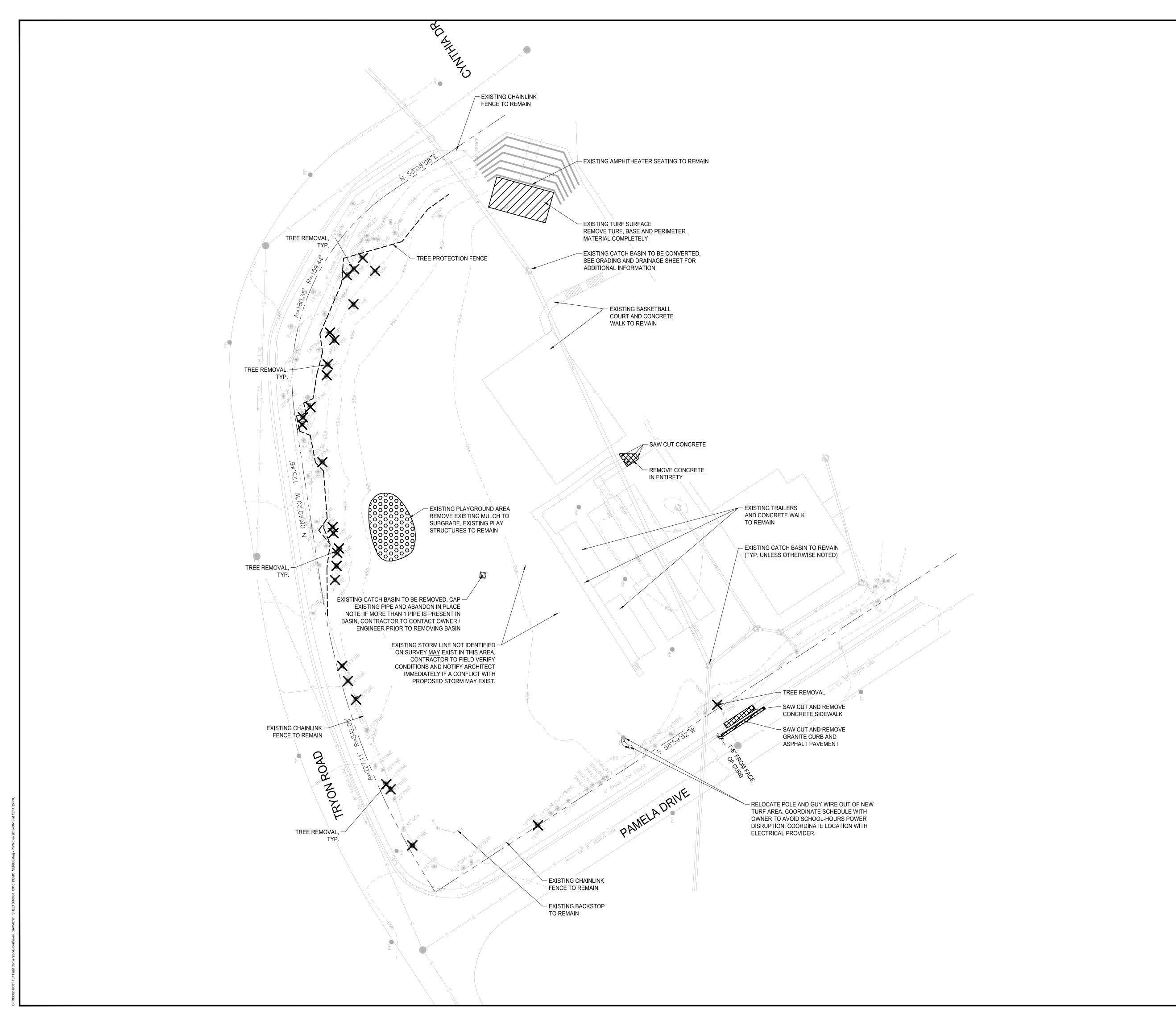
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EXISTING CONDITIONS

PROJECT NO. 18081-1	DATE 08/13/2018
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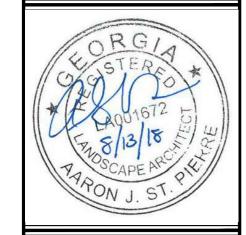


## **DEMO NOTES**

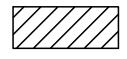
- 1. SEE SHEET C0.01 FOR ADDITIONAL DEMOLITION
- 2. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS IMMEDIATELY UPON DISCOVERY.
- 3. CONTRACTOR TO COORDINATE WITH OWNER FOR STORAGE LOCATIONS FOR CONSTRUCTION MATERIALS TO BE SALVAGED.
- 4. PRIOR TO BEGINNING DEMOLITION, ENSURE EROSION AND INLET PROTECTION ARE IN PLACE.
- 5. DISPOSE OF DEMOLISHED MATERIALS LEGALLY OFF
- 6. ANY DAMAGES TO EXISTING ITEMS TO REMAIN SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- 7. SITE BOUNDARY SHALL BE FENCED WITH STANDARD STAKED ORANGE CONSTRUCTION FENCING.
- 8. ALL LIGHTING AND LIGHTING EQUIPMENT SHALL BE PROTECTED IN PLACE WITH TREE PROTECTION FENCING PRIOR TO DEMOLITION.
- 9. A SUBSURFACE EXPLORATION HAS NOT BEEN CONDUCTED FOR THIS PROSECT, AND A GEOTECHNICAL EXPLORATION REPORT IS NOT AVAILABLE.



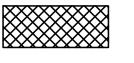
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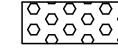
LEGEND:



TURF SURFACE REMOVAL



PAVEMENT REMOVAL (SEE PLAN FOR PAVEMENT TYPE)



MULCH REMOVAL

— LOD — LIMITS OF DISTURBANCE

TREE REMOVAL

— — — TREE PROTECTION FENCE

EXISTING CONTOUR LINE

SCALE: 1" = 30'

FIELD TURF

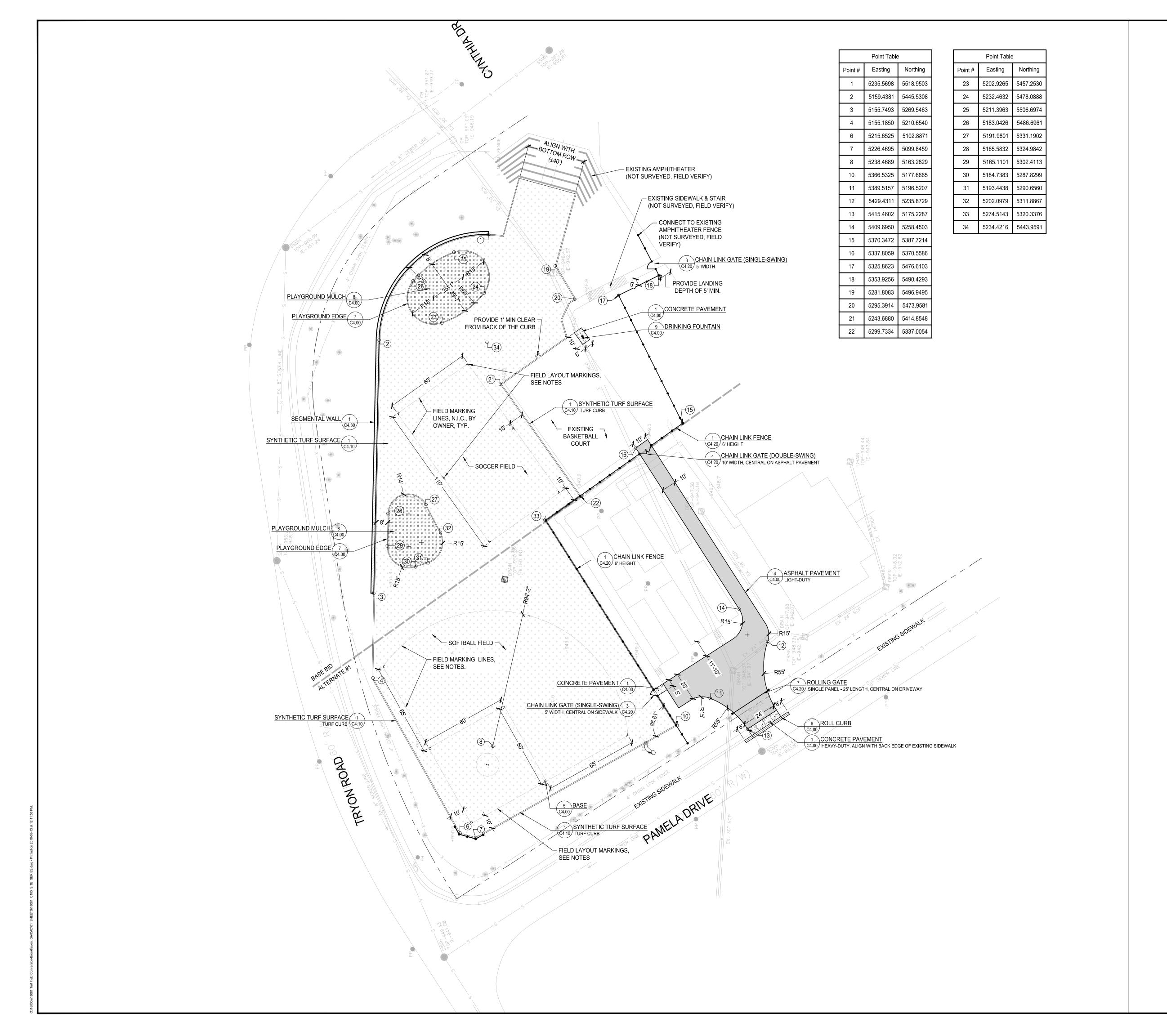
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**DEMOLITION PLAN** 

PROJECT NO. 18081-1	DATE 08/13/2018
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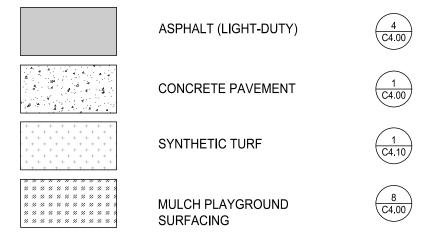
C0.10

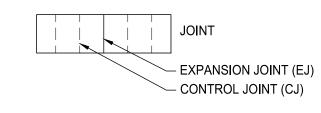


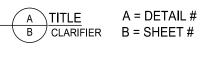
### LAYOUT NOTES:

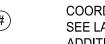
- I. SEE SHEET C0.01 FOR GENERAL NOTES. 2. INSTALL JOINTS WHERE SHOWN TO ALIGN TO WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND VERTICAL
- ELEMENTS (WALL, CURBS, ETC.). ALL JOINTS TO BE STRAIGHT AND TRUE. 3. LAYOUT ALL CURVES SMOOTHLY WITH NO ABRUPT CHANGES AT TANGENT
- 4. ALL CURBS ARE DIMENSIONED TO THE FACE OF CURB. 5. CONTRACTOR TO TAKE ALL PRECAUTIONS TO FIND AND AVOID SITE UTILITIES. ALL UTILITIES ARE NOT SHOWN ON DRAWING. VERIFY
- LOCATIONS AND CONSIDER SUCH WHEN ESTIMATING. 6. ALL PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). LATEST EDITION.
- 7. ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC, UNLESS OTHERWISE NOTED. 8. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH GDOT'S
- STANDARDS FOR ROADWAY AND BRIDGE CONSTRUCTION, LATEST
- 9. ALL ANGLES ARE 90° UNLESS OTHERWISE NOTED.

## LAYOUT LEGEND:









COORDINATE POINT. SEE LAYOUT DATA FOR ADDITIONAL INFORMATION

FIELD LAYOUT MARKINGS NOTES:

- TYPICAL SOCCER AND SOFTBALL FIELD. 1FT LONG TICK MARKS TO BE 4" WIDE. WHITE FIBER, STITCHED INTO TURF FABRIC. PROVIDE TICK MARKS AT ALL FIELD CORNERS AND AS SHOWN.

SCALE: 1" = 30 '

- QTY. SOCCER 6
- QTY. SOFTBALL 3 + 5 BASE LOCATIONS SEE PLANS FOR LOCATIONS.

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VERSION CON

TURF

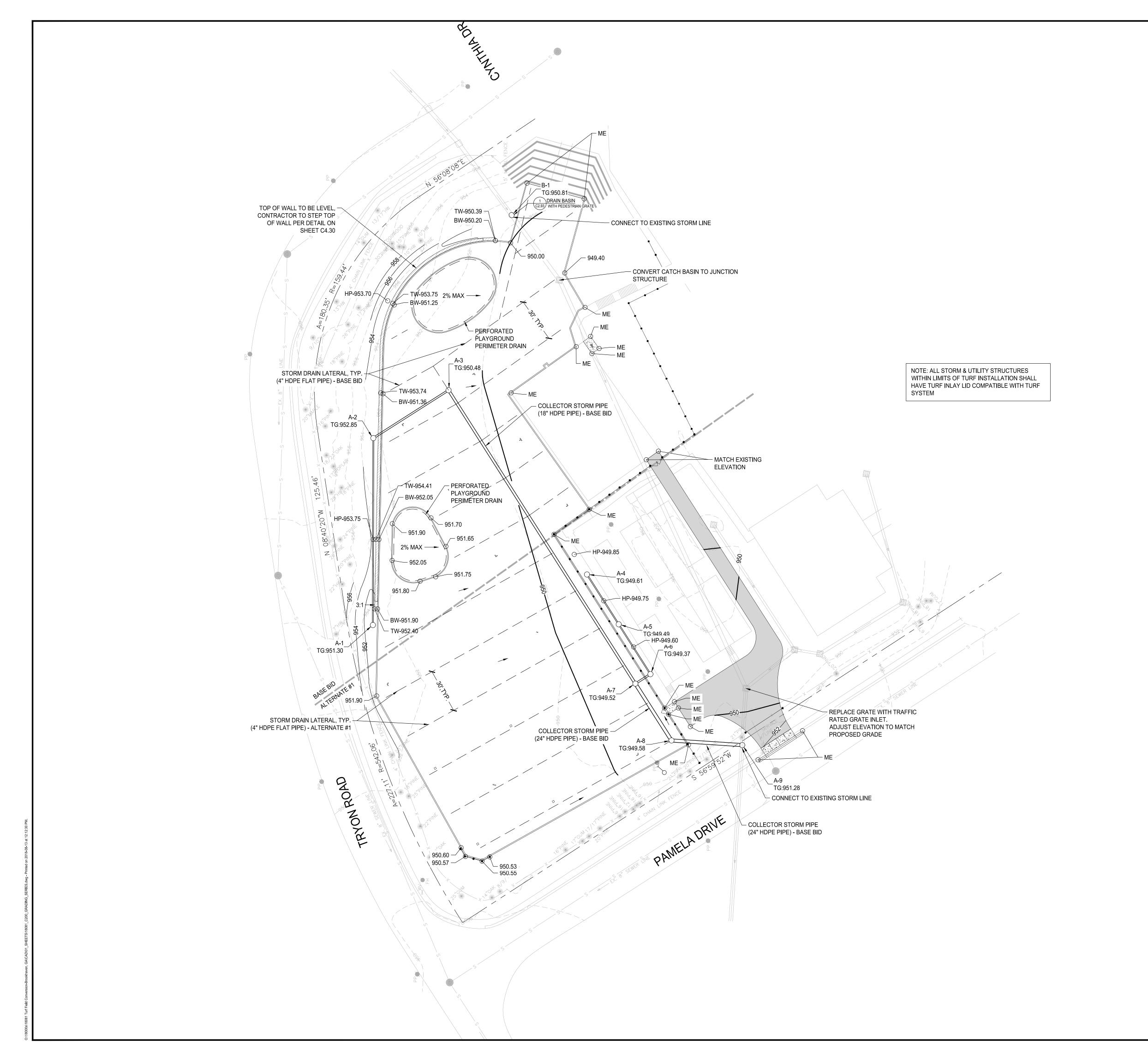
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LAYOUT PLAN

ROJECT NO.	DATE
18081-1	08/13/2018
RAWN BY	SCALE
LC	1"=30'
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SHEET NO. C1.00



**GRADING NOTES**:

- 1. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNERS REPRESENTATIVE. DRAINAGE SHALL ROUTE AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT LOSS OF TOPSOIL MATERIAL.
- 2. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NONSTRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.
- 3. FILL AREAS SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RECOMPACTION OF THESE SOILS, TO THE DENSITY SPECIFIED IN THE PROJECT
- SPECIFICATIONS, WILL BE ALLOWED UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER.

  4. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUB GRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTATBLE SOILS SHALL BE SCARIFIED TO A
- MINIMUM DEPTH OF 12" AND RECOMPACTED TO THE DENSITY SPECIFIED IN THE PROJECT SPECIFICATIONS AT NO ADDITIONAL COST TO THE OWNER.

  5. THE FOLLOWING SOIL COMPACTION RATES WILL BE REQUIRED:
- A. 95% MAXIMUM DRY DENSITY FOR OPEN AREAS AND GENERAL EMBANKMENTS.
   B. 98% MAXIMUM DRY DENSITY UNDER ROADS, PARKING, TRAILS, SIDEWALKS, BLDG.
   SLABS & FOLINDATIONS
- SLABS, & FOUNDATIONS.
  6. ALL FILL AREAS SHALL BE RAISED IN LIFTS NOT EXCEEDING 6 INCHES.
- 7. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK
- 8. ALL AREAS WILL BE GRADED TO PROVIDED PROPER DRAINAGE AND PREVENT STANDING
- 9. GRADING SHOWN IS TO FINISH GRADE.

LISTED IN THE BID DOCUMENTS.

- 10. CONTRACTOR RESPONSIBLE FOR VERIFYING EXISTING ELEVATIONS COMPARED TO THOSE SHOWN ON PLAN PRIOR TO GRADING. NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
- 11. THE SUITABILITY OF SOILS SHALL BE DETERMINED BY A QUALIFIED SOILS ENGINEER EMPLOYED BY THE OWNER. ALL DECISIONS RENDERED BY THE SOILS ENGINEER, RELATED TO SOIL SUITABILITY, SHALL BE FINAL.
- 12. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER.

#### **UTILITY NOTES:**

1. UNDERGROUND UTILITIES:

- A. UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, LANDSCAPE ARCHITECT, OR THEIR REPRESENTATIVES.
- B. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL SPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.

#### WETLANDS CERTIFICATION

THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS HEREIN CERTIFIES THE FOLLOWING: (1) THE NATIONAL WETLANDS INVENTORY MAP HAS BEEN CONSULTED; (2) THE APPROPRIATE PLAN SHEET

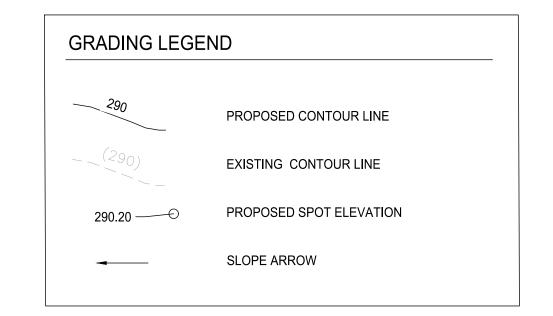
☐ DOES ☐ DOES NOT

INDICATE WETLANDS AS SHOWN ON THE MAP; AND (3) IF WETLAND ARE INDICATED THE LANDOWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE SECTION 404 PERMIT OR LETTER OF PERMISSION HAS BEEN OBTAINED.

#### ADDITIONAL NOTES

- 1. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRET WITH, LAND-DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL,
- ADDITIONAL EROSION CONTROL OR TREAT THE SEDIMENT SOURCE.

  3. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES WILL
- 3. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-STIE INSPECTION.
- 4. FEMA FLOOD INSURANCE RATE MAP, COMMUNITY MAP NUMBER 13089C0014J, DATED 05/16/2013, SHOWS ZONE AE FLOODPLAN AND FLOODWAY LIMITS.
- 5. REFER TO C0.01 FOR ABBREVIATIONS.

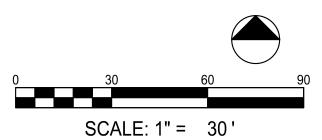


EXPORT SOIL MATERIAL:

EXCESS CUT MATERIAL TO BE WASTED AT AREA DESIGNATED BY OWNER. PROPOSED LOCATION WILL BE AT BROOKHAVEN PUBLIC WORKS COMPOUND.

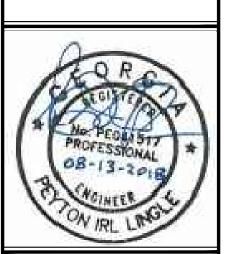
TURF GRADING NOTES:

1. FINISH GRADE OF SYNTHETIC TURF SURFACE TO HAVE 0.5% MIN SLOPE AND 2.0% MAX SLOP.



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ASHFORD PARK ELEMENTAL

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GRADING & DRAINAGE PLAN

PROJECT NO. 18081-1 08/13/2018

DRAWN BY LC 1"=30'

CHECKED BY MB

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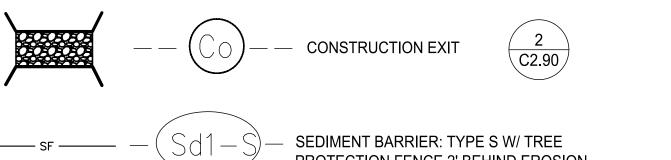
SEDIMENT STORAGE WRITTEN RATIONALE:

FOR SHEETFLOW LOCATIONS 1 AND 2, A TEMPORARY SEDIMENT BASIN IS NOT PROVIDED BECAUSE THE REQUIRED SEDIMENT STORAGE VOLUME FOR THE TOTAL DRAINAGE AREA IS PROVIDED (SUBSTANTIALLY EXCEEDED) BY THE TYPE C SILT FENCE AND CHECK DAMS. THE LOCATION OF THE TRAIL HAS BEEN SELECTED TO MINIMIZE THE ADDITIONAL DRAINAGE AREA FROM OFFSITE (UPSTREAM) FLOWS. THE TERRAIN DOES NOT PROVIDE A LOCATION TO OBTAIN MAXIMUM STORAGE BENEFIT AND EASE OF CLEAN-OUT OF ANY TRAPPED SEDIMENT. THERE ARE NO STORM PIPE DRAINAGE SYSTEMS TO DISCHARGE DIRECTLY INTO A SEDIMENT BASIN AS ALL THE RUNOFF IS TREATED

UNIFORM CODING SYSTEM FOR SOIL EROSION & SEDIMENT CONTROL PRACTICES

1. ALL PHASE 1 PRACTICES TO BE COMPLETED PRIOR TO ANY OTHER LAND DISTURBANCE ACTIVITIES. PHASE 2 PRACTICES TO BE IMPLEMENTED AS NEEDED DURING CONSTRUCTION. PHASE 3 PRACTICES TO BE IMPLEMENTED AS SOON AS CONSTRUCTION IS COMPLETE ON DIFFERENT ASPECTS OF THE PROJECT, NOT AT END OF ALL CONSTRUCTION ACTIVITIES FOR ENTIRE SITE.

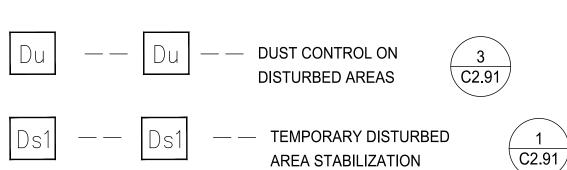
2. ALL TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED FROM SITE AT COMPLETION OF PROJECT OR WHEN CONTRIBUTING DRAINAGE AREA ACHIEVES FINAL STABILIZATION. STORM DRAIN OUTLET PROTECTION TO REMAIN IN PERMANENT CONDITION. ALL OTHER EROSION CONTROL MEASURES ON THIS SHEET ARE TEMPORARY.



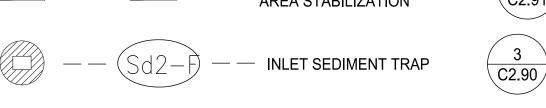
PROTECTION FENCE 2' BEHIND EROSION CONTROL FENCE, AWAY FROM DISTURBANCE \*ALSO SERVES AS LIMITS OF CONSTRUCTION/DISTURBANCE



LIMITS OF CONSTRUCTION/ DISTURBANCE

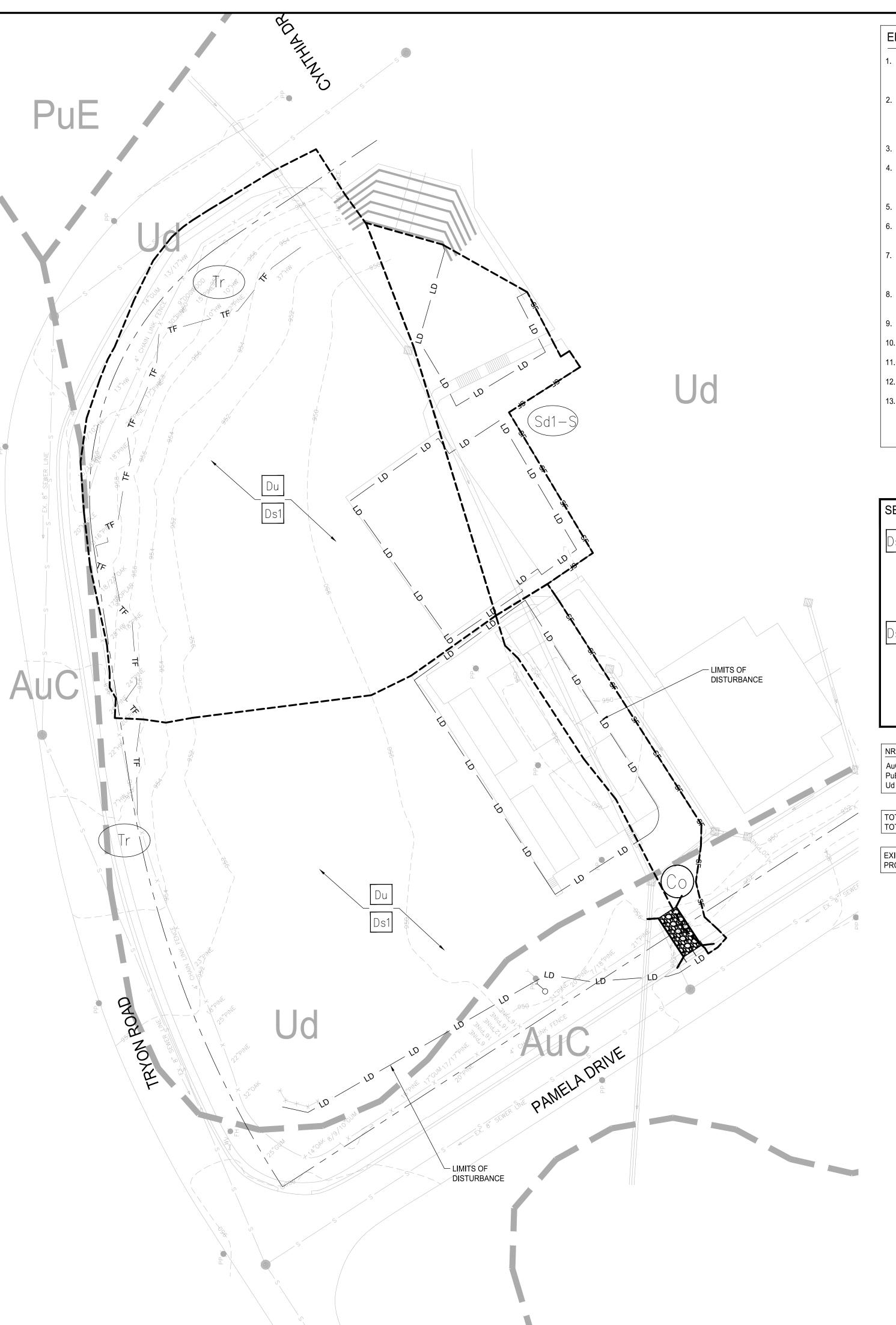


TEMPORARY DISTURBED C2.91 AREA STABILIZATION



SOD ALL DISTURBED AREAS WITH COMMON BERMUDA, PER SPECIFICATIONS





### **EROSION CONTROL NOTES**

- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT
- DISTURBED AREAS LEFT IDLE FOR MORE THAN FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION (DS2). MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION IMMEDIATELY UPON
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.
- MULCH WILL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- A CITY OF BROOKHAVEN LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR
- SEDIMENT AND EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE-HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE
- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL AND SHALL COMPLY WITH THE STANDARDS/SPECIFICATIONS IN THE MANUAL FOR
- EROSION AND SEDIMENT CONTROL IN GEORGIA. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY
- 10. THE USE OF POLYMERS (PAMS) IS ACCEPTED AS A BMP AS RECOMMENDED BY THE STATE SOIL & WATER CONSERVATION COMMISSION BMP "GREEN BOOK".
- 11. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
- 12. NO CLEARING OF THE SITE UNTIL ALL BASINS, DIVERSIONS, AND SEDIMENT CONTROLS ARE INSTALLED, STABILIZED, AND FUNCTIONAL.
- 13. LAND DISTURBANCE CANNOT BEGIN ON THE SITE UNTIL AFTER THE PRECONSTRUCTION CONFERENCE AND THE EROSION CONTROL INSPECTOR GIVES THE LDA PERMIT TO THE CONTRACTOR. PRESENT FOR THE PRECONSTRUCTION CONFERENCE SHALL BE: GENERAL CONTRACTOR, GRADING CONTRACTOR AND OWNER. THE DESIGN PROFESSIONAL MAY BE PRESENT AT THE DIRECTION OF THE OWNER.

## SEEDING NOTE THIS CONTRACT

SEED ALL DISTURBED AREAS (BOTH THOSE FROM PREVIOUS GRADING OPERATIONS, AND DISTURBANCES DURING THIS CONTRACT) NOT RECEIVING SPRIGGING OR SODDING (SEE LANDSCAPE PLANS) AS A PART OF THIS CONTRACT. THESE AREAS INCLUDE OPEN AREAS, DETENTION BASINS, AREAS OF FUTURE PAVING, PARKING LOTS, & ROADS. SEED SPECIES DEPEND UPON DATE OF COMPLETION.

NOTE: IF AREAS ARE NOT TO BE PLANTED WITH OTHER MATERIAL (SEE LANDSCAPE PLANS) SEED TO BE BERMUDA GRASS @ 75 LBS/AC. IF SEEDING OCCURS OCT. - FEB., USE TEMPORARY SEEDING OF ANNUAL RYEGRASS @ 49 LBS/AC, TO BE FOLLOWED WITH BERMUDA MAR. - SEPT.. APPLY STRAW MULCH, LIME, & FERTILIZER AS FOLLOWS.

UNIFORMLY SPREAD AGRICULTURAL LIME ON THE GROUND AT THE APPROXIMATE RATE

DETERMINED BY THE LABORATORY SOIL TEST.

UNIFORMLY SPREAD THE FERTILIZER SELECTED OVER THE GROUND AT APPROXIMATELY 1,200 LBS/ACRE (1350 KG/HA). IF USING A HIGHER ANALYSIS FERTILIZER WITH HYDROSEEDING, APPLY IT AT THE SAME RATE PER ACRE (HECTARE) AS THE STANDARD

EVENLY APPLY STRAW MULCH IMMEDIATELY AFTER SEEDING BETWEEN 3/4 IN AND 1-1/2 IN (20 MM and 40 MM) DEEP, ACCORDING TO THE TEXTURE AND MOISTURE CONTENT OF THE MULCH MATERIAL. MULCH SHALL ALLOW SUNLIGHT TO PENETRATE AND AIR TO CIRCULATE AS WELL AS SHADE THE GROUND, REDUCE EROSION, AND CONSERVE SOIL MOISTURE.

NRCS SOILS TYPE LEGEND

APPLING-URBAN LAND COMPLEX, 2 TO 10 PERCENT SLOPES PACOLET-URBAN LAND COMPLEX, 10-25 PERCENT SLOPES URBAN LAND

TOTAL PROJECT AREA: ±7.02 AC TOTAL DISTURBED AREA: ±1.66 AC

EXISTING USE: ELEMENTARY SCHOOL PROPOSED USE: ELEMENTARY SCHOOL

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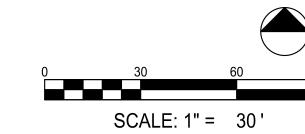
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**ESCP PHASE 1** 

18081-1 08/13/2018 RAWN BY CHECKED BY

SHEET NO. C2.10

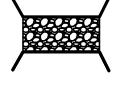


**VICINITY MAP** 

UNIFORM CODING SYSTEM FOR SOIL EROSION & SEDIMENT CONTROL PRACTICES

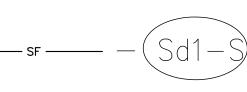
1. ALL PHASE 1 PRACTICES TO BE COMPLETED PRIOR TO ANY OTHER LAND DISTURBANCE ACTIVITIES. PHASE 2 PRACTICES TO BE IMPLEMENTED AS NEEDED DURING CONSTRUCTION. PHASE 3 PRACTICES TO BE IMPLEMENTED AS SOON AS CONSTRUCTION IS COMPLETE ON DIFFERENT ASPECTS OF THE PROJECT, NOT AT END OF ALL CONSTRUCTION ACTIVITIES FOR ENTIRE SITE.

2. ALL TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED FROM SITE AT COMPLETION OF PROJECT OR WHEN CONTRIBUTING DRAINAGE AREA ACHIEVES FINAL STABILIZATION. STORM DRAIN OUTLET PROTECTION TO REMAIN IN PERMANENT CONDITION, ALL OTHER EROSION CONTROL MEASURES ON THIS SHEET ARE TEMPORARY.









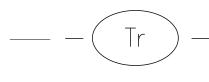
SEDIMENT BARRIER: TYPE S W/ TREE PROTECTION FENCE 2' BEHIND EROSION CONTROL FENCE, AWAY FROM DISTURBANCE \*ALSO SERVES AS LIMITS OF CONSTRUCTION/DISTURBANCE

C2.91

C2.91

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TREE PROTECTION FENCE \*ALSO SERVES AS LIMITS OF CONSTRUCTION/DISTURBANCE

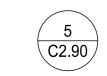
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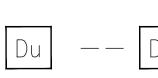
**INLET SEDIMENT TRAP** 

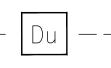
AREA STABILIZATION

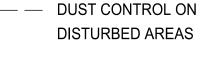
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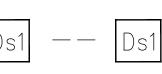


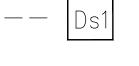
— LD — — LIMITS OF CONSTRUCTION/ DISTURBANCE



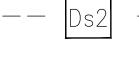


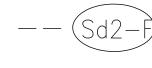




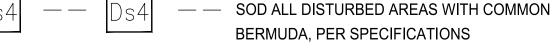


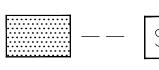


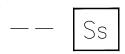
















TG:951.30

TRYON ROAD

TG:950.48

### **EROSION CONTROL NOTES**

- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT
- DISTURBED AREAS LEFT IDLE FOR MORE THAN FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION (DS2). MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION IMMEDIATELY UPON
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDED AREA WITHIN 24 HOURS OF SEEDING.
- MULCH WILL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- A CITY OF BROOKHAVEN LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR
- SCHEDULE. SEDIMENT AND EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE-HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE
- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL AND SHALL COMPLY WITH THE STANDARDS/SPECIFICATIONS IN THE MANUAL FOR
- EROSION AND SEDIMENT CONTROL IN GEORGIA. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY
- 10. THE USE OF POLYMERS (PAMS) IS ACCEPTED AS A BMP AS RECOMMENDED BY THE STATE SOIL & WATER CONSERVATION COMMISSION BMP "GREEN BOOK".
- 11. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
- 12. NO CLEARING OF THE SITE UNTIL ALL BASINS, DIVERSIONS, AND SEDIMENT CONTROLS ARE INSTALLED, STABILIZED, AND FUNCTIONAL. 13. LAND DISTURBANCE CANNOT BEGIN ON THE SITE UNTIL AFTER THE PRECONSTRUCTION CONFERENCE
- AND THE EROSION CONTROL INSPECTOR GIVES THE LDA PERMIT TO THE CONTRACTOR. PRESENT FOR THE PRECONSTRUCTION CONFERENCE SHALL BE: GENERAL CONTRACTOR, GRADING CONTRACTOR AND OWNER. THE DESIGN PROFESSIONAL MAY BE PRESENT AT THE DIRECTION OF THE OWNER.

## SEEDING NOTE THIS CONTRACT



DISTURBANCE

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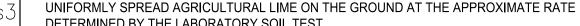
DISTURBANCE

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SEED ALL DISTURBED AREAS (BOTH THOSE FROM PREVIOUS GRADING OPERATIONS, AND DISTURBANCES DURING THIS CONTRACT) NOT RECEIVING SPRIGGING OR SODDING (SEE LANDSCAPE PLANS) AS A PART OF THIS CONTRACT. THESE AREAS INCLUDE OPEN AREAS, DETENTION BASINS, AREAS OF FUTURE PAVING, PARKING LOTS, & ROADS. SEED SPECIES DEPEND UPON DATE OF COMPLETION.

NOTE: IF AREAS ARE NOT TO BE PLANTED WITH OTHER MATERIAL (SEE LANDSCAPE PLANS) SEED TO BE BERMUDA GRASS @ 75 LBS/AC. IF SEEDING OCCURS OCT. - FEB., USE TEMPORARY SEEDING OF ANNUAL RYEGRASS @ 49 LBS/AC, TO BE FOLLOWED WITH BERMUDA MAR. - SEPT.. APPLY STRAW MULCH, LIME, & FERTILIZER AS FOLLOWS.



DETERMINED BY THE LABORATORY SOIL TEST. UNIFORMLY SPREAD THE FERTILIZER SELECTED OVER THE GROUND AT APPROXIMATELY 1,200 LBS/ACRE (1350 KG/HA). IF USING A HIGHER ANALYSIS FERTILIZER WITH

EVENLY APPLY STRAW MULCH IMMEDIATELY AFTER SEEDING BETWEEN 3/4 IN AND 1-1/2 IN (20 MM and 40 MM) DEEP, ACCORDING TO THE TEXTURE AND MOISTURE CONTENT OF THE

HYDROSEEDING, APPLY IT AT THE SAME RATE PER ACRE (HECTARE) AS THE STANDARD

MULCH MATERIAL. MULCH SHALL ALLOW SUNLIGHT TO PENETRATE AND AIR TO CIRCULATE AS WELL AS SHADE THE GROUND, REDUCE EROSION, AND CONSERVE SOIL MOISTURE.

NRCS SOILS TYPE LEGEND

APPLING-URBAN LAND COMPLEX, 2 TO 10 PERCENT SLOPES PACOLET-URBAN LAND COMPLEX, 10-25 PERCENT SLOPES URBAN LAND

TOTAL PROJECT AREA: ±7.02 AC TOTAL DISTURBED AREA: ±1.66 AC

EXISTING USE: ELEMENTARY SCHOOL PROPOSED USE: ELEMENTARY SCHOOL

THE ARCHITECT. REPRODUCTION, COPYING, OR USE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED AND ANY INFRINGEMENT IS SUBJECT TO LEGAL ACTION.



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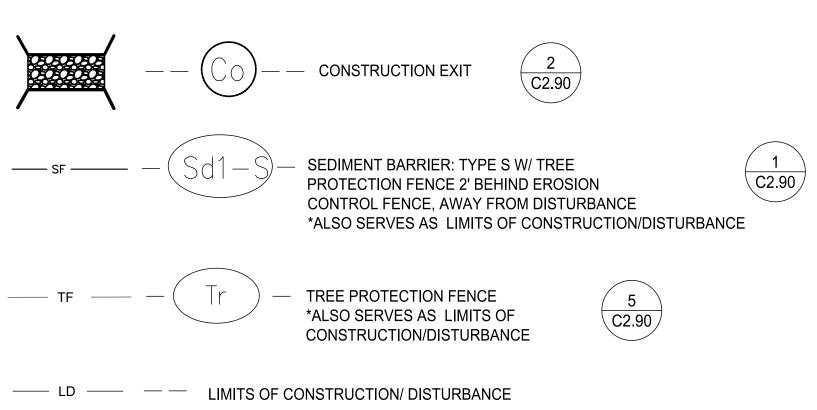
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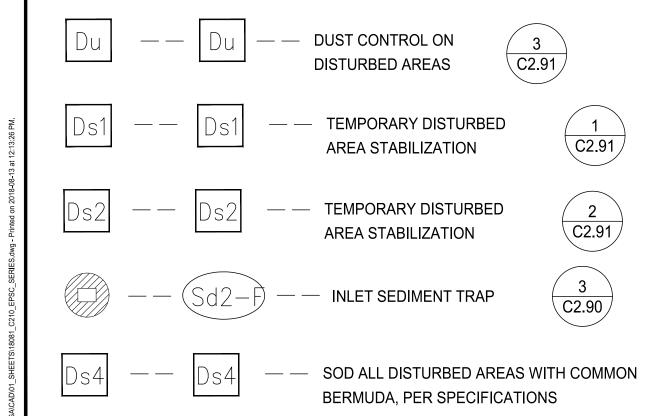
SCALE: 1" = 30'

UNIFORM CODING SYSTEM FOR SOIL EROSION & SEDIMENT CONTROL PRACTICES

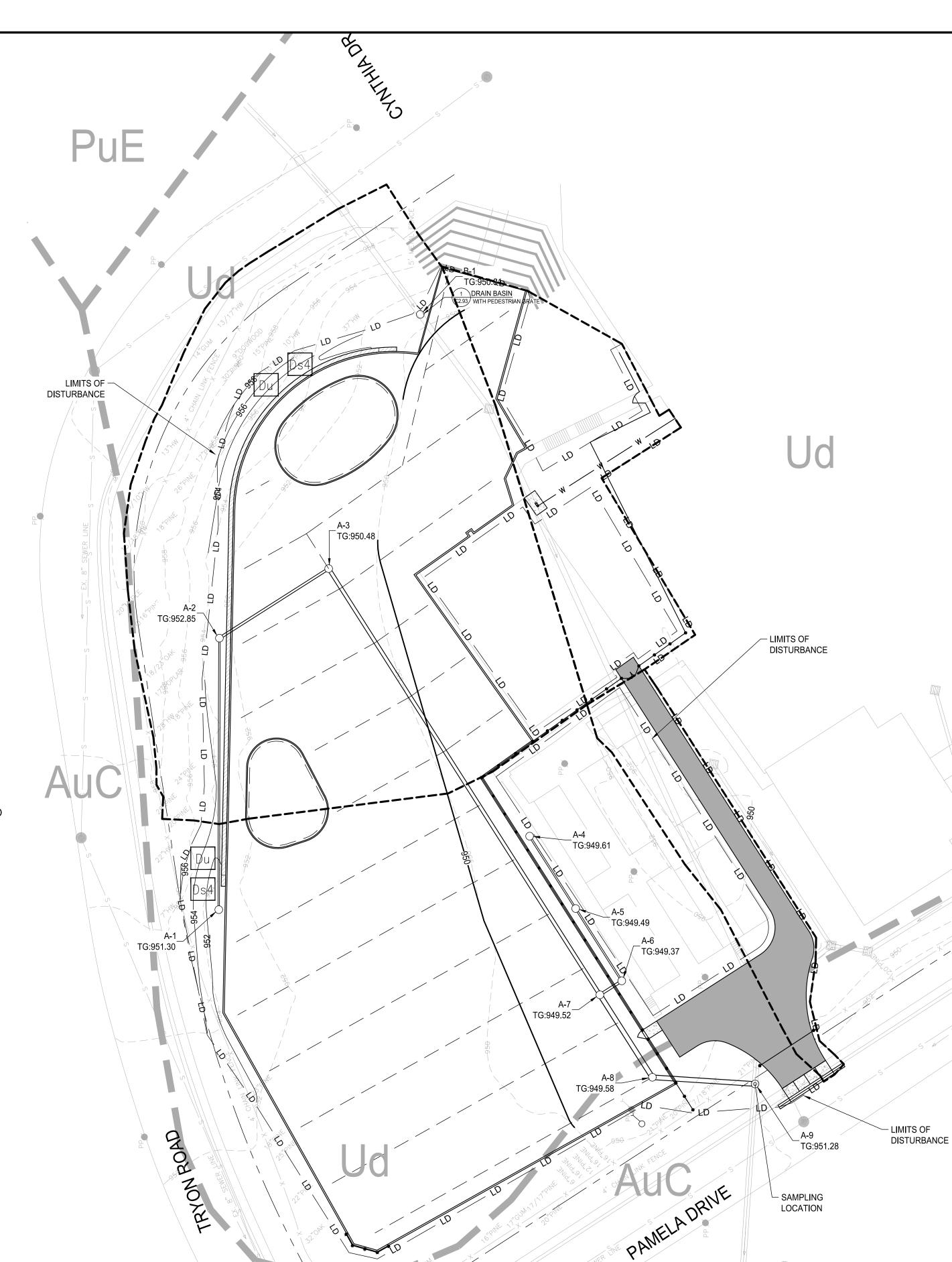
1. ALL PHASE 1 PRACTICES TO BE COMPLETED PRIOR TO ANY OTHER LAND DISTURBANCE ACTIVITIES. PHASE 2 PRACTICES TO BE IMPLEMENTED AS NEEDED DURING CONSTRUCTION. PHASE 3 PRACTICES TO BE IMPLEMENTED AS SOON AS CONSTRUCTION IS COMPLETE ON DIFFERENT ASPECTS OF THE PROJECT, NOT AT END OF ALL CONSTRUCTION ACTIVITIES FOR ENTIRE SITE.

2. ALL TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED FROM SITE AT COMPLETION OF PROJECT OR WHEN CONTRIBUTING DRAINAGE AREA ACHIEVES FINAL STABILIZATION. STORM DRAIN OUTLET PROTECTION TO REMAIN IN PERMANENT CONDITION. ALL OTHER EROSION CONTROL MEASURES ON THIS SHEET ARE TEMPORARY.





— — SLOPE STABILIZATION



#### **EROSION CONTROL NOTES**

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- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR
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- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL AND SHALL COMPLY WITH THE STANDARDS/SPECIFICATIONS IN THE MANUAL FOR
- EROSION AND SEDIMENT CONTROL IN GEORGIA. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY
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- 12. NO CLEARING OF THE SITE UNTIL ALL BASINS, DIVERSIONS, AND SEDIMENT CONTROLS ARE INSTALLED, STABILIZED, AND FUNCTIONAL.
- 13. LAND DISTURBANCE CANNOT BEGIN ON THE SITE UNTIL AFTER THE PRECONSTRUCTION CONFERENCE AND THE EROSION CONTROL INSPECTOR GIVES THE LDA PERMIT TO THE CONTRACTOR. PRESENT FOR THE PRECONSTRUCTION CONFERENCE SHALL BE: GENERAL CONTRACTOR, GRADING CONTRACTOR AND OWNER. THE DESIGN PROFESSIONAL MAY BE PRESENT AT THE DIRECTION OF THE OWNER.

## SEEDING NOTE THIS CONTRACT



SEED ALL DISTURBED AREAS (BOTH THOSE FROM PREVIOUS GRADING OPERATIONS, AND DISTURBANCES DURING THIS CONTRACT) NOT RECEIVING SPRIGGING OR SODDING (SEE LANDSCAPE PLANS) AS A PART OF THIS CONTRACT. THESE AREAS INCLUDE OPEN AREAS, DETENTION BASINS, AREAS OF FUTURE PAVING, PARKING LOTS, & ROADS. SEED SPECIES DEPEND UPON DATE OF COMPLETION.

NOTE: IF AREAS ARE NOT TO BE PLANTED WITH OTHER MATERIAL (SEE LANDSCAPE PLANS) SEED TO BE BERMUDA GRASS @ 75 LBS/AC. IF SEEDING OCCURS OCT. - FEB., USE TEMPORARY SEEDING OF ANNUAL RYEGRASS @ 49 LBS/AC, TO BE FOLLOWED WITH BERMUDA MAR. - SEPT.. APPLY STRAW MULCH, LIME, & FERTILIZER AS FOLLOWS.

UNIFORMLY SPREAD AGRICULTURAL LIME ON THE GROUND AT THE APPROXIMATE RATE DETERMINED BY THE LABORATORY SOIL TEST.

UNIFORMLY SPREAD THE FERTILIZER SELECTED OVER THE GROUND AT APPROXIMATELY 1,200 LBS/ACRE (1350 KG/HA). IF USING A HIGHER ANALYSIS FERTILIZER WITH HYDROSEEDING, APPLY IT AT THE SAME RATE PER ACRE (HECTARE) AS THE STANDARD

EVENLY APPLY STRAW MULCH IMMEDIATELY AFTER SEEDING BETWEEN 3/4 IN AND 1-1/2 IN (20 MM and 40 MM) DEEP, ACCORDING TO THE TEXTURE AND MOISTURE CONTENT OF THE MULCH MATERIAL. MULCH SHALL ALLOW SUNLIGHT TO PENETRATE AND AIR TO CIRCULATE AS WELL AS SHADE THE GROUND, REDUCE EROSION, AND CONSERVE SOIL MOISTURE.

NRCS SOILS TYPE LEGEND

APPLING-URBAN LAND COMPLEX, 2 TO 10 PERCENT SLOPES PACOLET-URBAN LAND COMPLEX, 10-25 PERCENT SLOPES

URBAN LAND

TOTAL PROJECT AREA: ±7.02 AC TOTAL DISTURBED AREA: ±1.66 AC

| EXISTING USE: ELEMENTARY SCHOOL PROPOSED USE: ELEMENTARY SCHOOL

CONTRACTOR TO SEAL ALL DISTURBED AREAS WITH COMMON BERMUDE. SEE PROJECT SPECIFICATIONS FOR SPECIAL PROVISIONS AND ADDITIONAL INFORMATION.

THE ARCHITECT. REPRODUCTION, COPYING, OR USE OF THIS DRAWING WITHOUT THEIR WRITTEN CONSENT IS PROHIBITED AND ANY INFRINGEMENT IS SUBJECT TO LEGAL ACTION.



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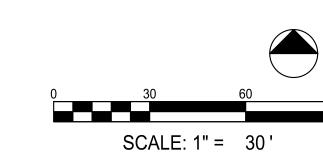
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PRIOR TO THE LAND DISTURBING CONSTRUCTION THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.

THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL QUANTITIES.

THE OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.

NO STAGING AREAS, MATERIAL STORAGE, CONCRETE WASH OUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS OR STREAM BUFFERS. IF POSSIBLE.

A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT

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

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITIES SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITIES. NO LAND DISTURBANCE SHALL TAKE PLACE OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.

PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.

THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES.

- 1. THE CONSTRUCTION EXIT, CONSISTING OF A MINIMUM PAD SIZE OF 20 FEET BY 50 FEET WITH A MINIMUM OF 6" THICK STONE, SHALL BE PLACED AS SHOWN ON THE PLANS. THE STONE SIZE SHALL CONSIST OF COURSE AGGREGATE BETWEEN 1-1/2" & 3-1/2" IN DIAMETER AND OVERLAID ON A GEOTEXTILE UNDERLINER. THE GEOTEXTILE UNDERLINER SHALL MEET THE REQUIREMENTS OF AASHTO M266-96, SECTION 7.3 SEPARATION REQUIREMENTS.
- 2. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXIT ALL PERIMETER EROSION CONTROL AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.
- 3. TYPE 'C' SILT FENCE SHOULD BE INSTALLED AT THE PERIMETER OF THE DISTURBED AREA AS SHOWN ON THE PLAN. THE SILT FENCE SHOULD BE PLACED IN ACCORDANCE WITH THE MANUAL FOR EROSION CONTROL IN GEORGIA, TABLE 6-27.1. THE SILT FENCE SHOULD BE KEPT ERECT AT ALL TIMES AND REPAIRED WHEN REQUESTED BY THE SITE INSPECTOR OR THE PROJECT DESIGN PROFESSIONAL OF RECORD. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF BARRIER. THE PERIMETER SILT FENCE SHOULD BE INSPECTED DAILY FOR ANY FAILURES. ANY FAILURES OF SAID FENCING SHOULD BE REPAIRED IMMEDIATELY.
- 4. INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL EXISTING STORM STRUCTURES AS SHOWN ON THE PLANS. SEE SEPARATE DETAIL FOR SPECIFICS ON TYPE OF INLET PROTECTION SPECIFIED.
- 5.STONE CHECK DAMS SHALL BE INSTALLED ON ALL EXISTING CONCENTRATED FLOWS AS SHOWN ON THE PLANS.
- 6. TREE PROTECTION FENCING SHOULD BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBANCE ACTIVITY AND MAINTAINED UNTIL FINAL LANDSCAPING 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. NO OTHER CONSTRUCTION ACTIVITIES SHALL OCCUR UNTIL THE PROJECT DESIGN PROFESSIONAL APPROVES THE INSTALLATION OF SAID EROSION CONTROL MEASURES. IF UNFORESEEN CONDITIONS EXIST IN THE FIELD THAT WARRANT CONSTRUCTION OF ADDITIONAL EROSION CONTROL MEASURES, THE CONTRACTOR MUST CONSTRUCT ANY ADDITIONAL EROSION CONTROL DEVICES DEEMED NECESSARY BY THE SITE INSPECTOR.

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 PONDS AND DIVERSION DIKES AS SHOWN ON THE CLEARING PHASE PLAN TO CONTROL EROSION AND STORM WATER RUNOFF.

THE DESIGN PROFESSIONAL WHO PREPARED THE ESPC PLAN WILL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN SEVEN DAYS

THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL IN AREAS SHOWN ON PLAN WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.

AFTER INSTALLATION.

NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.

ADDITIONAL SILT BARRIERS MUST BE PLACED AS SHOWN ON THE PLANS AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL TAKE PLACE UNTIL SILT BARRIER INSTALLATION AND SEDIMENT PONDS ARE CONSTRUCTED AS SHOWN ON THE CLEARING PHASE EROSION CONTROL PLAN.

ALL SILT FENCE MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS, 1983.

ALL ITEMS IN THIS SECTION OF THE SPECIFICATIONS SHALL MEET THE REQUIREMENTS AS SET FORTH IN SECTION 161, 162, 163, AND 164 OF GEORGIA D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD OF GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY

VEGETATION.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY, THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3 INCH STONE, AS CONDITIONS DEMAND. ALL MATERIAL SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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, OR AS DIRECTED BY THE EROSION CONTROL INSPECTOR.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLAN.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY

ALL CLEARING AND GRUBBING DEBRIS TO BE CHIPPED AND MULCHED FOR USE IN SEDIMENT AND EROSION CONTROL PREVENTION.

# GRADING PHASE EROSION CONTROL NOTES

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE PRELIMINARY GRADING PHASE OF CONSTRUCTION:

MAINTAIN FULL COORDINATION WITH THE DESIGN PROFESSIONAL, CONTRACTOR AND REGULATORY INSPECTOR AT ALL TIMES REGARDING PROJECT SEQUENCE.

DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES AND THEREFORE LIMITED DURATION, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED. NOTE SUB PHASES SHOWN ON PLANS.

EARTHWORK OPERATIONS IN THE VICINITY OF STREAM BUFFERS SHALL BE CAREFULLY CONTROLLED TO AVOID DUMPING OR SLOUGHING INTO THE BUFFER AREAS.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET AGAIN.

EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE PROPOSED DRAINAGE PATTERNS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT THE VARIOUS STAGES OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING BARRIERS AT THE TOE OF SLOPES UNDER CONSTRUCTION. THESE BARRIERS SHALL BE SHOWN IN THE PLANS. THESE BARRIERS MAY BE RELOCATED AND REUSED AFTER PERMANENT SLOPE STABILIZATION BECOMES FULLY ESTABLISHED. AS THEY ARE RELOCATED, ANY DEFECTIVE MATERIALS IN THE BARRIER SHALL BE REPLACED. IN ADDITION, ALL DEBRIS AND SILT AT THE PREVIOUS LOCATION SHALL BE REMOVED.

ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF 10FT OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL MATTING OR BLANKETS IMMEDIATELY.

TYPE "C" SILT FENCE SHALL BE PLACED AT THE TOE OF ALL DIRT STOCK PILE AREAS AND ALL FILL SLOPES 10FT OR GREATER IN HEIGHT. THE SILT FENCE SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED ON THE SLOPE. SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 1/2 HEIGHT OF THE BARRIER. ADDITIONALLY, DIVERSION DIKES SHALL BE SHALL BE CONSTRUCTED ALONG THE TOP OF ALL SAID FILL SLOPES WITH THE USE OF TEMPORARY DOWN DRAINS TO CONTROL STORMWATER RUNOFF AS SHOWN ON THE PLANS.

INLET SEDIMENT PROTECTION MEASURES SHALL BE INSTALLED ON ALL STORM STRUCTURES AS THEY ARE CONSTRUCTED. SEE PLAN VIEW FOR SPECIFIC TYPE AND SEPARATE DETAILS FOR ADDITIONAL INFORMATION ON TYPE OF INLET PROTECTION SPECIFIED.

STORM DRAIN OUTLET PROTECTION SHALL BE PLACED AT ALL OUTLET HEADWALLS AS SOON AS THE HEADWALL IS CONSTRUCTED. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

STONE CHECK DAMS SHALL BE INSTALLED IN AREAS OF CONCENTRATED FLOWS AS SHOWN ON THE PLAN. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL DRAINAGE SWALES SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD OF GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY

AFTER PRELIMINARY GRADING ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS AND DIVERSION DIKES AS SHOWN ON PLAN. THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT POND UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE 1/3 DEPTH OF BASIN. SEE SEPARATE DETAILS FOR ADDITIONAL INFORMATION.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED. INDICATORS MUST BE INSTALLED IN SEDIMENT BASINS INDICATING THE 1/3 FULL VOLUME FOR CLEANOUT.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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, OR AS DIRECTED BY THE EROSION CONTROL INSPECTOR.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO ANY CONSTRUCTION ACTIVITY BY OTHERS.

ALL INLET HEADWALLS TO BE PROTECTED WITH SILT GATES, AND ALL DROP INLETS TO BE UNDERCUT 1.5FT DEEP BY 10FT IN DIAMETER.

ERODED VEGETATED SLOPES WILL BE BACKFILLED, SMOOTHED, SEEDED OR GRASSED AND COVERED WITH GEOTEXTILE MATTING.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

# FINAL PHASE EROSION CONTROL NOTES

THE FOLLOWING EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING THE FINAL EROSION CONTROL PHASE OF CONSTRUCTION:

MAINTAIN FULL COORDINATION WITH THE DESIGN PROFESSIONAL, CONTRACTOR AND REGULATORY INSPECTOR AT ALL TIMES REGARDING PROJECT SEQUENCE.

SEDIMENT SHALL NOT BE WASHED INTO INLETS. IT SHALL BE REMOVED FROM THE SEDIMENT TRAPS AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLETS AGAIN.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD OF GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

ALL DISTURBED AREAS LEFT MULCHED AFTER 30 DAYS SHALL BE STABILIZED WITH TEMPORARY GRASSING.

THE CONTRACTOR SHALL MAINTAIN ALL SEDIMENT PONDS AND EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENT SHALL BE CLEANED OUT OF THE PONDS WHEN IT REACHES THE HALF-WAY POINT ON THE RISER.

AFTER CURBING, GRADED AGGREGATE BASE, AND PAVEMENT HAVE BEEN INSTALLED, ALL INLET SEDIMENT TRAPS ON SINGLE AND DOUBLE WING CATCH BASINS ALONG WITH ANY CURB INLETS SHALL BE REMOVED AND REPLACED WITH CURB FILTER INLET PROTECTION. SEE SEPARATE DETAIL FOR ADDITIONAL INFORMATION.

ALL ROADWAY AND PARKING SHOULDERS SHOULD BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED BEHIND CURBS.

SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE-HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1-3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.

CONTRACTOR SHALL INSPECT CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.

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 AS DIRECTED BY THE ON-SITE INSPECTOR OR THE CIVIL ENGINEER.

ALL TEMPORARY SEDIMENT BASINS SHALL BE REMOVED WHEN THE DEVELOPMENT IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH PERMANENT VEGETATION.

FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES INCLUDING REPLACING OR REPAIRING ANY DAMAGED DEVICES DUE TO CONSTRUCTION ACTIVITY BY OTHERS.

ERODED VEGETATED SLOPES WILL BE BACKFILLED, SMOOTHED, SEEDED OR GRASSED AND COVERED WITH GEOTEXTILE MATTING.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

UPON COMPLETION OF THE PROJECT AND RECEIPT OF CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED ON PLANS.

# CRITICAL WORK ZONE EROSION CONTROL NOTES:

HATCHED AREAS SHOWN ON THE EROSION CONTROL PLANS REPRESENT CRITICAL WORK ZONES. AT THE END OF EACH WORK DAY ALL SLOPES 2:1 OR STEEPER AND HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, POLYMERS, AND EROSION CONTROL MATTING. ADDITIONALLY, ALL FILL SLOPES SHALL RECEIVE A DIVERSION DIKE AND TEMPORARY DRAIN ALONG THE TOP OF THE SLOPE PREVENTING DRAINAGE SPILLING OVER THE EDGE AND DOWN THE FACE OF THE SLOPE. THE TEMPORARY DOWN DRAINS SHALL BE CONSTRUCTED WITH PERFORATED STAND PIPES AT THE TOP OF THE SLOPE AND RECONSTRUCTED EACH DAY AS THE SLOPE INCREASES IN HEIGHT. 3:1 SLOPES SHALL RECEIVE MATTING AS SPECIFIED ON THE EROSION CONTROL PLANS.

# DESIGN PROFESSIONAL'S CERTIFICATION

(1) I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001.

(2) "I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION."

DESIGN PROFESSIONAL

PE041517

4/29/2018

GA REGISTRATION #

LEVEL II CERTIFICATION EXPIRES:

## NPDES PERMIT COVERAGE

THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EDP). GENERAL PERMIT NO. GAR 100001. FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES). STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR STAND ALONE DEVELOPMENTS.

AUTHORIZED DISCHARGES

1. ALL DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART

2. ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1

3. AUTHORIZED MIXED STORMWATER DISCHARGES: PART I.C.2

A. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY.

B. THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THIS PERMIT.

C. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE

AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION
ARE OCCURRING ARE COVERED BY A DIFFERENT NPDES GENERAL PERMIT OR
INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN
COMPLIANCE WITH A DIFFERENT NPDES PERMIT.

4. AUTHORIZED NON-STORMWATER DISCHARGES: PART III.A.2

A. FIRE FIGHTING ACTIVITIES

B. FIRE HYDRANT FLUSHING
C. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING

D. IRRIGATION DRAINAGE
E. AIR CONDITIONING CONDENSATE

F. SPRINGS

G. UNCONTAMINATED GROUND WATER
H. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT
CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS

LIMITATIONS ON COVERAGE PART I.C.3

THE FOLLOWING STORMWATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:

A. STORMWATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATES FROM THE SITE AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION.

B. DISCHARGES THAT ARE MIXED WITH SOURCES OF NON-STORMWATER OTHER THAN DISCHARGES THAT ARE IDENTIFIED IN PART II.A.2 OF THIS PERMIT AND THAT ARE IN COMPLIANCE WITH PART IV.D.6 (NON-STORMWATER DISCHARGES) OF THIS PERMIT.

C. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH

C. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY THAT ARE SUBJECT TO AN EXISTING NPDES INDIVIDUAL OR GENERAL PERMIT. SUCH DISCHARGES MAY BE AUTHORIZED UNDER THIS PERMIT AFTER AN EXISTING PERMIT EXPIRES PROVIDED THE EXISTING PERMIT DID NOT ESTABLISH NUMERIC LIMITATIONS FOR SUCH DISCHARGES.

D. STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT THE DIRECTOR (EPD) HAS DETERMINED TO BE, OR MAY REASONABLY BE EXPECTED TO BE, CONTRIBUTING TO A VIOLATION OF A WATER QUALITY STANDARD.

2. WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTING QUANTITY ESTABLISHED UNDER EITHER GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A 12-14-2, ET SEQ.) 40 CFR 117 OR CFR 302 OCCURS DURING A 24 HOUR PERIOD, THE PERMITTEE IS REQUIRED TO NOTIFY THE FOLLOWING AGENCIES IN ACCORDANCE WITH THE ABOVE MENTIONED REGULATIONS AS SOON AS HE HAS KNOWLEDGE OF THE DISCHARGE: EPD AT (404)656-4883 OR (800) 241-4113 OR THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424-8802. PART III.B.1

3. THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL RESULTING FROM AN ON-SITE SPILL. PART III.B.2

WATER QUALITY COMPLIANCE PART I.C.4

ALL DISCHARGES AUTHORIZED BY THIS PERMIT SHALL NOT CAUSE VIOLATIONS OF GEORGIA'S IN-STREAM WATER QUALITY STANDARDS AS PROVIDED BY THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 301-3-6-03.

# PRIMARY PERMITTEE'S (OWNER/OPERATOR) CERTIFICATION

(1) "I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN (PLAN) WAS PREPARED BY A DESIGN PROFESSIONAL, AS DEFINED BY THIS PERMIT THAT HAS COMPLETED THE APPROPRIATE CERTIFICATION COURSE APPROVED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-19 AND THAT I WILL ADHERE TO THE PLAN AND COMPLY WITH ALL PERMIT REQUIREMENTS."

(2) "I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

PRIMARY PERMITTEE (OWNER/OPERATOR)

## NPDES PERMIT COVERAGE

SEE SHEET C2.30 FOR SAMPLING LOCATIONS.

SAMPLING METHODOLOGY PART IV.D.6

All SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED). THE GUIDANCE DOCUMENT TITLED "NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE
 SAMPLES

SAMPLES SHALL BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS
SHALL BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE

CLEANED THOROUGHLY TO AVOID CONTAMINATION.

4. MANUAL, AUTOMATIC, OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW-THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.

5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THE PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

#### SAMPLING FREQUENCY

SAMPLING FREQUENCY SHALL OCCUR IN ACCORDANCE WITH PART IV.D.6.D OF THE PERMIT.

1. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

2. HOWEVER, WHERE THE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THE PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

A. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;

B. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST:

C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B)
ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A
RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY
DESIGNED, INSTALLED AND MAINTAINED CORRECTIVE ACTION SHALL
BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND
TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT
AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT
REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS\*
UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL
POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE
PROPERLY DESIGNED, INSTALLED AND MAINTAINED;

D. WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING ORLIGATIONS LINDER (A), (B) OR (C) ABOVE:

SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; E. EXISTING CONSTRUCTION ACTIVITIES, I.E. THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

\* NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF 3.A. AND 3.B. BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

PRIMARY PERMITTEE/24 HR. CONTACT: BRIAN BORDEN CITY OF BROOKHAVEN 3360 OSBORNE RD BROOKHAVEN, GA 30319 PHONE: (404) 637-0562 DESIGN SPACES FOR LIFE.

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SUBMITTALS / REVISIONS

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ESCP NOTES

PROJECT NO. DATE
18081-1 08/13/2018

DRAWN BY SCALE
LC N/A

CHECKED BY

C2.40

SHEET NO.

#### EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPC)

THIS PLAN WAS PREPARED AS REQUIRED BY NPDES GENERAL PERMIT NO. GAR 100001 (STAND ALONE CONSTRUCTION PROJECT). THESE PLAN SHEETS AND ALL REQUIREMENTS OF THE GENERAL PERMIT AS WELL AS LOCAL, STATE, AND FEDERAL REGULATIONS OR LAWS APPLY REGARDLESS OF SPECIFIC INCLUSION IN THIS PLAN.

#### SITE DESCRIPTION:

OWNER/DEVELOPER AS PRIMARY PERMITTEE WILL OVERSEE SITE CONSTRUCTION LOCATED WITHIN THE PROPERTY LOCATED AT 2968 CRAVENRIDGE DR NE, ATLANTA, GA 30319. THE ENTIRE SITE CONTAINS ±7.02

#### DESCRIBE PROPERTY TO BE DEVELOPED: ELEMENTARY SCHOOL

AFTER PLACEMENT OF PERIMETER SILT PROTECTION BARRIERS AND CONSTRUCTION ENTRANCES CONSTRUCTION WILL BEGIN WITH DEMOLITION OF EXISTING SITE FEATURES AS OUTLINED ON THE DEMOLITION PLAN SHEET C0.10 CONTINUING WITH CLEARING AND GRUBBING OF VEGETATION IN AREAS THAT ARE TO BE DISTURBED, PRELIMINARY AND FINAL GRADING, UTILITY INSTALLATION, SIDEWALKS AND STRUCTURES PER THE PHASED EROSION CONTROL PLAN SHEETS C2.10-C2.30 AND CONSTRUCTION PLAN SET.

STORM WATER RUNOFF FROM THIS DEVELOPMENT WILL BE DIVERTED THROUGH TEMPORARY BMP'S UNTIL THE SITE IS STABILIZED.

#### <u>ZONING:</u>

THIS SITE IS ZONED R-85.

#### SURVEY INFORMATION:

BOUNDARY AND TOPOGRAPHIC INFORMATION FROM BOUNDARY SURVEY DATED MARCH 30, 2017 PROVIDED BY ALPHA LAND SERVICES.

THIS PROPERTY IS NOT LOCATED WITHIN A 100-YEAR FLOODPLAIN PER FEMA FIRM PANEL 13089C0052J, EFFECTIVE DATE MAY 16, 2013.

#### RUNOFF COEFFICIEN

- WEIGHTED PRE CONSTRUCTION ON CURVE NUMBER: 95
- WEIGHTED FIXE CONSTRUCTION ON CURVE NUMBER: 95

SEE "STORMWATER MANAGEMENT STUDY FOR "(PROJECT NAME)" DATED XXX XX, 20XX FOR ADDITIONAL INFORMATION.

#### \_\_\_\_

THE NRCS SOIL TYPES CAN BE FOUND ON SHEET C2.10 OF THESE CONSTRUCTION DOCUMENTS

#### SOIL DISTRIBUTING ACTIVITIES INCLUDE:

- INSTALLING A STABILIZED CONSTRUCTION EXIT, PERIMETER AND OTHER EROSION AND SEDIMENT
- CONTROLS.
- CLEARING AND GRUBBING.
- EXCAVATION OF THE FOUNDATION.
- GRADING AND EXCAVATION FOR UTILITIES.
   DEPARATION FOR FINAL PLANTING AND SEEDING
- PREPARATION FOR FINAL PLANTING AND SEEDING.COMPLETION OF ON-SITE STABILIZATION.

SEQUENCE OF MAJOR ACTIVITIES - SEE CONSTRUCTION SCHEDULE

### NAME OF RECEIVING WATERS:

THE RECEIVING WATER FOR THIS SITE IS NORTH FORK PEACHTREE CREEK.

### CONTROLS

EROSION AND SEDIMENT CONTROLS

ALL PERIMETER SILT FENCES AND CONSTRUCTION EXITS SHALL BE IN PLACE PRIOR TO ANY LAND DISTURBING ACTIVITIES.

EXISTING VEGETATION SHALL BE LEFT IN PLACE UNTIL SUCH TIME THAT LAND DISTURBING ACTIVITIES ARE TO TAKE PLACE UPON THAT PORTION OF THE SITE. WHEN CONSTRUCTION ACTIVITIES HAVE CEASED IN AN AREA, THAT AREA SHALL BE STABILIZED WITHIN 14 DAYS. IF THE AREA IS NOT YET TO FINAL GRADE, IT SHALL BE MULCHED. IF THE AREA IS TO FINAL GRADE AND WILL EVENTUALLY CONTAIN SITE IMPROVEMENTS SUCH AS THE STRUCTURES OR SIDEWALKS, IT SHALL BE TEMPORARY SEEDED. AREAS BROUGHT TO FINAL GRADE THAT WILL REMAIN PERVIOUS ARE TO BE PERMANENTLY SEEDED. ALLOWABLE EXCEPTIONS FROM THE NPDES GENERAL PERMIT, GAR 100001, ARE NOTED BELOW.

"WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION, ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER OR OTHER ADVERSE WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE."

"WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED."

PLEASE REFER TO DETAIL SHEETS FOR THE LAND DISTURBANCE CONSTRUCTION SCHEDULE AND TEMPORARY AND PERMANENT GRASSING SCHEDULES.

## NON- STORM WATER DISCHARGES

ALL NON-STORM WATER DISCHARGES WILL BE ROUTED THROUGH ON SITE BMP'S AND THE STORM WATER MANAGEMENT SYSTEM WHERE POSSIBLE. THESE DISCHARGES INCLUDE FLUSHING OF WATER AND FIRE LINES, IRRIGATION WATER, GROUND WATER, DEWATERING OR PITS OR DEPRESSIONS WITHIN THE CONSTRUCTION SITE AND RINSE ALL WATER OF NON-TOXIC MATERIALS.

## OTHER CONTROLS

NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE.

## WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ONSITE.

ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

#### **HAZARDOUS WASTES**

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND ALL THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THIS ESPCP AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTE WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORM WATER DISCHARGE WILL BE CONTAINED ONSITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORM WATER. IT SHALL BE THE RESPONSIBILITY OF THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

#### SANITARY WASTES

A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FOR EVERY TEN WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY WASTE UNITS WILL BE LOCATED IN ONE AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORM WATER DISCHARGE IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMP'S MUST BE IMPLEMENTED, SUCH AS GRAVEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE TO PREVENT WASTES FROM CONTRIBUTING TO STORM WATER DISCHARGES. THE LOCATION OF SANITARY WASTE UNITS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN GRADING PHASE, SHEET C-4B, BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

SANITARY SEWER WILL BE PROVIDED BY MUNICIPAL AUTHORITY/ SEPTIC SYSTEM OF THE COMPLETION OF THIS PROJECT.

#### CONCRETE WASHDOWN PER DETAIL 6 ON SHEET C2.90

- WASHOUT OF THE CONCRETE DRUM IS PROHIBITED. FOLLOWING IS A PROCEDURE TO WASHDOWN TOOLS, CHUTE AND HOPPER:

  1. COORDINATE WITH SITE SUPERINTENDENT TO EXCAVATE A PIT DEEP ENOUGH TO CONTAIN WASHDOWN WATER.
- 2. BACK IN EQUIPMENT.
- . WASHDOWN ONLY THE CHUTE, HOPPER AND REAR OF THE VEHICLE. DO NOT WASH OUT THE DRUM.
- 4. MAKE SURE WASHDOWN WATER GOES INTO AND STAYS IN THE PIT.
- 5. COORDINATE WITH SITE SUPERINTENDENT TO FILL IN PIT AND SMOOTH OUT GROUND.

#### OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION EXIT HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. SEE SHEET C2.10 FOR CONSTRUCTION EXIT LOCATION AND DETAILS. THE PAVED STREET ADJACENT TO THE SITE EXIT WILL BE INSPECTED DAILY FOR TRACKING OF MUD, DIRT, OR RACK. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

#### INVENTORY FOR POLLUTION PREVENTION PLAN

THE FOLLOWING MATERIALS ARE EXPECTED ONSITE DURING CONSTRUCTION: CONCRETE PRODUCTS, ASPHALT, PETROLEUM BASED FUELS AND LUBRICANTS FOR EQUIPMENT, TAR, METAL BUILDING MATERIALS, LUMBER, SHEET ROCK, FLOOR COVERINGS, ELECTRICAL WIRE AND FIXTURES, PAINTS/ STAINS/ FINISHING TREATMENTS, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CLEANING SOLVENTS, PESTICIDES, FERTILIZERS, HERBICIDES, CRUSHED STONE, PLASTIC AND METAL PIPES.

#### SPILL PREVENTION

PRACTICES SUCH AS GOOD HOUSEKEEPING, PROPER HANDLING OF HAZARDOUS PRODUCTS AND PROPER SPILL CONTROL PRACTICES WILL BE FOLLOWED TO REDUCE THE RISK OF SPILLS AND SPILLS FROM DISCHARGING INTO STORM WATER RUNOFF.

#### GOOD HOUSEKEEPING

- QUANTITIES OF PRODUCTS STORED ONSITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR THE JOB.
- PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM
- RAINFALL WHERE POSSIBLE.

  PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER LABELS LEGIBLE AND VISIBLE.
- PRODUCT MIXING, DISPOSAL AND DISPOSAL OF PRODUCT CONTAINERS WILL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- 5. THE CONTRACTOR WILL INSPECT SUCH MATERIALS TO ENSURE PROPER USE, STORAGE AND DISPOSAL.

## PRODUCT SPECIFIC PRACTICES

PETROLEUM BASED PRODUCTS- CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OR SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/ FINISHES/ SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASTE WATER ONSITE.

FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.

BUILDING MATERIALS - NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE PROCEDURES.

## SOIL CLEANUP AND CONTROL PRACTICES

PREVENT FUTURE SPILLS.

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND
- PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.

   MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL
- MATERIALS AND EQUIPMENT INCLUDES BUT IS NOT LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.

   SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- FOR SPILLS THAT IMPACT SURFACE WATER, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER WILL BE CONTACTED WITH IN 24 HOURS.
  FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES
  WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

## INSPECTIONS

#### PRIMARY PERMITTEE

- 1. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- 2. MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.
- 3. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- 4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS RECEIVED BY EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
- 5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
- 6. A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E. INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

#### MAINTENANCE & INSPECTION OF EROSION & SEDIMENT CONTROLS

#### MAINTENANCE

THE FOLLOWING BEST MANAGEMENT PRACTICE MAINTENANCE CRITERIA ARE TAKEN FORM THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA", 2016 EDITION.

CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5-3.5 INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES TO TROP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

DETENTION POND OUTLET STRUCTURES SHALL BE KEPT CLEAR OF TRASH AND DEBRIS. THIS WILL REQUIRE CONTINUOUS MONITORING AND MAINTENANCE, WHICH INCLUDES SEDIMENT REMOVAL WHEN ONE-THIRD OF THE SEDIMENT STORAGE CAPACITY HAS BEEN LOST.

SEDIMENT SHALL BE REMOVED FROM SILT FENCES ONCE IT HAS BEEN ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. FILTER FABRIC SHALL BE REPLACES WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE FABRIC IS REDUCED (APPROXIMATELY SIX MONTHS).

SEDIMENT SHALL BE REMOVED FROM TRAPS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE TRAP. SEDIMENT SHALL BE REMOVED FROM CURB INLET PROTECTION IMMEDIATELY. FOR EXCAVATED INLET SEDIMENT TRAPS, SEDIMENT SHALL BE REMOVED WHEN ON-HALF OF THE SEDIMENT STORAGE CAPACITY HAS BEEN LOST TO SEDIMENT ACCUMULATION.

SEDIMENT SHALL NOT BE WASHED INTO THE INLET. IT SHALL BE REMOVED FROM THE SEDIMENT TRAP AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT INTER THE INLET AGAIN.

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, ALL MATERIALS AND ANY SEDIMENT SHALL BE REMOVED AND EITHER SALVAGED OR DISPOSED OF PROPERLY. THE DISTURBED AREA SHALL BE BROUGHT TO PROPER GRADE, THEN SMOOTHED AND COMPACTED. APPROPRIATELY STABILIZE ALL DISTURBED AREAS AROUND THE INLET.

REPAIR ALL DAMAGES CAUSED TO TEMPORARY SEDIMENT BASINS BY SOIL EROSION OR CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORKING DAY. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE SPECIFIED DISTANCE BELOW THE TOP OF THE RISER. SEDIMENT SHALL NOT ENTER ADJACENT STREAMS OR DRAINAGE WAYS DURING SEDIMENT REMOVAL OR DISPOSAL. THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT ADJACENT TO A STREAM OR FLOODPLAIN.

INSPECT RIP RAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE OR IT STONES HAVE BEEN DISLODGED.

IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

ROUGHENED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE TO OBTAIN OPTIMUM SEED GERMINATION AND SEEDING GROWTH.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED.

PERMANENT VEGETATION SHALL BE APPLIED IMMEDIATELY TO ROUGH GRADED AREAS THAT WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS. THIS PRACTICE SHALL BE APPLIED IMMEDIATELY TO ALL AREAS AT FINAL GRADE. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND THAT FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, AT LEAST 70% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION OR EQUIVALENT PERMANENT STABILIZATION MEASURES HAVE BEEN EMPLOYED. PERMANENT VEGETATION SHALL CONSIST OF: PLANTED TREES, SHRUBS, PERENNIAL VINES, A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGIONS, SUCH THAT WITHIN THE GROWING SEASON 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED. FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION. UNTIL THIS STANDARD IS SATISFIED AND PERMANENT CONTROL MEASURES AND FACILITIES ARE OPERATIONAL, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL NOT BE REMOVED.

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3360 OSBORNE RD BROOKHAVEN, GA 30319 DESIGN SPACES FOR LIFE.

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SHEET TITLE

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ESCP NOTES

PROJECT NO. 18081-1 DATE 08/13/2018

DRAWN BY LC SCALE N/A

CHECKED BY MB

C2.41

#### SAMPLE ANALYSIS

STORM WATER SAMPLES ARE TO BE ANALYZED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40CFR PART 136 AND THE GUIDANCE DOCUMENT TITLES NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT EPA 833-B-92-001.

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT ONE OUTFALL LOCATIONS INDICATED ON SHEET C2.30. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 75, THE VALUE THAT WAS SELECTED FROM APPENDIX B IN PERMIT NUMBER GAR 100001. THE NTU IS BASED UPON THE TOTAL DISTURBED AREA OF 1.66 ACRES OF THE PROJECT SITE. THE SURFACE WATER DRAINAGE AREA OF LESS THAN 4.99 SQ. MILES. AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES.

#### SAMPLE TYPE

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40CFR PART 136 (UNLESS OTHER TEST PROCEDURES SOIL CONDITIONS HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

PER NPDES PERMIT, GAR 100001 "SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER. LARGE MOUTH, WELL-CLEANED AND RINSED GLASS TREATMENT SPECIFICATIONS OR PLASTIC JARS SHOULD BE USED TO COLLECTING SAMPLES. THE JARS SHOULD BE CLEANSED THOROUGHLY TO AVOID CONTAMINATION. MANUAL, AUTOMATIC OF RISING STAGE SAMPLING MAY BE UTILIZED.

#### SAMPLING POINTS

THERE IS ONE SAMPLING LOCATION LOCATED AT THE PROPOSED JUNCTION BOX A-9AS INDICATED ON SHEET C2.30. PER NPDES PERMIT GAS 100001, FOR CONSTRUCTION ACTIVITIES. THE PRIMARY PERMITTEE MUST COMPLETE ALL SAMPLING.

- CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STREAM WATER CHANNEL.
- THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- THE SAMPLINGS SHOULD BE KEPT FREE FROM FLOATING DEBRIS THE PRIMARY PERMITTEE DOES NOT HAVE TO SAMPLE SHEET FLOW INTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT.

## SAMPLING FREQUENCY

SEE NOTES ON SHEET C2.40.

1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THE PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

- 2. ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
- A. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
- B. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
- C. THE DATE(S) ANALYSES WERE PERFORMED;
- D. THE TIME(S) ANALYSES WERE INITIATED;
- E. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES; F. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
- G. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC USED TO DETERMINE THESE RESULTS.
- H. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND
- I. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.
- 3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THE PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF A. SEEDING WITH MULCH: (HYDRAULIC SEEDING EQUIPMENT ON SLOPES LESS THAN 3:1 AND STEEPER) SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.

IF NO QUALIFYING EVENTS OCCURRED WITHIN A MONTHLY MONITORING PERIOD, A REPORT MUST BE SUBMITTED STATING SUCH. ADDRESSES ARE PROVIDED BELOW:

GOVERNING AGENCY: CITY OF BROOKHAVEN PARKS AND RECREATION DEPARTMENT

3360 OSBORNE ROAD BROOKHAVEN, GA 30319 PHONE:(404) 637-0562

3360 OSBORNE ROAD

OWNER: CITY OF BROOKHAVEN PARKS AND RECREATION DEPARTMENT BROOKHAVEN, GA 30319 PHONE:(404) 637-0562

ATTN: INSPECTOR: TBD ADDRESS: TBD ADDRESS: TBD PHONE: TBD

## RETENTION OF RECORDS

- 1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI: A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5.
- OF THIS PERMIT: D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT
- E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
- F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2.
- OF THIS PERMIT: AND G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.
- 2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION), OR OTHER REPORTS REQUESTED BY THE THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

### COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

THE CONTRACTOR WILL OBTAIN COPIES OF ANY AND ALL LOCAL AND STATE REGULATIONS THAT ARE APPLICABLE TO STORM WATER MANAGEMENT, EROSION CONTROL, AND POLLUTION MINIMIZATION AT THIS JOB SITE AND WILL COMPLY FULLY WITH SUCH REGULATIONS. THE CONTRACTOR WILL SUBMIT WRITTEN EVIDENCE OF SUCH COMPLIANCE IF REQUESTED BY THE OWNER OR ANY AGENT OF A REGULATORY BODY. THE CONTRACTOR WILL COMPLY WITH ALL CONDITIONS OF ANY AND ALL LOCAL, STATE AND FEDERAL AGENCIES HAVE GOVERNING AUTHORITY, INCLUDING THE CONDITIONS RELATED TO MAINTAINING THE ESPCP AND EVIDENCE OF COMPLIANCE WITH THE ESPCP AT THE JOB SITE AND ALLOWING REGULATORY PERSONNEL ACCESS TO THE JOB SITE AND TO RECORDS IN ORDER TO DETERMINE COMPLIANCE.

THIS VEGETATIVE PLAN WILL BE CARRIED OUT ON ROAD CUT AND FILL SLOPES, SHOULDERS AND CRITICAL AREAS CREATED BY CONSTRUCTION, SEEDING WILL BE DONE AS SOON AS CONSTRUCTION IN AN AREA IS COMPLETED. PLANTINGS WILL BE MADE TO CONTROL EROSION. TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF TO DOWNSTREAM AREAS AND TO IMPROVE THE SAFETY AND BEAUTY OF THE DEVELOPMENT AREA.

DUE TO GRADING AND CONSTRUCTION, THE AREAS TO BE TREATED ARE MAINLY SUBSOIL SUBSTRATA. FERTILITY IS LOW AND THE PHYSICAL CHARACTERISTICS OF THE EXPOSED MATERIAL AREA UNFAVORABLE TO ALL BUT THE MOST HARDY PLANTS.

GRADE, SHAPE AND SMOOTH WHERE NEEDED TO PROVIDE FOR SAFE EQUIPMENT OPERATION AT SEEDING TIME AND FOR MAINTENANCE PURPOSES. THE LIME AND FERTILIZER IN DRY FORM WILL BE SPREAD UNIFORMLY OVER THE AREA IMMEDIATELY BEFORE SEEDBED PREPARATION. A SEEDBED WILL BE PREPARED BY SCARIFYING TO A DEPTH OF 1 TO 4 INCHES AS DETERMINED ON SITE. THE SEEDBED MUST BE WELL PULVERIZED. SMOOTHED AND FIRMED. SEEDING WILL BE DONE WITH CULTIPACKER-SEEDER, DRILL, ROTARY SEEDER OR OTHER MECHANICAL OR HAND SEEDER. SEED WILL BE DISTRIBUTED UNIFORMLY OVER A FRESHLY PREPARED SEEDBED AND COVERED LIGHTLY. WITHIN 24 HOURS AFTER SEEDING, STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY OVER THE AREA, LEAVING ABOUT 25 PERCENT OR THE GROUND SURFACE EXPOSED. MULCH WILL BE SPREAD WITH BLOWER-TYPE MULCH EQUIPMENT OR BY HAND AND ANCHORED IMMEDIATELY AT IT IS SPREAD. A DISK HARROW WITH THE DISK SET OR A SPECIAL PACKER DISK MAY BE USED TO PRESS THE MULCH INTO THE SOIL. THE PER ACRE APPLICATION RATES ARE AS FOLLOWS:

## A. SEEDING WITH MULCH:(CONVENTIONAL SEEDING EQUIPMENT ON SLOPES LESS THAN 3:1)

AGRICULTURAL LIMESTONE FERTILIZER, 5-10-15 MULCH, STRAW OR HAY		4000 LBS./ACRE 1500 LBS./ACRE 5000 LBS./ACRE
SEEDING SPECIES HULL COMMON BERMUDA GRASS	APPLICATION RATE/ACRE 10 LBS.	PLANTING DATES 3/1-6/15
FESCUE	50 LBS.	9/1-10/31
FESCUE RYE GRASS	50 LBS. 50 LBS.	11/1-2/28
HAY MULCH FOR TEMP. COVER	5000 LBS.	6/15-8/31

B. TOP DRESSING: APPLY WHEN PLANTS ARE 2 TO 4 INCHES TALL FERTILIZER(AMMONIUM NITRATE 33.5%)

C. SECOND-YEAR FERTILIZER: (5-10-15 OR EQUIVALENT) 800 LBS./ACRE

### HYDRAULIC SEEDING EQUIPMENT:

FERTILIZER (AMMONIUM NITRATE 33.5%)

C. SECOND-YEAR FERTILIZER: (0-20-20 OR EQUIVALENT)

WHEN HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS USED, NO GRADING AND SHAPING OR SEEDBED PREPARATION WILL BE REQUIRED. THE FERTILIZER, SEED AND WOOD CELLULOSE FIBER WILL BE MIXED WITH WATER AND APPLIED IN A SLURRY. ALL SLURRY INGREDIENTS MUST BE COMBINED TO FORM A HOMOGENEOUS MIXTURE, AND SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER MIXTURE IS MADE. STRAW OR HAY MULCH AND ASPHALT EMULSION WILL BE APPLIED WITH BLOWER-TYPE MULCH SPREADING EQUIPMENT WITHIN 24 HOURS AFTER SEEDING. THE MULCH WILL BE SPREAD UNIFORMLY OVER THE AREA, LEAVING ABOUT 25 PERCENT OF THE GROUND SURFACE EXPOSED. THE PER ACRE APPLICATION RATES ARE AS FOLLOWS:

300 LBS./ACRE

3000 LBS./ACRE

500 LBS./ACRE

#### AGRICULTURAL LIMESTONE #75 4000 LBS./ACRE 1500 LBS./ACRE FERTILIZER, 5-10-15 MULCH. (STRAW OR HAY) OR 5000 LBS./ACRE WOOD CELLULOSE FIBER MULCH 1000 LBS./ACRE

APPLICATION RATE/ACRE	PLANTING DATES
60 LBS.	
4 LBS.	3/1-6/15
6 LBS.	
40 LBS.	9/1-10/31
60 LBS.	
40 LBS.	
75 LBS.	11/1-2/28
50 LBS.	
5000 LBS.	6/15-8/31
ARE 2 TO 4 INCHES TALL	
	60 LBS. 4 LBS. 6 LBS. 40 LBS. 60 LBS. 40 LBS. 75 LBS. 50 LBS.

### GENERAL NOTES:

- 1. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN WILL INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS WITHIN SEVEN DAYS AFTER INSTALLATION.
- 2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- 3. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- 4. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- 5. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.
- 6. 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
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- 8. AFTER CONSTRUCTION, EROSION AND SEDIMENTATION WILL BE MANAGED BY STABILIZED LOT CONSISTING OF PAVED DRIVES, GRASSING, LANDSCAPING, AND COMMUNITY CENTER SITE.
- MINIMIZING WIND EROSION AND CONTROLLING DUST WILL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
- A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH NON-ERODIBLE MATERIAL
- ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND
- FREQUENT WATERING OF EXCAVATION AND FILL AREAS PROVIDING GRAVEL OR PAVING AT ENTRANCE/ EXIT DRIVES
- 10. EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- 11. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES WILL BE INSTALLED IF DEEMED NECESSARY BY THE ONSITE INSPECTOR.
- 12. EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES TO BE INSPECTED DAILY.
- 13. CUT AND FILL SLOPES SHALL NOT EXCEED 3H:1V ON RESIDENTIAL PROJECTS AND LOTS, AND LOTS SHALL NOT EXCEED 2H:1V ON ALL OTHER PROJECTS.
- 14. WEEKLY EROSION AND SEDIMENT CONTROL REPORTS SHALL BE SUBMITTED TO THE CITY ENGINEER STARTING WITH THE ISSUANCE OF THE LDP AND ENDING WHEN THE PROJECT IS RELEASED BY THE INSPECTOR.
- 15. INSPECTIONS BY QUALIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE AND THE ASSOCIATED RECORDS SHALL BE KEPT ON SITE IN COMPLIANCE WITH GAR 100001.

## DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION

I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION.

GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN.

THESE DISCREPANCIES MUST BE ADDRESS IMMEDIATELY AND A REINSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON SITE UNTIL THE DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.

#### APPENDIX B

## Nephelometric Turbidity Unit (NTU) TABLES

#### Cold Water (Trout Stream)

Surface Water Drainage Area, square miles

		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
	1.00-10	25	50	75	150	300	500	500	500
0:	10.01-25	25	25	50	75	150	200	500	500
Size, cres	25.01-50	25	25	25	50	75	100	300	500
	50.01-100	20	25	25	35	59	75	150	300
	100.01+	20	20	25	25	25	50	60	100

#### Warm Water (Supporting Warm Water Fisheries)

Surface Water Drainage Area, square miles

		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+	-
	1.00-10	75	150	200	400	750	750	750	750	
. 0:-	10.01-25	50	100	100	200	300	500	750	750	
ite Size, acres	25.01-50	50	50	100	100	200	300	750	750	
	50.01-100	50	50	50	100	100	150	300	600	
	100 01+	50	50	50	50	50	100	200	100	

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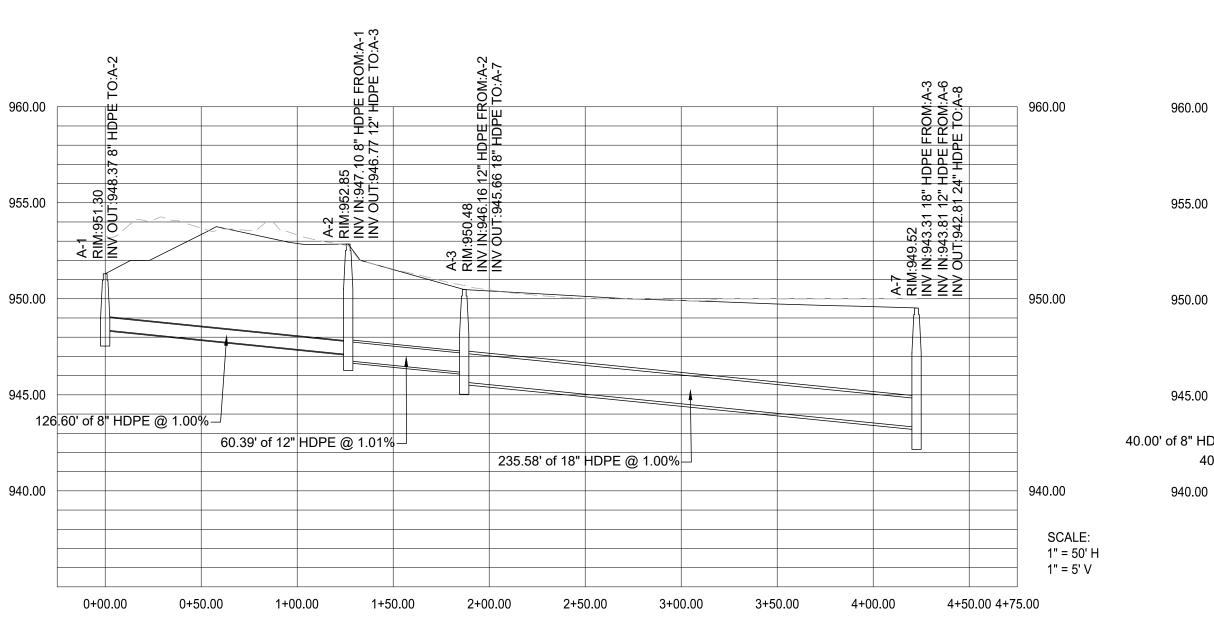
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PRIMARY PERMITTEE/24 HR. CONTACT: BRIAN BORDEN CITY OF BROOKHAVEN 3360 OSBORNE RD BROOKHAVEN, GA 30319 PHONE: (404) 637-0562

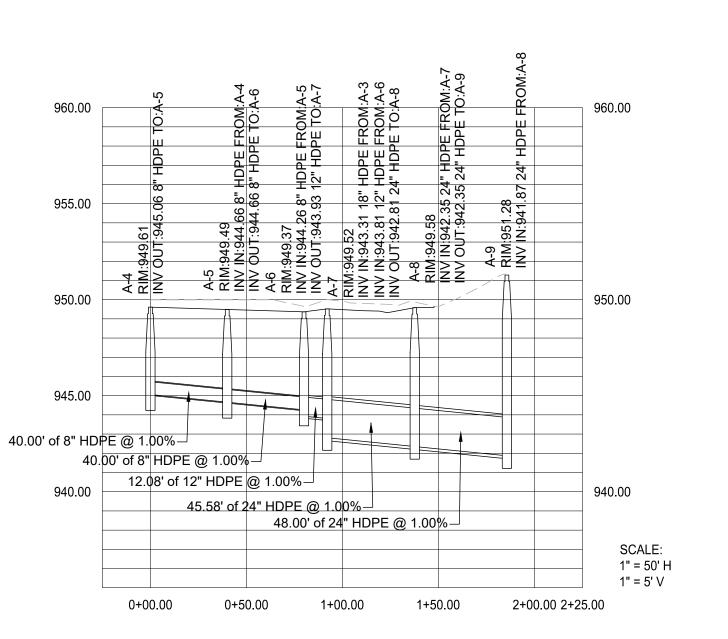
## STORM SEWER PIPE CHART

					Invert	DESIGN		DESIGN	FREQ.	WEIGHTED			DESIGN	FF FRIC		Time of		
	DIA		LENGTH	Invert Up	Down	SLOPE	Manning's	FREQ	FACTOR	<b>RATIONAL</b>	INTENSITY	AREA	FLOW	SLOPE	VELOCITY*	Concentration		
PIPE	inches	TYPE	ft	ft	ft	%	n	year	Cf	"C"	in/hr	acres	cfs	%	ft/sec	min	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE
A1-A2	8	HDPE	126.60	948.37	947.10	1.00%	0.012	25	1.1	0.85	9.35	0.07	0.6	0.22%	3.7	5.0	STANDARD GRATE INLET PER 2/C2.93	STANDARD GRATE INLET PER 1/C2.93
A2-A3	12	HDPE	60.39	946.77	946.16	1.01%	0.012	25	1.1	0.85	8.10	0.24	1.8	0.22%	4.9	5.6	STANDARD GRATE INLET PER 1/C2.93	SOLID COVER DRAIN BASIN PER 1C/2.93
A3-A7	18	HDPE	235.58	945.66	943.31	1.00%	0.012	25	1.1	0.93	8.04	1.24	10.2	0.82%	7.3	5.8	SOLID COVER DRAIN BASIN PER 1C/2.93	SOLID COVER DRAIN BASIN PER 1C/2.93
A4-A5	8	HDPE	40.00	945.06	944.66	1.00%	0.012	25	1.1	0.91	9.35	0.07	0.7	0.25%	3.7	5.0	PEDESTRIAN GRATE INLET PER 2/C2.93	PEDESTRIAN GRATE INLET PER 1/C2.93
A5-A6	8	HDPE	40.00	944.66	944.26	1.00%	0.012	25	1.1	0.91	8.21	0.12	1.0	0.56%	4.1	5.2	PEDESTRIAN GRATE INLET PER 1/C2.93	PEDESTRIAN GRATE INLET PER 1/C2.93
A6-A7	12	HDPE	12.08	943.93	943.81	1.00%	0.012	25	1.1	0.91	8.17	0.18	1.5	0.15%	4.6	5.3	PEDESTRIAN GRATE INLET PER 1/C2.93	SOLID COVER DRAIN BASIN PER 1C/2.93
A7-A8	24	HDPE	45.58	942.81	942.35	1.00%	0.012	25	1.1	0.93	7.89	1.64	13.2	0.30%	8.0	6.4	SOLID COVER DRAIN BASIN PER 1C/2.93	SOLID COVER DRAIN BASIN PER 1C/2.93
A8-A9	24	HDPE	48.00	942.35	941.87	1.00%	0.012	25	1.1	0.93	7.85	1.67	13.4	0.30%	8.0	6.5	SOLID COVER DRAIN BASIN PER 1C/2.93	JUNCTION BOX PER 4/C2.93

## PROFILE VIEW OF STORM LINE A1-A7



## PROFILE VIEW OF STORM LINE A4-A9



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STORM SEWER PIPE CHART AND PROFILES

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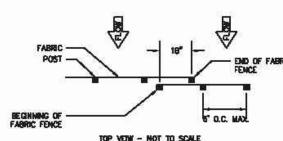
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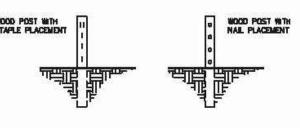
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lote: Filter Fabric may also be attached to ne post by wire, chors, and pockets or any other method provided mimimum P-factor, as required by GSWCC, is met. **FASTENERS FOR SILT FENCES** 

5 min.

6-197





MAINTENANCE

The exit shall be maintained in a condition that

will prevent tracking or flow of mud onto pub-

lic rights-of-way. This may require periodic top

dressing with 1.5-3.5 inch stone, as conditions

structures to trap sediment. All materials spilled,

demand, and repair and/or cleanout of any

CULVERT UNDER -ENTRANCE (IF NEEDED) DIVERSION RIDGE -(SEE NOTE 6)

N.S.A, R-2 (1.5"-3.5") COARSE AGGREGATE GEOTEXTILE UNDERLINER -TIRE WASHRACK AREA/ -

SUPPLY WATER TO WASH -

CROWN FOR POSITIVE DRAINAGE.

USED TO TRAP SEDIMENT.

4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".

DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).

WHEELS IF NECESSARY

GSWCC 2016 Edition

dropped, washed, or tracked from vehicles or

removed immediately.

CRUSHED STONE CONSTRUCTION EXIT

EXIT DIAGRAM

ENTRANCE ELEVATION

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

3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).

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 (DIVERT ALL SURFACE RUNOFF AND

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

RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES

Figure 6-14.1

10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC

site onto roadways or into storm drains must be

HARD SURFACE PUBLIC ROAD

(N.S.A. R-2)

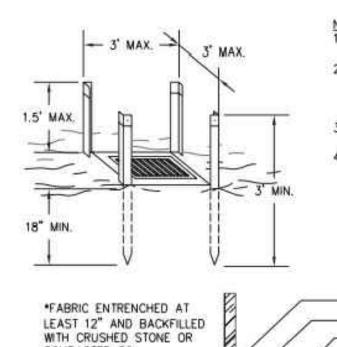
- SEDIMENT TRAP

(SEE NOTE 8)

CONSTRUCTION EXIT (Co)

## FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

#### STEEL FRAME AND TYPE C SILT FENCE INSTALLATION



1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS). THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3'

THE STEEL POSTS SHOULD BE SECURELY DRIVEN

THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE

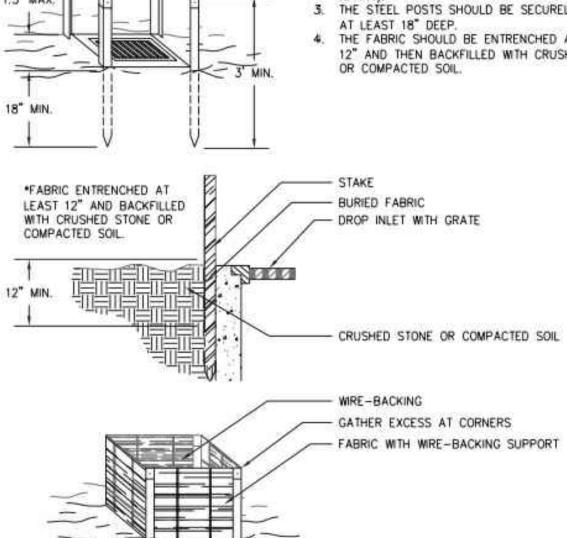


Figure 6-28.1 - Fabric and Supporting Frame For Inlet Projection

INLET SEDIMENT TRAP (Sd2-F)

# TYPICAL INSTALLATION GUIDELINES FOR ROLLED

2. HEIGHT (\*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION

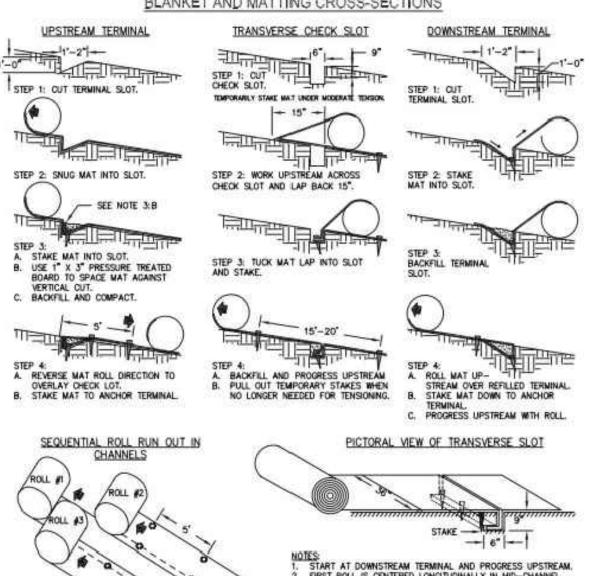
Figure 6-27.2

GSW00 (Amended - 2013)

SILT FENCE (Sd1-S)

## BLANKET AND MATTING CROSS-SECTIONS

EROSION CONTROL PRODUCTS (RECP)



START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID-CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN AUGMENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER, WORK DUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.

USE 3" OVERLAPS AND STAKE AT 5" INTERVALS ALONG THE SEAMS

USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

Figure 6-10.1 - Typical Installation Guidelines for Matting and Blankets

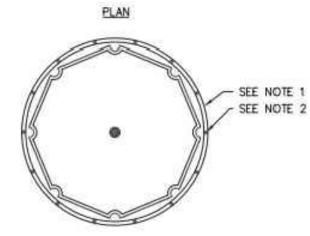
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SCALE: N.T.S.

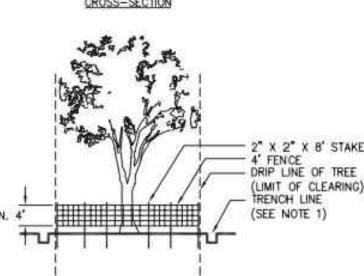
SLOPE STABILIZATION (Ss)

# TREE PROTECTION

"SNOW" FENCE



CROSS-SECTION



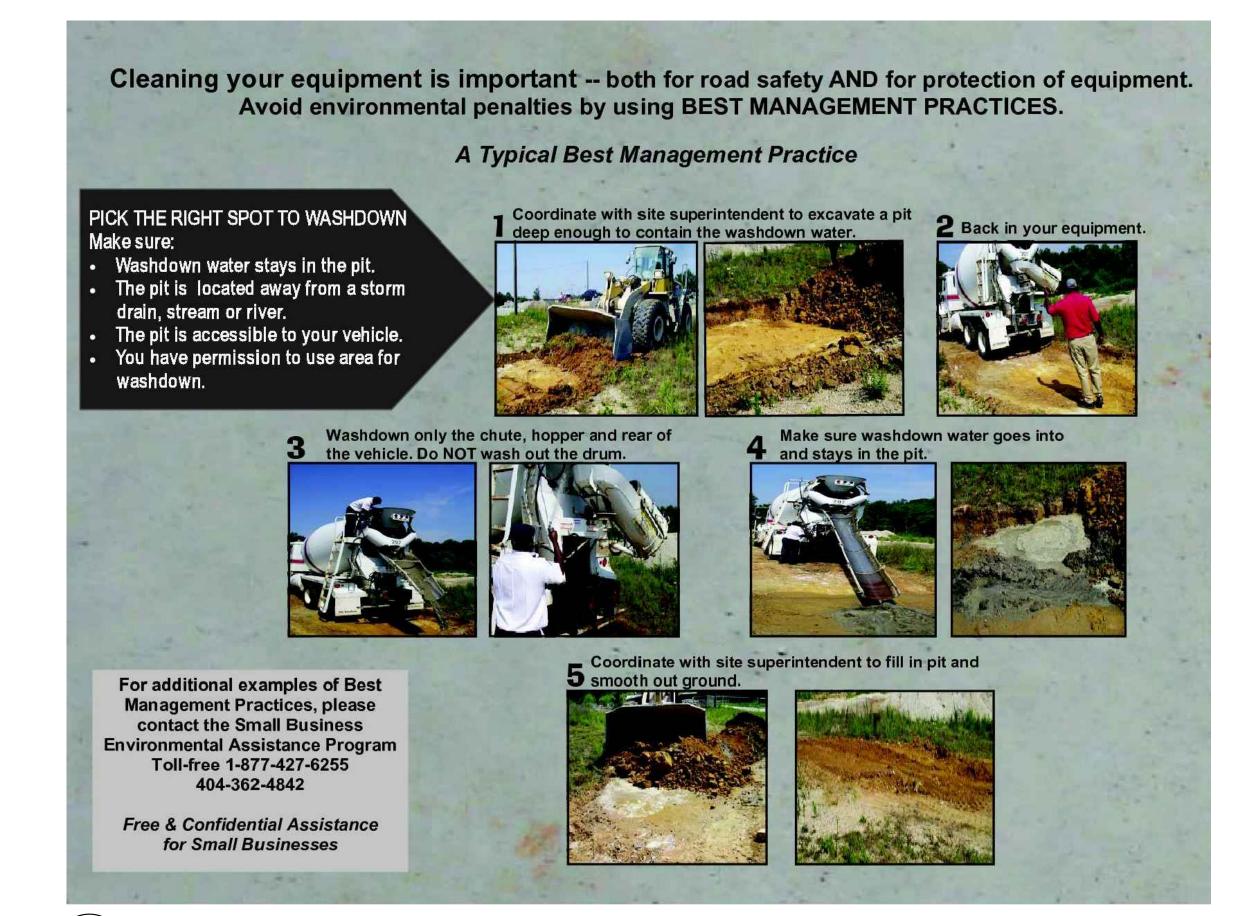
NOTES:
1. USE TRENCHER (I.E. DITCH WHICH) TO CUT A 4"-5" W X 18" D TRENCH ALONG DRIP LINE (LIMIT OF CLEARING) AND BACKFILL WITH SAND AND LIGHTLY COMPACT. 2. SPACE STAKES AT INTERVALS SUFFICIENT TO MAINTAIN ALL FENCING OUT OF DRIP LINE OR AS SHOWN BY ENGINEER (SET STAKES NO GREATER THAN 6 FEET ON CENTER-REBAR IS NOT TO BE USED FOR STAKES).

3. MAINTAIN FENCE BY REPAIRING AND/OR REPLACING DAMAGED FENCE. DO NOT REMOVE FENCING PRIOR TO LANDSCAPING OPERATIONS. 4. DO NOT STORE OR STACK MATERIALS, EQUIPMENT, OR VEHICLES WITHIN FENCED

5. FENCE SHALL BE ORANGE VINYL "SNOW FENCE" 4" HIGH MINIMUM. Figure 6-38.1

TREE PROTECTION (Tr) SCALE: N.T.S.

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**CONCRETE WASHDOWN PROCEDURE** 

IS DRAWING AND THE DESIGN SHOWN IS THE PROPERTY O



RSION NO

FIELD

TURF

SUBMITTALS / REVISIONS DESCRIPTION

DRAINAGE AND ESCP

ISSUED FOR BID

DETAILS

DRAWN BY SCALE CHECKED BY SHEET NO.

C2.90



DEFINITION

Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

## PURPOSE

To reduce runoff and erosion

#### To conserve moisture

·To prevent surface compaction or crusting

To control undesirable vegetation

To modify soil temperature

To increase biological activity in the soil

#### REQUIREMENT FOR REGULATORY COMPLIANCE

Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored and have a continuous 90% cover or greater of the soil surface.

Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months.

If any area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed. Refer to Ds2 -Dis-

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turbed Area Stabilization (With Temporary Seeding), Ds3 - Disturbed Area Stabilization (With Permanent Seeding), and Ds4 - Disturbed Area Stabilization (With Sodding).

#### SPECIFICATIONS

Mulching Without Seeding This standard applies to graded or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

#### Site Preparation

1. Grade to permit the use of equipment for applying and anchoring mulch.

Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.

Loosen compact soil to a minimum depth of 3 inches.

#### **Mulching Materials**

Select one of the following materials and apply at the depth indicated:

- Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
- Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
- Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re-used.

### Applying Mulch

When mulch is used without seeding, mulch shall be applied to provide full coverage of the

 Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical equipment.

2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.

Apply polyethylene film on exposed areas.

 Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application.

Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifers, binders and hydraulic mulch with tackifier specifically desgined for tacking straw can be substituted for emulsified asphalt. Please refer to specification Tac-Tackifers. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.

Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.

3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Table 6-4.1 - Temporary Cover or Companion Cover Crops PLANT, PLANTING RATE, AND PLANTING DATE FOR TEMPORARY COVER OR COMPANION CROPS 1

Species	Broadcas	t Rates	Resource Area <sup>3</sup>	Planting Dates by Resource Area							esou	ırce	Remarks			
				Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.												
	Rate Per Acre²	Pure Live Seed (PLS) Per 1000 sqft		J	F	М	Α	М	J	J	Α	s	0	N	D	
BARLEY Hordeum vulagre																
alone	3 bu. (144 lbs)	3.3 lbs	M-L									_				14,000 seed per pound. Winter hardy. Use
n mixture	1/2 bu. (24lbs)	0.6 lb	Р								992					on productive soils.
			С										-	_		
ESPEDEZA, ANNUAL espedeza striata																
alone	40 lbs	0.9 lb	M-L													200 000
n mixture	10 lbs	0.2 lb	Р			H										200,000 seed per pound. May volunteer for several years. Use inoculant EL.
			С		H											
OVEGRASS, WEEPING Eragrostis curvula																
alone	4 lbs	0.1 lb	M-L				_									1,500,000 seed per pound. May last for several
n mixture	2 lbs	0.05 lb	Р				H									years. Mix with Sericea lespedeza.
			С			H										
MILLET, BROWNTOP Panicum fasciculatum																
alone	40 lbs	0.9 lb	M-L													
n mixture	10 lbs	0.2 lb	Р					H	-							137,000 seed per pound. Quick dense cover. Will provide excessive competion in mixtures if
			С				-			-						seeded at high rate.

MILLET, PEARL Pennesetum glaucum						
alone	50 lbs	1.1 lbs	M-L P C			88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for mixtures.
OATS Avena sativa						
alone	4 bu. (128 lbs)	2.9 lbs	M-L			
in mixture	1 bu. (32 lbs)	0.7 lb	P C	8		13,000 seed per pound. Use on productive soils.  Not as a winter hardy as rye or barley.
RYE Secale cereale						
alone	3 bu. (168 lbs)	3.9 lbs	M-L			
in mixture	1/2 bu. (28 lbs)	0.6 lb	P C	-		18,000 seed per pound. Quick cover. Drought tolerant and winter hardy.
RYEGRASS, ANNUAL Lolium temulentum						
alone	40 lbs	0.9 lb	M-L	 		
			P	 		227,000 seed per pound. Dense cover. Very competitive and is <u>not</u> to be used in mixtures.
SUDANGRASS Sorghum sudanese						
alone	60 lbs	1.4 lbs	M-L	 		
			P C			55,000 seed per pound. Good on droughty sites.  Not recommended for mixtures.

TRITICALE X-Triticosecale					
alone in mixture	3 bu. (144 lbs) 1/2 bu. (24 lbs)	3.3 lbs 0.6 lb	С	 	Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.
WHEAT Triticum aestivum					
alone in mixture	3 bu. (180 lbs) 1/2 bu. (30 lbs)	4.1 lbs 0.7 lb	M-L P C	 	15,000 seed per pound. Winter hardy.

<sup>1</sup>Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily <sup>2</sup>Reduce seeding rates by 50% when drilled. <sup>3</sup>M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs P represents the Southern Piedmont MLRA

C represents Southern Coastal Plan; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs (see Figure 6-4.1, p. 6-40)

DISTURBED AREA STABILIZATION WITH MULCHING ONLY (Ds1) SCALE: N.T.S.

6-34

DISTURBED AREA STABLILIZATION WITH TEMPORARY SEEDING (Ds2) SCALE: N.T.S.

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**GEORGIA** 

Major Land Resource Areas

Figure 6-4.1

128 Southern Appalachian Ridges and Valleys

129 Sand Mountain

130B Southern Blue Ridge

136 Southern Piedmont

153B Tidewater Area

133A Southern Coastal Plain

153A Atlantic Coast Flatwoods

137 Carolina and Georgia Sand Hills

Spray-On Adhesive Application Requirements Water Nozzle Application Dilution Fine 235 12.5:1 Resin-in-Fine 4:1 spray

1. APPLY ACCORDING TO PLAN

2. MULCH DISTURBED AREAS AND TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL, OR TERRATACK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. 3. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.

4. IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET. 5. COVER SURFACES WITH CRUSHED STONE OR GRAVEL.

6. APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST.

7. APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS DESCRIBED IN TABLE 1. 8. PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.

9. SUPPLEMENT SURFACE COVERING AS NEEDED.

DUST CONTROL (Du)

SCALE: N.T.S.

TURF

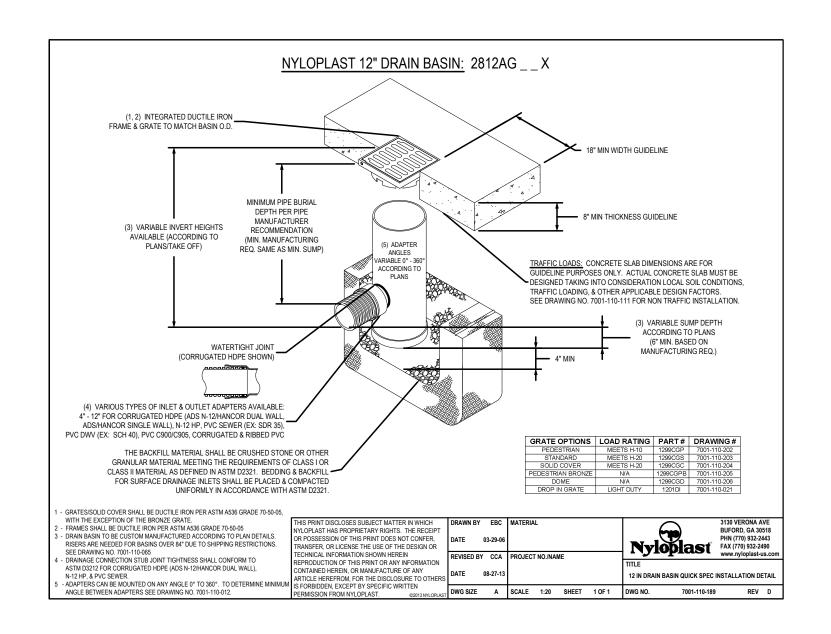
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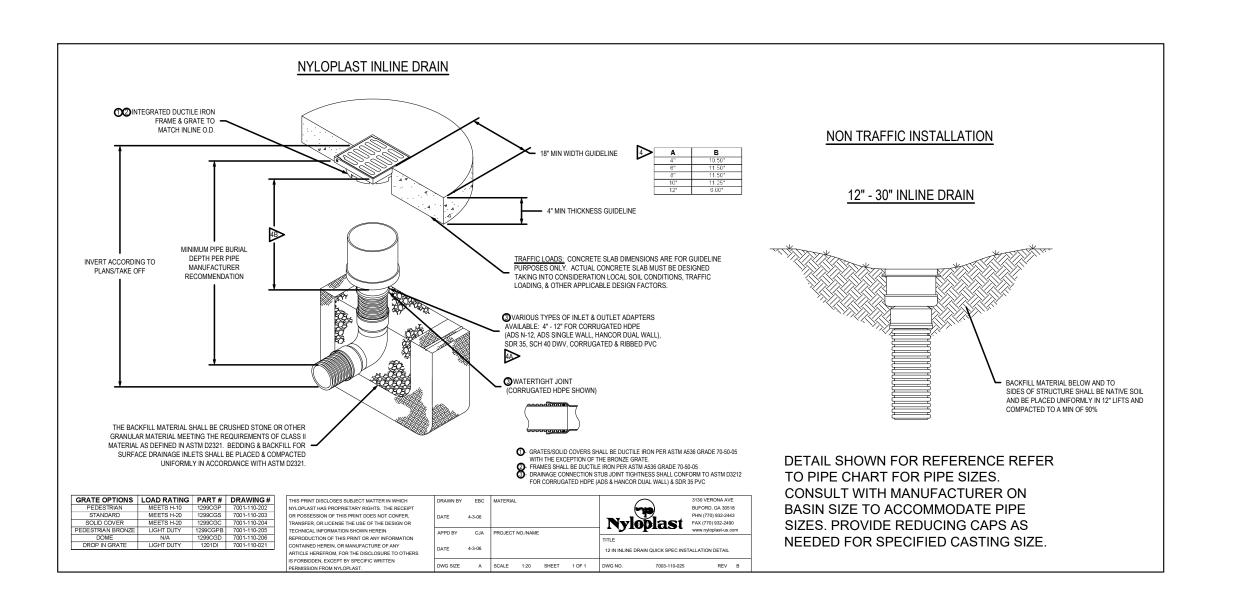
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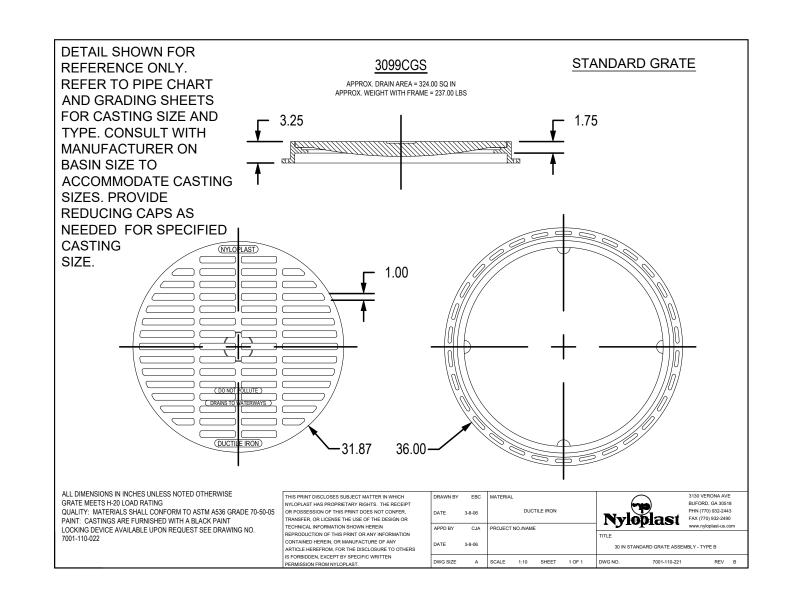
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DRAINAGE AND ESCP DETAILS

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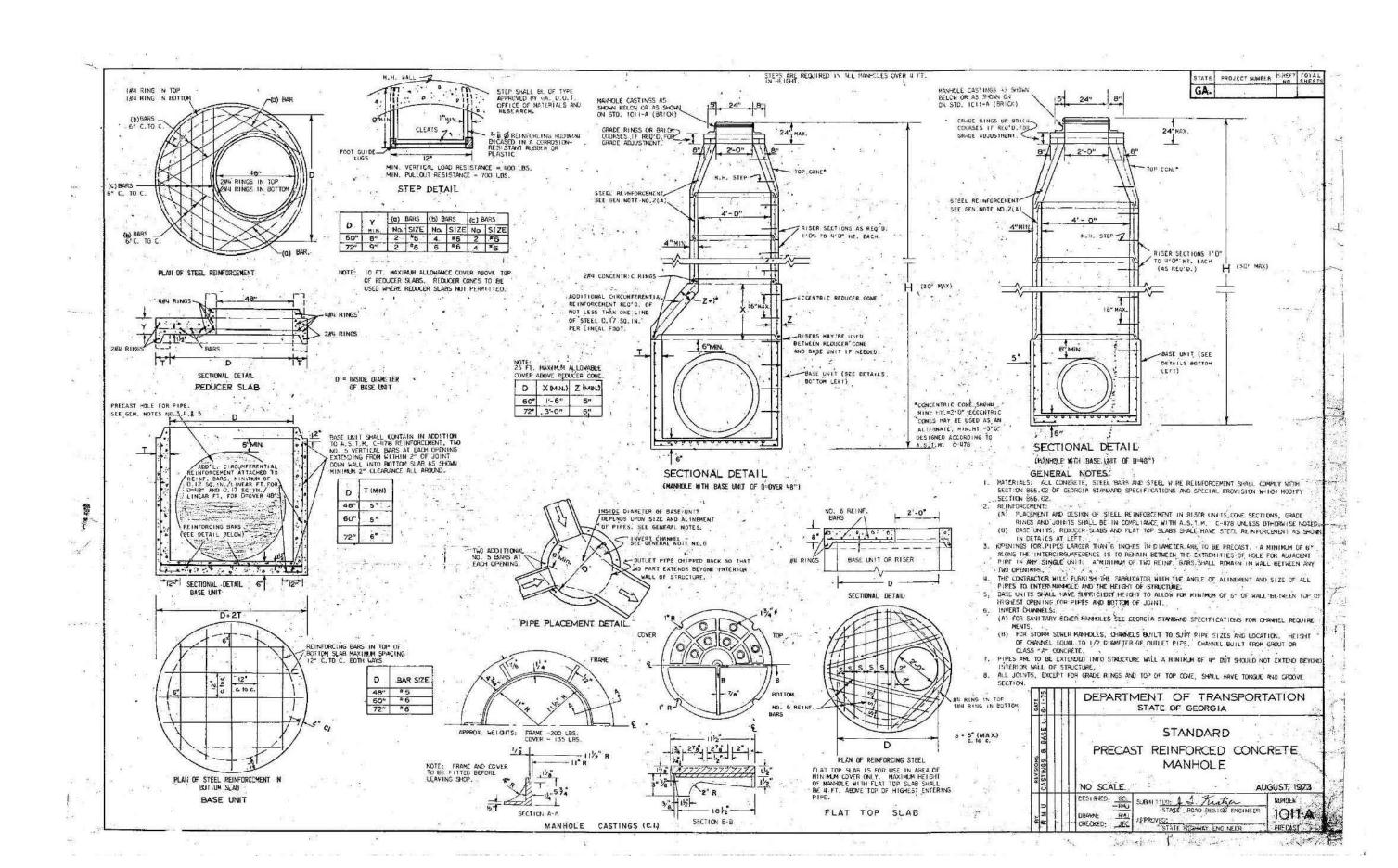






2 INLINE DRAIN
SCALE: N.T.S.

3 DRAIN GRATE ASSEMBLY
SCALE: N.T.S.





TURF FIELD CONVERSION ASHFORD PARK ELEMENTARY SCHOOL

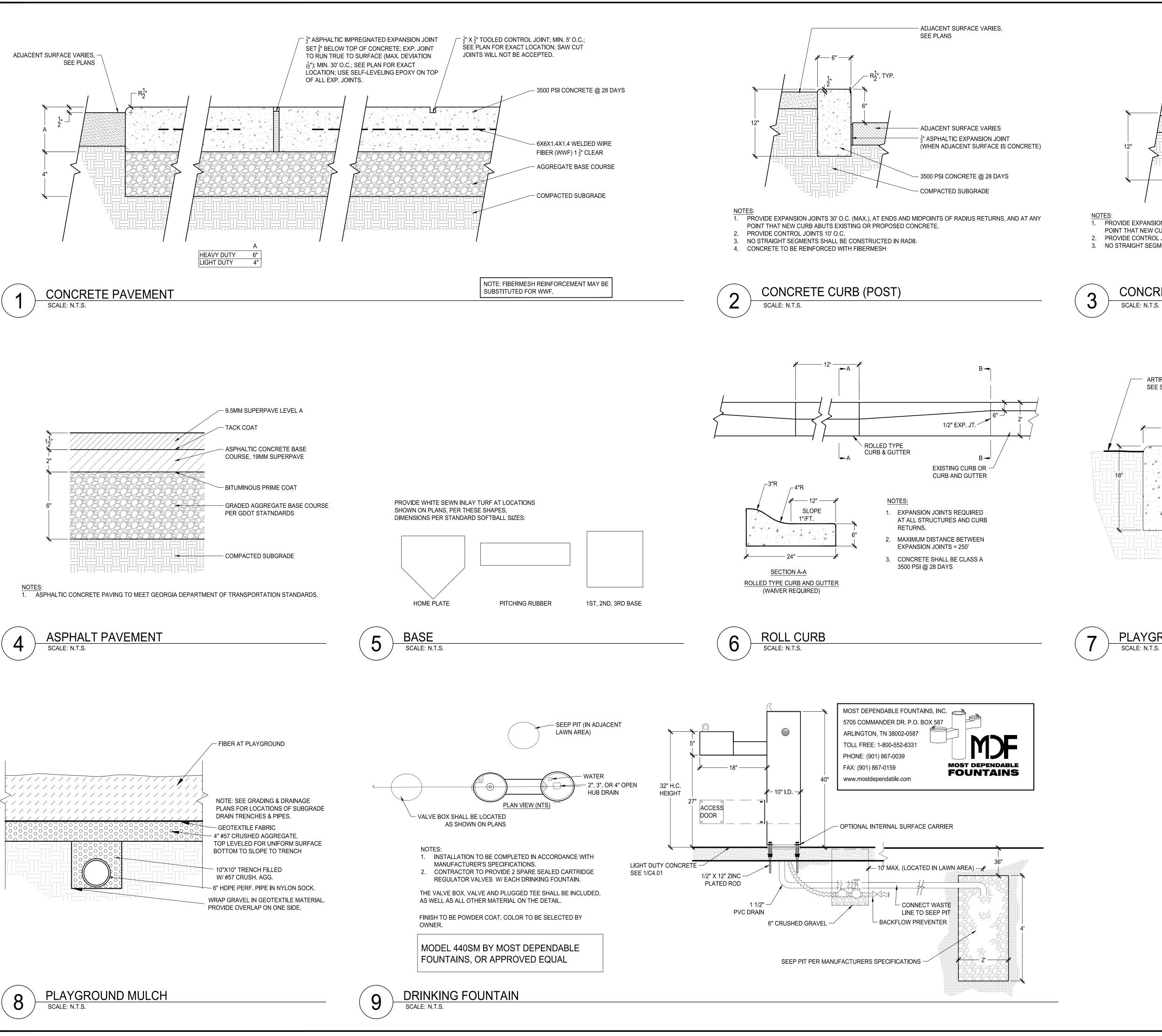
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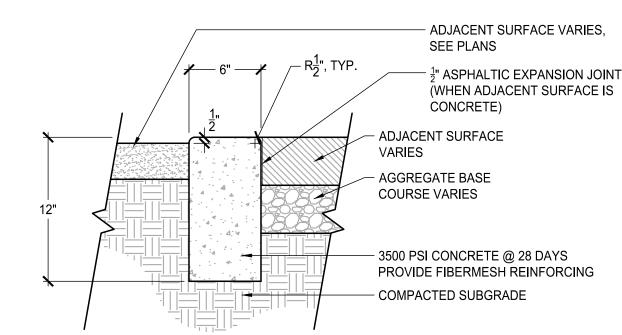
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DRAINAGE AND ESCP
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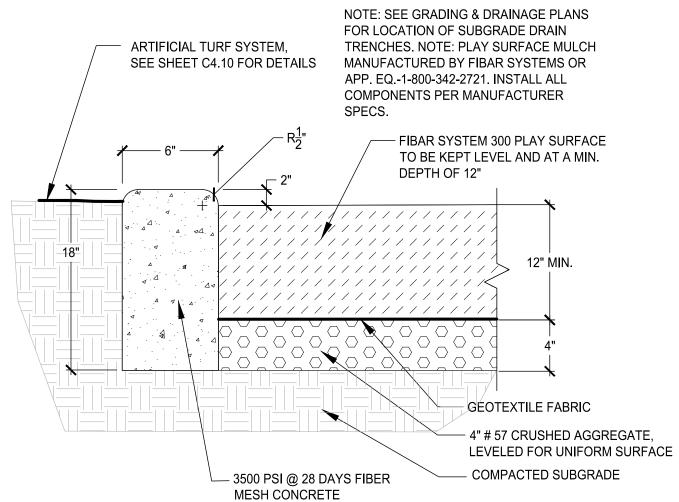




- 1. PROVIDE EXPANSION JOINTS 30' O.C. (MAX.), AT ENDS AND MIDPOINTS OF RADIUS RETURNS, AND AT ANY POINT THAT NEW CURB ABUTS EXISTING OR PROPOSED CONCRETE.
- 2. PROVIDE CONTROL JOINTS 10' O.C.
- 3. NO STRAIGHT SEGMENTS SHALL BE CONSTRUCTED IN RADII.

**CONCRETE CURB (RIBBON)** 

SCALE: N.T.S.



PLAYGROUND EDGE

**LEMENT** NO FIELD TURF

SUBMITTALS / REVISIONS NO. DATE DESCRIPTION

ISSUED FOR BID SHEET TITLE

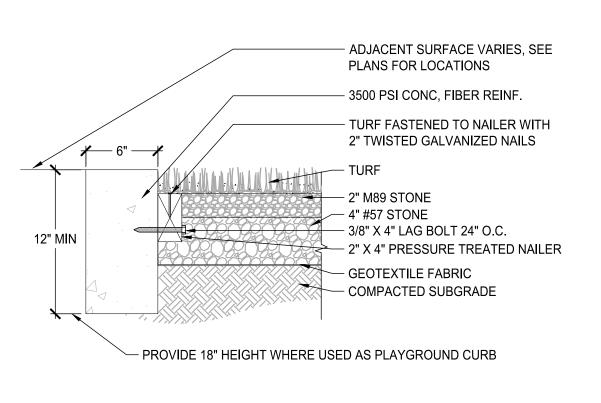
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PAVEMENT BEYOND TURNDOWN VARIES, SEE PLANS FOR ADDITIONAL INFORMATION - 3500 PSI CONC, FIBER REINF. - TURF FASTENED TO NAILER WITH 2" TWISTED GALVANIZED NAILS — 2" M89 STONE — 4" #57 STONE —— 3/8" X 4" LAG BOLT 24" O.C. 2" X 4" PRESSURE TREATED NAILER GEOTEXTILE FABRIC COMPACTED SUBGRADE

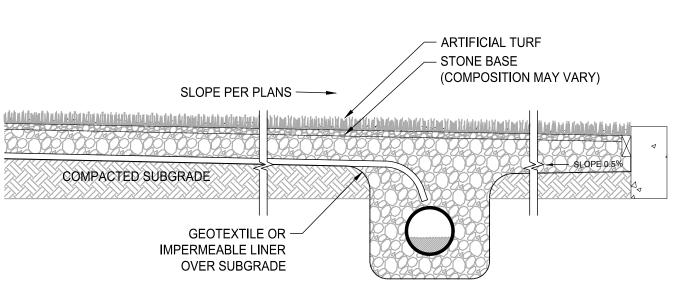
- 4" COARSE STONE - COMPOSITE DRAIN (30' O.C.) — GEOTEXTILE OR IMPERMEABLE LINER

FLAT DRAIN PIPE SECTION

— DRAIN TO BE LEVEL WITH TURF INFILL STONE BASE DROP INLET SEE PLANS -FOR ADD. INFORMATION PERIMETER COLLECTOR COMPACTED SUBGRADE — SLOPED TO DRAIN GEOTEXTILE OR IMPERMEABLE LINER TIE INTO SITE DRAINAGE (TBD BY ENGINEER OR ARCHITECT)

DRAIN INLET SECTION

CURB INSTALLATION SECTION SIDEWALK INSTALLATION SECTION



TYPICAL FIELD DRAINAGE SECTION

SEE SPECIFICATIONS FOR TURF PRODUCT REQUIREMENTS. PROVIDE INTEGRALLY STITCHED FIELD STRIPING FOR USE AS A MULTI-PURPOSE FIELD, INCLUDING: SOCCER AND SOFTBALL FIELD LINES, AS SHOWN ON PLANS.

SUBMIT PRODUCT DATA FOR REVIEW FOR FULL ARTIFICIAL TURF SYSTEM INCLUDING, BUT NOT LIMITED TO: FIELD DRAINAGE LAYOUT AND DRAINAGE COMPONENT PRODUCT DATA; AGGREGATE FILL ANALYSIS REPORTS; GEOTEXTILE PRODUCT DATA; TURF, INFILL, COOLING SYSTEM, STRIPING LAYOUT, ETC. SUBMIT COLOR OPTIONS FROM MANUFACTURER'S STANDARD COLOR PALATE FOR SELECTION BY OWNER.

SPECIFICATIONS FOR ADDITIONAL INFORMATION.

INSTALL SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. SEE

SYNTHETIC TURF SURFACE

VERSION TARY SCHOOL CON TURF

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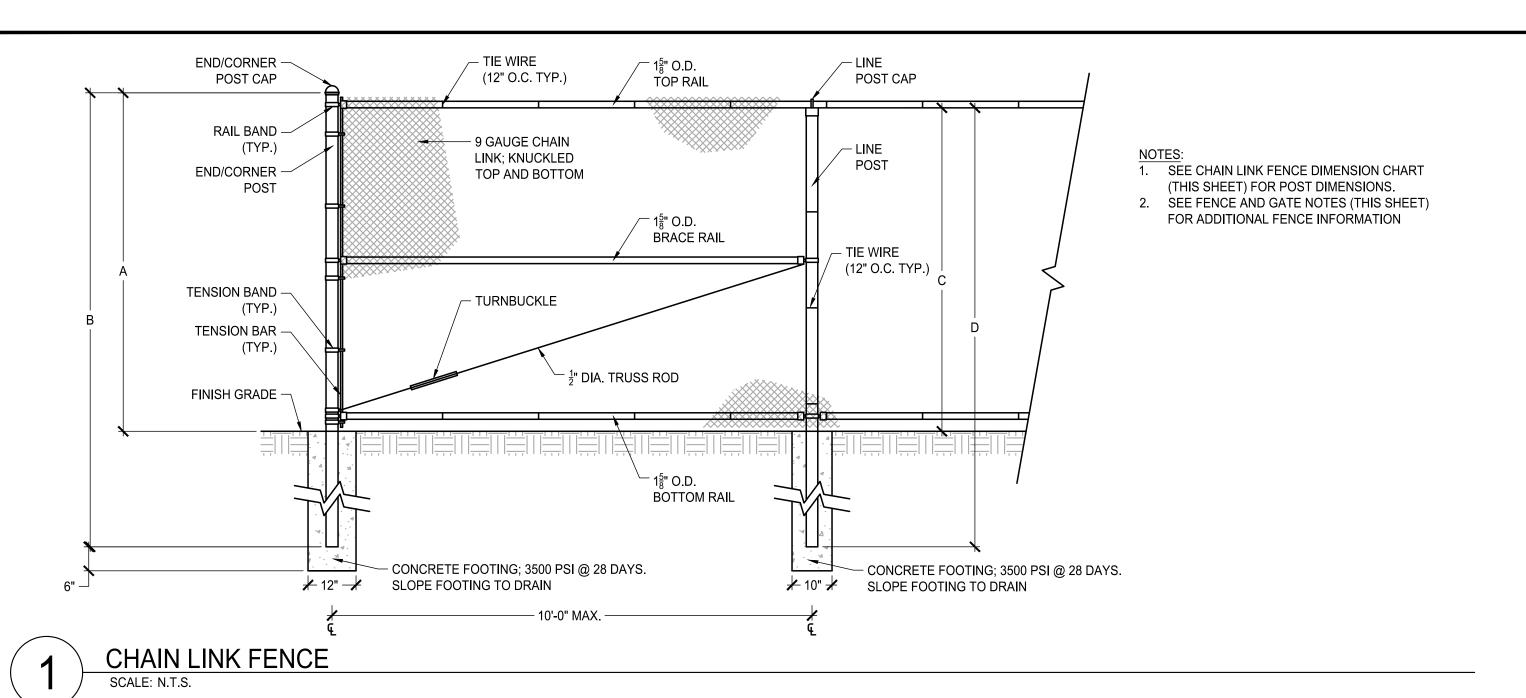
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**DETAILS** 

SCALE CHECKED BY MB SHEET NO.

C4.10



CHAIN LINK FENCE DIMENSION CHART **CORNER & END POST** LINE POST FENCE O.D. D HEIGHT 3'-6" 6'-0" 3'-9"  $3'-5\frac{3}{4}"$ 5'-6" 3'-6" 6'-2" 4'-3" 6'-8"  $3'-1\frac{3}{4}''$ 6'-6" 5'-0" 5'-3"  $4'-1\frac{3}{4}''$ 5'-8 <del>7</del>" 6'-0" 6'-0 <sup>5</sup>" 9'-1" 8'-8" 7'-0  $\frac{5}{8}$ " 6'-8  $\frac{7}{8}$ " 9'-8" 10'-1" 11'-1" 7'-8  $\frac{7}{8}$ " 8'-0"  $8'-0\frac{5}{8}''$ 10'-8" 9'-0" 12'-1" 8'-8 <sup>7</sup>'' 11'-8"  $9'-0\frac{5}{8}"$  $10'-0\frac{5}{8}"$ 13'-1" 9'-8  $\frac{7}{8}$ " 12'-8" 12'-0 <sup>5</sup>" 11'-8 <sup>7</sup><sub>8</sub>" 12'-0" 15'-1" 14'-8"

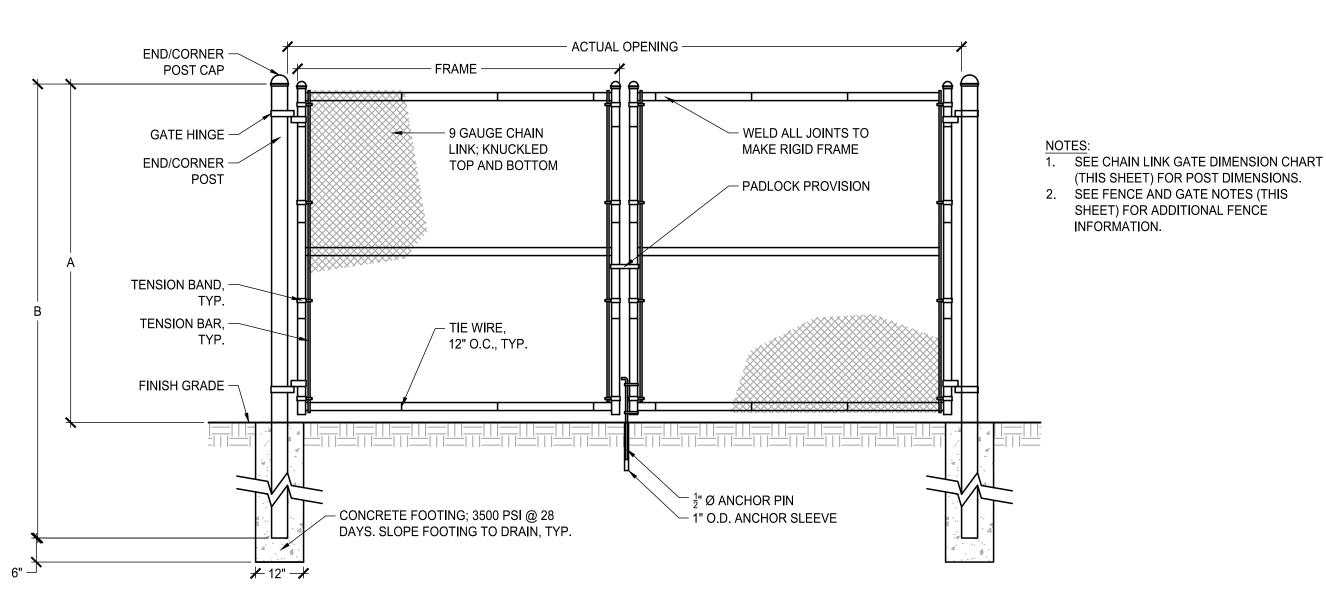
3. ALL GATES TO BE HEAVY DUTY SELF CLOSING AND SELF LATCHING. END/CORNER -POST CAP - HEAVY DUTY LEVER GATE HINGE GATE LATCH (SELF CLOSING) - PADLOCK PROVISION END/CORNER -TENSION BAND, - WELD ALL JOINTS TO MAKE RIGID FRAME TENSION BAR, — 9 GAUGE CHAIN LINK; KNUCKLED FINISH GRADE -TOP AND BOTTOM - TIE WIRE, 12" O.C., TYP. CONCRETE FOOTING; 3500 PSI @ 28 DAYS; SLOPE FOOTING TO DRAIN

SEE CHAIN LINK GATE DIMENSION CHART (THIS SHEET) FOR POST DIMENSIONS. SEE FENCE AND GATE NOTES (THIS SHEET) FOR ADDITIONAL FENCE INFORMATION.

CHAIN LINK GATE (SINGLE-SWING)

SCALE: N.T.S.

CHAIN LINK FENCE DIMENSION CHART SCALE: N.T.S.



SCALE: N.T.S.

Cl	CHAIN LINK GATE DIMENSION CHART - SINGLE GATE											
NORMAL OPENING	SQ. HINGE & LATCH POST	ACTUAL OPENING (E)	HINGE SETTING	RD. HINGE & LATCH POST	ACTUAL OPENING	HINGE SETTING	FRAME (F)					
3'-0"		3'-1"			3'-1 <sup>1</sup> / <sub>2</sub> "		2'-8 <sup>1</sup> / <sub>2</sub> "					
3'-6"	2 <u>1</u> " O.D.	3'-7"	2"		3'-7 <sup>1</sup> / <sub>2</sub> "	2 <sup>1</sup> / <sub>4</sub> "	3'-2 <sup>1</sup> / <sub>2</sub> "					
4'-0"	OR	4'-1"		2 <del>7</del> " O.D.	4'-1 <sup>1</sup> / <sub>2</sub> "		3'-8½"					
5'-0"	3" O.D.	5'-1"			5'-1 <sup>1</sup> / <sub>2</sub> "		4'-8½"					
6'-0"		6'-1"			6'-1 <sup>1</sup> / <sub>2</sub> "		5'-8½"					
7'-0"		7'-1"		4" O.D.	7'-1 <sup>1</sup> / <sub>2</sub> "		6'-8½"					
8'-0"	3" O.D.	8'-1"			8'-1 <sup>1</sup> / <sub>2</sub> "		7'-8½"					
9'-0"	3 O.D.	9'-1"			9'-1 <sup>1</sup> / <sub>2</sub> "		8'-8 <sup>1</sup> / <sub>2</sub> "					
10'-0"		10'-1"			10'-1 <del>1</del> "		9'-8 <sup>1</sup> / <sub>2</sub> "					
II .				6 <del>5</del> " O.D.	10'-2 <u>1</u> "	3 <u>1</u> "	9'-8½"					
11'-0"				4" O.D.	11'-1 <u>1</u> "	2 <u>1</u> "	10'-8 <sup>1</sup> / <sub>2</sub> "					
"				6 <del>5</del> " O.D.	11'-2 <u>1</u> "	3 <sup>1</sup> / <sub>2</sub> "	10'-8 <sup>1</sup> / <sub>2</sub> "					
12'-0"				4" O.D.	12'-1 <sup>1</sup> / <sub>2</sub> "	2 <u>1</u> "	11'-8 <sup>1</sup> / <sub>2</sub> "					
"				6 ½" O.D.	12'-2 <sup>1</sup> / <sub>2</sub> "	3 <sup>1</sup> / <sub>2</sub> "	11'-8 <sup>1</sup> <sub>2</sub> "					
13'-0"					13'-1 <sup>1</sup> / <sub>2</sub> "	ა <del>շ</del>	12'-7 <sup>1</sup> / <sub>2</sub> "					

Cl	HAIN LINI	K GATE [	DIMENSI	ON CHAI	RT - DOL	JBLE GA	TE
NORMAL OPENING	SQ. HINGE & LATCH POST	ACTUAL OPENING (E)	HINGE SETTING	RD. HINGE & LATCH POST	ACTUAL OPENING	HINGE SETTING	FRAME (F)
6'-0"		6'-0"			6' <del>-</del> 2"		2'-8 <sup>1</sup> / <sub>2</sub> "
7'-0"	2 <u>1</u> " O.D.	7'-0"			7'- <u>1</u> "		3'-2½"
8'-0"	OR	8'-0"		2 <del>7</del> " O.D.	8' <del>-</del> <u>1</u> "		3'-8½"
10'-0"	3" O.D.	10'-0"			10'- <u>1</u> "		4'-81/2"
12'-0"		12'-0"	2"		12'- <u>1</u> "	2 <u>1</u> "	5'-8 <sup>1</sup> / <sub>2</sub> "
14'-0"	3" O.D.	14'-0"			14'- <u>1</u> "	HINGE SETTING $2^{1}_{4}$ " $3^{1}_{2}$ " $2^{1}_{4}$ " $2^{1}_{4}$ " $2^{1}_{4}$ "	6'-8 <sup>1</sup> / <sub>2</sub> "
16'-0"		16'-0"		4" O.D.	16'- <u>-1</u> "		7'-8 <u>1</u> "
18'-0"		18'-0"			18' <del>-</del> ½"		8'-8 <sup>1</sup> / <sub>2</sub> "
20'-0"		20'-0"			20' <del>-</del> 1"		
11				6 <sub>8</sub> O.D.	20'-2 <del>1</del> "	3 <u>1</u> "	9'-81/2"
22'-0"				4" O.D.	22' <del>-</del> ½"	21/4"	10'-8 <del>1</del> "
11				6 <del>5</del> " O.D.	22'-2 <u>1</u> "	3½"	10'-8 <u>1</u> "
24'-0"				4" O.D.	24'-1"	2 <del>1</del> "	11'-8 <u>1</u> "
11				C511 O D	24'-2 <u>1</u> "	2111	11'-8 <sup>1</sup> <sub>2</sub> "
26'-0"				- 6 <sup>5</sup> / <sub>8</sub> " O.D.	26' <del>-</del> 1"	3 <u>1</u> "	12'-7 <sup>1</sup> / <sub>2</sub> "

CHAIN LINK GATE (DOUBLE-SWING)

SCALE: N.T.S.

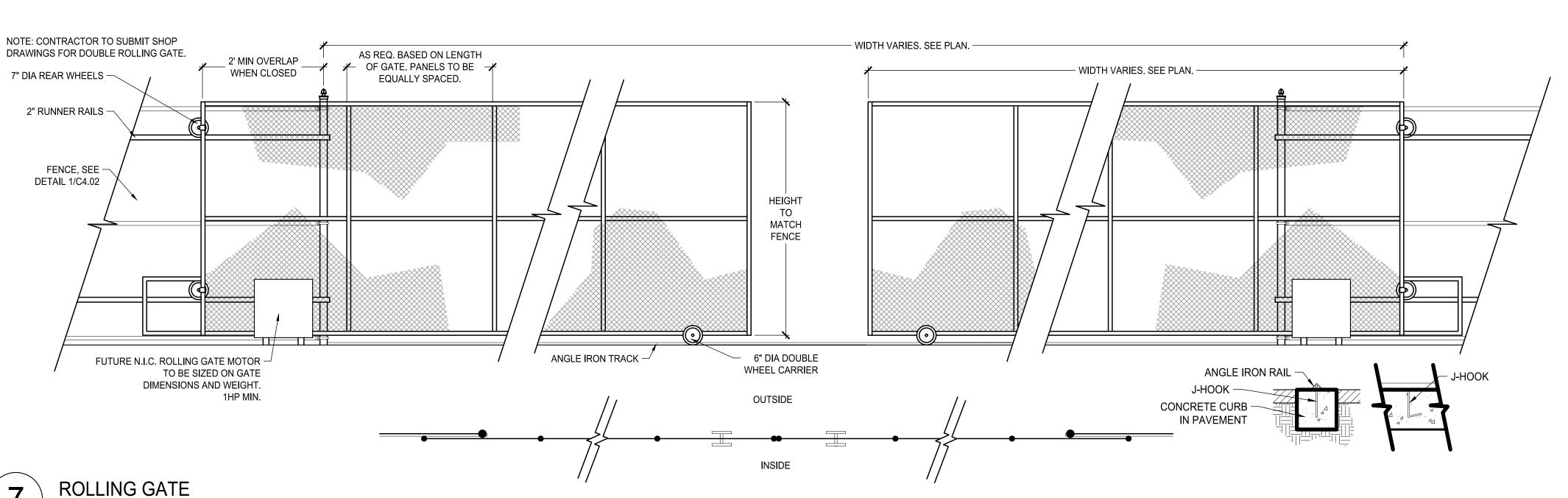
CHAIN LINK GATE DIMENSION CHARTS

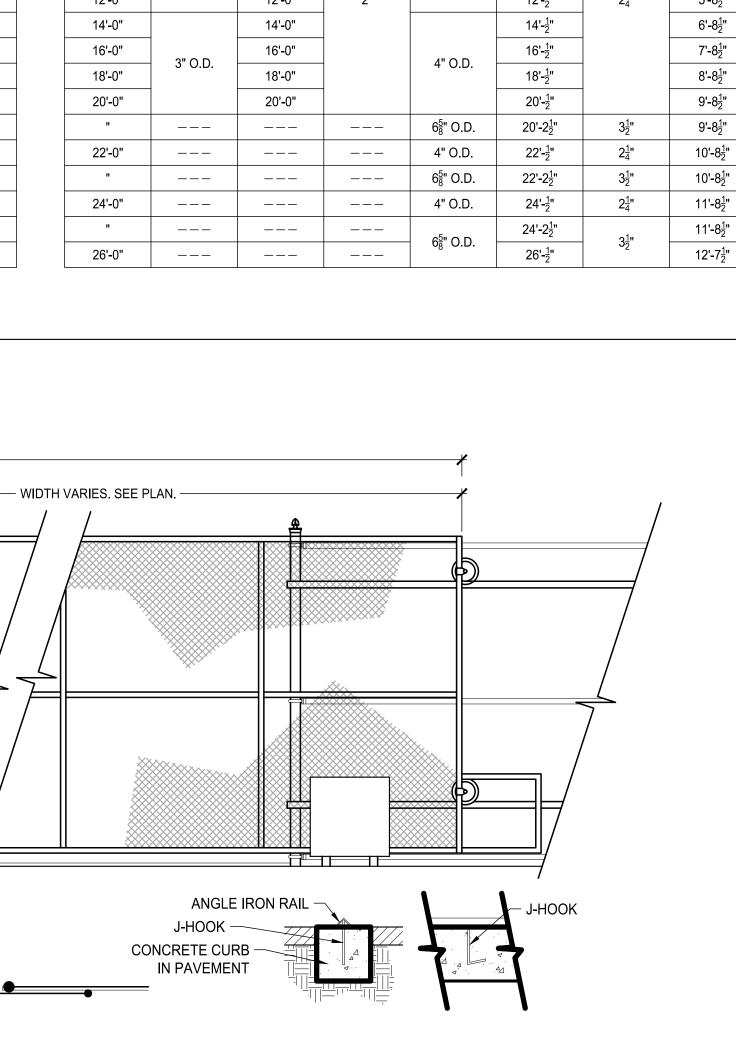
NOTES:	
<ol> <li>ALL POSTS AND RAILS SHALL BE LOCATED W/FABRIC TO THE INSIDE.</li> </ol>	OUTSIDE THE PLAYING FIELDS

- 2. ALL TERMINAL AND LINE POST 20'-0" OR TALLER SHALL BE 4" DIA. SCH. 40 STEEL UNLESS OTHERWISE NOTED
- 3. ALL RAILS SHALL BE 1-5/8"X1/4" ROLL FORMED STEEL OR EQUAL C TYPE
- 4. ALL POSTS SHALL BE EQUIPPED WITH EITHER LINE POST CAPS OR STANDARD CAPS.
- 5. ALL FENCING SHALL BE KNUCKLED TOP AND BOTTOM.
- 6. SEE FENCING CHARTS FOR CORNER POST AND LINE POST REQUIREMENTS.
- 7. CHANGES IN REQUIRED PLANS DUE TO SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR APPROVAL.
- 8. ALL FIELD ACCESS GATES TO BE SINGLE PANELS UNLESS NOTED OTHERWISE ON PLANS.
- 9. SOFT STEEL TIES. ( 9 GAUGE STEEL TO MATCH FENCE FABRIC COATING.)
- 10. MID-RAIL ON FENCING OVER 6'.
- 11. FENCING HT.: 4' AND UNDER 1 BAND PER FOOT. FENCING HT.: 5' AND ABOVE 1 BAND LESS THAN HT. OF FENCE.

NOTE: ALL FENCE FABRIC, POSTS, RAILS, HARDWARE, ETC., TO BE FUSION BONDED PVC, COLOR: BLACK. NOTE WIRE GAUGE SPECIFICATIONS REFER TO CORE WIRE SIZE ONLY (NOT CORE WIRE PLUS FINISH COATING)

CHAIN LINK NOTES SCALE: N.T.S.





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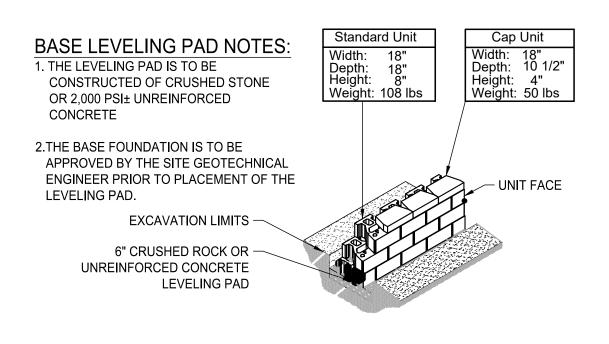
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DETAILS

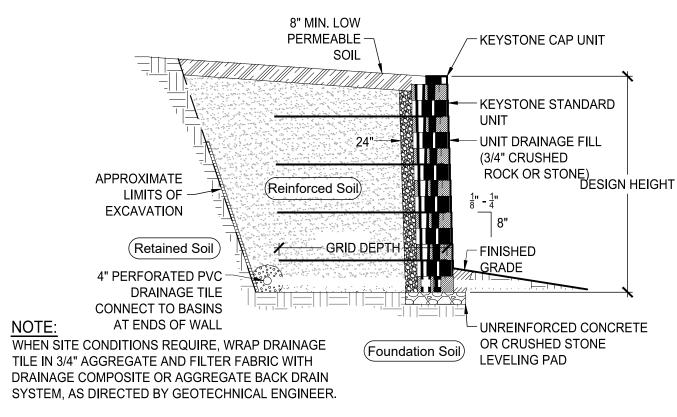
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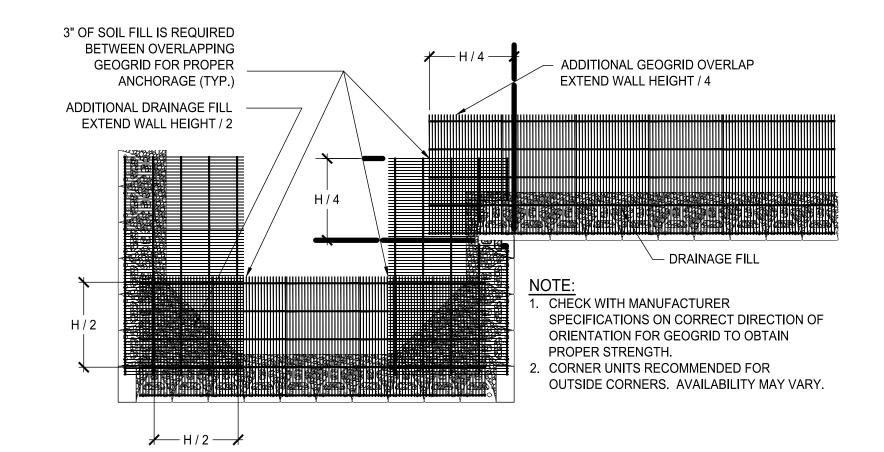
GEOGRID INSTALLATION ON CURVES



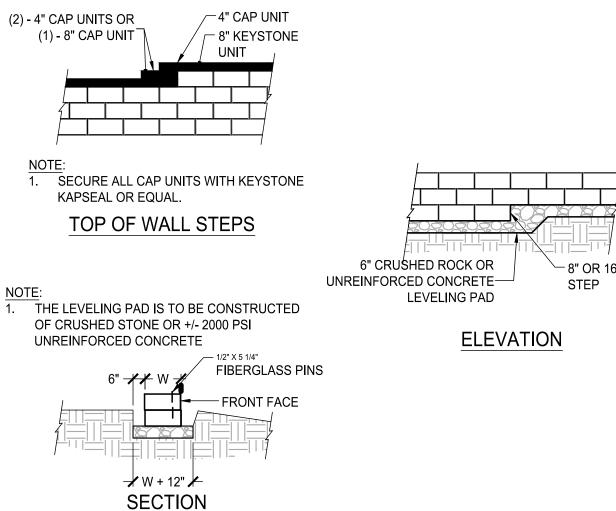
STANDARD UNIT / BASE PAD ISOMETRIC SECTION VIEW



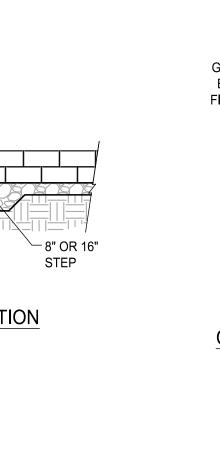
TYPICAL REINFORCED WALL SECTIOIN STANDARD UNIT - NEAR VERTICAL SETBACK



GEOGRID INSTALLATION AT CORNERS

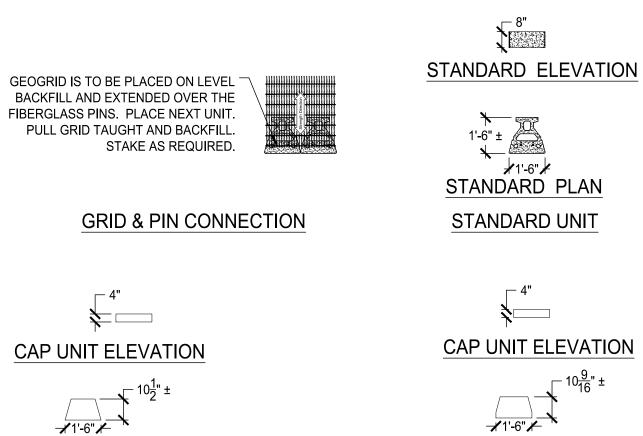


LEVELING PAD DETAIL



CAP UNIT PLAN

UNIVERSAL CAP UNIT OPTION



CAP UNIT PLAN

STRAIGHT SPLIT CAP UNIT OPTION

VERSION CON FIELD TURF

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08/13/2018 SCALE CHECKED BY

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ISSUED FOR BID

SHEET NO.

MODULAR RETAINING WALL DESIGN MUST BE SUBMITTED TO CITY OF BROOKHAVEN FOR APPROVAL PRIOR TO CONSTRUCTION PLAN APPROVAL. WALL DESIGN MUST INCLUDE DETAILS AND SPECIFICATIONS THAT ARE SITE SPECIFIC AND MUST BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA.

NOTE: SEGMENTAL RETAINING WALL SHOWN FOR REFERENCE PURPOSES ONLY.

SHOP DRAWINGS OF ALL COMPONENTS, SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF GEORGIA ARE TO BE SUBMITTED FOR REVIEW PRIOR TO FINAL AUTHORIZATION OF REQUIRED BUILDING PERMIT. THIS IS TO BE DONE PRIOR TO ORDERING, FABRICATION, CONSTRUCTION, ETC.

NOTE: IN SOME LOCATIONS, FENCING IS TO BE INSTALLED AT TOP OF WALLS. THE CONTRACTOR IS TO CONSIDER THE NECESSARY COMPONENTS TO ALLOW THIS TO OCCUR IN HIS BID AND IN THE DESIGN OF THE FENCE/WALL SYSTEM AND IS TO SUBMIT DETAILS FOR REVIEW PRIOR TO CONSTRUCTION.

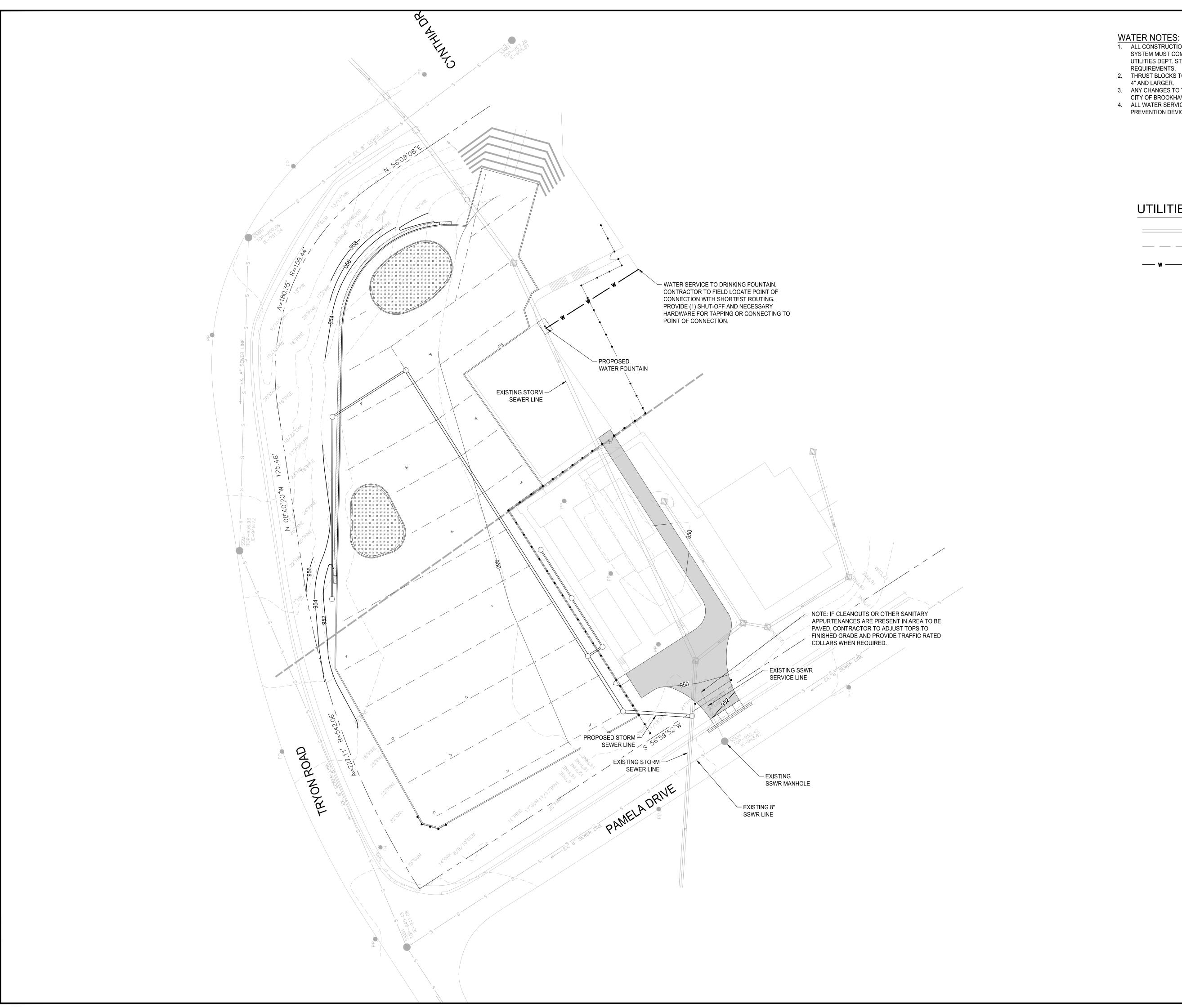
WHEN PLANNING STEP DOWNS IN WALL ELEVATION, DISTRIBUTE STEPS IN

FOUNDATIONS AND CAPS EVENLY ALONG LENGTH OF WALL.

CONSULT KEYSTONE ENGINEER FOR WALL DESIGN AND

CONSTRUCTION CONSULTATION. (800) 545-0754

SEGMENTAL WALL



- 1. ALL CONSTRUCTION METHODS AND MATERIALS USED IN THE WATER SYSTEM MUST COMPLY IN ALL REGULATED CITY OF BROOKHAVEN PUBLIC UTILITIES DEPT. STANDARDS, SPECIFICATIONS AND INSPECTION
- 2. THRUST BLOCKS TO BE USED AT ALL BENDS, PLUGS, AND TEES ON LINES
- 3. ANY CHANGES TO THE WATER DRAWINGS MUST BE APPROVED BY THE
- CITY OF BROOKHAVEN UTILITIES DEPARTMENT.
- 4. ALL WATER SERVICE LINES SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES.

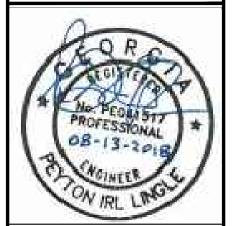
DESIGNATION OF THE SPACES FOR LI

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UTILITIES LEGEND:

PROPOSED COLLECTOR STORMWATER PIPE

PROPOSED STORM DRAIN LETERAL



MENT

TURF FIELD CONVERSION
ASHFORD PARK ELEMENTARY SCHOOL

CITY OF BF )KHAVEN

SUBMITTALS / REVISIONS

NO. DATE DESCRIPTION

ISSUED FOR BID

UTILITY PLAN

PROJECT NO. 18081-1	DATE 08/13/2018
DRAWN BY LC	SCALE 1"=30'
CHECKED BY MB	1
SHEET NO.	

SCALE: 1" = 30'

C5.00