CITY OF MABLETON, GEORGIA

5656 Mableton Parkway , Mableton , GA
October 16, 2025 at 6:00 PM

Conrad A. Woods – Board of Zoning Appeals Member – District 1
Gerri Aldridge - Board of Zoning Appeals Member – District 2
Helen Butler-Simmons Board of Zoning Board of Zoning Appeals Member District - 3
Christopher S. Semler Board of Zoning Appeals Member – District 4
Wendy Brown-Sanders Board of Zoning Appeals Member – District 5
Chijioke Ebbis Board of Zoning Appeals Member – Mayor Appointment

PLANNING COMMISSION REGULAR MEETING AGENDA

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **APPROVAL OF MINUTES**
4. **UNFINISHED BUSINESS**
5. **NEW BUSINESS**
   a. **VAR-2025-008 - 130 Veterans Memorial Hwy (Tax Parcel 18004400080) - Applicant is requesting encroachment into the 20' landscape buffer for retaining walls, playground, and dumpster.**
   b. **VAR-2025-007 - 1040 Highland Village Trail (Tax Parcel 18006600550) - Request variance for accessory structure (swimming pool) placement - Staff Hold**
6. **ADJOURNMENT**

Persons with special needs relating to handicapped accessibility, disability, or foreign language may contact the City Clerk at (404) 927-9502 or susan.hiott@mableton.gov at least three days prior to the meeting. The clerk can be located at the City of Mableton Offices, Riverside EpiCenter, 135 Riverside Pkwy, Austell, Georgia 30168 during regular office hours.

LAND DEVELOPMENT PLANS

FOR

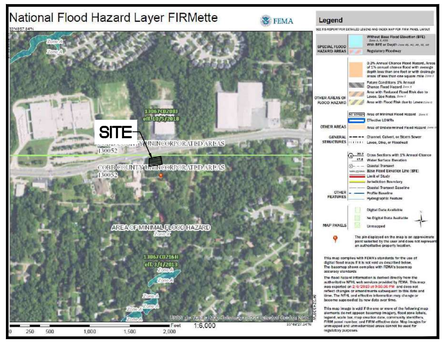
THE MANOR PREP

INTERNATIONAL SCHOOL

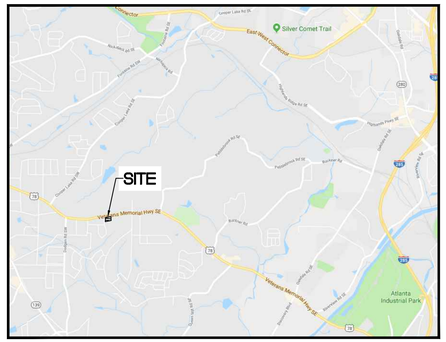
130 VETERANS MEMORIAL HWY. SE
MABLETON, COBB COUNTY, GA
LAND LOT 44, 18TH DISTRICT
PARCEL ID: 18004400080

"SPR-2019-00145"

AERIAL MAP
NOT TO SCALE



FEMA MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

PROJECT NARRATIVE

THE SCOPE OF THIS PROJECT IS TO DEVELOP AN APPROX. 21,600 SF DAYCARE FACILITY. CONSTRUCTION TO INCLUDE MINOR CLEARING, GRADING, BUILDING CONSTRUCTION, ASPHALT DRIVEWAYS & PARKING, AND ASSOCIATED UTILITIES. STORMWATER FROM THE SITE WILL BE CONVEYED TO THE PROPOSED UNDERGROUND DETENTION FACILITY.

SITE INFO

TOTAL SITE AREA: 1.70 AC.
TOTAL DISTURBED AREA: 1.63 AC.
TOTAL EXISTING IMPERVIOUS AREA: 0.0 AC.
TOTAL PROP. IMPERVIOUS AREA: 0.89 AC. (52.3%)
TOTAL PROP. PERVIOUS AREA: 0.81 AC. (47.7%)
ZONING: LOW-RISE OFFICE DISTRICT (LRO)

This site plan review is limited in scope to site preparation for construction. The egress components have not been reviewed. All building(s), structure(s), egress components, including ramps and stairs must be submitted separately to the fire marshal's office for review and approval prior to occupancies. Independent building permits are required in addition to the Land Disturbance Permit. The person identified below is designated at the design professional responsible for all means of egress components outside of the building.
Name EMMANUEL ABUA Phone 404.643.6044

CONTACTS

OWNER/DEVELOPER

ISHERE CORPORATION
5205 TIMBER RIDGE ROAD
MARIETTA, GA 30068
PHONE: (770) 365-8196
CONTACT: OLUWOLE TONY IMOUKHUEDE

CIVIL ENGINEER

CONCEPT ENGINEERING SERVICES, LLC
6735 PEACHTREE IND. BLVD. STE. 100
DORAVILLE, GA 30360
PHONE: (404) 643-6044
CONTACT: EMMANUEL ABUA

SURVEYOR

THE CRUSSELLE COMPANY
2981 POWDER SPRINGS ROAD
MARIETTA, GA 30064
PHONE: (770) 943-5903

AGENCIES

PLAN REVIEW

COBB CO. COMMUNITY DEVELOPMENT
1150 POWDER SPRINGS STREET
MARIETTA, GA 30064
PHONE: (770) 528-2147
CONTACT: DAVID GRIFFIN

WATER

COBB CO. WATER SYSTEM
660 S. COBB DRIVE
MARIETTA, GA 30060
PHONE: (770) 419-6312
CONTACT: TIMOTHY DAVIDSON

TRANSPORTATION

COBB CO. DEPT. OF TRANSPORTATION
1890 COUNTY SERVICES PARKWAY
MARIETTA, GA 30008
PHONE: (770) 528-1600
CONTACT: AMY DIAZ

TRANSPORTATION

GEORGIA DEPT. OF TRANSPORTATION
5025 NEW PEACHTREE RD
CHAMBLEE, GA 30341
PHONE: (770) 216-3899
CONTACT: RYAN ENSLEY

SUBMITTAL DATE

UNITY DEVELOPMENT SUBMITTAL – 4/17/2019
NSPORTATION (GDOT) RESUBMITTAL – 2/18/2020
NITY DEVELOPMENT RESUBMITTAL – 2/19/2020

CCWS
Approved by: Tim Davidson
* 1 set
03-12-2020

05/28/20
APPROVED FOR LAND DISTURBANCE PERMIT
Cobb County Development & Inspections Division
Approved by: Edward Matos

FULL SITE

APPROVED
Cobb County Department of Transportation
Approved by: James Washington

APPROVED
Cobb County Planning Commission and Zoning Division
These drawings were reviewed under the applicable laws and zoning stipulations adopted at this time. Every effort was made to catch all code and/or stipulation violations, but this does not relieve the owner of the responsibility to comply with items missed or unknown to the reviewer.
Approved by: Terry Martin

Cobb County Erosion Control Division
Approved for erosion control only. All erosion and sediment control devices must be installed prior to the construction of any building.
Approved by: Frank Gipson
03-13-2020

APPROVED
Cobb County Stormwater Management Division
Approval signifies general plan conformance to the Cobb County Code. The Design Professional and Developer remain solely responsible for the design and for correcting any and all errors, problems and code violations (if any) exposed during construction AFTER authorization by Cobb County.
Approved by: Andrew Heath
3-13-2020
Hold C.O. for Maintenance Agreement.
HYDRO

APPROVED
Cobb County
Site Plan Review Section - Arborist
This plan is in compliance with all tree preservation and/or landscaping requirements of the Cobb County Code. If any changes must be made due to plant material availability, site conditions or other reasons, a new plan must be submitted to the Community Development Agency Site Plan Review Section for review and approval prior to planting. Failure to do so will delay final project approval.
Approved by: Cecil Atchley
3-13-2020

APPROVED
Cobb County
Structural Plan Review Section
Every effort has been made to ensure that these plans comply with all applicable codes and ordinances. Items undetected or unknown to the reviewer may exist. The owner is responsible for the responsibility to comply with the applicable codes and ordinances.
Approved by: David Giran

Cobb County does not certify the accuracy of these plans. Approval by the County is based on its reliance on the information and representations submitted by the licensed professional whose name and seal appear on these plans. Cobb County assumes no liability or responsibility for the accuracy of the representations shown hereon.

SITE PLANS APPROVED
Cobb County
Fire Marshal's Office
SITE APPROVAL ONLY.
ALL EXTERNAL STAIRS, RAMPS AND EGRESS COMPONENTS MUST BE REVIEWED AND APPROVED SEPARATELY BY COBB FMO
3.12.2020 MKL
Approved by: Mary Lanning

RELOCATION OF ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE BUILDER.

COBB CO. ZONING NOTES

1. COBB COUNTY ACCEPTS NO RESPONSIBIL ITY FOR THE AMERICANS WITH DISABILITIES ACT (ADA), EXCEPT FOR NOTIFICATION REQUIREMENT. THE OWNER/DEVELOPER IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH SAID ACT.
2. ANY CONSTRUCTION TRAILERS TO BE PERMITTED THROUGH THE ZONING DIVISION.
3. ANY SIGNS TO BE PERMITTED THROUGH THE COBB COUNTY ZONING DIVISION; I.E., SUBDIVISION ENTRANCE SIGNS, MONUMENTS, AND ALL COMMERCIAL SIGNS. THE LOCATION OF SUBDIVISION SIGNS MUST ALSO BE SHOWN ON THE PLANS.
4. THE PARKING LOT AND PARKING SPACES SHALL CONFORM TO COUNTY DETAIL # 114.

COBB CO. LANDSCAPE NOTES

A LANDSCAPE CONFERENCE IS REQUIRED FOR THIS PROJECT PRIOR TO ANY FINISH LANDSCAPING. CALL THE COBB COUNTY ARBORIST AT (770) 528–2124 OR LANDSCAPE ARCHITECT AT (770) 528–2149. THERE ARE CRITICAL FACTORS ON THE LANDSCAPE PLAN THAT AFFECT BOTH THE GENERAL CONTRACTOR AND THE LANDSCAPE CONTRACTOR. PLANTING AREA DIMENSIONS, PLANTING METHODS AND AS WELL AS PLANT MATERIALS MUST BE IN ACCORDANCE WITH THE APPROVED PLAN, OR THE LANDSCAPE INSPECTOR MAY DELAY THE RELEASE OF THE CERTIFICATE OF OCCUPANCY.

COBB CO. DOT NOTE

A GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) PERMIT IS REQUIRED. APPROVAL OF WORK WITHIN OR ADJACENT TO GDOT RIGHT–OF–WAY IS DEFERRED TO GDOT (770) 216–3893 OR 3891, CHAMBLEE PERMITTING OFFICE.

RETAINING WALL NOTE

RETAINING WALLS OTHER THAN THOSE IN A STORMWATER STRUCTURE MAY BE SUBMITTED AFTER THE LDP IS ISSUED. RETAINING WALL PLANS THAT ARE NOT INCLUDED IN THIS PLAN SET MUST BE SUBMITTED AS A REVISION TO THIS LDP (NOT AS A SEPARATE RETAINING WALL PERMIT).

COBB CO. HISTORIC PRESERVATION NOTE

THE COBB COUNTY CEMETERY PRESERVATION COMMISSION RESERVES THE RIGHT TO EXAMINE THIS PROPERTY FOR ETHNIC, CULTURAL AND RELIGIOUS EVIDENCE LOCATED THEREIN. IF ANY ETHNIC, CULTURAL OR RELIGIOUS EVIDENCE IS FOUND DURING DEVELOPMENT, THEN THE COBB COUNTY CEMETERY PRESERVATION COMMISSION MUST BE NOTIFIED AT ONCE AT (770) 528–2035. FAILURE TO DO SO WILL RESULT IN A STOP–WORK ORDER.

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER
1 OF 1	SURVEY BY OTHERS
C0.5	APPROVED DOCUMENTS
C2.0	SITE PLAN
C2.1	FIRE TRUCK TURN
C2.5	GDOT SITE PLAN
C3.0	GRADING PLAN
C3.5	STORM PROFILES
C3.6	STORM PROFILES
C4.0	UTILITY PLAN
C4.5	SEWER PROFILES
C5.0	EROSION PHASE I
C5.1	EROSION PHASE II
C5.2	EROSION PHASE III
C5.3	EROSION NOTES
C5.4	EROSION NOTES
C5.5	EROSION DETAILS
C5.6	EROSION DETAILS
C5.7	EROSION DETAILS
C5.8	EROSION DETAILS
C5.9	EROSION DETAILS
C6.0	SIGHT DIST. PLAN/PROFILE
C6.1	SIGHT DIST. PLAN/PROFILE
C7.0	COUNTY DETAILS
C7.1	COUNTY DETAILS
C7.2	CONSTRUCTION DETAILS
C7.3	STORM DETAILS
C7.4	STORM DETAILS
C7.5	OCS DETAILS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE DETAILS

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED NO. 040937 PROFESSIONAL ENGINEER EMMANUEL MORGAN ABUA III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL
130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

COVER

DESIGNED BY: DO-CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO-CES

SCALE: AS SHOWN
DATE: 4-17-2019
PROJECT NO.: CES-2018-008-S
SHEET: C0.0

COBB COUNTY • GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
SPR-2019-00145
05/28/2020

811 Know what's below. Call before you dig.

SAMS, LARKIN, HUFF & BALLI
A LIMITED LIABILITY PARTNERSHIP

GARVIS L. SAMS, JR.
JOEL L. LARKIN
PARKS F. HUFF
JAMES A. BALLI

ADAM J. ROZEN

SUITE 100
376 POWDER SPRINGS STREET
MARIETTA, GEORGIA 30064-3448

770•422•7016
TELEPHONE
770•426•6583
FACSIMILE

WWW.SLHB-LAW.COM

July 23, 2018

(Stipulation Letter & Revised Site Plan)

VIA HAND DELIVERY & EMAIL

Mr. John P. Pederson, AICP, Manager
Cobb County Zoning Division
Community Development Agency
1150 Powder Springs Road, Suite 400
Marietta, GA 30064

Re: Application of OBurien, Inc. to Rezone a 1.70 Acre Tract from LI to LRO
(No. Z-59)

Dear John:

As you know, this firm represents OBurien, Inc. ("OBurien") concerning the above-captioned Application for Rezoning. The Application is scheduled to be heard and considered by the Cobb County Planning Commission on September 4, 2018. Thereafter, the Application is scheduled to be heard and considered by the Cobb County Board of Commissioners on September 18, 2018.

The property at issue ("Subject Property") consists of an approximate 1.70 acre tract of land on the south side of Veterans Memorial Highway ("VMH") which is presently zoned Light industrial ("LI"). The property is located within the confines of a Neighborhood Activity Center ("NAC") as shown on Cobb County's Future Land Use Map ("FLUM").

While this Application has been pending, we have had an opportunity to interface with the County's professional staff with whom we have established a meaningful dialogue. Additionally, we have been in preliminary contact with representatives of the Mableton Improvement Coalition ("MIC"), business owners and other property owners along the VMH Corridor and others. In that regard, this letter will serve as Oburien's expression of agreement with the following stipulations which shall become conditions and a part of the grant of the requested Rezoning and which shall be binding upon the Subject Property thereafter.

The referenced stipulations/conditions are as follows, to wit:

1. The stipulations and conditions set forth herein shall replace and supersede in full any and all prior stipulations and conditions in whatsoever form which are currently in place concerning the property which constitutes the subject matter of the above-captioned Application for Rezoning.

2. Rezoning of the Subject Property shall be in substantial conformity to that certain Revised Site Plan prepared by the Crusselle Company which is being filed concurrently herewith.

3. OBurien's proposal to "down-zone" the Subject Property to the Low Rise Office ("LRO") classification is to allow for the utilization of the Subject Property for the purposes of the construction and development of a Nursery/Day Care and Child Development Center. [1]

4. The architectural style and composition of the building shall be in substantial conformity to Veterans Memorial Highway Guidelines, as adopted by Cobb County on January 23, 2018, and consistent with architectural renderings/elevations which will be submitted under separate cover.

5. Compliance with recommendations from the Cobb County Department of Transportation ("DOT"), as follows:

   a. The installation of directional signage so that the exit point on VMH is not utilized as a point of ingress into the site.

   b. Since this Child Development Center will present circumstances where parents will escort their children into the building, there is no need to formulate a stacking or queuing plan to address interior vehicular circulation issues.

[1] Oburien's proposal constitutes a "down-zoning" of the Subject Property from LI to LRO and brings the Subject Property into compliance with its positioning on the FLUM and as being within a NAC which contemplates the type of use under the LRO classification sought by OBurien.

   c. The voluntary donation and conveyance of right-of-way on VMH so that the County can achieve fifty-feet (50') from that road's centerline. Of course, since VMH is a State controlled highway, the Georgia Department of Transportation ("GDOT") can waive the requirement for additional right-of-way.

   d. The voluntary donation and conveyance of right-of-way on Cook Road (which was constructed below County Standards) so that the County can achieve twenty-five feet (25') from the centerline of said right-of-way.

   e. The installation of sidewalk, curb and gutter on Cook Road.

   f. Ensuring there is a minimum of a one hundred foot (100') of tangent on Cook Road from VMH.

   g. Securing permits from GDOT with respect to any encroachments within VMH right-of-way.

6. Compliance with recommendations from the Cobb County Water System regarding the availability and accessibility of water and sewer to the Subject Property.[2]

7. Compliance with recommendations from the Stormwater Management Division with respect to detention, hydrology and downstream considerations.

8. Compliance with recommendations from the Cobb County Fire Marshall's Office including, but not necessarily limited to, compliance with "hose-pull" regulations; the radius of the circular portion of the proposed driveway; and, the outside and inside turning radius of interior infrastructure in order to accommodate fire apparatus and public safety vehicles.

[2] There is ample capacity for sewer. With respect to water, because of the sprinkler/fire suppression protocols for child development centers, the Subject Property may require a larger water meter than most buildings of the same size.

9. Entrance signage shall be ground-based, monument style signage and consistent with provisions of the Cobb County Sign Ordinance. Interior directional signage within parking and through-way components shall be consistent with the architectural style and composition of the building and the ground-based monument style signage.

10. The hours of operation shall be from 6:00 a.m. until 7:00 p.m., Monday – Friday.

11. At any one time, the maximum number of children within the Child Development Center at various points of the day shall be one hundred, seventy (170) children. There will be three (3) professional supervisors and twelve (12) teachers some of whom will be Pre-K Certified. The Child Development Center accommodates children between six (6) weeks and twelve (12) years of age.

12. The District Commissioner shall have the authority to approve minor modifications to the development proposal, the site plan and any stipulations except for those:

    a. Reduce the size of an approved buffer adjacent to property which is zoned the same or in a more restrictive zoning district.

    b. Relocate a structure closer to the property line of an adjacent property which is zoned the same or in a more restrictive zoning district.

    c. Increase the height of a building that is adjacent to property which is zoned in the same or more restrictive zoning district.

    d. Violate the Cobb County Zoning Ordinance.

    e. Change access locations to different roadways.

    f. Will be in direct conflict with, or in direct contradiction to Cobb County regulations.

In all respects, this Rezoning request is appropriate from a land use planning perspective in view of the positioning of the Subject Property within the NAC. Moreover, since the manner in which the subject property requires a Rezoning (by virtue of a down-zoning from LI to LRO) this request constitutes a needed exercise to ensure that the successful continuation of development along VMH is in substantial conformity to the design criteria outlined above.

Please do not hesitate to contact me should you or your staff require any additional information or documentation prior to the formulation of your final Zoning Analysis and Staff Recommendations. With kind regards, I am

Very truly yours,

SAMS, LARKIN, HUFF & BALLI, LLP

Garvis L. Sams, Jr.
gsams@slhb-law.com

GLS, Jr./klk
Enclosure/Attachment

cc: Listed on next page

cc: Members, Cobb County Board of Commissioners (via email w/attachment)
Lisa Cupid, Esq., District Commissioner (via email w/attachment)
Mr. Robert L. Hosack, AICP, County Manager (via email w/attachment)
Members, Cobb County Planning Commission (via email w/attachment)
BOC Commission Assistants (via email w/attachment)
Mr. Dana Johnson, AICP, Director (via email w/attachment)
Mr. Lee McClead, Deputy Director (via email w/attachment)
Mr. Jason S. Gaines, AICP, Planning Division Manager (via email w/attachment)
Mr. Jason Campbell, Planner III (via email w/attachment)
Mr. Terry Martin, Planner III (via email w/attachment)
Mr. Phillip Westbrook, Planner III (via email w/attachment)
Mr. Donald Wells, Planner I (via email w/attachment)
Ms. Tannesha Bates, Planner I (via email w/attachment)
Ms. Pamela Mabry, County Clerk (via email w/attachment)
Ms. Robin Pressley, Deputy County Clerk (via email w/attachment)
Ms. Leila Washington, Deputy County Clerk (via email w/attachment)
Captain Robert "Rock" Toler, Fire Department (via email w/attachment)
Mr. David Breaden, P.E. (via email w/attachment)
Ms. Amy Diaz, P.E. (via email w/attachment)
Ms. Ashley White, P.E. (via email w/attachment)
Mr. Tim Davidson (via email w/attachment)
Ms. Robin Meyer, MIC (via email w/attachment)
Ms. Terri Cummings, MIC (via email w/attachment)
Oburien, Inc. (via email w/attachment)
Mr. Ben Crusselle, RLS (via email w/attachment)

CONCEPT ENGINEERING SERVICES INC.
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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

APPROVED DOCUMENTS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C0.5

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
SLD 2019-00145
09/28/2020

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COBB CO. FIRE NOTES

1. ALL FIRE LINES SHALL BE DUCTILE IRON CONFORMING TO ANSI A21.51 OR AWWA C151 (CCDS 503.01.02)
   A. COMMERCIAL WATER SUPPLY TO HYDRANTS REQUIRED TO BE 8" DIP AND SINGLE FAMILY CAN BE 6" DIP.
2. FIRE LINES SHALL NOT EXTEND UNDER THE BUILDING MORE THAN 10 FEET AS MEASURED FROM THE OUTSIDE EDGE OF THE BUILDING TO THE CENTER OF THE VERTICAL PIPE. (NFPA 24-10.6.3.1.
3. ALL INTERMEDIATE CONTROL VALVES ON THE FIRE LINE SHALL BE EQUIPPED WITH A ROADWAY BOX.
4. SHOW DESIGNATED FIRE LANES TO MEET THE FOLLOWING REQUIREMENTS
   A. BOTH SIDES OF SIGNS SHALL READ "NO PARKING, FIRE LANE"
   B. LETTERS SHALL NOT BE LESS THAN 2 INCHES IN HEIGHT
   C. ONE SIGN SHALL BE POSTED AT THE BEGINNING OF THE FIRE LANE AND ONE AT THE END OF FIRE LANE WITH SIGNS NOT MORE THAN 100 FEET APART.
   D. SIGNS SHALL NOT BE MORE THAN 4 FEET FROM EDGE OF CURB AND SHALL BE VISIBLE FROM BOTH DIRECTIONS OF DRIVING SURFACE.
   E. HEIGHT OF SIGN FACE AS MEASURED FROM BOTTOM OF SIGN SHALL BE A MINIMUM OF 4 FEET AND A MAXIMUM OF 7 FEET FROM GROUND LEVEL.
   F. DECORATIVE SIGNAGE MAY BE USED WITH SEPARATE FIRE MARSHAL'S APPROVAL.
   G. LANES 20 TO 28, FEET MARKING AND SIGNS WILL BE REQUIRED ON BOTH SIDES.
   H. LANES 29 TO 37 FEET, SIGNS AND MARKINGS WILL BE REQUIRED ON ONE SIDE.
   I. LANES MORE THAN 37 FEET, NO SIGNS OR MARKINGS REQUIRED.
   J. CURBING OR LINEAGE DELINEATING FIRE LANE SHALL BE PAINTED RED AND THE TOP AND FACE OF CURB SHALL BE PAINTED (COBB COUNTY CODE SECTION 118-231).
   K. THE LIFE SAFETY INSPECTOR WILL MAKE FINAL DETERMINATION OF FIRE LANES BEFORE FINAL INSPECTION IS MADE.
5. SITE PLAN APPROVAL DOES NOT INCLUDE TANKS. TANKS SHALL BE PERMITTED SEPARATELY AT CCFMO. INSPECTIONS ARE REQUIRED TO BE SCHEDULED ONLINE AT WWW.COBBFMO.ORG.
6. NO GATE WILL BE INSTALLED AT THIS TIME. ACCESS TO GATES AND THROUGH GATES SHALL BE IN A DIRECT STRAIGHT PATH WITHOUT CURVATURE FOR AT LEAST 45 FEET ON EITHER SIDE. GATES SECURING FIRE APPARATUS ACCESS SHALL PROVIDE AT LEAST 14 FEET IN CLEAR WIDTH FOR A SINGLE LANE AND 20 FEET FOR A DOUBLE LANE. GATES SHALL BE SWING OR SLIDING TYPE. ELECTRIC GATES SHALL BE EQUIPPED WITH A MEANS OF OPENING THE GATE BY FIRE DEPARTMENT PERSONNEL FOR EMERGENCY ACCESS (KNOX SWITCH FROM WWW.KNOXBOX.COM) AND OPERATIONS UPON POWER FAILURE. MULTIPLE GATES ON SITE MAY REQUIRE INTERCONNECTION AND SIMULTANEOUS OPERATION. EMERGENCY OPENING DEVICES SHALL BE APPROVED BY THE COBB COUNTY FIRE MARSHAL'S OFFICE. (COBB COUNTY DEVELOPMENT STANDARDS 401.08.02).
7. ALL COBB COUNTY FIRE MARSHAL OFFICE INSPECTIONS ARE REQUIRED TO BE SCHEDULED ON LINE AT WWW.COBBFMO.ORG.
8. SITES WITH DEMO/ CONSTRUCTION MAINTAIN
   A. ACCESS FOR FIRE APPARATUS TO ALL BUILDINGS UNDER CONSTRUCTION INCLUDING TIMES OF RAIN OR MUD. ROADS SHALL BE MAINTAINED AND MINIMALLY PROVIDED WITH CRUSHED STONE BASE AT 20' WIDE.
   B. ACCESS TO BUILDINGS WITH A FDC OR STANDPIPES SHALL BE WITHIN 40' OF ACCESS. (NFPA 1141 3-1).
9. IFC 510 EMERGENCY RESPONDER RADIO COVER (ERRC) SIGNAL TESTING WILL BE REQUIRED FOR ALL NEW BUILDINGS OR BUILDINGS WITH SUBSTANTIAL RENOVATION(S).

COBB CO. LANDSCAPE NOTE

1. NO PERMANENT SIGNS, FLAG POLES, PROPOSED FIRE HYDRANTS, POWER TRANSFORMERS, SIDEWALKS OR ADA RAMPS WILL BE PLACED IN CONFLICT WITH AN ORDINANCE CODED OR APPROVED TREE PLANTING LOCATION.
2. THE COBB COUNTY ARBORIST OR LANDSCAPE ARCHITECT MUST APPROVE THE SITE LIGHTING PLAN. LIGHT POLES ARE NOT PERMITTED IN PARKING PENINSULAS, ISLANDS AND MEDIANS WITHOUT THE PRIOR APPROVAL OF THE COUNTY ARBORIST. 20' MINIMUM SPACING IS REQUIRED BETWEEN THE TRUNK OF ANY PROPOSED OVER-STORY HARDWOOD TREE (OR EXISTING TREE COUNTED FOR TREE ORDINANCE CREDIT) AND ANY EXISTING OR PROPOSED LIGHT IF THE SERVICE PROVIDER (ELECTRIC COMPANY) PRODUCES A LIGHTING PLAN, IT MUST ADHERE TO THE LIGHTING PLAN SHOWN IN THE CIVIL ENGINEERING DRAWINGS APPROVED BY COBB COUNTY FOR THE LAND DISTURBANCE PERMIT. IF A LIGHTING PLAN IS NOT PART OF THE CIVIL DRAWINGS, THE LIGHTING PLAN DESIGNER MUST SUBMIT A PLAN TO THE ARBORIST/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. IF SITE LIGHTING IS INSTALLED WITHOUT AN APPROVED PLAN, THE CERTIFICATE OF OCCUPANCY WILL BE WITHHELD UNTIL ALL CONFLICTING POWER POLES ARE MOVED. CALL 770-528-2147.

COBB CO. ES+PC NOTE

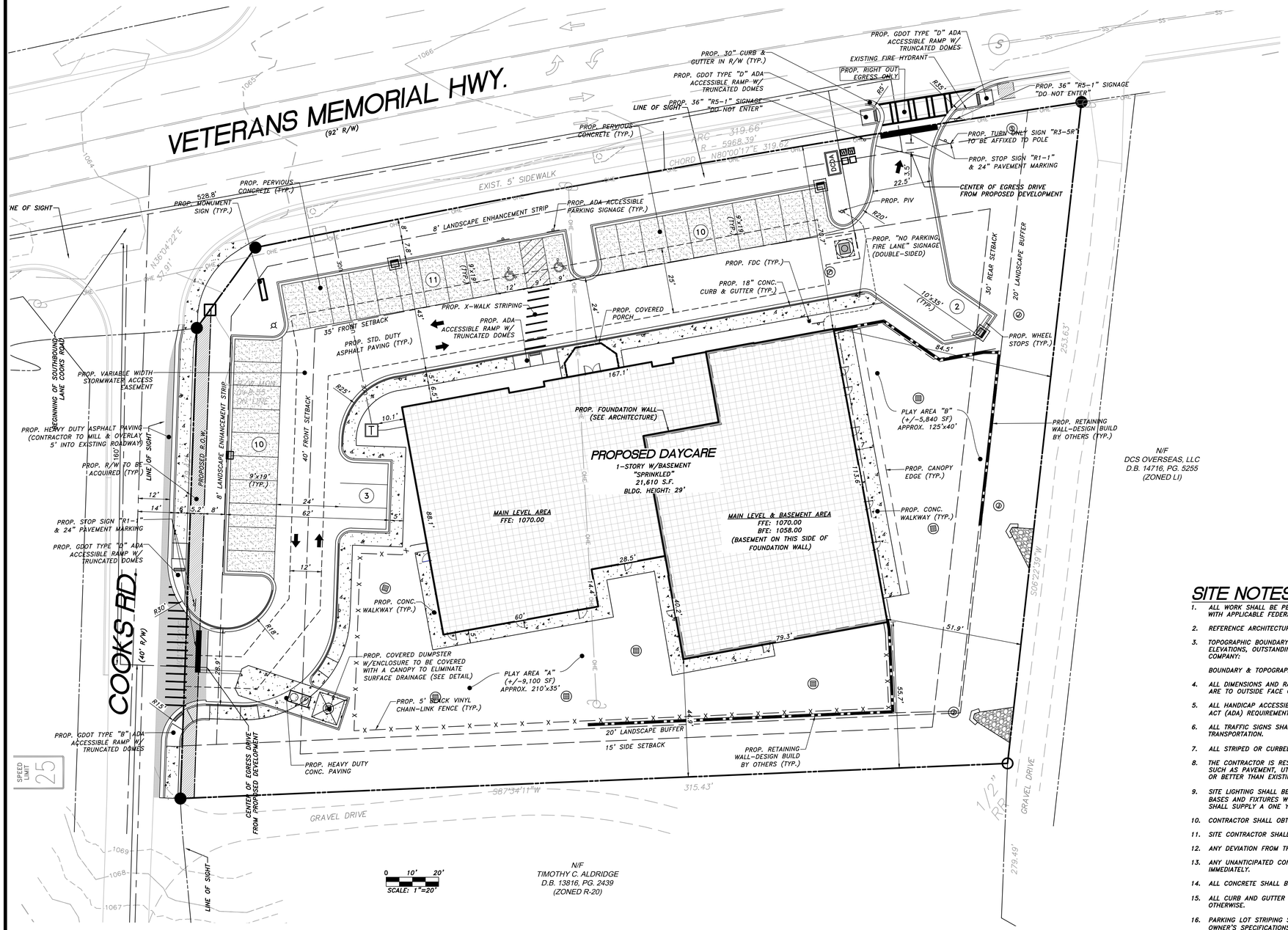
IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2:5 TO 1 % AND WITH A HEIGHT TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET. ALL GRADED SLOPES ON INDIVIDUAL PROJECTS SHALL BE NO STEEPER THAN 2: 1 OR THE APPROPRIATE RETAINING STRUCTURE SHALL BE DESIGNED TO REINFORCE OR RETAIN THE RESULTING EMBANKMENT.

COBB CO. ZONING NOTES

1. COBB COUNTY ACCEPTS NO RESPONSIBILITY FOR THE AMERICANS WITH DISABILITIES ACT (ADA), EXCEPT FOR NOTIFICATION REQUIREMENT. THE OWNER/DEVELOPER IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH SAID ACT.
2. ANY CONSTRUCTION TRAILERS TO BE PERMITTED THROUGH THE ZONING DIVISION.
3. ANY SIGNS TO BE PERMITTED THROUGH THE COBB COUNTY ZONING DIVISION; I.E., SUBDIVISION ENTRANCE SIGNS, MONUMENTS, AND ALL COMMERCIAL SIGNS. THE LOCATION OF SUBDIVISION SIGNS MUST ALSO BE SHOWN ON THE PLANS.
4. THE PARKING LOT AND PARKING SPACES SHALL CONFORM TO COUNTY DETAIL # 114.

COBB CO. TRANSPORTATION NOTES

1. ANY DRIVE, ACCESS, SIDEWALK/SHOULDER CROSS-SLOPE, IN THE R/W, IS TO MATCH THE STD 1/4" PER LF (2%, PER ADA).
2. A GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) PERMIT IS REQUIRED. APPROVAL OF WORK WITHIN OR ADJACENT TO GDOT RIGHT-OF-WAY IS DEFERRED TO GDOT, 770-216-3893 OR 3891, CHAMBLEE PERMITTING OFFICE.



SITE LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING SETBACK LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED SETBACK LINE
- 18" CURB AND GUTTER
- STOP BAR (PAVEMENT MARKING)
- TRAFFIC FLOW ARROW (PAVEMENT MARKING)
- HANDICAP STALL
- CONCRETE WHEEL STOP
- A.D.A. STD HANDICAP RAMP
- PARKING SPACE COUNT
- SIGN
- DUMPSTER PAD
- GRATE INLET
- STORM MANHOLE
- OUTLET CONTROL STRUCTURE
- HEADWALL
- SANITARY SEWER MANHOLE
- CONCRETE
- STANDARD DUTY PAVING

SITE AREA CALCULATIONS

LOT SIZE	= 74,144 SQ. FT. (1.702 AC)
DISTURBED AREA	= 70,907 SQ. FT. (1.63 AC)
PROP. IMPERVIOUS AREA	= 33,628 SF (0.77 AC.)-45.3%
PROP. PERVIOUS AREA	= 35,355 SF (0.81 AC.)-47.7%
-PROP. PERVIOUS CONC.	= 5,161 SF (0.12 AC.)-7.0%

BUILDING AREA CALCULATIONS

TOTAL BUILDING AREA	= 21,610 SQ. FT.
-MAIN LEVEL	= 16,064 SQ. FT.
-BASEMENT LEVEL	= 5,546 SQ. FT.
PLAY AREA "A"	= 9,100 SQ. FT.
PLAY AREA "B"	= 5,840 SQ. FT.
TOTAL PLAY AREA	= 14,940 SQ. FT.

ZONING

LRO (LOW-RISE OFFICE DISTRICT)

PARKING

REQUIRED PARKING	MIN. OF 20 SPACES
PROVIDED PARKING	32 REGULAR SPACES 2 ADA ACCESSIBLE (1 VAN)
TOTAL PROVIDED	34 PARKING SPACES

SETBACKS

FRONT YARD SETBACK	40'
MAJOR SIDE YARD SETBACK	35'
SIDE YARD SETBACK	15'
REAR YARD SETBACK	30'
MAX. BLDG. HEIGHT	35' (NOT TO EXCEED (2) STORIES)

SITE NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SITE WORK SPECIFICATIONS AND SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
2. REFERENCE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS, SIDEWALKS, STEPS, TRANSFORMER PADS, ETC.
3. TOPOGRAPHIC BOUNDARY SURVEY, PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY:

   BOUNDARY & TOPOGRAPHY:
4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN TO BUILDINGS ARE TO OUTSIDE FACE OF BUILDING.
5. ALL HANDICAP ACCESSIBLE PARKING SIGNS AND STRIPING SHALL BE IN ACCORDANCE WITH THE AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS AND STATE CODE.
6. ALL TRAFFIC SIGNS SHALL CONFORM TO THE UNIFORM TRAFFIC CONTROL MANUAL AND THE STATE OF GA DEPARTMENT OF TRANSPORTATION.
7. ALL STRIPED OR CURBED RADII SHALL BE 5' UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO ANY EXISTING IMPROVEMENTS, ONSITE OR OFF SITE, SUCH AS PAVEMENT, UTILITIES, STORM DRAINAGE, ETC. THE REPAIR MUST BE APPROVED BY THE ENGINEER AND BE EQUAL OR BETTER THAN EXISTING CONDITIONS.
9. SITE LIGHTING SHALL BE INCLUDED IN THE GENERAL CONTRACTOR'S SCOPE OF WORK. ALL PARKING LOT LIGHTING POLES, BASES AND FIXTURES WITH LAMPS SHALL BE INSTALLED BY THE GENERAL CONTRACTOR'S ELECTRICAL CONTRACTOR AND SHALL SUPPLY A ONE YEAR WARRANTY CERTIFICATE.
10. CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.
11. SITE CONTRACTOR SHALL SUPPLY AS-BUILT PLANS INDICATING ALL CHANGES AND DEVIATIONS.
12. ANY DEVIATION FROM THESE PLANS MAY CAUSE THE WORK TO BE UNACCEPTABLE.
13. ANY UNANTICIPATED CONDITIONS ENCOUNTERED DURING THE CONSTRUCTION PROCESS SHALL BE IDENTIFIED TO THE ENGINEER IMMEDIATELY.
14. ALL CONCRETE SHALL BE 3,000 PSI 28 DAY COMPRESSIVE STRENGTH.
15. ALL CURB AND GUTTER WITHIN THE DEVELOPMENT SHALL BE 18". IT SHALL BE 30" WITHIN THE R.O.W. UNLESS NOTED OTHERWISE.
16. PARKING LOT STRIPING SHALL BE INCLUDED IN PAVING CONTRACTOR'S SCOPE OF WORK. STRIPING WILL BE ACCORDING TO OWNER'S SPECIFICATIONS UNLESS NOTED OTHERWISE. ALL STRIPING IS TO HAVE TWO (2) COATS OF PAINT (MIN). ALL STRIPING IN R/W SHALL BE THERMOPLASTIC.
17. THE SITE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WORK AND APPURTENANCE TO WITHIN 5' OF THE BUILDING. THIS INCLUDES TRANSFORMER AND DUMPSTER PADS AS WELL AS ALL UTILITY CONDUITS.

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

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SEAL:

GEORGIA REGISTERED NO. 040937 PROFESSIONAL ENGINEER KENNETH MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

SITE PLAN

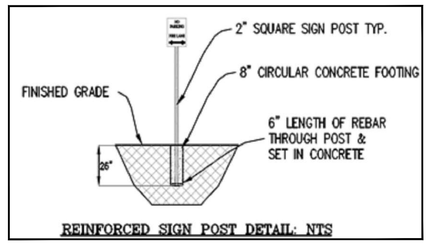
DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C2.0

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP: 2019-00145
05/28/2020

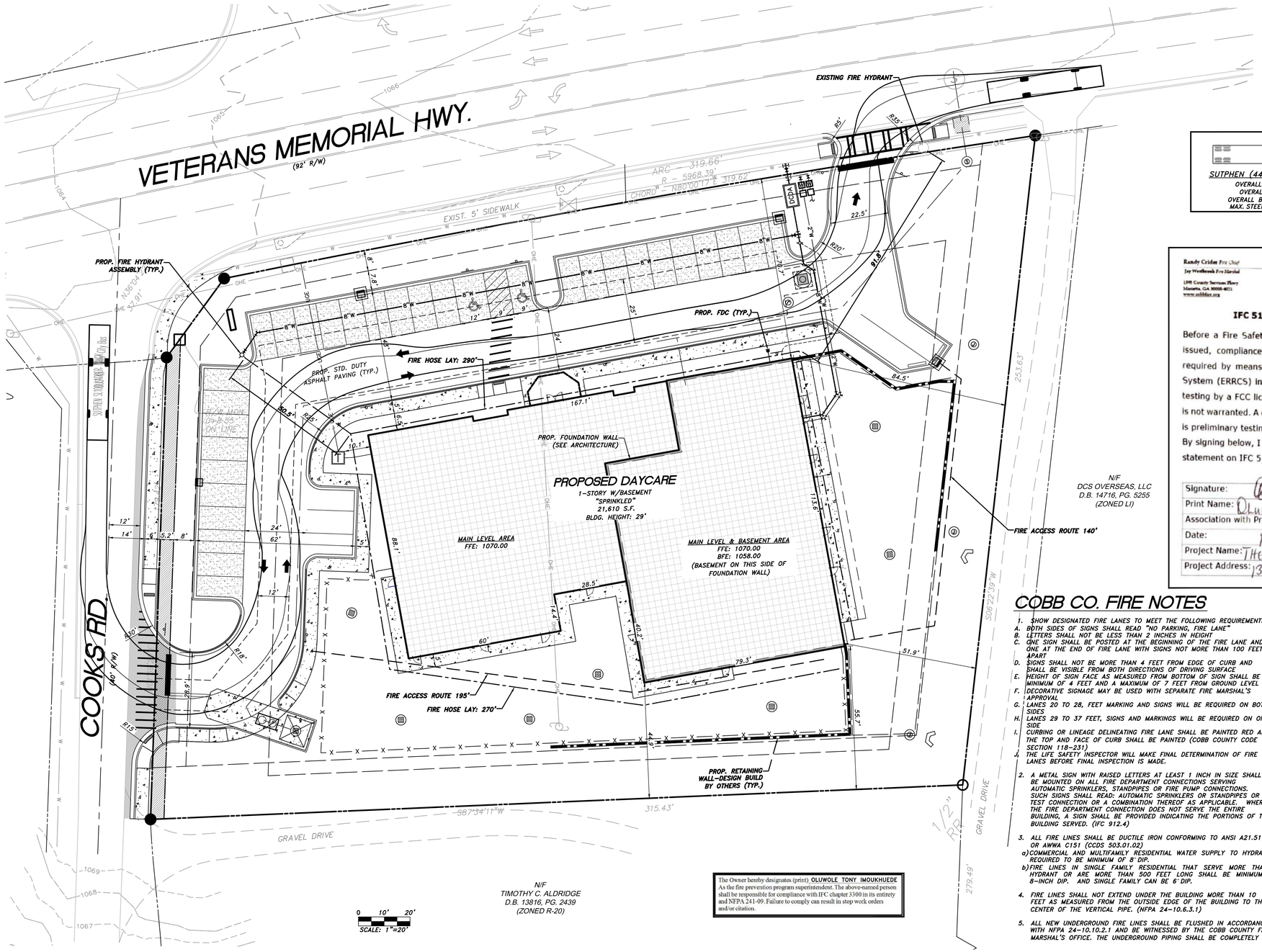
Know what's below. Call before you dig.

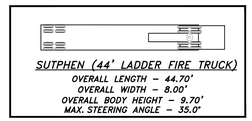


REINFORCED SIGN POST DETAIL: NTS

Application: All new (proposed) construction and any substantial renovation(s) to existing buildings as defined in OCGA 25-2-14 (O) (d) approved after January 30, 2014. Existing buildings as required by IFC 1103.2 when ordered by the Fire Marshal. Wired systems as identified in IFC 510.1 exception 1 will not be accepted in lieu of an ERRC.
Exceptions: (As permitted by IFC 510.1 (2))
The following structures are not required to comply with the requirements of IFC Section 510.
1. Buildings with no more than two occupiable stories, no more than 12,000 total square feet, and no floors below grade.
2. Temporary buildings including tents when permitted by the fire marshal.

For additions to buildings, unless the exceptions above are met for the area of the addition, the entire building being expanded must meet IFC 510 requirements.





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- CONCRETE
- STANDARD DUTY PAVING

Randy Crider Fire Chief
Jay Westbrook Fire Marshal
1395 County Services Pkwy
Marietta, GA 30008-4021
www.cobbfire.org

Cobb County Fire & Emergency Services
Nick Dunn Deputy Fire Marshal
Stephen Mize Deputy Fire Marshal
Rook Tyler Deputy Fire Marshal
fmoinspectionrequest@cobbcounty.org
phone: (770) 528-8510 • fax: (770) 528-8520

IFC 510 Compliance Acknowledgment

Before a Fire Safety Codes Release (Certificate of Occupancy) is issued, compliance with International Fire Code Section 510 is required by means of an Emergency Responder Radio Coverage System (ERRCS) installed, tested, and accepted **OR** through field testing by a FCC licensed radio contractor to verify that an ERRCS is not warranted. A critical element to compliance with this standard is preliminary testing once the building is dried-in.
By signing below, I acknowledge that I have read the above statement on IFC 510:

Signature:	
Print Name:	OLUWOLE TONY IMOUKHUEDE
Association with Project:	OWNER
Date:	1/5/20
Project Name:	THE MANOR PREP INTERNATIONAL SCHOOL
Project Address:	130 VETERANS MEMORIAL HWY, MABLETON GA 30126

The Owner hereby designates (print) OLUWOLE TONY IMOUKHUEDE As the fire prevention program superintendent. The above-named person shall be responsible for compliance with IFC chapter 3308 in its entirety and NFPA 241-09. Failure to comply can result in stop work orders and/or citation.

COBB CO. FIRE NOTES

1. SHOW DESIGNATED FIRE LANES TO MEET THE FOLLOWING REQUIREMENTS:
   A. BOTH SIDES OF SIGNS SHALL READ "NO PARKING, FIRE LANE"
   B. LETTERS SHALL NOT BE LESS THAN 2 INCHES IN HEIGHT
   C. ONE SIGN SHALL BE POSTED AT THE BEGINNING OF THE FIRE LANE AND ONE AT THE END OF FIRE LANE WITH SIGNS NOT MORE THAN 100 FEET APART
   D. SIGNS SHALL NOT BE MORE THAN 4 FEET FROM EDGE OF CURB AND SHALL BE VISIBLE FROM BOTH DIRECTIONS OF DRIVING SURFACE
   E. HEIGHT OF SIGN FACE AS MEASURED FROM BOTTOM OF SIGN SHALL BE A MINIMUM OF 4 FEET AND A MAXIMUM OF 7 FEET FROM GROUND LEVEL
   F. DECORATIVE SIGNAGE MAY BE USED WITH SEPARATE FIRE MARSHAL'S APPROVAL
   G. LANES 20 TO 28, FEET MARKING AND SIGNS WILL BE REQUIRED ON BOTH SIDES
   H. LANES 29 TO 37 FEET, SIGNS AND MARKINGS WILL BE REQUIRED ON ONE SIDE
   I. CURBING OR LINEAGE DELINEATING FIRE LANE SHALL BE PAINTED RED AND THE TOP AND FACE OF CURB SHALL BE PAINTED (COBB COUNTY CODE SECTION 118-231)
   J. THE LIFE SAFETY INSPECTOR WILL MAKE FINAL DETERMINATION OF FIRE LANES BEFORE FINAL INSPECTION IS MADE.
2. A METAL SIGN WITH RAISED LETTERS AT LEAST 1 INCH IN SIZE SHALL BE MOUNTED ON ALL FIRE DEPARTMENT CONNECTIONS SERVING AUTOMATIC SPRINKLERS, STANDPIPES OR FIRE PUMP CONNECTIONS. SUCH SIGNS SHALL READ: AUTOMATIC SPRINKLERS OR STANDPIPES OR TEST CONNECTION OR A COMBINATION THEREOF AS APPLICABLE. WHERE THE FIRE DEPARTMENT CONNECTION DOES NOT SERVE THE ENTIRE BUILDING, A SIGN SHALL BE PROVIDED INDICATING THE PORTIONS OF THE BUILDING SERVED. (IFC 912.4)
3. ALL FIRE LINES SHALL BE DUCTILE IRON CONFORMING TO ANSI A21.51 OR AWWA C151 (CCDS 503.01.02)
   a) COMMERCIAL AND MULTIFAMILY RESIDENTIAL WATER SUPPLY TO HYDRANTS REQUIRED TO BE MINIMUM OF 8" DIP.
   b) FIRE LINES IN SINGLE FAMILY RESIDENTIAL THAT SERVE MORE THAN 1 HYDRANT OR ARE MORE THAN 500 FEET LONG SHALL BE MINIMUM OF 8-INCH DIP. AND SINGLE FAMILY CAN BE 6" DIP.
4. FIRE LINES SHALL NOT EXTEND UNDER THE BUILDING MORE THAN 10 FEET AS MEASURED FROM THE OUTSIDE EDGE OF THE BUILDING TO THE CENTER OF THE VERTICAL PIPE. (NFPA 24-10.6.3.1)
5. ALL NEW UNDERGROUND FIRE LINES SHALL BE FLUSHED IN ACCORDANCE WITH NFPA 24-10.10.2.1 AND BE WITNESSED BY THE COBB COUNTY FIRE MARSHAL'S OFFICE. THE UNDERGROUND PIPING SHALL BE COMPLETELY FLUSHED BEFORE THE CONNECTION IS MADE TO DOWNSTREAM FIRE PROTECTION SYSTEM PIPING.
6. BURIAL DEPTH OF ALL NEW UNDERGROUND FIRE LINES SHALL NOT BE LESS THAN 42 INCHES MEASURED VERTICALLY FROM THE TOP OF PIPE TO THE FINISHED GRADE (CCCDS 410.5.2).
7. SITE PLAN APPROVAL DOES NOT INCLUDE TANKS. TANKS SHALL BE PERMITTED SEPARATELY AT CCFMO. INSPECTIONS ARE REQUIRED TO BE SCHEDULED ONLINE AT WWW.COBBFMO.ORG.
8. NO GATE WILL BE INSTALLED WITHOUT FIRE MARSHAL APPROVAL.
9. ANY STAIR OR MEANS OF EGRESS COMPONENT SHOWN ON THESE PLANS IS OUTSIDE OF THE LAND DISTURBANCE PERMIT REVIEW PROCESS. ALL STAIRS AND OTHER MEANS OF EGRESS COMPONENT MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE FIRE MARSHAL'S OFFICE PRIOR TO CONSTRUCTION.
10. FINAL DETERMINATION OF FIRE PROTECTION (SPRINKLERS, STANDPIPES AND ALARMS) WILL MADE DURING THE LIFE SAFETY CODE PLAN REVIEW FOR THE BUILDING. PRELIMINARY REQUIREMENTS CONTAINED ON SITE PLANS ARE BASED ON INITIAL REVIEW AND ARE SOMETIMES ACCEPTED AS EQUIVALENCIES DUE TO SITE ACCESS OR OTHER ISSUES WITH THE SITE. IF THE SITE PLANS CONTAIN REQUIREMENTS FOR FIRE PROTECTION SYSTEMS THE SITE APPROVAL IS CONTINGENT ON PROVIDING THE REQUIRED SYSTEMS.
11. ALL COBB COUNTY FIRE MARSHAL OFFICE INSPECTIONS ARE REQUIRED TO BE SCHEDULED ONLINE AT WWW.COBBFMO.ORG.
12. MAINTAIN ACCESS FOR FIRE APPARATUS TO ALL BUILDINGS UNDER CONSTRUCTION INCLUDING TWES OF RAIN OR MUD. ROADS SHALL BE MAINTAINED AND MINIMALLY PROVIDED WITH CRUSHED STONE BASE AT 20' WIDE.
13. THE OWNER AND/DEVELOPER SHALL DESIGNATE A FIRE PREVENTION PROGRAM SUPERINTENDENT IN ACCORDANCE WITH IFC 3308 AND NFPA 241. THE OWNER/DEVELOPER SHALL NOTIFY THE FMO PRIOR TO THE START OF CONSTRUCTION WITH THE NAME AND CONTACT INFORMATION FOR THE SUPERINTENDENT. THE SUPERINTENDENT SHALL BE FAMILIAR WITH THE REQUIREMENTS OF IFC 3308 AND NFPA 241 AS ADOPTED BY THE STATE OF GEORGIA.
14. IFC 510 EMERGENCY RESPONDER RADIO COVER (ERRC) SIGNAL TESTING WILL BE REQUIRED FOR ALL NEW BUILDINGS OR BUILDINGS WITH SUBSTANTIAL RENOVATION(S). SEE FOLLOWING LETTER FROM COBB COUNTY FIRE MARSHAL:

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
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CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
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Atlanta GA 30326
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SEAL:

GEORGIA REGISTERED No. 026937 PROFESSIONAL ENGINEER EMMANUEL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

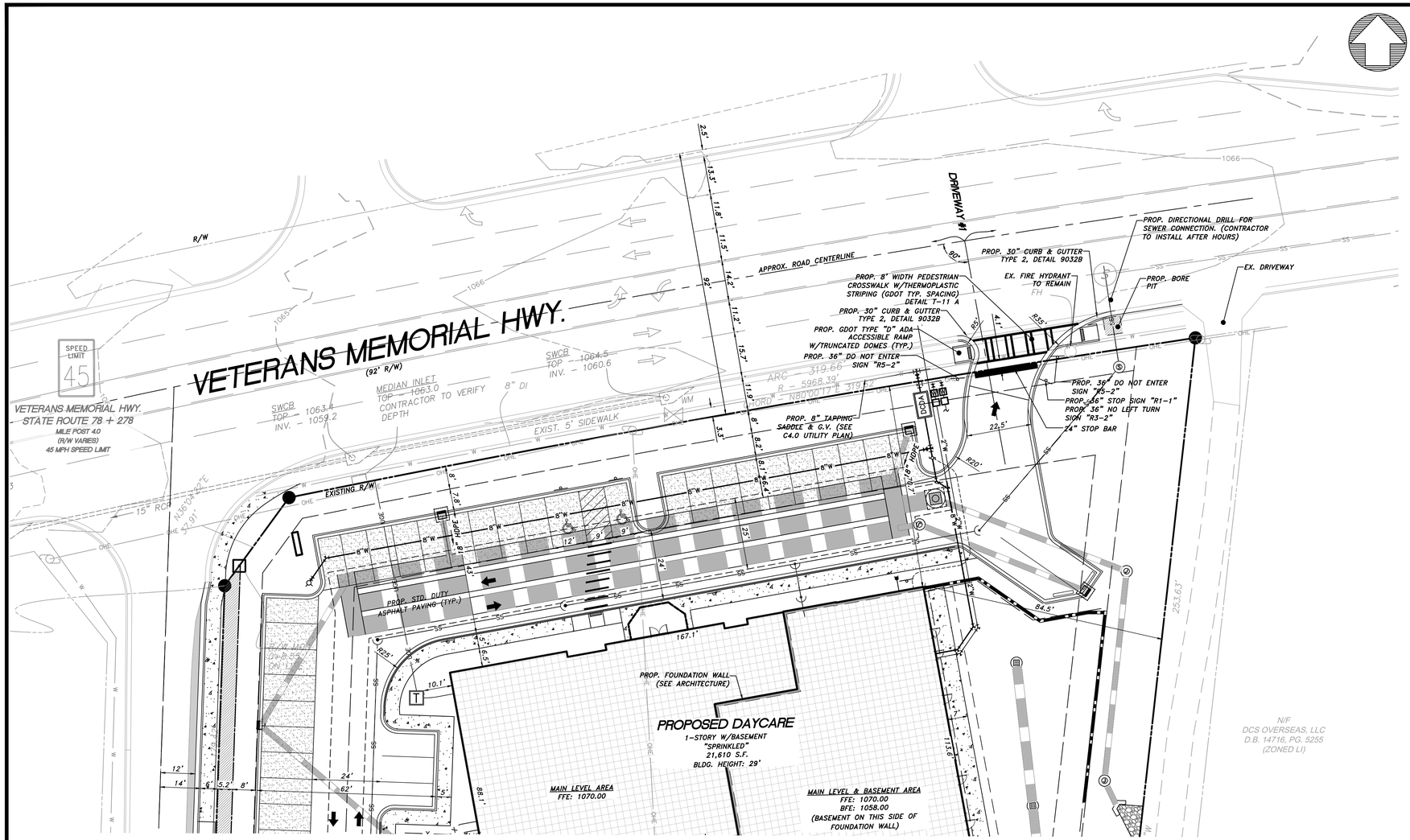
SHEET TITLE:

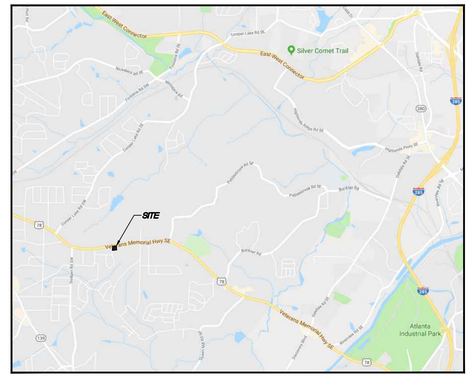
FIRE ACCESS & TRUCK TURN

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C2.1

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
SLD 2019-00145
05/28/2020

811 Know what's below. Call before you dig.





VICINITY MAP
NOT TO SCALE

SITE LEGEND

- EXISTING PROPERTY LINE
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- CONCRETE
- STANDARD DUTY PAVING

GA DOT NOTES

1. THE WORK AUTHORIZED MUST BEGIN WITHIN THREE MONTHS AND BE COMPLETED WITHIN TWELVE MONTHS ON A SCHEDULE SATISFACTORY TO THE DEPARTMENT FROM THE APPROVAL DATE AND ALSO, BE COMPLETED BEFORE THIS FACILITY IS OPEN TO THE PUBLIC.
2. THE FOLLOWING WILL NOT BE ALLOWED ON DOT RIGHT-OF-WAY: 1) DIVERSION OF ADDITIONAL DRAINAGE AREA ONTO THE RIGHT-OF-WAY, OR INCREASE IN THE CFS OF CURRENT VOLUMES OF WATER, 2) GRADING, EXCEPT AT DRIVEWAY CONSTRUCTION LOCATIONS 3) HEADWALLS 4) SIGNS, DISPLAY DEVISCES, AND OTHER STRUCTURES WHICH ARE DESIGNED, INTENDED, OR USED TO ADVERTISE OR INFORM. 5) LANDSCAPING WITHOUT PRIOR APPROVAL OF THE LANDSCAPE PLAN.
3. ALL EXISTING UTILITIES WHICH WOULD BE UNDER NEW PAVEMENT OR IN ACCELERATION/DECELERATION LANES SHALL BE RELOCATED FROM FINAL GRADING OR PAVING AND AT NO COST TO THE DOT, OR AN APPROVED RETENTION LETTER FROM THE UTILITY OWNER.
4. CONSTRUCTION OF EROSION CONTROL BARRIERS PER GEORGIA DEPARTMENT OF NATURAL RESOURCES CODE 391-3-7 AND SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
5. APPLICANT SHALL RESTORE ALL EXISTING SIGNS AND REGRASS TO DOT SPECIFICATIONS ALL RIGHT-OF-WAY THAT IS DISTURBED DURING WORK AUTHORIZED HEREIN.
6. THE PERMIT APPLICANT IS RESPONSIBLE FOR REPLACEMENT OF ALL EXISTING PAVEMENT MARKINGS DAMAGED BY THE PERMIT CONSTRUCTION AND THE ADDITION OF NEW PAVEMENT MARKINGS AND OR SIGNS AS SHOWN ON THE APPROVED PLAN, OR CURRENT M.U.T.C.D. GUIDELINES.
7. ALL CURBED ISLANDS SHALL BE FILLED TO THE TOP OF CURB WITH TOP SOIL AND GRASSED. NOTE: THIS APPROVAL DOES NOT ALLOW ANY WORK ON STATE RIGHT-OF-WAY IN CONNECTION WITH UTILITY LINES (SANITARY SEWER, WATER, TELEPHONE, GAS, ETC.)
8. REQUIRED PAVEMENT SPECIFICATIONS

1-1/4"-------- 9.5 MM SUPERPAVE
2-0"--------- 19 MM SUPERPAVE
8-0"--------- 25 MM SUPERPAVE
12-0"---------GRADED AGGREGATE BASE

NOTICE

THIS PERMIT IS APPROVED SUBJECT TO THE REVISIONS AND COMMENTS SHOWN IN RED ON THE ATTACHED PLAN COPY AND SHALL REMAIN DEPENDANT UPON COMPLIANCE WITH THESE.
NO WORK WILL BE ACCOMPLISHED UNDER THIS PERMIT WITHIN THE CONSTRUCTION LIMITS OF ANY DOT PROJECT WITHOUT WRITTEN APPROVAL FROM THE PRIME CONTRACTOR.
THE MAINTENANCE OF THE DRIVEWAY FROM THE NORMAL EDGE OF PAVEMENT IS THE RESPONSIBILITY OF THE PERMITTEE.
OVERLAY SHALL BE AS DIRECTED BY GDOT PERMIT INSPECTOR.
ALL SIDEWALKS, CROSSWALKS, AND RAMPS SHALL MEET ADA STANDARDS GDOT DETAILS.
THE APPLICANT IS RESPONSIBLE TO OBTAIN ALL NECESSARY ENVIRONMENTAL APPROVALS PRIOR TO ANYWORK ON THE STATE RIGHT-OF-WAY.

GDOT DRIVEWAY #1 INFORMATION

1. 319.6 TOTAL PROPERTY FRONTAGE ALONG VETERANS MEM. PARKWAY (SR 78 & 278).
2. 72.8' FROM PROPOSED DRIVEWAY CENTERLINE TO EAST PROPERTY CORNER.
3. 246.8' FROM PROPOSED DRIVEWAY CENTERLINE TO WEST PROPERTY CORNER.
4. 289.1' FROM PROPOSED DRIVEWAY CENTERLINE TO CENTERLINE OF COOKS RD.
5. 1,650' FROM PROPOSED DRIVEWAY CENTERLINE TO CENTERLINE RIGHT-OF-WAY OF ALLEN RD SE.
6. 22.5' FC-FC WIDTH OF PROPOSED RIGHT OUT ONLY DRIVEWAY.
7. 35' RIGHT & 5' LEFT RADII ON PROPOSED DRIVEWAY.

SIGHT DISTANCE CERTIFICATION

I, THE UNDERSIGNED, HEREBY CERTIFY THE SIGHT DISTANCE FOR THE PROJECT IS DESIGNED WITH ADEQUATE DISTANCE. THE REGULATED SPEED LIMIT ON THE APPROACHING THOROUGHFARE IS 45 MPH. THE DESIGNED SIGHT DISTANCE PROVIDES VISIBILITY OF 530 + FEET TO THE LEFT. THE SIGHT DISTANCE SHALL BE MEASURED FROM A POINT OF 15 FEET FROM TRAVEL LANE AT AN EYE LEVEL OF 3.5 FEET AND LOOKING AT AN OBJECT 3.5 FEET ABOVE THE CENTERLINE.

SIGNED _____ DATE _____

SITE NOTES

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2. REFERENCE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS, SIDEWALKS, STEPS, TRANSFORMER PADS, ETC.
3. TOPOGRAPHIC BOUNDARY SURVEY, PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY THE FOLLOWING COMPANY:

   BOUNDARY & TOPOGRAPHY:
4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED. ALL DIMENSIONS SHOWN TO BUILDINGS ARE TO OUTSIDE FACE OF BUILDING.
5. ALL HANDICAP ACCESSIBLE PARKING SIGNS AND STRIPING SHALL BE IN ACCORDANCE WITH THE AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS AND STATE CODE.
6. ALL TRAFFIC SIGNS SHALL CONFORM TO THE UNIFORM TRAFFIC CONTROL MANUAL AND THE STATE OF GA DEPARTMENT OF TRANSPORTATION.
7. ALL STRIPED OR CURBED RADII SHALL BE 5' UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO ANY EXISTING IMPROVEMENTS, ONSITE OR OFF SITE, SUCH AS PAVEMENT, UTILITIES, STORM DRAINAGE, ETC. THE REPAIR MUST BE APPROVED BY THE ENGINEER AND BE EQUAL OR BETTER THAN EXISTING CONDITIONS.
9. SITE LIGHTING SHALL BE INCLUDED IN THE GENERAL CONTRACTOR'S SCOPE OF WORK. ALL PARKING LOT LIGHTING POLES, BASES AND FIXTURES WITH LAMPS SHALL BE INSTALLED BY THE GENERAL CONTRACTOR'S ELECTRICAL CONTRACTOR AND SHALL SUPPLY A ONE YEAR WARRANTY CERTIFICATE.
10. CONTRACTOR SHALL OBTAIN ALL PERMITS BEFORE CONSTRUCTION BEGINS.
11. SITE CONTRACTOR SHALL SUPPLY AS-BUILT PLANS INDICATING ALL CHANGES AND DEVIATIONS.
12. ANY DEVIATION FROM THESE PLANS MAY CAUSE THE WORK TO BE UNACCEPTABLE.
13. ANY UNANTICIPATED CONDITIONS ENCOUNTERED DURING THE CONSTRUCTION PROCESS SHALL BE IDENTIFIED TO THE ENGINEER IMMEDIATELY.
14. ALL CONCRETE SHALL BE 3,000 PSI 28 DAY COMPRESSIVE STRENGTH.
15. ALL CURB AND GUTTER WITHIN THE DEVELOPMENT SHALL BE 18". IT SHALL BE 30" WITHIN THE R.O.W. UNLESS NOTED OTHERWISE.
16. PARKING LOT STRIPING SHALL BE INCLUDED IN PAVING CONTRACTOR'S SCOPE OF WORK. STRIPING WILL BE ACCORDING TO OWNER'S SPECIFICATIONS UNLESS NOTED OTHERWISE. ALL STRIPING IS TO HAVE TWO (2) COATS OF PAINT (MIN). ALL STRIPING IN R/W SHALL BE THERMOPLASTIC.
17. THE SITE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WORK AND APPURTENANCE TO WITHIN 5' OF THE BUILDING. THIS INCLUDES TRANSFORMER AND DUMPSTER PADS AS WELL AS ALL UTILITY CONDUITS.

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

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TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED PROFESSIONAL ENGINEER EDWIN MANUEL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

GDOT SITE PLAN

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.: CES-2018-008-S

SHEET: C2.5

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRIBUTANCE PERMIT

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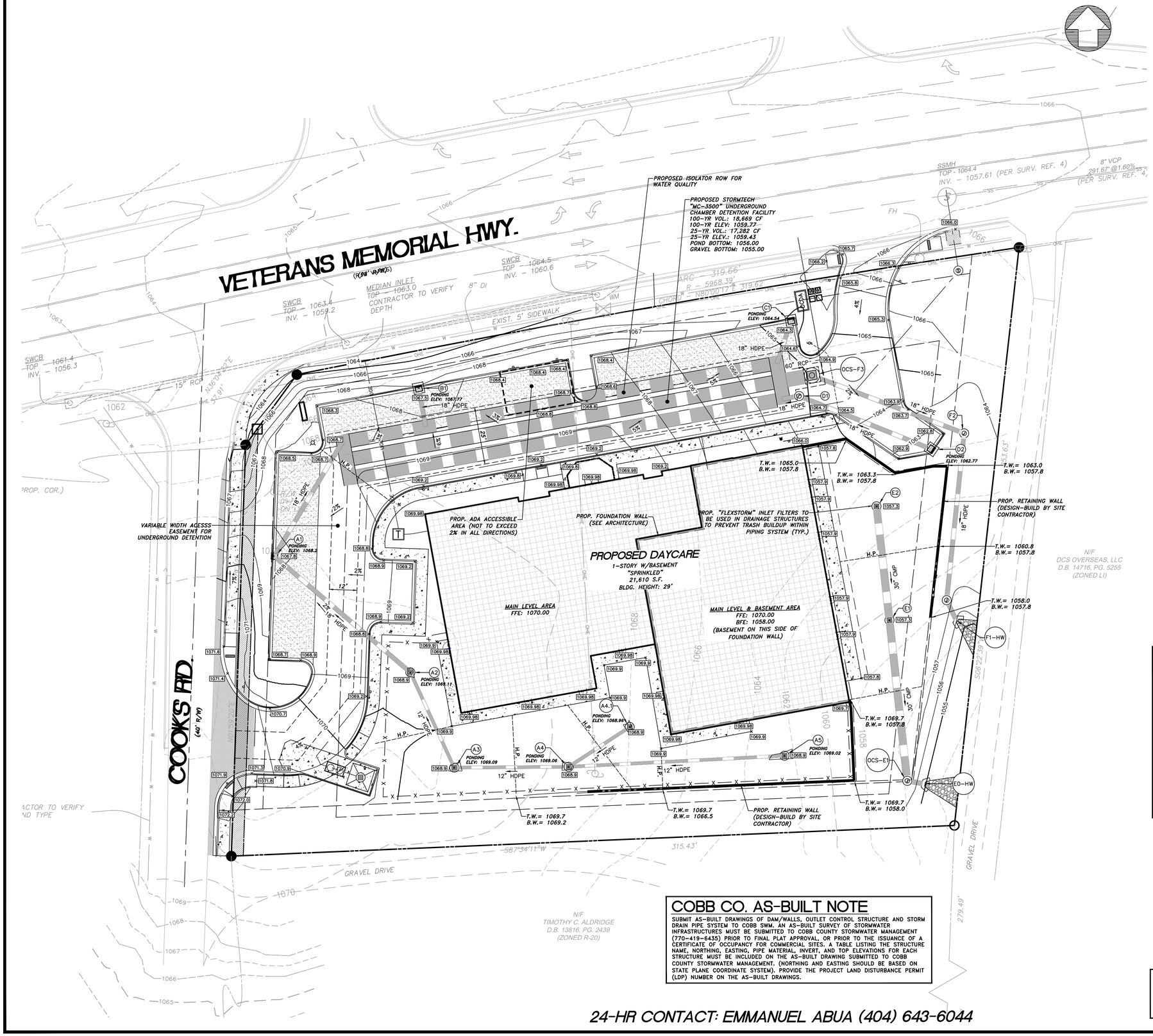
SLD 2019-00145
05/20/2020



GRADING LEGEND

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING SETBACK LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED SETBACK LINE
- EXISTING MINOR CONTOURS
- EXISTING MAJOR CONTOURS
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING STORM LINE
- PROPOSED STORM LINE
- PROPOSED SPOT ELEV
- SLOPE ARROW
- STORM MANHOLE
- HOODED GRATE INLET
- SANITARY SEWER MANHOLE

COBB CO. PIPE NOTES

1. THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA STANDARD 'PIPE CULVERTS' NUMBER 1030D, LATEST EDITION SHALL BE USED IN DETERMINING THE CLASS OF REINFORCED CONCRETE PIPE OR GAGE OF CORRUGATED STEEL PIPE OR TYPE 2 CORRUGATED ALUMINUM PIPE UNDER FILL AND THE METHOD OF BACK-FILLING. THE MINIMUM GAGE FOR CORRUGATED STEEL PIPE ALLOWED UNDER COBB COUNTY STANDARDS IS 12 (0.109 INCHES). ALL CORRUGATED STEEL PIPES ARE TO BE FULLY COATED. THE MINIMUM GAGE FOR TYPE 2 CORRUGATED ALUMINUM PIPE UNDER COBB COUNTY STANDARDS IS 14 (0.075 INCHES).
2. FIELD JOINTS FOR CORRUGATED PIPE SHALL BE MADE WITH BANDS OF THE SAME BASE METAL AND COATING AS THE CORRUGATED PIPE. BANDS SHALL BE OF THE HUGGER TYPE DESIGNED TO FULLY ENGAGE AT LEAST ONE ANNULAR CORRUGATION AT THE END OF EACH CORRUGATED PIPE AROUND ITS ENTIRE CIRCUMFERENCE. MINIMUM BAND WIDTH SHALL EQUAL THE CENTERLINE LENGTH OF FOUR (4) ANNULAR CORRUGATIONS. BANDS SHALL CONFORM TO CURRENT ASTM/AASHTO INDUSTRY STANDARDS AS TO SECURING BOLTS, THEIR NUMBER AND PLACEMENT.
3. CONCRETE PIPE SECTIONS MAY BE JOINED WITH BITUMINOUS PLASTIC CEMENT JOINTS, RUBBER-TYPE GASKET JOINTS, O-RING GASKET JOINTS OR PRE-FORMED PLASTIC GASKET JOINTS. IN BITUMINOUS PLASTIC CEMENT JOINTS, THE ANNULAR SPACE SHALL BE FILLED WITH JOINT MATERIAL, AND THE INSIDE OF EACH JOINT WIPED SMOOTH. RUBBER-TYPE, O_RING, AND PRE-FORMED PLASTIC GASKET JOINTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. ALL CATCH BASINS, DROP INLETS OR OTHER DRAINAGE STRUCTURES SHALL COMPLY WITH THE LATEST STANDARDS APPROVED AND PROMULGATED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION IN 'STANDARDS SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES', LATEST EDITION.
5. USE OF HDPE REQUIRES THE FOLLOWING:
   - GRANULAR BACKFILL TO TOP OF THE PIPE.
   - DEPTHS NO GREATER THAN TEN (10') FEET AS MEASURED TO INVERT OF PIPE.
   - INSTALLATION MUST BE OUTSIDE COUNTY RIGHT-OF-WAY.
   - WATERTIGHT BELL AND SPIGOT GASKETED JOINTS MUST BE PROVIDED.
   - 36-INCH DIAMETER OR GREATER MUST BE INSPECTED AND CERTIFIED BY A GEOTECHNICAL ENGINEER OR A MANUFACTURERS REPRESENTATIVE.
   - SMOOTHBORE PIPE ONLY.

SITE AREA CALCULATIONS

LOT SIZE	= 74,144 SQ. FT. (1.702 AC)
DISTURBED AREA	= 70,907 SQ. FT. (1.63 AC)
PROP. IMPERVIOUS AREA	= 33,628 SF (0.77 AC.)-45.3%
PROP. PERVIOUS AREA	= 35,355 SF (0.81 AC.)-47.7%
-PROP. PERVIOUS CONC.	= 5,161 SF (0.12 AC.)-7.0%

BUILDING AREA CALCULATIONS

TOTAL BUILDING AREA	= 21,610 SQ. FT.
-MAIN LEVEL	= 16,064 SQ. FT.
-BASEMENT LEVEL	= 5,546 SQ. FT.
PLAY AREA "A"	= 9,100 SQ. FT.
PLAY AREA "B"	= 5,840 SQ. FT.
TOTAL PLAY AREA	= 14,940 SQ. FT.

ENGINEER'S RUNOFF CONTROL CERTIFICATION:

THE PROPOSED EROSION AND RUNOFF CONTROL MEASURES ARE IN COMPLIANCE WITH THE COBB COUNTY SEDIMENT CONTROL AND FLOOD PROTECTION REGULATIONS AND WILL NOT INCREASE THE RUNOFF RATE FROM THE SITE FOR RAINSTORMS WITH A RETURN PERIOD OF 2, 5, 10, 25-50- AND 100-YEARS.

SIGNATURE_____ DATE_____

COBB CO. AS-BUILT NOTE

SUBMIT AS-BUILT DRAWINGS OF DAM/WALLS, OUTLET CONTROL STRUCTURE AND STORM DRAIN PIPE SYSTEM TO COBB SWM. AN AS-BUILT SURVEY OF STORMWATER INFRASTRUCTURES MUST BE SUBMITTED TO COBB COUNTY STORMWATER MANAGEMENT (770-419-6435) PRIOR TO FINAL PLAT APPROVAL, OR PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR COMMERCIAL SITES. A TABLE LISTING THE STRUCTURE NAME, NORTHING, EASTING, PIPE MATERIAL, INVERT, AND TOP ELEVATIONS FOR EACH STRUCTURE MUST BE INCLUDED ON THE AS-BUILT DRAWING SUBMITTED TO COBB COUNTY STORMWATER MANAGEMENT. (NORTHING AND EASTING SHOULD BE BASED ON STATE PLANE COORDINATE SYSTEM). PROVIDE THE PROJECT LAND DISTURBANCE PERMIT (LDP) NUMBER ON THE AS-BUILT DRAWINGS.

STORMWATER MAINTENANCE NOTE

ALL STORMWATER INFRASTRUCTURES ON THIS SITE ARE PRIVATELY OWNED, AND ANY MAINTENANCE OR REPLACEMENT IS THE OWNER'S RESPONSIBILITY.

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.

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SEAL:

GEORGIA REGISTERED No. 026937 PROFESSIONAL ENGINEER EMMANUEL MARKEL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

GRADING PLAN

DESIGNED BY: DO-CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO-CES

SCALE: AS SHOWN
DATE: 4-17-2019
PROJECT NO.: CES-2018-008-S
SHEET: C3.0

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP-2019-00145
05/28/2020

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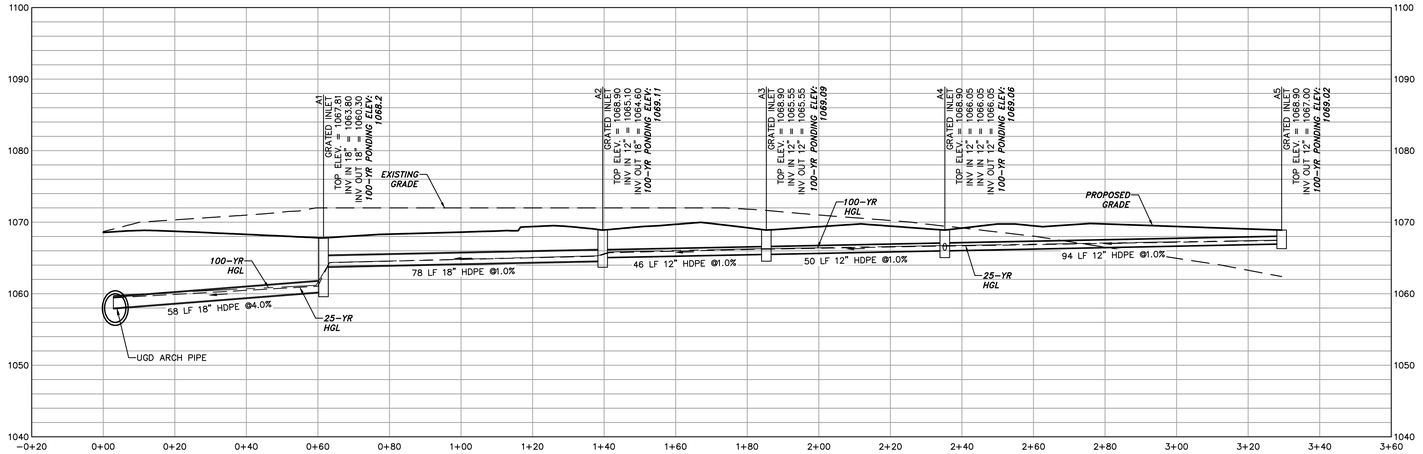
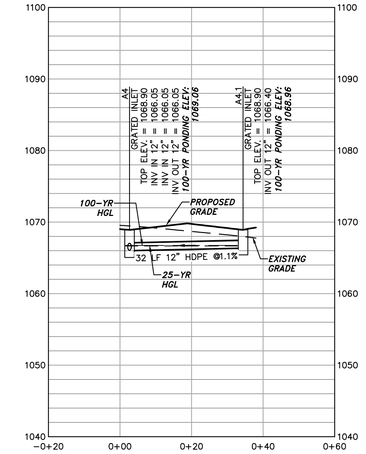
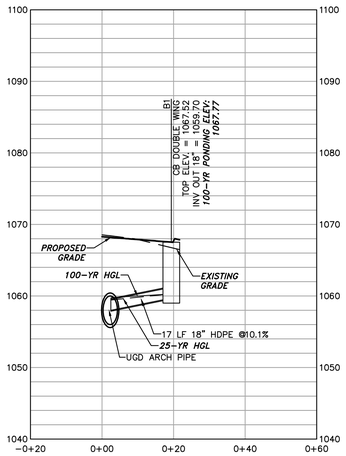


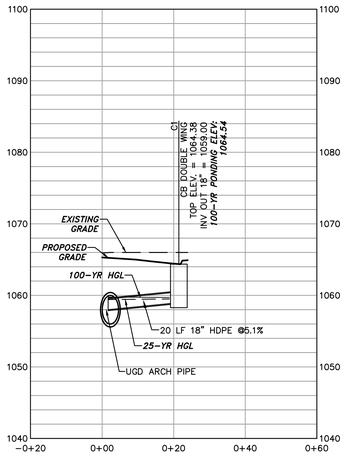
STORM A5–A1 PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



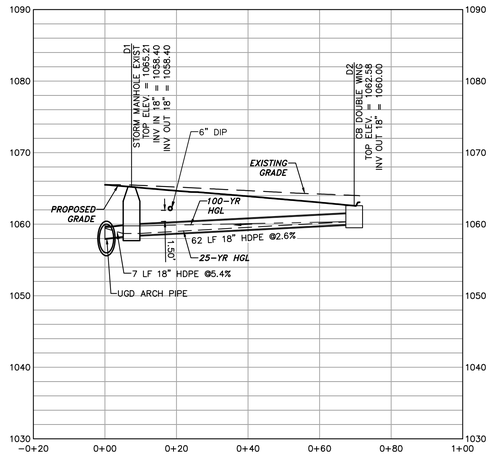
STORM A4.1–4 PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



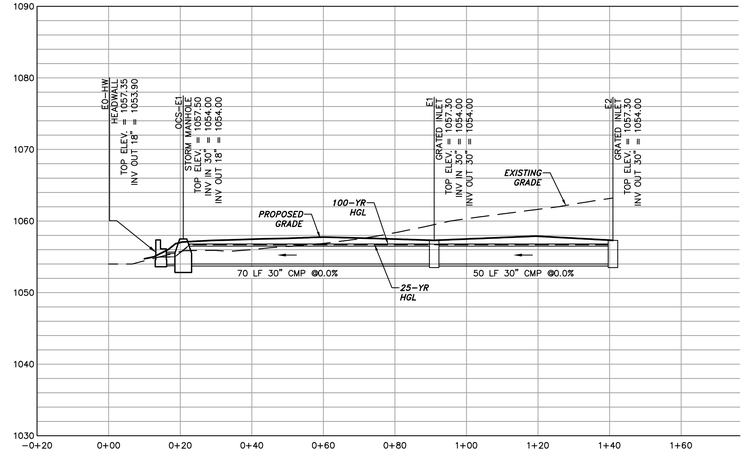
STORM B PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



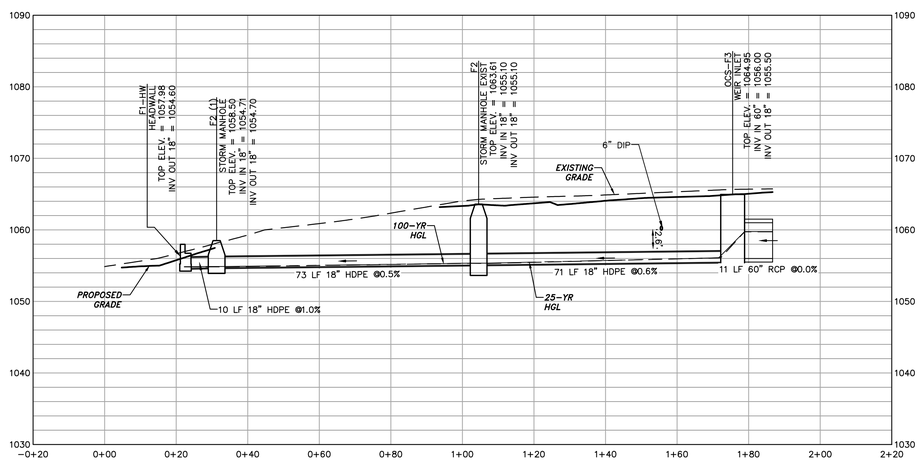
STORM C PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



STORM D2–D1 PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



STORM E PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



OCS PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

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SEAL:

GEORGIA REGISTERED No. 040937 PROFESSIONAL ENGINEER MANUEL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

STORM PROFILES

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C3.5

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP-2019-00145
05/29/2020

811 Know what's below. Call before you dig.

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	58.207	0.23	0.66	0.92	0.22	0.57	5.0	7.0	9.2	5.27	20.87	3.93	18	3.95	1058.00	1060.30	1059.77	1061.18	0.00	1067.81	A1
2	1	78.022	0.03	0.43	0.78	0.02	0.36	5.0	6.3	9.4	3.37	10.63	4.76	18	1.03	1063.80	1064.60	1064.38	1065.30	1067.81	1069.30	A2
3	2	45.734	0.09	0.40	0.81	0.07	0.34	5.0	6.1	9.4	3.18	3.53	5.02	12	0.98	1065.10	1065.55	1065.84	1066.31	1069.30	1069.40	A3
4	3	49.887	0.07	0.31	0.86	0.06	0.27	5.0	5.9	9.5	2.54	3.57	4.20	12	1.00	1065.55	1066.05	1066.31	1066.73	1069.40	1069.40	A4
5	4	94.154	0.16	0.16	0.86	0.14	0.14	5.0	5.0	9.8	1.36	3.58	2.96	12	1.01	1066.05	1067.00	1066.73	1067.49	1069.40	1069.10	A5
6	4	31.755	0.08	0.08	0.86	0.07	0.07	5.0	5.0	9.8	0.64	3.74	1.96	12	1.10	1066.05	1066.40	1066.73	1066.73	1069.40	1069.40	A4.1

Project File: STORM A1.stm | Number of lines: 6 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	16.907	0.21	0.21	0.94	0.20	0.20	5.0	5.0	9.8	1.92	33.30	2.30	18	10.05	1058.00	1059.70	1059.77	1060.22	0.00	1067.52	B1

Project File: STORM B1.stm | Number of lines: 1 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	19.774	0.23	0.23	0.94	0.21	0.21	5.0	5.0	9.8	2.11	23.62	1.87	18	5.06	1058.00	1059.00	1059.77	1059.71	0.00	1064.38	C1

Project File: STORM C1.stm | Number of lines: 1 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	7.446	0.00	0.10	0.00	0.00	0.09	0.0	7.1	9.1	0.80	24.34	0.46	18	5.37	1058.00	1058.40	1059.77	1059.77	0.00	1065.21	D1
2	1	62.213	0.10	0.10	0.89	0.09	0.09	5.0	5.0	9.8	0.86	16.84	1.65	18	2.57	1058.40	1060.00	1059.77	1060.35	1065.21	1062.58	D2

Project File: STORM D1.stm | Number of lines: 2 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	7.181	0.05	0.16	0.79	0.04	0.13	5.0	21.0	6.4	0.80	4.20	1.02	12	1.39	1053.90	1054.00	1056.75	1056.75	1057.34	1057.55	E1A
2	1	70.471	0.05	0.11	0.79	0.04	0.09	5.0	14.1	7.5	0.64	0.00	0.13	30	0.00	1054.00	1054.00	1056.77	1056.77	1057.55	1057.30	E1
3	2	49.983	0.06	0.06	0.78	0.05	0.05	5.0	5.0	9.8	0.45	0.00	0.09	30	0.00	1054.00	1054.00	1056.77	1056.77	1057.30	1057.30	E2

Project File: STORM E1.stm | Number of lines: 3 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

Storm Sewer Tabulation

100-YR STORM EVENT

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr	Total		Incr	Total	Inlet	Syst					Size	Slope	Dn	Up	Dn	Up	Dn	Up	
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	End	9.637	0.00	0.00	0.00	0.00	0.00	0.0	34.2	0.0	0.27	4.79	1.47	18	0.21	1054.60	1054.62	1054.84	1054.86	1057.98	1058.50	F2 (1)
2	1	73.157	0.00	0.00	0.00	0.00	0.00	0.0	26.2	0.0	0.27	8.45	1.96	18	0.65	1054.68	1055.15	1054.88	1055.34	1058.50	1063.61	F2
3	2	70.981	0.00	0.00	0.00	0.00	0.00	0.0	18.5	0.0	0.27	10.79	2.06	18	1.06	1055.15	1055.90	1055.34	1056.09	1063.61	1064.95	F3
4	3	11.191	0.00	0.00	0.00	0.00	0.00	5.0	5.0	0.0	0.27	0.00	1.30	60	0.00	1056.00	1056.00	1056.15	1056.20	1064.95	0.00	F4

Project File: Storm OCS1.stm | Number of lines: 4 | Run Date: 12/23/2019

NOTES:Intensity = 127.16 / (Inlet time + 17.80) ^ 0.82; Return period =Yrs. 100 ; c = cir e = ellip b = box

Storm Sewers v10.40

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
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ENERGY ENGINEERING

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Atlanta GA 30326

TEL: (404) 643-6044

EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED No. 040937 PROFESSIONAL ENGINEER ELTON MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

STORM PROFILES

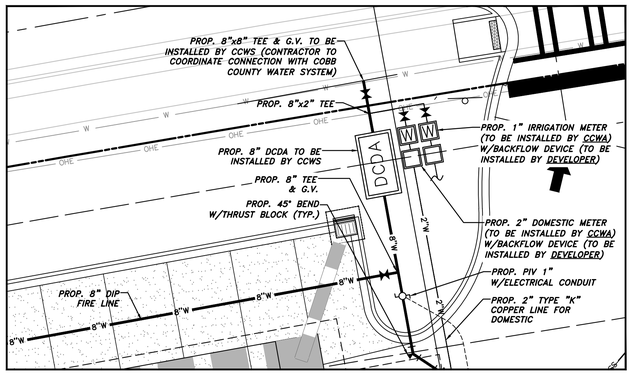
DESIGNED BY: DO-CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO-CES

SCALE: AS SHOWN
DATE: 4-17-2019
PROJECT NO.: CES-2018-008-S
SHEET: C3.6

COBB COUNTY GEORGIA APPROVED FOR LAND DISTRUBANCE PERMIT

811 Know what's **Below.** **Call** before you dig.

LDP-2019-00145
05/28/2020



WATER CONNECTION INSET

SCALE: 1"=10'

FIRE NOTE

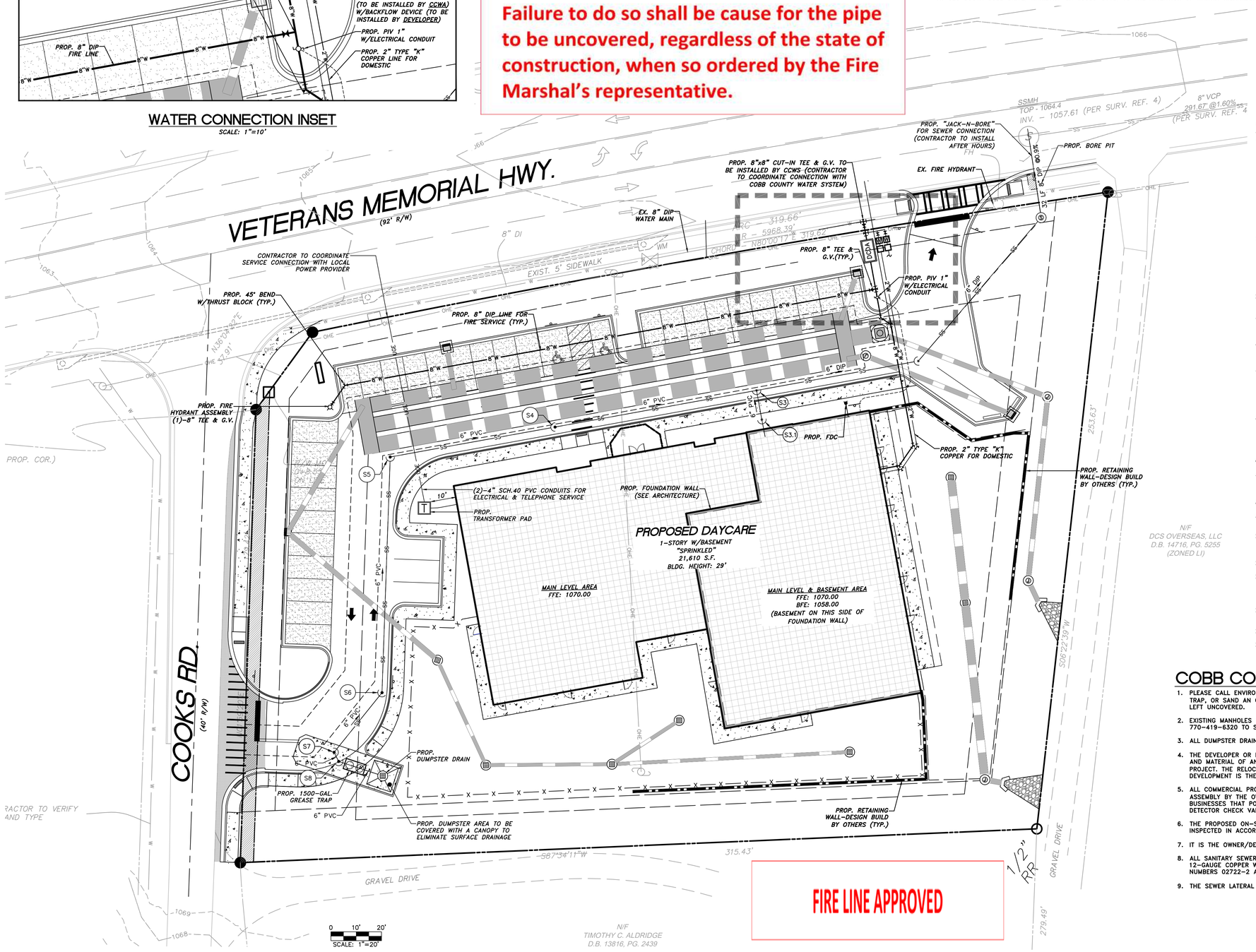
NO STREET PARKING HAS BEEN APPROVED FOR THIS DEVELOPMENT.

An underground pipe inspection must be scheduled at www.cobbfire.org.

Failure to do so shall be cause for the pipe to be uncovered, regardless of the state of construction, when so ordered by the Fire Marshal's representative.

COBB COUNTY BACKFLOW PREVENTION NOTES

1. ALLOW 6 TO 8 WEEKS FOR METER INSTALLATION AFTER PAYMENT OF ALL FEES. ALL METER LOCATIONS, INCLUDING OFF R.O.W. IN AN EASEMENT, MUST BE GRADED TO FINISHED R.O.W. CURB/SIDEWALK GRADE BEFORE CCWS CONTRACTOR WILL BE ALLOWED TO SET METER(S).
2. COBB COUNTY WILL MAKE EVERY EFFORT TO HAVE YOUR METER(S) INSTALLED AT THE APPROVED LOCATION. HOWEVER, COBB COUNTY CANNOT BE HELD RESPONSIBLE FOR UNFORESEEN OR UNKNOWN UNDERGROUND CONFLICTS WITH OTHER UTILITIES OR GROUND CONDITIONS WHICH DICTATE THAT THE METER(S) BE SET AT ANOTHER LOCATION. INSTALLING WATER PIPES FROM THE BUILDING TO THE PROPOSED METER LOCATION PRIOR TO METER INSTALLATION MAY RESULT IN ADDITIONAL COSTS FOR THE PROPERTY OWNER IN THE EVENT THAT THE METER LOCATION IS CHANGED.
3. THE COUNTY-INSTALLED FIRE METER (DCDA) REQUIRES BACKFLOW TESTING BY CONTRACTOR BEFORE A CO CAN BE ISSUED.
4. PLEASE CONTACT MARVIN RICHARDS, ENVIRONMENTAL COMPLIANCE SUPERVISOR FOR THE CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM AT (770)528-3343 FOR A SPECIFIC DETERMINATION OF BACKFLOW PREVENTION ASSEMBLY. OWNER MUST HAVE BACKFLOW PREVENTION ASSEMBLY(S) INSTALLED AND INSPECTED BY THE BACKFLOW PREVENTION INSPECTOR BEFORE WATER SERVICE IS ACTIVATED. AFTER THE WATER SERVICE IS ACTIVATED EACH ASSEMBLY MUST BE TESTED BY AN APPROVED TESTER BEFORE PERMANENT WATER SERVICE IS APPROVED. A COPY OF THE TEST RESULTS MUST BE SENT TO THE BACKFLOW PREVENTION PROGRAM AT 680 SOUTH COBB DRIVE, MARIETTA, GA 30060-3115, TO THE ATTENTION OF MARVIN RICHARDS.



FIRE LINE APPROVED

CCWS
Approved by: Tim Davidson

COBB COUNTY LANDSCAPE NOTES

1. THE COBB COUNTY ARBORIST OR LANDSCAPE ARCHITECT MUST APPROVE THE SITE LIGHTING PLAN. LIGHT POLES ARE NOT PERMITTED IN PARKING PENINSULAS, ISLANDS AND MEDIANS WITHOUT THE PRIOR APPROVAL OF THE COUNTY ARBORIST. 20' MINIMUM SPACING IS REQUIRED BETWEEN THE TRUNK OF ANY PROPOSED OVER-STORY HARDWOOD TREE (OR EXISTING TREE COUNTED FOR TREE ORDINANCE CREDIT) AND ANY EXISTING OR PROPOSED LIGHT POLE. IF THE SERVICE PROVIDER (ELECTRIC COMPANY) PRODUCES A LIGHTING PLAN, IT MUST ADHERE TO THE LIGHTING PLAN SHOWN IN THE CIVIL ENGINEERING DRAWINGS APPROVED BY COBB COUNTY FOR THE LAND DISTURBANCE PERMIT. IF A LIGHTING PLAN IS NOT PART OF THE CIVIL DRAWINGS, THE LIGHTING PLAN DESIGNER MUST SUBMIT A PLAN TO THE ARBORIST/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. IF SITE LIGHTING IS INSTALLED WITHOUT AN APPROVED PLAN, THE CERTIFICATE OF OCCUPANCY WILL BE WITHHELD UNTIL ALL CONFLICTING POWER POLES ARE MOVED. CALL 770-528-2147.
2. THE SITE CONTRACTOR SHALL COORDINATE SERVICE ROUTING OF ALL GAS, TELEPHONE, AND ELECTRICAL LINES WITH THE APPROPRIATE UTILITY COMPANY. ALL CONSTRUCTION MUST COMPLY WITH EACH UTILITY'S STANDARDS AND SPECIFICATIONS AND NOT INTERFERE WITH TREE PLANTING SITES OR EXISTING TREES TO BE PRESERVED.

UTILITY NOTES

1. *COBB CO. WATER SYSTEM STANDARD SPECIFICATIONS AND DETAILS SHALL GOVERN ALL WATER AND SANITARY SEWER MAIN CONSTRUCTION.*
2. *THE BUILDING CONTRACTOR IS RESPONSIBLE FOR LOCATION, SIZE AND SPECIFICATIONS OF ALL ELECTRICAL TRANSFORMER PADS FROM THE LOCAL POWER COMPANY AND PROVIDING SERVICE FROM THE TRANSFORMER TO THE BUILDING.*
3. *CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS AND IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.*
4. *CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OR OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED TO ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.*
5. *THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISH GRADE, AND SHALL HAVE TRAFFIC BEARING LIDS. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS MUST MATCH FINISHED GRADE (UNLESS OTHERWISE NOTED). ALL EXISTING MANHOLES & UTILITY BOXES SHALL BE ADJUSTED AS NECESSARY TO MATCH PROPOSED GRADING.*
6. *CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3' OVER ALL WATER LINES.*
7. *THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF WATER AND SEWER LINE IS (10') TEN FEET. THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINES IS (18") EIGHTEEN INCHES.*
8. *ALL FIRE HYDRANTS SHALL CONFORM TO LOCAL REQUIREMENTS.*
9. *EXISTING UTILITIES LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED FOR LOCATION AND NUMBER BY THE CONTRACTOR.*
10. *ALL ELECTRIC, TELEPHONE AND GAS LINES, INCLUDING SERVICE LINES, ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANIES SPECIFICATIONS.*
11. *CONTRACTOR TO COORDINATE INSTALLATION OF ALL UTILITIES BY OTHERS WITH HIS WORK.*
12. *PRIMARY ELECTRIC SERVICE IS PROVIDED BY THE POWER COMPANY. THIS INCLUDES THE TRANSFORMER AND PAD, TRENCHING, BACKFILL AND COMPACTION. CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND FEES ASSOCIATED WITH POWER SERVICE AS WELL AS SECONDARY SERVICE.*
13. *ALL SANITARY MANHOLES AND PIPE TO BE FLUSHED CLEAN OF DEBRIS PRIOR TO TURN OVER OF SYSTEM TO OWNER.*
14. *ALL EASEMENTS TO BE PLATTED BY THE CONTRACTOR (UNLESS OTHERWISE NOTED).*
15. *ANY UTILITIES NOT SHOWN THAT REQUIRE RELOCATION OR REMOVAL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS TO REPORT ALL DISCREPANCIES TO THE ENGINEER IMMEDIATELY UPON DISCOVERY.*

COBB COUNTY WATER SYSTEM NOTES

1. PLEASE CALL ENVIRONMENTAL COMPLIANCE AT 770-419-6430 FOR THE REQUIRED GREASE TRAP, DUMPSTER TRAP, OR SAND AN OIL/GREASE INTERCEPTOR INSPECTION. PROVIDE A 3-WORK-DAY NOTICE. TRAPS MUST BE LEFT UNCOVERED.
2. EXISTING MANHOLES MUST BE CORED & BOOTED WITH A KOR-N-SEAL OR EQUAL RUBBER BOOT. PLEASE CALL 770-419-6320 TO SCHEDULE INSPECTION OF SEWER TIE-IN.
3. ALL DUMPSTER DRAINAGE FACILITIES ARE TO BE INSTALLED AND MAINTAINED BY OWNER.
4. THE DEVELOPER OR DEVELOPER'S CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE AND MATERIAL OF ANY EXISTING WATER OR SEWER FACILITY PROPOSED FOR CONNECTION OR USE BY THIS PROJECT. THE RELOCATION OF ANY WATER/SEWER FACILITY REQUIRED TO AVOID ANY PART OF THIS DEVELOPMENT IS THE RESPONSIBILITY OF THE DEVELOPER.
5. ALL COMMERCIAL PROJECTS REQUIRE THE INSTALLATION OF AN APPROVED TESTABLE DOUBLE CHECK VALVE ASSEMBLY BY THE OWNER/DEVELOPER ON THE CUSTOMER-SIDE OF DOMESTIC AND IRRIGATION METERS. BUSINESSES THAT POSE A GREATER DEGREE OF HAZARD MAY REQUIRE ADDITIONAL PROTECTION. THE DOUBLE DETECTOR CHECK VALVE DOES NOT REQUIRE A BACKFLOW PREVENTION DEVICE.
6. THE PROPOSED ON-SITE WASTEWATER COLLECTION SYSTEM IS PRIVATE AND MUST BE DESIGNED, INSTALLED, AND INSPECTED IN ACCORDANCE WITH COBB COUNTY PLUMBING CODES. CALL 528-2134 FOR SITE INSPECTIONS.
7. IT IS THE OWNER/DEVELOPER'S RESPONSIBILITY TO INSTALL AND MAINTAIN GREASE TRAPS.
8. ALL SANITARY SEWER IN THE PUBLIC RIGHT-OF-WAY IS REQUIRED TO BE ELECTRONICALLY LOCATABLE WITH 12-GAUGE COPPER WIRE AND MARKED WITH POLYETHYLENE 6" WIDE YELLOW WARNING TAPE PER CCWS DETAIL NUMBERS 02722-2 AND 02722-4A.
9. THE SEWER LATERAL SHOWN IN DETAIL #02722-2 MUST BE SET WITHIN 2' OF THE INSIDE EDGE OF THE R.O.W.

CONCEPT ENGINEERING SERVICES INC.
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Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net
CLIENT:

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SEAL:

GEORGIA REGISTERED No. 040937 PROFESSIONAL ENGINEER MARK L. MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

UTILITY PLAN

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C4.0

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
SDP2019-00145
05/29/2020

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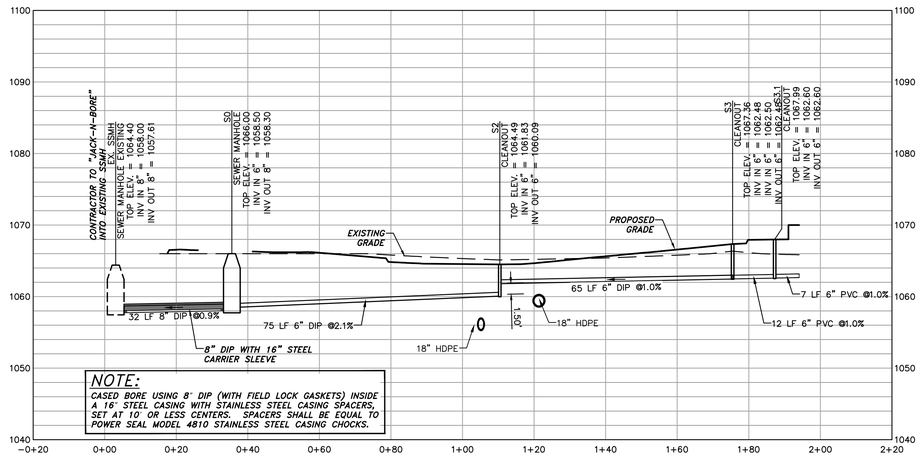
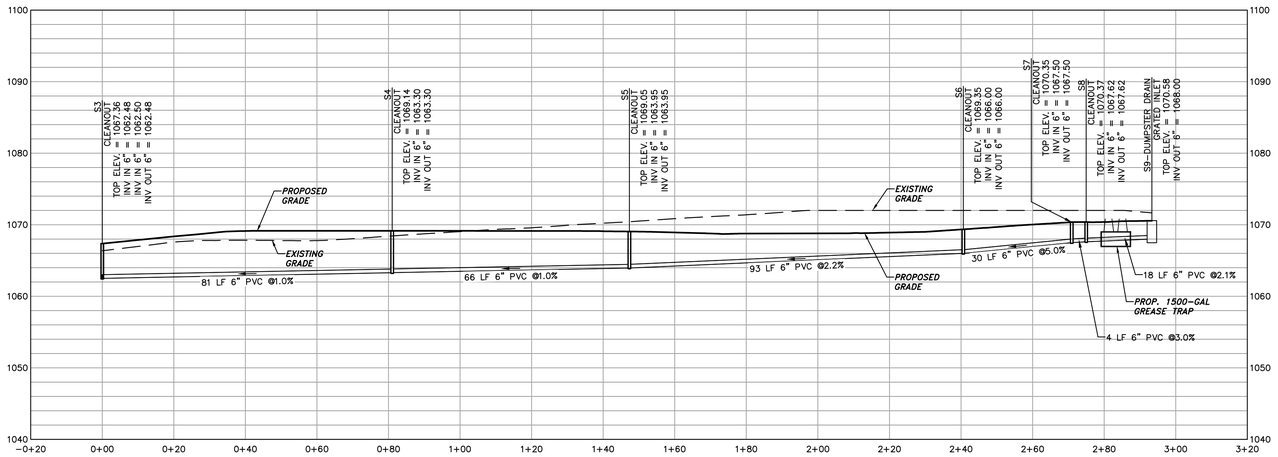
24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044



SEWER PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'



SAN. SEWER S9-S3 PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

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SEAL:

GEORGIA
REGISTERED
No. 029537
PROFESSIONAL
ENGINEER
JASON MAXWELL MORGAN, III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

SEWER PROFILES

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES

SCALE: AS SHOWN

DATE:

PROJECT NO.:
CES-2018-008-S

SHEET:
C4.5

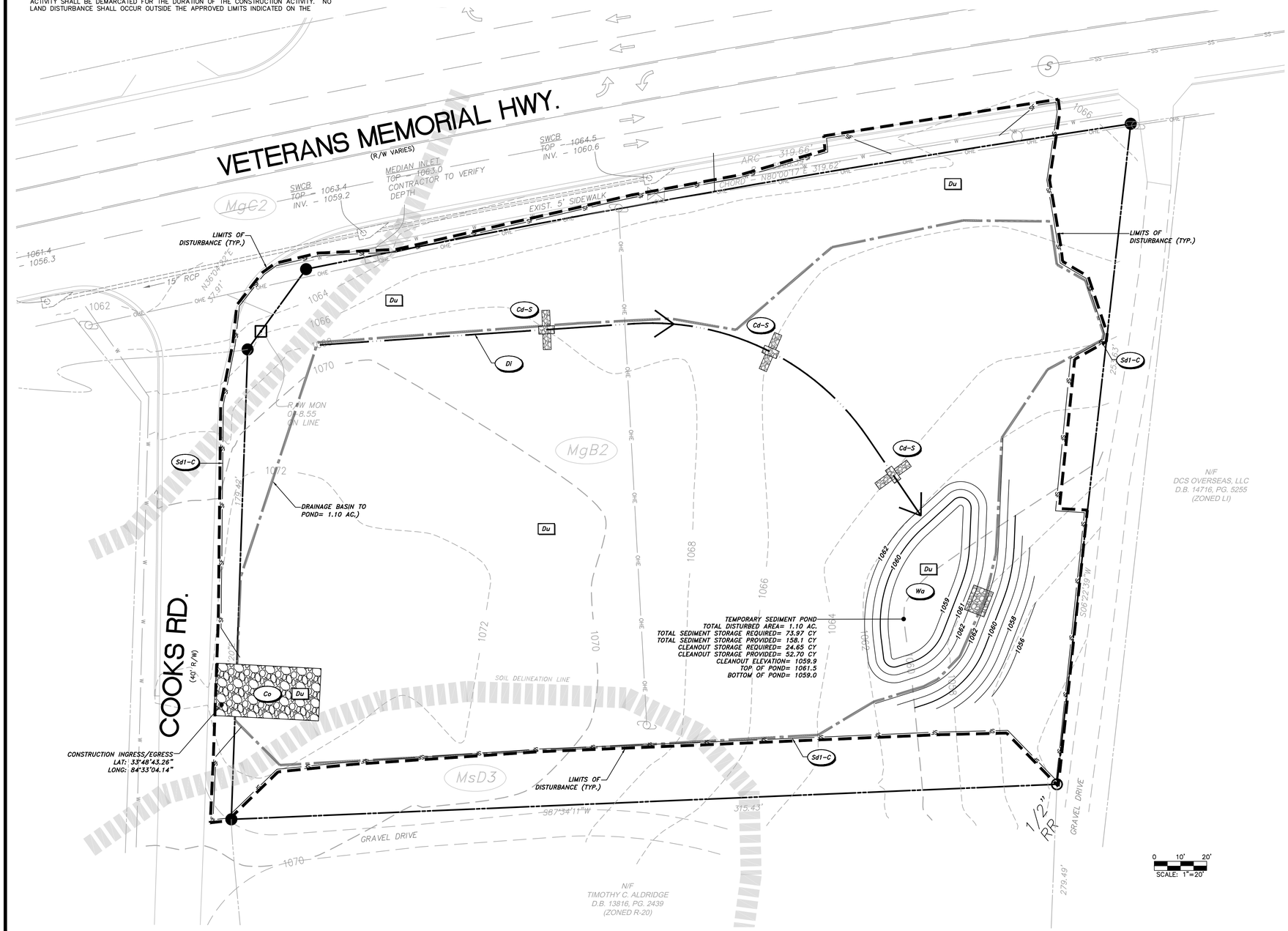
COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP: 2019-00145
05/29/2020

811 Know what's below. Call before you dig.

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL CONFORM TO THE LATEST EROSION AND SEDIMENT CONTROL REGULATIONS FOR THE STATE, COUNTY, AND/OR CITY.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES, AND MAINTAINED DURING SUCH ACTIVITIES.
3. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOILED DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC. FROM THE DRAINAGE AREAS SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.
4. EROSION CONTROL MEASURES ARE TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES. WIRE REINFORCED BACKING (TYPE C) SILT FENCE TO BE USED UNLESS OTHERWISE INDICATED.
5. SILT FENCE MUST MEET REQUIREMENTS OF THE SPECIFICATIONS CONTAINED IN THE CONSTRUCTION DETAILS OR AN EQUIVALENT PRODUCT APPROVED BY THE OWNER'S REPRESENTATIVE.
6. PRIOR TO ANY OTHER CONSTRUCTION A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE BUILT. THE CONSTRUCTION ENTRANCE/EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
7. 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 ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS. IF WETLANDS EXIST ON-SITE, ANY CLEARING MUST BE IN ACCORDANCE WITH THE WETLANDS PERMIT.
8. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
9. OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
10. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
11. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO GROUND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FORM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
12. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
13. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.
14. 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.
15. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
16. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH AND/OR "PAM." SEE APPENDIX 1 ON SHEET C5.30.
17. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
18. EROSION AND SEDIMENT CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE, INSTALLATION, MAINTENANCE AND REMOVAL AS REQUIRED BY THE REGULATIONS OF THE STATE AND/OR GOVERNING AGENCY. THE INSTALLATION OF THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION.
19. CONTRACTOR TO MAINTAIN ON-SITE DAILY LOG OF ALL MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES. LOG SHALL BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE TO SUBMIT THE NPDES NOTICE OF TERMINATION TO THE APPROPRIATE STATE AGENCY.
20. THE CONTRACTOR IS RESPONSIBLE FOR UPHOLDING THE EROSION CONTROL STANDARDS FOR GEORGIA REGARDLESS OF WHAT SEDIMENT CONTROL MEASURES WERE INDICATED WITHIN THE PLAN SET.
21. 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.
22. SEDIMENT AND EROSION MEASURES AND PRACTICES TO BE INSPECTED DAILY.
23. ALL DISTURBED AREAS TO BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT.
24. CUT AND FILL SLOPES SHALL NOT EXCEED 3H:1V ON RESIDENTIAL PROJECTS AND LOTS, AND SHALL NOT EXCEED 2H:1V ON ALL OTHER PROJECTS. IF COMPLIANCE IS NOT MET AN APPLICATION FOR A VARIANCE MAY BE AN OPTION.
25. WEEKLY EROSION AND SEDIMENT CONTROL REPORTS SHALL BE SUBMITTED TO THE DEVELOPMENT DEPARTMENT STARTING WITH THE ISSUANCE OF THE DEVELOPMENT PERMIT AND ENDING WHEN PROJECT IS RELEASED BY THE INSPECTOR.

TOTAL SITE AREA: 1.70 AC.
TOTAL DISTURBED AREA: 1.63 AC.



24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

EROSION LEGEND

Co	CONSTRUCTION EXIT	
Sd1-S	SEDIMENT BARRIER SILT FENCE (SENSITIVE)	SF
Sd2-F	TEMPORARY INLET SEDIMENT TRAP (FILTER FABRIC)	
Sd2-P	TEMPORARY INLET SEDIMENT TRAP (PIGS IN A BLANKET)	
Sd3	TEMPORARY SEDIMENT BASIN	Sd3
Ds1	DISTURBED AREA MULCHING ONLY	Ds1
Ds2	DISTURBED AREA TEMPORARY SEEDING	Ds2
Ds3	DISTURBED AREA PERMANENT SEEDING	Ds3
Ds4	DISTURBED AREA SODDING	Ds4
Du	DUST CONTROL	Du
Mb	SLOPE STABILITY	Mb
SOIL DELINEATION LINE		
SOIL TYPE SERIES		HgC2
LIMITS OF DISTURBANCE LINE		

SOIL SERIES

MgB2	MADISON SANDY LOAM, 2-6% SLOPES, MODERATELY ERODED
MgC2	MADISON SANDY LOAM, 6-10% SLOPES, ERODED
MsD3	MADISON & 'PACOLET SOILS, 10-15% SLOPES, SEVERELY ERODED

ENGINEER CERTIFICATION:

THE PROPOSED EROSION AND RUNOFF CONTROL MEASURES ARE IN COMPLIANCE WITH THE COBB COUNTY SEDIMENT CONTROL AND FLOOD PROTECTION REGULATIONS AND WILL NOT INCREASE THE RUNOFF RATE FROM THE SITE FOR RAINSTORMS WITH A RETURN PERIOD OF 2, 5, 10, 25, 50 AND/OR 100 YEARS.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HERE-IN BY MYSELF OR MY AUTHORIZED AGENT UNDER MY DIRECT SUPERVISION.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

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 ACT AND THE DOCUMENT 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA', PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THIS 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 REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 1000001.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

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SEAL:

GEORGIA REGISTERED No. 043637 PROFESSIONAL ENGINEER LEON MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

ES&PC PLAN PHASE 1

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C5.0

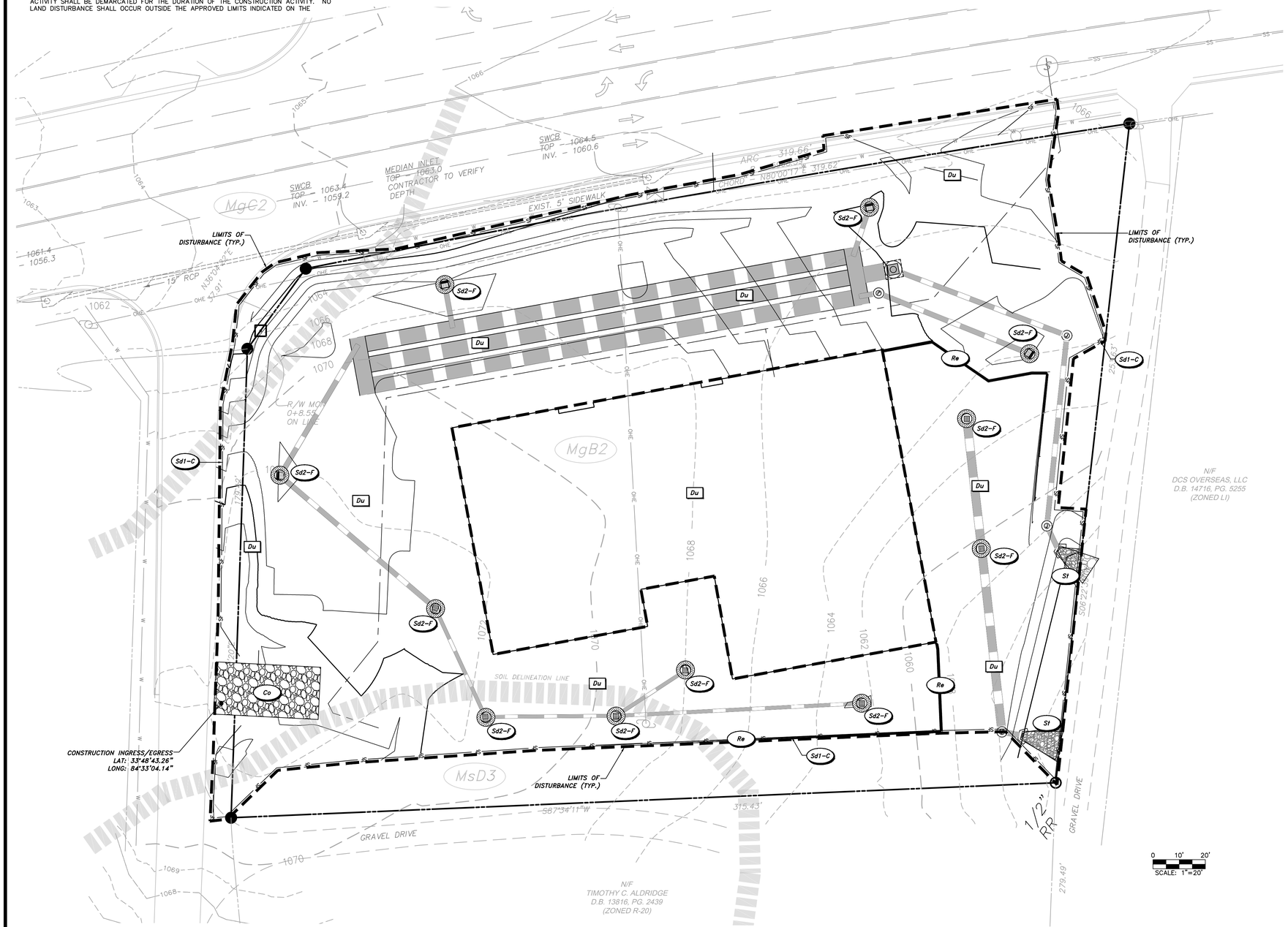
COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP 2019-00145
05/28/2020

811 Know what's below. Call before you dig.

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL CONFORM TO THE LATEST EROSION AND SEDIMENT CONTROL REGULATIONS FOR THE STATE, COUNTY, AND/OR CITY.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES, AND MAINTAINED DURING SUCH ACTIVITIES.
3. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOILED DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC. FROM THE DRAINAGE AREAS SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.
4. EROSION CONTROL MEASURES ARE TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES. WIRE REINFORCED BACKING (TYPE C) SILT FENCE TO BE USED UNLESS OTHERWISE INDICATED.
5. SILT FENCE MUST MEET REQUIREMENTS OF THE SPECIFICATIONS CONTAINED IN THE CONSTRUCTION DETAILS OR AN EQUIVALENT PRODUCT APPROVED BY THE OWNER'S REPRESENTATIVE.
6. PRIOR TO ANY OTHER CONSTRUCTION A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE BUILT. THE CONSTRUCTION ENTRANCE/EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLE OR SITE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY.
7. 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 ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS. IF WETLANDS EXIST ON-SITE, ANY CLEARING MUST BE IN ACCORDANCE WITH THE WETLANDS PERMIT.
8. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
9. OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
10. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
11. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO GROUND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FORM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
12. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.
13. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE UTILIZED FOR EROSION CONTROL.
14. 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.
15. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
16. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH AND/OR "PAM." SEE APPENDIX 1 ON SHEET C5.30.
17. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
18. EROSION AND SEDIMENT CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE, INSTALLATION, MAINTENANCE AND REMOVAL AS REQUIRED BY THE REGULATIONS OF THE STATE AND/OR GOVERNING AGENCY. THE INSTALLATION OF THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION.
19. CONTRACTOR TO MAINTAIN ON-SITE DAILY LOG OF ALL MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES. LOG SHALL BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE TO SUBMIT THE NPDES NOTICE OF TERMINATION TO THE APPROPRIATE STATE AGENCY.
20. THE CONTRACTOR IS RESPONSIBLE FOR UPHOLDING THE EROSION CONTROL STANDARDS FOR GEORGIA REGARDLESS OF WHAT SEDIMENT CONTROL MEASURES WERE INDICATED WITHIN THE PLAN SET.
21. 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.
22. SEDIMENT AND EROSION MEASURES AND PRACTICES TO BE INSPECTED DAILY.
23. ALL DISTURBED AREAS TO BE GRASSED AS SOON AS CONSTRUCTION PHASES PERMIT.
24. CUT AND FILL SLOPES SHALL NOT EXCEED 3H:1V ON RESIDENTIAL PROJECTS AND LOTS, AND SHALL NOT EXCEED 2H:1V ON ALL OTHER PROJECTS. IF COMPLIANCE IS NOT MET AN APPLICATION FOR A VARIANCE MAY BE AN OPTION.
25. WEEKLY EROSION AND SEDIMENT CONTROL REPORTS SHALL BE SUBMITTED TO THE DEVELOPMENT DEPARTMENT STARTING WITH THE ISSUANCE OF THE DEVELOPMENT PERMIT AND ENDING WHEN PROJECT IS RELEASED BY THE INSPECTOR.

TOTAL SITE AREA: 1.70 AC.
TOTAL DISTURBED AREA: 1.63 AC.



24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

EROSION LEGEND

Co	CONSTRUCTION EXIT	
Sd1-S	SEDIMENT BARRIER SILT FENCE (SENSITIVE)	SF
Sd2-F	TEMPORARY INLET SEDIMENT TRAP (FILTER FABRIC)	
Sd2-P	TEMPORARY INLET SEDIMENT TRAP (PIGS IN A BLANKET)	
Sd3	TEMPORARY SEDIMENT BASIN	Sd3
Ds1	DISTURBED AREA MULCHING ONLY	Ds1
Ds2	DISTURBED AREA TEMPORARY SEEDING	Ds2
Ds3	DISTURBED AREA PERMANENT SEEDING	Ds3
Ds4	DISTURBED AREA SODDING	Ds4
Du	DUST CONTROL	Du
Mb	SLOPE STABILITY	Mb
SOIL DELINEATION LINE		
SOIL TYPE SERIES		HgC2
LIMITS OF DISTURBANCE LINE		

SOIL SERIES

MgB2	MADISON SANDY LOAM, 2-6% SLOPES, MODERATELY ERODED
MgC2	MADISON SANDY LOAM, 6-10% SLOPES, ERODED
MsD3	MADISON & PACOLET SOILS, 10-15% SLOPES, SEVERELY ERODED

ENGINEER CERTIFICATION:

THE PROPOSED EROSION AND RUNOFF CONTROL MEASURES ARE IN COMPLIANCE WITH THE COBB COUNTY SEDIMENT CONTROL AND FLOOD PROTECTION REGULATIONS AND WILL NOT INCREASE THE RUNOFF RATE FROM THE SITE FOR RAINSTORMS WITH A RETURN PERIOD OF 2, 5, 10, 25, 50 AND/OR 100 YEARS.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HERE-IN BY MYSELF OR MY AUTHORIZED AGENT UNDER MY DIRECT SUPERVISION.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

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 ACT AND THE DOCUMENT 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA', PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THIS 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 REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 1000001.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED No. 043637 PROFESSIONAL ENGINEER LEON MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

ES&PC PLAN PHASE 2

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C5.1

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
SLD 2019-00145
05/20/2020

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TOTAL SITE AREA: 1.70 AC.
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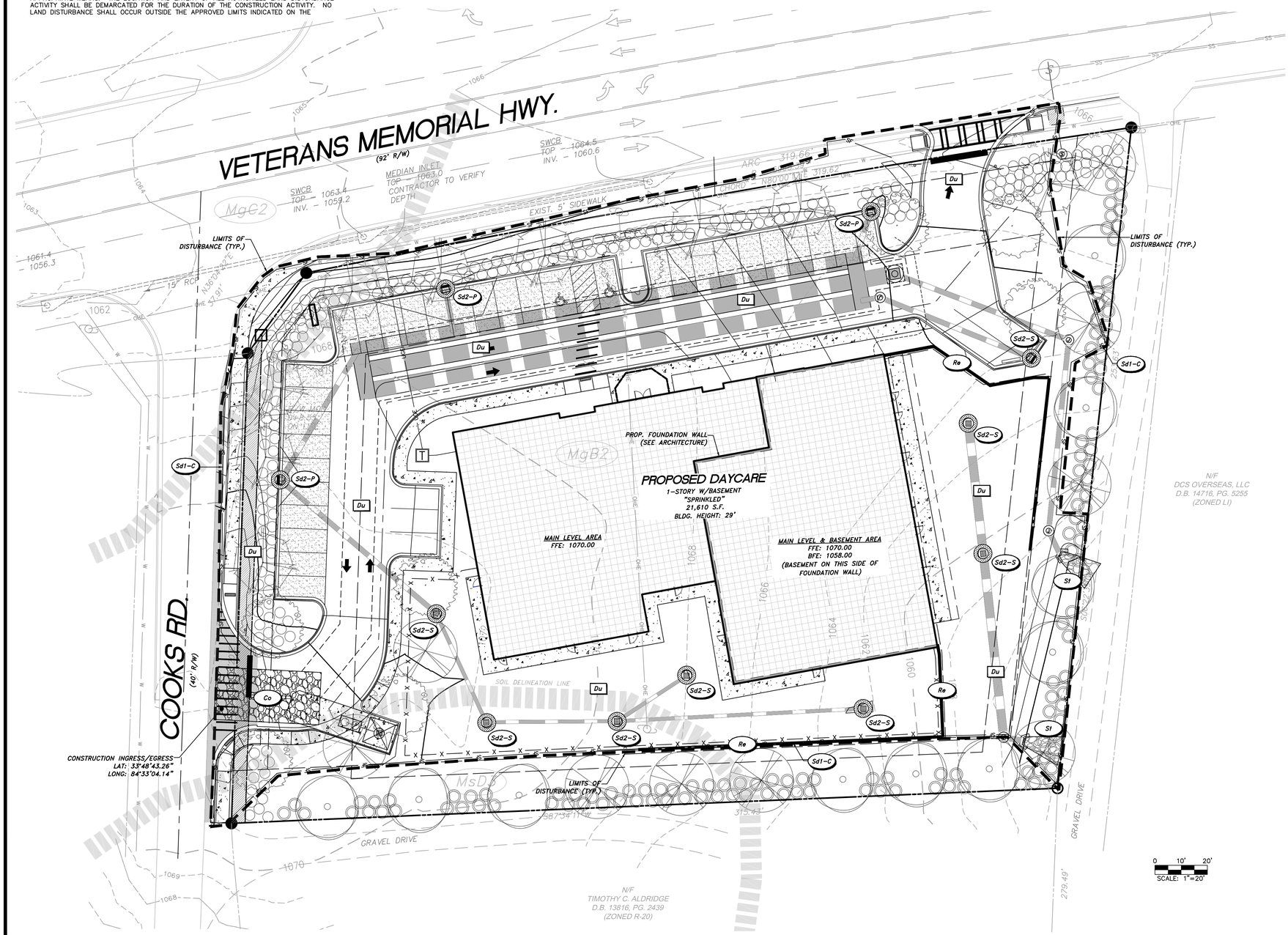

24-HR CONTACT: EMMANUEL ABUA (404) 643-6044

EROSION LEGEND

Co	CONSTRUCTION EXIT	
Sd1-S	SEDIMENT BARRIER SILT FENCE (SENSITIVE)	SF
Sd2-F	TEMPORARY INLET SEDIMENT TRAP (FILTER FABRIC)	
Sd2-P	TEMPORARY INLET SEDIMENT TRAP (PIGS IN A BLANKET)	
Sd3	TEMPORARY SEDIMENT BASIN	Sd3
Ds1	DISTURBED AREA MULCHING ONLY	Ds1
Ds2	DISTURBED AREA TEMPORARY SEEDING	Ds2
Ds3	DISTURBED AREA PERMANENT SEEDING	Ds3
Ds4	DISTURBED AREA SODDING	Ds4
Du	DUST CONTROL	Du
Mb	SLOPE STABILITY	Mb
SOIL DELINEATION LINE		
SOIL TYPE SERIES		HgC2
LIMITS OF DISTURBANCE LINE		

SOIL SERIES

MgB2	MADISON SANDY LOAM, 2-6% SLOPES, MODERATELY ERODED
MgC2	MADISON SANDY LOAM, 6-10% SLOPES, ERODED
MsD3	MADISON & PACOLET SOILS, 10-15% SLOPES, SEVERELY ERODED

ENGINEER CERTIFICATION:

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SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HERE-IN BY MYSELF OR MY AUTHORIZED AGENT UNDER MY DIRECT SUPERVISION.

SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

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SIGN LEON MAXWELL MORGAN GA PE#043637 DATE 2-5-2020

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED No. 043637 PROFESSIONAL ENGINEER LEON MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

ES&PC PLAN PHASE 3

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C5.2

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
SDP-2019-00145
05/29/2020

811 Know what's below. Call before you dig.

1. THE CHECKLIST HAS BEEN PROVIDED ON SHEET C5.31.
2. SIGNATURE, SEAL, AND GSWCC LEVEL II CERTIFICATION NUMBER ARE SHOWN ON ALL SHEETS.
3. THE DISTURBANCE FOR THIS PROJECT IS LESS THAN 50 ACRES AT ANY ONE TIME.
4. 24-HOUR CONTACT:
   NAME: CONCEPT ENGINEERING SERVICES--EMMANUAL ABUA
   PHONE: (404) 643-6044
5. PRIMARY PERMITTEE: CONCEPTENGRSCEO@GMAIL.COM
   ISHERE CORPORATION
   5205 TIMBER RIDGE ROAD
   MARIETTA, GA 30068
6. TOTAL SITE ACREAGE: 10.12
   TOTAL DISTURBED ACREAGE: 7.92
7. CONSTRUCTION EXIT IS LOCATED AT:
   LATITUDE: N33.81202 (N33°48'43.26")
   LONGITUDE: W84.55115 (W84°33'04.14")
8. INITIAL PLAN DATE IS SHOWN ON ALL SHEETS. ANY PLAN REVISIONS ARE SHOWN ON THE COVER SHEET AND THE SHEET AFFECTED BY THE REVISION
9. CONSTRUCTION ACTIVITY DESCRIPTION: EXISTING LAND USE IS VEGETATIVE OPEN PASTURE. THE PROPOSED DEVELOPMENT WOULD INCLUDE THE CONSTRUCTION OF A 22,000SF DAYCARE FACILITY WITH ASSOCIATED PARKING, UTILITIES AND STORMWATER MANAGEMENT INFRASTRUCTURE.
10. VICINITY MAP IS SHOWN ON THIS SHEET.
11. THE INITIAL RECEIVING WATER IS: AN UNKNOWN NAMED TRIBUTARY OF QUEENS LAKE.

12. 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.

02.27.2020		LEON MAXWELL MORGAN	043637	0000087030
DATE	DESIGN PROFESSIONAL'S SIGNATURE	DESIGN PROFESSIONAL'S NAME	GA. PE #	GSWCC CERT#

13. 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 GEORGIA 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 100003.

02.27.2020		LEON MAXWELL MORGAN	043637	0000087030
DATE	DESIGN PROFESSIONAL'S SIGNATURE	DESIGN PROFESSIONAL'S NAME	GA. PE #	GSWCC CERT#

14. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN SEVEN (7) DAYS AFTER INSTALLATION.

I CERTIFY THAT THE SITE WAS VISITED WITHIN SEVEN (7) DAYS OF THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S.

DATE	DESIGN PROFESSIONAL'S SIGNATURE	DESIGN PROFESSIONAL'S NAME	GA. PE #	GSWCC CERT#

INSPECTION REVEALED THE FOLLOWING DEFICIENCIES FROM THE APPROVED ES&PC PLAN:

THE PERMITTEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF THE RECEIPT OF THE INSPECTION REPORT UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED.

15. 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.

(I). EXCEPT AS PROVIDED IN PART IV.(III). BELOW, NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 25 FOOT BUFFER ALONG THE BANKS OF ALL STATE WATERS, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, EXCEPT WHERE THE DIRECTOR HAS DETERMINED TO ALLOW A VARIANCE THAT IS AT LEAST AS PROTECTIVE OF NATURAL RESOURCES AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROVISIONS OF O.C.G.A. 12-7-6, OR WHERE A DRAINAGE STRUCTURE OR A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED IN THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED, OR ALONG ANY EPHEMERAL STREAM, OR WHERE BULKHEADS AND SEAWALLS MUST BE CONSTRUCTED TO PREVENT THE EROSION OF THE SHORELINE ON LAKE OCONEE AND LAKE SINCLAIR. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

(1) PUBLIC DRINKING WATER SYSTEM RESERVOIRS,
(2) STREAM CROSSINGS FOR WATER AND SEWER LINES, PROVIDED THAT THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER.
(3) BUFFER CROSSING FOR FENCES, PROVIDED THAT THE CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER.
(4) STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT: (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCES TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E., DISTURBANCE TO UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.

(II). NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 50 FOOT BUFFER, AS MEASURED HORIZONTALLY FROM THE POINT WHERE VEGETATION HAS BEEN WRESTED BY NORMAL STREAM FLOW OR WAVE ACTION, ALONG THE BANKS OF ANY STATE WATERS CLASSIFIED AS 'TROUT STREAMS' EXCEPT WHEN APPROVAL IS GRANTED BY THE DIRECTOR FOR ALTERNATE BUFFER REQUIREMENTS IN ACCORDANCE WITH THE PROVISIONS OF 12-7-6, OR WHERE A ROADWAY DRAINAGE STRUCTURE MUST BE CONSTRUCTED; PROVIDED, HOWEVER, THAT SMALL SPRINGS AND STREAMS CLASSIFIED AS TROUT STREAMS WHICH DISCHARGE AN AVERAGE ANNUAL FLOW OF 25 GALLONS PER MINUTE OR LESS SHALL HAVE A 25 FOOT BUFFER OR THEY MAY BE PIPED, AT THE DISCRETION OF THE PERMITTEE, PURSUANT TO THE TERMS OF A RULE PROVIDING FOR A STREAMLINED VARIANCE FROM THIS PART FOR SMALL TROUT STREAMS AUTHORIZED BY THE BOARD OF NATURAL RESOURCES INCLUDING NOTIFICATION OF SUCH TO EPD AND THE LOCAL ISSUING AUTHORITY OF THE LOCATION AND EXTENT OF THE PIPING AND PRESCRIBED METHODOLOGY FOR MINIMIZING THE IMPACT OF SUCH PIPING AND FOR MEASURING THE VOLUME OF WATER DISCHARGED BY THE ANY SUCH PIPE MUST STOP SHORT OF THE DOWNSTREAM PERMITTEE'S PROPERTY, AND THE PERMITTEE MUST COMPLY WITH THE BUFFER REQUIREMENT FOR ANY ADJACENT TROUT STREAMS. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND ARE IMPLEMENTED:

(1) PUBLIC DRINKING WATER SYSTEM RESERVOIRS,
(2) STREAM CROSSINGS FOR WATER AND SEWER LINES, PROVIDED THAT THE STREAM CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER.
(3) BUFFER CROSSING FOR FENCES, PROVIDED THAT THE CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER.
(4) STREAM CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT: (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF STREAM CROSSINGS AND DISTURBANCES TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E., DISTURBANCE TO UNDERLYING VEGETATION IS MINIMIZED), AND (D) NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE STREAM CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.

(III). EXCEPT AS PROVIDED IN PART IV(IV) BELOW, NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A 25 FOOT BUFFER ALONG COASTAL MARSHLANDS, AS MEASURED HORIZONTALLY FROM THE COASTAL MARSHLAND--UPLAND INTERFACE, AS DETERMINED IN ACCORDANCE WITH PART 4 OF ARTICLE 4 OF CHAPTER 5 OF TITLE 12, THE COASTAL MARSHLANDS PROTECTION ACT OF 1970, AND THE RULES AND REGULATIONS PROMULGATED THEREUNDER, EXCEPT WHERE THE DIRECTOR DETERMINES TO ALLOW A VARIANCE THAT IS AT LEAST AS PROTECTIVE OF NATURAL RESOURCES AND THE ENVIRONMENT IN ACCORDANCE WITH THE PROVISIONS OF 12-7-6, OR WHERE OTHERWISE ALLOWED BY THE DIRECTOR PURSUANT TO CODE SECTION 12-2-8, OR WHERE AN ALTERATION WITHIN THE BUFFER AREA HAS BEEN AUTHORIZED PURSUANT TO CODE SECTION 12-5-286, OR FOR MAINTENANCE OF ANY CURRENTLY SERVICEABLE STRUCTURE, LANDSCAPING, OR HARDSCAPING, INCLUDING BRIDGES, ROADS, PARKING LOTS, GOLF COURSES, GOLF CART PATHS, RETAINING WALLS, BULKHEADS, AND PATIOS, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED, OR WHERE A DRAINAGE STRUCTURE OR ROADWAY DRAINAGE STRUCTURE IS CONSTRUCTED OR MAINTAINED, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED, OR ON THE LANDWARD SIDE OF ANY CURRENTLY SERVICEABLE SHORELINE STABILIZATION STRUCTURE, OR FOR THE MAINTENANCE OF ANY MANMADE STORMWATER DETENTION BASIN, GOLF COURSE POND, OR IMPOUNDMENT THAT IS LOCATED ENTIRELY WITHIN THE PROPERTY OF A SINGLE INDIVIDUAL, PARTNERSHIP, OR CORPORATION, PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED. THE BUFFER SHALL NOT APPLY TO THE FOLLOWING ACTIVITIES PROVIDED THAT ADEQUATE EROSION CONTROL MEASURES ARE INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS AND SUCH MEASURES ARE FULLY IMPLEMENTED:

(1) PUBLIC DRINKING WATER SYSTEM RESERVOIRS,
(2) CROSSINGS FOR UTILITY LINES THAT CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER,
(3) ANY LAND-DISTURBING ACTIVITY CONDUCTED PURSUANT TO AND IN COMPLIANCE WITH A VALID AND EFFECTIVE LAND-DISTURBING PERMIT ISSUED SUBSEQUENT TO APRIL 22, 2014, AND PRIOR TO DECEMBER 31, 2015
(4) ANY LOT FOR WHICH THE PRELIMINARY PLAT HAS BEEN APPROVED PRIOR TO DECEMBER 31, 2015 IF ROADWAYS, BRIDGES, OR WATER AND SEWER LINES HAVE BEEN EXTENDED TO SUCH LOT PRIOR TO THE EFFECTIVE DATE OF THIS ACT AND IF THE REQUIREMENT TO MAINTAIN A 25 FOOT BUFFER WOULD CONSUME AT LEAST 15 PERCENT OF THE HIGH GROUND OF THE PLATTED LOT OTHERWISE AVAILABLE FOR DEVELOPMENT;
(5) BUFFER CROSSING FOR FENCES, PROVIDED THAT THE CROSSINGS OCCUR AT AN ANGLE, AS MEASURED FROM THE POINT OF CROSSING, WITHIN 25 DEGREES OF PERPENDICULAR TO THE STREAM AND CAUSE A WIDTH OF DISTURBANCE OF NOT MORE THAN 50 FEET WITHIN THE BUFFER, AND NATIVE RIPARIAN VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER, AND
(6) CROSSINGS FOR AERIAL UTILITY LINES, PROVIDED THAT: (A) THE NEW UTILITY LINE RIGHT-OF-WAY WIDTH DOES NOT EXCEED 100 LINEAR FEET, (B) UTILITY LINES ARE ROUTED AND CONSTRUCTED SO AS TO MINIMIZE THE NUMBER OF CROSSINGS AND DISTURBANCES TO THE BUFFER, (C) ONLY TREES AND TREE DEBRIS ARE REMOVED FROM WITHIN THE BUFFER RESULTING IN ONLY MINOR SOIL EROSION (I.E., DISTURBANCE TO UNDERLYING VEGETATION IS MINIMIZED), AND (D) VEGETATION IS RE-ESTABLISHED IN ANY BARE OR DISTURBED AREAS WITHIN THE BUFFER. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE CROSSINGS WITH DETAILS OF THE BUFFER DISTURBANCE INCLUDING AREA AND LENGTH OF BUFFER DISTURBANCE, ESTIMATED LENGTH OF TIME OF BUFFER DISTURBANCE, AND JUSTIFICATION.

(IV). EXCEPT AS PROVIDED ABOVE, FOR BUFFERS REQUIRED PURSUANT TO PART IV.(I). AND (II) AND (III), NO CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITHIN A BUFFER AND A BUFFER SHALL REMAIN IN ITS NATURAL, UNDISTURBED, STATE OF VEGETATION UNTIL ALL LAND-DISTURBING ACTIVITIES ON THE CONSTRUCTION SITE ARE COMPLETED. DURING COVERAGE UNDER THIS PERMIT, A BUFFER CANNOT BE THINNED OR TRIMMED OF VEGETATION AND A PROTECTIVE VEGETATIVE COVER MUST REMAIN TO PROTECT WATER QUALITY AND AQUATIC HABITAT AND A NATURAL CANOPY MUST BE LEFT IN SUFFICIENT QUANTITY TO KEEP SHADE ON THE STREAM BED OR MARSH.

16. THERE IS A 25' UNDISTURBED STREAM BUFFER & 75' COUNTY BUFFER. THERE ARE NO ENCROACHMENTS INTO THE BUFFER AREA. NO BUFFER VARIANCE NEEDED.
17. THE PRIMARY, SECONDARY OR TERTIARY PERMITTEES, AS APPLICABLE, SHALL AMEND THEIR PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT (I.E., THOSE BMPS WHERE THE DESIGN IS BASED UPON RAINFALL INTENSITY, DURATION AND RETURN FREQUENCY OF STORMS) OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM SOURCES IDENTIFIED UNDER PART IV.D.3. OF THIS PERMIT; AMENDMENTS TO THE PLAN MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AS PROVIDED IN THIS PERMIT. SECONDARY PERMITTEES MUST NOTIFY THE PRIMARY PERMITTEE WITHIN 24-HOURS OF BECOMING AWARE OF ANY SUSPECTED BMP DESIGNED DEFICIENCIES WHICH ARE NOT EFFECTIVE IN CONTROLLING THE DISCHARGE OF POLLUTANTS FROM THE SECONDARY PERMITTEE'S SITE. THE PRIMARY PERMITTEE MUST EVALUATE WHETHER THESE DEFICIENCIES EXIST WITHIN 48-HOURS OF SUCH NOTICE, AND IF THESE DEFICIENCIES ARE FOUND TO EXIST MUST AMEND THE PLAN IN ACCORDANCE WITH THIS PARAGRAPH TO ADDRESS THOSE DEFICIENT BMPS WITHIN SEVEN (7) DAYS OF BEING NOTIFIED BY THE SECONDARY PERMITTEE. WHEN THE PLAN IS AMENDED, THE PRIMARY PERMITTEE MUST NOTIFY AND PROVIDE A COPY OF THE AMENDMENT TO ALL AFFECTED SECONDARY PERMITTEES WITHIN THIS SEVEN (7) DAY PERIOD. THE SECONDARY PERMITTEE(S) MUST IMPLEMENT ANY NEW PLAN REQUIREMENTS AFFECTING THEIR SITE(S) WITHIN 48-HOURS OF NOTIFICATION BY THE PRIMARY PERMITTEE. NOTWITHSTANDING THE FOREGOING, THE PRIMARY OR TERTIARY PERMITTEE REMAINS RESPONSIBLE FOR INSURING THAT THE PLAN, AS APPROPRIATE, MEETS THE REQUIREMENTS OF THIS PERMIT. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

18. WASTE DISPOSAL. LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES AND STORM DRAINS. WASTE COLLECTION AREAS, SUCH AS DUMPSTERS, ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED THE PLAN SHOULD INCLUDE SECONDARY CONTAINMENT AROUND LIQUID WASTE COLLECTION AREAS TO FURTHER MINIMIZE THE LIKELIHOOD OF CONTAMINATED DISCHARGES. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

19. 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.
20. 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.
21. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WIT MULCH OR TEMPORARY SEEDING.
22. FOR PLANS PREPARED BY A PRIMARY PERMITTEE FOR A COMMON DEVELOPMENT, A LIST OF THE NAMES AND ADDRESSES OF ALL SECONDARY PERMITTEES MUST BE INCLUDED IN THE PLAN AND BE AMENDED AS APPROPRIATE. THESE AMENDMENTS ARE NOT SUBJECT TO THE DESIGN PROFESSIONAL CERTIFICATION REQUIREMENTS SPECIFIED IN PART IV.C.
23. STORM WATER DOES NOT DISCHARGE INTO AN IMPAIRED STREAM SEGMENT. SEE THIS SHEET FOR REQUIREMENTS.
24. THERE IS NOT A TMDL IMPLEMENTATION PLAN FOR THE RECEIVING WATERS.
25. THIS PROJECT DOES NOT ALLOW CONCRETE WASHDOWN ON SITE. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.
26. SOIL CLEANUP AND CONTROL PRACTICES
   A. LOCAL, STATE, AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
   B. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDED BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
   C. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
   D. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS.
   E. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
   F. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
   G. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
   H. 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.

CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON SITE VEHICLES AND MACHINERY. DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF EQUIPMENT TO PREVENT SPILLS. 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 CONTAINMENT. 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.

27. FOR BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE, PROVIDE COVER (E.G. PLASTIC SHEETING, TEMPORARY ROOFS) TO MINIMIZE THE EXPOSURE OF THESE PRODUCTS TO PRECIPITATION AND TO STORMWATER, OR A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THESE AREAS. MINIMIZATION OF EXPOSURE IS NOT REQUIRED IN CASES WHERE EXPOSURE TO PRECIPITATION AND STORMWATER WILL NOT RESULT IN A DISCHARGE OF POLLUTANTS, OR WHERE EXPOSURE OF A SPECIFIC MATERIAL OR PRODUCT POSES LITTLE RISK TO STORMWATER CONTAMINATION (SUCH AS FINAL PRODUCTS AND MATERIALS INTENDED FOR OUTDOOR USE).
28. PERMANENT VEGETATION AND A STORMWATER MANAGEMENT SYSTEM TO BE ESTABLISHED AND MAINTAINED DURING CONSTRUCTION TO CONTROL POLLUTANTS IN STORMWATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.
29. PRACTICES USED TO REDUCE POLLUTANTS IN STORMWATER DISCHARGES INCLUDE THE USE OF SILT FENCE, A TEMPORARY SEDIMENT POND, DUST CONTROL & GRASSING.. TO FURTHER REDUCE POLLUTANTS, MATERIALS THAT ARE POTENTIAL HAZARDS SHALL BE IDENTIFIED PRIOR TO LOCATING ON SITE AND PERSONNEL WILL BE TRAINED BY THE CONTRACTOR TO HANDLE SPILLS OR LEAKS. POLLUTANTS WILL BE STORED IN SPECIFIC AND CONTROLLED AREAS BY THE CONTRACTOR.
30. ANTICIPATED ACTIVITY SCHEDULE IS SHOWN ON THIS SHEET.
31. INSPECTIONS PERMITTEE REQUIREMENTS
   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, (B) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING; AND (C) MEASURE RAINFALL ONCE EACH 24 HOUR PERIOD AT THE SITE. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
   2. MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IN 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 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. 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).
   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. 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 PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, 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(4). OF THIS 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 UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE. WHERE THE REPORT DOES NOT ID

EROSION, SEDIMENT AND POLLUTION CONTROL GENERAL NOTES

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

1. QUANTITIES OF PRODUCTS STORED ONSITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR THE JOB.
2. PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM RAINFALL, WHERE POSSIBLE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER LABELS LEGIBLE AND VISIBLE.
4. 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

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, THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

FERTILIZER / HERBICIDES – THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATION 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 ON SITE. ALL SUCH MATERIALS WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY WELDED 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 REGULATION. NO CONSTRUCTION WASTE WILL BE BURIED ON SITE.

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

EROSION, SEDIMENT AND POLLUTION CONTROL PLAN NOTES

ELIGIBILITY

1. CONSTRUCTION ACTIVITIES. THIS PERMIT AUTHORIZES, SUBJECT TO THE CONDITIONS OF THIS PERMIT:
   - A. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH STAND ALONE CONSTRUCTION PROJECTS THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE OCCURRING ON OR BEFORE, AND CONTINUING AFTER, THE EFFECTIVE DATE OF THIS PERMIT, (HENCEFORTH REFERRED TO AS EXISTING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES) EXCEPT FOR DISCHARGES IDENTIFIED UNDER PART I.C.3.; AND
   - B. ALL DISCHARGES OF STORM WATER ASSOCIATED WITH STAND ALONE CONSTRUCTION PROJECTS THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE OCCURRING AFTER THE EFFECTIVE DATE OF THIS PERMIT, (HENCEFORTH REFERRED TO AS EXISTING STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES).
   - C. COVERAGE UNDER THIS PERMIT IS NOT REQUIRED FOR DISCHARGES OF STORM WATER ASSOCIATED WITH MINOR LAND DISTURBING ACTIVITIES (SUCH AS HOME GARDENS AND INDIVIDUAL HOME LANDSCAPING, REPAIRS, MAINTENANCE WORK, FENCES AND OTHER RELATED ACTIVITIES WHICH RESULT IN MINOR SOIL EROSION) CONDUCTED OUTSIDE OF THE 25 FOOT BUFFER ALONG THE BANKS OF ALL STATE WATERS REQUIRING A BUFFER AND OUTSIDE OF THE 50 FOOT BUFFER ALONG THE BANKS OF ALL STATE WATERS CLASSIFIED AS TROUT STREAMS REQUIRING A BUFFER ON INDIVIDUAL RESIDENTIAL LOTS SOLD TO HOMEOWNERS WHERE ALL PLANNED CONSTRUCTION ACTIVITIES ON THAT LOT HAVE BEEN COMPLETED AND HAVE UNDERGONE FINAL STABILIZATION.
2. MIXED STORM WATER DISCHARGES. THIS PERMIT MAY ONLY AUTHORIZE A STORM WATER DISCHARGE FROM A CONSTRUCTION SITE OR ACTIVITY THAT IS MIXED WITH A STORM WATER DISCHARGE FROM AN INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION WHERE:
   - 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 STORM WATER 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; AND
   - C. STORM WATER 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.
3. LIMITATIONS ON COVERAGE. THE FOLLOWING STORM WATER DISCHARGES FROM CONSTRUCTION SITES ARE NOT AUTHORIZED BY THIS PERMIT:
   - A. STORM WATER DISCHARGES ASSOCIATED WITH AN INDUSTRIAL ACTIVITY THAT ORIGINATE 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–STORM WATER OTHER THAN DISCHARGES WHICH ARE IDENTIFIED IN PART III.A.2. OF THIS PERMIT AND WHICH ARE IN COMPLIANCE WITH PART IV.D.7. (NON–STORM WATER DISCHARGES) OF THIS PERMIT;
   - C. STORM WATER 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; AND
   - D. STORM WATER 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.

AUTHORIZATION

1. ANY PERSON DESIRING COVERAGE UNDER THIS PERMIT MUST SUBMIT A NOTICE OF INTENT (NOI) TO THE EPD AND THE NOI MUST BE RECEIVED BY THE EPD IN ACCORDANCE WITH THE REQUIREMENTS OF PART II, USING NOI FORMS PROVIDED BY THE EPD (OR AN EXACT PHOTOCOPY THEREOF), IN ORDER FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES TO BE AUTHORIZED.
2. UNLESS NOTIFIED BY THE DIRECTOR TO THE CONTRARY, A PERMITTEE WHO SUBMITS AN NOI IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PERMIT IS AUTHORIZED TO DISCHARGE STORM WATER FROM CONSTRUCTION SITES UNDER THE TERMS AND CONDITIONS OF THIS PERMIT FOURTEEN (14) DAYS AFTER THE DATE THAT THE NOI IS POSTMARKED. THE DIRECTOR MAY DENY COVERAGE UNDER THIS PERMIT AND REQUIRE SUBMITTAL OF AN APPLICATION FOR AN INDIVIDUAL NPDES PERMIT OR ALTERNATIVE GENERAL NPDES PERMIT BASED ON A REVIEW OF THE NOI OR OTHER INFORMATION. SHOULD THE DIRECTOR DENY COVERAGE UNDER THIS PERMIT, COVERAGE UNDER THIS PERMIT IS AUTHORIZED UNTIL THE DATE SPECIFIED IN THE NOTICE OF DENIAL BY THE DIRECTOR.
3. WHERE A NEW PERMITTEE IS TO BEGIN WORK ON–SITE AFTER AN NOI FOR THE FACILITY/CONSTRUCTION SITE HAS BEEN SUBMITTED, THE NEW PERMITTEE MUST SUBMIT A NEW NOI IN ACCORDANCE WITH PART II.CONTINUING OBLIGATIONS OF PERMITTEES. UNLESS AND UNTIL RESPONSIBILITY FOR A SITE COVERED UNDER THIS PERMIT IS PROPERLY TERMINATED ACCORDING TO THE TERMS OF THE PERMIT, THE INITIAL PERMITTEE REMAINS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE TERMS OF THE PERMIT AND FOR ANY VIOLATIONS OF SAID TERMS.

NOTICE OF INTENT REQUIREMENTS

- A. DEADLINES FOR NOTIFICATION
  1. EXCEPT AS PROVIDED IN PART II.A.2., II.A.3. AND II.A.5., OWNERS OR OPERATORS OR BOTH WHO INTEND TO OBTAIN COVERAGE UNDER THIS GENERAL PERMIT FOR STORM WATER DISCHARGES FROM A CONSTRUCTION SITE (WHERE CONSTRUCTION ACTIVITIES BEGIN AFTER ISSUANCE OF THIS PERMIT), SHALL SUBMIT A NOTICE OF INTENT (NOI) IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART AT LEAST FOURTEEN (14) DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
  2. FOR SITES WHERE CONSTRUCTION ACTIVITIES, SUBJECT TO THIS PERMIT, ARE OCCURRING ON THE EFFECTIVE DATE OF THIS PERMIT, THE OWNER OR OPERATOR OR BOTH SHALL SUBMIT AN NOI IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART NO LATER THAN SIXTY (60) DAYS AFTER THE EFFECTIVE DATE OF THIS PERMIT.
  3. A DISCHARGER IS NOT PRECLUDED FROM SUBMITTING AN NOI IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART AFTER THE DATES PROVIDED IN PARTS II.A.1. OR II.A.2. OF THIS PERMIT. IN SUCH INSTANCES, EPD MAY BRING AN ENFORCEMENT ACTION FOR FAILURE TO SUBMIT AN NOI IN A TIMELY MANNER OR FOR ANY UNAUTHORIZED DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT HAVE OCCURRED ON OR AFTER THE DATES SPECIFIED IN PART II.A.1. AND II.A.2.
  4. WHERE AN OWNER OR AN OPERATOR OR BOTH CHANGES AFTER AN NOI HAS BEEN FILED, THE SUBSEQUENT OWNER OR OPERATOR OR BOTH MUST FILE A NEW NOI IN ACCORDANCE WITH THIS PART, AT LEAST SEVEN (7) DAYS BEFORE BEGINNING WORK AT THE FACILITY/CONSTRUCTION SITE. IN THE EVENT A LENDER OR OTHER SECURED CREDITOR ACQUIRES LEGAL TITLE TO THE FACILITY/CONSTRUCTION SITE, SUCH PARTY MUST FILE A NEW NOI IN ACCORDANCE WITH THIS PART BY THE EARLIER TO OCCUR OF (A) SEVEN (7) DAYS BEFORE BEGINNING WORK AT THE FACILITY/CONSTRUCTION SITE; OR (B) THIRTY (30) DAYS FROM ACQUIRING LEGAL TITLE TO THE FACILITY/CONSTRUCTION SITE. STABILIZATION AND BMP INSTALLATION AND/OR MAINTENANCE MEASURES OF A DISTURBED SITE, BY THE SUBSEQUENT OWNER OR OPERATOR, MAY OCCUR IN ADVANCE OF FILING A NEW NOI, WITHOUT VIOLATION OF THIS PERMIT.
  5. FOR SITES WHERE CONSTRUCTION ACTIVITIES WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE (1) ACRE THAT ARE REQUIRED AS A RESULT OF STORM– OR EMERGENCY–RELATED REPAIR WORK, THE OWNER OR OPERATOR OR BOTH SHALL NOTIFY THE APPROPRIATE EPD DISTRICT OFFICE WITHIN THREE (3) DAYS OF COMMENCEMENT OF SAID CONSTRUCTION ACTIVITIES. THE OWNER OR OPERATOR OR BOTH SHALL SUBMIT THE NOI TO THE APPROPRIATE EPD DISTRICT OFFICE AS SOON AS POSSIBLE AFTER THE STORM OR EMERGENCY–RELATED EVENT BUT NO LATER THAN FOURTEEN (14) DAYS AFTER THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND SHALL SUBMIT THE PLAN IN ACCORDANCE WITH PART IV.A.6.

NOTICE OF INTENT SUBMITTAL

NOIS ARE TO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO BOTH THE APPROPRIATE EPD DISTRICT OFFICE ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT AND TO THE LOCAL ISSUING AUTHORITY IN JURISDICTIONS AUTHORIZED TO ISSUE A LAND DISTURBANCE ACTIVITY PERMIT FOR THE PERMITTEE'S CONSTRUCTION SITE PURSUANT TO O.C.G.A. 12–7–1, ET SEQ. IF AN ELECTRONIC SUBMITTAL SERVICE IS PROVIDED BY EPD THEN THE NOI MAY BE SUBMITTED ELECTRONICALLY SO LONG AS A PAPER COPY IS ALSO SUBMITTED BY RETURN RECEIPT OR SIMILAR SERVICE. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATIVE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOTICE OF TERMINATION (NOT) IS SUBMITTED IN ACCORDANCE WITH PART VI.

FEES

ANY APPLICABLE FEES SHALL BE SUBMITTED BY THE PRIMARY PERMITTEE IN ACCORDANCE WITH RULES AND REGULATIONS FOR WATER QUALITY CONTROL (RULES) PROMULGATED BY THE BOARD OF NATURAL RESOURCES BY SUBMITTING AN NOI FOR COVERAGE UNDER THIS PERMIT THE PRIMARY PERMITTEE AGREES TO PAY ANY FEES REQUIRED, NOW OR IN THE FUTURE, BY SUCH RULES AUTHORIZED UNDER O.C.G.A. SECTION 12–5–23(A)(5)(A), WHICH ALLOWS THE BOARD OF NATURAL RESOURCES TO ESTABLISH A FEE SYSTEM. FEES MAY BE ASSESSED ON LAND DISTURBING ACTIVITY PROPOSED TO OCCUR ON OR AFTER THE EFFECTIVE DATE OF THIS PERMIT AND SHALL BE PAID IN ACCORDANCE WITH SUCH RULES.

RENOTIFICATION

UPON ISSUANCE OF A NEW OR DIFFERENT GENERAL PERMIT FOR SOME OR ALL OF THE STORM WATER DISCHARGES COVERED BY THIS PERMIT, THE PERMITTEE IS REQUIRED TO NOTIFY THE EPD OF THEIR INTENT TO BE COVERED BY THE NEW OR DIFFERENT GENERAL PERMIT. THE PERMITTEE MUST SUBMIT A NEW NOTICE OF INTENT IN ACCORDANCE WITH THE NOTIFICATION REQUIREMENTS OF THE NEW OR DIFFERENT GENERAL PERMIT.

SPECIAL CONDITIONS, MANAGEMENT PRACTICES, PERMIT VIOLATIONS AND OTHER LIMITATIONS

- A. PROHIBITION ON NON–STORM WATER DISCHARGES.
  1. EXCEPT AS PROVIDED IN PART I.C.2. AND III.A.2., ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORM WATER.
  2. THE FOLLOWING NON–STORM WATER DISCHARGES MAY BE AUTHORIZED BY THIS PERMIT PROVIDED THE NON–STORM WATER COMPONENT OF THE DISCHARGE IS EXPLICITLY LISTED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND IS IN COMPLIANCE WITH PART IV.D.7.: DISCHARGES FROM FIRE FIGHTING ACTIVITIES; FIRE HYDRANT FLUSHING; POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING; IRRIGATION DRAINAGE; AIR CONDITIONING CONDENSATE; SPRINGS; UNCONTAMINATED GROUND WATER; AND FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.
- B. RELEASES IN EXCESS OF REPORTABLE QUANTITIES.
  1. THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL IN THE STORM WATER DISCHARGE(S) FROM A SITE SHALL BE PROHIBITED. THIS PERMIT DOES NOT RELIEVE THE PERMITTEE OF THE REPORTING REQUIREMENTS OF GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. §§12–14–2, ET SEQ.), 40 CFR PART 117 AND 40 CFR PART 302. 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 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD, THE PERMITTEE IS REQUIRED TO NOTIFY EPD AT (404) 656–4863 OR (800) 241–4113 AND THE NATIONAL RESPONSE CENTER (NRC) AT (800) 424–8802 IN ACCORDANCE WITH THE REQUIREMENTS OF GEORGIA'S OIL OR HAZARDOUS MATERIAL SPILLS OR RELEASES ACT (O.C.G.A. §§12–14–2, ET SEQ.), 40 CFR 117 AND 40 CFR 302 AS SOON AS HE/SHE HAS KNOWLEDGE OF THE DISCHARGE.
  2. THIS PERMIT DOES NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL RESULTING FROM AN ON–SITE SPILL.

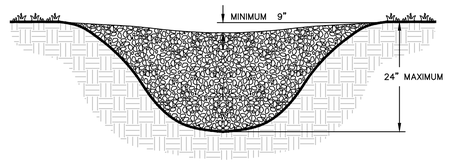
MANAGEMENT PRACTICES AND PERMIT VIOLATIONS

1. BEST MANAGEMENT PRACTICES, AS SET FORTH IN THIS PERMIT, ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES, AND MUST BE IMPLEMENTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS CONTAINED IN THE "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 TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA. PROPER DESIGN, INSTALLATION, AND MAINTENANCE (F BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF NONCOMPLIANCE WITH PART III.D.3. AND PART III.D.4.
2. FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A VIOLATION OF THIS PERMIT FOR EACH DAY ON WHICH SUCH FAILURE OCCURS. BMP MAINTENANCE AS A RESULT OF THE PERMITTEE'S ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION FOR THE PURPOSES OF THIS PARAGRAPH, IF DURING THE PERIODIC INSPECTIONS THE PERMITTEES ROUTINE BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE SHALL CORRECT THE BMP FAILURES AND SHALL SUBMIT A SUMMARY OF THE VIOLATIONS TO EPD IN ACCORDANCE WITH PART V.A.2. OF THIS PERMIT.
3. 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 DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS CLASSIFIED AS TROUT STREAMS AND MORE THAN TWENTY–FIVE (25) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS SUPPORTING WARM WATER FISHERIES, REGARDLESS OF A PERMITTEES CERTIFICATION UNDER PART II.B.1.i. THIS PARAGRAPH SHALL NOT APPLY TO ANY LAND DISTURBANCE ASSOCIATED WITH THE CONSTRUCTION OF SINGLE–FAMILY HOMES WHICH ARE NOT PART OF A SUBDIVISION OR PLANNED COMMON DEVELOPMENT UNLESS FIVE (5) ACRES OR MORE WILL BE DISTURBED.
4. WHEN THE PERMITTEE HAS ELECTED TO MONITOR OUTFALL(S), THE 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 THE VALUE SELECTED FROM APPENDIX B APPLICABLE TO THE CONSTRUCTION SITE. AS SET FORTH THEREIN, THE NEPHELOMETRIC TURBIDITY UNIT (NTU) VALUE SHALL BE SELECTED FROM APPENDIX B BASED UPON THE SIZE OF THE CONSTRUCTION SITE, THE SURFACE WATER DRAINAGE AREA AND WHETHER OR NOT THE RECEIVING WATER(S) SUPPORTS WARM WATER FISHERIES OR IS A TROUT STREAM AS INDICATED IN THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391–3–6 AT WWW.GAEPD.ORG.

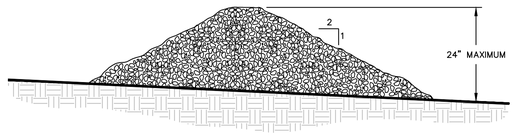
STANDARD PERMIT CONDITIONS

- A. DUTY TO COMPLY.
  1. EACH PERMITTEE MUST COMPLY WITH ALL APPLICABLE CONDITIONS OF THIS PERMIT. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE GEORGIA WATER QUALITY CONTROL ACT (O.C.G.A. §§12–5–20, ET SEQ.) AND IS GROUNDS FOR ENFORCEMENT ACTION; FOR PERMIT TERMINATION; OR FOR DENIAL OF A PERMIT RENEWAL APPLICATION. FAILURE OF A PRIMARY PERMITTEE TO COMPLY WITH ANY APPLICABLE TERM OR CONDITION OF THIS PERMIT SHALL NOT RELIEVE ANY OTHER PRIMARY PERMITTEE FROM COMPLIANCE WITH THEIR APPLICABLE TERMS AND CONDITIONS OF THIS PERMIT.
  2. EACH PERMITTEE MUST DOCUMENT IN THEIR RECORDS ALL KNOWN VIOLATIONS OF THIS PERMIT AT HIS/HER SITE WITHIN SEVEN (7) DAYS OF HIS/HER KNOWLEDGE OF THE VIOLATION. A SUMMARY OF THESE VIOLATIONS MUST BE SUBMITTED TO EPD BY THE PERMITTEE AT THE ADDRESSES SHOWN IN PART II.C. WITHIN FOURTEEN (14) DAYS OF HIS/HER DISCOVERY OF THE VIOLATION.
  3. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT (O.C.G.A. §§12–5–20, ET SEQ.) PROVIDE THAT ANY PERSON WHO FALSIFIES, TAMPERS WITH, OR KNOWINGLY RENDERS INACCURATE ANY MONITORING DEVICE OR METHOD REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, MAKES ANY FALSE STATEMENT, REPRESENTATION, OR CERTIFICATION IN ANY RECORD OR OTHER DOCUMENT SUBMITTED OR REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, INCLUDING MONITORING REPORTS OR REPORTS OF COMPLIANCE OR NONCOMPLIANCE SHALL, UPON CONVICTION BE PUNISHED BY A FINE OR BY IMPRISONMENT, OR BY BOTH. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT ALSO PROVIDE PROCEDURES FOR IMPOSING CIVIL PENALTIES WHICH MAY BE LEVIED FOR VIOLATIONS ESTABLISHED PURSUANT TO THE ACTS, OR NEGLIGENTLY OR INTENTIONALLY FAILING OR REFUSING TO COMPLY WITH ANY FINAL OR EMERGENCY ORDER OF THE DIRECTOR.
- B. CONTINUATION OF THE EXPIRED GENERAL PERMIT. THIS PERMIT EXPIRES ON THE DATE SHOWN ON THE COVER PAGE OF THIS PERMIT. HOWEVER, AN EXPIRED GENERAL PERMIT CONTINUES IN FORCE AND EFFECT UNTIL A NEW GENERAL PERMIT IS ISSUED, FINAL AND EFFECTIVE. CONSTRUCTION SITES THAT HAVE NOT OBTAINED COVERAGE UNDER THE PERMIT BY THE PERMIT EXPIRATION DATE CANNOT BECOME AUTHORIZED TO DISCHARGE UNDER THE CONTINUED PERMIT.
- C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. IT SHALL NOT BE A DEFENSE FOR THE PERMITTEE IN AN ENFORCEMENT ACTION THAT IT WOULD HAVE BEEN NECESSARY TO HALT OR REDUCE THE PERMITTED ACTIVITY IN ORDER TO MAINTAIN COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT.
- D. DUTY TO MITIGATE. THE PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO MINIMIZE OR PREVENT ANY DISCHARGE IN VIOLATION OF THIS PERMIT WHICH HAS A REASONABLE LIKELIHOOD OF ADVERSELY AFFECTING HUMAN HEALTH OR THE ENVIRONMENT.
- E. DUTY TO PROVIDE INFORMATION. THE PERMITTEE SHALL FURNISH TO THE DIRECTOR; A STATE OR LOCAL AGENCY APPROVING SOIL EROSION AND SEDIMENTATION CONTROL PLANS, GRADING PLANS, OR STORM WATER MANAGEMENT PLANS; OR IN THE CASE OF A STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY WHICH DISCHARGES THROUGH A MUNICIPAL SEPARATE STORM SEWER SYSTEM WITH AN NPDES PERMIT, TO THE LOCAL GOVERNMENT OPERATING THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, ANY INFORMATION WHICH IS REQUESTED TO DETERMINE COMPLIANCE WITH THIS PERMIT. IN THE CASE OF INFORMATION SUBMITTED TO THE EPD SUCH INFORMATION SHALL BE CONSIDERED PUBLIC INFORMAPLON AND AVAILABLE UNDER THE GEORGIA OPEN RECORDS ACT.
- F. OTHER INFORMATION. WHEN THE PERMITTEE BECOMES AWARE THAT HE FAILED TO SUBMIT ANY RELEVANT FACTS OR SUBMITTED INCORRECT INFORMATION IN THE NOTICE OF INTENT OR IN ANY OTHER REPORT REQUIRED TO BE SUBMITTED TO THE EPD, THE PERMITTEE SHALL PROMPTLY SUBMIT SUCH FACTS OR INFORMATION.
- G. SIGNATORY REQUIREMENTS. ALL NOTICES OF INTENT, NOTICE OF TERMINATIONS, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, REPORTS, CERTIFICATIONS OR OTHER INFORMATION EITHER SUBMITTED TO THE EPD OR THE OPERATOR OF A LARGE OR MEDIUM MUNICIPAL SEPARATE STORM SEWER SYSTEM, OR THAT THIS PERMIT REQUIRES BE MAINTAINED BY THE PERMITTEE, SHALL BE SIGNED AS FOLLOWS:
  1. ALL NOTICES OF INTENT SHALL BE SIGNED AS FOLLOWS:
     - A. FOR A CORPORATION: BY A RESPONSIBLE CORPORATE OFFICER. FOR THE PURPOSE OF THIS PERMIT, A RESPONSIBLE CORPORATE OFFICER MEANS: (1) A PRESIDENT, SECRETARY, TREASURER, OR VICE–PRESIDENT OF THE CORPORATION IN CHARGE OF A PRINCIPAL BUSINESS FUNCTION, OR ANY OTHER PERSON WHO PERFORMS SIMILAR POLICY– OR DECISION MAKING FUNCTIONS FOR THE CORPORATION; OR (2) THE MANAGER OF ONE OR MORE MANUFACTURING, PRODUCTION OR OPERATING FACILITIES PROVIDED THE MANAGER IS AUTHORIZED TO MAKE MANAGEMENT DECISIONS WHICH GOVERN THE OPERATION OF THE REGULATED FACILITY INCLUDING HAVING THE EXPLICIT OR IMPLICIT DUTY OF MAKING MAJOR CAPITAL INVESTMENT RECOMMENDATIONS, AND INITIATING AND DIRECTING OTHER COMPREHENSIVE MEASURES TO ASSURE LONG TERM ENVIRONMENTAL COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS; THE MANAGER CAN ENSURE THE NECESSARY SYSTEMS ARE ESTABLISHED OR ACTIONS TAKEN TO GATHER COMPLETE AND ACCURATE INFORMATION FOR PERMIT APPLICATION REQUIREMENTS; AND WHERE AUTHORITY TO SIGN DOCUMENTS HAS BEEN ASSIGNED OR DELEGATED TO THE MANAGER IN ACCORDANCE WITH CORPORATE PROCEDURES;
     - B. FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP: BY A GENERAL PARTNER OR THE PROPRIETOR, RESPECTIVELY; OR
     - C. FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC FACILITY: BY EITHER A PRINCIPAL EXECUTIVE OFFICER OR RANKING ELECTED OFFICIAL.
  2. ALL REPORTS, CERTIFICATION STATEMENTS, OR OTHER REPORTS REQUIRED BY THE PERMIT AND OTHER INFORMATION REQUESTED BY THE EPD SHALL BE SIGNED BY A PERSON DESCRIBED ABOVE OR BY A DULY AUTHORIZED REPRESENTATIVE OF THAT PERSON. A PERSON IS A DULY AUTHORIZED REPRESENTATIVE ONLY IF:
     - A. THE AUTHORIZATION IS MADE IN WRITING BY A PERSON DESCRIBED ABOVE AND SUBMITTED TO THE EPD;
     - B. THE AUTHORIZATION SPECIFIES EITHER AN INDIVIDUAL OR A POSITION HAVING RESPONSIBILITY FOR THE OVERALL OPERATION OF THE REGULATED FACILITY OR ACTIVITY, SUCH AS THE POSITION OF MANAGER, OPERATOR, SUPERINTENDENT, OR POSITION OF EQUIVALENT RESPONSIBILITY OR AN INDIVIDUAL OR POSITION HAVING OVERALL RESPONSIBILITY FOR ENVIRONMENTAL MATTERS FOR THE COMPANY. (A DULY AUTHORIZED REPRESENTATIVE MAY BE EITHER A NAMED INDIVIDUAL OR ANY INDIVIDUAL OCCUPYING A NAMED POSITION);
     - C. CHANGES TO AUTHORIZATION. IF AN AUTHORIZATION UNDER PART II.B. IS NO LONGER ACCURATE BECAUSE A DIFFERENT OPERATOR HAS RESPONSIBILITY FOR THE OVERALL OPERATION OF THE CONSTRUCTION SITE, A NEW NOTICE OF INTENT SATISFYING THE REQUIREMENTS OF PART II.B. MUST BE SUBMITTED TO THE EPD PRIOR TO OR TOGETHER WITH ANY REPORTS, INFORMATION, OR APPLICATIONS TO BE SIGNED BY AN AUTHORIZED REPRESENTATIVE; AND
     - D. CERTIFICATION. DOCUMENTS SHALL BE SIGNED BY THE PARTY THAT CONTRACTS FOR THE DOCUMENT AND THAT PARTY SHALL MAKE THE FOLLOWING CERTIFICATION: "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 ON 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 TH

CROSS SECTION



PROFILE VIEW



NOTES:
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

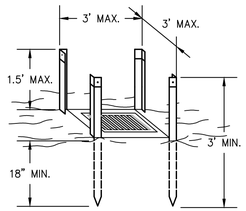
STONE CHECK DAM

N.T.S.

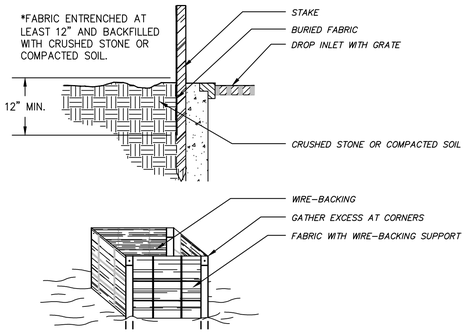
Cd-S

GA-Cd-S

STEEL FRAME AND TYPE C SILT FENCE INSTALLATION



NOTES:
1. DESIGN IS FOR SLOPES NO GREATER THAN 5% (NOT DESIGNED FOR CONCENTRATED FLOWS).
2. THE STEEL POSTS SUPPORTING THE SILT FENCE MATERIAL SHOULD BE SPACED EVENLY AROUND THE PERIMETER OF THE INLET (MAXIMUM OF 3' APART).
3. THE STEEL POSTS SHOULD BE SECURELY DRIVEN AT LEAST 18" DEEP.
4. THE FABRIC SHOULD BE ENTRENCHED AT LEAST 12" AND THEN BACKFILLED WITH CRUSHED STONE OR COMPACTED SOIL.



FABRIC AND SUPPORTING FRAME FOR INLET PROTECTION

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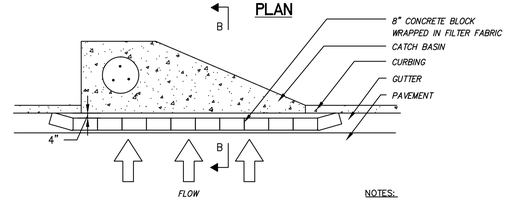
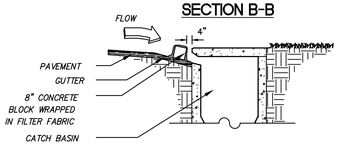
Sd2-F

GA-Sd2F

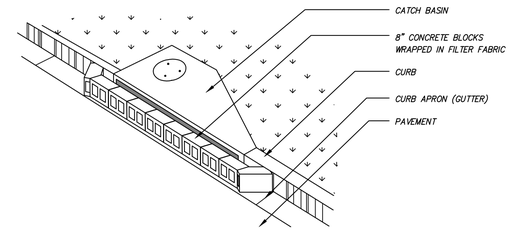
PLAN



SECTION B-B



NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
3. FACE OPENINGS IN BLOCKS OUTWARD.
4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.



CURB INLET FILTER "PIGS IN A BLANKET"

Sd2-P

GA-Sd2-P

CONCEPT ENGINEERING SERVICES INC.

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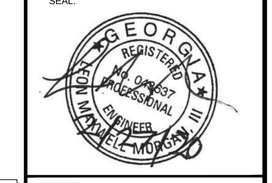


REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

EROSION DETAILS

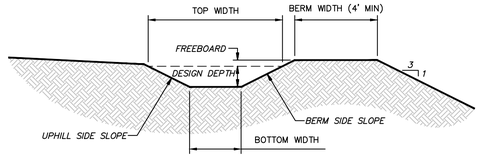
DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C5.5

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP 2019-00145
05/28/2020

811 Know what's below. Call before you dig.



DESIGN

- CHANNEL CROSS-SECTION SHOULD BE TRAPEZOIDAL OR PARABOLIC IN SHAPE IN MOST INSTANCES.
- SIDE SLOPES SHOULD BE 2:1 OR FLATTER.
- EXCAVATE NARROW, DEEP CHANNELS ON STEEP SLOPES AND BROAD, SHALLOW CHANNELS ON GENTLE SLOPES.
- SEE CALCULATIONS FOR SPECIFICS OF DITCH SIZE.
- MINIMUM FREEBOARD IS 4" FOR TEMPORARY DIVERSIONS AND 6" FOR PERMANENT DIVERSIONS.
- TEMPORARY DIVERSIONS ARE DESIGNED FOR 10-YR STORM EVENT, PERMANENT DIVERSIONS ARE DESIGNED FOR 50-YR STORM EVENT.

CHANNEL LINING REQUIREMENTS		
VELOCITY (FT/SEC)	REQUIRED LINING	n VALUE
0 TO 5 (FT/SEC)	VEGETATIVE MEASURES	0.03
5+ TO 10 (FT/SEC)	RIPRAP, SOD, OR VEGITATION WITH MATTING BLANKETS	0.07 OR 0.03
10+ (FT/SEC)	CONCRETE	0.013

ROAD DIVERSIONS

- RIDGE RUNS AT 30° DIAGONALLY ACROSS ROAD.
- CHANNEL DEPTH AND RIDGE HEIGHT SHALL BOTH BE BETWEEN 8" AND 12" MINIMUM AND MAXIMUM.
- CHANNEL BOTTOMS AND RIDGE TOPS SHALL BOTH BE SMOOTH ENOUGH TO BE CROSSED BY VEHICULAR TRAFFIC.
- THE MAXIMUM DISTANCE BETWEEN DIVERSIONS MUST FOLLOW REQUIREMENTS FOR ROAD DIVERSION SPACING.

MAINTENANCE

- INSPECT WEEKLY AND AFTER EACH 0.5" RAINFALL EVENT
- REMOVE SEDIMENT AND REPAIR AS NEEDED.

INSTALLATION

- REMOVE TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIAL INTERFERING WITH FREE FLOW.
- COMPACT ALL FILLS PER COMPACTION SPECIFICATIONS.
- ADEQUATE OUTLET PROTECTION MUST BE PRESENT.
- CONSTRUCT ABOVE, ACROSS, OR BELOW A SLOPE TO INTERCEPT RUNOFF AND REDUCE THE EFFECTIVE SLOPE LENGTH.

ROAD DIVERSION SPACING

- 1% = 400-FT
- 2% = 250-FT
- 5% = 125-FT
- 10% = 80-FT
- 15% = 60-FT
- 20% = 50-FT

TYPICAL TRAPEZOIDAL DIVERSION

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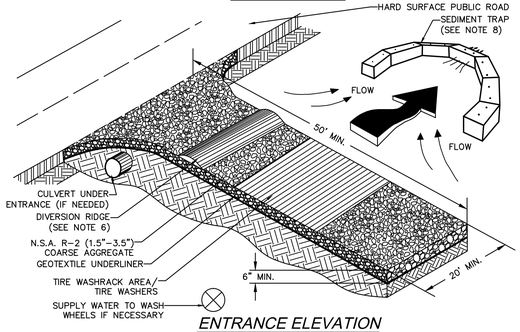
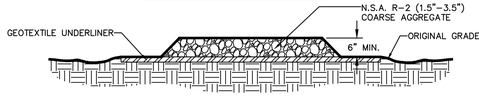
EXIT DIAGRAM



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

CRUSHED STONE CONSTRUCTION EXIT

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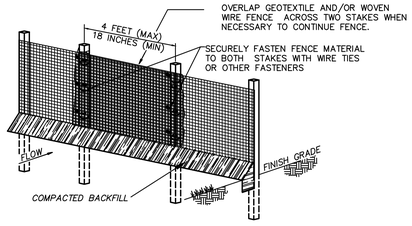
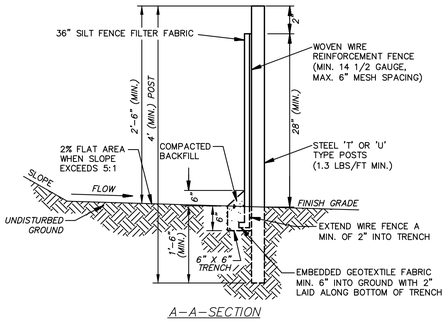
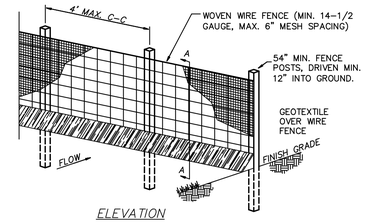
1/4 ACRE PER 100-LF MAX DRAINAGE AREA





A-A-SECTION



ELEVATION

MAINTENANCE

- SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER.
- FILTER FABRIC SHALL BE REPLACED WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE FABRIC IS REDUCED (APPROX. 6 MONTHS), OR ANY TEARS OR HOLES ARE IN THE FABRIC.
- TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
- ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

SILT FENCE FILTER FABRIC

- UTILIZE DOT APPROVED FABRICS. COMMON EXAMPLES INCLUDE: MIRAFI 130X, AMOCO 1198, BELTECH 810, SI 915 SC, LING GTF 190
- UTILIZE FENCE FABRIC THAT MEETS THE FOLLOWING CRITERIA:
  - TENSILE STRENGTH PER ASTM D-4632 WITH WARP-260 AND FILL-180 (LBS. MIN.)
  - ELONGATION PER ASTM D-4632 OF 40% MAX
  - APPARENT OPENING SIZE (MAX. SIEVE SIZE) PER ASTM D-4751 OF #30
  - FLOW RATE OF 70 GAL/MIN/SQ.FT.
  - ULTRAVIOLET STABILITY OF 80 PER ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355
  - BURSTING STRENGTH OF 175 PSI MIN. PER ASTM D-3786

MAXIMUM SLOPE LENGTH

- WHERE ALL RUNOFF IS TO BE STORED BEHIND THE SILT FENCE, MAXIMUM SLOPE LENGTH SHALL NOT EXCEED:

LAND SLOPE	= MAX. SLOPE LENGTH
< 2%	= 100 FT.
2% - 5%	= 75 FT.
5% - 10%	= 50 FT.
10% - 20%	= 25 FT.
> 20%	= 15 FT.

- IN AREAS WHERE THE SLOPE IS GREATER THAN 20% OR 5:1, A FLAT AREA LENGTH OF 10 FT BETWEEN THE TOE OF THE SLOPE AND THE SILT FENCE MUST BE PROVIDED.

INSTALLATION

- DO NOT INSTALL ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
- INSTALL WHERE SHEET FLOW CONDITION EXIST.
- START POST INSTALLATION AT THE CENTER OF THE LOWEST POINT WITH REMAINING POSTS SPACED 4 FEET APART.
- TYPE 'C' SILT FENCE SHALL BE USED WHERE RUNOFF FLOWS OR VELOCITIES ARE PARTICULARLY HIGH.
- TYPE 'C' SILT FENCE SHALL BE USED WHERE SLOPES EXCEED A VERTICAL HEIGHT OF 10 FEET.
- TWO ROWS OF TYPE 'C' SILT FENCE MUST BE USED ALONG ALL STREAM BUFFERS.
- WOVEN WIRE REINFORCEMENT FENCE TO BE FASTENED SECURELY TO STEEL POSTS WITH WIRE TIES OR APPROVED EQUAL AT TOP, MID AND BOTTOM.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE REINFORCEMENT FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.

SEDIMENT BARRIER - TYPE 'S' SILT FENCE

N.T.S.

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MULCHING

- MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS.
- STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING.
- MULCH SHALL BE USED AS A BEDDING MATERIAL TO CONSERVE MOISTURE AND CONTROL WEEDS IN NURSERIES, ORNAMENTAL BEDS, AROUND SHRUBS, AND ON BARE AREAS ON LAWNS.
- THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND.
- MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.
- WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.
- SELECT THE MULCHING MATERIAL BEST SUITED OR AS OUTLINED IN PLAN.
- DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE. BOTH SHALL BE APPLIED TO ACHIEVE 4 TO 6 INCHES OF THICKNESS.
- WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE TO ACHIEVE 4 TO 6 INCHES OF THICKNESS. DRY STRAW OR DRY HAY SHALL BE THEN BE APPLIED AFTER HYDRAULIC SEEDING.
- WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.
- HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER SHALL USE 1,000 POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER.
- SERICEA LESPEDEZA HAY CONTAINING MATURE SEED CAN BE USED AND SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
- PINE STRAW OR PINE BARK CAN BE USED AND SHALL BE APPLIED AT A THICKNESS OF 3 TO 5 INCHES FOR BEDDING PURPOSES. THIS IS NOT APPROPRIATE FOR SEEDED AREAS. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED.
- WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
- BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

ANCHORING MULCH

- STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.
- MULCH ON SLOPES GREATER THAN 3% SHOULD BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-SOR 55-1) OR OTHER SUITABLE TACKIFIER.
- WOOD WASTE ON SLOPES FLATTER THAN 3:1 (33%) DO NOT NEED ANCHORING.
- 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 SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE SS-1H OR CSS-1H). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE OR SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT
- EMULSIFIED ASPHALT SHALL BE APPLIED AS A MIXTURE OF 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
- TACKIFERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONEHALF BUSHEL PER ACRE.
- PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED 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 FOR THE WOOD WASTE CHIPS.

PLANTING

HYDRAULIC SEEDING

- MIX THE SEED (INNOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED.
- APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

CONVENTIONAL SEEDING

- SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED.
- FOR BROADCAST PLANTING, USE A CULTIPACKER-SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED.
- COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

NO-TILL SEEDING

- NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES.
- NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT.
- THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

INDIVIDUAL PLANTS

- SHRUBS, VINES AND SPRIGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS.
- PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW.
- EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS.
- NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY.
- THE TIPS OF VINES AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE.
- WHERE INDIVIDUAL HOLES ARE DUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.
- UTILIZE LANDSCAPE PLAN AND DETAILS WHERE APPLICABLE.

SEEDBED PREPARATION

- SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED.
- WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE DONE AS FOLLOWS:

BROADCAST PLANTINGS

- TILLAGE AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.
- TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
- TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
- ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS

- WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
- FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO ACCOMMODATE ROOTS WITHOUT CROWDING.
- WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

INNOCULANTS

- ALL LEGUME SEED SHALL BE INOCULATED WITH APPROPRIATE NITROGEN-FIXING BACTERIA. THE INNOCULANT SHALL BE A PURE CULTURE PREPARED SPECIFICALLY FOR THE SEED SPECIES AND USED WITHIN THE DATES ON THE CONTAINER.
- A MIXING MEDIUM RECOMMENDED BY THE MANUFACTURER SHALL BE USED TO BOND THE INNOCULANT TO THE SEED. FOR CONVENTIONAL SEEDING, USE TWICE THE AMOUNT OF INNOCULANT RECOMMENDED BY THE MANUFACTURER. FOR HYDRAULIC SEEDING, FOUR TIMES THE AMOUNT OF INNOCULANT RECOMMENDED BY THE MANUFACTURER SHALL BE USED.
- ALL INOCULATED SEED SHALL BE PROTECTED FROM THE SUN AND HIGH TEMPERATURES AND SHALL BE PLANTED THE SAME DAY INOCULATED. NO INOCULATED SEED SHALL REMAIN IN THE HYDROSEEDER LONGER THAN ONE HOUR.

MAINTENANCE

- RE-SEED AREAS WHERE AN ADEQUATE STAND OF VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- ENSURE MINIMUM OF 70% COVERAGE OF ALL EXPOSED EARTH IN ORDER TO ACHIEVE FINAL STABILIZATION.
- APPLY ONE TON OF AGRICULTURAL LIME EVERY 4-6 YEARS OR AS INDICATED BY SOIL TESTS.
- FERTILIZE IN ACCORDANCE WITH SOIL TESTS OR AS SHOWN IN TABLE 6-5.1 FOR SECOND YEAR AND MAINTENANCE RATES.
- MOW BERMUDA AND BAHIA AS DESIRED. MOW SERICEA LESPEDEZA ONLY AFTER FROST TO ENSURE SEEDS ARE MATURE.
- MAINTAIN 6" OR MORE OF TOP GROWTH. NOTE THAT MOWING TOO CLOSE TO THE ROOTS WILL STUNT ROOT GROWTH FOR A PERIOD OF TIME.
- IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

PLANT SELECTION

- REFER TO TABLES 6-4.1, 6-5.2, 6-5.3 AND 6-5.4 FOR APPROVED SPECIES.
- SPECIES NOT LISTED SHALL BE APPROVED BY THE STATE RESOURCE CONSERVATIONIST OF THE NATURAL RESOURCES CONSERVATION SERVICE BEFORE THEY ARE USED.
- PLANTS SHALL BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS, SITE AND SOIL CONDITIONS, PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING, METHOD OF PLANTING; AND THE NEEDS AND DESIRES OF THE LAND USER.
- SOME PERENNIAL SPECIES ARE EASILY ESTABLISHED AND CAN BE PLANTED ALONE (e.g. COMMON BERMUDA, TALL FESCUE, WEEPING LOVEGRASS).
- OTHER PERENNIALS, ARE SLOW TO BECOME ESTABLISHED AND SHOULD BE PLANTED WITH ANOTHER PERENNIAL SPECIES (e.g. BAHIA GRASS AND SERICEA LESPEDEZA).
- PLANTING WITH COMPANION SPECIES WILL PROVIDE QUICK COVER AND AMPLE SOIL PROTECTION UNTIL THE TARGET PERENNIAL SPECIES BECOMES ESTABLISHED.
- COMMON SEEDING COMBINATIONS ARE:
  1. WEEPING LOVEGRASS WITH SERICEA LESPEDEZA (SCARIFIED).
  2. TALL FESCUE WITH SERICEA LESPEDEZA (UNSCARIFIED).
- PLANT SELECTION MAY ALSO INCLUDE ANNUAL COMPANION CROPS. ANNUAL COMPANION CROPS SHOULD BE USED ONLY WHEN THE PERENNIAL SPECIES ARE NOT PLANTED DURING THEIR OPTIMUM PLANTING PERIOD (e.g. BROWN TOP MILLET WITH COMMON BERMUDA IN MID-SUMMER).
- CARE SHOULD BE TAKEN IN SELECTING COMPANION CROP SPECIES AND SEEDING RATES BECAUSE ANNUAL CROPS WILL COMPETE WITH PERENNIAL SPECIES FOR WATER, NUTRIENTS, AND GROWING SPACE.
- A HIGH SEEDING RATE OF THE COMPANION CROP MAY PREVENT THE ESTABLISHMENT OF PERENNIAL SPECIES.
- RYEGRASS SHALL NOT BE USED IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.

SEED QUALITY (PLS)

- THE TERM "PURE LIVE SEED" IS USED TO EXPRESS THE QUALITY OF SEED AND IS NOT SHOWN ON THE LABEL.
- PURE LIVE SEED (PLS) IS EXPRESSED AS A PERCENTAGE OF THE SEEDS THAT ARE PURE AND WILL GERMINATE.
- INFORMATION ON PERCENT GERMINATION AND PURITY CAN BE FOUND ON SEED TAGS.
- PLS IS DETERMINED BY MULTIPLYING THE PERCENT OF PURE SEED WITH THE PERCENT OF GERMINATION
- I.E.: (PLS = % GERMINATION X % PURITY)

  EXAMPLE:

  COMMON BERMUDA SEED
  70% GERMINATION, 80% PURITY

  PLS = 70% GERMINATION X 80% PURITY

  PLS = 56%
- THE PERCENT OF PLS HELPS YOU DETERMINE THE AMOUNT OF SEED YOU NEED BY DIVIDING THE APPLICATION RATE BY THE PLS AND TIMES 100.
- I.E.: (BULK RATE = APPLICATION RATE : PLS X 100)

  EXAMPLE:

  IF THE SEEDING RATE IS 10 POUNDS AND THE PLS IS 56 %, THE BULK APPLICATION RATE IS:

  10 LBS./ACRE : 56% PLS X 100 = 17.9 LBS/ACRE

  YOU WOULD NEED TO APPLY 17.9 LBS/ACRE TO PROVIDE 10 LBS/ACRE OF PURE LIVE SEED.
- APPLICATION RATES SHOWN DO NOT ACCOUNT FOR INCREASES NEEDED DUE TO PLS.
- ACTUAL APPLICATION RATES REQUIRED ON SITE WILL NEED TO BE ADJUSTED BASED ON SEED BAGS BEING USED.

WILDLIFE PLANTINGS

COMMERCIALLY AVAILABLE PLANTS BENEFICIAL TO WILDLIFE SPECIES INCLUDE THE FOLLOWING:

MAST BEARING TREES

- BEECH, BLACK CHERRY, BLACKGUM, CHESTNUT, CHINKAPIN, HACKBERRY, HICKORY, HONEY LOCUST, NATIVE OAK, PERSIMMON, SAWTOOTH OAK AND SWEETGUM.
- ALL TREES THAT PRODUCE NUTS OR FRUITS ARE FAVORED BY MANY GAME SPECIES. HICKORY PROVIDES NUTS USED MAINLY BY SQUIRRELS AND BEAR.

SHRUBS AND SMALL TREES

- BAYBERRY, BICOLOR LESPEDEZA, CRABAPPLE, DOGWOOD, HUCKLEBERRY OR NATIVE BLUEBERRY, MOUNTAIN LAUREL, NATIVE HOLLY, RED CEDAR, RED MULBERRY, SUMAC, WAX MYRTLE, WILD PLUM AND BLACKBERRY.
- PLANT IN PATCHES WITHOUT TALL TREES TO DEVELOP STABLE SHRUB COMMUNITIES.
- ALL PRODUCE FRUITS USED BY MANY KINDS OF WILDLIFE, EXCEPT FOR LESPEDEZA WHICH PRODUCES SEEDS USED BY QUAIL AND SONGBIRDS.

GRASSES, LEGUMES, VINES AND TEMPORARY COVER

- BAHIAGRASS, BERMUDAGRASS, GRASS-LEGUME MIXTURES, PARTRIDGE PEA, ANNUAL LESPEDEZA, ORCHARDGRASS (FOR MOUNTAINS), BROWNTOP MILLET (FOR TEMPORARY COVER), AND NATIVE GRAPES.
- PROVIDES HERBACEOUS COVER IN CLEARINGS FOR A GAME BIRD BROOD-REARING HABITAT.
- APPROPRIATE LEGUMES SUCH AS VETCHES, CLOVERS, AND LESPEDEZAS MAY BE MIXED WITH GRASS, BUT THEY MAY DIE OUT AFTER A FEW YEARS.

LIME AND FERTILIZER RATES AND ANALYSIS

- AGRICULTURAL LIME IS REQUIRED AT THE RATE OF ONE TO TWO TONS PER ACRE UNLESS SOIL TESTS INDICATE OTHERWISE.
- GRADED AREAS REQUIRE LIME APPLICATION.
- IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED.
- AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.
- LIME SPREAD BY CONVENTIONAL EQUIPMENT SHALL BE "GROUND LIMESTONE". GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THAT 90 PERCENT OF THE MATERIAL WILL PASS THROUGH A 10-MESH SIEVE, NOT LESS THAN 50 PERCENT WILL PASS THROUGH A 50-MESH SIEVE AND NOT LESS THAN 25 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.
- AGRICULTURAL LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT SHALL BE "FINELY GROUND LIMESTONE." FINELY GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THAT 98 PERCENT OF THE MATERIAL WILL PASS THROUGH A 20-MESH SIEVE AND NOT LESS THAN 70 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.
- IT IS DESIRABLE TO USE DOLOMITIC LIMESTONE IN THE SAND HILLS, SOUTHERN COASTAL PLAIN AND ATLANTIC COAST FLATWOODS MLRAs.
- AGRICULTURAL LIME IS GENERALLY NOT REQUIRED WHERE ONLY TREES ARE PLANTED.
- INITIAL FERTILIZATION, NITROGEN, TOPDRESSING, AND MAINTENANCE FERTILIZER REQUIREMENTS FOR EACH SPECIES OR COMBINATION OF SPECIES ARE LISTED IN TABLE 6-5.1.

LIME AND FERTILIZER APPLICATION

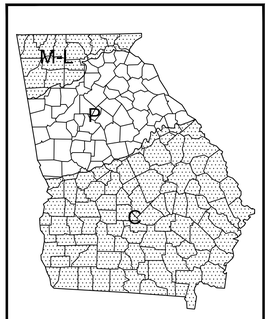
- WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED, INNOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY.
- THE INNOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO THE HYDRAULIC SEEDER.
- THE SLURRY MIXTURE WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER.
- FINELY GROUND LIMESTONE WILL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING.
- WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:
  1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION.
  2. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS.
  3. BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED OR TRENCHED.
  4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH PINE TREE SEEDLING.

GRADING AND SHAPING

- GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED.
- VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.
- WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION.
- CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET.
- DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

INSTALLATION

- THIS PRACTICE SHALL BE APPLIED IMMEDIATELY TO ROUGH GRADED AREAS THAT WILL BE UNDISTURBED FOR LONGER THAN SIX MONTHS
- THIS PRACTICE OR SODDING 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 (SUCH AS THE USE OF RIP RAP, GABIONS, PERMANENT MULCHES OR GEOTEXTILES).
- PERMANENT VEGETATION SHALL CONSIST OF: GRASSES, PLANTED TREES, SHRUBS, PERENNIAL VINES; A CROP OF PERENNIAL VEGETATION APPROPRIATE FOR THE REGION SUCH THAT WITHIN THE GROWING SEASON A 70% COVERAGE BY PERENNIAL VEGETATION SHALL BE ACHIEVED.
- FINAL STABILIZATION APPLIES TO EACH PHASE OF CONSTRUCTION.
- FOR LINEAR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL OR SILVICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY STABILIZING THE DISTURBED LAND FOR ITS AGRICULTURAL OR SILVICULTURAL USE.
- UNTIL THIS STANDARD OF FINAL STABILIZATION IS SATISFIED AND PERMANENT CONTROL MEASURES AND FACILITIES ARE OPERATIONAL, INTERIM STABILIZATION MEASURES AND TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL NOT BE REMOVED.
- PERMANENT PERENNIAL VEGETATION IS TO BE USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.
- USE CONVENTIONAL PLANTING METHODS WHERE POSSIBLE.
- WHEN MIXED PLANTINGS ARE DONE DURING MARGINAL PLANTING PERIODS, COMPANION CROPS SHALL BE USED.
- NO-TILL PLANTING IS EFFECTIVE WHEN PLANTING IS DONE FOLLOWING A SUMMER OR WINTER ANNUAL COVER CROP. (e.g. SERICEA LESPEDEZA PLANTED NO-TILL INTO STANDS OF RYE IS AN EXCELLENT PROCEDURE).
- IT IS IMPERATIVE THAT YOU CHECK THE TAG ON THE BAG OF SEED TO VERIFY THE TYPE, PURE SEED AND GERMINATION PERCENT OF THE SEED TO BE PLANTED. CALCULATE PURE LIVE SEED (PLS) TO COMPENSATE FOR PERCENT OF BAG THAT WILL NOT PRODUCE GRASS IN THE APPLICATION RATES. APPLICATION RATES DO NOT REFLECT ANY INCREASE FOR PLS REDUCTION.
- REDUCE SEEDING RATES BY 50% WHEN DRILLED.
- SCARIFY, PIT OR TRENCH SEALED OR CRUSTED SOIL.
- FERTILIZE BASED ON SOIL TESTS OR AS SHOWN IN TABLE 6-5.1 FOR TOP DRESSING, SECOND YEAR AND MAINTENANCE RATES.
- APPLY AGRICULTURAL LIME AS PRESCRIBED BY SOIL TESTS OR AT A RATE OF 1 TO 2 TONS PER ACRE.
- APPLY SEED BY HAND, CYCLONE SEEDER, DRILL OR HYDRO-SEEDER. SEED PLANTED WITH A DRILL SHOULD BE PLANTED 1/2"-1" DEEP.
- IRRIGATION SHOULD BE USED TO SUPPLEMENT RAINFALL, BUT NOT TO THE EXTENT TO CAUSE EROSION.
- IRRIGATION SHOULD BE USED WHEN THE SOIL IS DRY OR WHEN SUMMER PLANTINGS ARE DONE.
- BLOCK SOD PROVIDES IMMEDIATE COVER. IT IS ESPECIALLY EFFECTIVE IN CONTROLLING EROSION ADJACENT TO CONCRETE FLUMES AND OTHER STRUCTURES. REFER TO DISTURBED AREA STABILIZATION WITH SODDING REQUIREMENTS.
- LOW MAINTENANCE PLANTS, AS WELL AS NATIVES, SHOULD BE USED TO ENSURE LONG-LASTING EROSION CONTROL.
- MOWING SHOULD NOT BE PERFORMED DURING THE QUAIL NESTING SEASON (MAY TO SEPTEMBER).
- WILDLIFE PLANTINGS SHOULD BE INCLUDED IN CRITICAL AREA PLANTINGS.



RESOURCE AREA MAP

RESOURCE AREA INDEX

- M-L – REPRESENTS THE MOUNTAIN, BLUE RIDGE, AND RIDGES AND VALLEYS MLRAs.
- P – REPRESENTS THE SOUTHERN PIEDMONT MLRA.
- C – REPRESENTS THE SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATWOODS MLRAs.

DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)

Ds.3

GA-Ds3

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INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

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DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

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SHEET:
C5.6

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP-2019-00145
05/28/2020

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DURABLE SHRUBS AND GROUND COVERS FOR PERMANENT COVER

TABLE 6-5.3

GROUND COVERS INCLUDE A WIDE RANGE OF LOW-GROWING PLANTS PLANTED TOGETHER IN CONSIDERABLE NUMBERS TO COVER LARGE AREAS OF THE LANDSCAPE. GROUND COVERS GROW SLOWER THAN GRASSES. WEEDS ARE LIKELY TO COMPETE, ESPECIALLY THE FIRST YEAR. MAINTENANCE IS NEEDED TO INSURE SURVIVAL. THESE GROUND COVERS WILL NOT BE USED UNLESS PROPER MAINTENANCE IS PLANNED. MAINTAIN MULCH AT THREE-INCH THICKNESS UNTIL PLANTS PROVIDE ADEQUATE COVER.

FALL PLANTING IS ENCOURAGED BECAUSE THE NEED FOR CONSTANT WATERING IS REDUCED AND PLANTS HAVE TIME TO ESTABLISH NEW ROOTS BEFORE HOT WEATHER.

COMMON NAME	SCIENTIFIC NAME	MATURE HEIGHT	PLANT SPACING	COMMENTS
ALBELIA	ABELIA GRANDIFLORA	3-4 FT.	5 FT.	ALSO A PROSTRATE FORM 2 FEET HIGH. SUN, SEMI-SHADE. SEMI-EVERGREEN
CAROLINA YELLOW JESSAMINE	GELSEMIUM SEMPERVRENS	LOW	3 FT.	VINE. YELLOW, TRUMPET-LIKE FLOWERS. HARDY, ONE OF BEST VINES. EVERGREEN. NATIVE TO GEORGIA.
CARPET BLUE	AJUGA REPTANS	2-4 IN.	3 FT.	NEEDS GOOD DRAINAGE, PARTIAL SHADE. BLUE OR WHITE FLOWERS. EVERGREEN
BEARBERRY COTONEASTER	COTONEASTER DAMMERI	2-4 FT.	3 FT.	WHITE FLOWERS, RED FRUIT. SUN. EVERGREEN
GROUND COVER COTONEASTER	COTONEASTER SALICIFOLUIS 'REPENS'	1-2 FT.	3 FT.	WHITE FLOWERS, RED FRUIT. SUN. EVERGREEN
ROCK COTONEASTER	COTONEASTER HORIZONTAILS	1-2 FT.	3 FT.	SEMI-EVERGREEN. SUN.
VIRGINIA CREEPER	PARTHENOCISSUE QUINQUEFOLIA	LOW	3 FT.	RED IN FALL. VINE DECIDUOUS. NATIVE TO GEORGIA
DAYLILY	HEMEROCALLIS SPP.	2-3 FT.	3 FT.	MANY FLOWERS COLORS. FULL SUN. VERY HARDY.
ENGLISH IVY	HEDERA HELIX	LOW	5 FT.	SHADE ONLY. CLIMBS
COMPACTA HOLLY	LIEX CRENATA 'COMPACTA'	3-4 FT.	5 FT.	SUN, SEMI-SHADE
CHINESE HOLLY	LIEX CORNUTA 'ROTUNDA'	3-4 FT.	5 FT.	VERY DURABLE. SUN, SEMI-SHADE
DWARF BURFORD HOLLY	LIEX BURFORDII 'NANA'	5-8 FT.	8 FT.	
DWARF YAUPON HOLLY	LIEX VOMITORIA 'NANA'	3-4 FT.	5 FT.	VERY DURABLE. SUN, SEMI-SHADE
REPANDENS HOLLY	LEIX CRENATA 'REPANDENS	2-3 FT.	5 FT.	SUN, SEMI-SHADE
ANDORRA JUNIPER	JUNIPERUS HORIZONTALIS 'PLUMOSA'	2-3 FT.	5 FT.	EXCELLENT FOR SLOPES. SUN.
ANDORRA COMPACTA JUNIPER	JUNIPERUS HORIZONTALIS 'PLUMOSA COMPACTA'	1-2 FT.	5 FT.	MORE COMPACT THAN ANDORA.
BLUE CHIP JUNIPER	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	8-10 FT.	4 FT.	
BLUE RUG JUNIPER	JUNIPERUS HORIZONTALIS 'WILTONII'	4-6 FT.	3 FT.	VERY LOW. SUN.
PARSONS JUNIPER	JUNIPERUS DAVURICA 'EXPANSA' (SQUAMATA PARSONI)	18-24 FT.	5 FT.	ONE OF THE BEST GOOD WINTER COVER
PFITZER JUNIPER	JUNIPERUS CHINENSIS 'PFITZERANA'	6-8 FT.	6 FT.	NEEDS ROOMS
PRINCE WALES JUNIPER	JUNIPERUS HORIZONTALIS 'PRICE OF WALAS'	8-10 IN.	4 FT.	FEATHERY APPEARANCE.
SARGENT JUNIPER	JUNIPERUS CHINENSIS 'SARGENTIL'	1-2 FT.	5 FT.	FULL SUN. NEEDS GOOD DRAINAGE. GOOD WINTER COLOR
SHORE JUNIPER	JUNIPERUS CONFERTA	2-3 FT.	5 FT.	EMERALD SEA OF BLUE PACIFIC CULTIVARS ARE GOOD
LIRIOPE	LIRIOPE MUSCARI	8-10 FT.	3 FT.	
CREEPING LIRIOPE	LIRIOPE SPICATA	10-12 FT.	1 FT.	SPEADS BY RUNNERS.
BIG LEAF PERIWINKLE	VINCA MAJOR	12-15 IN.	4 FT.	LILAC FLOWERS IN SPRING. SEMI-SHADE
COMMON PERIWINKLE	VINCA MINOR	5-6 IN.	4 FT.	LAVENDER-BLUE FLOWERS IN SPRING SEMI-SHADE
CHEROKEE ROSE	ROSA LAEVIGATA	2 FT	5 FT.	RAMPANT GROWER. NOT FOR RESTRICTED SPACES. STATE FLOWER
MEMORIA ROSE	ROSA WEUCHURIANA	2 FT	5 FT.	RAMPANT GROWER.
ST. JOHNSWORT	HYPERICUM CALYCENUM	8-12 IN.	3 FT.	SEMI-SHADE
ANTHONY WATERER SPIREA	SPIREA BUMALDA	3-4 FT.	5 FT.	SUN.
THUNBERG SPIREA	SPIREA THINBERGII	3-4 FT.	5 FT.	SUN.

GA-Ds3

PERMANENT COVER

TABLE 6-4.1 COMPANION CROPS

TYPE OF SPECIES	APPLICATION TYPE	APPLICATION RATES PER ACRE	APPLICATION RATES PER 1000 SQ.FT.	RESOURCE AREA	PLANTING DATES BY RESOURCE AREAS (SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.) J F M A M J J A S O N D	OPTIMUM PLANTING DATES	REMARKS
BAHIA, PENSACOLA (Paspalum Notatum)	ALONE OR WITH TEMPORARY COVER	60 lbs.	1.4 lbs.	P C		4/1 - 5/31	166,000 SEED PER POUND. LOW GROWING. SOD FORMING. SLOW TO ESTABLISH. WILL SPREAD INTO BERMUDA LAWNS. MIX WITH SERICEA LESPEDEZA OR WEEPING LOVEGRASS.
	WITH OTHER PERENNIALS	30 lbs.	0.7 lbs.			3/1 - 5/31	
BAHIA, WILMINGTON (Paspalum Notatum)	ALONE OR WITH TEMPORARY COVER	60 lbs.	1.4 lbs.	M-L P		3/15 - 5/31	166,000 SEED PER POUND. LOW GROWING. SOD FORMING. SLOW TO ESTABLISH. WILL SPREAD INTO BERMUDA LAWNS. MIX WITH SERICEA LESPEDEZA OR WEEPING LOVEGRASS.
	WITH OTHER PERENNIALS	30 lbs.	0.7 lbs.			3/1 - 5/31	
BERMUDA, COMMON (Cynodon Dactylon) HULLED SEED	ALONE	10 lbs.	0.2 lbs.	P C		4/1 - 5/31	1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOD FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS.
	WITH OTHER PERENNIALS	6 lbs.	0.1 lbs.			3/15 - 5/31	
BERMUDA, COMMON (Cynodon Dactylon) UNHULLED SEED	WITH TEMPORARY COVER	10 lbs.	0.2 lbs.	P C		10/1 - 2/28	PLANT WITH WINTER ANNUALS. PLANT WITH TALL FESCUE.
	WITH OTHER PERENNIALS	6 lbs.	0.1 lbs.			11/1 - 1/31	
BERMUDA SPRIGS (Cynodon Dactylon)	SPRIG SOD PLUGS	40 cu.ft.	0.9 cu.ft.	M-L P C		4/15 - 6/15 4/1 - 6/15 4/1 - 5/31	1 cu.ft. = 650 SPRIGS (APPROX.), PLANT SOD PLUGS ON 3x3 FOOT GRID. USE COASTAL, COMMON, TIFT 44 IN ALL RESOURCE AREAS; TIFT 78 ONLY IN C, AND MIDLAND ONLY IN M-L.
CENTIPEDE (Eremochloa Ophiuroides)	BLOCK SOD ONLY	BLOCK SOD ONLY	BLOCK SOD ONLY	P C		11/1 - 5/31 11/1 - 5/31	DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE. EFFECTIVE IN CONCENTRATED FLOWS. IRRIGATION NEEDED UNTIL ESTABLISHED. DO NOT PLANT NEAR PASTURES. WINTERHARDY.
CROWNVETECH (Coronilla Varia)	WITH WINTER ANNUALS OR COOL SEASON GRASSES	15 lbs.	0.3 lbs.	M-L P		9/1 - 10/15 9/1 - 10/15	100,000 SEED PER POUND. DENSE GROWTH. DROUGHT TOLERANT AND FIRE RESISTANT. MIX WITH 30 POUNDS OF TALL FESCUE OR 15 POUNDS OF RYE. INOCULATE SEED WITH M INOCULANT. USE NORTH OF ATLANTA.
FESCUE, TALL (Festuca Arundinacea)	ALONE	50 lbs.	1.1 lbs.	M-L M-L P		3/1 - 4/15 8/15 - 10/15 9/1 - 10/15	227,000 SEED PER POUND. USE ALONE ONLY ON BETTER SITES. NOT FOR DROUGHTY SOILS. MIX WITH PERENNIAL LESPEDEZAS OR CROWNVETCH. APPLY TOPDRESSING IN SPRING FOLLOWING FALL PLANTINGS. NOT FOR HEAVY USE AREAS (e.g. ATHLETIC FEILDS).
	WITH OTHER PERENNIALS	30 lbs.	0.7 lbs.				
LESPEDEZA, SERICEA (Lespedeza Cuneata) SCARIFIED	ALONE	60 lbs.	1.4 lbs.	M-L P C		4/1 - 5/31 3/15 - 5/31 3/1 - 5/15	350,000 SEED PER POUND. WIDELY ADAPTED. LOW MAINTENANCE. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, OR TALL FESCUE. DO NOT MIX WITH SERICEA LESPEDEZA. SLOW TO DEVELOP SOLID STANDS. TAKES 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED. EXCELLENT ON ROADBANKS. INOCULATE SEED WITH EL INOCULANT.
LESPEDEZA, SERICEA (Lespedeza Cuneata) UNSCARIFIED	ALONE	75 lbs.	1.7 lbs.	M-L P C		9/1 - 2/28 9/1 - 2/28 9/1 - 2/28	
LESPEDEZA, AMBRO VIRGATA OR APPALOW (Lespedeza Virgata or Cuneata G. Don) SEED BEARING HAY	ALONE	3 TONS	138 lbs.	M-L P C		10/1 - 2/28 10/1 - 1/31 10/15 - 1/15	CUT WHEN SEED IS MATURE BUT BEFORE IT SHATTERS. ADD TALL FESCUE OR WINTER ANNUALS.
LESPEDEZA, AMBRO VIRGATA OR APPALOW (Lespedeza Virgata or Cuneata G. Don) SCARIFIED	ALONE	60 lbs.	1.4 lbs.	M-L P C		4/1 - 5/31 3/15 - 5/31 3/1 - 5/15	300,000 SEED PER POUND. HEIGHT OF GROWTH IS 18 TO 24 INCHES. ADVANTAGEOUS IN URBAN AREAS. SPREADING-TYPE GROWTH. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, TALL FESCUE OR WINTER ANNUALS. DO NOT MIX WITH SERICEA LESPEDEZA. SLOW TO DEVELOP SOLID STANDS. INOCULATE WITH EL INOCULANT.
LESPEDEZA, AMBRO VIRGATA OR APPALOW (Lespedeza Virgata or Cuneata G. Don) UNSCARIFIED	ALONE	75 lbs.	1.7 lbs.	M-L P C		9/1 - 2/28 9/1 - 2/28 9/1 - 2/28	
LESPEDEZA, SHRUB (Lespedeza bicolor) (Lespedeza thumbergii)	PLANTS ONLY	PLANTS ONLY	PLANTS ONLY	M-L P C		10/1 - 3/31 11/1 - 3/15 11/15 - 2/28	PLANT ON 3x3 FOOT GRID. PROVIDE WILDLIFE FOOD AND COVER.
LOVEGRASS, WEEPING (Eragrostis Curvula)	ALONE	4 lbs.	0.1 lbs.	M-L P C		4/1 - 5/31 3/15 - 5/31 3/1 - 5/31	1,500,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT. GROWS WELL WITH SERICEA LESPEDEZA ON ROADBANKS.
	WITH OTHER PERENNIALS	2 lbs.	0.05 lbs.				
MAIDENCANE (Panicum Hemitomon)	SPRIGS ONLY	SPRIGS ONLY	SPRIGS ONLY	M-L P C		2/1 - 3/31 2/1 - 3/31 2/1 - 3/31	PLANT AT 2x3 FOOT SPACING. FOR VERY WET SITES. MAY CLOG CHANNELS. DIG SPRIGS FROM LOCAL SOURCES. USE ALONG RIVER BANKS AND SHORELINES.
PANICGRASS, ATLANTIC OR COASTAL (Panicum Amarumvar. Amarulum)	ALONE	20 lbs.	0.5 lbs.	P C		3/1 - 4/30 3/1 - 4/30	GROWS WELL ON COASTAL SAND DUNES, BORROW AREAS, AND GRAVEL PITS. PROVIDES WINTER COVER FOR WILDLIFE. MIX WITH SERICEA LESPEDEZA EXCEPT ON SAND DUNES.
REED CANARY GRASS (Phalaris Arundinacea)	ALONE	50 lbs.	1.1 lbs.	M-L P		8/15 - 10/15 9/1 - 10/15	GROWS SIMILAR TO TALL FESCUE.
	WITH OTHER PERENNIALS	30 lbs.	0.7 lbs.				
SUNFLOWER, 'AZTEC' MAXIMILLIAM (Helianthus Maximiliani)	ALONE	10 lbs.	0.2 lbs.	M-L P C		4/15 - 5/31 4/15 - 5/31 4/1 - 5/31	227,000 SEED PER POUND. MIX WITH WEEPING LOVEGRASS OR OTHER LOW-GROWING GRASSES OR LEGUMES.
KUDZU (Pueraria Thumbergiana)	PLANTS OR CROWNS	PLANTS OR CROWNS	PLANTS OR CROWNS	M-L P C		1/1 - 3/15 1/1 - 3/15 1/1 - 3/15	PLANT AT 3 TO 7 FOOT SPACING. RAPID AND VIGOROUS GROWTH. EXCELLENT EROSION CONTROL. WILL CLIMB. VERIFY WITH LOCAL JURISDICTION PRIOR TO USE.

TREES FOR EROSION CONTROL

TABLE 6-5.4

SITE	SOIL MATERIAL	COMMON SOILS	PLANTING TREE SPECIES 1/	SPACING	PLANTING DATES 3/
BORROW AREAS, 12/1-3/15 GRADED AREAS, AND SPOIL MATERIAL	SANDY	LAKELAND, TROUP	LOBLOLLY PINE (PINUS TAEDA)	(2)	M-L,P 12/1-3/15 C 12/1-3/1
			LONGLEAF PINE (PINUS PALUSTRIS)		
	LOAMY	ORANGEBURG, TIFTON	LOBLOLLY PINE		M-L,P 12/1-3/15 C 12/1-3/1
			SLASH PINE		
	CLAY	CECIL FACEVILLE	LOBLOLLY PINE		M-L,P 12/1-3/15 C 12/1-3/1
			SLASH PINE		
			VIRGINIA PINE (PINUS VIRGINIANA)		
STREAMBANKS ALL 11/15-3/15			WILLOWS 4/ (SALIX SPECIES)	2 FT X 2 FT	

(1) OTHER TREES AND SHRUBS LISTED ON TABLE 6-5.3 MAY BE INTERPLANTED WITH THE PINES FOR IMPROVED WILDLIFE BENEFITS.

(2)

TYPE OF PLANTING	TREE SPACING	NO. OF TREES PER ACRE
TREES ALONE	4 FT. X 4 FT.	2722
TREES IN COMBINATION WITH GRASSES AND/OR OTHER PLANTS	6 FT. X 6 FT.	1210

(3) FERTILIZATION OF COMPANION CROP IS AMPLE FOR THIS SPECIES.

FERTILIZER REQUIREMENTS

TABLE 6-5.1

TYPE OF SPECIES	YEAR	ANALYSIS OR N-P-K	EQUIVALENT	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 1/2/
	SECOND	6-12-12	1000 LBS./AC.	-
	MAINTENANCE	10-10-10	400 LBS./AC.	30
2. COOL SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS./AC.	0-50 LBS./AC. 1/
	SECOND	0-10-10	1000 LBS./AC.	-
	MAINTENANCE	0-10-10	400 LBS./AC.	-
3. GROUND COVERS	FIRST	10-10-10	1500 LBS./AC.	-
	SECOND	10-10-10	1000 LBS./AC.	-
	MAINTENANCE	10-10-10	400 LBS./AC.	-
4. PINE SEEDINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDING PLACED IN THE CLOSING HOLE	-
5. SHURB LESPEDEZA	FIRST	0-10-10	700 LBS./AC.	-
	MAINTENANCE	0-10-10	700 LBS./AC.	
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 LBS./AC.	30 LBS./AC. 5/
7. WARM SEASON GRASSES	FIRST	6-12-12	1500 LBS./AC.	50-100 LBS./AC. 2/ 6/
	SECOND	6-12-12	800 LBS./AC.	50-100 LBS./AC 2/
	MAINTENANCE	10-10-10	400 LBS./AC.	30 LBS./AC.
8. WARM SEASON GRASSES AND LEGUMES	FIRST	6-12-12	1500 LBS./AC.	50 LBS./AC. 6/
	SECOND	0-10-10	1000 LBS./AC.	
	MAINTENANCE	0-10-10	400 LBS./AC.	

(1) APPLY IN SPRING FOLLOWING SEEDING.
(2) APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
(3) APPLY IN 3 SPLIT APPLICATIONS.
(4) APPLY WHEN PLANTS ARE PRUNED.
(5) APPLY TO GRASS SPECIES ONLY.
(6) APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

Ds3

DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
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SEAL:

GEORGIA REGISTERED No. 026937 PROFESSIONAL ENGINEER MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

EROSION DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019
PROJECT NO.:	CES-2018-008-S
SHEET:	C5.7

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP 2019-00145
05/28/2020

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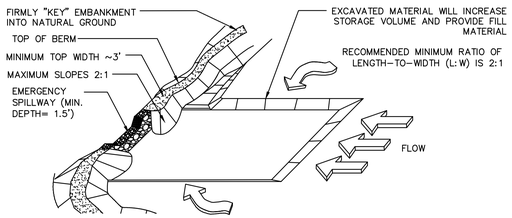
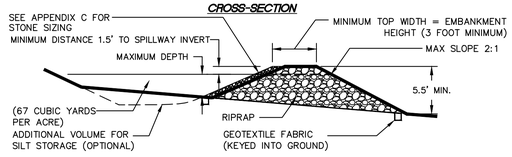
TEMPORARY SEDIMENT TRAP

COURTESY OF CITY OF KNOXVILLE BMP EROSION AND SEDIMENT

ROCK OUTLET



CROSS-SECTION



PROFILE THROUGH EMBANKMENT

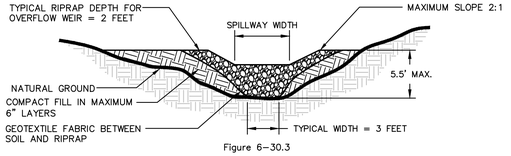


Figure 6-30.3

GA-Sd4 N.T.S. Sd4

TEMPORARY GROUND COVER

TABLE 6-4.1 COMPANION CROPS

TYPE OF SPECIES	APPLICATION TYPE	APPLICATION RATES PER ACRE	APPLICATION RATES PER 1000 SQ.FT.	RESOURCE AREA	PLANTING DATES BY RESOURCE AREAS (SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE, PERMISSIBLE BUT MARGINAL DATES.) J F M A M J J A S O N D	OPTIMUM PLANTING DATES	REMARKS
BARLEY (Hordeum Vulgare)	ALONE	144 lbs. (3 bu.)	3.3 lbs.	M-L		9/1 - 10/31	14,000 SEED PER POUND. WINTERHARDY.
	IN MIXTURE	24 lbs. (½ bu.)	0.6 lbs.	P C		9/15 - 11/15 10/1 - 12/31	USE ON PRODUCTIVE SOILS.
LEPEDEZA, ANNUAL (Lespedeza Striata)	ALONE	40 lbs.	0.9 lbs.	M-L P C		3/1 - 3/31 3/1 - 3/31 2/1 - 2/28	200,000 SEED PER POUND. MAY VOLUNTEER FOR SEVERAL YEARS. USE INCULCATE EL.
	IN MIXTURE	10 lbs.	0.2 lbs.				
LOVEGRASS, WEEPING (Eragrostis Curvula)	ALONE	4 lbs.	0.1 lbs.	M-L P C		4/1 - 5/31 4/1 - 5/31 3/1 - 5/31	1,500,000 SEED PER POUND. MAY LAST FOR SEVERAL YEARS. MIX WITH SERICEA LESPEDEZA.
	IN MIXTURE	2 lbs.	0.05 lbs.				
MILLET BROWNTOP (Panicum fasciculatum)	ALONE	40 lbs.	0.9 lbs.	M-L P C		4/15 - 6/15 4/15 - 6/30 4/15 - 6/30	137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.
	IN MIXTURE	10 lbs.	0.2 lbs.				
MILLET, PEARL (Pennesetum Glaucum)	ALONE	50 lbs.	1.1 lbs.	M-L P C		5/15 - 7/15 5/1 - 7/31 4/15 - 8/15	88,000 SEED PER POUND. QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
OATS (Avena Sativa)	ALONE	128 lbs. (4 bu.)	2.9 lbs.	M-L P C		9/15 - 11/15 9/15 - 11/15 9/15 - 11/15	13,000 SEED PER POUND USE ON PRODUCTIVE SOILS. NOT AS WINTERHARDY AS RYE OR BARLEY.
	IN MIXTURE	32 lbs. (1 bu.)	0.7 lbs.				
RYE (Secale Cereale)	ALONE	168 lbs. (3 bu.)	3.9 lbs.	M-L P C		8/15 - 10/31 9/15 - 11/30 10/1 - 12/31	18,000 SEED PER POUND QUICK COVER. DROUGHT TOLERANT AND WINTERHARDY.
	IN MIXTURE	28 lbs. (½ bu.)	0.6 lbs.				
RYEGRASS ANNUAL (Lolium Temulentum)	ALONE	40 lbs.	0.9 lbs.	M-L P C		8/15 - 11/15 9/1 - 12/15 9/15 - 12/31	227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.
SUDANGRASS (Sorghum Sudanese)	ALONE	60 lbs.	1.4 lbs.	M-L P C		5/1 - 7/31 5/1 - 7/31 4/1 - 7/31	55,000 SEED PER POUND. GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.
TRITICALE (X-Triticosecale)	ALONE	144 lbs. (3 bu.)	3.3 lbs.	C (ONLY)		10/15 - 11/30	USE ON LOWER PART OF SOUTHERN COASTAL PLAIN AND IN ATLANTIC COASTAL FLATWOODS ONLY.
	IN MIXTURE	24 lbs. (½ bu.)	0.6 lbs.				
WHEAT (Triticum Aestivum)	ALONE	180 lbs. (3 bu.)	4.1 lbs.	M-L P C		9/15 - 11/30 10/1 - 12/15 10/15 - 12/31	15,000 SEED PER POUND. WINTERHARDY.
	IN MIXTURE	30 lbs. (½ bu.)	0.7 lbs.				

INSTALLATION

- MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE.
- TEMPORARY GRASSING IS NOT SUITABLE FOR USE ON AREAS THAT WILL BE EXPOSED FOR SIX MONTHS OR LONGER. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION IS REQUIRED.
- MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING.
- GRADE SITE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING TEMPORARY SEEDING.
- GRADING OR SHAPING ARE NOT REQUIRED IF SLOPES CAN BE PLANTED WITH A HYDROSEEDER OR BY HAND-SEEDING.
- SEEDBED PREPARATION IS NOT REQUIRED IF SOIL IS LOOSE AND NOT SEALED BY RAIN.
- INSTALL OTHER NEEDED/REQUIRED EROSION CONTROL MEASURE BMPS PRIOR TO APPLYING SEED TO AREA.
- COORDINATE TEMPORARY VEGETATIVE MEASURES WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION.
- SOME SPECIES OF TEMPORARY VEGETATION ARE NOT APPROPRIATE FOR COMPANION CROP PLANTINGS BECAUSE OF THEIR POTENTIAL TO OUT-COMPETE THE DESIRED PERMANENT SPECIES (E.G. ANNUAL RYEGRASS). CONTACT NRCS OR THE LOCAL SWCD FOR MORE INFORMATION.
- UNDER-SEEDING REDUCES THE STAND, WHILE OVER-SEEDING CREATES EXCESSIVE DEMAND FOR MOISTURE, NUTRIENTS, LIGHT, AND SPACE. BOTH PRACTICES WILL RESULT IN LESS THAN 90% COVERAGE AS REQUIRED.
- IT IS IMPERATIVE THAT YOU CHECK THE TAG ON THE BAG OF SEED TO VERIFY THE TYPE, PURE SEED AND GERMINATION PERCENT OF THE SEED TO BE PLANTED. CALCULATE PURE LIVE SEED (PLS) TO COMPENSATE FOR PERCENT OF BAG THAT WILL NOT PRODUCE GRASS IN THE APPLICATION RATES. APPLICATION RATES DO NOT REFLECT ANY INCREASE FOR PLS REDUCTION.
- REDUCE SEEDING RATES BY 50% WHEN DRILLED.
- TEMPORARY COVER CROPS ARE VERY COMPETITIVE AND WILL CROWN OUT PERENNIALS IF SEEDED TOO HEAVILY.

MAINTENANCE

- RE-SEED AREAS WHERE AN ADEQUATE STAND OF TEMPORARY VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- ENSURE MINIMUM OF 90% COVERAGE OF ALL EXPOSED EARTH.

GRADING AND SHAPING

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

SEEDBED PREPARATION

- WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED.
- WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
- WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER

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

SEEDING

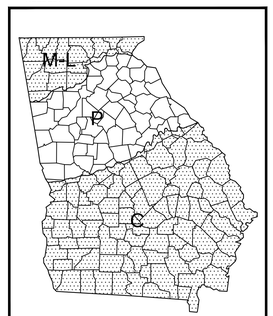
- SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.
- SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTI-PACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER).
- DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER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

MULCHING

- TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. BUT IT IS RECOMMENDED TO UTILIZE MULCH ON TOP OF TEMPORARY VEGETATION WHENEVER POSSIBLE.
- MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION ONLY.

IRRIGATION

- DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION.
- THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.



RESOURCE AREA MAP

RESOURCE AREA INDEX

- M-L - REPRESENTS THE MOUNTAIN, BLUE RIDGE, AND RIDGES AND VALLEYS MLRAs.
- P - REPRESENTS THE SOUTHERN PIEDMONT MLRA.
- C - REPRESENTS THE SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATWOODS MLRAs.

DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

N.T.S.

GA-Ds2 Ds2

24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.

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SEAL:

GEORGIA REGISTERED No. 045937 PROFESSIONAL ENGINEER EMMANUEL MORGAN, III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

EROSION DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C5.8

COBB COUNTY GEORGIA APPROVED FOR LAND DISTRUBANCE PERMIT

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LDP 2019-00145
05/28/2020

METHOD AND MATERIALS

TEMPORARY METHODS

- MULCHES – COVER DISTURBED AREA WITH MULCHING ONLY.
- SYNTHETIC RESINS – USED TO BIND MULCH MATERIAL, SUCH AS ASPHALT EMULSIONS.
- TACKIFIERS AND BINDERS – RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- VEGETATIVE COVER – COVER DISTURBED AREA WITH TEMPORARY SEEDING.
- SPRAY-ON ADHESIVES – USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. APPLY PER RATE REQUIREMENTS.
- TILLAGE – THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION – THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.
- BARRIERS – SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION.
- CALCIUM CHLORIDE – APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS

- PERMANENT VEGETATION – COVER DISTURBED AREA WITH PERMANENT VEGETATION. EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING – THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL.
- STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL, SUCH AS A CONSTRUCTION ROAD.

INSTALLATION

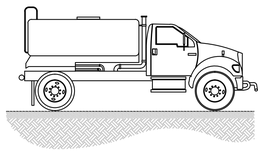
- APPLY AS NEEDED ON ALL SITES.
- PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES.
- REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE, OR SAFETY, OR TO ANIMALS OR PLANT LIFE.
- APPLY TEMPORARY OR PERMANENT CONTROL MEASURES AS NEEDED.

SPRAY-ON ADHESIVE APPLICATION

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1	FINE SPRAY	300

MAINTENANCE

- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.
- RE-APPLY AS NEEDED.



DUST CONTROL ON DISTURBED AREA

Du

GA-Du

INSTALLATION

- MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE.
- MULCH IS NOT SUITABLE FOR USE ON AREAS THAT WILL BE EXPOSED FOR SIX MONTHS OR LONGER. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION IS REQUIRED.
- MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS LACKING.
- MULCH MUST BE APPLIED AT THE APPROPRIATE DEPTH, ANCHORED AS NEEDED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.
- IN CONCENTRATED FLOW AREAS, ENSURE MULCH IS PROPERLY ANCHORED OR AVOID UTILIZING MULCH ALL TOGETHER.
- GRADE SITE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
- INSTALL OTHER NEEDED/REQUIRED EROSION CONTROL MEASURE BMPS PRIOR TO PLACING MULCH ON AREA.
- LOOSEN COMPACTED SOIL TO A MINIMUM DEPTH OF THREE (3) INCHES.
- APPLY MULCH UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
- CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OR DAMAGE TO SHOES, CLOTHING, ETC.

MULCHING MATERIALS

- DRY STRAW OR HAY – DRIED STRAW OR HAY WITH THE ADVANTAGE OF EASY APPLICATION.
- WOOD WASTE – 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.
- CUTBACK ASPHALT – SLOW CURING SHALL BE USED FOR EROSION CONTROL APPLICATIONS.
- POLYETHYLENE FILM – SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIALS FOR TEMPORARY PROTECTION. THIS COVER MATERIAL CAN BE SALVAGED AND RE-USED.

MAINTENANCE

- ADD MULCH AS NEEDED TO MAINTAIN THE SUGGESTED DEPTH.
- ENSURE MINIMUM OF 90% COVERAGE OF ALL EXPOSED EARTH.
- IF ORGANIC MULCH IS TO BE LEFT AND INCORPORATED INTO THE SOIL, APPLY 20-30 POUNDS OF NITROGEN IN ADDITION TO THE FERTILIZER REQUIRED FOR VEGETATION.

ANCHORING MULCH

- STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.
- MULCH ON SLOPES GREATER THAN 3% SHOULD BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-SOR 55-1) OR OTHER SUITABLE TACKIFIER.
- WOOD WASTE ON SLOPES FLATTER THAN 3:1 (33%) DO NOT NEED ANCHORING.
- 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 SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AE-5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE OR SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT
- EMULSIFIED ASPHALT SHALL BE APPLIED AS A MIXTURE OF 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
- TACKIFERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. SYNTHETIC TACKIFIERS OR BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED 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 FOR THE WOOD WASTE CHIPS.
- POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

MULCHING APPLICATION REQUIREMENTS

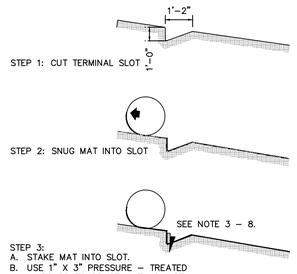
MATERIAL	RATE	DEPTH
STRAW OR HAY	2 1/2 TON/ACRE	2" TO 4"
WOOD WASTE, CHIPS, SAWDUST, BARK	6 TO 9 TON/ACRE	2" TO 3"
CUTBACK ASPHALT	1200 GAL./ACRE OR 1/4 GAL./SQ. YD. OR SEE MANUFACTURER'S RECOMMENDATIONS	---
POLYETHYLENE FILM	SECURE WITH SOIL, ANCHORS, WEIGHTS	---
GEOTEXTILES, JUTE MATTING, NETTING, ETC.	SEE MANUFACTURER'S RECOMMENDATIONS	---

DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

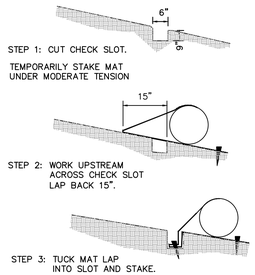
Ds1

GA-Ds1

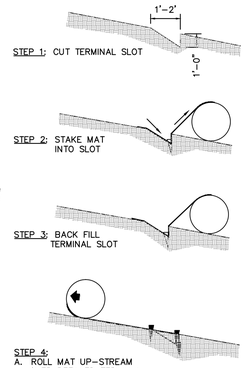
UPSTREAM TERMINAL

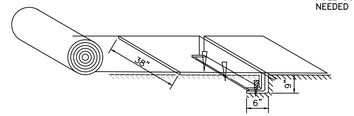


TRANSVERSE CHECK SLOT



DOWN STREAM TERMINAL

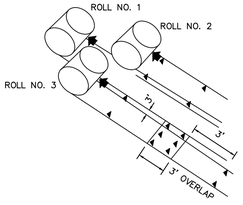




PICTORIAL VIEW OF TRANSVERSE SLOT

INSTALLATION

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH.
- ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH.
- BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL.
- SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
- BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE.
- ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
- WHEN USING OPTIONAL DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT,
- PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP.
- STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.
- NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.



SEQUENTIAL ROLL OUT IN CHANNELS

1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND FIRST ROLL. USE CENTER ROLL FOR ALIGNMENT TO CHANNEL CENTER.
4. WORK OUTWARDS FROM CHANNEL CENTER TO EDGE.
5. USE 3" OVERLAP AND STAKE AT 5' INTERVAL ALONG SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT LINING AT ROLL ENDS.

MAINTENANCE

- ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL THEY BECOME PERMANENTLY STABILIZED.

EROSION CONTROL MATTING AND BLANKETS

N.T.S.

Ss / Mb

GA-Mb

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326

TEL: (404) 643-6044

EMAIL: eabua@conceptengrs.net

CLIENT:

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SEAL:

GEORGIA REGISTERED No. 040637 PROFESSIONAL ENGINEER KEVIN MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

EROSION DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

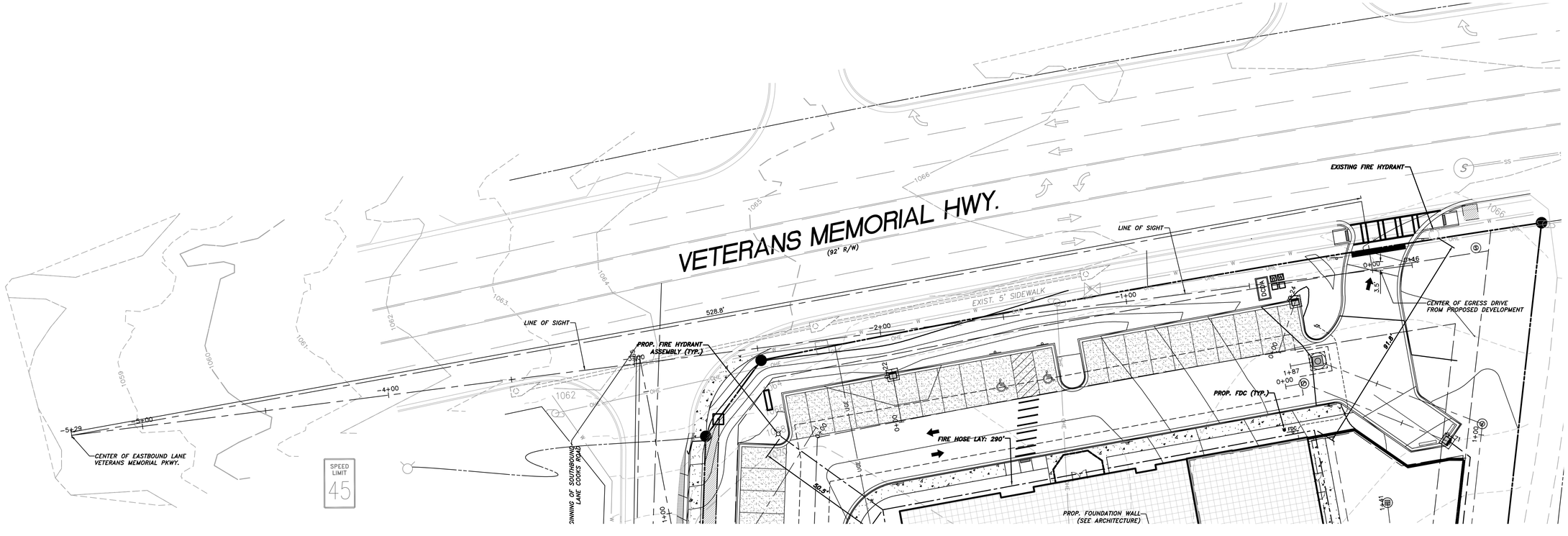
PROJECT NO.:
CES-2018-008-S

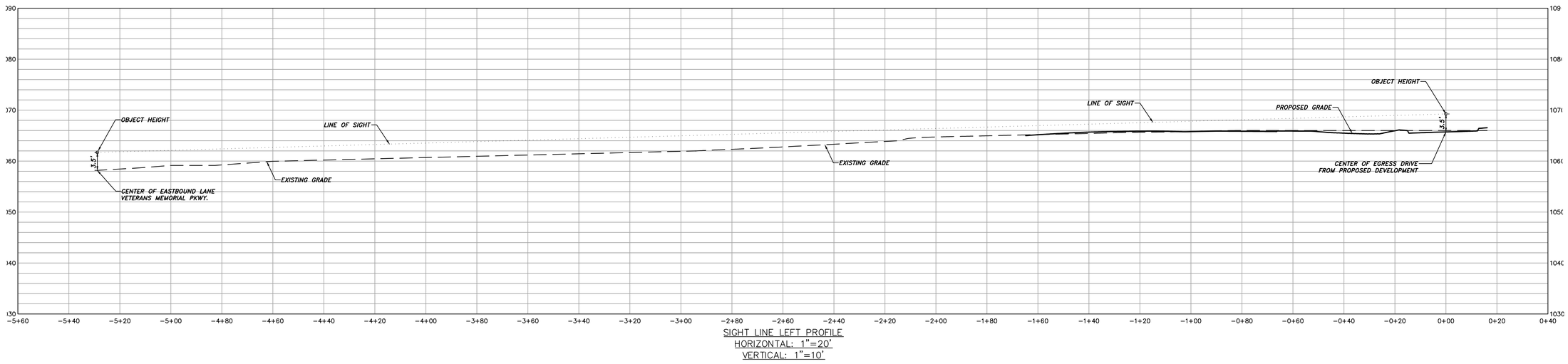
SHEET:
C5.5

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP, 2019-00145
05/28/2020

811 Know what's Below. Call before you dig.

24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044





SIGHT LINE LEFT PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

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SEAL:

GEORGIA REGISTERED No. 043037 PROFESSIONAL ENGINEER NOEL MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

SIGHT DIST. PLAN/PROFILE

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	
PROJECT NO.:	CES-2018-008-S
SHEET:	C6.0

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP: 2019-00145
05/29/2020

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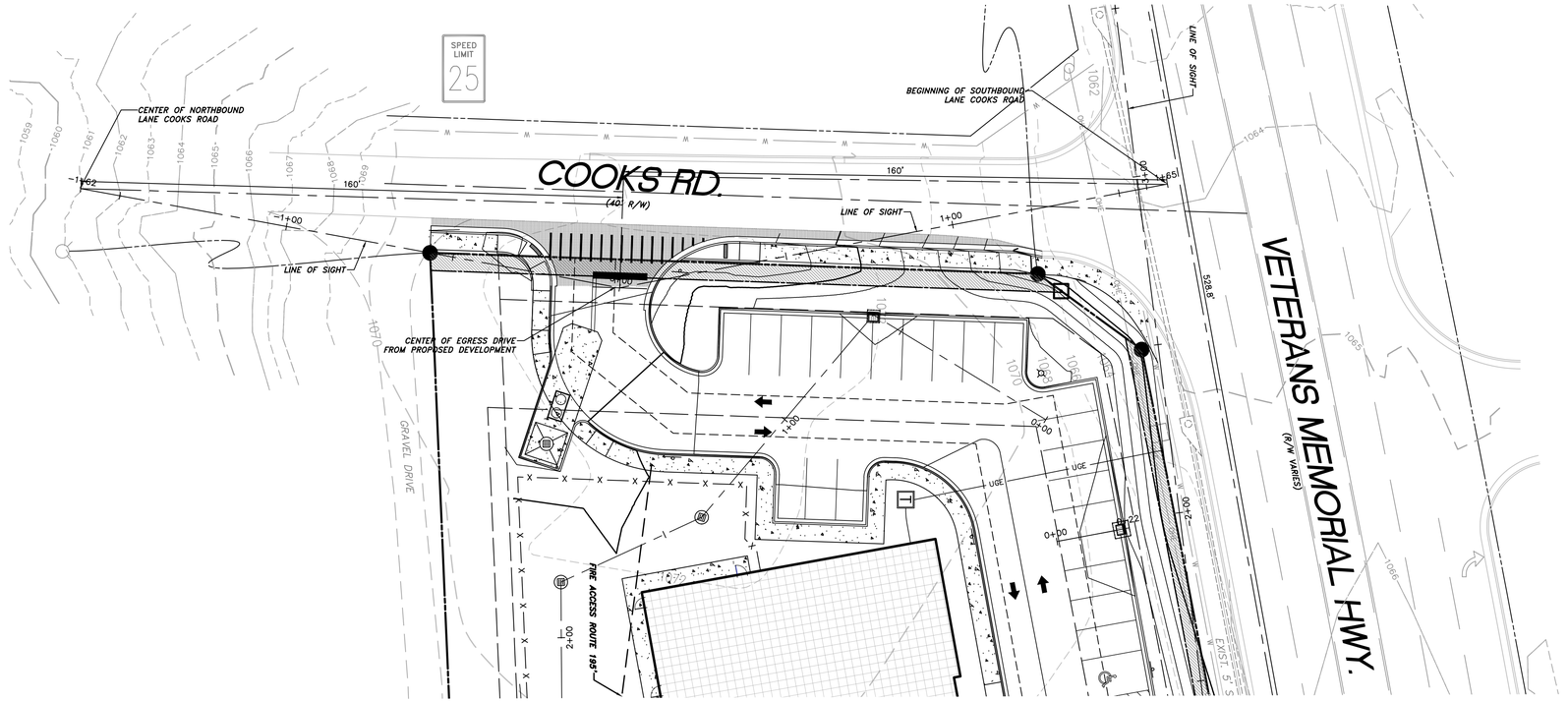

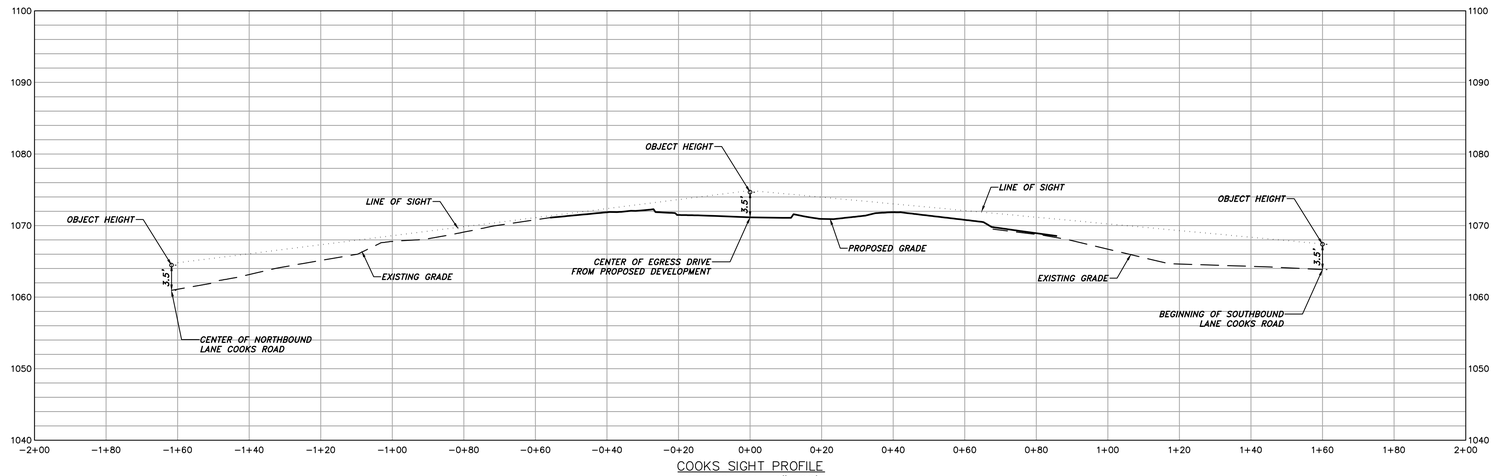

COOKS SIGHT PROFILE
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

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SEAL:

GEORGIA
REGISTERED
NO. 040537
PROFESSIONAL
ENGINEER
EDEN MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

SIGHT DIST. PLAN/PROFILE

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	
PROJECT NO.:	CES-2018-008-S
SHEET:	C6.1

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP-2019-00145
05/29/2020

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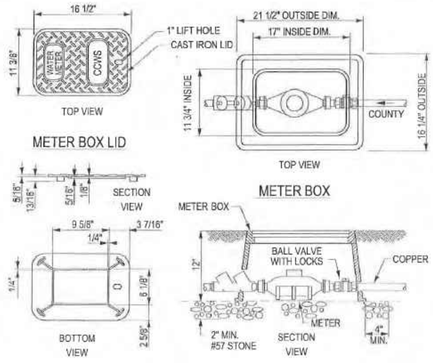
DETAIL 02713-14C
COBB COUNTY WATER SYSTEM
3/4" & 1" WATER METER BOX & LID DETAIL

SEPTEMBER 10, 2007 — AGENCY DIRECTOR

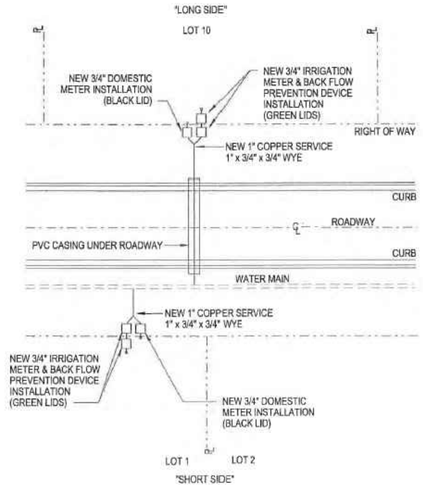
Steve McCullers



NOTE:
1. METER BOX LID TO BE CAST IRON - (VESTAL MFG. CO. OR APPROVED EQUIVALENT).
2. METER BOX TO BE NDS D1200 OR APPROVED EQUIVALENT.

DETAIL 02713-42
NEW DOMESTIC/IRRIGATION COMBINATION METER WITH BACK FLOW PREVENTION DEVICE INSTALLATION DEVELOPER INSTALLED

NOVEMBER 28, 2007 — AGENCY DIRECTOR



NOTE: DOUBLE SERVICES FOR DOMESTIC NOT ALLOWED WITH IRRIGATION METERS.

DETAIL 02713-23
COBB COUNTY WATER SYSTEM
3/4" THRU 10" METER INSTALLATION INFORMATION

OCTOBER 26, 2010 — AGENCY DIRECTOR

Steve McCullers

METER SIZE & TYPE IN INCHES	RESIDENTIAL	COMMERCIAL	IRRIGATION ONLY (STANDARD)	DOMESTIC	COMBINED IRR. & DOM.	FIRE PROTECTION	SIZE OF METER BOX IN INCHES (OUTSIDE DIM.) W x L x D	SIZE OF METER VAULT IN FEET (OUTSIDE DIM.) W x L x D	CCWS VAULT I.D.	REQUIRED EASEMENT IN FEET W x L
3/4 x 3/4 *	X		X	X	X		14 x 20 1/4 x 18		#1	NONE
3/4 x 3/4		X	X				14 x 20 1/4 x 18		#1	5 1/2 x 4
1 *	X		X	X	X		14 x 20 1/4 x 18		#1	NONE
1		X	X	X	X		14 x 20 1/4 x 18		#1	5 1/2 x 4
1 1/2		X	X	X	X		24 x 36 x 18		#2	5 x 6
1 1/2 WBP		X	X	X	X		24 x 36 x 18		#2	5 x 6
2		X	X	X	X		24 x 36 x 18		#2	5 x 6
2 w2BP		X		X	X		24 X 36 x 18		#2	5 x 6
3 w2BP		X		X	X			5 x 8 x 5 1/2	A	9 x 10
4 w2BP		X		X	X			5 x 8 x 5 1/2	A	9 x 10
6 DC		X				X		5 x 8 x 5 1/2	A	9 x 10
6 FM x 1.5 or 2		X		X	X	X		7 x 13 x 5 1/2	B	11 x 15
8 DC		X				X		5 x 8 x 5 1/2	A	9 x 10
8 FM x 2		X		X	X	X		7 x 13 x 5 1/2	B	11 x 15
10 DC		X				X		5 x 9 1/2 x 5 1/2	C	9 x 11 1/2
10 FM x 2		X		X	X	X		11 x 15 x 5 1/2	D	15 x 17

w2BP _____ WITH 2" BYPASS LINE
DC _____ DOUBLE CHECK VALVE ASSEMBLY (WITH NO BYPASS LINE IF FIRE PROTECTION ONLY)
6FM x 1.5 or 2 ___ FIRELINE AND MASTER METER - 6" SIZE OF FIRE LINE METER. 1.5" or 2" SIZE OF LOW FLOW METER. ALL FM METERS INCLUDE 6" BYPASS LINE.

CCWS ID
#1 _____ STANDARD 12" x 17" METER BOX
#2 _____ STANDARD 24" x 36" METER BOX
A _____ 4'-0" x 7'-0" x 5'-0" CONCRETE VAULT WITH LID. HATCH 3'-0"x 3'-0"x 0'- 1/4" REC.
B _____ 6'-0" x 12'-0" x 5'-0" CONCRETE VAULT WITH LID. HATCH 3'-0"x 3'-0"x 0'- 1/4" REC.
C _____ 8'-0" x 8'-0" x 5'-0" CONCRETE VAULT WITH LID. HATCH 3'-0"x 3'-0"x 0'- 1/4" REC.
D _____ 10'-0" x 14' 0" x 5'-0" CONCRETE VAULT WITH LID. HATCH 4'-0"x 4' 0"x 0'- 1/4" REC.

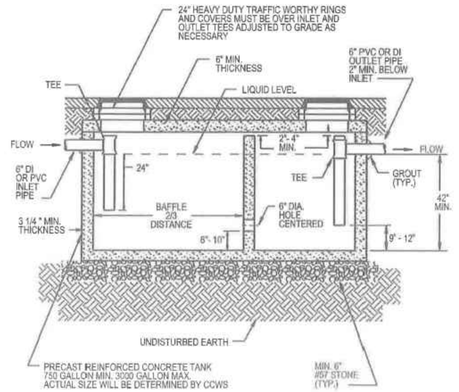
REQUIRED EASEMENT 5 1/2 x 4 = 5 1/2 EQUALS FOOTAGE ALONG RIGHT OF WAY
4 EQUALS FOOTAGE PERPENDICULAR TO RIGHT OF WAY.

* CCWS WILL PROVIDE 3/4"AND 1" BACKFLOW DEVICES TO BE INSTALLED WITH RESIDENTIAL 3/4" AND 1" METER INSTALLATIONS.

DETAIL 03410-20
COBB COUNTY WATER SYSTEM
GREASE TRAP

JULY 23, 2012 — AGENCY DIRECTOR

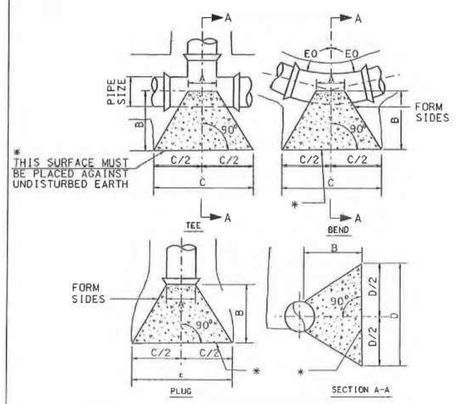
STEVE MCCULLERS



Note: Prior to covering the grease trap, call Environmental Compliance at 770.419.6430 to request an inspection. Please allow a 2-day notice for the inspection.

DETAIL 02713-12(A)
COBB COUNTY WATER SYSTEM
THRUST BLOCKING

AUGUST 7, 2001 — AGENCY DIRECTOR



NOTES: 1. SEE DETAIL 02713-12B FOR DIMENSION TABLES
2. COVER CONTACT SURFACE ON JOINT WITH ROOFING FELT PRIOR TO PLACEMENT OF CONCRETE

DETAIL 02713-12(B)
COBB COUNTY WATER SYSTEM
THRUST BLOCK DIMENSIONS

AUGUST 7, 2001 — AGENCY DIRECTOR

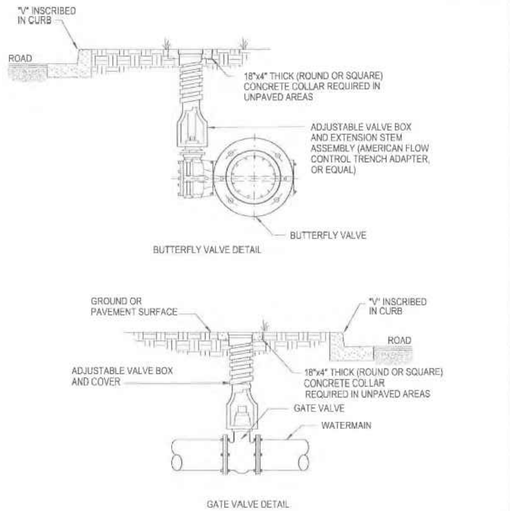
FITTING	PIPE DIA. (IN)	THRUST A	BLOCK B	DIM. C	(FEET) D	APPROX. VOL. (C.Y.)	BEARING AREA (SQ. FT.)	DESIGN THRUST (LBS.)
90° BEND	6	1.0	1.6	3.9	2.4	0.30	9.3	18,500
	8	1.2	2.1	5.2	3.1	0.66	15.9	31,685
	10	1.5	2.5	6.3	3.8	1.03	23.8	47,875
	12	1.7	3.8	7.5	4.5	2.05	33.8	67,705
	14	2.0	3.5	8.7	5.2	3.20	45.5	90,960
	16	2.2	4.0	8.9	5.9	4.69	58.6	117,645
	18	2.5	4.5	11.1	6.6	6.61	73.9	147,755
	20	2.7	5.0	12.3	7.4	8.95	90.8	181,290
	24	3.3	5.5	14.7	8.8	16.31	129.3	258,660
45° BEND	6	0.5	1.2	2.9	1.7	0.11	5.0	10,055
	8	0.6	1.5	3.8	2.3	0.25	8.8	17,290
	10	0.8	1.9	4.6	2.8	0.47	13.0	25,920
	12	0.9	2.2	5.6	3.3	0.79	18.3	36,555
	14	0.9	2.6	6.4	3.8	1.21	24.6	49,250
	16	1.0	2.9	7.3	4.4	1.78	31.8	63,595
	18	1.1	3.3	8.2	4.9	2.50	40.0	80,000
	20	1.2	3.6	9.0	5.4	3.40	49.1	98,155
	24	1.5	4.3	10.8	6.5	5.81	70.0	140,040
22 1/2° BEND	6	0.5	0.8	2.1	1.2	0.04	2.6	5,120
	8	0.6	1.1	2.7	1.6	0.10	4.4	8,810
	10	0.6	1.3	3.5	2.0	0.18	6.6	13,260
	12	0.9	1.6	4.0	2.4	0.30	9.4	18,740
	14	0.9	1.8	4.8	2.8	0.46	12.8	25,175
	16	1.0	2.1	5.2	3.1	0.67	16.3	32,660
	18	1.1	2.3	5.8	3.5	0.94	20.4	40,895
	20	1.2	2.6	6.5	3.9	1.28	25.1	50,175
	24	1.5	3.1	7.7	4.6	2.19	35.8	71,585
11 1/4° BEND	6	0.5	0.6	1.5	0.9	0.02	1.3	2,590
	8	0.6	0.8	1.9	1.2	0.04	2.2	4,440
	10	0.8	0.9	2.4	1.4	0.07	3.3	6,675
	12	0.9	1.1	2.8	1.7	0.12	4.7	9,440
	14	0.9	1.3	3.2	2.0	0.17	6.3	12,590
	16	1.0	1.5	3.7	2.2	0.25	8.2	16,400
	18	1.1	1.7	4.2	2.5	0.36	10.3	20,595
	20	1.2	1.9	4.6	3.3	0.48	12.6	25,270
	24	1.5	2.2	5.5	5.8	0.83	18.0	36,055
TEE /PLUG	6	1.0	1.3	3.3	2.0	0.19	6.5	13,000
	8	1.2	1.7	4.3	2.6	0.41	11.2	22,500
	10	1.5	2.1	5.3	3.2	0.76	16.9	33,850
	12	1.7	2.5	6.3	3.8	1.26	23.9	47,870
	14	2.0	2.9	7.3	4.4	1.97	32.2	64,315
	16	2.2	3.3	8.3	5.0	2.58	41.6	83,185
	18	2.5	3.8	9.3	5.6	4.06	52.2	104,475
	20	2.7	4.2	10.4	6.2	5.49	64.1	128,190
	24	3.3	5.0	12.4	7.4	8.40	91.4	182,695

Thrust Block Notes:
1. The dimensions and values in these tables are based on the following:
   a. Water main test pressure = 350 p.s.i.
   b. Horizontal bearing strength of soil = 2,000 p.s.f.
2. The bearing surface of the thrust block shall be placed against undisturbed soil. If this is not possible, the fill between the bearing surface and undisturbed soil shall be compacted to at least 95% Modified Proctor density.

DETAIL 02713-4
COBB COUNTY WATER SYSTEM
VALVE INSTALLATION

JULY 9, 2008 — AGENCY DIRECTOR

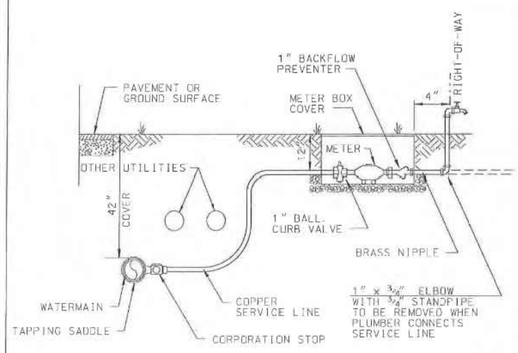
Steve McCullers



DETAIL 02713-14B
COBB COUNTY WATER SYSTEM
1" WATER METER INSTALLATION (TYPICAL SECTION)

MAY 12, 2005 — AGENCY DIRECTOR

Steve McCullers



NOTE: FITTINGS TO METER TO BE FLARED
FITTINGS PAST METER TO BE THREADED

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326

TEL: (404) 643-6044

EMAIL: eabua@conceptengrs.net

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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

COUNTY DETAILS

DESIGNED BY: DO-CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO-CES

SCALE: AS SHOWN
DATE: 4-17-2019

PROJECT NO.: CES-2018-008-S

SHEET: C7.0

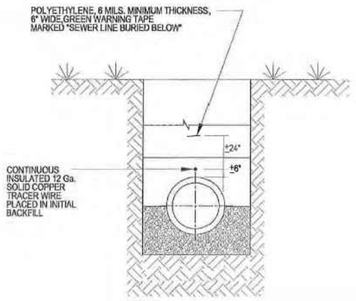
COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
UPR-2019-00145
10/24/2020

Know what's Below. Call before you dig.

24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044

DETAIL 02722-4A
COBB COUNTY WATER SYSTEM
UTILITY TRACER

AUGUST 22, 2011 — AGENCY DIRECTOR

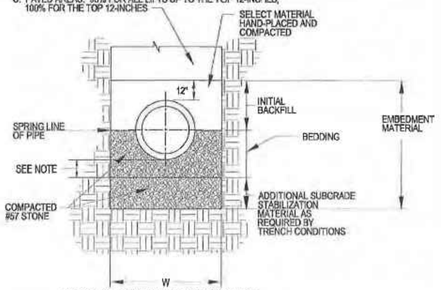


NOTES:
1. TRACER WIRE TO BE 12 AWG SOLID COPPER RATED FOR DIRECT BURY WITH MINIMUM 30 MIL POLYETHYLENE INSULATION.
2. ALL SPLICES AND CONNECTIONS SHALL BE PROTECTED WITH DIRECT BURY CONNECTORS EQUAL TO 3M DBRY-6 SPLICE KITS
3. TRACER WIRE TO CONTINUE UNINTERRUPTED AROUND MANHOLES

DETAIL 02722-1
COBB COUNTY WATER SYSTEM
SEWER TRENCH DETAIL

AUGUST 22, 2011 — AGENCY DIRECTOR

BACKFILL COMPACTION (STANDARD PROCTOR)
A. UNPAVED AREAS OUTSIDE OF ROADWAY RIGHT-OF-WAYS: 90% FOR ALL LIFTS
B. UNPAVED AREAS OF ROADWAY RIGHT-OF-WAY: 98% FOR ALL LIFTS
C. PAVED AREAS: 98% FOR ALL LIFTS UP TO THE TOP 12-INCHES, 100% FOR THE TOP 12-INCHES

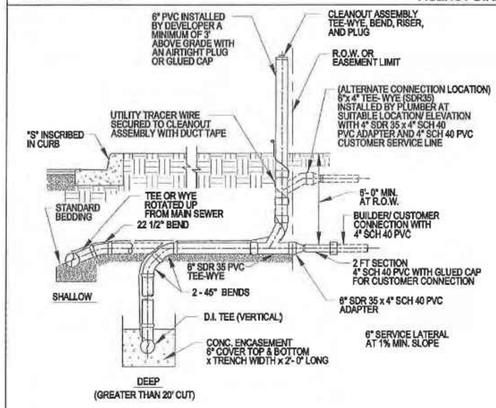


W = TRENCH WIDTH DEFINED AS NOMINAL PIPE OUTSIDE DIAMETER PLUS TWO FEET FOR MEASUREMENT AND PAYMENT OF ADDITIONAL SUBGRADE STABILIZATION MATERIAL ALLOWANCE AND/OR ROCK EXCAVATION ALLOWANCE (AS APPLICABLE AND AS AUTHORIZED)

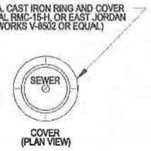
NOTE:
BEDDING DEPTH BELOW PIPE TO BE AS FOLLOWS:
SERVICE LATERALS = 4" MINIMUM
SEWERS - 8" DIA. TO 18" DIA. = 6" MINIMUM
SEWERS - GREATER THAN 18" DIA. = PIPE DIA./3

DETAIL 02722-2
COBB COUNTY WATER SYSTEM
SEWER SERVICE CONNECTION

AUGUST 22, 2011 — AGENCY DIRECTOR



6" CLEANOUT ASSEMBLY ADJUSTED TO LANDSCAPE GRADE BY BUILDER AT TIME OF CONNECTION

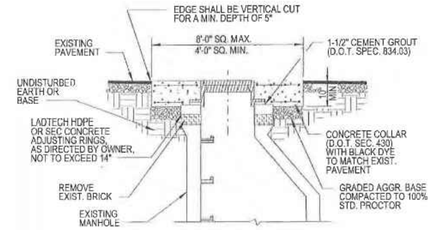


NOTES:
1. UTILITY TRACER SYSTEM REQUIRED REFER TO DETAIL 02722-4B
2. ONLY 1 SINGLE FAMILY RESIDENCE PER SEWER SERVICE CONNECTION
3. SERVICE LATERAL BEDDING & BACKFILL TO CONFORM TO DETAIL 02722-1, EXCEPT BEDDING DEPTH UNDER PIPE TO BE 4" MIN.

DETAIL 03410-9
COBB COUNTY WATER SYSTEM
MANHOLE RAISING IN PAVEMENT

JUNE 21, 2007 — AGENCY DIRECTOR

Steve McCullers



MANHOLE RAISING NOTES :

1. CONCRETE FOR COLLAR SHALL BE A MIN. OF 10" THICK.
2. IF REPLACEMENT OF THE FRAME & COVER IS NECESSARY, ACCEPTABLE PRODUCTS ARE EAST JORDAN IRON WORKS V-1480-1 OR U.S. FOUNDRY 350E.
3. ALL MANHOLE FRAME GRADE ADJUSTMENTS SHALL CONFORM TO THE REQUIREMENTS OF THIS DETAIL.
4. REINFORCEMENT SHALL BE CUT-TO-FIT MAT OF 6"x 6", 10x10 GAUGE WELDED WIRE FABRIC PLACED WITH 2" CLEARANCE FROM BOTTOM AND TOP SURFACES.

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

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SEAL:

GEORGIA REGISTERED No. 046537 PROFESSIONAL ENGINEER EDEN MAXWELL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

COUNTY DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

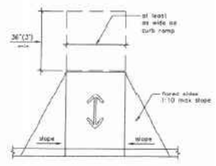
PROJECT NO.:
CES-2018-008-S

SHEET:
CT-1

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP# 2019-00145
05/28/2020

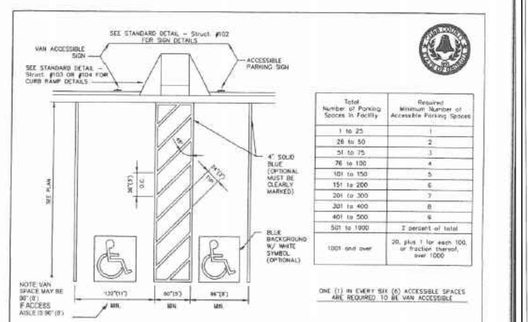
Know what's **Below.** **Call** before you dig.

406.4 Landings. Landings shall be provided at the tops of curb ramps. The landing clear length shallbe 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the *curb ramp*, excluding flared sides, leading to the landing.



406.5 Location. *Curb ramps* and the flared sides of *curb ramps* shall be located so they do not project into vehicular traffic lanes, parking *spaces* or parking access aisles. *Curb ramps* at *marked crossing* shall be wholly contained within the markings, excluding any flared sides.

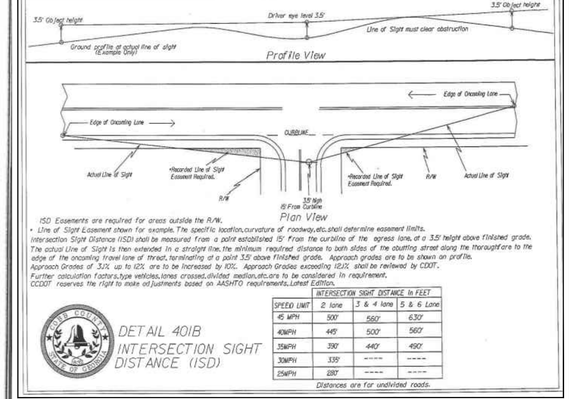
STANDARD DETAIL - CURB RAMPS (non-D. O. T. regulated)
COBB COUNTY, GEORGIA
N. T. S. — Struct. #103



Total Number of Parking Spaces in Facility	Required Minimum Number of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

ONE (1) IN EVERY SIX (6) ACCESSIBLE SPACES ARE REQUIRED TO BE VAN ACCESSIBLE

STANDARD DETAIL - ACCESIBLE PARKING SPACES (non-D. O. T. regulated)
COBB COUNTY, GEORGIA
N. T. S. — Struct. #101

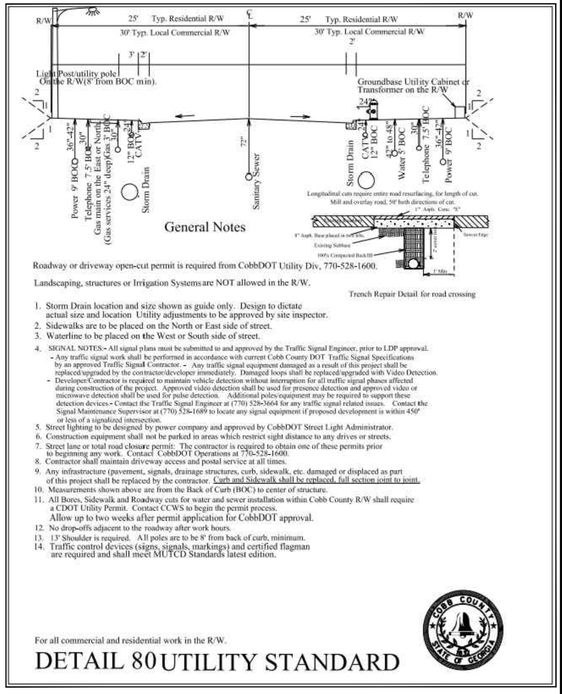


150 Easements are required for areas outside the R/W.
* Line of Sight Easement shown for example. The specific location, curvature of roadway, etc. shall determine easement limits.
Intersection Sight Distance (ISD) shall be measured from a point established 15' from the curbline of the egress lane, at a 3.5' height above finished grade. The actual Line of Sight is then extended in a straight line, the minimum required distance to both sides of the oncoming street along the thoroughfare to the edge of the oncoming travel lane of thread, terminating at a point 3.5' above finished grade. Approach grades are to be shown on profile.
Approach Grades of 3.0% up to 12% are to be increased by 10%. Approach Grades exceeding 12.0% shall be reviewed by CDOT.
Further calculation factors, type vehicles, lanes crossed, divided section, etc. are to be considered to requirement.
CCDOT reserves the right to make adjustments based on AASHTO requirements. Latest Edition.

DETAIL 401B
INTERSECTION SIGHT DISTANCE (ISD)

	INTERSECTION SIGHT DISTANCE in FEET		
SPEED LIMIT	2 lane	3 & 4 lane	5 & 6 Lane
25 MPH	500'	560'	630'
30MPH	445'	500'	560'
35MPH	390'	440'	490'
40MPH	335'	----	----
25MPH	280'	----	----

Distances are for undivided roads.



General Notes

Roadway or driveway open-cut permit is required from CobbDOT Utility Div, 770-528-1600.

Landscaping, structures or Irrigation Systems are NOT allowed in the R/W.

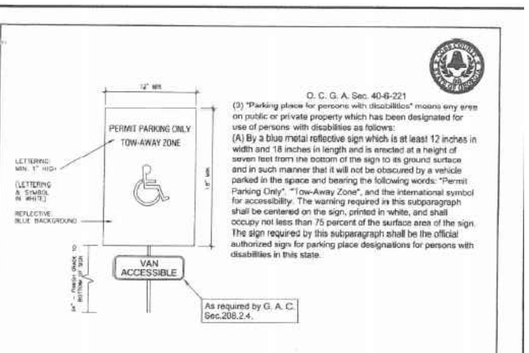
Trench Repair Detail for road crossing

1. Storm Drain location and size shown as guide only. Design to dictate actual size and location Utility adjustments to be approved by site inspector.
2. Sidewalks are to be placed on the North or East side of street.
3. Waterline to be placed on the West or South side of street.
4. SIGNAL NOTES:- All signal plans must be submitted to and approved by the Traffic Signal Engineer, prior to LDP approval.
   - Any traffic signal work shall be performed in accordance with current Cobb County DOT Traffic Signal Specifications by an approved Traffic Signal Contractor. - Any traffic signal equipment damaged as a result of this project shall be replaced/upgraded by the contractor/developer immediately. Damaged loops shall be replaced/upgraded with Video Detection.
   - Developer/Contractor is required to maintain vehicle detection without interruption for all traffic signal phases affected during construction of the project. Approved video detection shall be used for presence detection and approved video or microwave detection shall be used for pulse detection. Additional poles/equipment may be required to support these detection devices.- Contact the Traffic Signal Engineer at (770) 528-3604 for any traffic signal related issues. Contact the Signal Maintenance Supervisor at (770) 528-1689 to locate any signal equipment if proposed development is within 450' or less of a signalized intersection.
5. Street lighting to be designed by power company and approved by CobbDOT Street Light Administrator.
6. Construction equipment shall not be parked in areas which restrict sight distance to any drives or streets.
7. Street lane or total road closure permit: The contractor is required to obtain one of these permits prior to beginning any work. Contact CobbDOT Operations at 770-528-1600.
8. Contractor shall maintain driveway access and postal service at all times.
9. Any infrastructure (pavement, signals, drainage structures, curb, sidewalk, etc. damaged or displaced as part of this project shall be replaced by the contractor. Curb and Sidewalk shall be replaced, full section joint to joint.
10. Measurements shown above are from the Back of Curb (BOC) to center of structure.
11. All Bores, Sidewalk and Roadway cuts for water and sewer installation within Cobb County R/W shall require a CDOT Utility Permit. Contact CCWS to begin the permit process. Allow up to two weeks after permit application for CobbDOT approval.
12. No drop-offs adjacent to the roadway after work hours.
13. 13' Shoulder is required. All poles are to be 8' from back of curb, minimum.
14. Traffic control devices (signs, signals, markings) and certified flagman are required and shall meet MUTCD Standards latest edition.

For all commercial and residential work in the R/W.

DETAIL 80 UTILITY STANDARD

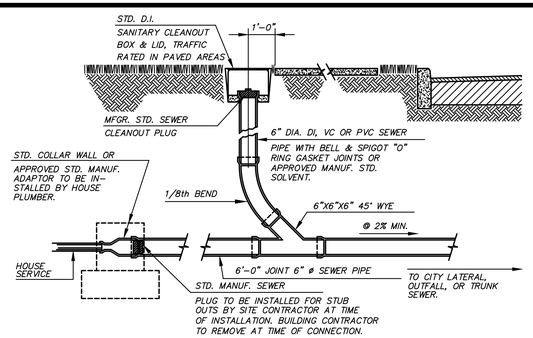
STANDARD DETAIL - ALTERNATE PARALLEL CURB RAMP (non-D. O. T. regulated)
COBB COUNTY, GEORGIA
N. T. S. — Struct. #104



O. C. G. A. Sec. 40-6-221
(3) "Parking place for persons with disabilities" means any area on public or private property which has been designated for use of persons with disabilities as follows:
(A) By a blue metal reflective sign which is at least 12 inches in width and 18 inches in length and is erected at a height of seven feet from the bottom of the sign to its ground surface and in such manner that it will not be obscured by a vehicle parked in the space and bearing the following words: "Permit Parking Only". "Tow-Away Zone", and the international symbol for accessibility. The warning required in this subparagraph shall be centered on the sign, printed in white, and shall occupy not less than 75 percent of the surface area of the sign. The sign required by this subparagraph shall be the official authorized sign for parking place designations for persons with disabilities in this state.

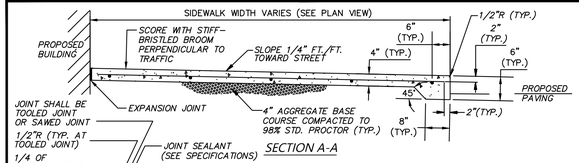
STANDARD DETAIL - ACCESIBLE PARKING SPACE SIGNAGE (non-D. O. T. regulated)
COBB COUNTY, GEORGIA
N. T. S. — Struct. #102

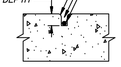
24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044



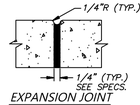
STANDARD SANITARY CLEAN-OUT

N.T.S.





CONTRACTION JOINT



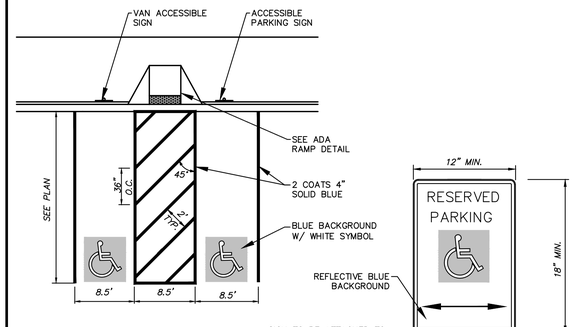
EXPANSION JOINT

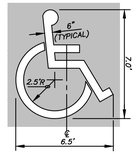
NOTES:

1. WHERE REQUIRED REINFORCEMENT WILL BE No. 3 BARS 24" O.C. EACH WAY (MAX. SPACING), OR 6 X 6 –W1.4 X W1.4 WWF CONCRETE TO BE 4", 3500 P.S.I. P.C. CONCRETE.
2. TOOLED CONTRACTION JOINT IN FRESH CONCRETE TO BE GROOVED JOINT 1/4 OF CONCRETE DEPTH MIN. WITH 1/2" MIN. RADIUS ON EXPOSED EDGES.
3. SAWED CONTRACTION JOINT TO BE 1/4 OF CONCRETE DEPTH MIN. AND FILLED WITH CONTINUOUS LENGTHS OF JOINT SEALANT AS SPECIFIED IN SECTION 02520–2.01 OF THE SPECIFICATIONS.
4. PATHFINDER DETECTABLE WARNING SURFACE AVAILABLE FROM CARSONITE INTERNATIONAL, CARSON CITY, NV (800) 648–7974 3' WIDE – DOT 12"x12"x1/4" OVERLAY, OR EQUAL.

CONCRETE SIDEWALK @ BUILDING

N.T.S.





ACCESSIBLE PARKING SYMBOL

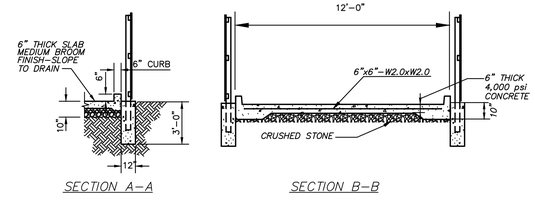
LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

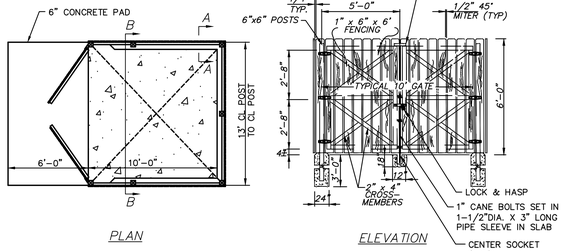
NOTES:

1. SEE SITE PLAN FOR LAYOUT AND LOCATION.
2. ALL DIMENSIONS ARE TO ℄ OF STRIPE UNLESS OTHERWISE INDICATED.
3. 2% MAXIMUM SLOPE IN ALL DIRECTIONS WITHIN THE ACCESSIBLE SPACE.
4. * CONCRETE BOLLARD AROUND POST IS NECESSARY WHERE THE SIGN IS TO BE WITHIN 2' OF THE TRAVEL LANE OR PARKING SPACE

ADA PARKING DETAIL

N.T.S.



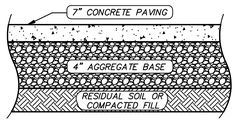


WOODEN FENCE NOTES:

1. ALL POST AND STRINGERS SHALL BE OSMOSIS TREATED PINE.
2. ALL FENCE SIDING SHALL BE UNTREATED CEDAR.
3. ALL METAL FASTENERS SHALL BE HOT DIPPED GALVANIZED.
4. IF DRAIN IS REQUIRED BY LOCAL CODE INSTALL DRAIN IN CENTER OF PAD AND SLOPE PAD TO DRAIN. IF NO DRAIN SLOPE PAD TO DRAIN TO ACCESS POINT.
5. REFER TO GEOTECHNICAL RECOMMENDATIONS FOR THICKNESS OR APPLICABILITY OF STONE BASE.

DUMPSTER PAD AND FENCE ENCLOSURE

N.T.S.



HEAVY DUTY CONCRETE PAVING

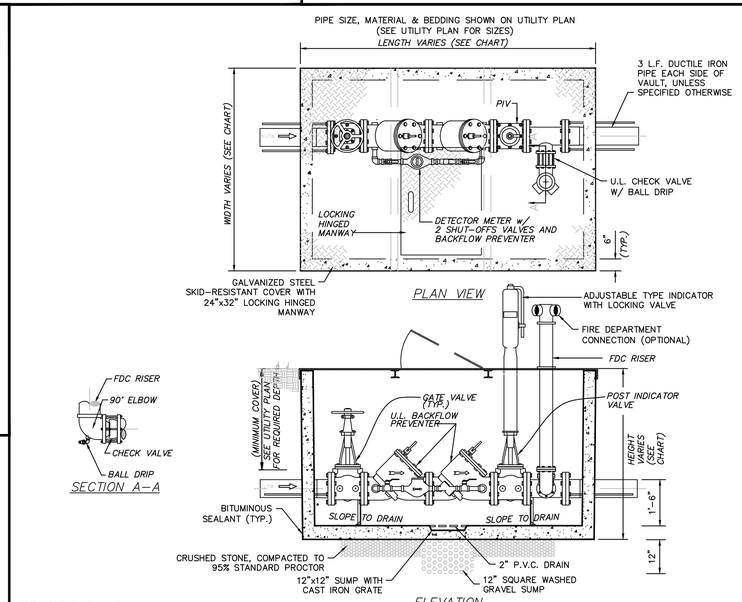
N.T.S.

CRUSHED STONE BASE SHOULD BE COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM 1557, METHOD D).

CRUSHED STONE AGGREGATE SHOULD MEET OR EXCEED REQUIREMENTS OF SECTION 815 OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PAVEMENT DESIGN IS BASED ON A 20 YEAR PAVEMENT LIFE, CALIFORNIA BEARING RATIO (CBR) VALUE OF 5, AND SUBGRADE MODULUS (k) OF 125 PSI/INCH. SUBGRADE SHOULD MEET THESE REQUIREMENTS AS A MINIMUM.

CONCRETE PAVING SPECIFICATION



SPECIFICATIONS

CONCRETE : CLASS 1 CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR AND FIRST STAGE OF WALL WITH SECTIONAL RISER TO REQUIRED DEPTH.

REINFORCEMENT: GRADE 60 REINFORCED STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

STEEL COVER: 1/4" STEEL SKID–RESISTANT FLOOR PLATE WELDED TO 3" ANGLE FRAME WITH (2) 3"X2–3/8" I BEAM SUPPORTS.

NOTE

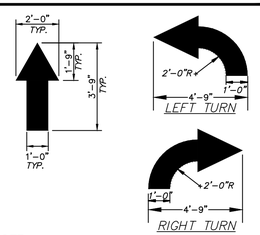
THIS PLAN REPRESENTS AN ACCEPTABLE METHOD FOR PLACEMENT OF A BACKFLOW PREVENTER & VAULT, HOWEVER, ALL LOCAL CODES VARY AND MUST BE ADHERED TO FOR VAULT & VALVE/METER ASSEMBLY.

VAULT DIMENSIONS:

SIZE	LEN.	WIDTH	HEIGHT
4"	7'–10"	4'–4"	5'–6"
6"	7'–10"	4'–4"	5'–6"
8"	8'–8"	5'–0"	5'–6"
10"	9'–0"	6'–0"	6'–6"

DETECTOR CHECK VALVE W/ BY-PASS DETECTOR METER

N.T.S

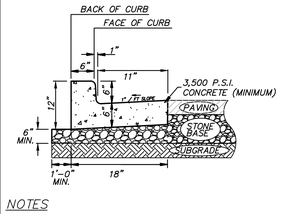


NOTE

1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B–20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. ALL TRAFFIC FLOW ARROWS TO BE SOLID WHITE REFLECTIVE TRAFFIC PAINT OR MEET LOCAL REQUIREMENTS.

PARKING LOT FLOW ARROW

N.T.S.



NOTES

1. EXPANSION JOINTS REQUIRED AT ALL STRUCTURES AND CURB RETURNS. 25 FOOT MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS.
2. 3,500 PSI CONCRETE WITH SMOOTH FINISH.
3. COMPACT SUBGRADE TO 95% STANDARD PROCTOR.
4. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

STANDARD 18" CONCRETE CURB AND GUTTER

N.T.S.

24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326

TEL: (404) 643-6044

EMAIL: eabua@conceptengrs.net

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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

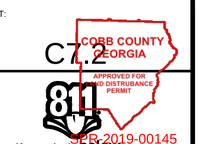
SHEET TITLE:

CONSTRUCTION DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C7.2



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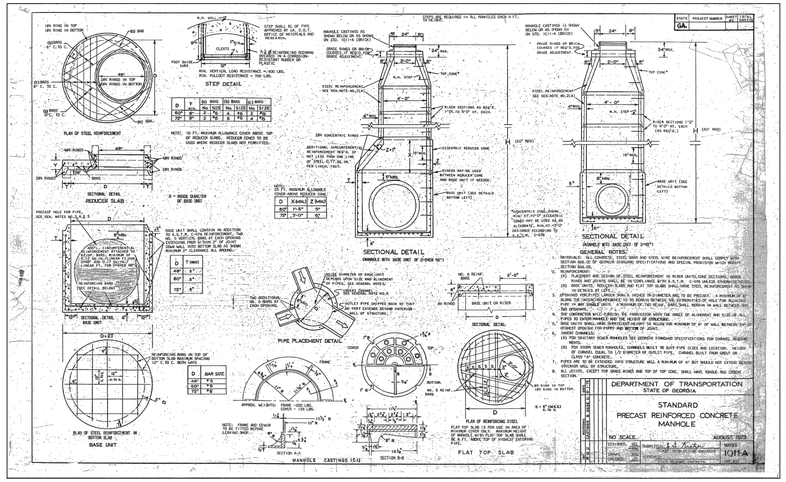
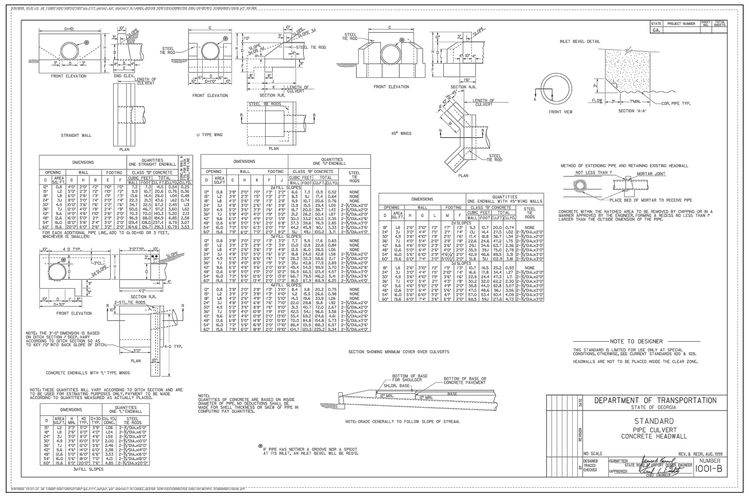
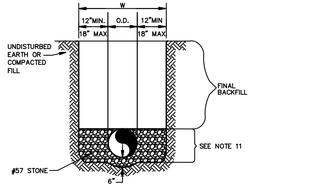
LDP 2019-00145
05/28/2020







HDPE PIPE SMALLER THAN 60"ø

N.T.S.

GENERAL NOTES

1. BEDDING SHALL BE CLASS I–A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I–B COMPACTED TO 85% STANDARD PROCTOR.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I–A OR CLASS I–B OR CLASS II COMPACTED TO 85% PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I–A WORKED BY HAND, OR CLASS I–B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
4. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
5. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321–LATEST EDITION.
6. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV–A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
7. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
8. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)
9. PIPE BEDDING TO EXTEND UP AROUND THE PIPE TO 1/3 THE OUTSIDE PIPE DIAMETER, FOR ALL PIPES EXCEPT HDPE, WHICH REQUIRES THE BEDDING BE PROVIDED TO THE CROWN OF THE PIPE.

HDPE BEDDING DETAIL

N.T.S.

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

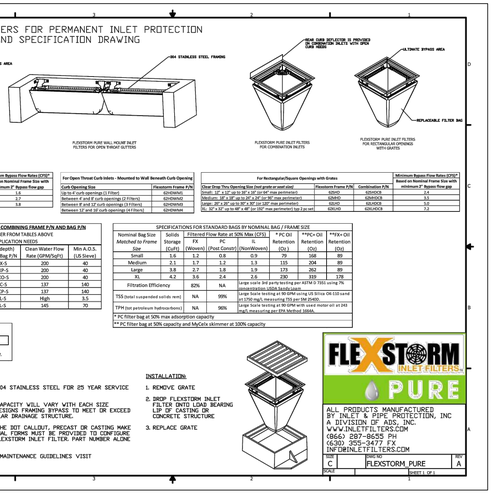
130 VETERANS MEMORIAL HWY SE
MABLETON, GA

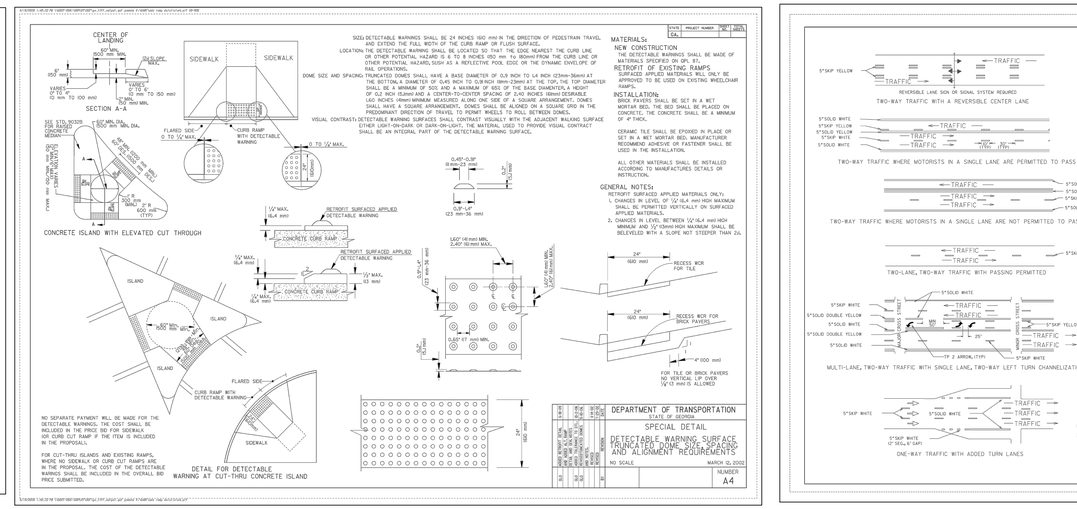
SHEET TITLE:

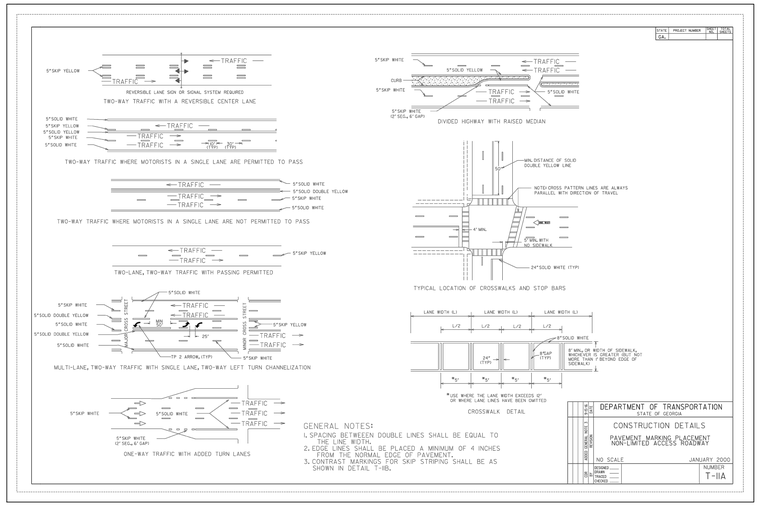
STORM DETAILS

DESIGNED BY: DO-CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO-CES

SCALE: AS SHOWN
DATE: 4-17-2019
PROJECT NO.: CES-2018-008-S
SHEET: C7.3







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APPROVED FOR LAND DISTURBANCE PERMIT
COBB COUNTY GEORGIA
LDP 2019-00145
05/28/2020

24 HOUR EMERGENCY CONTACT: EMMANUEL ABUA (404) 643-6044

COBB COUNTY WATER SYSTEM

Stephen D. McCullers, P.E.
Director

Divisions
Business Services
Customer Services
Engineering & Records
Stormwater Management
System Maintenance
Water Protection

Customer Services Facility
660 South Cobb Drive
Marietta, Georgia 30060-3105
770-419-6200
www.cobbwater.org

8/29/2019

Cobb County Fire Department
Fire Prevention Division
1596 County Services Parkway
Marietta, GA 30060

To whom it concerns:

A Fire Flow Test has been conducted by the Cobb County Water System for the following project:

PROJECT NAME:	*THE MANOR PREP INTERNATIONAL SCHOOL*
STREET NAME:	**130 VETERANS MEMORIAL HIGHWAY**
DISTRICT:	**18**
LAND LOT(S):	**44**
DEVELOPER:	**ISHERE CORPORATION**
CONTACT NAME:	**EMMANUEL ABUA** **PHONE: 404-643-6044**
TYPE OF DEV:	**COMMERCIAL**

The results of this test are: **TEST DATE: 8/28/2019**

STATIC PRESSURE	83	PSI
RESIDUAL PRESSURE	77	PSI
FIRE HYDRANT FLOW	1250	GPM
AVAILABLE FLOW AT 20 psi	4450	GPM
SIZE OF WATER MAIN (UNCONFIRMED)	8	INCHES

The data contained herein are furnished only to demonstrate that adequate fire protection flow exists at the time of the test. Fluctuations to pressure and flow will occur due to demands on the system and other conditions beyond the control of the Cobb County Water System: therefore, additional criteria must be considered and additional independent tests run to confirm pressures for use in the design of any water distribution, sprinkler, or fire protection system.

Sincerely,
COBB COUNTY WATER SYSTEM

BRIAN HENLEY
Construction Inspector Supervisor
Engineering Records Division
Brian.Henley@cobbcounty.org
cc: File

For Cobb County Water System Use Only:
STATIC / RESIDUAL HYDRANT NO. H180044001
FLOW HYDRANT NO. H180045003

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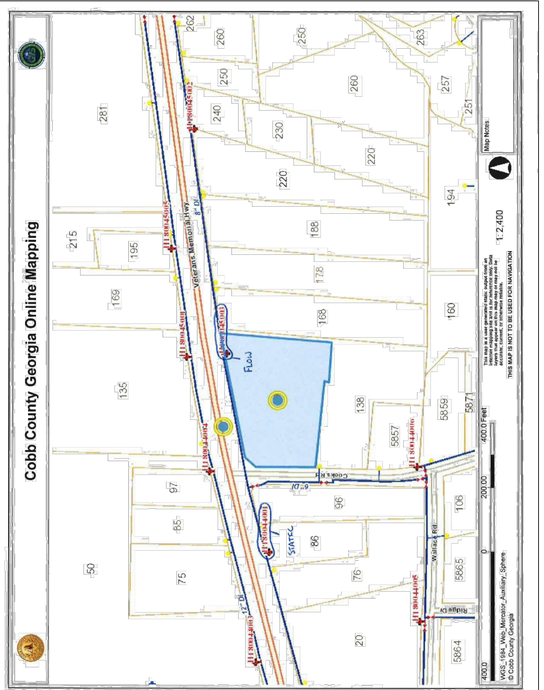
Equal Opportunity Employer
www.cobbcounty.org



StormTech MC-3500 Chamber

StormTech MC-3500 Chamber (not to scale)

Nominal Chamber Specifications

Size (L x W x H)	90" (2286 mm) x 77" (1956 mm) x 45" (1143 mm)
Chamber Storage	109.9 ft³ (3.11 m³)
Min. Installed Storage*	178.9 ft³ (5.06 m³)
Weight	134 lbs (60.8 kg)

* This assumes a minimum of 12" (305 mm) of stone above, 9" (229 mm) of stone below chambers, 9" (229 mm) of row spacing, and 40% stone porosity.

StormTech MC-3500 End Cap (not to scale)

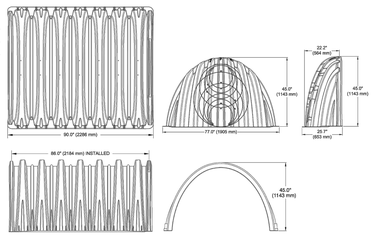
Nominal End Cap Specifications

Size (L x W x H)	25.7" (653 mm) x 73" (1905 mm) x 45" (1143 mm)
End Cap Storage	14.9 ft³ (0.42 m³)
Min. Installed Storage*	46.0 ft³ (1.30 m³)
Weight	49 lbs (22.2 kg)

* This assumes a minimum of 12" (305mm) of stone above, 9" (229 mm) of stone below, 9" (229 mm) row spacing, 6" (152 mm) of stone perimeter, and 40% stone porosity.

Shipping

15 chambers/pallet
7 end caps/pallet
7 pallets/truck



Storage Volume Per Chamber/End Cap ft³ (m³)

	Bare Unit Storage	Chamber/End Cap and Stone Volume — Stone Foundation Depth in. (mm)			
	ft³ (m³)	9 (229)	12 (305)	15 (381)	18 (457)
MC-3500 Chamber	109.9 (3.11)	178.9 (5.06)	184.0 (5.21)	189.2 (5.36)	194.3 (5.5)
MC-3500 End Cap	14.9 (0.42)	46.0 (1.33)	47.7 (1.35)	49.4 (1.40)	51.1 (1.45)

NOTE: Assumes 40% porosity for the stone plus the chamber/end cap volume. End Cap volume assumes 6" (152mm) stone perimeter.

Volume of Excavation Per Chamber/End Cap in yd³ (m³)

	Stone Foundation Depth in. (mm)			
	9 (229)	12 (305)	15 (381)	18 (457)
MC-3500	12.4 (9.5)	12.8 (9.9)	13.3 (10.2)	13.8 (10.5)
End Cap	4.1 (3.1)	4.2 (3.2)	4.4 (3.3)	4.5 (3.5)

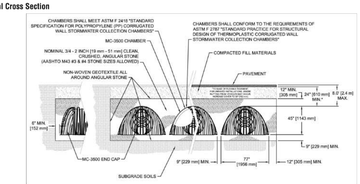
NOTE: Assumes 9" (229 mm) of separation between chamber rows, 6" (152 mm) of perimeter in front of end caps, and 24" (610 mm) of cover. The volume of excavation will vary as depth of cover increases.

Amount of Stone Per Chamber

ENGLISH tons (yd³)	Stone Foundation Depth			
	9 in.	12 in.	15 in.	18 in.
MC-3500	9.1 (6.4)	9.7 (6.9)	10.4 (7.3)	11.1 (7.8)
End Cap	4.1 (2.9)	4.3 (3.0)	4.5 (3.2)	4.7 (3.3)
METRIC kg (m³)	229 mm	305 mm	381 mm	457 mm
MC-3500	8220 (4.9)	8831 (5.3)	9443 (5.6)	10054 (6.0)
End Cap	3699 (2.2)	3900 (2.3)	4100 (2.4)	4301 (2.6)

NOTE: Assumes 12" (305 mm) of stone above, and 9" (229 mm) row spacing, and 6" (152mm) of perimeter stone in front of end caps.

General Cross Section



NOTES:
1. THIS CROSS SECTION PROVIDES GENERAL INFORMATION FOR THE MC-3500 CHAMBER. STORMTECH MC-3500 CHAMBERS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE MC-3500 DESIGN MANUAL AND MC-3500 CONSTRUCTION GUIDE.
2. PROPERLY INSTALLED MC-3500 CHAMBERS PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE PRESENCES.
3. PERIMETER STONE MUST ALWAYS BE BROUGHT UP EVENLY WITH BACKFILL OF BED. PERIMETER STONE MUST EXTEND HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH STRAIGHT OR SLOPED SIDEWALLS.

StormTech
Detention • Retention • Water Quality
A division of ADS
70 Inwood Road, Suite 3 | Rocky Hill | Connecticut | 06067
860.529.8188 | 888.892.2694 | fax 866.328.8401 | fax 860-529-8040 | www.stormtech.com

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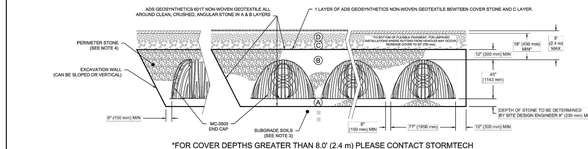
ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**PINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145*, A-1, A-2-4, A-3 OR AASHTO M43*, 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43*, 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43*, 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE[3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



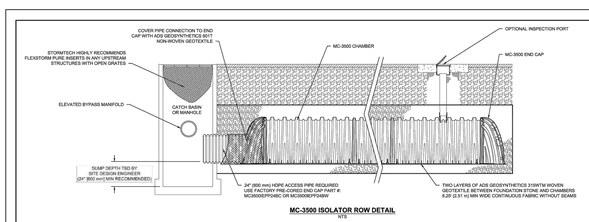
*FOR COVER DEPTHS GREATER THAN 8.0' (2.4 m) PLEASE CONTACT STORMTECH

NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3418-19a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45/476 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTERNAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3"
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F3418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

MC-3500	STANDARD CROSS SECTION
DATE: 05-10-19	DRAWING: KS
PROJECT #:	CHECKED: KS

ADS TECHNOLOGY YELLAND, OK 43026

1 SHEET OF 1



MC-3500 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

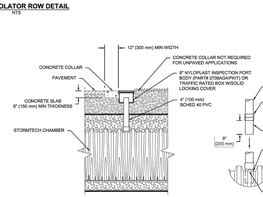
STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORT (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND MEASURING STICK, CHECK FOR DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A CAMERA, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



CONNECTION DETAIL
NTS

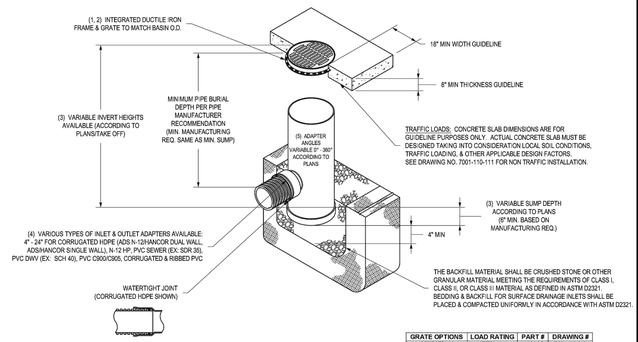
4" PVC INSPECTION PORT DETAIL
NTS

MC-3500	ISOLATOR ROW DETAILS
DATE: 11/04/19	DRAWING: KJ
PROJECT #:	CHECKED: KJ

ADS TECHNOLOGY YELLAND, OK 43026

1 SHEET OF 1

NYLOPLAST 24" DRAIN BASIN: 2824AG _ _X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	2496CGP	7001-110-216
STANDARD	MEETS H-20	2496CGS	7001-110-217
SOLID COVER	MEETS H-20	2496CGC	7001-110-218
DOME	N/A	2496CGD	7001-110-219
DROP IN GRATE	LIGHT DUTY	2457D	7001-110-870

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL) N-12 HP & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE HAS LIGHT DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.

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DRAWN BY	EBC	MATERIAL	
DATE	04-03-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-14-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: 24 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-152 REV E

1201DI

APPROX. DRAIN AREA = 39.75 SQ. IN
APPROX. WEIGHT = 15 LBS

DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE HAS LIGHT DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.

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DRAWN BY	AWA	MATERIAL	
DATE	3-5-90		
REVISED BY	EBC	PROJECT NO./NAME	
DATE	4-13-11		
DWG SIZE	A	SCALE 1:6	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

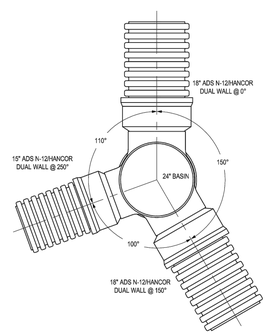
TITLE: 12 IN DROP IN

DWG NO. 7001-110-021 REV D

1. MEASURE THE ANGLE BETWEEN THE PIPE RUNS DIRECTLY FROM THE STORM DRAIN PLANS FOR EACH STRUCTURE LOCATION. THE ANGLE BETWEEN EVERY PIPE RUN MUST BE MEASURED.
2. REFER TO DRAWING NO. 7001-110-012 FOR MINIMUM ANGLE REQUIREMENTS. THE ANGLES LISTED ARE THE MINIMUM ANGLES POSSIBLE BETWEEN ADAPTERS DUE TO PRODUCTION RESTRICTIONS.
3. WHEN RECORDING THE MEASURED ANGLES ON AN ORDER FORM BE SURE TO MEASURE THE ANGLES IN A CLOCKWISE DIRECTION & LABEL THE ANGLE POSITIONS STARTING WITH 0° AT THE TOP OF THE PAGE, THE 12 O'CLOCK POSITION; 90° WOULD THEN FOLLOW AT 3 O'CLOCK, 180°AT 6 O'CLOCK, & SO FORTH (TYPICALLY YOUR OUTLET PIPE WOULD BE LABELED AT 0°).

EXAMPLE:
THE 24" BASIN TO THE RIGHT HAS THREE ADAPTERS:
18" ADS N-12/HANCOR DUAL WALL ADAPTER @ 0°
18" ADS N-12/HANCOR DUAL WALL ADAPTER @ 150°
15" ADS N-12/HANCOR DUAL WALL ADAPTER @ 250°

AT FIRST GLANCE, IT APPEARS THAT AN 18" BASIN COULD BE USED TO MANUFACTURE THIS STRUCTURE, BUT AN 18" BASIN CAN NOT BE USED BECAUSE THERE IS ONLY 100° BETWEEN ONE OF THE 18" ADAPTERS & THE 15" ADAPTER. ACCORDING TO THE MINIMUM ANGLE CHART AN 18" BASIN REQUIRES A MINIMUM OF 110° BETWEEN AN 18" & 15" ADAPTER. A 24" BASIN IS THE MINIMUM BASIN SIZE THAT CAN BE USED TO MANUFACTURE THIS STRUCTURE ACCORDING TO THE MINIMUM ANGLE CHART A 24" BASIN REQUIRES A MINIMUM OF 84" BETWEEN AN 18" & 15" ADAPTER & THE 100° BETWEEN THE 18" & 15" ADAPTER ON THIS BASIN IS WELL ABOVE THAT MINIMUM REQUIREMENT.



DRAIN BASIN TOP VIEW
WITHOUT FRAME & GRATE

DRAWN BY	EBC	MATERIAL	
DATE	05-01-07		
REVISED BY	CCA	PROJECT NO./NAME	
DATE	09-04-13		
DWG SIZE	A	SCALE 1:20	SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2490
www.nyloplast-us.com

TITLE: NYLOPLAST DRAIN BASIN LAYOUT WITH MINIMUM ANGLE MEASUREMENT EXAMPLE

DWG NO. 7001-110-284 REV C

e's
CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326

TEL: (404) 643-6044

EMAIL: eabua@conceptengrs.net

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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

STORM DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C7.4

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTURBANCE PERMIT
LDP-2019-00145
05/28/2020

811 Know what's Below. Call before you dig.

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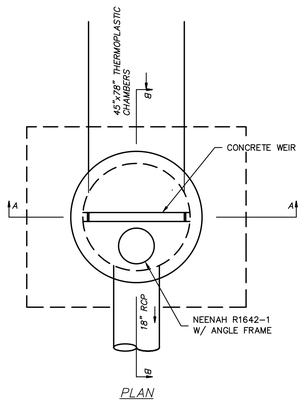
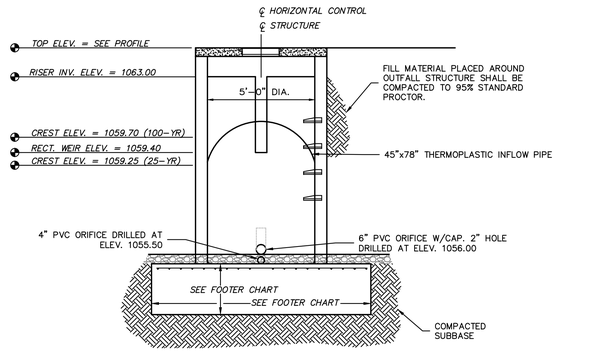
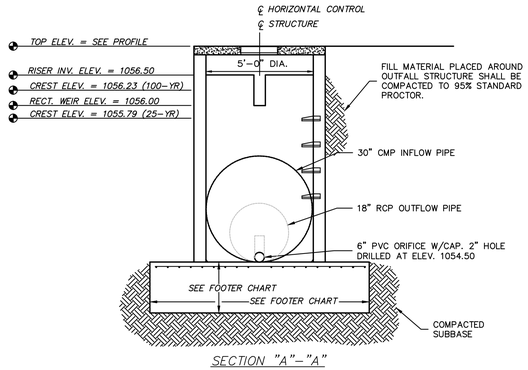


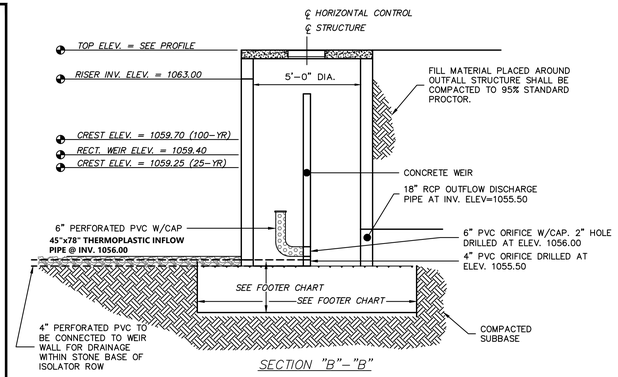
PLAN



SECTION "A"-"A"



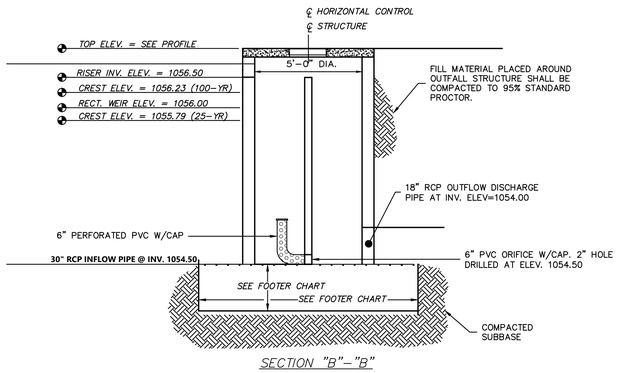
SECTION "A"-"A"



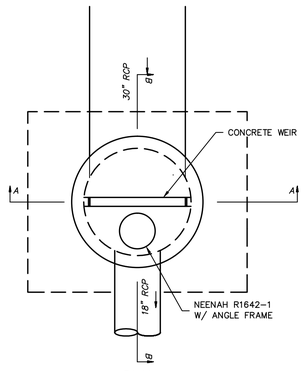
SECTION "B"-"B"

OUTLET CONTROL STRUCTURE "F3"

N.T.S.



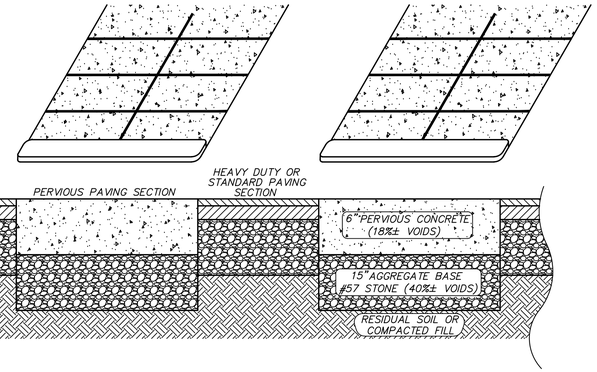
SECTION "B"-"B"



PLAN

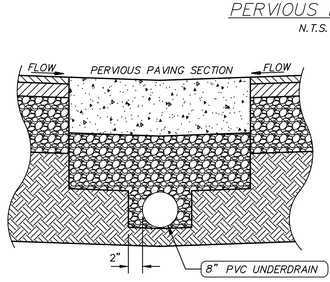
OUTLET CONTROL STRUCTURE "E1"

N.T.S.



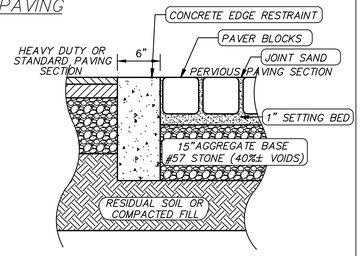
PERVIOUS PAVING

N.T.S.



UNDERDRAIN

N.T.S.



ALTERNATE PAVER BLOCKS

N.T.S.

CRUSHED STONE BASE SHOULD BE COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM 1557, METHOD D).

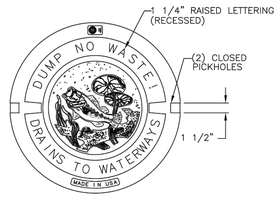
CRUSHED STONE AGGREGATE SHOULD MEET OR EXCEED REQUIREMENTS OF SECTION 815 OF THE STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PERVIOUS PAVING DETAIL

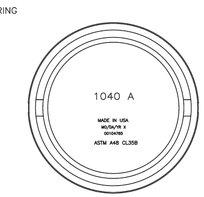
S2A

1040A Cover

ej



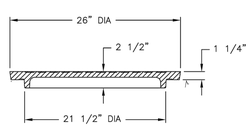
SPECIAL MACHINE SEAT HEIGHT



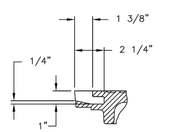
BOTTOM VIEW OF COVER

Product Number
00104785
Design Features
-Materials
Gray Iron (CL35B)
-Design Load
Heavy Duty
-Open Area
n/a
-Coating
Undipped
- ✓ Designates Machined Surface

Certification
- ASTM A48
-
-Country of Origin: USA



COVER SECTION



PICKHOLE DETAIL

Drawing Revision
03/12/2008 Designer: DEW
11/26/2013 Revised By: DVD

Disclaimer
Weights (lbs./kg) dimensions (inches/mm) are approximate. EJ GROUP, Inc. reserves the right to modify specifications without prior notice.
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800 626 4653
ejco.com

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
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6735 Peachtree Industrial Blvd. Suite 100
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Atlanta GA 30326
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SEAL:

GEORGIA REGISTERED No. 049637 PROFESSIONAL ENGINEER EMMANUEL O. MAXWELL MORGAN

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP

INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

STORM DETAILS

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	4-17-2019

PROJECT NO.:
CES-2018-008-S

SHEET:
C7.5

COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP-2019-00145
05/28/2020

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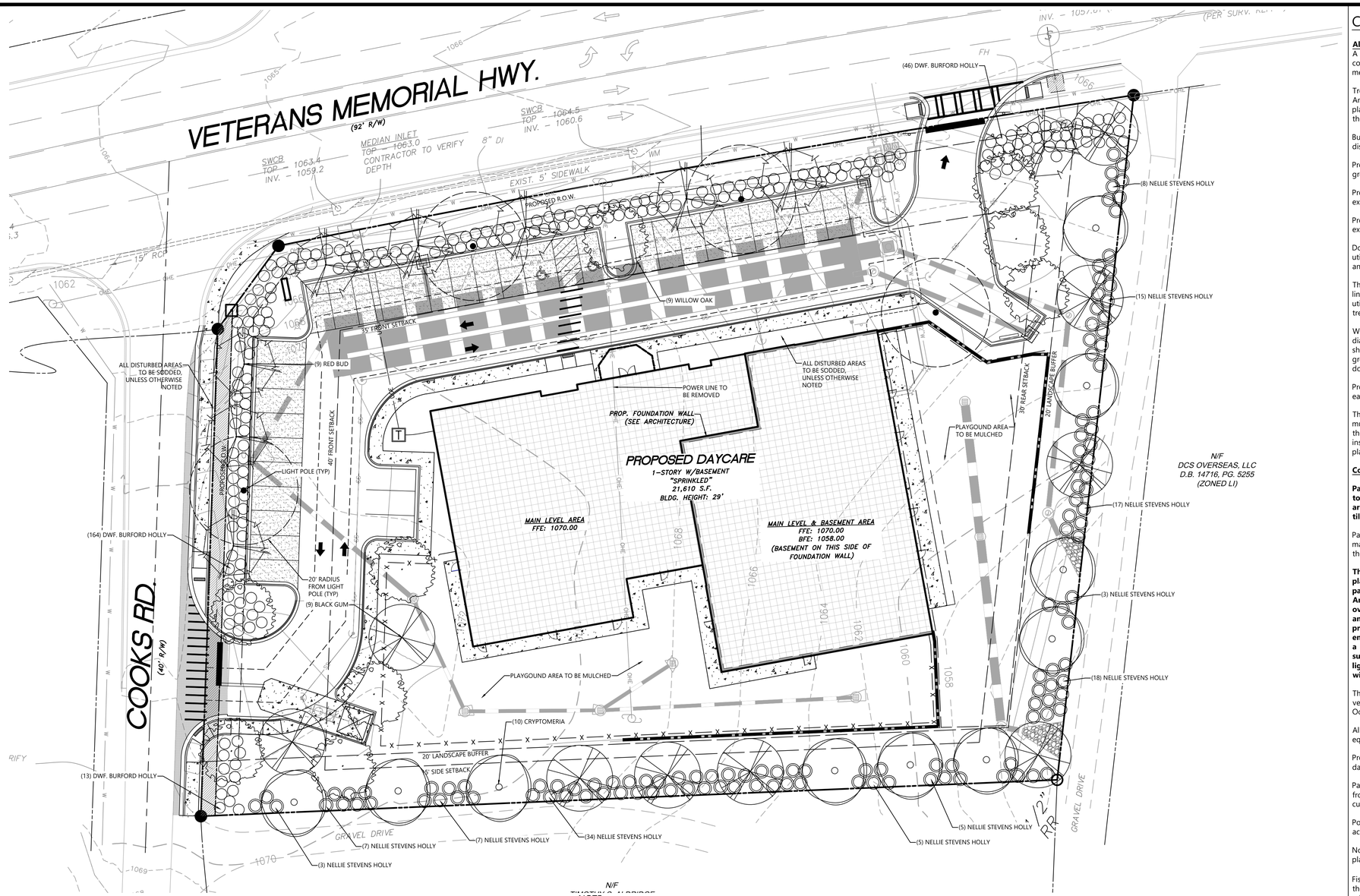


SPECIMEN TREES RECOMPENSE

THERE ARE NO SPECIMEN TREES ON THIS SITE.

DENSITY CALCULATIONS

TOTAL SITE AREA = 1.702 ACRES

SDF = 15 X 1.702 = 25.53 UNITS

SDF PROVIDED = 25.9 UNITS

IMPORTANT NOTE:

A LANDSCAPE CONFERENCE IS REQUIRED FOR THIS PROJECT PRIOR TO ANY FINISH LANDSCAPING. CALL THE COBB COUNTY ARBORIST/LANDSCAPE ARCHITECT AT (770) 528-2029. THERE ARE CRITICAL FACTORS ON THE LANDSCAPE PLAN THAT AFFECT BOTH THE GENERAL CONTRACTOR AND THE LANDSCAPE CONTRACTOR. PLANTING AREA DIMENSIONS, PLANTING METHODS AND AS WELL AS PLANT MATERIALS MUST BE IN ACCORDANCE WITH THE APPROVED PLAN, OR THE LANDSCAPE INSPECTOR MAY DELAY THE RELEASE OF THE CERTIFICATE OF OCCUPANCY.

STREET YARD TREES

REQUIRED: 1 TREE PER 35 L.F.
434.08' STREET YARD / 35 L.F. = 12.4 =
12 TREES REQUIRED
12 TREES PROVIDED

STREET YARD SHRUBS

REQUIRED: 18 SHRUBS PER 35 L.F.
(434.08' STREET YARD / 35 L.F.) X 18 = 223.24 =
223 SHRUBS REQUIRED
223 SHRUBS PROVIDED

PARKING LOT TREES

REQUIRED: 1 TREE PER 1,140 SF PARKING AREA
TOTAL PARKING AREA PROVIDED: 6,675 SF
TOTAL PARKING LOT TREES REQUIRED: 5.85 = 6

NOTE:

1. INSTALLED TREES MUST BE ALLOWED TO GROW TO THEIR NATURAL SIZE AND SHAPE AND NOT BE PRUNED IN CONFLICT WITH ANSI A300 STANDARDS (NO TOPPING, LIMBING UP, LION TAILING, ETC.).
2. THE INSTALLATION OF EROSION CONTROL DEVICES CAUSES HARM TO TREES. ON INDIVIDUAL LOTS, USE SILT FENCE ONLY AS NEEDED AND LOCATE IT FAR FROM TREE PROTECTION ZONES AS POSSIBLE.
3. PRUNING OF TREE LIMBS TO PROVIDE CLEARANCE FOR EQUIPMENT AND MATERIALS SHALL BE DONE IN ACCORDANCE WITH STANDARD ARBORICULTURAL PRACTICE (SEE ANSI A300-1995).
4. A MAINTENANCE BOND, LETTER OF CREDIT OR ESCROW ACCOUNT IS REQUIRED FOR ALL MATERIALS PLANTED TO MEET ORDINANCE REQUIREMENTS. THE AMOUNT OF THIS "MAINTENANCE SURETY" MUST BE 110 PERCENT OF THE COST OF ALL REQUIRED PLANT MATERIALS AND THE COST OF INSTALLATION AND GUARANTEE OF THOSE MATERIALS. THE SURETY IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER OF THIS PROJECT. IT MUST BE PREPARED ON FORMS PROVIDED BY THE COMMUNITY DEVELOPMENT AGENCY AND MUST BE POSTED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY (CO).
5. THE EXPIRATION DATE OF THE SURETY INSTRUMENT SHALL BE DETERMINED AS THIRTY (30) MONTHS FROM THE DATE OF SURETY. FOR ALL PLANT MATERIALS THAT WILL BE IRRIGATED BY AN AUTOMATED IRRIGATION SYSTEM, AND NO WATERING RESTRICTIONS ARE IN PLACE PROHIBITING ITS USE FOR ALL REQUIRED TREES AND PLANTS, THE SURETY EXPIRATION CAN BE REDUCE TO EIGHTEEN (18) MONTHS.

	QTY	BOTANICAL NAME	COMMON NAME	SIZE (MIN.)	UNITS	TOTAL UNITS	CONTAINER	% OF TOTAL	REMARKS
	9	CERCIS CANADENSIS	EASTERN REDBUD	4" CAL	0.7	6.3	B&B	24%	MATCHED SPECIMENS
	9	QUERCUS PHELLOS 'HIGHTOWER'	WILLOW OAK	4" CAL	0.7	6.3	B&B	24%	SPECIMEN-FULL, WELL BALANCED CANOPY
	9	NYSSA SYLVATICA	BLACK GUM	4" CAL	0.7	6.3	B&B	24%	SPECIMEN-FULL, WELL BALANCED CANOPY
	10	CRYPTOMERIA JAPONICA	CRYPTOMERIA	14' HT.	0.7	7	B&B	27%	SPECIMEN-FULL, WELL BALANCED CANOPY
	122	ILEX X 'NELLIE R STEVENS'	NELLIE STEVENS HOLLY	7-GAL			CONTAINER		FULL, HEALTHY SPECIMEN, MIN. 5-6' HT.
	322	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	3-GAL			CONTAINER		FULL, HEALTHY SPECIMEN

PARKING SUMMARY

PARKING REQUIREMENTS	20 SPACES MIN.
PARKING PROVIDED	36 SPACES PROVIDED

NOTE:

1. THIS LIGHTING PLAN IS PRELIMINARY AND MAY BE SUBJECT TO CHANGE BY A SUBSEQUENT DESIGNER. ANY SUBSEQUENT LIGHTING PLANS MUST ADHERE TO COBB COUNTY DEVELOPMENT STANDARDS AND BE SUBMITTED TO THE COBB COUNTY SITE PLAN REVIEW SECTION FOR REVIEW AND APPROVAL PRIOR TO THE INSTALLATION OF ANY LIGHTS, POLES, OR WIRING.

COBB COUNTY NOTES

All Projects

A pre-construction conference is required prior to the issuance of the on-site construction permit. Call the Site Inspections Section at (770) 528-2142 to arrange a meeting at the site.

Tree protection and replacement shall be enforced according to Cobb County standards. Any field adjustments to tree protection device types or locations or substitutions of plant materials shown on the approved plans are subject to the review and approval of the Cobb County Arborist or County Landscape Architect.

Buffers must be planted to Cobb County Standards where sparsely vegetated or where disturbed for approved utility or access crossings.

Provide 20' minimum spacing between the trunks of all deciduous shade trees. Provide greater spacing where possible.

Provide 20' minimum spacing between the trunks of all deciduous shade trees and any existing or proposed light poles. Provide greater spacing where possible.

Provide 15' minimum spacing between the trunks of all deciduous shade trees and any existing or proposed buildings. Provide greater spacing where possible.

Do not install over-story trees in locations where future conflicts with existing overhead utility lines will be inevitable. Contact the Cobb County Arborist or Landscape Architect if any potential conflicts are identified during the installation process.

The site contractor shall coordinate service routing of all gas, telephone, and electrical lines with the appropriate utility company. All construction must comply with each utility's standards and specifications and not interfere with tree planting sites or existing trees to be preserved.

When digging near trees, the contractor shall prune all exposed roots one (1) inch in diameter and larger on the side of the trench adjacent to the trees. Pruning shall consist of making a clean cut flush with the side of the trench to promote new root growth. Pruning of tree limbs to provide clearance for equipment and materials shall be done according to standard arboricultural practice (see ANSI A300-1995).

Protect the trunks of any trees being preserved within the temporary or permanent utility easements with strapped-on planking or similar protective device.

The density requirements shown on the Tree Preservation and/or Replacement Plan(s) must be verified prior to the issuance of the Certificate of Occupancy or acceptance of the Final Plat. Call the Development Inspections Division at (770) 528-2124 for an inspection. A performance bond, letter-of-credit or escrow account will be accepted if plant materials must be installed at a later date.

Commercial Projects Only

Parking lot islands, peninsulas and medians must have clean, cultivated soil to a total depth of two and one-half (2½) feet. Native subsoil is acceptable in these areas if the soil is amended with appropriate soil amendments and thoroughly tilled. Otherwise, loamy topsoil is required.

Parking lot islands and medians must be covered with four (4) inches of organic mulch material (replaced periodically). To discourage soil compaction from pedestrian traffic, these areas may be planted with low evergreen shrubs, but not with grass.

The Cobb County Arborist or Landscape Architect must approve the site lighting plan (as it relates to location of poles only). Light poles are not permitted in parking peninsulas, islands and medians without the prior approval of the County Arborist. 20' minimum spacing is required between the trunk of any proposed over-story hardwood tree (or existing tree counted for tree ordinance credit) and any existing or proposed light pole. If the service provider (electric company) produces a lighting plan, it must adhere to the lighting plan shown in the civil engineering drawings provided by Cobb County for the land disturbance permit. If a lighting plan is not part of the civil drawings, the lighting plan designer must submit a plan to the Arborist/Landscape Architect for review and approval. If site lighting is installed without an approved plan, the Certificate of Occupancy will be withheld until all conflicting power poles are moved.

The installation of the irrigation system or hose bibs (as specified on this plan) will be verified by the County Arborist prior to the release of this project for a Certificate of Occupancy.

All electronic landscape irrigation systems installed after January 1, 2005, must be equipped with a rain sensor shut-off switch in accordance with Georgia HB 1277.

Provide 15' minimum clearance between trees and dumpster enclosures so as to prevent damage from garbage truck lift mechanism.

Parking lot islands, peninsulas and medians must have a minimum width of eight (8) feet from back of curb. Peninsulas must have a minimum depth of 18.5 feet from back of curb.

Position the parking lot trees approximately four feet from all adjacent curb lines to achieve maximum shading effect.

No permanent sign(s), flag pole(s), proposed fire hydrants or power transformers will be placed in conflict with an ordinance coded or approved tree planting location.

Fiscal surety for maintenance of planted trees must be in place prior to the issuance of the certificate of occupancy. A maintenance inspection will be performed prior to the scheduled release date of the posted fiscal surety to determine the health of the trees planted to meet the requirements of this ordinance as well as any buffer plantings.

ARBORIST NOTES:

1. THIS SITE HAS BEEN PREVIOUSLY DEVELOPED AND THE PROPOSED SCOPE OF WORK IS AN "ADDITION TO AN EXISTING PROJECT". THE SITE WORK IS SUBSTANTIAL AND INCLUDES RECONFIGURING THE EMPLOYEE PARKING AREA, ADDING TO THE BUILDING, AND CONSTRUCTION OF STORM WATER MANAGEMENT FACILITIES IN THE REAR OF THE SITE.
2. THE CONSULTANT HAS BASED THE DENSITY REQUIREMENTS ON THE ENTIRE SITE.
3. POWER TRANSMISSION LINES AND OVERHEAD LINES FOR PHONE AND CABLE ARE LOCATED ALONG THE FRONT OF THIS SITE.
4. SPECIMEN TREES - THERE WERE NO TREES FOUND ON THE SITE THAT QUALIFY AS SPECIMENS.
5. STATE WATERS - THERE WERE NOT STATE WATERS PRESENT OR ADJACENT TO THE SITE.
6. FLOOD PLAINS - NO FLOOD PLAINS WERE LOCATED ON THE SITE.

CONCEPT ENGINEERING SERVICES INC.
ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING
6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
Atlanta GA 30326
TEL: (404) 643-6044
EMAIL: eabua@conceptengrs.net

CLIENT:

THIS DRAWING IS THE PROPERTY OF CES LLC. IT IS ONLY TO BE USED FOR THE PROJECT AND LOCATION IDENTIFIED HEREIN. NO PART OF THIS DRAWING IS TO BE REPRODUCED, STORED IN A RETREVAL SYSTEM OR TRANSMITTED IN ANY FORM BY MEANS ELECTRONIC, MECHANICAL, PHOTOCOPYING OR OTHERWISE WITHOUT THE PRIOR PERMISSION OF CES LLC.

SEAL:

GEORGIA REGISTERED PROFESSIONAL ENGINEER MICHAEL MORGAN III

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

THE MANOR PREP
INTERNATIONAL SCHOOL

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

LANDSCAPE PLAN

DESIGNED BY:	DO-CES
DRAWN BY:	DJ
CHECKED BY:	DJ
APPROVED BY:	DO-CES
SCALE:	AS SHOWN
DATE:	
PROJECT NO.:	CES-2018-008-S
SHEET:	

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
SLD 2019-00145
09/28/2020

Know what's below. Call before you dig.

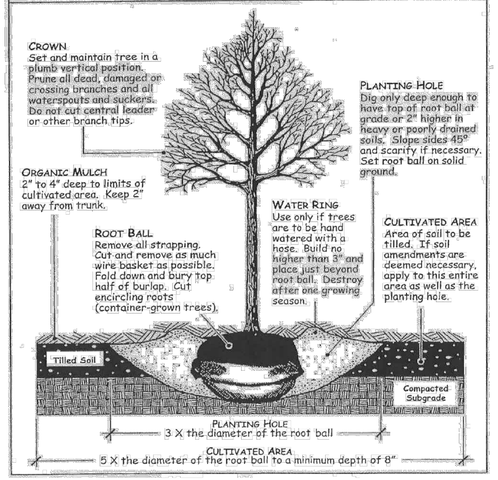
FILE NAME: C:\Users\DJones\Dropbox\Veterans Daycare\LANDSCAPE.dwg LAST SAVED By: DJones 9/1/2020 8:14 PM PLOTTED By: DJones 9/1/2020 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG To PDF.PC3 PLOT STYLE: MARPEN MONO.CTB

Detail 416 – 1
Community Development Agency

TREE PLANTING

May, 2001 Effective Date

Typical Section

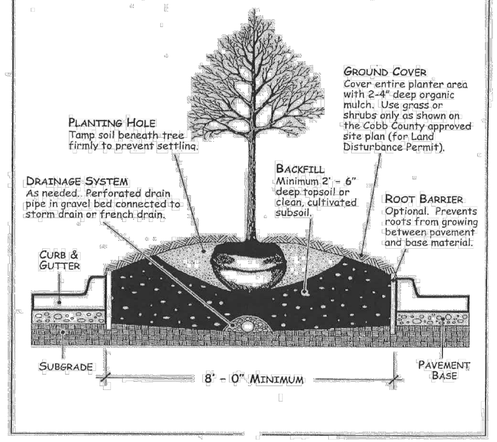


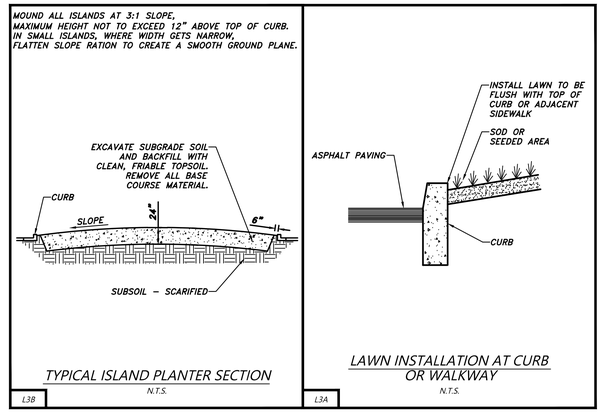
Detail 416 – 6
Community Development Agency

TREE PLANTING IN PARKING LOTS

May, 2001 Effective Date

Typical Section



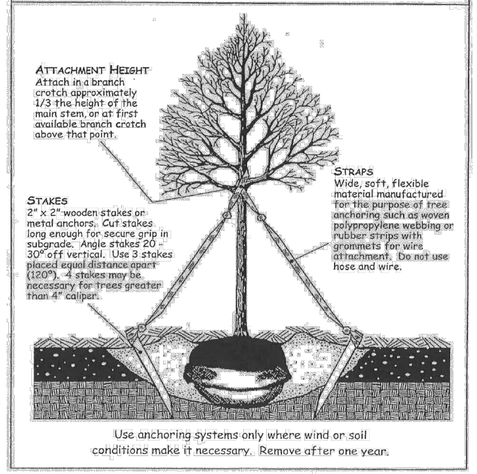


Detail 416 – 4
Community Development Agency

TREE ANCHORING – TYPE C
For trees larger than 2 inches caliper

May, 2001 Effective Date

Typical Section



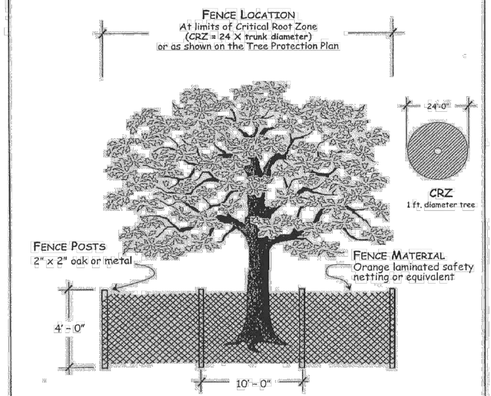
Use anchoring systems only where wind or soil conditions make it necessary. Remove after one year.

Detail 416 – 7
Community Development Agency

TREE PROTECTION FENCE

May, 2001 Effective Date

Typical Section



FOR ADDED PROTECTION

- Provide 4" deep wood chip mulch over any unprotected root zone.
- Make clean cuts on roots exposed by grading and backfill immediately.
- Provide temporary irrigation where practical and feasible.

CONCEPT ENGINEERING SERVICES INC.

ARCHITECTURE
ENGINEERING
CONSTRUCTION MANAGEMENT
ENERGY ENGINEERING

6735 Peachtree Industrial Blvd. Suite 100
Northpark Town Center, Suite 1700
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TEL: (404) 643–6044

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SEAL:

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT:

130 VETERANS MEMORIAL HWY SE
MABLETON, GA

SHEET TITLE:

DESIGNED BY: DO–CES
DRAWN BY: DJ
CHECKED BY: DJ
APPROVED BY: DO–CES

SCALE: AS SHOWN
DATE:
PROJECT NO.: CES–2018–008–S
SHEET:

COBB COUNTY GEORGIA
APPROVED FOR LAND DISTRUBANCE PERMIT
LDP 2019-00145
05/28/2020

Know what's below. Call before you dig.

FILE NAME: C:\Users\DonnaM\Dropbox\Veterans Dayton\LANDSCAPE.dwg LAST SAVED BY: Donna 1/29/2020 9:54 PM PLOTTED BY: Donna Johnson 1/29/2020 PAPER: ARCH FULL BLEED D (24.00 X 36.00 INCHES) DEVICE: DWG To PDF.PC3 PLOT STYLE: HARMIS HOMES.CTB

VAR-25-08

ATTACHMENT A

PAID
AUG 11 2025

Application for Variance
Mableton, Georgia

(type or print clearly)

Application No. VAR 25-008
Hearing Date: 9/11/25

Applicant THE MANOR PREP SCHOOL Phone # 7703658196 E-mail Manorcrest25@gmail.com

OLUWOLE TONY IMOUKHUEDE Address _____
(representative's name, printed) (street, city, state and zip code)

Imouk Phone # 770 365 8196 E-mail imoukhuede94@gmail.com
(representative's signature)

Signed, sealed and delivered in presence of:

My commission expires: _____ _____
Notary Public

Titleholder ISHERE CORPORATION Phone # 770.365 8196 E-mail imoukhuede94@gmail.com

Signature Imouk Address: 130 VETERANS MEMORIAL HWY. SE.
(attach additional signatures, if needed) (street, city, state and zip code) MABLETON GA 30126

Signed, sealed and delivered in presence of:

My commission expires: 8/26/2028 MReyes
Notary Public

MARYURI L. REYES NOTARY PUBLIC COBB COUNTY GEORGIA MY COMMISSION EXPIRES 08/26/2028

Present Zoning of Property LRO

Location 130 VETERANS MEMORIAL HIGHWAY SE MABLETON GA 30126
(street address, if applicable; nearest intersection, etc.)

Land Lot(s) 44 District 18th Size of Tract 1.70 Acre(s)

Please select the extraordinary and exceptional condition(s) to the piece of property in question. The condition(s) must be peculiar to the piece of property involved.

Size of Property_____ Shape of Property_____ Topography of Property_____ Other _____

Does the property or this request need a second electrical meter? YES_____ NO ✓.

How many stories is the proposed building? 1 How many square feet? 24,090

The City of Mableton Zoning Ordinance Section (insert) states that the City of Mableton Board of Zoning Appeals must determine that applying the terms of the Zoning Ordinance without the variance would create an unnecessary hardship. Please state what hardship would be created by following the normal terms of the ordinance.

The hardship is not self-imposed and arises from conditions unique to the property and its intended educational use, which is a benefit to the surrounding community. Our ability to meet the educational and operational needs of our students/staff would be significantly compromised. The variance will not alter the essential character of the neighborhood nor will it be detrimental to public welfare, or inconsistent with the intent of the Zoning Ordinance.

List type of variance requested: SITE / ZONING VARIANCE
I humbly request variance for the following: 1.

ATTACHMENT CI

PROPERTY/FINANCIAL DISCLOSURE REPORT[1] BY APPLICANT[2]

(A separate form must be completed by each applicant* - please see definition below)

Does any member of the Mayor and Council or Planning Commission have a property interest (direct or indirect ownership, including any percentage of ownership less than total) in the subject property?
NO

If so, describe the nature and extent of such interest:

Does any member of the Mayor and Council or Planning Commission have a financial interest (direct ownership interests of the total assets or capital stock where such ownership interest is ten percent (10%) or more) of a corporation, partnership, limited partnership, firm, enterprise, franchise, association, or trust, which has a property interest (direct or indirect ownership, including any percentage of ownership less than total) upon the subject property? NO

If so, describe the nature and extent of such interest:

Does any member of the Mayor and Council or Planning Commission have a spouse, mother, father, brother, sister, son or daughter who has any interest as described above?
NO

If so, describe the relationship and the nature and extent of such interest:

I certify that the foregoing information is true and correct, this 6TH day of AUGUST, 2025.

Applicant's Signature

[1]If the answer to any question is "Yes," then the Mayor or the member of the Council or Planning Commission must immediately disclose the nature and extent of such interest, in writing, to the City Council of Mableton, Georgia. A copy should be filed with this application. Such disclosures shall be a public record and available for public inspection at any time during normal working hours.

[2]Applicant means any person who applies for a rezoning action and any attorney, or other person representing or acting on behalf of a person who applies for a rezoning action

ATTACHMENT C2

CAMPAIGN DISCLOSURE REPORT[1] BY APPLICANT[2]

(A separate form must be completed by each applicant - please see definition below)*

Has the applicant[2] made, within two (2) years immediately preceding the filing of this application for rezoning, campaign contributions aggregating two hundred fifty dollars ($250.00) or more or made gifts having in the aggregate a value of two hundred fifty dollars ($250.00) or more to a member or members of the Mayor and Council or Planning Commission who will consider the application?

NO

If so, the applicant and the attorney representing the applicant must file a disclosure report with the Mayor and Council of Mableton within ten (10) days after this application is first filed.

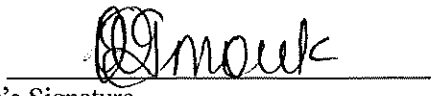
Please apply the following information that will be considered as the required disclosure:

The name of the member(s) of the Mayor and Council or Planning Commission to whom the campaign contribution or gift was made:

The dollar amount of each campaign contribution made by the applicant to the member(s) of the Mayor and Council or Planning Commission during the two (2) years immediately preceding the filing of this application and the date of each such contribution:

An enumeration and description of each gift having a value of two hundred fifty dollars ($250.00) or more made by the applicant to the member(s) of the Mayor and Council or Planning Commission during the two (2) years immediately preceding the filing of this application:

I certify that the foregoing information is true and correct, this 6TH day of AUGUST, 2025.



Applicant's Signature

[1]If the answer to any question is "Yes," then the member of the Mayor and Council or Planning Commission must immediately disclose the nature and extent of such interest, in writing, to the City Council of Mableton, Georgia. A copy should be filed with this application. Such disclosures shall be a public record and available for public inspection at any time during normal working hours.

[2]Applicant means any person who applies for a rezoning action and any attorney or other person representing or acting on behalf of a person who applies for a rezoning action

Deed Book 15614 Pg 2952
Filed and Recorded Mar-25-2019 07:35am
2019-0030575
Real Estate Transfer Tax $270.00
0332019005567

Rebecca Keaton
Clerk of Superior Court Cobb Cty. Ga.

After Recording Return To:
The Zdrilich Law Group, LLC
3575 Koger Blvd.
Suite 125
Duluth, GA 30096
File No.: 2019-03-06054

STATE OF GEORGIA

COUNTY OF GWINNETT

LIMITED WARRANTY DEED

THIS INDENTURE, made as of the 15th day of March, 2019 between

HWA YONG MCBRIDE NKA HWA YONG LEE

as party or parties of the first part, hereinafter called Grantor, and

ISHERE, CORPORATION, A GEORGIA CORPORATION

as party of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of other good and valuable considerations and the sum of Ten and no/100 ($10.00) Dollars in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto the said Grantee, the following described property:

All that tract or parcel of land lying and being in Land Lot 44 of the 18th District, 2nd Section, Cobb County, Georgia, and being more particularly described as follows:

Beginning at an intersection of the Southern right of way line of U.S. Highway 78 aka Bankhead Highway (having a 80 foot right of way) with the Eastern right of way line of Cooks Road (having a 40 foot right of way), said point being the true point of beginning; thence run along the Southern right of way line of U.S. Hwy. 78 aka Bankhead Highway North 81 degrees 16 minutes 36 seconds East a distance of 319.62 feet to a point; thence turning and running South 07 degrees 38 minutes 57 seconds West a distance of 253.83 feet to an iron pin set; thence turning and running South 88 degrees 50 minutes 29 seconds West a distance of 315.43 feet to a point of Eastern right of way line of Cooks Road; thence turning and running along said right of way line North 03 degrees 15 minutes 38 seconds East a distance of 179.43 feet to a point; thence turning and running North 37 degrees 20 minutes 40 seconds East a distance of 37.91 feet to a point and the point of beginning. All as more clearly shown on that certain survey prepared by G.W. Crusselle, Sr., dated July 10, 1992.

Subject Property Address: 130 Veterans Memorial Hwy, Mableton, GA 30126

PARCEL NO.: 18-0044-0-008-0

Subject to any Easements and Restrictions of Record.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, to the only proper use, benefit and behoof of the said Grantee forever in FEE SIMPLE.

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantee against the claims of all persons owing, holding or claiming by through or under the said Grantor.

IN WITNESS WHEREOF, the Grantor has signed and sealed this Limited Warranty Deed, the day and year above written.

Signed, sealed and delivered
In the presence of:

GRANTOR:

Unofficial Witness

Hwa Yong McBride nka Hwa Yong Lee

Notary Public
My commission expires: _____

(seal)

CLAIRE DEBRA LIM
NOTARY PUBLIC
FULTON COUNTY, GEORGIA
MY COMMISSION EXPIRES SEPTEMBER 13, 2021

Printed: 8/6/2025

Cobb County Online Tax Receipt

Thank you for your payment!

CARLA JACKSON TAX COMMISSIONER
HEATHER WALKER CHIEF DEPUTY
Phone: 770-528-8600
Fax: 770-528-8679

Payer:
OBURIEN INC WEST COBB PREP ACADEMY

ISHERE CORPORATION

Payment Date: 11/15/2024

Tax Year	Parcel ID	Due Date		Appeal Amount		Taxes Due
2024	18004400080	10/15/2024	**Pay:**	N/A	or	$0.00

Interest	Penalty	Fees	Total Due	Amount Paid	Balance
$37.79	$187.80	$0.00	$0.00	$3,981.68	**$0.00**

Scan this code with your mobile phone to view this bill!

ISHERE CORPORATION
5205 Timber Ridge Road
Marietta GA 30068

AUTHENTICATION OF CORPORATE RECORDS

I, Oluwole Imoukhuede, the undersigned, being the duly appointed and acting Chief Executive Officer of Ishere Corporation, a corporation organized and existing under the laws of the State of Georgia, do hereby certify and authenticate the following corporate record/document as a true and accurate representation of the records of Ishere Corporation.

In witness whereof, I have hereunto set my hand and caused the seal of the Corporation, or a facsimile thereof, to be affixed this 6th day of August 2025.

Oluwole Tony Imoukhuede
Chief Executive Officer
Ishere Corporation

SEAL

ATTESTATION

I, Bose Imoukhuede, the duly appointed and acting Secretary of Ishere Corporation, to whom the Bylaws have delegated responsibility for authenticating records of the Corporation, do hereby attest:

A. That the corporate seal or facsimile thereof affixed to the document is in fact the seal of the corporation of true facsimile thereof, as the case may be.
B. That the officer of the corporation executing this document does in fact occupy the official position indicated, that he is duly authorized to execute this document on behalf of the corporation, and that the signature subscribed thereto is genuine; and
C. That the execution of this document on behalf of the corporation has being duly authorized

Executed on this 6th day of August 2025.

Bose Imoukhuede
Vice President
Ishere Corporation

August 11, 2025

Statement of Hardship in Support of Variance Application

To the Honorable Members of the City of Mableton Zoning Board of Appeals, Planning & Zoning Staff, and Respected County Commissioners:

I respectfully submit this statement in support of my application for a zoning variance regarding an encroachment by my already-constructed educational facility into the designated landscape buffer zone. This hardship application is rooted in a combination of unavoidable environmental conditions and contractor oversight, both of which have imposed significant, unforeseen economic and emotional burdens over the course of this project.

Environmental and Topographical Challenges

At the time of initial construction, a very steep slope and highly irregular terrain were discovered on-site, conditions that were not fully apparent during the preliminary planning stages. The substantial grade changes and instability of the land made adherence to the original site development plan not only economically infeasible but also structurally impractical.

Efforts to maintain the original layout would have introduced severe safety risks, particularly in relation to soil erosion, water drainage, and accessibility issues that would directly jeopardize the health and well-being of the children to be enrolled in our care.

In our commitment to safety and structural integrity, we engaged in additional grading, reinforced foundational work, and incorporated terrain-adaptive design features. Ironically, these enhancements led to higher construction costs than if the original flat-land design had been possible, despite resulting in non-conformity with landscape buffer zone requirements.

Economic Impact and Emotional Toll
This project has already absorbed substantially higher costs than anticipated due to topographic modifications, contractor delays, and redesign efforts aimed at meeting as many code standards as possible. The prolonged delay in operations has created profound economic hardship, not only in lost income but in the ongoing carrying costs associated with loans, permits, utilities, and maintenance for an otherwise completed but unused facility.

This has been a deeply personal journey of perseverance and vision—one inspired by the desire to bring accessible, high-quality education to the heart of Mableton. The setbacks have tested that vision in ways I never imagined.

Community Consideration and Neighbor Support
I would also like to note that my immediate neighbor to the south, whose driveway borders the western side of our property, has expressed understanding and support regarding the circumstances of this project. He has not voiced any objection to the landscape buffer encroachment and has been consistently sympathetic throughout this process. His perspective as an adjacent homeowner underscores that the impact of this variance is minimal and does not adversely affect neighboring properties or community aesthetics.

Commitment to Collaboration and Compliance
I fully understand the city's commitment to protecting buffer zones and preserving environmental harmony. I am therefore willing to work closely with city staff and environmental consultants to explore pragmatic mitigation options. This includes:
• Making contributions to the City Tree Bank or Conservation Fund as appropriate;
• Implementing additional landscaping or green infrastructure to enhance buffer aesthetics;
• Considering alternative stormwater or erosion-control measures;
• Complying with any other remedial steps deemed necessary for the health, safety, and welfare of the community.

A Plea for Empathy and Vision
This request is not made lightly. It arises from a genuine and well-documented hardship, shaped by environmental unpredictability and human error—challenges that were never part of the original intent.

I respectfully ask that you consider the full context of this application, not merely the encroachment in isolation, but the effort, purpose, and resilience it represents.

I am confident that with your empathy, technical guidance, and thoughtful deliberation, we can find a pathway forward that honors both the city's planning objectives and the critical role this school will play in educating the next generation of Mableton residents.

With gratitude and commitment,

Oluwole Tony Imoukhuede
Applicant / The Manorcrest Preparatory School

Signature

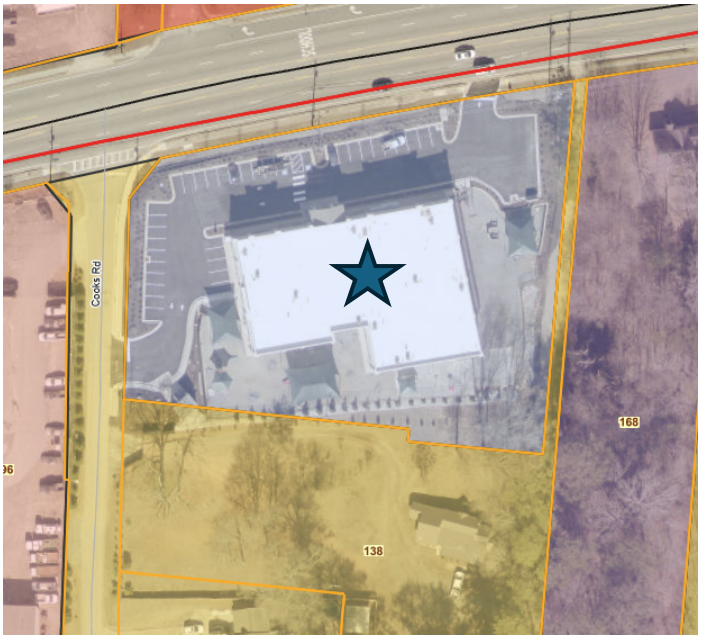
City of Mableton
Community Development | Planning and Zoning Division
6116 Mableton Parkway, Suite144
Mableton, GA 30126
(470) 417-4220
www.mableton.gov

BOARD OF ZONING APPEAL STAFF REPORT

GENERAL INFORMATION

CASE NUMBER: VAR2025-008
APPLICANT: Oluwole Tony Imokhugde
REQUEST: To allow encroachment into the 20' landscape buffer for 16 and 10 foot retaining wall, dumpster pad and playground.
PROPERTY LOCATION: 130 Veterans Memorial Hwy, Mableton, Georgia
PARCEL ID: 18004400080
ACREAGE: 1.70
HEARING DATE: October 16, 2025
DISTRICT: 3

ZONING MAP



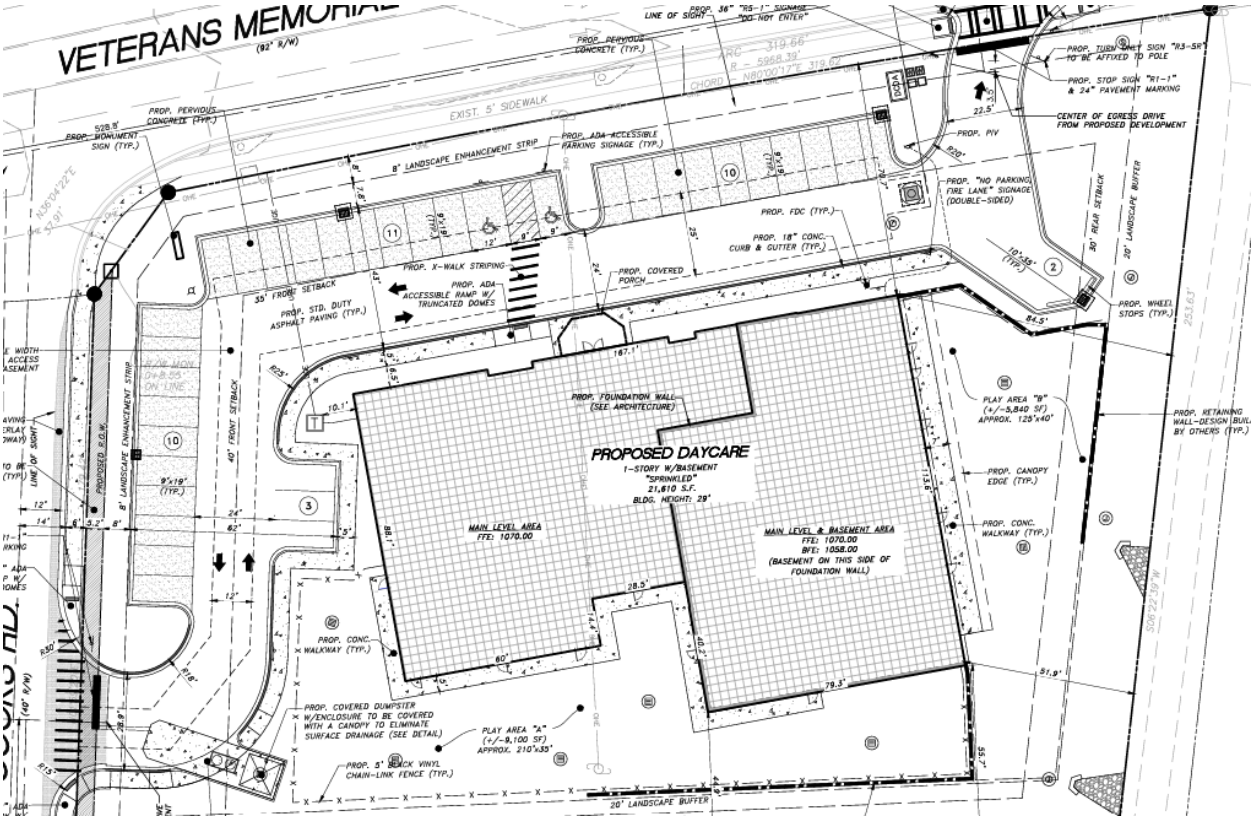
Star = Subject Property

I. Purpose of Request

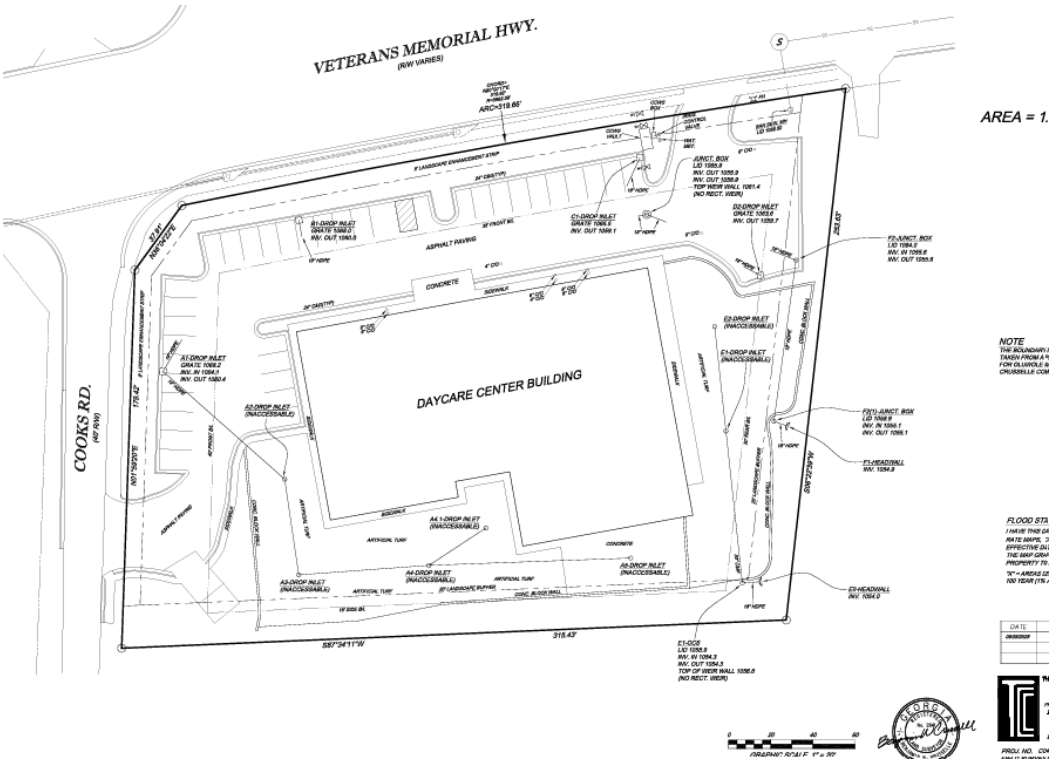
The applicant, the owner of an existing daycare facility, is requesting after-the-fact variances to allow encroachments into the required 20-foot landscape buffer along the eastern and southern property boundaries. Specifically, the request pertains to two retaining walls, 16 feet and 10 feet in height, as well as a 5-foot encroachment to accommodate a dumpster pad.

The daycare facility was originally permitted and approved for construction in 2018 under a site plan that complied with applicable zoning requirements. Subsequent to this approval, the applicant made modifications to the site, including construction within the buffer area, prior to completing the required approval process. At the time, the property was under the jurisdiction of Cobb County. With the incorporation of the City of Mableton, the applicant is now seeking formal variance approval for these modifications. The approved site plan is attached for reference

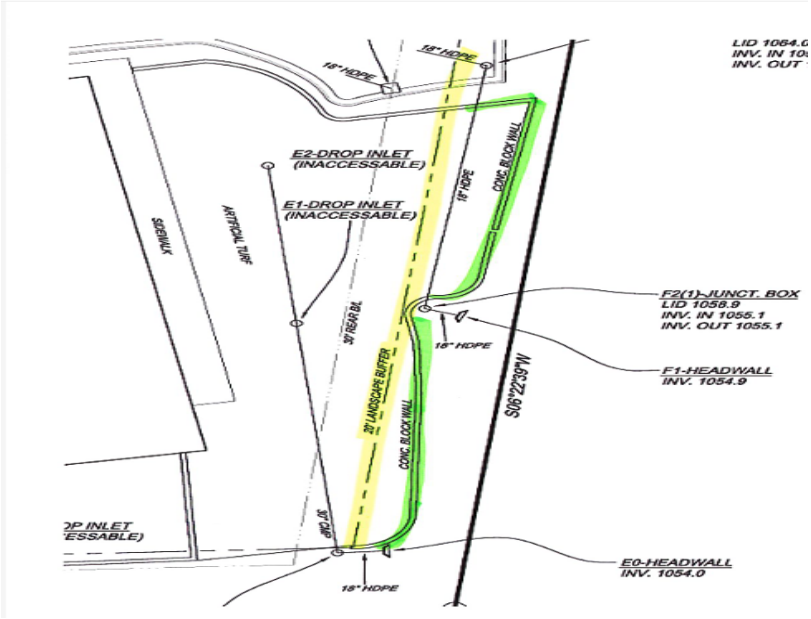
Approved Site Plan



Modified Site Plan



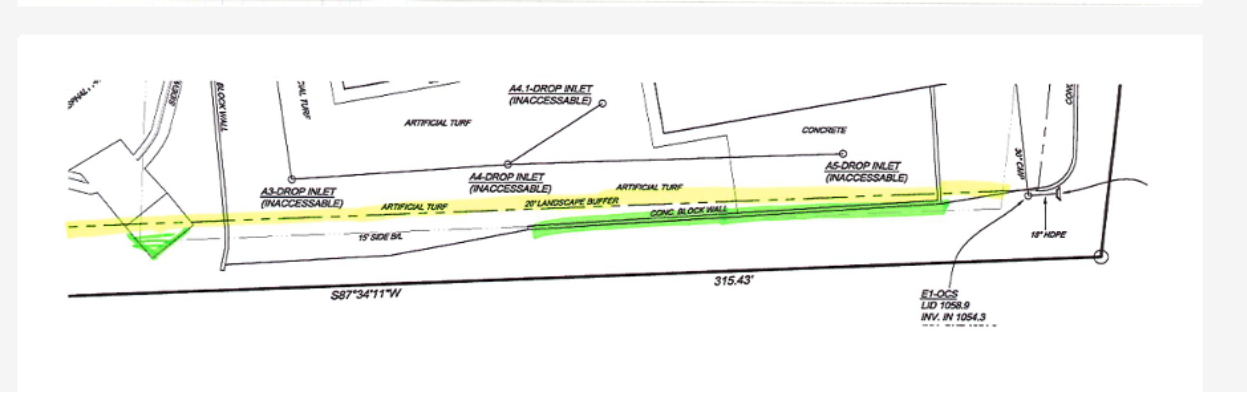
Zoom View of Encroachment into Eastern Buffer.



Yellow Line = 20' Landscape buffer

Green = Encroachment into the buffer

Zoomed View of Encroachment into Southern Buffer



Yellow Line = 20' Landscape buffer

Green = Encroachment into the buffer

Aerial Photo Direction from Southwest to Northeast

Aerial Photo from West to East

Lower View from West to Wast

Lower Vier from West to East

II. Code Requirements

Per Code Sec 3.21 NRC (Neighborhood Commercial Retail) Any property within this district which abuts a residentially zoned property shall have a minimum 20-foot landscaped screening buffer adjacent to all residentially zoned property. Additionally, necessary private utilities and access drives may be allowed through, over or across a landscape buffer, however dumpster and retaining wall are not permitted without a variance.

Per Section 10.32 Board of Zoning Appeals (d)(3) ; Variances may only be granted upon meeting specific hardship criteria and where impacts can be mitigated. Please see the staff analysis in the following paragraph.

III. Staff Analysis

i) Extraordinary and exceptional conditions pertaining to the particular piece of property due to size, shape, or topography:

The subject property does not exhibit unique physical conditions such as irregular shape, topography, or utility constraints that would necessitate encroachment into the required buffer. Instead, the encroachments stem from modifications to the site plan made by the applicant without prior approval. These circumstances are not unique and are the result of applicant actions rather than inherent site conditions.

ii) Application of this chapter to this property would create an unnecessary hardship:

Strict application of the zoning ordinance would require removal or relocation of the retaining walls and dumpster pad to comply with the 20-foot landscape buffer requirement. While this would impose a financial burden on the applicant, staff finds that the hardship is self-created. The applicant constructed these improvements without city approval and in conflict with the previously approved site plan. Therefore, any hardship arises from the applicant's actions rather than from conditions inherent to the property.

iii) Such conditions are peculiar to the property involved:

The circumstances leading to this variance request are not peculiar to the subject property. The lot does not present unusual physical characteristics such as irregular shape, severe topography, or natural constraints that would prevent compliance with the buffer requirement. Instead, the variance request arises from the applicant's decision to modify the approved site plan and construct retaining walls and a dumpster pad within the buffer without city approval. These conditions are the result of applicant actions and are not unique or inherent to the property itself.

iv) Relief, if granted, would not cause substantial detriment to the public good or impair the purposes and intent of this chapter:

20-foot landscape buffer to provide screening, protect adjacent properties, and maintain community character. Allowing 10- and 16-foot retaining walls, along with a dumpster pad/playground, within the buffer compromises its function and sets a concerning precedent for disregarding approved site plan. While additional landscaping or screening could partially mitigate visual impacts, the variance would still weaken the purpose of the buffer standard and could be detrimental to the public good by allowing the playground and dumpster, which may cause additional noise and undermine consistency and predictability in development review.

v) No variance may be granted for a prohibited use or in conflict with stipulations:

The requested variance does not involve the establishment of a prohibited use. However, the improvements constructed within the required landscape buffer are in direct conflict with the approved site plan and applicable conditions of zoning. Granting the variance would effectively override those stipulations and allow an encroachment that the ordinance and prior approvals were intended to prevent. As such, approval would create inconsistency with the regulatory framework designed to ensure compliance with zoning and development standards.

Staff Recommendation.

Based on the analysis, staff recommends Denial of the variance request. The hardship is self-created, and the encroachments significantly impact the intent of the required buffer.

If the Board chooses to approve the variance, staff recommends the following stipulations to mitigate impacts:

If approved please approved with the following conditions:

1. Applicant shall submit a revised site plan accurately reflecting the location and dimensions of the retaining walls and dumpster pad.

2. Applicant shall install enhanced landscaping within any remaining buffer area and along the exposed faces of the retaining walls, subject to staff approval, to mitigate visual impacts.

3. Applicant shall provide screening (masonry wall or opaque fence) around the dumpster pad, consistent with city standards.

4. The applicant shall comply with all other code requirements related to the land disturbance process.

5. Buffer encroachment on the east and southern landscape buffer side shall be limited to retaining wall only, no playground equipment or play area shall be located in this area. Any future modifications to the site plan shall require prior approval from the city.

6. Hours of the dumpster shall be limited to 7 am – 7 pm.

ATTACHMENT A

PAID
AUG 11 2025

Application for Variance
Mableton, Georgia

RECEIVED
AUG 11 2025
BY:

(type or print clearly)

Application No. VAR 25-007
Hearing Date: 10/16/25

Applicant Jehan Ruffin Phone # 954-592-5914 E-mail jalruffin@gmail.com

Alan Humble/Artistic Pools Address 1040 Highland Village Trail Mableton GA 30126
(representative's name, printed) (street, city, state and zip code)

(representative's signature) Phone # 770-722-1652 E-mail alanh@artisticpools.com

My commission expires: April 17, 2028

Signed, sealed and delivered in presence of:
Rachel Turner
Notary Public

RACHEL TURNER NOTARY PUBLIC GWINNETT COUNTY, GEORGIA MY COMMISSION EXPIRES APRIL 17, 2028

Titleholder Representative Phone # 770-722-1652 E-mail
Signature Address: 1040 Highland Village Trail
(attach additional signatures, if needed) (street, city, state and zip code)

My commission expires: 8/26/28

Signed, sealed and delivered in presence of:
MLReyes
Notary Public

MARYURI L. REYES NOTARY PUBLIC PAULDING COUNTY, GEORGIA MY COMMISSION EXPIRES 08/26/2028

Present Zoning of Property Single Family Residential
Location 1040 Highland Village Trail Mableton GA 30126
(street address, if applicable; nearest intersection, etc.)

Land Lot(s) 66 &67 District 18th Size of Tract 0.3443 Acre(s)

Please select the extraordinary and exceptional condition(s) to the piece of property in question. The condition(s) must be peculiar to the piece of property involved.

Size of Property____ Shape of Property____ Topography of Property____ Other X

Does the property or this request need a second electrical meter? YES____ NO X.

How many stories is the proposed building? N.A. How many square feet? N.A.

The City of Mableton Zoning Ordinance Section (insert) states that the City of Mableton Board of Zoning Appeals must determine that applying the terms of the Zoning Ordinance without the variance would create an unnecessary hardship. Please state what hardship would be created by following the normal terms of the ordinance.

Due to road frontage on three sides of the property and stormwater drainage on the fourth side, the proposed location of the pool is the only location to construct the pool. Without the variance, the pool can not be installed.

List type of variance requested: Reduce 40' conservation buffer to 30' to allow for pool placement, and to reduce 20' sign buffer to 17' to allow for decking. Both buffers are currently bermuda turf. Planting buffers proposed beyond pool/decking.

2. **Public Hearing**. Applicant, or representative for applicant, must attend the Variance Hearing. Failure to attend may result in dismissal with prejudice, rejection of the application or continuance of the hearing at the Board's sole discretion.

3. **Application Fees**. Fees must be paid by credit card or Venmo. To qualify for the residential fee schedule, the applicant must be the present or future resident.
   a. Residential - $150.00
   b. Churches -$450.00
   c. Livestock - $25.00
   d. Builders -$450.00
   e. Commercial - $500.00

4. **Mailings**. Applicants are required to provide a Certificate of Mailing that demonstrates that all property owners adjacent to the subject property have been notified of the Variance application. Applicants are encouraged to provide the letter to city staff for a cursory review prior to completing the Certificate of Mailing. The notice must be postmarked 30 calendar days prior to the Planning Commission Hearing. The applicant/representative is required to file with the Zoning Division proof of the mailing no later than 21 days prior to the Planning Commission Zoning Hearing for which the application is scheduled to be considered. Staff is authorized to continue any pending case in which the above requirements are not met. The notification must include:
   a. A legible copy of the application and site plan
   b. Phone numbers and email addresses for the applicant and the City zoning office.

5. **Reduction in Lot Size or Public Road Frontage**. Variances for a reduction in lot size or a reduction in public road frontage cannot be heard by the Board of Zoning Appeals. These two types of variances can only be heard by the Mayor and Council via the "Other Business" process. Please see the "Other Business" application for the requirements, fees and hearing dates.

6. **Public Contact**. Variance applications are public information and will be visible on the City website, advertised in the newspaper and otherwise disseminated to the general public. Applicants and their representatives should expect communication (phone calls, emails) from members of the public and should respond to their questions and concerns with complete, factual information and courtesy.

7. **Reconsideration**. Any variance request may not be reconsidered for a period of twelve (12) months after it has been rejected by the Board of Zoning Appeals, unless by court order or pursuant to a settlement of litigation approved by the Board of Zoning Appeals.

List of Attachments

✓Attachment A – Variance Application
✓Attachment B – Warranty Deed
✓Attachments C1 & 2 – Disclosure Forms
Attachment D – Legal Description
✓Attachment E – Site Plan
Attachment F – Sign Variances Only
Attachment G – Tax Receipt
Attachment H – Septic Tank Documentation

RECEIVED
AUG 11 2025
BY:

Prepared By:
Weissman PC
3500 Lenox Road, 4th Floor
Atlanta, GA 30326

File No.: W-R-03385-24-MT

Parcel ID: 18006600550

LIMITED WARRANTY DEED

STATE OF GEORGIA
COUNTY OF FULTON

THIS INDENTURE, made this 21st day of June, 2024 by and between **Greenwood Highlands Village, LLC, a Georgia limited liability company**, as party or parties of the first part, hereinafter called Grantor, and **Jehan Alexandria Lee Ruffin**, as party or parties of the second part, hereinafter called Grantee (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of the sum of TEN DOLLARS AND NO/100 ($10.00) AND OTHER VALUABLE CONSIDERATIONS in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto the said Grantee, the following described property, to-wit:

SEE ATTACHED EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF BY REFERENCE HERETO

THIS CONVEYANCE is made subject to all zoning ordinances, easements and restrictions of record affecting said described property.

TO HAVE AND TO HOLD the said tract or parcel of land, with all and singular the rights, members and appurtenances thereof, to the same being, belonging, or in anywise appertaining, only to the proper use, benefit and behoof of the said Grantee, forever IN FEE SIMPLE.

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantee against the claims of all persons claiming by, through, or under Grantor herein.

IN WITNESS WHEREOF, the Grantor has signed and sealed this Deed, on the date and year above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Notary Public

My Commission Expires: 11/30/25

CHARLES JACKSON
Notary Public, Georgia
Fulton County
My Commission Expires
November 30, 2025

Greenwood Highlands Village LLC, a Georgia limited liability company

BY:
Rashun Michael, Sole Member

RECEIVED
AUG 11 2025
BY:

ATTACHMENT C1

RECEIVED
AUG 11 2025
BY:

PROPERTY/FINANCIAL DISCLOSURE REPORT[1] BY APPLICANT[2]

(A separate form must be completed by each applicant* - please see definition below)

Does any member of the Mayor and Council or Planning Commission have a property interest (direct or indirect ownership, including any percentage of ownership less than total) in the subject property?

No

If so, describe the nature and extent of such interest:

Does any member of the Mayor and Council or Planning Commission have a financial interest (direct ownership interests of the total assets or capital stock where such ownership interest is ten percent (10%) or more) of a corporation, partnership, limited partnership, firm, enterprise, franchise, association, or trust, which has a property interest (direct or indirect ownership, including any percentage of ownership less than total) upon the subject property? NO

If so, describe the nature and extent of such interest:

Does any member of the Mayor and Council or Planning Commission have a spouse, mother, father, brother, sister, son or daughter who has any interest as described above?

NO

If so, describe the relationship and the nature and extent of such interest:

I certify that the foregoing information is true and correct, this 11th day of August, 2025.

Applicant's Signature

[1]If the answer to any question is "Yes," then the Mayor or the member of the Council or Planning Commission must immediately disclose the nature and extent of such interest, in writing, to the City Council of Mableton, Georgia. A copy should be filed with this application. Such disclosures shall be a public record and available for public inspection at any time during normal working hours.

[2]Applicant means any person who applies for a rezoning action and any attorney, or other person representing or acting on behalf of a person who applies for a rezoning action

ATTACHMENT C2

CAMPAIGN DISCLOSURE REPORT[1] BY APPLICANT[2]

(A separate form must be completed by each applicant - please see definition below)*

Has the applicant[2] made, within two (2) years immediately preceding the filing of this application for rezoning, campaign contributions aggregating two hundred fifty dollars ($250.00) or more or made gifts having in the aggregate a value of two hundred fifty dollars ($250.00) or more to a member or members of the Mayor and Council or Planning Commission who will consider the application? no

If so, the applicant and the attorney representing the applicant must file a disclosure report with the Mayor and Council of Mableton within ten (10) days after this application is first filed.

Please apply the following information that will be considered as the required disclosure:

The name of the member(s) of the Mayor and Council or Planning Commission to whom the campaign contribution or gift was made:

The dollar amount of each campaign contribution made by the applicant to the member(s) of the Mayor and Council or Planning Commission during the two (2) years immediately preceding the filing of this application and the date of each such contribution:

An enumeration and description of each gift having a value of two hundred fifty dollars ($250.00) or more made by the applicant to the member(s) of the Mayor and Council or Planning Commission during the two (2) years immediately preceding the filing of this application:

RECEIVED
AUG 11 2025
BY: CW

I certify that the foregoing information is true and correct, this 11th August day of, 2025

_____.

Applicant's Signature

[1]If the answer to any question is "Yes," then the member of the Mayor and Council or Planning Commission must immediately disclose the nature and extent of such interest, in writing, to the City Council of Mableton, Georgia. A copy should be filed with this application. Such disclosures shall be a public record and available for public inspection at any time during normal working hours.

[2]Applicant means any person who applies for a rezoning action and any attorney or other person representing or acting on behalf of a person who applies for a rezoning action

Merchant: City of Mableton

1400 Veterans Memorial Highway
Mableton, GA 30126
US

4045902511

Order Information

Description: 1040 Highland Village Trail
Order Number:
Customer ID:

P.O. Number:
Invoice Number: VAR-2025-007

Billing Information
Alan Humble

Shipping Information

Shipping:	0.00
Tax:	0.00
Total:	**USD 265.00**

Payment Information

Date/Time: 11-Aug-2025 11:41:52 EDT
Transaction ID: 121178488645
Transaction Type: Authorization w/ Auto Capture
Transaction Status: Captured/Pending Settlement
Authorization Code: 08706G
Payment Method: Visa XXXX7730

RECEIVED
AUG 11 2025
BY:

The field data upon which this plat is based has a closure precision of one foot in15,000 feet and an angular error of 03" seconds per angle point and was adjusted using the Compass Rule. This plat has been calculated for closure and is found to be accurate within one foot in100,000 feet.

Equipment used: Topcon GTS-213 Total Station.

FLOOD HAZARD STATEMENT

THIS PROPERTY IS NOT IN A FLOOD HAZARD AREA AS PER THE FIRM FLOOD HAZARD MAP OF COBB COUNTY, GEORGIA,

LOT AREA:
15,000 sf.
0.3443 ACRES

SCOPE OF WORK:
IN-GROUND POOL, DECKING AND POOL EQUIPMENT

EXISTING LOT COVERAGE BREAKDOWN:
HOUSE: 2,530 SQ. FT.
PORCH: 165 SQ. FT.
SIDEWALK: 76 SQ. FT.
DRIVEWAY: 954 SQ. FT.
PATIO: 265 SQ. FT.

EXISTING LOT COVERAGE = 3,990 SQ. FT.
3,990 / 15,000 = 26.6%

PROPOSED LOT COVERAGE:
POOL/SPA COPING: 133 SF
PAVER DECKING: 708 SF
POOL EQUIP: 25 SFT
TOTAL PROPOSED: 866 SF

PROPOSED IMPERV. AREA:
4,856 SQ. FT. 32.3 %

POOL SPECS:
22' X 30'6" X 10'
3'-6' DEEP
21,200 GALLONS

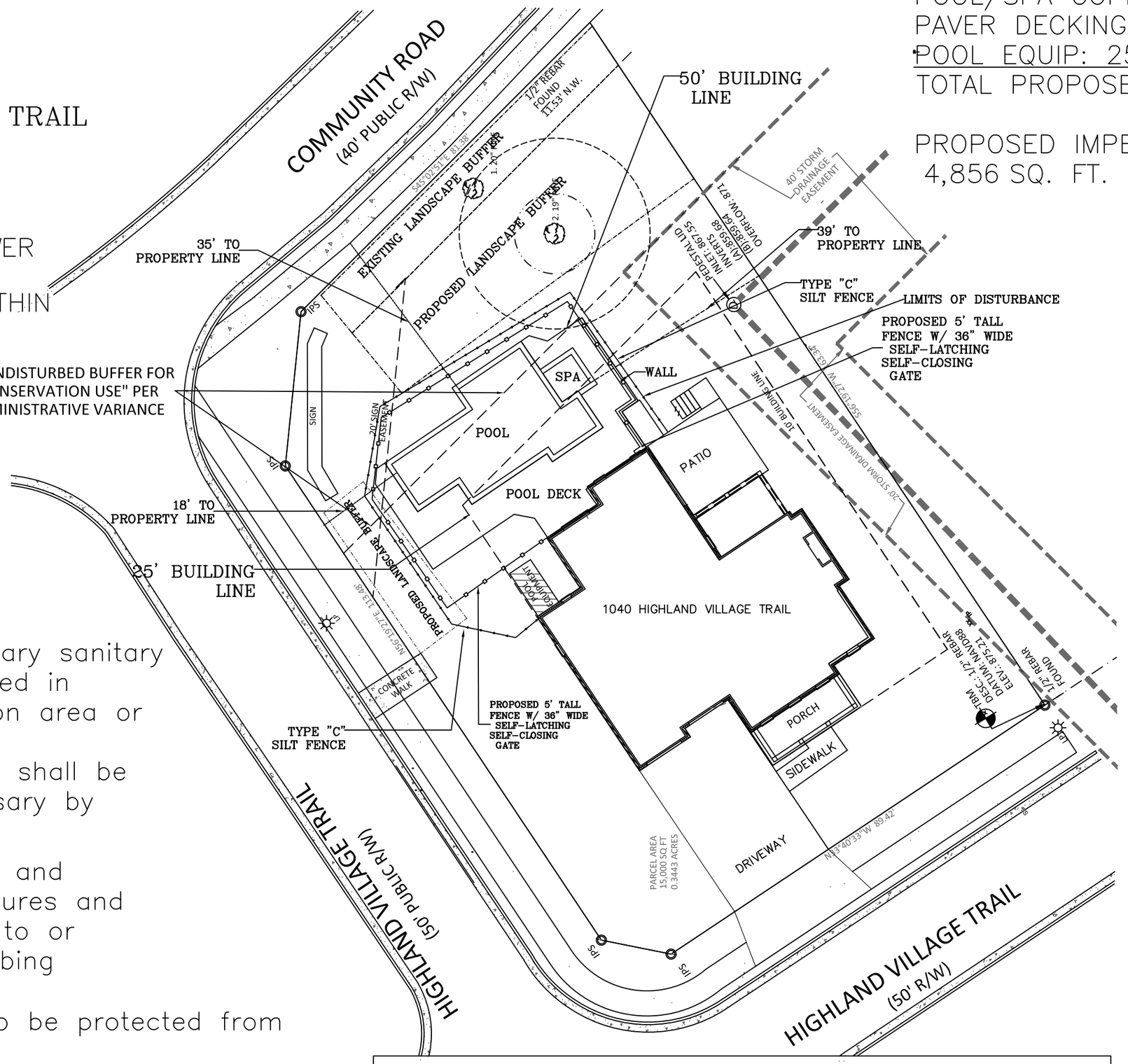
NO WALL TO EXCEED 4' TALL

HOMEOWNER INFO
JEHAN RUFFIN
1040 HIGHLAND VILLAGE TRAIL
MABLETON GA 30126

NOTES: PROPERTY ON SEWER

NO STATE WATER EXISTS WITHIN 200' OF PROJECT SITE

NOTE:
ALL RUNOFF FROM REAR DOWNSPOUTS AND POOL DECKING AND POOL OVER FLOW (POOL FILTER DOES NOT HAVE BACKWASH) WILL BE DIRECTED TO FLOW INTO THE ADJACENT DRAINAGE EASEMENT ON SOUTHEAST SIDE OF PROPERTY



LEGEND

IPF = 1/2" REBAR FOUND
IPS = 1/2" REBAR PIN SET
L.L. = LAND LOT
L.L.L. = LAND LOT LINE
P.L. = PROPERTY LINE
CL = CENTERLINE
B.L. = BUILDING LINE
R/W = RIGHT-OF-WAY
S.S.E. = SANITARY SEWER EASEMENT
D.E. = DRAINAGE EASEMENT
MH = MANHOLE
C.B. = CATCH BASIN
J.B. = JUNCTION BOX
HW = HEADWALL
D.I. = DROP INLET
PP = POWER/UTILITY POLE
F.H. = FIRE HYDRANT
I.E. = INVERT ELEVATION
F.F.E. = FINISHED FLOOR ELEVATION
F.F.B. = FINISHED FLOOR BASEMENT
F.F.G. = FINISHED FLOOR GARAGE
BOC = BACK OF CURB
EP = EDGE OF PAVEMENT
N/F = NOW OR FORMERLY
P.O.B. = POINT OF BEGINNING
--SS-- = SANITARY SEWER LINE/PIPE
-X-X-X- = FENCE LINE
--O-- = FLOOD HAZARD ZONE LINE
_____ = STORM SEWER LINE/PIPE
--W-- = WATER LINE
--G-- = GAS LINE
CM = CONCRETE MONUMENT
C.E. = CONSTRUCTION EASEMENT
C&G = CURB AND GUTTER
LS = LIGHT STANDARD
OTP = OPEN TOP PIPE FOUND
CTP = CRIMP TOP PIPE FOUND
WD = WOOD DECK
CO = CLEAN OUT

notes:
- Dumpsters and/or temporary sanitary facilities shall not be located in the street or tree protection area or right-of-way.
- Additional erosion controls shall be installed as deemed necessary by the on-site inspector(s)
- The installation of erosion and sedimentation control measures and practices shall occur prior to or concurrent with land-disturbing activities.
- All tree protection areas to be protected from sedimentation.
- All tree protection devices to be installed prior to land disturbance and maintained until final landscaping.
- All tree protection fencing to be inspected daily and repaired or replaced as needed.

- Work hours and construction deliveries are:
Monday - Friday 7:00am - 7:00pm
Saturday 8:00am - 5:00pm

AS REQUIRED BY SUBSECTION (d) OF O.C.G.A. SECTION 15-6-67, THIS PLAT HAS BEEN PREPARED BY A LAND SURVEYOR AND APPROVED BY ALL APPLICABLE LOCAL JURISDICTIONS FOR RECORDING AS EVIDENCED BY APPROVAL CERTIFICATES, SIGNATURES, STAMPS, OR STATEMENTS HEREON. SUCH APPROVALS OR AFFIRMATIONS SHOULD BE CONFIRMED WITH THE APPROPRIATE GOVERNMENTAL BODIES BY ANY PURCHASER OR USER OF THIS PLAT AS TO INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED LAND SURVEYOR CERTIFIES THAT THIS PLAT COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN THE RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

ROBERT W. RICHARDSON, GA RLS #3419 — DATE 6/22/2025

GEORGIA REGISTERED No. 3419 PROFESSIONAL LAND SURVEYOR ROBERT W RICHARDSON

NOTES
- Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion and sediment control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

CONTRACTOR INFO:
ARTISTIC POOLS INC.
3884 NORTH PEACHTREE RD,
ATLANTA GA 30341
770-458-9177

24HR CONTACT INFO
RON COKER JR.
404-557-3265

Locate and field stake all utilities, easements, pipes, flood limits, stream buffers, and tree save areas prior to any land disturbing activities.

20 10 0 20
GRAPHIC SCALE - 1"=20'

ALPHA LAND SERVICES
P.O. BOX 1651
LOGANVILLE,GA. 30052
CONTACT: ROBERT RICHARDSON
OFF: 770.696.4054 EMAIL: ROBERT@ALPHASURVEYOR.COM

SITE PLAN FOR:
1040 HIGHLAND VILLAGE TRAIL
TAX PARCEL: 18006600550

REVISION:

REF. PLAT: PB. 261 P. 69

LAND LOT: 66 & 67
DISTRICT: 18TH
COBB COUNTY
GEORGIA
FIELD DATE: 03/26/25
PLAT DATE: 03/26/25

LOT: BLOCK:
SUB: HIGHLAND VILLAGE
R5 - RESIDENTIAL 1 FAMILY
AREA = 0.3443
JOB No. 25-54-LOT4

Letter of Intent for Variance:

1040 Highland Village Trail

Mableton, GA 30126

1) Extraordinary and exceptional conditions pertaining to the particular piece of property due to size, shape, or topography: Roadway on three sides of property and stormwater drainage on the remaining side of the property limit possible locations to install pool.

2) Application of this chapter to this property would create an unnecessary hardship: No alternative location exists on this property. Without the variance, clients cannot install pool.

3) Such conditions are peculiar to the property involved: House approximation to 3 roads and stormwater drainage.

4) Relief, if granted, would not cause substantial detriment to the public good or impair the purposes and intent of this chapter: No

Thank you,

Alan Humble

Artistic Pools, Inc

770-722-1652

Sample Legal Property Descriptions

Sample 1:

. . . the following described property, situated in the Parish of Vernon, Louisiana, to-wit:-

Southwest quarter of Southwest quarter (SW ¼ of SW ¼) and West Half of Southeast quarter of Southwest quarter (W½ SE¼ SW¼) of Section Eleven (11), Township Four (4) North of Range Eight (8) West, containing sixty (60) acres of land, more or less, together with the residence, garage, barns and garden used by J. H. Kurth, Jr. for the past ten (10) years, and also the garage building now being used as a pipe storage room, but there is excepted from this sale all other buildings and improvements on said property which are expressly reserved by the vendor.

Sample 2:

A certain tract of land situated in the Parish of Assumption, State of Louisiana, on the right descending bank of Bayou Lafourche, and forming part of the Trinity Plantation, and having a front on the public road of Bayou Lafourche of Two Hundred Eight and 70/100 (208.70') feet with the same width in the rear, and running back from said public road, between parallel lines, the upper line of said lot measuring Nine Hundred and Eighty-two (982') feet in length; the starting point of said lower line from Bayou Lafourche beginning a distance of Nine Hundred and Eighty-two (982') feet from the lower line of Trinity Plantation, and which property is fully described on a plan of survey made by J. Martin Rhodes, C. E., on February 8, 1909, and annexed to and made part of an act of sale from **Walter Guion**, et als, to **George Seth Guion** on **February 16, 1909**; together with all buildings and improvements thereon and all rights, ways, privileges and servitudes thereto appertaining and belonging.

Sample 3:

Lots 6, 7, and the South ½ of Lot 3, West 60 feet of South ½ of Lot 4, West 60 feet of Lot 5 and Lot 8, Block 20, OLD SURVEY, Leesville, Vernon Parish, Louisiana.