SITE DEVELOPMENT PLANS

FOR

HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS

PROJECT LOCATION

HIGHWAY 100

FRANKLIN, GA 30217

CONSTRUCTION ENTRANCE

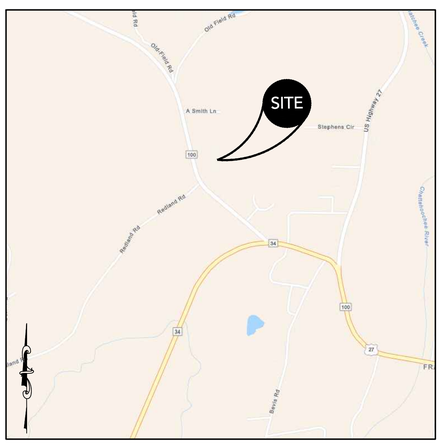
33.291182 NORTH

-85.118333 WEST

PARCEL ID NUMBER

0030 0073

PROJECT TRACT 25.33 ACRES | DISTURBED AREA 1.8 ACRES



SITE LOCATION MAP
NOT TO SCALE

PROJECT CONSULTANTS AND CONTACT INFORMATION

OWNER / DEVELOPER

HEARD COUNTY BOARD OF COMMISSIONERS
201 PARK AVENUE
FRANKLIN, GA 30217
CONTACT: 706-675-3821
24-HOUR CONTACT: FELICIA ADAMS
FELICIAADAMS@HEARDCOUNTYGA.COM

CIVIL ENGINEER

CARTER ENGINEERING CONSULTANTS, INC.
1010 COMMERCE DRIVE
BOGART, GA 30622
CONTACT: 770.725.1200
BRIAN KIMSEY, P.E.
BRIAN@CARTERENGINEERING.COM

SURVEYOR

CARTER ENGINEERING CONSULTANTS
1010 COMMERCE DRIVE
BOGART, GA 30622
CONTACT: 770.725.1200
MICHAEL FOLEY, GA RLS #3346

DESIGN BENCHMARK 50% DD OWNER REVIEW

DRAWING STATUS NOT FOR CONSTRUCTION

CARTER ENGINEERING

SITE DESIGN & ENGINEERING SHEET INDEX

REVISION BLOCK

REVISION NUMBER	REVISION DATE & DESCRIPTION
ISSUE 1	12.12.23 - INITIAL SUBMITTAL
ISSUE 2	02.02.24 - FOUNDATION PLAN ADDED
ISSUE 3	----
ISSUE 4	----
ISSUE 5	----
ISSUE 6	----
ISSUE 7	----
ISSUE 8	----
ISSUE 9	----
ISSUE 10	----

GENERAL PLAN SET NOTES

1. THE ENGINEER IS NOT RESPONSIBLE FOR COST CHANGES DURING CONCEPTUAL, PRELIMINARY, OR DESIGN PHASE.
2. BIDS & QUOTES SHALL BE BASED ON PLAN SETS LABELED "ISSUE FOR BID" ON THE REVISION BLOCK.
3. BIDS & QUOTES SHALL BE REVISED BASED ON PLANS LABELED "ISSUE FOR CONSTRUCTION" ON THE REVISION BLOCK.
4. IF DISCREPANCIES ARE ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE DEVIATION FROM THIS PLAN SET, THE ENGINEER SHOULD BE NOTIFIED FOR UPDATED PLANS AND/ OR FIELD CHANGES.
5. THE ENGINEER IS NOT RESPONSIBLE FOR DESIGN OR CONSTRUCTION COST ASSOCIATED WITH FIELD CHANGES OR DEVIATION FROM THIS PLAN SET DUE TO UNFORESEEN SITE CONDITIONS, CLIENT MODIFICATION REQUEST AND/ OR CONTRACTOR CHANGES.
6. THE ENGINEER IS NOT RESPONSIBLE FOR THE EFFICACY OF FIELD CHANGES OR DEVIATION FROM THIS PLAN SET IN ANYWAY, UNLESS CHANGES ARE DIRECTED BY THE ENGINEER.

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

GEORGIA REGISTERED NO. 26703 PROFESSIONAL ENGINEER BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY
SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE: COVER

SHEET NUMBER: C 1.0

PROJECT NUMBER: 23002HCG

DATE: 12.12.23

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | LAND PLANNING | LAND SURVEYING | MUNICIPAL SERVICES

CONSTRUCTION NOTES

1. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE, AND ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. ANY DISCREPANCY SHALL BE IMMEDIATELY REPORTED TO THE OWNER OR HIS REPRESENTATIVE.
2. NOTIFY THE INSPECTOR OF THE LOCAL GOVERNING AUTHORITY 24 HOURS BEFORE EVERY PHASE OF CONSTRUCTION.
3. ALL WORK SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR, AT HIS EXPENSE, UNLESS ALREADY OBTAINED BY THE OWNER.
4. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING, AND ALL OTHER UTILITIES.
5. THE EXISTING UTILITIES SHOWN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE DRAWINGS. THE UTILITIES SHOWN ARE THOSE LOCATED BY THE SURVEYOR OF RECORD. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF THE UTILITIES SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR CONSENT OF THE ENGINEER AND THE MUNICIPALITY MAY CAUSE FOR THE WORK TO BE UNACCEPTABLE.
7. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER.
8. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
9. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
10. THE CONTRACTOR SHALL PROVIDE SHEETING AND SHORING FOR ALL TRENCH CONSTRUCTION IN ACCORDANCE WITH OSHA GUIDELINES.
11. ALL PIPE LENGTHS SHOWN ARE TO THE CENTERLINE OF THE STRUCTURES UNLESS SPECIFICALLY NOTED.
12. PIPES (STORM AND SANITARY SEWER) SHALL BE LAID ON SMOOTH, CONTINUOUS GRADES WITH NO VISIBLE BENDS AT THE JOINTS.
13. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUM REQUIRED FOR RELATIVELY DRY STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES TO PROVIDE SUCH ADDITIONAL BEDDING AS REQUIRED TO PROPERLY CONSTRUCT WORK.
14. ALL STORM DRAINAGE INLET STRUCTURES SHALL HAVE METAL RING AND COVER FOR ACCESS.
15. ALL ANGLES SHOWN ARE 90 DEGREES UNLESS SHOWN OTHERWISE.
16. ALL GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL VERIFY DIMENSIONS, GRADES, AND EXISTING ELEVATIONS PRIOR TO CONSTRUCTION.
17. CONCRETE CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON PLANS. MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO STATE D.O.T. STANDARD SPECIFICATIONS.
18. ALL CONCRETE SHALL HAVE 3000 PSI COMPRESSIVE STRENGTH AFTER 28 DAYS, WITH A MAXIMUM SLUMP OF FOUR (4) INCHES, UNLESS SPECIFIED OTHERWISE.
19. ALL EXPOSED CONCRETE SHALL HAVE A FINE HAIR BROOMED FINISH.
20. PARKING AND DRIVEWAY BASE COURSE AND ASPHALTIC CONCRETE SURFACE AND PRIME MATERIALS, EQUIPMENT, METHODS FOR CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO STATE D.O.T. STANDARD SPECIFICATIONS.
21. CONTRACTOR TO FIELD VERIFY ALL STORM, SANITARY, WATER AND OTHER UTILITIES LOCATIONS AND INVERTS PRIOR TO INSTALLATION OF ANY UTILITIES. NOTIFY ENGINEER PRIOR TO PROCEEDING WITH ANY WORK IF DISCREPANCIES FOUND.
22. THE USE OF CONCRETE THRUST BLOCKS FOR THE INSTALLATION OF WATER MAINS IS STRICTLY PROHIBITED. PRESSURE PIPE FITTINGS AND OTHER ITEMS REQUIRING RESTRAINT SHALL BE RESTRAINED USING METHODS SPECIFIED AND APPROVED BY COUNTY/CITY TECHNICAL STANDARDS, SPECIFICATIONS AND REGULATIONS. THE PREFERRED METHOD OF RESTRAINT IS THROUGH THE USE OF "MEGA-LUGS" OR "MJR" DEVICES.
23. ALL DIMENSIONS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

EARTHWORK SPECIFICATIONS

CLEARING AND GRUBBING

1. CLEARING AND GRUBBING SHALL CONSIST OF CLEARING THE SURFACE OF THE GROUND OF THE DESIGNATED AREAS OF ALL TREES, LOGS, SNAGS, BRUSH, UNDERGROWTH, HEAVY GROWTH OF GRASS, WEEDS, FENCE STRUCTURES, DEBRIS AND RUBBISH OF ANY NATURE, NATURAL OBSTRUCTIONS SUCH AS OBJECTIONABLE SOIL MATERIAL UNSATISFACTORY FOR FOUNDATIONS. IT SHALL ALSO CONSIST OF GRUBBING OF STUMPS, ROOTS FOUNDATIONS AND DISPOSAL OF ALL SUCH MATERIAL. ALL HOLES REMAINING AFTER THE GRUBBING OPERATION IN EMBANKMENT AREAS AND IN EXCAVATION AREAS LESS THAN TWO (2) FEET IN DEPTH, SHALL HAVE SIDES BROKEN DOWN AND LEVELED IF NECESSARY TO FLATTEN OUT SLOPES, REFILLED WITH ACCEPTABLE MATERIAL THAT IS PROPERLY COMPACTED IN LAYERS BY TAMPERS, ROLLERS OR CONSTRUCTION EQUIPMENT.
2. BURNING ON SITE IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE LOCAL GOVERNING AUTHORITIES HAVING JURISDICTION.

EXISTING TREES OUTSIDE OF GRADING LIMITS LINE:

1. TREES AND VEGETATION TO BE SAVED SHALL BE PROTECTED FROM DAMAGE BY A FENCE BARRICADE PRIOR TO, OR DURING, CLEARING OPERATIONS. TREES TO BE REMOVED FROM THE AREA OUTSIDE THE LIMITS OF GRADING OR FROM SPECIFICALLY DESIGNATED AREAS WITHIN THE CONSTRUCTION AREAS. IF, IN THE OPINION OF THE ENGINEER, A CONTRACTOR DAMAGES A TREE NOT TO BE REMOVED, THE CONTRACTOR WILL BE FINED A PREDETERMINED AMOUNT FOR EACH DAMAGED TREE. THE CONTRACT SHALL ALSO BE RESPONSIBLE FOR ALL COSTS ASSOCIATED IN REMOVING THE DAMAGED TREE FROM THE SITE.

FILL:

1. ALL VEGETATION SUCH AS ROOTS, BRUSH, HEAVY GROWTH OF GRASS, TOPSOIL, ALL DECAYED VEGETABLE MATTER, RUBBISH, AND OTHER UNSUITABLE MATERIAL WITHIN THE AREA UPON WHICH FILL IS TO BE PLACED SHALL BE STRIPPED OR BE OTHERWISE REMOVED BEFORE THE FILL OPERATION IS STARTED. IN NO CASE SHALL UNSUITABLE MATERIAL REMAIN IN OR UNDER THE FILL AREA. SLOPED GROUND SURFACE STEEPER THAN ON VERTICAL TO FOUR HORIZONTAL, ON WHICH FILL IS TO BE PLACED, SHALL BE PLACED, STEPPED OR BENCHED IN SUCH A MANNER THAT THE FILL TO BE PLACED SHALL BE 97 PERCENT OF THE MAXIMUM LABORATORY DRY DENSITY ACCORDING TO STANDARD PROCTOR (AASHTO T99, ASTM D-698). MOISTURE CONTENT SHALL BE WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. PROOF ROLL THE AREAS TO BE FILLED OR ON WHICH STRUCTURES ARE TO BE PLACED. A LOADED DUMP TRUCK OR OTHER RUBBER TIRED EQUIPMENT SHALL BE USED FOR PROOF ROLLING. OVERLAPPING PASSES OF A VEHICLES SHOULD BE MADE ACROSS THE SITE IN ONE DIRECTION AND THEN PERPENDICULAR TO THE ORIGINAL DIRECTION OF ROLLING.
2. ANY YIELDING, PUMPING OR SOFT AREAS SHOULD BE CUT OUT AND REPLACED WITH FILL COMPACTED AS DESCRIBED HEREIN.
3. THE PROPOSED FILL SHOULD BE LIMITED TO SOILS CLASSIFIED IN ACCORDANCE WITH ASTM D-2487 AS GM, GC, SW, SM, SC, ML AND CL. SOIL CLASSIFIED AS PT, OH, OL, CH AND MH ARE NOT SATISFACTORY AS COMPACTED FILL.
4. FILLS AND EMBANKMENTS SHALL BE CONSTRUCTED AT THE LACTATIONS AND TO THE LINES AND GRADES INDICATED ON CONSTRUCTION PLANS. THE SLOPE SHALL NOT EXCEED 2 FOOT HORIZONTAL TO 1 FOOT VERTICAL (3 FOOT HORIZONTAL TO 1 FOOT VERTICAL IN THE PUBLIC RIGHT OF WAY). THE COMPLETED FILL SHALL CORRESPOND TO THE SHAPE OF THE TYPICAL SECTIONS INDICATED ON THE CONSTRUCTION PLANS. MATERIAL REMOVED FROM THE EXCAVATION SHALL BE USED IN FORMING THE FILL. FILL MATERIAL SHALL BE REASONABLY FREE FROM ROOTS, OTHER ORGANIC MATERIAL, TRASH AND STONES HAVING MAXIMUM DIMENSIONS GREATER THAN 6 INCHES (4 INCHES IN TRENCHES FOR UTILITIES). NO FROZEN MATERIAL WILL BE PERMITTED IN THE FILL. STONES HAVING A MAXIMUM DIMENSION OF 4 INCHES WILL NOT BE PERMITTED IN THE UPPER SIX INCHES OF FILL OR EMBANKMENT OR UTILITY TRENCH. THE MATERIAL SHALL BE PLACED IN SUCCESSIVE HORIZONTAL LAYERS NOT MORE THAN 8 INCHES THICK, UNLESS OTHERWISE NOTED, IN LOOSE DEPTH FOR THE WIDTH OF THE CROSS-SECTION AND SHALL BE COMPACTED TO AT LEAST 97 PERCENT OF THE MAXIMUM LABORATORY DRY DENSITY ACCORDING TO STANDARD PROCTOR (ASTM D-698, AASHTO T-99). MOISTURE SHALL BE WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. THE TOP 12 INCHES OF THE PAVING, PARKING AND/OR ROADWAY SUB-GRADE SHALL BE COMPACTED TO 97 PERCENT OF THE MAXIMUM DRY DENSITY (STANDARD PROCTOR). EACH LIFT SHALL BE ROLLED WITH A VIBRATORY ROLLER, A SHEEPSFOOT ROLLER, OR A LOADED RUBBER TIRED DUMP TRUCK, SCRAPER OR LOADER. IF THE SOIL IS TOO DRY, A WATER TRUCK WITH SPREADER BAR OR SPRAY HOSE SHALL BE USED TO BRING THE SOIL TO THE PROPER MOISTURE RANGE. THE WATER SHALL BE THOROUGHLY AND PROPERLY MIXED WITH THE SOIL PRIOR TO COMPACTION.
5. STORM DRAIN PIPES SHALL BE PLACED ON FIRM BOTTOM AND HAND TAMPED TO SAFE UP THE PIPE. A CUSHION OF SOIL SHALL BE TAMPED ABOVE THE CROWN OF THE PIPE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS SO THAT THE HEAVIER COMPACTION EQUIPMENT CAN THEN BE USED TO BRING THE SOIL TO A DENSITY AS DESCRIBED ABOVE FOR FILL AREAS.
6. IF SOILS INVESTIGATION REPORT IS PROVIDED, THEN FOLLOW THE RECOMMENDATIONS OF THE REPORT IF THEY EXCEED THE RECOMMENDATIONS OF THESE SPECIFICATIONS.

TOPSOIL:

1. UNLESS OTHERWISE SPECIFIED, AREAS DESIGNATED FOR GRADING OPERATIONS THAT CONTAIN A BLANKET OF TOPSOIL SHALL BE STRIPPED AND PLACED IN CONVENIENT STOCKPILES FOR LATER USE AS A TOPSOIL BLANKET ON THE NEW GRADED AREAS SPECIFIED HEREIN, OR AS DESIGNATED. TOPSOIL SHALL BE STRIPPED FROM ALL AREAS DESIGNATED TO RECEIVE FILL. THE STRIPPING OF MATERIAL FOR TOPSOIL SHALL BE CAREFULLY DETERMINED AND ONLY THE QUANTITY REQUIRED SHALL BE STOCKPILED. MATERIAL STOCKPILED SHALL BE STORED IN A SATISFACTORY MANNER TO AFFORD PROPER DRAINAGE. WHEN GRADING OPERATIONS PERMIT, INSTEAD OF STOCKPILING, THE TOPSOIL SHALL BE HAULED AND SPREAD DIRECTLY ON THE AREAS DESIGNATED TO RECEIVE TOPSOIL.

ROCK EXCAVATION:

1. IF ROCK IS ENCOUNTERED, CLEAR AWAY EARTH TO EXPOSE MATERIAL. NOTIFY OWNER AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO EXCAVATION. REMOVE ROCK TO A DEPTH OF 6 INCHES BELOW AND 8 INCHES ON EACH SIDE OF PIPES IN TRENCHES. A MEASUREMENT OF EXTENT OF ROCK TO BE REMOVED SHALL BE MADE. ROCK EXCAVATION SHALL BE PAID FOR IN ACCORDANCE WITH AGREEMENT WITH THE OWNER.

DEMOLITION NOTES

EXISTING STRUCTURES & FACILITIES:

1. THE LOCATIONS OF ALL EXISTING FACILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER / LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES.
2. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, SUPERVISION AND EQUIPMENT REQUIRED FOR THE ORDERLY DEMOLITION AND REMOVAL OF EXISTING STRUCTURES, PAVEMENT, AND UTILITIES AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
3. THE CONTRACTOR IS REQUIRED TO FAMILIARIZE HIM/HERSELF WITH THE STRUCTURES TO BE DEMOLISHED. A BRIEF DESCRIPTION OF THE STRUCTURES PROPOSED TO BE INSTALLED AND DEMOLISHED ARE INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY.
4. THE FOLLOWING LIST OF STRUCTURES REQUIRING DEMOLITION IS INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE DRAWINGS INDICATE THE SCOPE OF THE DEMOLITION WHERE DEMOLITION IS REQUIRED (SEE CORRESPONDING PLANS):
   - 4.1. DEMOLITION AND REMOVAL OF EXISTING ON-SITE ASPHALT, CONCRETE, PAVING, AND CURBING TO LIMITS OF DISTURBANCE/DEMOLITION AS SHOWN ON THE CORRESPONDING PLANS. CONTRACTOR TO VERIFY AND COORDINATE ANY DISCREPANCIES AND/OR CONCERNS WITH ENGINEER/LANDSCAPE ARCHITECT ACCORDINGLY.
5. ALL ON-SITE UNDERGROUND STRUCTURES AND PIPING MUST BE COMPLETELY REMOVED AND OVER-EXCAVATED BY A MINIMUM OF 12" BENEATH THE STRUCTURES. CONTRACTOR SHALL USE APPROVED FILLING MATERIAL FOR FILLING THESE AREAS. FILL SHALL BE CLEAN WITH LESS THAN 50% PASSING THE #200 SIEVE, PLASTICITY INDEX LESS THAN 10, WITH MAXIMUM PARTICLE SIZE OF 1.25 INCHES, AND SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T99).
6. ALL EXISTING STRUCTURES, PAVEMENTS, SLABS, FOUNDATIONS, STEPS AND OTHER EXISTING FEATURES INDICATED ON THE DRAWINGS TO BE REMOVED SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR. REMOVE NO STRUCTURE SUBSTANTIALLY AS A WHOLE. DEMOLISH COMPLETELY ON THE PREMISES.
7. ALL EXISTING SEWERS, PIPING, UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
8. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR PERSON AND PROPERTY AT ALL TIMES. HE OR SHE SHALL EXECUTE THE WORK IN A MANNER THAT AVOIDS HAZARDS TO PERSONS AND PROPERTY AND THAT PREVENTS INTERFERENCE WITH THE USE AND ACCESS TO ADJACENT PROPERTIES, BUILDINGS, AND ADJACENT STREETS. STREETS AND SIDEWALKS SHALL NOT BE BLOCKED BY DEBRIS AND EQUIPMENT.
9. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER FOR PROPER DIRECTION IF ANY ENVIRONMENTAL OR HEALTH RELATED CONTAMINATE IS ENCOUNTERED DURING THE DEMOLITION AND/OR EXCAVATION PROCESS.

DISPOSAL:

10. REMOVE AND LEGALLY DISPOSE OF ALL OTHER RUBBISH, RUBBLE, AND DEBRIS. ALL REFUSE AND MISCELLANEOUS ITEMS TO BE REMOVED, THAT ARE NOT TO BE STOCKPILED FOR LATER USE ON THE PROJECT OR DELIVERED TO THE OWNER, SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR IN ACCORDANCE WITH ANY AND ALL APPLICABLE LAWS, STANDARDS, AND REGULATIONS SET FORTH BY LOCAL, STATE, AND FEDERAL OFFICIALS THAT GOVERN THE DISPOSAL OF WASTE AND DEBRIS.

PAVEMENT REMOVAL:

11. WHERE EXISTING PAVEMENT IS TO BE REMOVED, CONTRACTOR SHALL SAW-CUT THE SURFACING LEAVING A UNIFORM AND STRAIGHT EDGE WITH THE MINIMAL DISTURBANCE POSSIBLE TO THE REMAINING ADJACENT SURFACING. IF CONSTRUCTION RESULTS IN RAVELING OF THE SAW-CUT SURFACE, RECUT BACK FROM THE RAVELED EDGE PRIOR TO RESTORATION.
12. WHERE EXISTING PAVEMENT, CURB, CURB AND GUTTER, SIDEWALK, DRIVEWAY OR VALLEY GUTTER IS TO BE REMOVED FOR THE PURPOSE OF CONSTRUCTION OR REMOVING BOX CULVERTS, PIPE, INLETS, MANHOLES, APPURTENANCES, FACILITIES OR STRUCTURES, SAID PAVEMENT, ETC., THE SAID OR PROPOSED STRUCTURE SHALL BE REPLACED AND RESTORED IN EQUAL OR BETTER CONDITION THAN THE ORIGINAL. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, TOOLS, SUPPLIES, AND ANY OTHER NECESSARY EQUIPMENT AS REQUIRED BY PROJECT AND SITE REQUIREMENTS.

ACCESS:

13. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING THE DEMOLITION PROCESS OF THE EXISTING FACILITIES AND SITE.

PERMITTING:

14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY REQUIRED PERMITTING FOR DEMOLITION FROM THE RESPONSIBLE AUTHORITIES AND REGULATIONS AND FULLY ACKNOWLEDGE AND COMPLY WITH ALL REQUIREMENTS PRIOR TO COMMENCING OF DEMOTION WORK.
15. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED IN ORDER TO PERFORM THE CONTRACT WORK FOR THIS PROJECT. THE CONTRACTOR SHALL CONDUCT SITE VISITS AND SHALL EXAMINE ALL OF THE INFORMATION WITHIN THESE DOCUMENTS AND ALL DISCREPANCIES AND/OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LEAD ENGINEER/ARCHITECT PRIOR TO BID SUBMITTAL.
16. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITY TO THAT AREA DELINEATED IN THE DRAWING AND APPROVED BY OFFICIALS.
17. ALL OTHER EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO STORM DRAINAGE, GAS, ELECTRIC, TELEPHONE, AND WATER & SEWER SHALL BE PRESERVED AND PROTECTED AT ALL TIMES AS NEEDED AND AS REQUIRED.

STAKING AND SURVEYING NOTES

STAKING:

1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION STAKING AND CONSTRUCTION ACTIVITIES BASED ON THE LATEST APPROVED DESIGN PLANS AND/OR DESIGN FILE(S) AS PROVIDED AND AS WARRANTED BY CLIENT AND PROJECT NEEDS.
2. PRIOR TO COMMENCING CONSTRUCTION STAKING OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR AND/OR STAKING SURVEYOR SHALL CONFIRM WITH THE PROJECT LEAD ENGINEER/ARCHITECT, WHO'S RESPONSIBLE FOR THIS PROJECT, THAT THE LATEST PLANS AND/OR DESIGN FILE(S) ARE BEING UTILIZED.
3. THE ENGINEER/LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR OWNERS, CONTRACTORS OR SURVEYORS STAKING OR PERFORMING CONSTRUCTION ACTIVITIES BASED ON OUT-OF-DATE DESIGN PLANS AND/OR DESIGN FILES.
4. CONSTRUCTION STAKING SHALL ADHERE TO THE HORIZONTAL AND VERTICAL DATUM LISTED IN THIS CONSTRUCTION SET AND AS PROVIDED IN THE CORRESPONDING FILES, NOTES, AND/OR DRAWINGS.

TOLERANCES & DISCREPANCIES:

5. IF, DURING CONSTRUCTION STAKING OR CONSTRUCTION ACTIVITIES, SURVEY DISCREPANCIES ARE ENCOUNTERED WITH REGARD TO THE DESIGN PLANS OR DESIGN FILE, WORK SHOULD CEASE AND THE LEAD ENGINEER/LANDSCAPE ARCHITECT SHOULD BE NOTIFIED IMMEDIATELY TO RESOLVE THE ISSUE OR ISSUES. THE ENGINEER / LANDSCAPE ARCHITECT CAN NOT BE HELD RESPONSIBLE OR LIABLE FOR ISSUES THAT THEY HAVE NOT RECEIVED NOTIFICATION.
6. THE CONSTRUCTION TOLERANCES SHOWN IN THE CORRESPONDING DRAWINGS, NOTES, AND/OR FILES, IN GENERAL, REPRESENT INDUSTRY STANDARDS. HOWEVER, EXCEPTIONS CAN BE MADE IF IT DETERMINED THAT CERTAIN DEVIATED CONSTRUCTION ACTIVITIES DO NOT ADVERSELY AFFECT THE DESIGN REQUIREMENTS OR FUNCTIONALITY. THE LEAD ENGINEER/LANDSCAPE ARCHITECT WILL EVALUATE CONSTRUCTION ACTIVITIES THAT DEVIATE FROM THE DESIGN PLANS ON A CASE-BY-CASE BASIS. IF IT IS DETERMINED THAT THE CERTAIN DEVIATED CONSTRUCTION ACTIVITIES DO ADVERSELY AFFECT THE DESIGN REQUIREMENTS, FUNCTIONALITY, AND INTENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING ALL ITEMS TO THE PLANS AND SPECIFICATIONS AS DETERMINED AND REQUIRED BY DESIGN PROFESSIONAL, AT THE CONTRACTOR'S EXPENSE.

CIVIL ENGINEERING DESIGN TOLERANCES FOR PROJECT:

GENERAL GRADING:	±0.10 FEET	RETAINING WALLS:	±0.05 FEET
ALL PIPE/CONDUITS:	±0.05 FEET	SITE FEATURES (SPOT ELEV., ETC.)	±0.05 FEET
DRAINAGE STRUCTURES:	±0.05 FEET	UTILITY ELEVATIONS:	±0.10 FEET
SANITARY SEWER STRUCTURES:	±0.05 FEET	EROSION CONTROL BMPS:	±0.05 FEET
STORMWATER POND FEATURES:	±0.05 FEET		

AS-BUILT & SPECIFICATIONS:

7. THE ENGINEER/LANDSCAPE ARCHITECT SHOULD BE PROVIDED WITH AN AS-BUILT SURVEY OF THE PROJECT FOR REVIEW AND APPROVAL AFTER THE PROJECT IS COMPLETE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EFFORTS WITH DESIGN PROFESSIONAL.
8. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL SITE SPECIFIC REQUIREMENTS REGARDING CONSTRUCTION, MATERIALS, TESTING, AND CERTIFICATIONS.

PROJECT GEOGRAPHICAL INFORMATION

PROJECT PROJECTION & DATUM:

HORIZONTAL DATUM: NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT
VERTICAL DATUM: NORTH AMERICAL VERTICAL DATUM OF 1988 (NAVD88)

BOUNDARY SURVEY:

SURVEYOR NAME: N/A
DATE OF SURVEY: N/A
TRACT OR PARCEL: *
HORIZONTAL DATUM: NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT
VERTICAL DATUM: NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88)

TOPOGRAPHIC SURVEY:

SURVEYOR NAME: MICHAEL FOLEY, GA RLS #3346
DATE OF SURVEY: 10.06.23
TRACT OR PARCEL: *
HORIZONTAL DATUM: NAD83 GEORGIA STATE PLANES, WEST ZONE, US FOOT
VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

GEOGRAPHICAL INFORMATION SYSTEMS (GIS) DATA UTILIZED:

TOPOGRAPHIC DATA: FIELD RUN SURVEY
PARCEL DATA: HEARD COUNTY Q PUBLIC
ADDITIONAL DATA: --

GEORGIA COMP. R. & REGS. R. 180-6-.09:

THE TOPOGRAPHIC AND ELEVATION DATA SHOWN HEREON WAS OBTAINED FROM FIELD RUN SURVEY AND IS NOT CERTIFIED AS CORRECT BY THIS ENGINEER. USERS OF THIS DATA DO SO AT THEIR OWN RISK.

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED NO. 26703 PROFESSIONAL ENGINEER J. BRIAN KIMSEY

GSWCC Level II Certification No. 00000003007

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

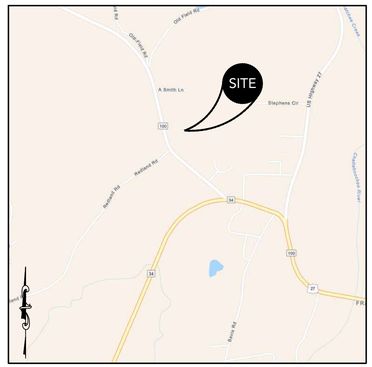
SHEET TITLE:
GENERAL NOTES

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 2.0

PROJECT NUMBER:
23002HCG

DATE:
12.12.23



LOCATION MAP
SCALE: N.T.S.

PROJECT INFORMATION

DRAWING SET PREPARED BY:	OWNER/DEVELOPER:
CARTER ENGINEERING CONSULTANTS, INC. 1010 COMMERCE DRIVE BOGART, GA 30622 CONTACT: BRIAN KIMSEY, P.E. PHONE: 770.725.1200 BRIAN@CARTERENGINEERING.COM	HEARD COUNTY BOARD OF COMMISSIONERS 201 PARK AVENUE FRANKLIN, GA 30217 CONTACT: FELICIA ADAMS 706-675-3821 FELICIAADAMS@HEARDCOUNTYGA.COM

SITE INFORMATION

JURISDICTION	HEARD COUNTY
PROPERTY LOCATION	HIGHWAY 100 FRANKLIN, GA 30217
PARCEL NUMBER	0030 0073
CURRENT ZONING	I (INDUSTRIAL DISTRICT)
PROPOSED ZONING	I (INDUSTRIAL DISTRICT)
OVERLAY DISTRICT	NONE
EXISTING USE	GOVERNMENT USE
PROPOSED USE	GOVERNMENT USE
BUFFERS REQUIRED	N/A
REQUIRED BUILDING SETBACKS	FRONT: 60-FEET SIDE: 15-FEET REAR: 15-FEET
MAXIMUM LOT COVERAGE	---%
MINIMUM LANDSCAPE	---%
MAXIMUM BUILDING HEIGHT	75-FEET
SANITARY SEWER SERVICE	*SANITARY PROVIDER
WATER SERVICE	*WATER PROVIDER
FEMA FLOOD INSURANCE RATE MAP NO.	13149C0161D
FEMA FIRM DATE	04/19/2017
FEMA SFHA ZONE	ZONE X

UNDERGROUND UTILITY DISCLAIMER:
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD INFORMATION AND/OR EXISTING DRAWINGS. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE OWNER, HIS/HER EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE CARTER ENGINEERING IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER IF A DISCREPANCY IS FOUND. SPECIFICALLY, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES PRIOR TO COMMENCEMENT OF STORM AND SANITARY SEWER CONSTRUCTION.

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

50' 25' 0 50' 100' 150'
GRAPHIC SCALE
SCALE: 1" = 50'

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

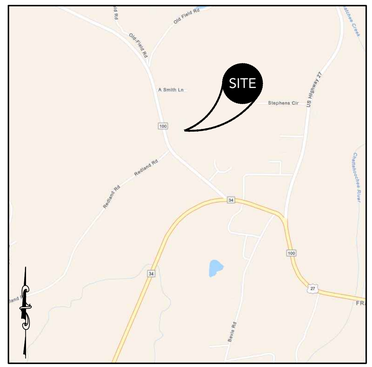
SHEET TITLE:
EXISTING SITE PLAN

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 3.0

PROJECT NUMBER:
23002HCG

DATE:
12.12.23



LOCATION MAP
SCALE: N.T.S.

PROJECT INFORMATION

DRAWING SET PREPARED BY:	OWNER/DEVELOPER:
CARTER ENGINEERING CONSULTANTS, INC. 1010 COMMERCE DRIVE BOGART, GA 30622 CONTACT: BRIAN KIMSEY, P.E. PHONE: 770.725.1200 BRIAN@CARTERENGINEERING.COM	HEARD COUNTY BOARD OF COMMISSIONERS 201 PARK AVENUE FRANKLIN, GA 30217 CONTACT: FELICIA ADAMS 706-675-3821 FELICIAADAMS@HEARDCOUNTYGA.COM

SITE INFORMATION

JURISDICTION	HEARD COUNTY
PROPERTY LOCATION	HIGHWAY 100 FRANKLIN, GA 30217
PARCEL NUMBER	0030 0073
CURRENT ZONING	I (INDUSTRIAL DISTRICT)
PROPOSED ZONING	I (INDUSTRIAL DISTRICT)
OVERLAY DISTRICT	NONE
EXISTING USE	GOVERNMENT USE
PROPOSED USE	GOVERNMENT USE
BUFFERS REQUIRED	N/A
REQUIRED BUILDING SETBACKS	FRONT: 60-FEET SIDE: 15-FEET REAR: 15-FEET
MAXIMUM LOT COVERAGE	---%
MINIMUM LANDSCAPE	---%
MAXIMUM BUILDING HEIGHT	75-FEET
SANITARY SEWER SERVICE	*SANITARY PROVIDER
WATER SERVICE	*WATER PROVIDER
FEMA FLOOD INSURANCE RATE MAP NO.	13149C0161D
FEMA FIRM DATE	04/19/2017
FEMA SFHA ZONE	ZONE X

UNDERGROUND UTILITY DISCLAIMER:
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD INFORMATION AND/OR EXISTING DRAWINGS. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE OWNER, HIS/HER EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE CARTER ENGINEERING IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER IF A DISCREPANCY IS FOUND. SPECIFICALLY, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES PRIOR TO COMMENCEMENT OF STORM AND SANITARY SEWER CONSTRUCTION.

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

50' 25' 0 50' 100' 150'
GRAPHIC SCALE
SCALE: 1" = 50'

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

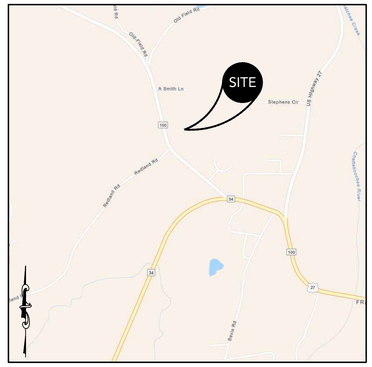
SHEET TITLE:
OVERALL SITE PLAN

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 4.0

PROJECT NUMBER:
23002HCG

DATE:
12.12.23



LOCATION MAP
SCALE: N.T.S.

PROJECT INFORMATION

DRAWING SET PREPARED BY:	OWNER/DEVELOPER:
CARTER ENGINEERING CONSULTANTS, INC.	HEARD COUNTY BOARD OF COMMISSIONERS
1010 COMMERCE DRIVE	201 PARK AVENUE
BOGART, GA 30622	FRANKLIN, GA 30217
CONTACT: BRIAN KIMSEY, P.E.	CONTACT: FELICIA ADAMS
PHONE: 770.725.1200	706-675-3821
BRIAN@CARTERENGINEERING.COM	FELICIAADAMS@HEARDCOUNTYGA.COM

SITE INFORMATION

JURISDICTION	HEARD COUNTY
PROPERTY LOCATION	HIGHWAY 100 FRANKLIN, GA 30217
PARCEL NUMBER	0030 0073
CURRENT ZONING	I (INDUSTRIAL DISTRICT)
PROPOSED ZONING	I (INDUSTRIAL DISTRICT)
OVERLAY DISTRICT	NONE
EXISTING USE	GOVERNMENT USE
PROPOSED USE	GOVERNMENT USE
BUFFERS REQUIRED	N/A
REQUIRED BUILDING SETBACKS	FRONT: 60-FEET SIDE: 15-FEET REAR: 15-FEET
MAXIMUM LOT COVERAGE	---%
MINIMUM LANDSCAPE	---%
MAXIMUM BUILDING HEIGHT	75-FEET
SANITARY SEWER SERVICE	*SANITARY PROVIDER
WATER SERVICE	*WATER PROVIDER
FEMA FLOOD INSURANCE RATE MAP NO.	13149C0161D
FEMA FIRM DATE	04/19/2017
FEMA SFHA ZONE	ZONE X

UNDERGROUND UTILITY DISCLAIMER:
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD INFORMATION AND/OR EXISTING DRAWINGS. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE OWNER, HIS/HER EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE CARTER ENGINEERING IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER IF A DISCREPANCY IS FOUND. SPECIFICALLY, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES PRIOR TO COMMENCEMENT OF STORM AND SANITARY SEWER CONSTRUCTION.

STRUCTURAL NOTES:

1. CONCRETE SLAB SHALL BE A MINIMUM OF 5 INCHES THICK, REINFORCED AT MID DEPTH WITH 6X6-W2.9XW2.9 WELDED WIRE FABRIC OR HEAVIER AT MID DEPTH.
2. CONCRETE MATERIAL SHALL BE NORMAL WEIGHT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28-DAYS.
3. SLAB SHALL BE CAST ON PROPERLY DRAINED AND COMPACTED SUBGRADE.
4. SLAB DIMENSIONS SHALL BE SUFFICIENT SUCH THAT THE TOWER LEGS DO NOT BEAR WITHIN 24 INCHES OF THE SLAB EDGES.
5. BURN BUILDING FOUNDATION SHALL MEET THE STRUCTURAL DESIGN COMPLETED BY FIRE TRAINING STRUCTURES, LLC. SEE SHEET S-1.

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER J. BRIAN KIMSEY NO. 26703

GSWCC Level II Certification
No. 00000003007

CARTER ENGINEERING
ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

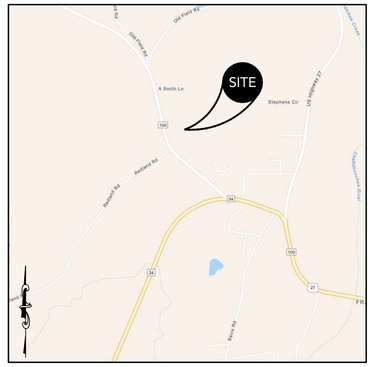
SHEET TITLE:
SITE & GRADING PLAN

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 4.1

PROJECT NUMBER:
23002HCG

DATE:
12.12.23



LOCATION MAP
SCALE: N.T.S.

PROJECT INFORMATION

DRAWING SET PREPARED BY:	OWNER/DEVELOPER:
CARTER ENGINEERING CONSULTANTS, INC.	HEARD COUNTY BOARD OF COMMISSIONERS
1010 COMMERCE DRIVE	201 PARK AVENUE
BOGART, GA 30622	FRANKLIN, GA 30217
CONTACT: BRIAN KIMSEY, P.E.	CONTACT: FELICIA ADAMS
PHONE: 770.725.1200	706-675-3821
BRIAN@CARTERENGINEERING.COM	FELICIAADAMS@HEARDCOUNTYGA.COM

SITE INFORMATION

JURISDICTION	HEARD COUNTY
PROPERTY LOCATION	HIGHWAY 100 FRANKLIN, GA 30217
PARCEL NUMBER	0030 0073
CURRENT ZONING	I (INDUSTRIAL DISTRICT)
PROPOSED ZONING	I (INDUSTRIAL DISTRICT)
OVERLAY DISTRICT	NONE
EXISTING USE	GOVERNMENT USE
PROPOSED USE	GOVERNMENT USE
BUFFERS REQUIRED	N/A
REQUIRED BUILDING SETBACKS	FRONT: 60-FEET SIDE: 15-FEET REAR: 15-FEET
MAXIMUM LOT COVERAGE	---%
MINIMUM LANDSCAPE	---%
MAXIMUM BUILDING HEIGHT	75-FEET
SANITARY SEWER SERVICE	*SANITARY PROVIDER
WATER SERVICE	*WATER PROVIDER
FEMA FLOOD INSURANCE RATE MAP NO.	13149C0161D
FEMA FIRM DATE	04/19/2017
FEMA SFHA ZONE	ZONE X

UNDERGROUND UTILITY DISCLAIMER:
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD INFORMATION AND/OR EXISTING DRAWINGS. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE OWNER, HIS/HER EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE CARTER ENGINEERING IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER IF A DISCREPANCY IS FOUND. SPECIFICALLY, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES PRIOR TO COMMENCEMENT OF STORM AND SANITARY SEWER CONSTRUCTION.

GEORGIA811
Utilities Protection Center, Inc.
Know what's **below**
Call before you dig

GRID NORTH

20' 10' 0 20' 40' 60'
GRAPHIC SCALE
SCALE: 1" = 20'

REVISION BLOCK		
ISSUE	REVISION DATE & DESCRIPTION	
1	12.12.23 - INITIAL SUBMITTAL	
2	02.02.24 - FOUNDATION PLAN ADDED	
3	----	
4	----	
5	----	
6	----	
7	----	
8	----	

GEORGIA REGISTERED NO. 26703 PROFESSIONAL ENGINEER J. BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE:
UTILITY PLAN

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 4.2

PROJECT NUMBER:
23002HCG

DATE:
12.12.23

#4 24 HOUR CONTACT

FELICIA ADAMS: 706-675-3821

#5 PRIMARY PERMITTEE

HEARD COUNTY BOARD OF COMMISSIONERS
201 PARK AVENUE
FRANKLIN, GA 30217
PHONE: 706-675-3821
EMAIL: FELICIAADAMS@HEARDCOUNTYGA.COM

#6 PROJECT AREA

TOTAL SITE AREA:	25.33 ACRES
TOTAL DISTURBED AREA	1.8 ACRES

#7 CONSTRUCTION EXIST LOCATION

LONGITUDE:	-85.118333 WEST
LATITUDE:	33.291182 NORTH

#9 DESCRIPTION OF THE CONSTRUCTION ACTIVITY

THE EXISTING SITE CONSISTS OF AN ABANDONED GAS STATION FACILITY. THE PROJECT INCLUDES THE CONSTRUCTION AND INSTALLATION OF ADDITIONAL GOVERNMENT FACILITIES.

#11 PROJECT RECEIVING WATERS

THE RECEIVING WATERS OF THIS PROJECT ARE AN UNNAMED TRIBUTARY TO CENTRALHATCHEE CREEK

#12 SITE VISIT CERTIFICATION

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 DIRECT SUPERVISION.

BRIAN KIMSEY, P.E. — 12.12.23 DATE
P.E. #26703

E&SC CERTIFICATION NUMBER 000000003007

#13 SOIL & EROSION CONTROL BMP CERTIFICATION

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 DIRECT SUPERVISION.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 100001."

BRIAN KIMSEY, P.E. — 12.12.23 DATE
P.E. #26703

E&SC CERTIFICATION NUMBER 000000003007

#14 CERTIFY INSPECTION

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 7 DAYS AFTER INSTALLATION.

#15 NON-EXEMPT ACTIVITIES

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 BUFFERS AS MEASURED FORM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS

#16 BUFFER ENCROACHMENT

THERE ARE NO WARRANTED OR NECESSARY ENCROACHMENTS TO ANY BUFFERS. VARIANCE IS NOT REQUIRED.

#17 AMENDMENT/REVISION STATEMENT

AMENDMENTS/ REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

#18 WASTE MATERIAL STATEMENT

WASTE MATERIAL SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

WASTE MATERIALS

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

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

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

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

SANITARY WASTES

A MINIMUM OF ONE PORTABLE SANITARY UNIT WILL BE PROVIDED FROM EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE WILL BE COLLECTED FORM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

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

#19 SEDIMENT CONTROL ON-SITE

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 MAINTAINED AT ALL TIMES

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 EXPOSED DISTURBED AREAS

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

#22 IMPAIRED STREAM SEGMENT

CONSTRUCTION ACTIVITY DOES NOTE DISCHARGE INTO AN IMPAIRED STREAM SEGMENT. THE CONSTRUCTION ACTIVITY IS NOT WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT.

#24 CONCRETE WASH DOWN

THIS PROJECT DOES NOT ALLOW CONCRETE WASH DOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND REAR OF THE VEHICLES ON THE PROJECT SITE. THESE ACTIONS ARE ONLY ALLOWED AT SPECIFIED LOCATIONS WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

#25 BMP REMEDIATION FOR PETROLEUM SPILLS AND WASTE

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

PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
CONCRETE TRUCK WASHING - CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE AT THE SPECIFIED LOCATION.

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

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

SPILL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE, AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- MATERIAL AND EQUIPMENT, NECESSARY OF SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MAPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
- SPLIT PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER). THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1 - 800 - 424 - 8802.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITH 24 HOURS AT 1 - 800 - 424 - 8802.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS. THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.

-FOR SPILLS LESS THAT 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 OIL IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT).THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

#26 POLLUTANT CONTROL AFTER CONSTRUCTION IS COMPLETED

ALL DISTURBED AREAS WILL BE PERMANENTLY STABILIZED ONCE CONSTRUCTION ACTIVITY IS COMPLETED. ALL RUNOFF FROM THE IMPERVIOUS AREAS ON SITE WILL FLOW TO THE PROPOSED INLETS AND BE CAPTURED WITHIN THE UNDERGROUND DETENTION SYSTEM. A HYDRODYNAMIC SEPARATOR HAS BEEN PROPOSED FOR THE SITE FOR POLLUTANT CONTROL.

#27 COVER FOR BUILDING MATERIALS

THE CONTRACTOR SHALL LOCATE ALL BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTES, AND OTHER MATERIALS IN A LOCATION FREE FROM STORMWATER RUNOFF. IN ADDITION, THE CONTRACTOR SHALL PROTECT THESE MATERIALS FROM PRECIPITATION BY COVERING WITH PLASTIC SHEETING OR A TEMPORARY ROOF THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD.

#28 STORM WATER POLLUTION BMPS

POTENTIAL SOURCES OF STORM WATER POLLUTION INCLUDE: SEDIMENT DISPLACEMENT FROM EARTHWORK AND EROSION, CONSTRUCTION TRASH FROM CONSTRUCTION WORKERS AND EQUIPMENT LEAKAGE / SPILLAGE OF FUEL, OIL, AND FLUIDS FROM CONSTRUCTION EQUIPMENT. THE PROPOSED TEMPORARY SEDIMENT TRAPS AND SILT FENCE WILL REDUCE POLLUTANTS IN STORMWATER DISCHARGES DURING CONSTRUCTION. NO ADVERSE IMPACTS ARE EXPECTED DUE TO THE NATURE OF THIS CONSTRUCTION ACTIVITY.

#29 ACTIVITY SCHEDULE

TASK DESCRIPTION:	MONTHS (2024)				
		MARCH	APRIL	MAY	JUNE
INSPECT AND MAINTAIN ALL EROSION COMTROL BMP		X	X	X	X
CONSTRUCTION EXIT AND PERIMETER SILT FENCE		X			
CLEARING & GRUBBING		X	X		
DEMO		X	X		
ROUGH GRADING		X	X		
TEMPORARY STABILIZATION (GRASSING)			X	X	X
CURB AND GUTTER			X	X	X
FINAL STABILIZATION			X	X	X
PAVING				X	X
FINAL LANDSCAPING, GRASSING, CLEANING OF STORM DRAINS				X	X
DISPOSITION OF TEMPORARY SEDIMENT CONTROL MEASURES		X	X	X	X

START DATE: MARCH 1ST, 2024 — END: JUNE 31TH, 2024

#30 INSPECTIONS

A. PERMITTEE REQUIREMENTS

1. EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

2. MEASURE 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 IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

3. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

6. A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTION S TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2 OF THIS PERMIT.

#31 SAMPLING FREQUENCY

1. THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM AFTER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
2. HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THE IS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CEASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

A. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FORM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOUSE AS DEFINED IN THIS PERMIT * (MONDAY THRU FRIDAY, 8:00 AM TO 5:00 PM AND SATURDAY 8:00 AM TO 5:00 PM WHEN CONSTRUCTION ACTIVITY IS BEING CONDUCTED BY THE PRIMARY PERMITTEE) AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION:
B. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST.
C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL AREA NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITH TOW (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FORM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OF EXCEEDS 0.5 INCH DURRING NORMAL BUSINESS HOURS * UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED.
D. WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D4.A(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF A ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B), OR (C) ABOVE; AND
E. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

*NOTE THAT THE PERMITTE MAY CHOOSE TO MEET THE REQUIREMENT OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

REPORTING:

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

A. THE RAINFALL AMOUNT, DATE, EXACT PLACE, AND TIME OF SAMPLING OR MEASUREMENTS;
B. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
C. THE DATE(S) ANALYSES WERE PERFORMED;
D. THE TIME(S) ANALYSES WERE INITIATED;
E. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
F. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED; AND
G. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS.
H. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU." AND
I. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. 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 LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. IF ELECTRONIC SUBMITTAL IS PROVIDED BY EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.

#32 RETENTION OF RECORDS

1. THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT THE DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:
   A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
   B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
   C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
   D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
   E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A OF THIS PERMIT;
   F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
   G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2) OF THIS PERMIT.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE..

#33 STORMWATER SAMPLING

SAMPLE ANALYSIS

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

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 75, THE VALUE THAT WAS SELECTED FROM APPENDIX B IN PERMIT NO. GAR 1000001. THE NTU IS BASED UPON THE DISTURBED ACREAGE OF 1.8 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF <1.0 SQUARE MILES, AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES.

SAMPLE TYPE

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

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

#34 SAMPLING POINTS AND NTU REQUIREMENTS

APPENDIX B
Nephelometric Turbidity Unity (NTU) TABLES

COLD WATER (Trout Stream)

		Surface Water Drainage Area, Square Miles							
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
SITE SIZE, ACRES	1.00-10	25	50	75	150	300	500	500	500
	10.01-25	25	25	50	75	150	200	500	500
	25.01-50	25	25	25	50	75	100	300	500
	50.01-100	20	25	25	35	59	75	150	300
	100.01+	20	20	25	25	25	50	60	100

WARM WATER (SUPPORTING WARM WATER FISHERIES)

		Surface Water Drainage Area, Square Miles							
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
SITE SIZE, ACRES	1.00-10	75	150	200	400	750	750	750	750
	10.01-25	50	100	100	200	300	500	750	750
	25.01-50	50	50	100	100	200	300	750	750
	50.01-100	50	50	50	100	100	150	300	600
	100.01+	50	50	50	50	50	100	200	100

39 & 40 ALTERNATIVE BMP'S

N/A - THERE ARE NO ALTERNATIVE BMP'S ASSOCIATED WITH THIS PROJECT.

41 & 42 WETLANDS, STATE WATERS, BUFFERS

FEMA FLOOD INSURANCE RATE MAP NO. 13149C0161D, DATED 04/19/2017 INDICATES THAT THIS PROPERTY IS LOCATED IN ZONE X.

#45 PEAK DISCHARGE FLOW

PEAK DISCHARGE PRIOR TO CONSTRUCTION: CN = 74.9
PEAK DISCHARGE AFTER CONSTRUCTION IS COMPLETE: CN = 89.7

#47 SOILS CHART

SOIL SERIES TABLE

MAPPING UNIT & SOIL NAME	SOIL TEXTURE	ERODIBILITY (K)	STRUCTURE	PERMEABILITY (IN/HR)
AmB - Appling sandy loam	Sandy loam	0.24	Granular	1.63
CfD2 - Cecil sandy clay loam	Sandy clay loam	0.37	Granular	1.28

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST - STAND ALONE CONSTRUCTION PROJECTS

SWCD: WEST GEORGIA SWCD

Project Name	HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS	BRIAN KIMSEY, P.E. - BRIAN@CARTERENGINEERING.COM	Filled Out By
Address	HIGHWAY 100	12.12.23	Date on Plans
City/County	HEARD COUNTY		

Sheet #	Included	TO BE SHOWN ON ES&PC PLAN
C 5.0		1. The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
C 5.0 - C 5.3		2. Level II certification number issued by the Commission, signature and seal of the certified design professional
NA		3. Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the GAEPD District Office. If GAEPD approves the request to disturb 50 acres or more at any one time, the Plan muat include at least 4 of the BMPs listed in Appendix 1 of this checklist and the GAEPD approval letter. *
C 5.0		4. The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls.
C 5.0		5. Provide the name, address, email address, and phone number of primary permittee.
C 5.0		6. Note total and disturbed acreages of the project or phase under construction.
C 5.0		7. Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.
ALL		8. Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
C 5.0		9. Description of the nature of construction activity and existing site conditions.
C 5.1 - C 5.3		10. Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
C 5.0		11. Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
C 5.0		12. Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 19 of the permit.
C 5.0		13. Design professional's certification statement and signature that the site was visited prior to development of the comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 19 of the permit.
C 5.0		14. Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." in accordance with Part IV.A.5 page 25 of the permit. *
C 5.0		15. Clearly note the statement that "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."
NA		16. Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
C 5.0		17. Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." *
C 5.0		18. Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." *
C 5.0		19. Clearly note statement that "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."
C 5.0		20. Clearly note statement that "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."
C 5.0		21. Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
C 5.0		22. Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of a Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. *
NA		23. If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. *
C 5.0		24. BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. *
C 5.0		25. Provide BMPs for the remediation of all petroleum spills and leaks.
C 5.0		26. Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. *
C 5.0		27. Description of practices to provide cover for building materials and building products on site. *
C 5.0		28. Description of the practices that will be used to reduce the pollutants in storm water discharges. *
C 5.1 - C 5.3		29. Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
C 5.0		30. Provide complete requirements of Inspections and record keeping by the primary permittee. *
C 5.0		31. Provide complete requirements of Sampling Frequency and Reporting of sampling results. *
C 5.0		32. Provide complete details for Retention of Records as per Part IV.F. of the permit. *
C 5.0		33. Description of analytical methods to be used to collect and analyze the samples from each location. *
C 5.0		34. Appendix B rationale for NTU values at all outfall sampling points where applicable. *
C 5.1 - C 5.3		35. Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged. *
C 5.1 - C 5.3		36. A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase. *
C 5.1 - C 5.3		37. Graphic scale and North arrow.
C 5.1 - C 5.3		38. Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: Map Scale: 1=100' or Larger Scale; Contour Intervals: 0.5 or 1; 1 or 2; 2, 5 or 10
NA		39. Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.georgia.gov.
NA		40. Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. *
NA		41. Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
NA		42. Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
HYDRO		43. Delineation and acreage of contributing drainage basins on the project site.
HYDRO		44. Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. *
C 5.0		45. An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
C 5.5		46. Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
C 5.1 - C 5.3		47. Soil series for the project site and their delineation.
C 5.1 - C 5.3		48. The limits of disturbance for each phase of construction.
C 5.1 - C 5.3		49. Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan.
C 5.1 - C 5.3		50. Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
C 5.5		51. Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.
C 5.5		52. Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of the year that seeding will take place and for the appropriate geographic region of Georgia.

* If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream, the * checklist items would be N/A.

Effective January 1, 2023

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED NO. 26703 PROFESSIONAL ENGINEER J. BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

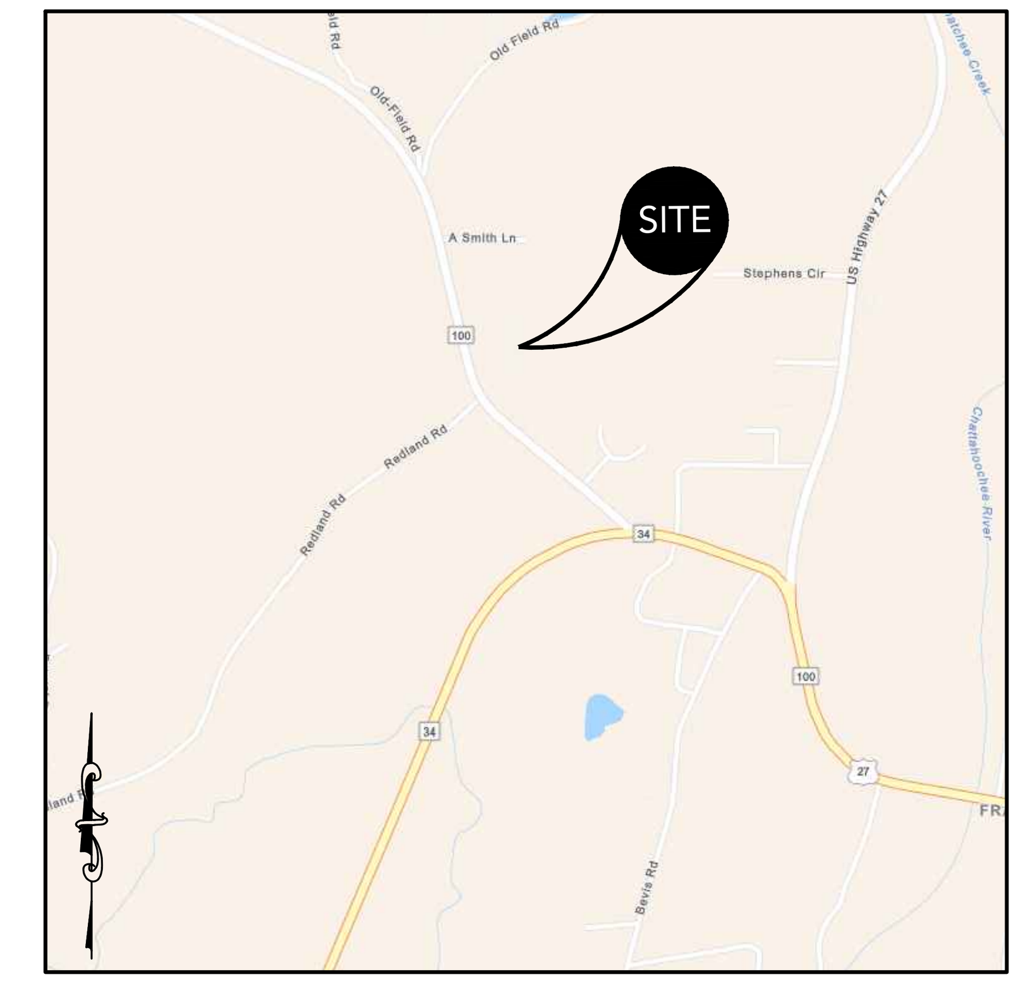
SHEET TITLE:
EROSION CONTROL NOTES

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.0

PROJECT NUMBER:
23002HCG

DATE:
12.12.23



LOCATION MAP
SCALE: N.T.S.

SOIL AND EROSION CONTROL NOTES	
DEVELOPER/OWNER	HEARD COUNTY BOARD OF COMMISSIONERS 201 PARK AVENUE FRANKLIN, GA 30217
24-HOUR CONTACT	FELICIA ADAMS 706-675-3821
PROJECT DESCRIPTION:	
THE PROJECT INCLUDES THE CONSTRUCTION AND INSTALLATION OF ADDITIONAL GOVERNMENT FACILITIES.	
EXISTING CONDITIONS:	
EXISTING LAND IS COMPRISED OF GOVERNMENT FACILITIES	
TOTAL TRACT:	25.33 AC
DISTURBED AREA:	1.8 AC

CRITICAL AREAS: THERE ARE NO CRITICAL AREAS ON SITE. ALL SLOPES STEEPER THAN 3:1 SHALL HAVE EROSION CONTROL MATTING INSTALLED. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

1. ADDITIONAL MEASURES WILL BE ADDED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES SHALL 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. PRACTICES WILL BE CHECKED DAILY.
4. STANDARD AND SPECIFICATIONS: ALL DESIGN WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE STATE APPROVED EROSION CONTROL DESIGN MANUAL.
5. THE CONTRACTOR SHALL OBSERVE THE PROJECT SCHEDULE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL TIME PERIODS.
6. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, AND/OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION AND NO LAND DISTURBANCE SHALL OCCUR OUTSIDE APPROVED LIMITS.
7. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH POINT OF ENTRY/EXIT FROM THE SITE ONTO ANY PUBLIC ROADWAY PRIOR TO ANY OTHER CONSTRUCTION.
8. AS INDICATED ON THE ACTIVITY SCHEDULE ON THE SHEET LABELED 'EROSION CONTROL NOTES', SEDIMENT CONTROLS AT THE PERIMETER AND THE CONSTRUCTION EXITS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTION OF THE SITE.
9. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
10. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, ALL ACCUMULATED SEDIMENT WILL BE REMOVED AND DISPOSED OF PROPERLY AND ALL PERIMETER SEDIMENT CONTROLS WILL BE REMOVED.
11. ALL DRAIN INLET PROTECTION DEVICES ARE TO BE REMOVED WITHIN 30 DAYS AFTER THE SITE HAS BEEN STABILIZED, OR WHEN INLET PROTECTION IS NO LONGER NEEDED. THE AREA AROUND THE INLET IS TO BE CLEANED AND RE-GRADED. IN ADDITION, THE INSIDE OF THE STORM DRAIN INLET MUST BE CLEARED AND BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF FINAL INSPECTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY BMPS.

THERE ARE STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THE RECEIVING WATERS OF THIS PROJECT ARE AN UNNAMED TRIBUTARY TO CENTRALHATCHEE CREEK AND FLOW ALONG THE EAST SIDE OF THE SITE.

THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

DESCRIPTION: Existing land is comprised of an existing fire station. The proposed project includes the construction of a new fire station.

CRITICAL AREAS: There are no critical areas on site. All slopes steeper than 3:1 shall have erosion control matting installed.

PROJECT AREA

PHASE 1 SEDIMENT STORAGE CALCULATIONS:

Drainage Area = 0.3 Ac
Disturbed area = 0.3 Ac
Required Sed. Storage = 0.3 Ac * 67 CY/Ac = 20.1CY

Sed. Storage Provided by the following BMPs (See notes for calculation formulas):

- Silt Fence Storage = Length of silt fence * 0.216 CY/LF = 1377.8 LF * 0.216 CY/LF = 297.6 CY

Total Volume of BMPs = 297.6 CY

NOTE:
CONSTRUCTION DISTURBED AREA SHOWN ON E&SC PLAN. ALL ADDITIONAL DISTURBED AREAS SHALL BE UP GRADIENT OF THE PROPOSED BMP'S. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL BMP'S THROUGHOUT CONSTRUCTION AND PREVENT SEDIMENT FROM MIGRATING DOWN GRADIENT AT ALL TIMES.

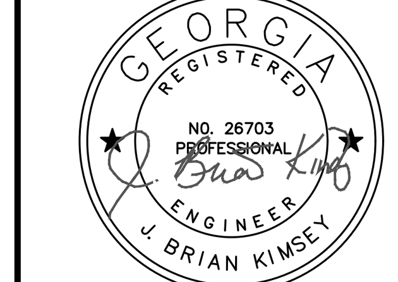
EROSION CONTROL LEGEND	
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Du	DUST CONTROL
Ss	SLOPE STABILIZATION
Co	CONSTRUCTION EXIT
Sd1-NS	SILT FENCE NON-SENSITIVE
St	RIPRAP OUTLET PROTECTION
Sd2-F	INLET PROTECTION (SILT FENCE)
Sd2-P	INLET PROTECTION (PIGS IN A BLANKET)
Sk	FLOATING SURFACE SKIMMER
Sd3	TEMPORARY SEDIMENT BASIN

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

20' 10' 0 20' 40' 60'
GRAPHIC SCALE
SCALE: 1" = 20'

REVISION BLOCK	
ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----



GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

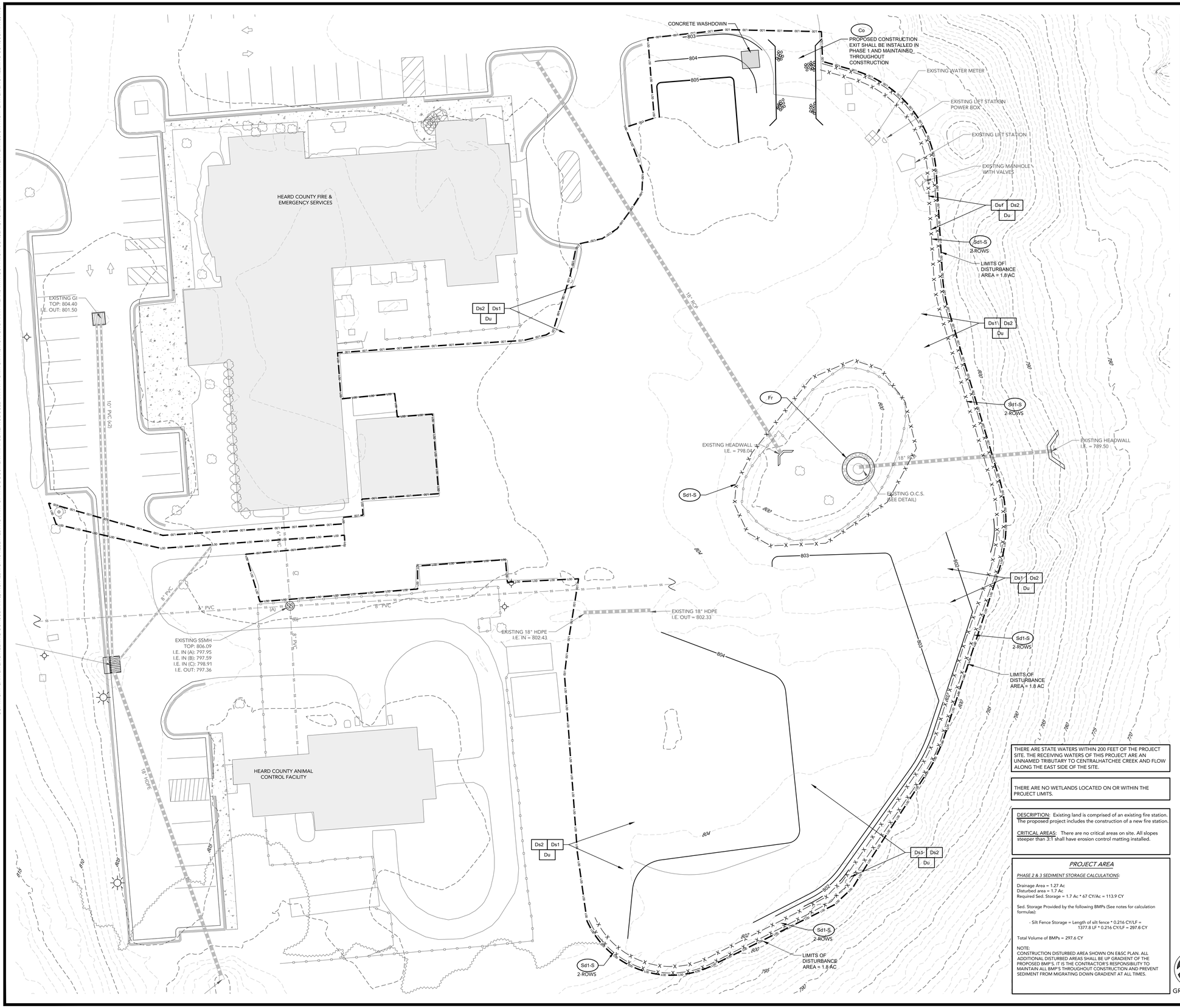
SHEET TITLE:
EROSION CONTROL PLAN PHASE 1

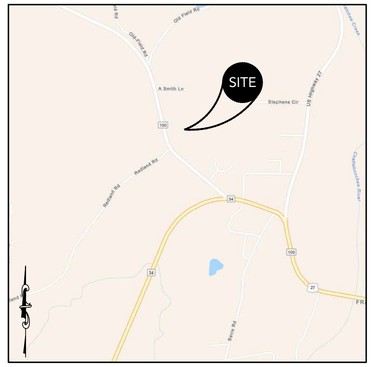
PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.1

PROJECT NUMBER:
23002HCG

DATE:
12.12.23





LOCATION MAP
SCALE: N.T.S.

SOIL AND EROSION CONTROL NOTES

DEVELOPER/OWNER	HEARD COUNTY BOARD OF COMMISSIONERS
	201 PARK AVENUE
	FRANKLIN, GA 30217
24-HOUR CONTACT	FELICIA ADAMS
	706-675-3821

PROJECT DESCRIPTION:

THE PROJECT INCLUDES THE CONSTRUCTION AND INSTALLATION OF ADDITIONAL GOVERNMENT FACILITIES.

EXISTING CONDITIONS:

EXISTING LAND IS COMPRISED OF GOVERNMENT FACILITIES

TOTAL TRACT:	25.33 AC
DISTURBED AREA:	1.8 AC

CRITICAL AREAS: THERE ARE NO CRITICAL AREAS ON SITE. ALL SLOPES STEEPER THAN 3:1 SHALL HAVE EROSION CONTROL MATTING INSTALLED. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

1	ADDITIONAL MEASURES WILL BE ADDED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
2	THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
3	EROSION CONTROL MEASURES SHALL 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. PRACTICES WILL BE CHECKED DAILY.
4	STANDARD AND SPECIFICATIONS: ALL DESIGN WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE STATE APPROVED EROSION CONTROL DESIGN MANUAL.
5	THE CONTRACTOR SHALL OBSERVE THE PROJECT SCHEDULE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL TIME PERIODS.
6	PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, AND/OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION AND NO LAND DISTURBANCE SHALL OCCUR OUTSIDE APPROVED LIMITS.
7	A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH POINT OF ENTRY/EXIT FROM THE SITE ONTO ANY PUBLIC ROADWAY PRIOR TO ANY OTHER CONSTRUCTION.
8	AS INDICATED ON THE ACTIVITY SCHEDULE ON THE SHEET LABELED 'EROSION CONTROL NOTES', SEDIMENT CONTROLS AT THE PERIMETER AND THE CONSTRUCTION EXITS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTION OF THE SITE.
9	ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
10	ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, ALL ACCUMULATED SEDIMENT WILL BE REMOVED AND DISPOSED OF PROPERLY AND ALL PERIMETER SEDIMENT CONTROLS WILL BE REMOVED.
11	ALL DRAIN INLET PROTECTION DEVICES ARE TO BE REMOVED WITHIN 30 DAYS AFTER THE SITE HAS BEEN STABILIZED, OR WHEN INLET PROTECTION IS NO LONGER NEEDED. THE AREA AROUND THE INLET IS TO BE CLEANED AND RE-GRADED. IN ADDITION, THE INSIDE OF THE STORM DRAIN INLET MUST BE CLEARED AND BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF FINAL INSPECTION.
12	THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY BMPS.

THERE ARE STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THE RECEIVING WATERS OF THIS PROJECT ARE AN UNNAMED TRIBUTARY TO CENTRALHATCHEE CREEK AND FLOW ALONG THE EAST SIDE OF THE SITE.

THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

DESCRIPTION: Existing land is comprised of an existing fire station. The proposed project includes the construction of a new fire station.

CRITICAL AREAS: There are no critical areas on site. All slopes steeper than 3:1 shall have erosion control matting installed.

PROJECT AREA

PHASE 2 & 3 SEDIMENT STORAGE CALCULATIONS:

Drainage Area = 1.27 Ac
Disturbed area = 1.7 Ac
Required Sed. Storage = 1.7 Ac * 67 CY/Ac = 113.9 CY

Sed. Storage Provided by the following BMPs (See notes for calculation formulas):

- Silt Fence Storage = Length of silt fence * 0.216 CY/LF = 1377.8 LF * 0.216 CY/LF = 297.6 CY

Total Volume of BMPs = 297.6 CY

NOTE:
CONSTRUCTION DISTURBED AREA SHOWN ON E&SC PLAN. ALL ADDITIONAL DISTURBED AREAS SHALL BE UP GRADIENT OF THE PROPOSED BMP'S. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL BMP'S THROUGHOUT CONSTRUCTION AND PREVENT SEDIMENT FROM MIGRATING DOWN GRADIENT AT ALL TIMES.

EROSION CONTROL LEGEND

Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Du	DUST CONTROL
Ss	SLOPE STABILIZATION
Co	CONSTRUCTION EXIT
Sd1-NS	SILT FENCE NON-SENSITIVE
St	RIPRAP OUTLET PROTECTION
Sd2-F	INLET PROTECTION (SILT FENCE)
Sd2-P	INLET PROTECTION (PIGS IN A BLANKET)
Sk	FLOATING SURFACE SKIMMER
Sd3	TEMPORARY SEDIMENT BASIN

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

20' 10' 0 20' 40' 60'
GRAPHIC SCALE
SCALE: 1" = 20'

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY

GSWCC Level II Certification
No. 000000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

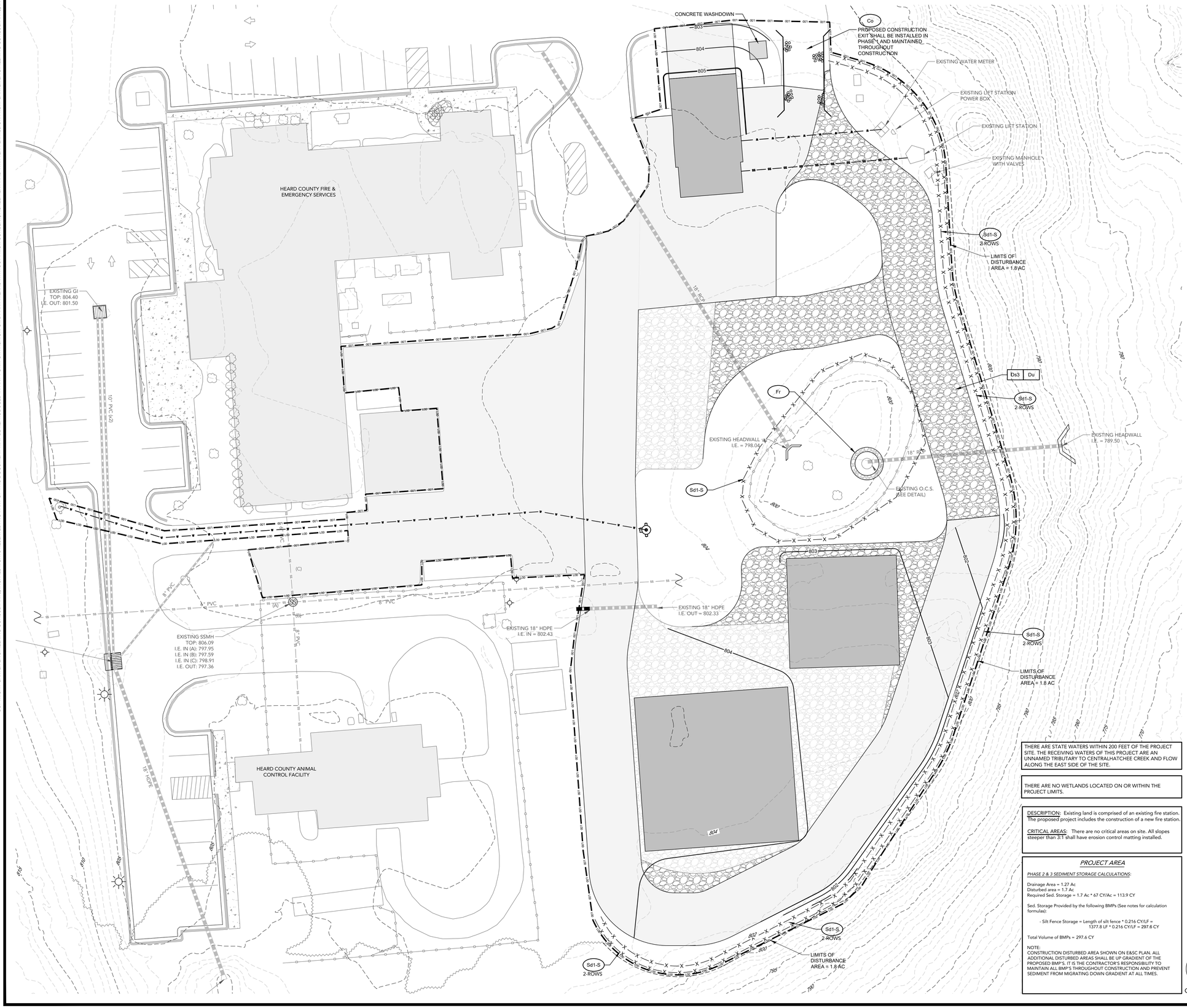
SHEET TITLE:
EROSION CONTROL PLAN PHASE 2

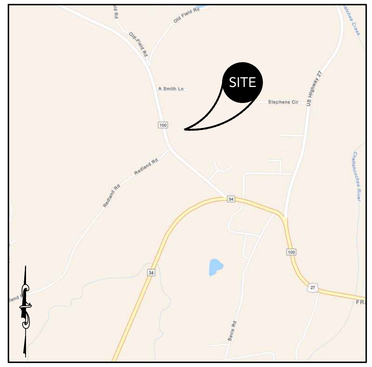
PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.2

PROJECT NUMBER:
23002HCG

DATE:
12.12.23





LOCATION MAP
SCALE: N.T.S.

SOIL AND EROSION CONTROL NOTES

DEVELOPER/OWNER	HEARD COUNTY BOARD OF COMMISSIONERS
	201 PARK AVENUE
	FRANKLIN, GA 30217
24-HOUR CONTACT	FELICIA ADAMS
	706-675-3821

PROJECT DESCRIPTION:

THE PROJECT INCLUDES THE CONSTRUCTION AND INSTALLATION OF ADDITIONAL GOVERNMENT FACILITIES.

EXISTING CONDITIONS:

EXISTING LAND IS COMPRISED OF GOVERNMENT FACILITIES

TOTAL TRACT:	25.33 AC
DISTURBED AREA:	1.8 AC

CRITICAL AREAS: THERE ARE NO CRITICAL AREAS ON SITE. ALL SLOPES STEEPER THAN 3:1 SHALL HAVE EROSION CONTROL MATTING INSTALLED. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

1. ADDITIONAL MEASURES WILL BE ADDED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES SHALL 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. PRACTICES WILL BE CHECKED DAILY.
4. STANDARD AND SPECIFICATIONS: ALL DESIGN WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE STATE APPROVED EROSION CONTROL DESIGN MANUAL.
5. THE CONTRACTOR SHALL OBSERVE THE PROJECT SCHEDULE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL TIME PERIODS.
6. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, AND/OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION AND NO LAND DISTURBANCE SHALL OCCUR OUTSIDE APPROVED LIMITS.
7. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH POINT OF ENTRY/EXIT FROM THE SITE ONTO ANY PUBLIC ROADWAY PRIOR TO ANY OTHER CONSTRUCTION.
8. AS INDICATED ON THE ACTIVITY SCHEDULE ON THE SHEET LABELED 'EROSION CONTROL NOTES', SEDIMENT CONTROLS AT THE PERIMETER AND THE CONSTRUCTION EXITS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTION OF THE SITE.
9. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
10. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, ALL ACCUMULATED SEDIMENT WILL BE REMOVED AND DISPOSED OF PROPERLY AND ALL PERIMETER SEDIMENT CONTROLS WILL BE REMOVED.
11. ALL DRAIN INLET PROTECTION DEVICES ARE TO BE REMOVED WITHIN 30 DAYS AFTER THE SITE HAS BEEN STABILIZED, OR WHEN INLET PROTECTION IS NO LONGER NEEDED. THE AREA AROUND THE INLET IS TO BE CLEANED AND RE-GRADED. IN ADDITION, THE INSIDE OF THE STORM DRAIN INLET MUST BE CLEARED AND BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF FINAL INSPECTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY BMPS.

THERE ARE STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THE RECEIVING WATERS OF THIS PROJECT ARE AN UNNAMED TRIBUTARY TO CENTRALHATCHEE CREEK AND FLOW ALONG THE EAST SIDE OF THE SITE.

THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

DESCRIPTION: Existing land is comprised of an existing fire station. The proposed project includes the construction of a new fire station.

CRITICAL AREAS: There are no critical areas on site. All slopes steeper than 3:1 shall have erosion control matting installed.

PROJECT AREA

PHASE 2 & 3 SEDIMENT STORAGE CALCULATIONS:

Drainage Area = 1.27 Ac
Disturbed area = 1.7 Ac
Required Sed. Storage = 1.7 Ac * 67 CY/Ac = 113.9 CY

Sed. Storage Provided by the following BMPs (See notes for calculation formulas):

- Silt Fence Storage = Length of silt fence * 0.216 CY/LF = 1377.8 LF * 0.216 CY/LF = 297.6 CY

Total Volume of BMPs = 297.6 CY

NOTE:
CONSTRUCTION DISTURBED AREA SHOWN ON E&SC PLAN. ALL ADDITIONAL DISTURBED AREAS SHALL BE UP GRADIENT OF THE PROPOSED BMP'S. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL BMP'S THROUGHOUT CONSTRUCTION AND PREVENT SEDIMENT FROM MIGRATING DOWN GRADIENT AT ALL TIMES.

EROSION CONTROL LEGEND

Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Du	DUST CONTROL
Ss	SLOPE STABILIZATION
Co	CONSTRUCTION EXIT
Sd1-NS	SILT FENCE NON-SENSITIVE
St	RIPRAP OUTLET PROTECTION
Sd2-F	INLET PROTECTION (SILT FENCE)
Sd2-P	INLET PROTECTION (PIGS IN A BLANKET)
Sk	FLOATING SURFACE SKIMMER
Sd3	TEMPORARY SEDIMENT BASIN

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

20' 10' 0 20' 40' 60'
GRAPHIC SCALE
SCALE: 1" = 20'

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY

GSWCC Level II Certification
No. 00000003007

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE:
EROSION CONTROL PLAN PHASE 3

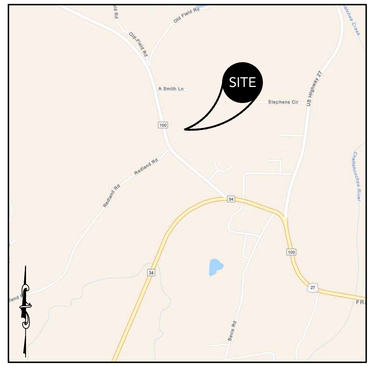
PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.3

PROJECT NUMBER:
23002HCG

DATE:
12.12.23

ENGINEER/DESIGNER NOT RESPONSIBLE FOR COST CHANGES DURING PRELIMINARY PHASE. BIDS & QUOTES SHALL BE BASED ON PLAN SETS LABELED "ISSUE FOR BID". BIDS & QUOTES SHALL BE REVISED BASED ON PLANS LABELED "ISSUE FOR CONSTRUCTION".



LOCATION MAP
SCALE: N.T.S.

SOIL AND EROSION CONTROL NOTES

DEVELOPER/OWNER	HEARD COUNTY BOARD OF COMMISSIONERS
	201 PARK AVENUE
	FRANKLIN, GA 30217
24-HOUR CONTACT	FELICIA ADAMS
	706-675-3821

PROJECT DESCRIPTION:

THE PROJECT INCLUDES THE CONSTRUCTION AND INSTALLATION OF ADDITIONAL GOVERNMENT FACILITIES.

EXISTING CONDITIONS:

EXISTING LAND IS COMPRISED OF GOVERNMENT FACILITIES

TOTAL TRACT:	25.33 AC
DISTURBED AREA:	1.8 AC

CRITICAL AREAS: THERE ARE NO CRITICAL AREAS ON SITE. ALL SLOPES STEEPER THAN 3:1 SHALL HAVE EROSION CONTROL MATTING INSTALLED. THERE ARE NO STATE WATERS WITHIN 200 FEET OF THE PROJECT SITE. THERE ARE NO WETLANDS LOCATED ON OR WITHIN THE PROJECT LIMITS.

1. ADDITIONAL MEASURES WILL BE ADDED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES SHALL 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. PRACTICES WILL BE CHECKED DAILY.
4. STANDARD AND SPECIFICATIONS: ALL DESIGN WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE STATE APPROVED EROSION CONTROL DESIGN MANUAL.
5. THE CONTRACTOR SHALL OBSERVE THE PROJECT SCHEDULE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO INSURE THAT LAND STRIPPED OF ITS NATURAL COVER IS EXPOSED ONLY IN SMALL TIME PERIODS.
6. PRIOR TO COMMENCING LAND DISTURBING ACTIVITY, THE LIMITS OF LAND DISTURBANCE AND ALL STREAM BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, AND/OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE ACTIVITY SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION AND NO LAND DISTURBANCE SHALL OCCUR OUTSIDE APPROVED LIMITS.
7. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH POINT OF ENTRY/EXIT FROM THE SITE ONTO ANY PUBLIC ROADWAY PRIOR TO ANY OTHER CONSTRUCTION.
8. AS INDICATED ON THE ACTIVITY SCHEDULE ON THE SHEET LABELED 'EROSION CONTROL NOTES', SEDIMENT CONTROLS AT THE PERIMETER AND THE CONSTRUCTION EXITS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTION OF THE SITE.
9. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
10. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, ALL ACCUMULATED SEDIMENT WILL BE REMOVED AND DISPOSED OF PROPERLY AND ALL PERIMETER SEDIMENT CONTROLS WILL BE REMOVED.
11. ALL DRAIN INLET PROTECTION DEVICES ARE TO BE REMOVED WITHIN 30 DAYS AFTER THE SITE HAS BEEN STABILIZED, OR WHEN INLET PROTECTION IS NO LONGER NEEDED. THE AREA AROUND THE INLET IS TO BE CLEANED AND RE-GRADED. IN ADDITION, THE INSIDE OF THE STORM DRAIN INLET MUST BE CLEARED AND BE FREE OF SEDIMENT AND DEBRIS AT THE TIME OF FINAL INSPECTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY BMPS.

SOIL SERIES TABLE

MAPPING UNIT & SOIL NAME	SOIL TEXTURE	ERODIBILITY (K)	STRUCTURE	PERMEABILITY (IN/HR)
AmB - Appling sandy loam	Sandy loam	0.24	Granular	1.63
CfD2 - Cecil sandy clay loam	Sandy clay loam	0.37	Granular	1.28

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

GRID NORTH

20' 10' 0 20' 40' 60'
GRAPHIC SCALE
SCALE: 1" = 20'

REVISION BLOCK		
ISSUE	REVISION DATE & DESCRIPTION	
1	12.12.23 - INITIAL SUBMITTAL	
2	02.02.24 - FOUNDATION PLAN ADDED	
3	----	
4	----	
5	----	
6	----	
7	----	
8	----	

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY

GSWCC Level II Certification
No. 00000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE:
SOILS MAP

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.4

PROJECT NUMBER:
23002HCG

DATE:
12.12.23

MULCHING RATES — Ds1

USE DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEEDS SEEDS. DRY STRAW OR HAY SHALL BE APPLIED AT THE RATE OF 2.5 TONS PER ACRE. MULCHING SHALL BE USED MULCH WILL BE SPREAD UNIFORMLY WITHIN 24-HOURS AFTER SEEDING. MULCH SHALL BE USED DURING MONTHS THAT GRASSING SOULD NOT BE APPLIED BASED ON THE SCHEDULE BELOW.

TEMPORARY AND PERMANENT VEGETATION SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 6 OF "THE MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA".

TEMPORARY GRASSING — Ds2

TEMPORARY GRASSES SHALL CONSIST OF SOWING A QUICK GRASS SUCH AS RYE, BROWN TOP MILLET, OR GRASS SUITABLE TO THE AREA AND SEASON. LIME AND FERTILIZER RATES PER SOILS TEST. MULCH IS NOT REQUIRED BUT SHOULD BE USED AS DICTATED BY SITE CONDITIONS. TEMPORARY GRASSING IS REQUIRED WHEN DISTURBED AREA IS LEFT EXPOSED MORE THAN 14 DAYS.

SPECIES	RATE	PLANTING DATES
BROWN MILLET	40#/ACRE	APRIL - JUNE
RYE	3 bu./ACRE	AUGUST-DECEMBER
WEEPING LOVEGRASS	5#/ACRE	FEBRUARY-JUNE
ANNUAL LESPEDEZA	40#/ACRE	FEBRUARY-APRIL
SUDAN GRASS	60#/ACRE	APRIL-AUGUST
WHEAT	3bu./ACRE	SEPTEMBER-DECEMBER

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 MATERIALS, 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 A DISK, RIPPER, OR CHISEL.

PERMANENT GRASSING — Ds3

PERMANENT GRASSING SHALL CONSIST OF GROUND PREPARATION, LIMING, FERTILIZATION, MULCHING AND SEEDING. THE GROUND SHALL BE PREPARED BY PLOWING AND DISKING TO A DEPTH NOT LESS THAN 4". FERTILIZER AND LIME SHALL BE UNIFORMLY MIXED INTO THE GROUND. WITH FERTILIZER AT THE RATE OF 1500#/ACRE AND LIME AT THE RATE OF 2000#/ACRE. THE GROUND SHALL BE FINISHED OFF SMOOTH AND UNIFORM AND BE FREE OF ROCKS, CLODS, ROOTS AND WEEDS. FERTILIZER SHALL BE APPLIED PER THE TABLE BELOW, WEATHER PERMITTING, SEEDING SHALL BE DONE WITHIN 24 HOURS OF FERTILIZER APPLICATION. SEED SHALL BE UNIFORMLY SPREAD AT THE RATES SHOWN BELOW. MULCHING IS REQUIRED AND SHALL BE DONE IMMEDIATELY AFTER SEEDING. MULCH SHALL BE UNIFORMLY APPLIED OVER SEEDED AREAS AND SHALL ACHIEVE 75% TO 100% SOIL COVER. THE RATE OF APPLICATION SHALL BE DOUBLED ON SLOPES STEEPER THAN 4:1.

GRASSING RATES AND SCHEDULE

SPECIES	RATE	PLANTING DATES
TALL FESCUE	50#/ACRE	MARCH-APRIL/ AUGUST-OCTOBER
SERICEA LESPEDEZA (b)	60#/ACRE	MARCH-JUNE
WEEPING LOVE GRASS	5#/ACRE	MARCH-JUNE
UNHULLED BERMUDA	10#/ACRE	JAN-FEBOCT-DEC
HULLED BERMUDA	10#/ACRE	MARCH-JUNE
BAHIA	60#/ACRE	APRIL-MARCH

(a) USE A MINIMUM OF 40# SCARIFIED SEED. REMAINDER MAY BE UNSCARIFIED, CLEAN HULLED SEED.
(b) USE EITHER COMMON SERALA, OR INTERSTATE SERICEA LESPEDEZA.

LIMING RATES

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.

FERTILIZER REQUIREMENTS

TYPES OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac/ 1/2/ 30
2. Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. 1/ - -
3. Ground Covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 3/ 1300 lbx./ac. 3/ 1100 lbx./ac.	- - -
4. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	- -
5. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 2/ 6/ 50-100 lbs./ac. 2/ 30 lbs./ac.
6. Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac. 6/

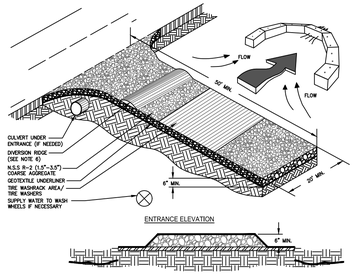
APPROVED TACKIFIERS AND BINDERS

PRODUCT OR TRADE NAME	RECOMMENDED APPLICATION RATE
Finn A500 HYDRO-STIK	40 lb./ac.
Agro Track MP	PMR
CONWED CON-TAC	40 lb./ac.
Eco Tak-OP/Eco Tak-SATII PMR	
Emulsified Asphalt	100 gal. of SS-1h or CSS-1h and 100 gal. of water per ton of mulch
Hercules Soiloc-E	PMR
HYDRO-BOND	35 lb/ac.
RMB-plus	80-120 lb./ac.
TACPAC GT	PMR
TERRA-MULCH	
TACKING AGENT III	PMR

Du

DUST CONTROL

EXIT DIAGRAM

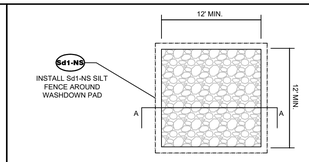


ENTRANCE ELEVATION

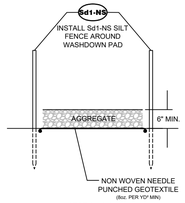
NOTES :
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD 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.

NOT TO SCALE

CRUSHED STONE CONSTRUCTION EXIT — **Co**



PLAN VIEW



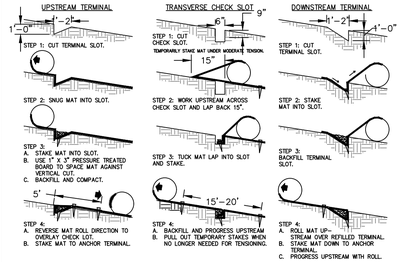
SECTION A-A

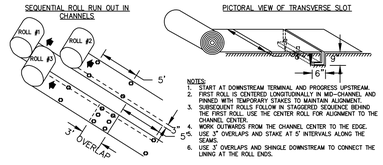
12'x12' CONCRETE WASHDOWN AREA GRAVEL PAD
1. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
2. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
3. INSTALL SILT FENCE AS SHOWN
4. REMOVE CONCRETE AND GRAVEL AFTER CONSTRUCTION IS COMPLETE AND STABILIZE AREA IN ACCORDANCE WITH Ds3 BMP SHOWN ON EROSION CONTROL DETAIL SHEET.

NOT TO SCALE

CONCRETE WASHDOWN AREA DETAIL

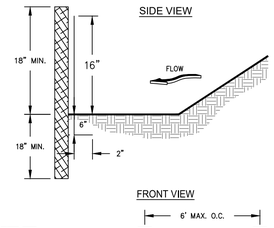
BLANKET AND MATTING CROSS-SECTIONS





NOT TO SCALE

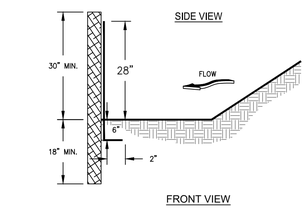
TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP) — **Ss**



NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

NOT TO SCALE

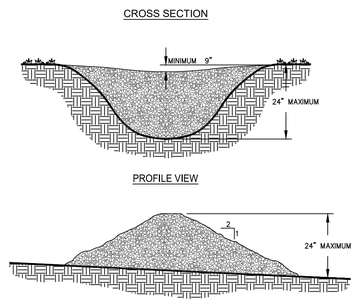
SILT FENCE TYPE- NON SENSITIVE — **Sd1-NS**



NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

NOT TO SCALE

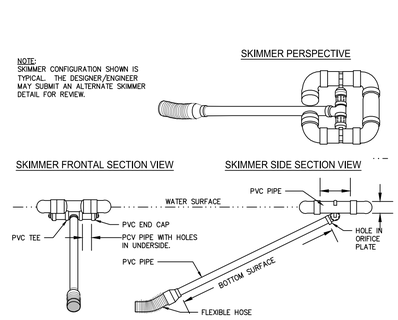
SILT FENCE-TYPE SENSITIVE — **Sd1-S**



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).

NOT TO SCALE

STONE CHECK DAM — **Cd-S**



NOT TO SCALE

FLOATING SURFACE SKIMMER — **Sk**

REVISION BLOCK		
ISSUE	REVISION DATE & DESCRIPTION	
1	12.12.23 - INITIAL SUBMITTAL	
2	02.02.24 - FOUNDATION PLAN ADDED	
3	----	
4	----	
5	----	
6	----	
7	----	
8	----	

GEORGIA REGISTERED PROFESSIONAL ENGINEER J. BRIAN KIMSEY NO. 26703

GSWCC Level II Certification No. 00000003007

CARTER ENGINEERING
CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

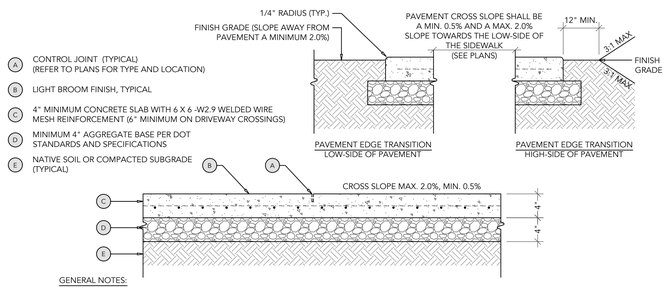
SHEET TITLE:
EROSION CONTROL DETAILS

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 5.5

PROJECT NUMBER:
23002HCG

DATE:
12.12.23

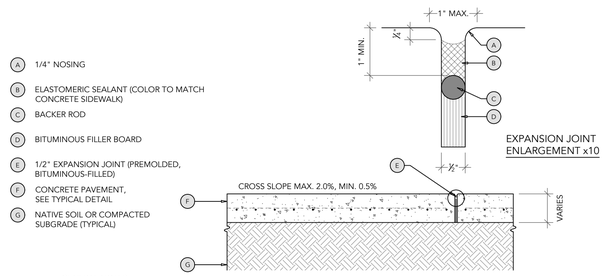


GENERAL NOTES:

1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH (PSI).
2. SET REINFORCEMENT 1.5" TO 2" FROM SURFACE OF PAVING. WWM SHALL MAINTAIN 1.5" CLEARANCE FROM CONTRACTION JOINTS.
3. AGGREGATE MATERIAL USED AS BASE COURSE MUST COMPLY WITH THE GRADATION REQUIREMENTS ESTABLISHED BY THE STATE DEPARTMENT OF TRANSPORTATION. AGGREGATE MATERIAL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.
4. REFER TO GEOTECHNICAL REPORT (AS PROVIDED) FOR FURTHER DETAILS. GEOTECHNICAL REPORT TAKES PRECEDENT OVER DETAILS HEREIN.
5. DEPTH OF ANY SAW CUT CONTRACTION JOINTS SHALL BE 1/2" IF CUT WITHIN 6 HOURS OF POUR. IF SAW CUTTING OCCURS AFTER 6 HOURS OF CONCRETE POUR, THE JOINT DEPTH SHALL BE 1/4 THE CONCRETE THICKNESS.
6. ALL JOINTS TO BE PERPENDICULAR WITH PAVEMENT EDGE. WHERE CURVED, ALL JOINTS TO RADIATE AND BE ALIGNED WITH CENTER POINT.
7. "CURE AND SEAL", OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.
8. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
9. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.
10. OVER CAULKED AND/OR MESSY JOINTS WILL REQUIRE REMOVAL AND REPAIR AT NO EXTRA COST TO CLIENT/OWNER.
11. FORE ASPHALT INSTALLATIONS, THE SUBGRADE AND THE GRADED AGGREGATE BASE COURSE MUST BE PROOF ROLLED BY AN INSPECTOR PRIOR TO INSTALLATION. INSPECTOR MAY REQUIRE FURTHER TESTING IF NECESSARY.
12. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
13. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.

1 STANDARD DUTY CONCRETE PAVEMENT (TYPICAL)

NTS

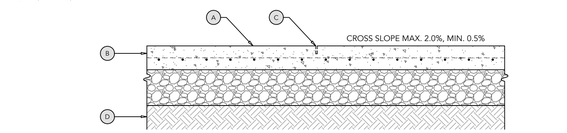


GENERAL NOTES:

1. CAULK EXPANSION JOINT WITH ELASTOMERIC SEALANT (COLOR TO MATCH ADJACENT CONCRETE COLOR).
2. EXPANSION JOINTS SHALL BE HAVE A MAXIMUM 20' SPACING.
3. MAXIMUM WIDTH OF JOINT SEALANT SHALL BE ½" AS DETAILED. EXCESS SEALANT SHALL NOT EXTEND BEYOND WIDTH OF JOINT OR ON TO JOINT NOSING. HOLD SEALANT DOWN ½" AS SHOWN.
4. CLEAN ALL EXCESS SEALANT FROM CONCRETE SURFACE.
5. DEPTH OF ANY SAW CUT CONTRACTION JOINTS SHALL BE 1/2" IF CUT WITHIN 6 HOURS OF POUR. IF SAW CUTTING OCCURS AFTER 6 HOURS OF CONCRETE POUR, THE JOINT DEPTH SHALL BE 1/4 THE CONCRETE THICKNESS.
6. 'CURE AND SEAL', OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.
7. OVER CAULKED AND/OR MESSY JOINTS WILL REQUIRE REMOVAL AND REPAIR AT NO EXTRA COST TO CLIENT/OWNER.

2 EXPANSION JOINT (TYPICAL)

NTS

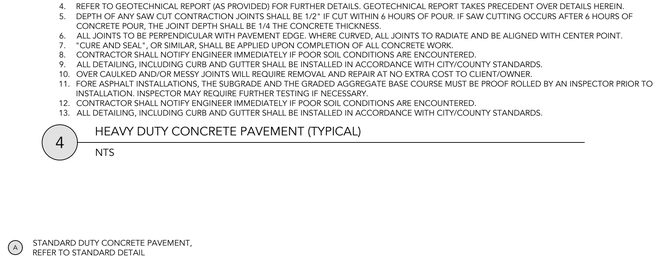


GENERAL NOTES:

1. DEPTH OF ANY SAW CUT CONTRACTION JOINTS SHALL BE 1/2" IF CUT WITHIN 6 HOURS OF POUR. IF SAW CUTTING OCCURS AFTER 6 HOURS OF CONCRETE POUR, THE JOINT DEPTH SHALL BE 1/3 THE CONCRETE THICKNESS.
2. ALL JOINTS ARE TO BE PERPENDICULAR WITH EDGES OF PAVEMENT. WHERE PAVEMENT IS CURVED, ALL JOINTS ARE TO RADIATE AND BE ALIGNED WITH CENTER POINT.
3. "CURE AND SEAL", OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.
4. OVER CAULKED AND/OR MESSY JOINTS WILL REQUIRE REMOVAL AND REPAIR AT NO EXTRA COST TO CLIENT/OWNER.

3 CONTROL JOINT - SAW CUT OR TOOLED

NTS

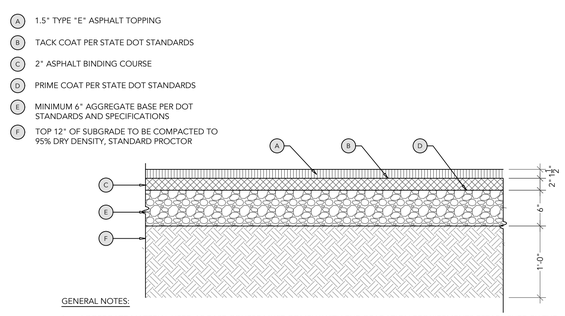


GENERAL NOTES:

1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH (PSI).
2. SET REINFORCEMENT 1.5" TO 2" FROM SURFACE OF PAVING. WWM SHALL MAINTAIN 1.5" CLEARANCE FROM CONTRACTION JOINTS.
3. AGGREGATE MATERIAL USED AS BASE COURSE MUST COMPLY WITH THE GRADATION REQUIREMENTS ESTABLISHED BY THE STATE DEPARTMENT OF TRANSPORTATION. AGGREGATE MATERIAL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.
4. REFER TO GEOTECHNICAL REPORT (AS PROVIDED) FOR FURTHER DETAILS. GEOTECHNICAL REPORT TAKES PRECEDENT OVER DETAILS HEREIN.
5. DEPTH OF ANY SAW CUT CONTRACTION JOINTS SHALL BE 1/2" IF CUT WITHIN 6 HOURS OF POUR. IF SAW CUTTING OCCURS AFTER 6 HOURS OF CONCRETE POUR, THE JOINT DEPTH SHALL BE 1/4 THE CONCRETE THICKNESS.
6. ALL JOINTS TO BE PERPENDICULAR WITH PAVEMENT EDGE. WHERE CURVED, ALL JOINTS TO RADIATE AND BE ALIGNED WITH CENTER POINT.
7. "CURE AND SEAL", OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.
8. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
9. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.
10. OVER CAULKED AND/OR MESSY JOINTS WILL REQUIRE REMOVAL AND REPAIR AT NO EXTRA COST TO CLIENT/OWNER.
11. FORE ASPHALT INSTALLATIONS, THE SUBGRADE AND THE GRADED AGGREGATE BASE COURSE MUST BE PROOF ROLLED BY AN INSPECTOR PRIOR TO INSTALLATION. INSPECTOR MAY REQUIRE FURTHER TESTING IF NECESSARY.
12. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
13. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.

4 HEAVY DUTY CONCRETE PAVEMENT (TYPICAL)

NTS

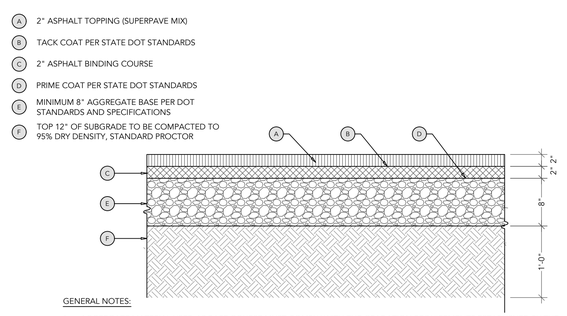


GENERAL NOTES:

1. AGGREGATE MATERIAL USED AS BASE COURSE MUST COMPLY WITH THE GRADATION REQUIREMENTS ESTABLISHED BY THE STATE DEPARTMENT OF TRANSPORTATION. AGGREGATE MATERIAL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.
2. REFER TO GEOTECHNICAL REPORT (AS PROVIDED) FOR FURTHER DETAILS. GEOTECHNICAL REPORT TAKES PRECEDENT OVER DETAILS LISTED WITHIN THIS SET.
3. THE SUBGRADE AND THE GRADED AGGREGATE BASE COURSE MUST BE PROOF ROLLED BY AN INSPECTOR PRIOR TO INSTALLATION OF ASPHALT. INSPECTOR MAY REQUIRE FURTHER TESTING IF NECESSARY.
4. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
5. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.

5 STANDARD DUTY ASPHALT PAVEMENT (TYPICAL)

NTS

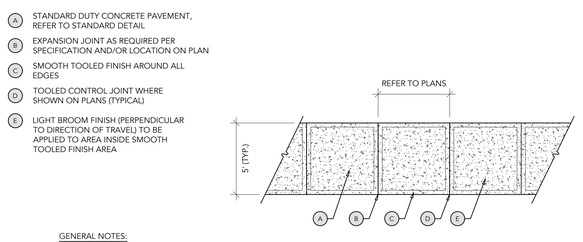


GENERAL NOTES:

1. AGGREGATE MATERIAL USED AS BASE COURSE MUST COMPLY WITH THE GRADATION REQUIREMENTS ESTABLISHED BY THE STATE DEPARTMENT OF TRANSPORTATION. AGGREGATE MATERIAL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.
2. REFER TO GEOTECHNICAL REPORT (AS PROVIDED) FOR FURTHER DETAILS. GEOTECHNICAL REPORT TAKES PRECEDENT OVER DETAILS LISTED WITHIN THIS SET.
3. THE SUBGRADE AND THE GRADED AGGREGATE BASE COURSE MUST BE PROOF ROLLED BY AN INSPECTOR PRIOR TO INSTALLATION OF ASPHALT. INSPECTOR MAY REQUIRE FURTHER TESTING IF NECESSARY.
4. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF POOR SOIL CONDITIONS ARE ENCOUNTERED.
5. ALL DETAILING, INCLUDING CURB AND GUTTER SHALL BE INSTALLED IN ACCORDANCE WITH CITY/COUNTY STANDARDS.

6 HEAVY DUTY ASPHALT PAVEMENT (TYPICAL)

NTS

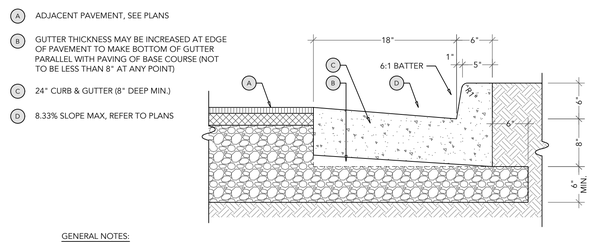


GENERAL NOTES:

1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH (PSI).
2. CONTROL JOINTS ARE AT 5'-0" O.C. TOOLED 1/2" WIDE WITH 1/2" RADIUS. JOINTS ARE 1" DEEP OR ¼ DEPTH OF SLAB (WHICHEVER IS GREATER)
3. EXPANSION JOINTS SHALL HAVE A MAXIMUM 20' SPACING (REFER TO DETAIL).
4. CONCRETE TO BE REINFORCED AS NECESSARY (REFER TO GEOTECHNICAL REPORT FOR FURTHER DETAIL)
5. SIDEWALK SHALL HAVE A MAXIMUM CROSS SLOPE OF 2%.
6. A SMOOTH TOOLED FINISH SHALL BE APPLIED TO THE THE EDGES (AS SHOWN) WHILE THE INNER SQUARE SHALL HAVE A LIGHT BROOM FINISH TO CREATE PICTURE FRAME EFFECT.
7. "CURE AND SEAL", OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.

7 TYPICAL CONCRETE SIDEWALK WITH TOOLED JOINTS

NTS

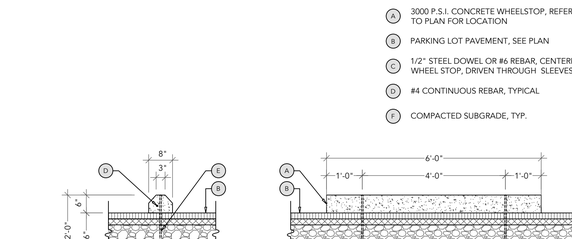


GENERAL NOTES:

1. MINIMUM DESIGN STANDARDS SHALL MEET STATE DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS AND DETAILS AND SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODE, REGULATIONS AND ORDINANCES.
2. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH (PSI).
3. 1/2" EXPANSION JOINTS OR PREMOLDED BITUMINOUS EXPANSION JOINT MATERIAL SHALL BE PROVIDED AT ALL STRUCTURES AND RADIUS POINTS AND AT INTERVALS NOT TO EXCEED 50' SPACING (REFER TO DETAIL).
4. CONSTRUCTION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 10' SPACING.
5. CONCRETE TO BE REINFORCED AS NECESSARY (REFER TO GEOTECHNICAL REPORT FOR FURTHER DETAIL)
6. AGGREGATE BASE COURSE MATERIAL MUST COMPLY WITH THE GRADATION REQUIREMENTS ESTABLISHED BY THE DOT. AGGREGATE MATERIAL SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.
7. AGGREGATE BASE SHALL EXTEND BEYOND THE BACK OF CURB A MINIMUM OF 6".
8. "CURE AND SEAL", OR SIMILAR, SHALL BE APPLIED UPON COMPLETION OF ALL CONCRETE WORK.
9. GUTTER THICKNESS MAY BE INCREASED TO MATCH PAVING COURSE AS NEEDED. GUTTER SHALL BE SUPER ELEVATED IN AREAS WHERE STORMWATER IS INTENDED TO DRAIN AWAY FROM THE CURB (REFER TO PLANS).
10. PROVIDE 45° MITERED CONTROL JOINT AT 90° CORNERS.
11. TOOLED CONTROL JOINTS SHALL BE PLACED OVER ALL SLEEVES AND EXTEND DOWN THE FACE OF THE CURB TO THE SLEEVE OPENING.

8 CURB & GUTTER - TYPICAL

NTS



GENERAL NOTES:

1. CONTRACTOR SHALL CAULK ALL DOWEL OPENINGS, COLOR TO MATCH WHEEL STOP MATERIAL. HOLES SHALL BE FILLED WITH NON-SHRINKAGE CEMENTITIOUS GROUT.
2. PLACE WHEELSTOPS PER PLAN AND CENTERED WITHIN PARKING SPACE STRIPING AS SHOWN.
3. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURUER'S RECOMMENDATIONS AND SPECIFICATIONS.

9 CONCRETE WHEELSTOP - 6' - TYPICAL

NTS

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED NO. 26703 PROFESSIONAL ENGINEER J. BRIAN KIMSEY

GSWCC Level II Certification No. 00000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE: STANDARD DETAILS

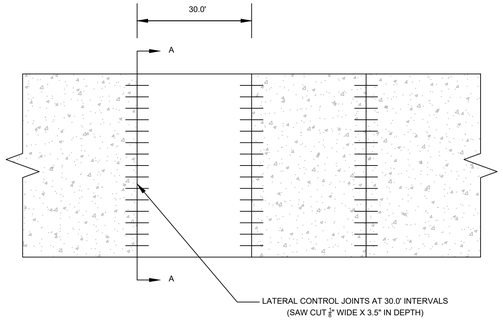
PROJECT NAME: HEARD COUNTY

SHEET NUMBER: C 6.0

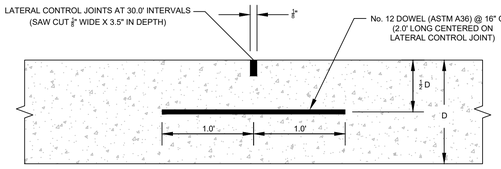
PROJECT NUMBER: 23002HCG

DATE: 12.12.23

ENGINEER/DESIGNER NOT RESPONSIBLE FOR COST CHANGES DURING PRELIMINARY PHASE. BIDS & QUOTES SHALL BE BASED ON PLAN SETS LABELED "ISSUE FOR BID". BIDS & QUOTES SHALL BE REVISED BASED ON PLANS LABELED "ISSUE FOR CONSTRUCTION".

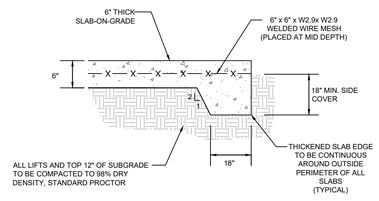


STANDARD JOINT LAYOUT
NOT TO SCALE



SECTION A-A
NOT TO SCALE

CONCRETE SLAB LATERAL CONTROL JOINT DETAIL



CONCRETE SLAB-ON-GRADE /
THICKENED SLAB EDGE DETAIL

N.T.S

SPECIFICATIONS:

1. SUBGRADE
   a. WILL BE COMPACTED TO 98% OF STANDARD PROCTOR DENSITY
   i. PROOF ROLL TEST WILL BE PERFORMED USING A FULLY LOADED TANDEM AXEL DUMP TRUCK
   ii. TESTING AND COMPACTION IS TO BE PERFORMED BY CONTRACTOR
   c. ANY AREA FOUND UNABLE TO MEET THIS WITH REASONABLE EFFORT WILL BE UNDERCUT AND REPLACED WITH ACCEPTABLE MATERIAL.
   i. MATERIAL WILL BE COMPACTED TO 98% OF STANDARD PROCTOR DENSITY AND CAPABLE OF SUPPORTING A 3,000 PSF SUPERIMPOSED LOAD
   ii. THE COST FOR REMOVAL AND REPLACEMENT OF SUBGRADE MATERIAL IS NOT TO BE INCLUDED. THIS WILL BE AT HUBER'S EXPENSE IF NEEDED. PROVIDE LABOR AND EQUIPMENT RATES FOR THIS TYPE OF WORK WITH THE BID.
2. GEOTEXTILE
   a. WOVEN POLYPROPYLENE GEOTEXTILE WILL BE INSTALLED ON SUBGRADE
   b. SHALL MEET AASHTO M288
3. REBAR
   a. SHALL BE #5 WITH TWO LAYERS AT 16" ON CENTERS (BOTH DIRECTIONS, T&B)
   b. REBAR WILL TIED AT ALL INTERSECTIONS
   c. THE MAIN GRID SHALL BE A MINIMUM OF 2" FROM SURFACE (T&B) AND A MAXIMUM OF 4" FROM SURFACE (T&B)
   d. ALL REBAR SHALL BE ENCAPSULATED WITHIN CONCRETE. REBAR WILL NOT TOUCH THE GROUND OR BE EXPOSED.
4. CONCRETE
   a. CONCRETE FOR THE NEW SLAB SHALL BE 4000 PSI AT 28-DAYS WITH A MAXIMUM WATER/CEMENTICIOUS MATERIAL RATIO OF 0.45 BY WEIGHT. TWENTY PERCENT OF THE CEMENTICIOUS MATERIAL SHALL BE FLY ASH MEETING THE REQUIREMENTS OF ASTM C 618 CLASS C OR F. THE CONCRETE SHALL BE AIR ENTRAINED TO PROVIDE BETWEEN 3 AND 6 PERCENT ENTRAINED AIR. SLUMP RANGE SHALL BE 3-5 INCHES. LESS SLUMP MAY BE REQUIRED IF SLAB IS SLIPFORMED.
   b. SCREED TOP OF CONCRETE SLAB TO WITHIN 1/8 INCH IN 10 FEET TOLERANCE. APPLY MEDIUM BROOM FINISH PERPENDICULAR TO TRAVEL DIRECTION AS SOON AS CONCRETE HAS BEGUN TO SET. MAKE ONE SET OF FIVE TEST CYLINDERS FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED.
   c. AFTER BROOM FINISH HAS BEEN APPLIED, APPLY CURING COMPOUND COMPLYING WITH ANSI/ASTM C 309 TYPE I, CLASS A WITH MOISTURE LOSS NOT MORE THAN 0.055 gr./sq.cm. WHEN APPLIED AT A RATE OF 200 sf./gal.
   d. LATERAL CONTROL JOINTS SHALL BE SAW CUT INTO THE TOP OF THE SLAB AT 300 FOOT INTERVALS WITHIN 12 HOURS OF PLACEMENT. SAW CUTS SHALL BE 1/8 INCH WIDE AND 3-1/2 INCHES DEEP.
   e. AFTER SAW CUTS HAVE BEEN MADE, FILL SAW CUTS WITH A POLYURETHANE SELF-LEVELING JOINT SEALANT.
   f. HEAVY LOADS SHALL NOT BE ALLOWED ON THE SLAB UNTIL THE CONCRETE HAS REACH FULL 28-DAY DESIGN STRENGTH.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE, WITH ALL GEORGIA AMENDMENTS. REFERENCE TO OTHER STANDARD SPECIFICATIONS OR CODES SHALL MEAN THE DATE OF THE PUBLICATION LISTED IN THE REFERENCE SECTION OF THE 2006 INTERNATIONAL BUILDING CODE U.N.O.
2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 350-06, ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
4. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE STARTING WORK. NOTIFY CIVIL ENGINEER OF ANY DISCREPANCY.
5. NOTIFY THE ENGINEER OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY, AND SAFETY OF ANY NECESSARY ERECTION BRACING, SHORING, OR TEMPORARY SUPPORTS REQUIRED TO SUIT THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION.

STRUCTURAL NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI REG. WT. WITH A MAX. W/C RATIO OF 0.45, AIR ENTRAINMENT OF 3-6 PERCENT, AND A SLUMP RANGE OF 3" TO 5". SUBMIT CONCRETE MIX DESIGN FOR THE ENGINEER'S APPROVAL.
2. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".
3. CONCRETE COVER PROTECTION FOR REINFORCEMENT SHALL BE AS FOLLOWS:
   CONCRETE CAST AGAINST EARTH: 3 INCHES
   FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
   #5 BARS AND SMALLER: 2 INCHES
   #6 BARS AND LARGER: 2 INCHES
4. LAP ALL BARS IN ACCORDANCE WITH THE LAP SPLICE SCHEDULE, UNLESS SHOWN OTHERWISE. LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI STANDARDS CLASS B UNLESS OTHERWISE NOTED BY EOR.
5. EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4 INCH, 45 DEGREE CHAMFER UNLESS SHOWN OTHERWISE.
6. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60 AND BE FREE OF RUST SCALE OR ANY FOREIGN MATERIOR PRIOR TO INSTALLATION.
7. CONCRETE SLAB AND FOUNDATION SHALL BE +/- 1/8" OF FINISH GRADE.

LAP SPLICE SCHEDULE

LOCATION	BAR SIZE								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
HORIZONTAL BARS	16"	19"	24"	29"	42"	48"	60"	74"	88"
VERTICAL BARS	16"	16"	18"	22"	32"	37"	46"	57"	68"

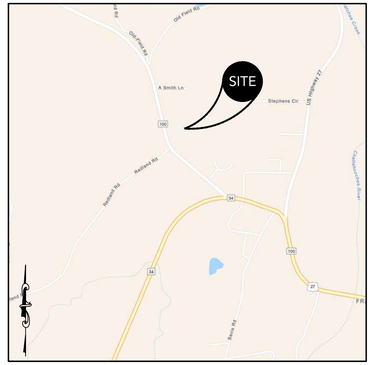
NOTES:
1. LAP SPLICES ARE BASED ON 4000 PSI REG. WT. CONCRETE, MIN. BAR SPACING OF 8", AND MIN. COVER OF 2".

STRUCTURAL NOTES CONTINUED:

15. FACTORS OF SAFETY:
    F.S. OF SLIDING = 1.5
    F.S. OF OVERTURNING = 1.5
    F.S. OF BEARING CAPACITY = 2.0
    RETAINING WALL DESIGN DOES NOT ACCOUNT FOR THE GLOBAL STABILITY OF THE DAM.
16. RETAINING WALL PARAMETRS:
    EFFECTIVE FRICTION ANGLE = 28°
    COEFFICIENT OF FRICTION = 0.35
    UNIT WEIGHT OF SOIL = 120 PCF
    BEARING CAPACITY OF SOIL = 2,500 PSF
    SURCHARGE = 250 PSF
17. VERIFICATION OF WALL LOCATION MUST BE DONE BY THE ENGINEER OF RECORD AS WELL AS THE ON SITE GEOTECHNICAL ENGINEER FARMILIAR WITH CAST-IN-PLACE STRUCTURES. EOR MUST PERFORM DAILY SITE VISITS.

STRUCTURAL NOTES CONTINUED:

1. ALL STRUCTURAL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICA CONCRETE INSTITUTE 301-10 STANDARDISPECIFICATIONS FOR STRUCTURAL CONCRETE, AMERICAN CONCRETE INSTITUTE 318-11, AND INTERNATIONAL BUILDING CODE 2012.
2. ALL STRUCTURAL CONCRETE SHALL BE F'c = 4000 PSI
3. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A992
4. CAST IN PLACE ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 36
5. MATERIAL:
   ALL SUPERSTRUCTURE STEEL SHALL BE ASTM A709, GRADE 50 (A572), UNLESS NOTED OTHERWISE. ALL STEEL GALVANIZED AFTER FABRICATION. ALL FASTENERS, UNLESS NOTED OTHERWISE SHALL BE HIGH STRENGTH BOLTS, ASTM A325 TYPE 1 (GALV) WITH ASTM A563 GRADE DH OR HD3 NUT AND ONE F436 WASHER PER BOLT. FASTENERS SHALL BE FURNISHED WITH ROTATIONAL CAPACITY TEST.
6. WELDING:
   ALL WELDING SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5 BRIDGE WELDING CODE AND THE AASHTO FRACTURE CONTROL, WHERE APPLICABLE.
   NON-DESTRUCTIVE TESTES OF ALL WELDS SHALL BE PERFORMED AS FOLLOWS:
   FILLET WELDS - VISUAL INSPECTION - 100%
   FILLET WELDS - MAGNETIC PARTICLE TESTING - 10% MIN PER AWS D1.5
7. ANCHOR BOLTS:
   THE ANCHOR BOLTS SHALL BE EITHER CAST-IN-PLACE DURING THE ABUTMENT CONSTRUCTION OR DRILLED AND ANCHORED TO THE ABUTMENTS PRIOR TO THE BRIDGE BEING ERECTED. IF DRILLED AND ANCHORED, THE AMBIENT TEMPERATURE OF AIR AND SUBSTRUCTURE MUST BE ABOVE 35° F AND BELOW 110° F. THE ANCHOR BOLTS SHALL BE ANCHORED USING ULTRABOND 1300 HIGH STRENGTH STRUCTURAL EPOXY OR EQUAL. THE EPOXY ADHESIVE SHALL BE MIXED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ULTRABOND IS A PRODUCT OF ADHESIVES TECHNOLOGY CORP., 450 EAST COPANS ROAD, POMPANO BEACH, FL 33064, PHONE: 800-892-1880. THE STRUCTURAL EPOXY IS FURTHER DESCRIBED AS A TWO COMPONENT 1:1 RATIO, 100% SOLIDS, HIGH MODULUS, SOLVENT FREE, MOISTURE INSENSITIVE, AND NON-SAG. MEETS ASTM C881-90, TYPE I, II, IV, V GRADE 3, CLASS A, B AND C, AASHTO M235
8. PROFILE GRADE:
   SLOPE IS ASSUMED TO BE 0%. MEMBERS AND BEARING PLATES ARE FABRICATED TO FIT UP ACCURATELY UP TO A GRADE OF 1.5%. IF PROFILE GRADE EXCEEDS 1.5%, THE FABRICATOR SHALL BE NOTIFIED.
9. GEOTECHNICAL ENGINEER SHALL APPROVE THE SOIL BEARING CAPACITY.
10. ON SITE GEOTECHNICAL ENGINEER SHALL APPROVE THE EXCAVATION FOR THE WALL AND MEET OSHA STANDARDS BEFORE THE START OF CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE COMPLIANCE WITH OSHA REGULATIONS.
12. AN INDEPENDENT TESTING AGENCY SHALL INSPECT AND APPROVE THE BEARING MATERIALS AND APPROVE THE SUITABILTY OF THE MATERIAL.
13. BACKFILL REQUIREMENTS: PLACEMENT IN 8-INCH LIFTS AT 95% STANDARD PROCTOR COMPACTION
14. ALL CONTROL JOINTS SHOULD BE INSTALLED WITH CAMFER EDGES AT 25 FT INTERVALS MINIMUM.



LOCATION MAP
SCALE: N.T.S.

PROJECT INFORMATION

DRAWING SET PREPARED BY:	OWNER/DEVELOPER:
CARTER ENGINEERING CONSULTANTS, INC.	HEARD COUNTY BOARD OF COMMISSIONERS
1010 COMMERCE DRIVE	201 PARK AVENUE
BOGART, GA 30622	FRANKLIN, GA 30217
CONTACT: BRIAN KIMSEY, P.E.	CONTACT: FELICIA ADAMS
PHONE: 770.725.1200	706-675-3821
BRIAN@CARTERENGINEERING.COM	FELICIAADAMS@HEARDCOUNTYGA.COM

SITE INFORMATION

JURISDICTION	HEARD COUNTY
PROPERTY LOCATION	HIGHWAY 100 FRANKLIN, GA 30217
PARCEL NUMBER	0030 0073
CURRENT ZONING	I (INDUSTRIAL DISTRICT)
PROPOSED ZONING	I (INDUSTRIAL DISTRICT)
OVERLAY DISTRICT	NONE
EXISTING USE	GOVERNMENT USE
PROPOSED USE	GOVERNMENT USE
BUFFERS REQUIRED	N/A
REQUIRED BUILDING SETBACKS	FRONT: 60-FEET SIDE: 15-FEET REAR: 15-FEET
MAXIMUM LOT COVERAGE	---%
MINIMUM LANDSCAPE	---%
MAXIMUM BUILDING HEIGHT	75-FEET
SANITARY SEWER SERVICE	*SANITARY PROVIDER
WATER SERVICE	*WATER PROVIDER
FEMA FLOOD INSURANCE RATE MAP NO.	13149C0161D
FEMA FIRM DATE	04/19/2017
FEMA SFHA ZONE	ZONE X

UNDERGROUND UTILITY DISCLAIMER:
THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD INFORMATION AND/OR EXISTING DRAWINGS. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. CARTER ENGINEERING DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE OWNER, HIS/HER EMPLOYEES, CONSULTANTS AND CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE CARTER ENGINEERING IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UTILITIES PRIOR TO COMMENCING WORK AND NOTIFY ENGINEER IF A DISCREPANCY IS FOUND. SPECIFICALLY, THE CONTRACTOR SHALL VERIFY THE INVERT ELEVATIONS OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES PRIOR TO COMMENCEMENT OF STORM AND SANITARY SEWER CONSTRUCTION.

GEORGIA811
Utilities Protection Center, Inc.
Know what's below
Call before you dig

REVISION BLOCK

ISSUE	REVISION DATE & DESCRIPTION
1	12.12.23 - INITIAL SUBMITTAL
2	02.02.24 - FOUNDATION PLAN ADDED
3	----
4	----
5	----
6	----
7	----
8	----

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 26703
J. BRIAN KIMSEY
GSWCC Level II Certification
No. 00000003007

CARTER ENGINEERING

CARTER ENGINEERING
3651 MARS HILL ROAD
SUITE 2000
WATKINSVILLE, GA 30677

P: 770.725.1200
F: 770.725.1204
www.carterengineering.com

SITE DEVELOPMENT PLANS
FOR
HEARD COUNTY EMA FACILITY SITE IMPROVEMENTS
HIGHWAY 100 - FRANKLIN, GA 30217

SHEET TITLE:
STRUCTURAL DETAILS

PROJECT NAME:
HEARD COUNTY

SHEET NUMBER:
C 7.0

PROJECT NUMBER:
23002HCG

DATE:
12.12.23

GENERAL STRUCTURAL NOTES:

BUILDING CODE:

INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, WITH GEORGIA AMENDMENTS.
BUILDING OCCUPANCY CLASSIFICATION = U
STORIES: ONE
ROOF HEIGHT: 8'–6"
AREA: 640 SQFT
TYPE OF CONSTRUCTION: II–B UNPROTECTED NON–COMBUSTIBLE

USE:
THIS EQUIPMENT WILL BE USED TO SIMULATE A BUILDING FOR FIREFIGHTER SEARCH, RESCUE, AND LIVE–FIRE TRAINING DRILLS. THIS EQUIPMENT WILL ONLY BE USED BY TRAINED FIRE SERVICE PROFESSIONALS OR STUDENTS UNDER THE DIRECT SUPERVISION OF TRAINED FIRE SERVICE PROFESSIONALS AND WILL BE LOCKED/SECURED WHEN NOT IN USE. THE SCOPE OF THIS PROJECT DOES NOT INCLUDE ANY ELECTRIC, PLUMBING, GAS, OR HVAC.

METHOD OF CONSTRUCTION:
THIS EQUIPMENT IS CONSTRUCTED OF SHOP FABRICATED ISO SHIPPING CONTAINERS, SOME OF WHICH ARE INSULATED TO ALLOW REPEATED LIVE–FIRE TRAINING WITHOUT DAMAGING THE STRUCTURE. ONSITE WORK WILL INCLUDE CONSTRUCTING A SHALLOW SPREAD FOOTING FOUNDATION AND ANCHORING THE SHOP FABRICATED SHIPPING CONTAINERS TO THE FOUNDATION.

NRTL LABELING:
THE FACTORY FABRICATED WORK PRODUCT SHALL BE LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) AS CONFORMING TO THE FOLLOWING STANDARD: NFPA 1402: 2019 –STANDARD ON FACILITIES FOR FIRE TRAINING AND ASSOCIATED PROPS.

LOADS:

ROOFS:
ROOF LIVE LOAD: 50 PSF.

FLOORS:
FLOOR LIVE LOAD: 50 PSF.

LATERAL:
WIND:
3 SECOND WIND GUST = 100 MPH.
RISK CATEGORY = I.
EXPOSURE = C.

SEISMIC:
IMPORTANCE FACTOR = 1.0.
SS = 0.159.
S1 = 0.082.
TL = 12.
Soil Site Class = D.
SDS = 0.170.
SD1 = 0.131.
SEISMIC DESIGN CATEGORY = B.
BASIC SEISMIC–FORCE RESISTING SYSTEM = SHEAR WALLS OF OTHER CONSTRUCTION.
RESPONSE MODIFICATION FACTOR (R) = 2.5.
ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE PROCEDURE.

FOUNDATIONS:

FOUNDATIONS ARE DESIGNED TO BE SUPPORTED ON APPROVED, FIRM, UNDISTURBED SOIL, OR APPROVED, CONTROLLED, COMPACTED, FIRM MATERIAL. DESIGN SOIL BEARING VALUE = 1,000 PSF. BOTTOM OF FOOTING SHALL BE LOCATED 36 INCHES MINIMUM BELOW LOWEST ADJACENT SOIL GRADE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE BEARING SURFACE CONDITIONS DESCRIBED IN THE DRAWINGS. IT IS RECOMMENDED THAT THE CONTRACTOR RETAIN THE SERVICES OF A REGISTERED GEOTECHNICAL ENGINEER TO VERIFY THE SOIL CONDITIONS PRIOR TO COMMENCEMENT OF EARTHWORK.

CONCRETE:

SPECIFIED 28 DAY COMPRESSIVE STRENGTH F'c:

FOUNDATIONS ---------- 4,000 PSI

GENERAL:

ALL CAST–IN–PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED UNLESS NOTED OTHERWISE. ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED. NO OTHER ADMIXTURES PERMITTED WITHOUT APPROVAL. FOR CONCRETE WITHOUT PLASTICIZER, MAXIMUM SLUMP 4 1/2" AT POINT OF PLACEMENT U.N.O. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL.
FOR REINFORCING INFORMATION, SEE REINFORCING SECTION OF G.S.N., PLANS, SCHEDULES AND DETAILS.

UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE EMBEDMENT OF CONDUITS, PIPES, SLEEVES, ETC. OF ANY MATERIAL SHALL NOT BE PERMITTED WITHIN ANY CONCRETE STRUCTURAL ELEMENT.

FLY ASH – IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS, SHALL BE LIMITED TO 25% OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT. FLY ASH SHALL BE INCLUDED IN THE CALCULATION OF W/C RATIOS SPECIFIED ABOVE. FLY ASH ADMIXTURES SHALL NOT BE USED ON SLABS WITH A BURNISHED OR ACID FINISH.

TEST DATA FOR EACH CONCRETE MIX SHALL BE SUBMITTED FOR REVIEW PER CHAPTER 5 OF ACI 318. REFERENCE FIGURE R5.3 FOR SUBMITTAL REQUIREMENTS AND OPTIONS. CONCRETE MIX DESIGNS THAT ARE SUBMITTED WITHOUT THE APPROPRIATE TEST DATA CANNOT BE REVIEWED.

REINFORCING:

ALL REINFORCING PER CRSI SPECIFICATIONS AND HANDBOOK. ASTM A615 (Fy = 60 KSI / GRADE 60) DEFORMED BARS FOR ALL BARS #5 AND LARGER. ASTM A615 (Fy = 40 KSI / GRADE 40) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. WELDED WIRE FABRIC PER ASTM A185, WIRE PER ASTM A82. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGES AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ---------- 3"
EXPOSED TO EARTH OR WEATHER
#5 AND SMALLER ---------- 1 1/2"
ALL OTHER PER LATEST EDITION OF ACI 318

ALL REINFORCING SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES. SUPPORT OF FOUNDATION REINFORCING MUST PROVIDE ISOLATION FROM MOISTURE/CORROSION BY USE OF A PLASTIC OR CONCRETE CHAIR. DUCT–TAPE COVERED REINFORCING IS NOT AN ACCEPTABLE CHAIR.

ALL DIMENSIONS REFERENCED IN DRAWINGS AS "CLEAR" SHALL BE FROM FACE OF STRUCTURE TO EDGE OF REINFORCING, AND SHALL NOT BE LESS THAN STATED, NOR GREATER THAN "CLEAR" DIMENSION PLUS 3/8". ALL OTHERS SHALL BE PLUS OR MINUS 1/4" TYPICAL UNLESS NOTED OTHERWISE.

FIELD BENDING OR STRAIGHTENING OF DEFORMED BARS SHALL BE LIMITED TO #5 BARS AND SMALLER AND SHALL BE FIELD BENT OR STRAIGHTENED ONLY ONCE. ANY BEND SHALL BE LIMITED TO 90 DEGREES. IF FIELD BENDING OR STRAIGHTENING OF #6 BARS OR LARGER IS REQUIRED, OR IF A SECOND BEND IS REQUIRED FOR #5 BARS AND SMALLER, HEAT SHALL BE APPLIED FOR BENDING OR STRAIGHTENING. CONTRACTOR SHALL SUBMIT PROCEDURE FOR APPLYING HEAT TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BENDING OR STRAIGHTENING BARS.

STRUCTURAL STEEL:

GENERAL:

ALL CONSTRUCTION PER LATEST AISC HANDBOOK. ALL TUBE STEEL SHALL BE ASTM A500 (Fy = 46 KSI). ALL MISCELLANEOUS STEEL UNLESS NOTED OTHERWISE SHALL BE ASTM A36 (Fy = 36 KSI).

ALL STRUCTURAL ROLLED STEEL MEMBERS WITH Fy GREATER THAN 36 KSI ARE TO BE IDENTIFIED WITH AN ASTM SPECIFICATION MARK OR TAG PER IBC 2202.1.

UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE ASTM A307. ALL BOLTS SHALL BE INSTALLED WITH STEEL WASHERS AT SHORT SLOTTED HOLES USING SNUG TIGHT INSTALLATION, UNLESS NOTED OTHERWISE.

ALL STEEL ASSEMBLIES WILL BE FABRICATED AT THE FIRE TRAINING STRUCTURES (FTS) SHOP IN PHOENIX, AZ. ALL WELDING WILL BE PERFORMED BY THOSE WHO ARE 3G AND 4G GMAW AWS D1.1 CERTIFIED. WELDING IS PERFORMED UNDER THE SUPERVISION OF AN AWS CERTIFIED WELDING INSPECTOR (CWI).

HIGH STRENGTH BOLTS:

ALL HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. INSTALL WASHERS AND TIGHTEN "SNUG TIGHT" PER AISC SPECIFICATIONS. NO DIRECT TENSION INDICATOR TIGHTENING DEVICES OR ALTERNATE DESIGN FASTENERS ARE PERMITTED WITH "SNUG TIGHT" APPLICATIONS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. FOR ADDITIONAL INFORMATION, SEE ABOVE.

EPOXY ANCHORS:

ALL POST–INSTALLED ANCHORS FOR CONCRETE INSTALLATION SHALL UTILIZE HILTI HIT–HY 200 EPOXY WITH GALVANIZED F1554 GR.36 THREADED ANCHOR RODS INSTALLED PER ICC ESR–4868.

GENERAL NOTES:

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

SPECIAL INSPECTION – STRUCTURAL ONLY:

SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE REGISTERED ENGINEER WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE SUPERVISING ENGINEER SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE.

SPECIAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. "SPECIAL STRUCTURAL INSPECTION" SHALL NOT RELIEVE THE OWNER OR THEIR AGENT FROM REQUESTING THE BUILDING JURISDICTION REQUIRED INSPECTIONS.
SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 FOR THE FOLLOWING:

CONCRETE CONSTRUCTION:

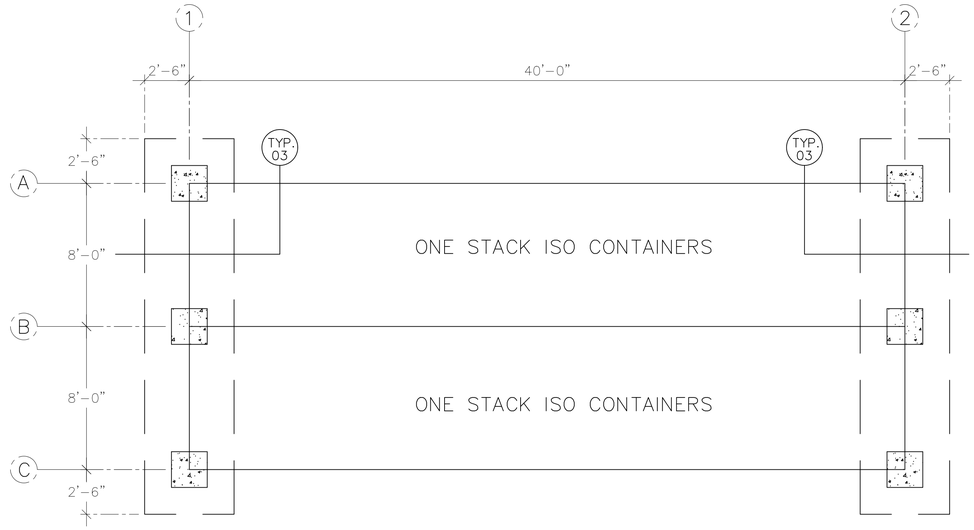
1. CONCRETE:
A. DURING THE TAKING OF TEST SPECIMENS.
B. NO INSPECTION IS REQUIRED FOR THE PLACEMENT OF FOUNDATION CONCRETE. INSPECTION OF FOUNDATION REINFORCING IS REQUIRED PER "REINFORCING STEEL" SECTION BELOW.

2. REINFORCING STEEL: INSPECTION OF IN–PLACE REINFORCING FOR CONFORMANCE PRIOR TO THE CLOSING OF FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE FOR THE FOLLOWING:
A. REINFORCING FOR ALL CONCRETE REQUIRED TO HAVE INSPECTION NOTED ABOVE.
B. REINFORCING FOR CONCRETE FOUNDATIONS.

3. POST–INSTALLED ANCHORS: DURING THE PLACEMENT OF ALL ANCHORS SHOWN ON STRUCTURAL DRAWINGS.
A. INSPECTION OF HOLE DIAMETER AND DEPTH.
B. INSPECTION OF HOLE CLEANING WITH WIRE BRUSH AND COMPRESSED AIR.
C. INSPECTION OF ANCHOR INSTALLATION USING SPECIFIED PRODUCT AND MANUFACTURER'S RECOMMENDED + INSTALLATION PROCEDURES.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:

A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.
B. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS, AND ALL DEVIATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE WORK. ALL REQUESTS FOR DEVIATIONS SHALL BE INITIATED BY THE CONTRACTOR VIA WRITTEN REQUEST FOR INFORMATION (RFI).
C. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
D. CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED BY IN–PLACE LADDERS, SCAFFOLDS, LIFTS AND/OR OTHER EQUIPMENT OPERATED BY THE CONTRACTOR'S PERSONNEL AS REQUIRED FOR SAFE OBSERVATION. INSPECTOR IS NOT RESPONSIBLE OR AUTHORIZED TO OPERATE CONTRACTOR'S EQUIPMENT.
E. UPON COMPLETION OF THE ASSIGNED WORK THE ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

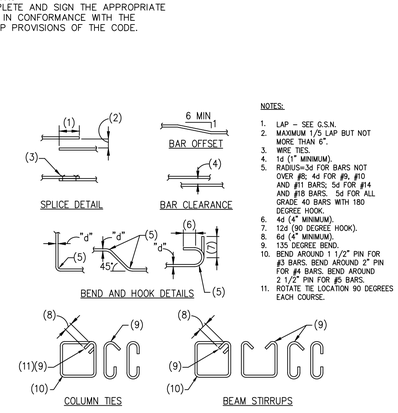


FOUNDATION PLAN
1/4" = 1'

CONC PSI	CLASS B TENSION SPLICE LENGTHS						COMP. BARS
	f'c=2,500/3,000 PSI		f'c = 4,000 PSI		f'c = 5,000 PSI		f'c = ≥ 3,000
BAR SIZE (METRIC) / LOCATION	REGULAR	TOP	REGULAR	TOP	REGULAR	TOP	STD LAP	ENCLOSED W/ SPIRAL TIES
#3 (10)	24"	31"	19"	24"	17"	22"	12"	12"
#4 (13)	32"	41"	25"	32"	22"	29"	15"	12"
#5 (16)	39"	51"	31"	40"	28"	36"	19"	14"
#6 (19)	47"	61"	37"	48"	33"	43"	23"	17"
#7 (22)	69"	89"	54"	70"	49"	63"	26"	20"
#8 (25)	78"	102"	62"	80"	55"	72"	30"	23"
#9 (29)	88"	115"	70"	91"	63"	81"	34"	25"
#10 (32)	99"	129"	79"	102"	70"	91"	38"	28"
#11 (36)	110"	143"	87"	113"	78"	101"	42"	31"

NOTES:
1. TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
2. LAP SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES PER LATEST EDITION OF ACI 318 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS OR SCHEDULES.
3. CONTACT STRUCTURAL ENGINEER IF CLEAR SPACING OF REINFORCEMENT IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS (&2db), OR IF CLEAR COVER IS LESS THAN THE BAR DIAMETER (db).
4. THIS TABLE IS BASED ON NORMAL WEIGHT CONCRETE.
5. FOR ADDITIONAL INFORMATION, SEE G.S.N., PLANS, SCHEDULES AND DETAILS.

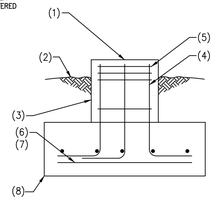
01 LAP SCHEDULE FOR REINFORCING STEEL IN CONCRETE — NO SCALE



NOTES:
1. LAP – SEE G.S.N.
2. MAXIMUM 1/3 LAP BUT NOT MORE THAN 6".
3. WIRE TIES.
4. 1d (1" MINIMUM).
5. RADIUS=3d FOR BARS NOT OVER #8; 4d FOR #9, #10 AND #11 BARS; 5d FOR #14 AND #18 BARS. 5d FOR ALL GRADE 40 BARS WITH 180 DEGREE HOOK.
6. 4d (4" MINIMUM).
7. 12d (90 DEGREE HOOK).
8. 6d (4" MINIMUM).
9. 135 DEGREE BEND.
10. BEND AROUND 1 1/2" PIN FOR #3 BARS. BEND AROUND 2" PIN FOR #4 BARS. BEND AROUND 2 1/2" PIN FOR #5 BARS.
11. ROTATE TIE LOCATION 90 DEGREES EACH COURSE.

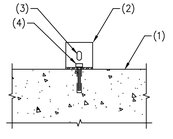
02 TYPICAL CONCRETE REINFORCING BAR DETAILS — NO SCALE

NOTES:
1. CONTAINER ATTACHMENT AT PEDESTAL CENTER–LINE PER DETAIL 5 / 6.
2. FINISHED GRADE.
3. 24" SQ. CONCRETE PEDESTAL, EXTEND 4" ABOVE FINISHED GRADE. TOP OF PEDESTALS SHALL BE WITHIN ± 1/4" OF ONE ANOTHER TO ACHIEVE LEVEL BEARING SURFACE FOR CONTAINER ATTACHMENT.
4. 8#5 VERTS, ONE EACH CORNER OF PEDESTAL AND ONE CENTERED IN EACH FACE OF PEDESTAL.
5. #3 TIES AT 8" O.C. AND 3 ADDITIONAL #3 TIES IN TOP 5".
6. #5 REBAR AT 12" O.C. EACH–WAY, BOTTOM.
7. 3 INCH CONCRETE COVER TO REINFORCING STEEL, TYP.
8. 5FT WIDE X 12–INCH THICK CONTINUOUS FOOTING.



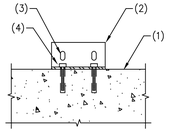
03 CONTINUOUS REINFORCED CONCRETE FOOTING — NO SCALE

NOTES:
1. CONCRETE PEDESTAL PER DETAIL 03.
2. 6" X 6" X 3/8" BY 6" LONG STEEL ANGLE.
3. 7/8" DIA. A–325 BOLT WITH WASHER AT CONTAINER ATTACHMENT.
4. 3/4" DIA. EPOXY ANCHOR PER GENERAL STRUCTURAL NOTES WITH EFFECTIVE EMBEDMENT OF 6–3/4" AT FOOTING PEDESTAL.



04 ATTACHMENT ANGLE AT REINFORCED CONCRETE PEDESTAL — NO SCALE

NOTES:
1. CONCRETE PEDESTAL PER DETAIL 03.
2. 6" X 6" X 3/8" BY 13" LONG STEEL ANGLE.
3. 2–7/8" DIA. A–325 BOLT WITH WASHER AT CONTAINER ATTACHMENT.
4. 2– 3/4" DIA. EPOXY ANCHORS PER GENERAL STRUCTURAL NOTES WITH EFFECTIVE EMBEDMENT OF 6–3/4" AT FOOTING PEDESTAL.



05 DUAL ATTACHMENT ANGLE AT REINFORCED CONCRETE PEDESTAL — NO SCALE

FIRE TRAINING STRUCTURES, L.L.C.
1005 NORTH 50TH STREET
PHOENIX, AZ 85008
T: (602) 268-6156
WWW.FIRETRAININGSTRUCTURES.COM

REVISION

HEARD COUNTY, GA
LIVE-FIRE TRAINING FACILITY
1816 GEORGIA 100
FRANKLIN, GA 30217

JOB NO. HEARD COUNTY, GA
DRAWN JED
ENGINEER PTB
DATE 1–31–2024
SCALE 1/4" = 1'

NOTES
PLAN
DETAILS

SHEET
S-1