Site Work Plans

FOR

Mosaic Galleria 125 High Avenue Pooler, Georgia 31322

FOR

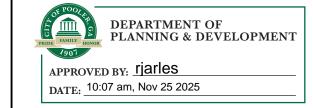
Mosaic Five, LLC P.O. Box 6465 Beaufort, South Carolina 29906



September, 2025









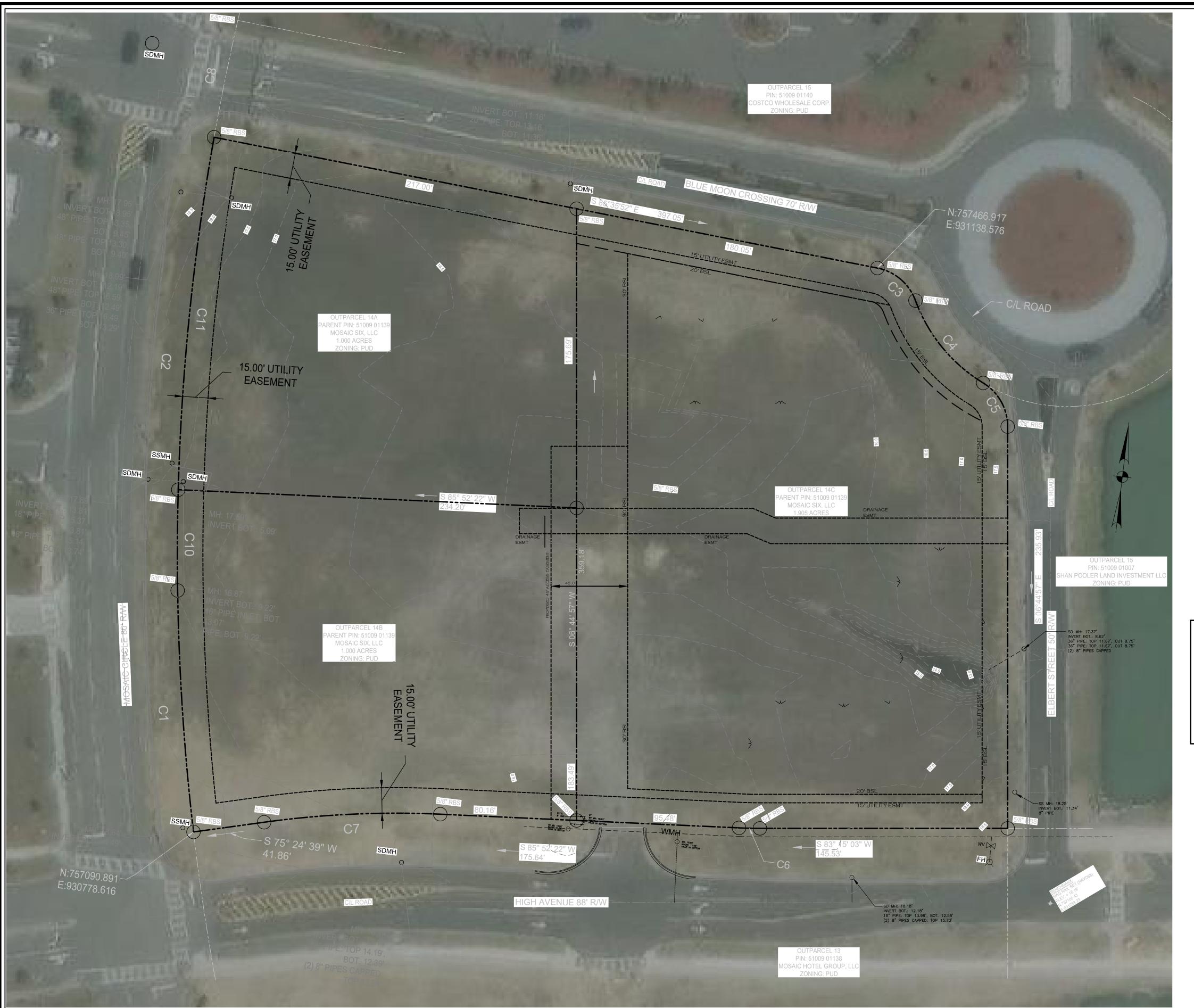
SPECIAL ORDINANCE NOTE:

I. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, STANDARDS ARE TO TAKE PRECEDENCE.

LANDSCAPE AND UTILITY BOND NOTES:

1. ALL LANDSCAPE AND UTILITY BONDS THAT ARE REQUIRED BY THE CITY OF POOLER ARE TO BE SUPPLIED AND MAINTAINED BY THE SITE OWNER.





CURVE TABLE											
CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	CHORD LENGTH							
C1	N 10°30'28" W	142.08'	1403.62'	142.14'							
C2	N 02°08'57" W	266.99'	1403.62'	267.40'							
C3	S 56°15'50" E	29.39'	30.00'	30.72'							
C4	S 46°10'24" E	62.62'	95.00'	63.81'							
C5	S 36°04'59" E	29.39'	30.00'	30.72'							
C6	S 84°33'43" W	12.26'	268.00'	12.26'							
C7	S 80°38'30" W	103.57'	568.00'	103.71'							
C8	N 32°40'17" E	188.11'	95.00'	271.63'							
C9	N 04°44'14" E	70.00'	1403.62'	70.01'							
C10	N 06°23'54" W	59.19'	1403.62'	59.19'							
C11	N 00°56'27" W	208.01'	1403.62'	208.20'							

NEW EXISTING DESCRIPTION BUILDING RESURFACE ASPHALT PAVEMENT ASPHALT PAVEMENT TYPE I ASPHALT PAVEMENT TYPE I I CONCRETE PAVEMENT CONCRETE SIDEWALK STORM DRAIN LINE — SS — SANITARY SEWER LINE WATER LINE SANITARY SEWER MANHOLE GAS VALVE WATER VALVE WATER METER FIRE HYDRANT FLARED END SECTION SPOT ELEVATION CONTOUR INVERT ELEVATION CHAIN LINK FENCE —_x— DITCH INVERT PROPERTY LINE IRON PIN FOUND TW 16.83 TOP OF WALK TP 14.65 TOP OF PAVEMENT FG 16.1 FINISHED GRADE TS 16.10 TOP OF STONE TG 16.10 TOP OF GUTTER TOP OF CURB TC 16.10

. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

STREAM BUFFER ENCROACHMENT NOTES:

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.

POOLER ORDINANCE NOTES:

CONTRACTOR IS TO VERIFY ALL BSL'S, BUFFERS, ETC. WTIH THE POOLER LANNING AND ZONING DEPARTMENT PRIOR TO CONSTRUCTION ACTIVITIES

SPECIAL F.F. NOTES

. CONTRACTOR TO VERIFY FEMA ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH GOVERNING AGENCY REQUIREMENTS. 2. CONTRACTOR TO COORDINATE FINISH FLOOR ELEVATIONS WITH STRUCTURAL, ARCHITECTURAL AND M.E.P. PLANS.

. CONTRACTOR IS TO COORDINATE ALL GAS, LIGHTING, ELECTRICAL, PHONE, CABLE AND ANY OTHER REQUIRED UTILITIES WITH THE APPROPRIATE UTILITY AGENCIES.

2. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING OF CONSTRUCTION ACTIVITIES AND FOR AVOIDING CONFLICT WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

3. CONTRACTOR IS TO COORDINATE ALL DEMOLITION WORK WITH THE OWNER. ALL ITEMS NOT TO BE RELOCATED OR GIVEN TO THE OWNER WILL BECOME THE PROPERTY OF THE CONTRACTOR.

4. REMOVE ALL TREES AS NECESSARY FOR PROPOSED CONSTRUCTION.

TRAFFIC / RIGHT-OF-WAY AND DISCHARGE NOTES:

WITHIN CITY OF POOLER RIGHT-OF-WAY.

LEGEND

I. ALL ROAD CLOSINGS, DETOURS AND ETC. ARE TO BE COORDINATED WITH THE CITY

2. ANY AND ALL NECESSARY PERMITS MUST BE OBTAINED FROM THE CITY OF POOLER PRIOR TO COMMENCEMENT OF ANY WORK. 3. CONTRACTOR IS TO OBTAIN A R.O.W. PERMIT PRIOR TO PERFORMING ANY WORK

4. CHLORINATED DISINFECTED WATER SHALL NOT BE DISCHARGED INTO THE STORMWATER SYSTEM.

SPECIAL ORDINANCE NOTE

. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, STANDARDS ARE TO TAKE PRECEDENCE.

3. Datum : NAVD 88

. Survey information: Gardner Surveying 2. Date of Original Survey : May, 2024

PROJECT INFORMATION:

P.I.N. : 51009 01139

PROJECT ADDRESS: 125 High Avenue Pooler, Georgia 31322

CURRENT ZONING : PUD PHASE 7 SAVANNAH QUARTERS

SITE SIZE: 1.91 ACRES

ESTIMATED DISTURBED AREA: 2.5 ACRES TOTAL PERVIOUS AREA: 0.7 ACRES TOTAL IMPERVIOUS AREA: 1.2 ACRES (63% IMPERVIOUS)

SETBACKS: FRONT = 30' REAR = 15'

SIDE = 20'

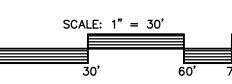
MAX. BUILDING HEIGHT = 125'-0" PROPOSED BUILDING HEIGHT = 21'-3"

OWNER : Mosaic Five, LLC (contact : D.J. Desaı) P.O. Box 6465

PHONE: 843-379-9405

Beaufort, South Carolina 29906 PRIMARY PERMITTEE EMAIL : djdesai@hdcompaniesus.com

F THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE C SAID ERROR, DISCREPANCY OR CONFLICT.



SEORG/ SEGISTER No. 28372 PROFESSION PROFESSIONAL

PRIOR TO DIGGING

Drawing Number

2 of 28 sheets

SPECIAL CONSTRUCTION NOTE:

FEMA MAP NOTES:

THIS DEVELOPMENT IS WITHIN FLOOD ZONE AREA "X" ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 130561C0108 \$ 130561C0109, MAP REVISED AUGUST 16, 2018 (NAVD 88). THIS SITE IS IN ZONE "X" AND IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE.

EXISTING SITE PLAN

CONTRACTOR IS TO VERIFY FEMA ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

FIRE PROTECTION WATER:

I. RETAIL = B OCCUPANCY (SECTION 304.1)

2. SPRINKLER PROTECTION IS NOT REQUIRED AS PER CHAPTER 9 3. FIRE PROTECTION IS PROVIDED

LANE - NO PARKING - TOW-AWAY ZONE".

3. AS PER FIRE CODE, FIRE FIGHTING APPARATUS MUST BE ABLE TO ACCESS TO WITHIN 150' OF ANY PART OF BUILDING.

2. FIRE LANE SIGNS SHALL BE SPACED AT A MINIMUM OF 200 FEET APART, SIZE TO BE $12" \times 18"$

WITH A WHITE REFLECTING BACKGROUND AND RED LETTERS AND SHALL READ AS FOLLOWS: "FIRE

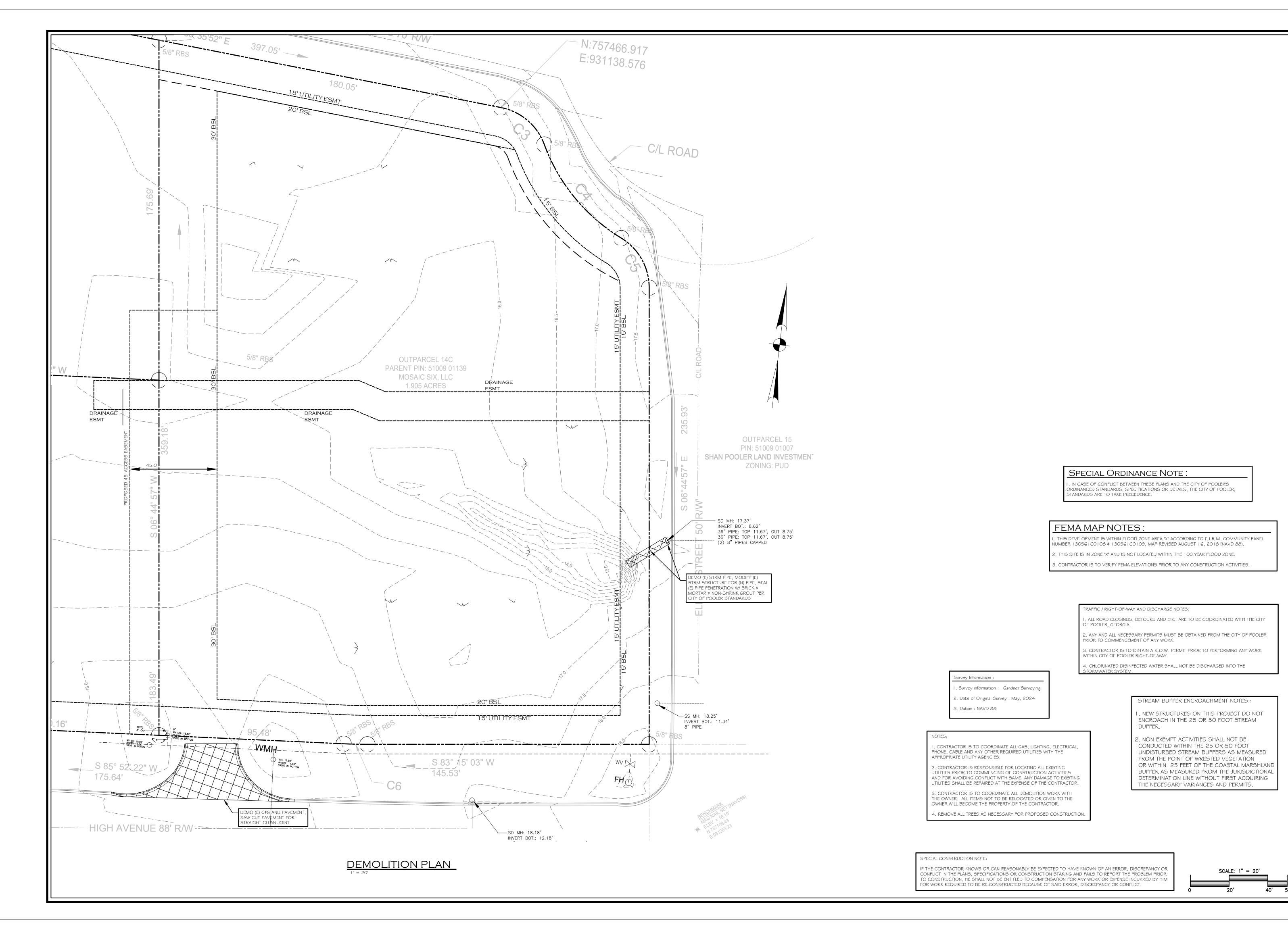
APPROVED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER

TEMPORARY OR PERMANENT ROADS CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS

SITE FIRE PROTECTION NOTES:

. ACCESS FOR FIREFIGHTING 3310.10 REQUIRED ACCESS.

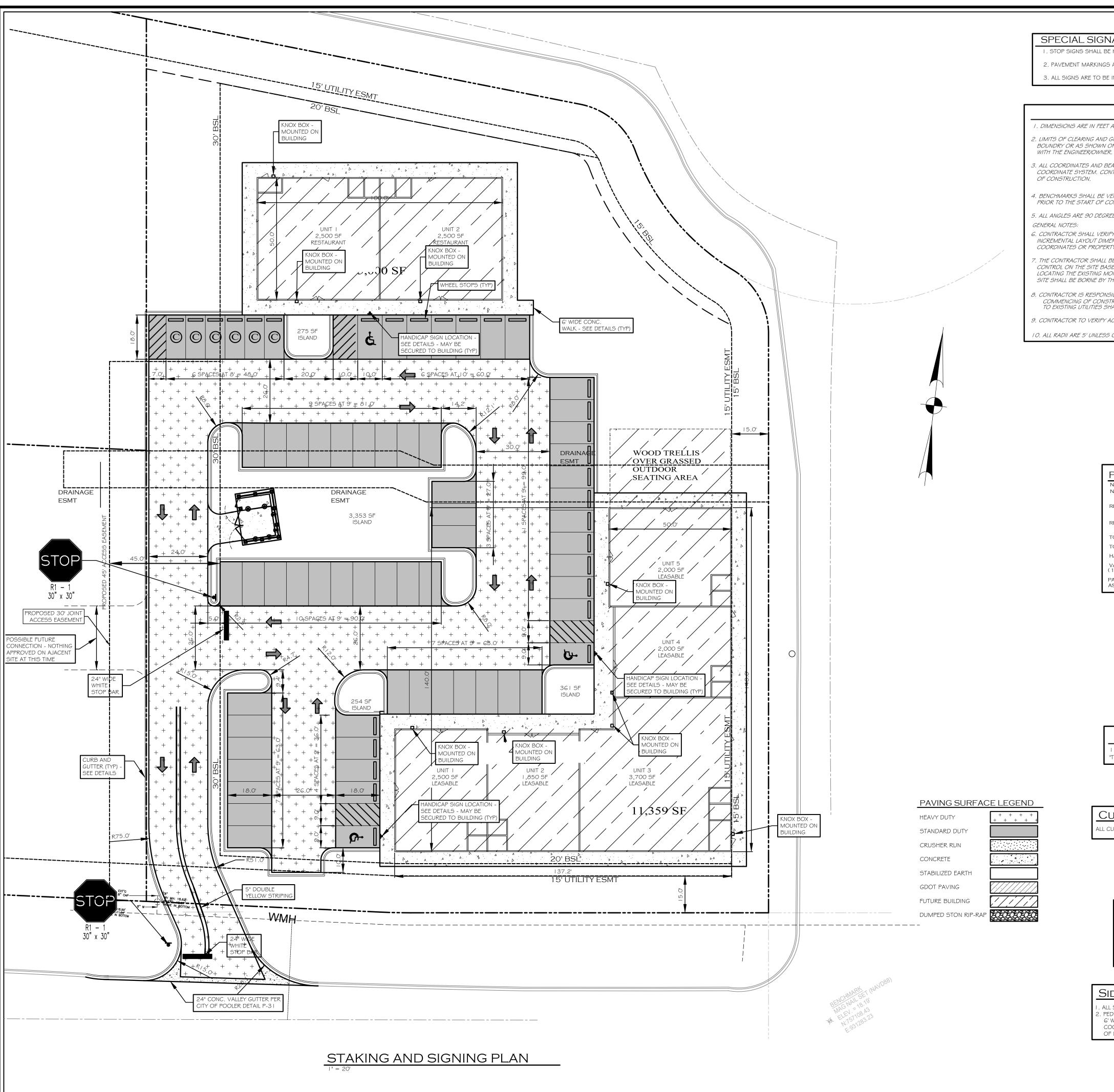
ROADS ARE AVAILABLE.



PRIOR TO DIGGING

SEORGIA GEORGIA AL BOSSIELE No. 28372 PROFESSIONAL 10 G-25

Drawing Number



SPECIAL SIGNAGE AND STRIPING NOTES:

. STOP SIGNS SHALL BE HIGH INTENSITY OR DIAMOND GRADE. 2. PAVEMENT MARKINGS ARE TO BE THERMOPLASTIC.

3. ALL SIGNS ARE TO BE IN ACCORDANCE WITH MUTCD.

I. DIMENSIONS ARE IN FEET AND DECIMAL OF FEET UNLESS NOTED OTHERWISE. 2. LIMITS OF CLEARING AND GRUBBING SHALL MATCH THE PROPERTY LINE BOUNDRY OR AS SHOWN ON THE PLANS. COORDINATE ALL CLEARING ACTIVITIES

- 3. ALL COORDINATES AND BEARINGS SHOWN ARE BASED ON A SITE COORDINATE SYSTEM. CONTRACTOR SHALL VERIFY PRIOR TO THE START
- 4. BENCHMARKS SHALL BE VERIFIED BY THE CONTRACTOR AS TO LOCATION AND ELEVATION PRIOR TO THE START OF CONSTRUCTION.
- 5. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.

S. CONTRACTOR SHALL VERIFY THAT OVERALL SITE DIMENSIONS AGREE WITH THE INCREMENTAL LAYOUT DIMENSIONS AS SHOWN, ANY DISCREPANCIES WITH DIMENSIONS AND COORDINATES OR PROPERTY LINES SHALL BE ADJUSTED AND APPROVED BY THE ENGINEER.

- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING HORIZONTAL AND VERTICAL CONTROL ON THE SITE BASED ON EXISTING MONUMENTS. ALL COSTS INVOLVED IN LOCATING THE EXISTING MONUMENTS AND CARRYING THE STAKING LAYOUT TO THE SITE SHALL BE BORNE BY THE CONTRACTOR.
- 3. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING OF CONSTRUCTION AND FOR AVOIDING CONFLICT WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- 9. CONTRACTOR TO VERIFY ACTUAL BUILDING DIMENSIONS WITH ARCH. PLANS.

I O. ALL RADII ARE 5' UNLESS OTHERWISE NOTED.

PECIAL AE AND VE ZONE NOTES

. BUILDINGS IN "AE" ZONES ARE TO HAVE THE FINISHED FLOOR SET A MINIMUM OF I' ABOVE FLOOD, VERIFY WITH MUNICIPALITY.

2. BUILDINGS IN "VE" ZONES ARE TO HAVE THE LOWEST HORIZONTAL STRUCTURAL MEMBER SET A MINIMUM OF 1' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

3. BUILDINGS IN AE AND VE ZONES ARE TO HAVE ALL ELECTRICAL, PLUMBING, HVAC, DUCTWORK AND OTHER EQUIPMENT TO BE A MINIMUM OF 1' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

4. FLOOD VENTS ARE REQUIRED IN "AE" ZONES AND ARE TO HAVE I SQUARE INCH / SQUARE FOOT OF ENCLOSED AREA WITH A MINIMUM ROUND OPENING OF 3", A MINIMUM OF 2 OPENINGS WITH ALL OPENINGS EVENLY SPACED AROUND PERIMETER. BOTTOM OF OPENING SHALL BE 12" OR LESS ABOVE ADJACENT

5. BREAK AWAY WALLS ARE REQUIRED IN "VE" ZONES.

6. ENCLOSED CRAWL SPACES ARE TO HAVE I SF SCREENED VENT PER 150 SF OF CRAWL SPACE AREA WITH A VENT LOCATED A MAX. OF 3' FROM EACH CORNER.

7. COORDINATE SITE WORK AND FINISHED FLOOR ELEVATIONS WITH ARCHITECTURAL PLANS TO MAKE SURE BUILDING ELEVATIONS ARE SET AS PER CODE. VERIFY WITH MUNICIPALITY.

3. STRUCTURES IN FLOOD ZONES IN CHATHAM COUNTY ARE TO HAVE THE LOWEST OCCUPIABLE AREA (INCLUDING PORCHES) FINISHED FLOOR SET 3' ABOVE THE FLOOD ZONE ELEVATION (BFE + 3). VERIFY WITH MUNICIPALITY.

9. IN CHATHAM COUNTY, BUILDINGS IN AE AND VE ZONES ARE TO HAVE ALL ELECTRICAL (INTERIOR, EXTERIOR) INCLUDING DISCONECT BOXES, PLUMBING, HVAC, OUTLETS, SWITCHES, DUCTWORK AND OTHER EQUIPMENT A MINIMUM OF 3' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

STREAM BUFFER ENCROACHMENT NOTES:

. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

. 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 JURISDICTIONA DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

PARKING CALCULATIONS:

NEW RETAIL BUILDINGS = 12,050 SF NEW RESTAURANTS = 72 SEATS TOTAL

HANDICAP SPACES SUPPLIED = 3 SPACES

ASSUMING A RETAIL AND RESTAURANT OCCUPANCY

REQUIRED RETAIL PARKING = (2,050) = 48 SPACES REQUIRED

REQUIRED RESTAURANT PARKING = $\left(\frac{1.35 \text{ ACL}}{4.56 \text{ SEATS}}\right) \left(\frac{7}{4.56 \text{ SEATS}}\right)$ 72 SEATS = 18 SPACES REQUIRED

TOTAL SPACES REQUIRED = 48+ 18 = 66 SPACES REQUIRED TOTAL SPACES SUPPLIED = 66 SPACES

VAN ACCESSIBLE SPACES SUPPLIED = 1 SPACE (1 VAN SPACE / 6 H.C. SPACES AS PER ADA 208.2.4)

PAVEMENT MARKING NOTES

. ALL SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DESIGN (MUTCD)".

POOLER ORDINANCE NOTES:

CONTRACTOR IS TO VERIFY ALL BSL'S, BUFFERS, ETC. WITH THE POOLER ANNING AND ZONING DEPARTMENT PRIOR TO CONSTRUCTION ACTIVITIES

SPECIAL HANDICAP RAMP NOTES:

. ALL HANDICAP RAMPS SHALL BE CONSTRUCTED AND TINTED" AS PER ADA GUIDELINES AND REQUIREMENTS.

GREENSPACE CALCULATIONS:

= 0.3684 = 37 % GREENSPACE

FIRE PROTECTION WATER:

AS PER 2018 IBC : I. RETAIL = B OCCUPANCY (SECTION 304.1)

2. SPRINKLER PROTECTION IS NOT REQUIRED AS PER CHAPTER 9 3. FIRE PROTECTION IS PROVIDED

SITE FIRE PROTECTION NOTES:

ACCESS FOR FIREFIGHTING 3310.10 REQUIRED ACCESS.

APPROVED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ROADS ARE AVAILABLE.

2. FIRE LANE SIGNS SHALL BE SPACED AT A MINIMUM OF 200 FEET APART, SIZE TO BE 12" x 18" WITH A WHITE REFLECTING BACKGROUND AND RED LETTERS AND SHALL READ AS FOLLOWS: "FIRE LANE - NO PARKING - TOW-AWAY ZONE".

3. AS PER FIRE CODE, FIRE FIGHTING APPARATUS MUST BE ABLE TO ACCESS TO WITHIN 150' OF ANY PART OF BUILDING

SPECIAL ORDINANCE NOTE:

IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, ANDARDS ARE TO TAKE PRECEDENCE.

STOP SIGN AND STOP BAR INSTALLATION NOTES STOP BARS ARE TO BE WHITE, 24" WIDE x | 2' LONG, INSTALLED 6'-0" FROM THE INTERSECTING

CURB RADII NOTE

ALL CURB RADII ARE 5' U.N.O.

TOTAL SITE = 1.90 AC.

GREENSPACE = 0.70 AC.

PAVING / BUILDING / ETC. = 1.20 AC.

ROAD PAVEMENT EDGE AS PER MUTCD 3B. I G. 2. STOP SIGNS ARE TO BE INSTALLED ALLIGNED WITH THE STOP BARS AS PER MUTCD 3B. I G.

OF POOLER, GEORGIA.

RAFFIC / RIGHT-OF-WAY AND DISCHARGE NOTES: . ALL ROAD CLOSINGS, DETOURS AND ETC. ARE TO BE COORDINATED WITH THE CITY

2. ANY AND ALL NECESSARY PERMITS MUST BE OBTAINED FROM THE CITY OF POOLER PRIOR TO COMMENCEMENT OF ANY WORK.

. CONTRACTOR IS TO OBTAIN A R.O.W. PERMIT PRIOR TO PERFORMING ANY WORK ITHIN CITY OF POOLER RIGHT-OF-WAY.

4. CHLORINATED DISINFECTED WATER SHALL NOT BE DISCHARGED INTO THE

SITE LIGHTING NOTE:

ALL SITE LIGHTING IS TO BE AS PER OWNER AND IS TO BE COORDINATED WITH OWNER FOR POLE PLACEMENT, APPROVA BY POOLER, ETC.

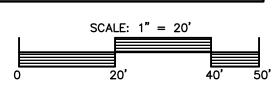
SIDEWALK NOTES:

. ALL SIDEWALKS ARE TO BE ADA COMPLIANT. 2. PEDESTRIAN PATHS IN PARKING AREAS ARE TO BE 6' WIDE - PATTERN, COLOR AND TEXTURE TO BE COORDINATED WITH OWNER AND THE CITY OF POOLER.

SPECIAL CONSTRUCTION NOTE:

F THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS O REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED

BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

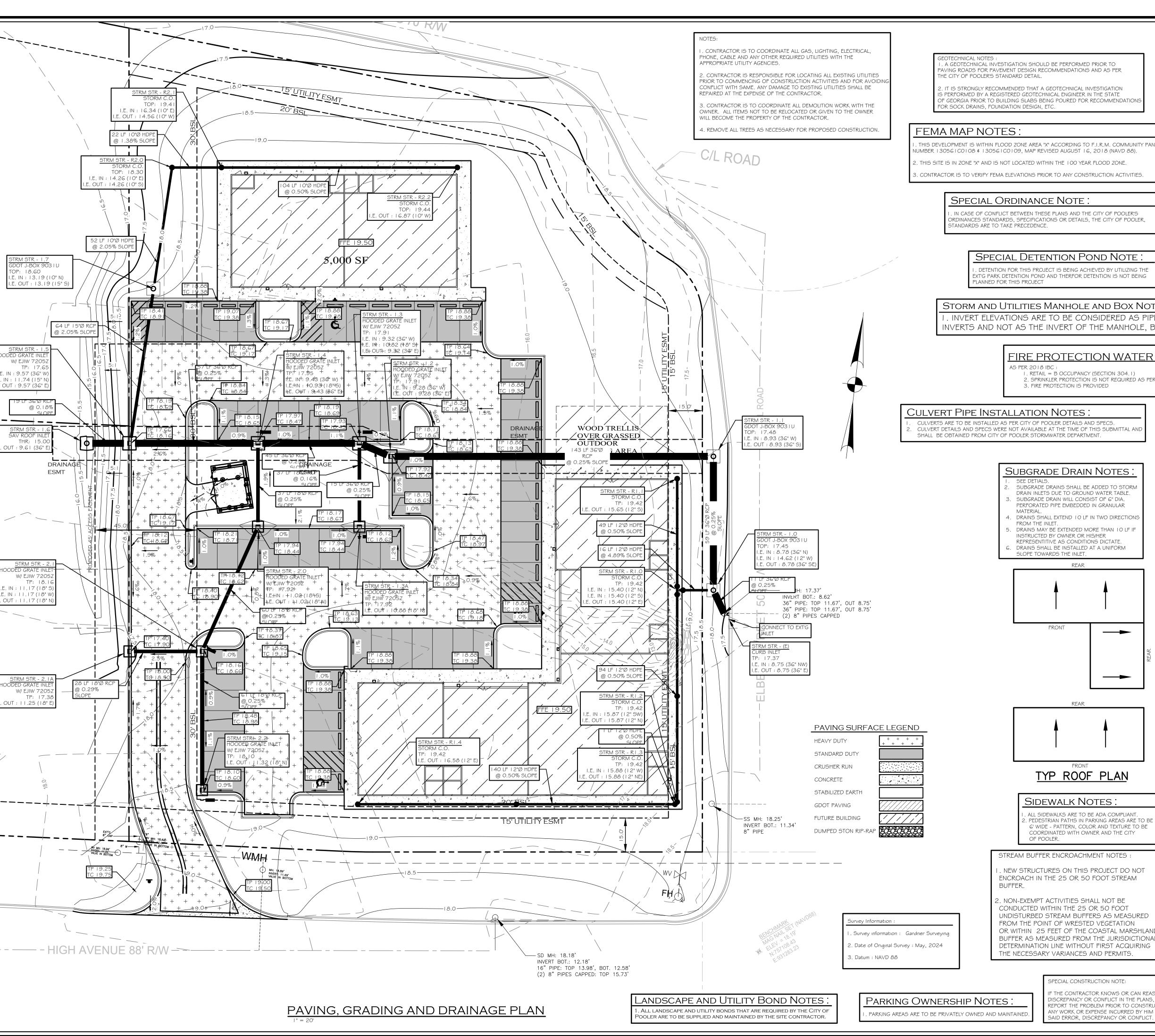


PROFESSIONAL Drawing Number

Mail Bost et

No. 28372

PRIOR TO DIGGING



A GEOTECHNICAL INVESTIGATION SHOULD BE PERFORMED PRIOR TO AVING ROADS FOR PAVEMENT DESIGN RECOMMENDATIONS AND AS PER

. IT IS STRONGLY RECOMMENDED THAT A GEOTECHNICAL INVESTIGATION PERFORMED BY A REGISTERED GEOTECHNICAL ENGINEER IN THE STATE OF GEORGIA PRIOR TO BUILDING SLABS BEING POURED FOR RECOMMENDATION: FOR SOCK DRAINS, FOUNDATION DESIGN, ETC.

THIS DEVELOPMENT IS WITHIN FLOOD ZONE AREA "X" ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 130561C0108 \$ 130561C0109, MAP REVISED AUGUST 16, 2018 (NAVD 88).

2. THIS SITE IS IN ZONE "X" AND IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE.

. CONTRACTOR IS TO VERIFY FEMA ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

SPECIAL ORDINANCE NOTE

IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S DRDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER,

SPECIAL DETENTION POND NOTE:

DETENTION FOR THIS PROJECT IS BEING ACHIEVED BY UTILIZING THE XT'G PARK DETENTION POND AND THERFOR DETENTION IS NOT BEING LANNED FOR THIS PROJECT

STORM AND UTILITIES MANHOLE AND BOX NOTES:

. INVERT ELEVATIONS ARE TO BE CONSIDERED AS PIPE INVERTS AND NOT AS THE INVERT OF THE MANHOLE, BOX, ETC.

FIRE PROTECTION WATER :

I. RETAIL = B OCCUPANCY (SECTION 304.1)

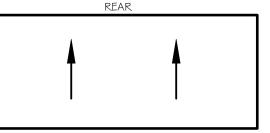
2. SPRINKLER PROTECTION IS NOT REQUIRED AS PER CHAPTER 9 3. FIRE PROTECTION IS PROVIDED

CULVERTS ARE TO BE INSTALLED AS PER CITY OF POOLER DETAILS AND SPECS. CULVERT DETAILS AND SPECS WERE NOT AVAILABLE AT THE TIME OF THIS SUBMITTAL AN

Subgrade Drain Notes :

- DRAIN INLETS DUE TO GROUND WATER TABLE. SUBGRADE DRAIN WILL CONSIST OF 6" DIA.
- DRAINS SHALL EXTEND 10 LF IN TWO DIRECTIONS
- FROM THE INLET DRAINS MAY BE EXTENDED MORE THAN IO LF IF
- INSTRUCTED BY OWNER OR HIS/HER REPRESENTITIVE AS CONDITIONS DICTATE.
- SLOPE TOWARDS THE INLET

REAR FRONT



TYP ROOF PLAN

SIDEWALK NOTES

. ALL SIDEWALKS ARE TO BE ADA COMPLIANT. . PEDESTRIAN PATHS IN PARKING AREAS ARE TO BE 6' WIDE - PATTERN, COLOR AND TEXTURE TO BE COORDINATED WITH OWNER AND THE CITY OF POOLER.

STREAM BUFFER ENCROACHMENT NOTES :

NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL

SPECIAL CONSTRUCTION NOTE:

THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR. SCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO EPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR NY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE (AID ERROR, DISCREPANCY OR CONFLICT.

PECIAL AE AND VE ZONE NOTES

FLOOD. VERIFY WITH MUNICIPALITY.

CODE. VERIFY WITH MUNICIPALITY.

. BUILDINGS IN "AE" ZONES ARE TO HAVE THE FINISHED FLOOR SET A MINIMUM OF 1' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

2. BUILDINGS IN "VE" ZONES ARE TO HAVE THE LOWEST HORIZONTAL STRUCTURAL MEMBER SET A MINIMUM OF 1' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

3. BUILDINGS IN AE AND VE ZONES ARE TO HAVE ALL ELECTRICAL, PLUMBING, HVAC, DUCTWORK AND OTHER EQUIPMENT TO BE A MINIMUM OF 1' ABOVE

4. FLOOD VENTS ARE REQUIRED IN "AE" ZONES AND ARE TO HAVE I SQUARE INCH SQUARE FOOT OF ENCLOSED AREA WITH A MINIMUM ROUND OPENING OF 3", A MINIMUM OF 2 OPENINGS WITH ALL OPENINGS EVENLY SPACED AROUND PERIMETER. BOTTOM OF OPENING SHALL BE 12" OR LESS ABOVE ADJACENT

5. BREAK AWAY WALLS ARE REQUIRED IN "VE" ZONES.

G. ENCLOSED CRAWL SPACES ARE TO HAVE I SF SCREENED VENT PER 150 SF OF CRAWL SPACE AREA WITH A VENT LOCATED A MAX. OF 3' FROM EACH CORNER.

7. COORDINATE SITE WORK AND FINISHED FLOOR ELEVATIONS WITH ARCHITECTURAL PLANS TO MAKE SURE BUILDING ELEVATIONS ARE SET AS PER

8. STRUCTURES IN FLOOD ZONES IN CHATHAM COUNTY ARE TO HAVE THE

LOWEST OCCUPIABLE AREA (INCLUDING PORCHES) FINISHED FLOOR SET 3' ABOVE THE FLOOD ZONE ELEVATION (BFE + 3). VERIFY WITH MUNICIPALITY.

9. IN CHATHAM COUNTY, BUILDINGS IN AE AND VE ZONES ARE TO HAVE ALL ELECTRICAL (INTERIOR, EXTERIOR) INCLUDING DISCONECT BOXES, PLUMBING, HVAC, OUTLETS, SWITCHES, DUCTWORK AND OTHER EQUIPMENT A MINIMUM OF 3' ABOVE FLOOD. VERIFY WITH MUNICIPALITY.

SPECIAL F.F. NOTES:

. CONTRACTOR TO VERIFY FEMA ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES AND COORDINATE WITH GOVERNING AGENCY REQUIREMENTS.

2. CONTRACTOR TO COORDINATE FINISH FLOOR ELEVATIONS WITH STRUCTURAL. ARCHITECTURAL AND M.E.P. PLANS.

SITE FIRE PROTECTION NOTES:

. ACCESS FOR FIREFIGHTING

3310.10 REQUIRED ACCESS APPROVED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS

ROADS ARE AVAILABLE. 2. FIRE LANE SIGNS SHALL BE SPACED AT A MINIMUM OF 200 FEET APART, SIZE TO BE 12" x 18" WITH A WHITE REFLECTING BACKGROUND AND RED LETTERS AND SHALL READ AS FOLLOWS: "FIRE LANE - NO PARKING - TOW-AWAY ZONE".

3. AS PER FIRE CODE, FIRE FIGHTING APPARATUS MUST BE ABLE TO ACCESS TO WITHIN 150' OF ANY PART OF BUILDING.

SPECIAL CONSTRUCTION NOTES

TOR IS TO OBTAIN, REVIEW AND FOLLOW THE RECCOMMENDATIONS SET FORTH BY T GOETECHNICAL REPORT.

. GROUNDWATER MUST BE LOWERED DURING CONSTRUCTION BY ANY MEANS APPROVED BY THE GEOTECHNICAL ENGINEE 3. DE-WATERING MAY BE ACCOMPLISHED BY WELLPOINTS AND / OR DITCHES WITH SUMPS AND PUMPS

H. STIPPING OF PROJECT SITE DEPTHS MAY BE FROM 2 TO IN EXCESS OF 5 FEET BELOW THE GROUND SURFACE. 5. FILL AND / OR BACKFILL SHALL CONSIST OF COARSE-GRAINED SOILS CLASSIFIED AS SW, SP, SM OR SP-SM WITH A MAXIMUM OF 15% PASSING A #200 SIEVE.

G. BACKFILL FOR PAVING SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH

'. ANT TRENCH LEFT VACANT (from relocate) UTILITIES, STUMP HOLES, ETC. SHALL BE BACKFILLED WITH APPROVED SOIL, PLACED IN 6 INCH LIFTS AND COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.

S. SUBGRADE SHALL BE PROOF ROLLEN WITH A LOADED DUMP TRUCK. ANY "PUMPING" OR UNSTABLE AREAS SHALL BE EMOVED AND REPLACED AS PER SPECIAL CONSTRUCTION NOTE #6. IN THE CASE OF EXCESSIVE MOISTURE, THE AREA MAY BE ALLOWED TO DRY AND RE-PROOF ROLLED.

9. ALL FILL SOILS FOR THIS PROJECT SHALL BE AS PER SPECIAL CONSTRUCTION NOTE #5.

O. SOILS CLASSIFIED AS MH, CH, CC OR SC WILL NOT BE ACCEPTABLE.

I , ALL FOOTING EXCAVATIONS AND SLAB SUBGRADES SHALL BE COMPACTED TO A MINIMUM OF 95% IN ACCORDANCE

2. SLABS ON GRADE SHOULD BE SUPPORTED BY A MINIMUM OF 4 INCHES OF GRANULAR FREE DRAINING GRAVEL OR COARSE SAND TO REMOVE MOISTURE.

3. A VAPOR RETARDING MEMBRANE SHALL BE PLACED BETWEEN GRANULAR BASE AND CONCRETE TO PREVENT MIGRATIC

GENERAL NOTES

LIMITS OF GRADING AND GRASSING ARE INDICATED ON THE SOIL EROSION AND SEDIMENT CONTROL PLANS AS "LIMITS OF DISTURBANCE".

CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING OF CONSTRUCTION AND FOR AVOIDING CONFLICT WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

4. ALL DISTURBED AREAS FROM NEW CONSTRUCTION ACTIVITIES WILL BE SEEDED, MULCHED, FERTILIZED AND WATERED TO PROMOTE A SUFFICIENT GROUND COVER THAT WILL PREVENT SOIL EROSION. 5. DRAINAGE: ALL EXCAVATION SHALL BE PERFORMED SO THAT THE SITE AND THE AREA IMMEDIATELY SURROUNDING THE SITE WHICH EFFECTS THE OPERATIONS WILL BE

CONTINUALLY AND EFFECTIVELY DRAINED. SURFACE WATER, GROUNDWATER, OR ANY PERCHED WATER WHICH MIGHT BE ENCOUNTERED DURING EXCAVATIONS SHALL BE REMOVED BY ANY ACCEPTABLE MEANS APPROVED BY THE ENGINEER. 6. ELEVATIONS ARE BASED ON NAVD 88 DATUM. SEE C2 FOR ELEVATION DATUM.

7. CONTRACTOR TO VERIFY ALL EXISTING AND PROPOSED STRUCTURE LOCATIONS (drainage, sanitary, etc.) TOPS AND DEPTHS PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION.

8. DETENTION BASIN MAY BE ENLARGED (not deepened) TO GAIN FILL FOR CONSTRUCTION IF THE MATERIAL IS SATISFACTORY.

9. DETENTION BASIN IS TO BE CONSTRUCTED WITH 3:1 SIDESLOPES.

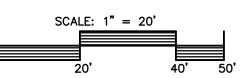
10. DETENTION BASIN IS TO BE SODDED TO PREVENT EROSION.

11. 18" CURB AND GUTTER (if required) TO BE CONCRETE. 12. #12 GA. WIRE SHALL BE INSTALLED ABOVE ALL STORM PIPES AT 1 TO 2 FEET

3. ALL STORM PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.

14. SEE UTILITY PLAN FOR PIPE SEPARATION NOTES.

5. PARKING AREA IS TO BE PRIVATELY OWNED AND MAINTAINED.



5 of 28 sheets

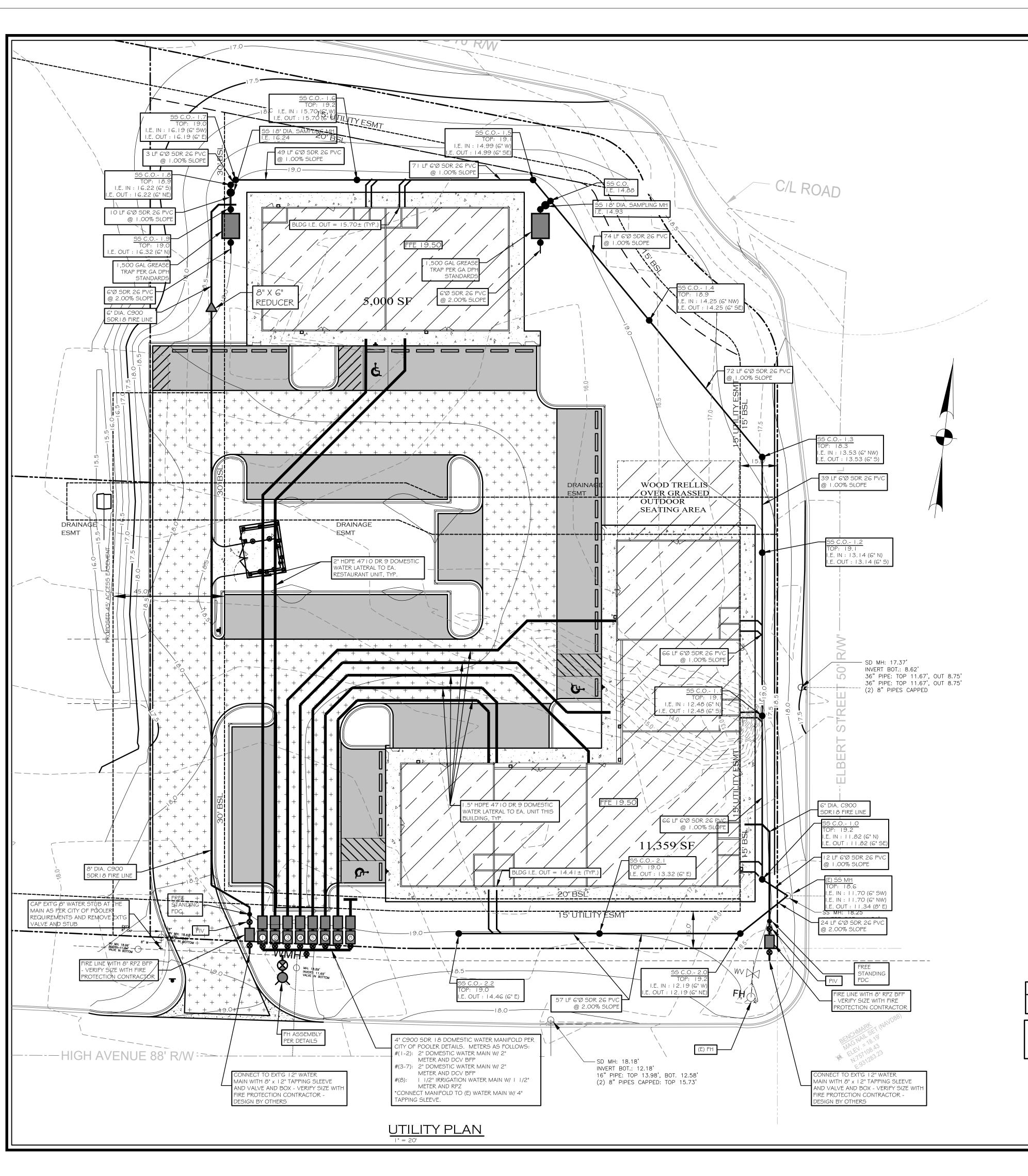
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No. 28372

PROFESSIONAL



SPECIAL UTILITY TERMINATION NOTES

I. ALL UTILITIES (WATER, SEWER, GAS, ELECTRIC, ETC.) NOT TO BE USED ON THIS PROJECT ARE TO BE TERMINATED AS PER THE UTILITY PROVIDERS INSTRUCTIONS.

2. ALL UTILITY TERMINATIONS ARE TO BE COORDINATED WITH THE UTILITY PROVIDER, OWNER AND CITY OF POOLER.

FEMA MAP NOTES:

THIS DEVELOPMENT IS WITHIN FLOOD ZONE AREA "X" ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 130561C0108 \$ 130561C0109, MAP REVISED AUGUST 16, 2018 (NAVD 88).

2. THIS SITE IS IN ZONE "X" AND IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE.

CONTRACTOR IS TO VERIFY FEMA ELEVATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

UTILITY OWNERSHIP NOTES

. WATER SYSTEMS BEHIND METERS ARE TO BE PRIVATELY OWNED AND 2. SANITARY SEWER SYSTEMS UPSTREAM OF SS MH NO. I ARE TO BE PRIVATELY OWNED AND MAINTAINED.

SPECIAL ORDINANCE NOTE:

IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, TANDARDS ARE TO TAKE PRECEDENCE

SPECIAL WATER LINE NOTES

. ALL WATER METERS ENCOUNTERED ON THE PROJECT SITE, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE DISCONNECTED AND RETURNED TO THE CITY OF POOLER WATER AND SEWER DEPARTMENT.

2. ALL LATERALS WHICH ARE REMOVED FROM SERVICE SHALL BE CAPPED AS CLOSE TO THE MAIN AS PRACTICAL WITHOUT REMOVING ROADWAY. THIS WORK IS TO BE COORDINATED WITH THE CITY OF POOLER WATER AND SEWER DEPARTMENT.

TRACER WIRE NOTES

ALL WATER MAINS WATER LATERALS AND FIRE HYDRANTS ARE TO HAVE A #12 GAUGE SOLID COPPER WIRE INSTALLED WITH EACH UTILITY. IT SHALL BE INSTALLED IN SUCH A MANNER THAT THE WIRES ARE CONNECTED TO EACH OTHER AND CAN BE CONTINUOUSLY TRACED. THE WATER DEPARTMEN HALL CONDUCT A TRACING TEST TO ENSURE COMPLIANCE.

Drop Manhole Notes :

. DROP MANHOLES SHALL BE PRECAST CONFORMING TO ASTM C478 AND SHALL BE BUILT AT THE LOCATIONS AND IN CONFORMANCE WITH THE DETAILS SHOWN WHERE THE DIFFERENCE IN IE ELEVATION BETWEEN THE INCOMING PIPE AND MANHOLE IE IS MORE THAN 2 FEET. 2. PROTECTIVE COATINGS ARE REQUIRED FOR ALL WET WELLS, RECEIVING MANHOLES, DROP MANHOLES, ANY STRUCTURE WHERE A FORCE MAIN TERMINATES OR HIGH LEVELS OF CORROSION ARE ANTICIPATED.

SPECIAL WATER LINE NOTES:

. Pipe, fittings, valves and other accessories shall, unless otherwise directed, be unloaded at the point of delivery and stored where they will be protected and will not be hazordous to traffic. They shall at all times be handled with care to avoid damage. The interior of all pipe, fittings and other accessories shall be kept free from dirt and foreign matter at all times.

2. Any defective, damaged, or unsound pipe shall be rejected. All foreign matter or dirt shall be removed from the inside of the pipe before it is lowered into it's position in the trench and shall be kept clean by approved means during and after laying. Care shall be taken to prevent dirt from entering the joint space. During installation, when pipe laying is not in progress, a mechanical joint plug or cap, or approved equal, will be used to form a water tight seal at both ends of the line being laid and no trench water shall be

ermitted to enter the pipe 3. Clean the interiors of all pipe by brushing, swabbing or washing out all dirt before placement.

4. Flush the new pipe lines until the water runs clear at the end of all mains and laterals. This should be done after the pressure test and before disinfection. Minimum flush time and velocity are to be 2.5 fps which is necessary to purge the line of foreign material.

5. All materials used and come into contact with drinking water during its distribution shall not adversely affect drinking water quality and public health and must be certified for conformance with American National Standards Institute/National Sanitation Foundation Standard 61 (ANSI/NSF Standard 61).

6. All new sanitary sewer laterals and new mains are required to be televised at the owner's / contractor's expense.

7. All sanitary sewer laterals are required to be capped.

8. All sanitary sewer laterals shall be connected to the sewer main at a 90 degree angle.

VALVE NOTES:

- . ALL TAPPING VALVES SHALL BE GATE VALVES WITH STAINLESS STEEL BOLTS. 2. ALL 2" GATE VALVES UPSTREAM OF EACH MANIFOLD METER IS TO HAVE STAINLESS STEEL BOLTS. 3. ALL TAPS FOR METERS SHALL HAVE A MINIMUM OF
- 3' SEPARATION FROM EACH OTHER OR ANY BELL

STREAM BUFFER ENCROACHMENT NOTES

. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

Landscape and Utility Bond Notes : . ALL LANDSCAPE AND UTILITY BONDS THAT ARE REQUIRED BY THE CITY OF POOLER ARE TO BE SUPPLIED AND MAINTAINED BY THE SITE CONTRACTOR.

SPECIAL GREASE INTERCEPTOR NOTES: . ALL GREASE INTERCEPTORS ARE REQUIRED TO HAVE A SAMPLING MANHOL NOT LESS THAN 18" IN DIAMETER INSTALLED AT THE EFFLUENT SIDE OF THE

ITERCEPTOR PRIOR TO THE SANITARY SEWER CONNECTION.

SPECIAL CONSTRUCTION NOTE:

IF THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR O CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM OR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

FIRE PROTECTION WATER:

AS PER 2018 IBC : I. RETAIL = B OCCUPANCY (SECTION 304.1) 2. SPRINKLER PROTECTION IS NOT REQUIRED AS PER CHAPTER 9 3. FIRE PROTECTION IS PROVIDED

SITE FIRE PROTECTION NOTES:

. ACCESS FOR FIREFIGHTING 3310.10 REQUIRED ACCESS.

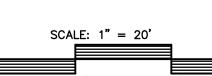
APPROVED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ROADS ARE AVAILABLE.

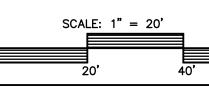
2. FIRE LANE SIGNS SHALL BE SPACED AT A MINIMUM OF 200 FEET APART, SIZE TO BE 12" x 18" WITH A WHITE REFLECTING BACKGROUND AND RED LETTERS AND SHALL READ AS FOLLOWS: "FIRE LANE - NO PARKING - TOW-AWAY ZONE".

3. AS PER FIRE CODE, FIRE FIGHTING APPARATUS MUST BE ABLE TO ACCESS TO WITHIN 150' OF ANY PART OF BUILDING.

rvey Information . Survey information: Gardner Surveying

2. Date of Original Survey : May, 2024 3. Datum : NAVD 88





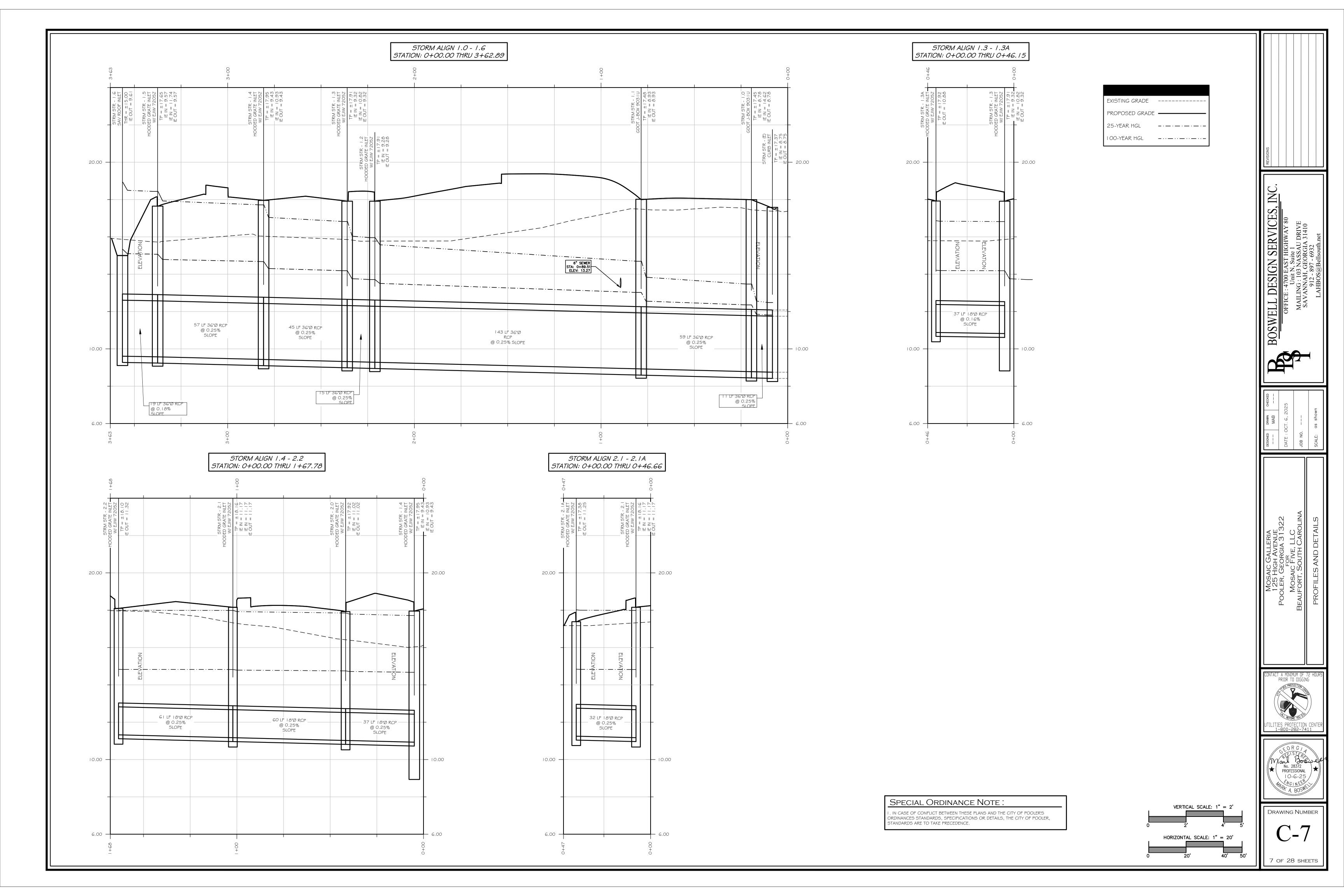
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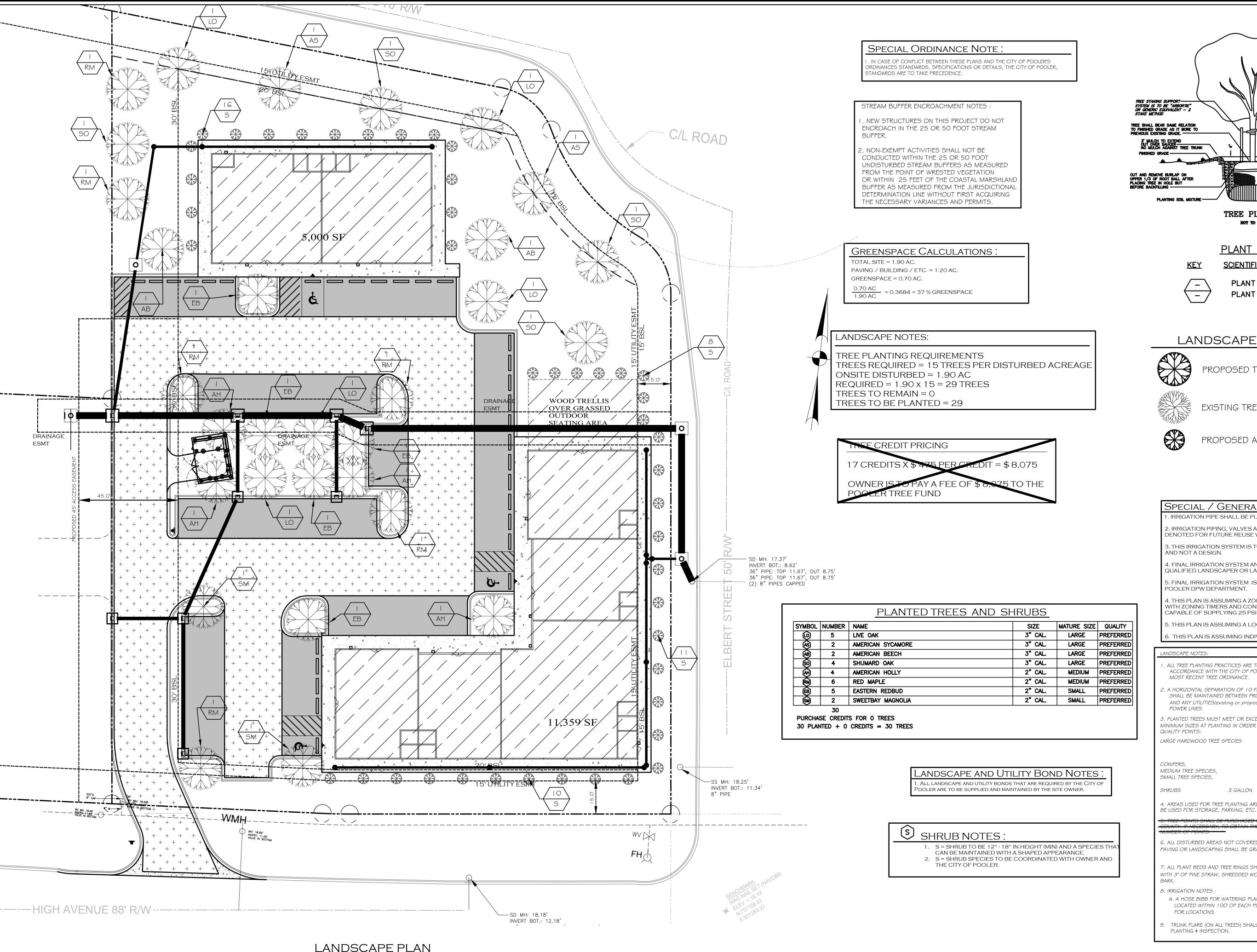
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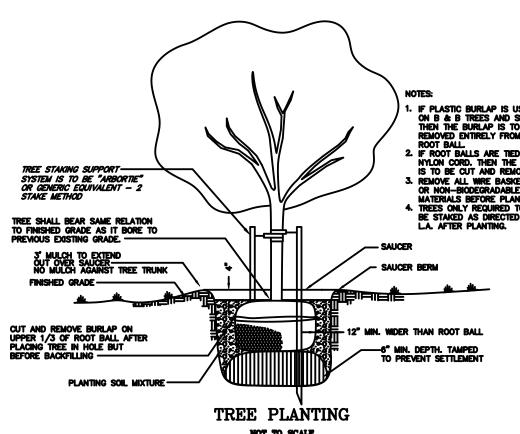


PRIOR TO DIGGING

GEORGIAN SEGISTARIAN No. 28372
PROFESSION PROFESSIONAL







PLANT LEGEND

SCIENTIFIC & COMMON NAME

PLANT QUANTITY PLANT KEY

LANDSCAPE LEGEND



PROPOSED TREE OR SHRUB



EXISTING TREE OR SHRUB



PROPOSED ACCENT PLANT

SPECIAL / GENERAL IRRIGATION NOTES:

IRRIGATION PIPE SHALL BE PURPLE PIPE.

2. IRRIGATION PIPING, VALVES AND SPRAY HEADS SHALL BE DENOTED FOR FUTURE REUSE WATER.

3. THIS IRRIGATION SYSTEM IS TO BE CONSIDERED A GUIDE ONLY

AND NOT A DESIGN.

4. FINAL IRRIGATION SYSTEM AND WELL IS TO BE DESIGNED BY A QUALIFIED LANDSCAPER OR LANDSCAPE ARCHITECT.

5. FINAL IRRIGATION SYSTEM IS TO BE APPROVED BY THE CITY OF POOLER DPW DEPARTMENT.

> 3" CALIPER (diameter of stem measured sıx ınches above the ground)

2" CALIPER

4. THIS PLAN IS ASSUMING A ZONED SYSTEM OF 15 GPM PER ZONE WITH ZONING TIMERS AND CONTROLLERS, A SYSTEM WHICH IS CAPABLE OF SUPPLYING 25 PSI AT THE MAIN.

5. THIS PLAN IS ASSUMING A LOOPED MAIN OF 1 1/2" DIA. 6. THIS PLAN IS ASSUMING INDIVIDUAL WATER LAT'S OF 1" DIA.

ANDSCAPE NOTES:

. ALL TREE PLANTING PRACTICES ARE TO BE IN ACCORDANCE WITH THE CITY OF POOLER'S MOST RECENT TREE ORDINANCE.

2. A HORIZONTAL SEPARATION OF 10 FEET (min.) SHALL BE MAINTAINED BETWEEN PROPOSED TREES AND ANY UTILITIES(existing or proposed) OR UNDER

POWER LINES. 3. PLANTED TREES MUST MEET OR EXCEED THE MINIMUM SIZES AT PLANTING IN ORDER FOR TREE

LARGE HARDWOOD TREE SPECIES

MEDIUM TREE SPECIES,

SMALL TREE SPECIES, 3 GALLON

4. AREAS USED FOR TREE PLANTING AREAS SHALL NOT

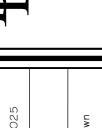
S. ALL DISTURBED AREAS NOT COVERED BY STRUCTURES, PAVING OR LANDSCAPING SHALL BE GRASSED.

7. ALL PLANT BEDS AND TREE RINGS SHALL BE MULCHED

WITH 3" OF PINE STRAW, SHREDDED WOOD CHIPS OR PINE

8. IRRIGATION NOTES : A. A HOSE BIBB FOR WATERING PLANTS IS TO BE LOCATED WITHIN 100' OF EACH PLANT. SEE PLANS

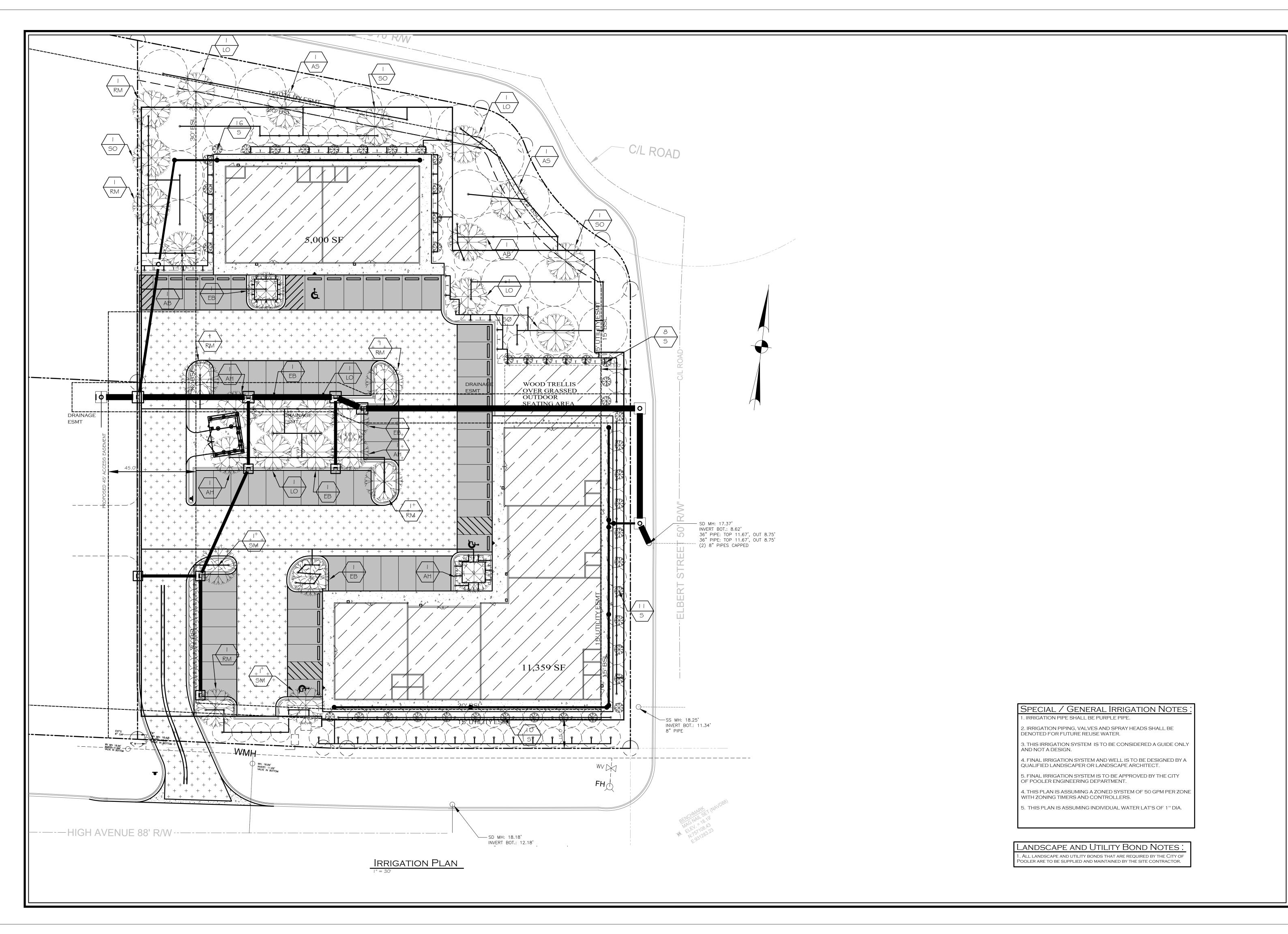
TRUNK FLARE (ON ALL TREES) SHALL BE VISIBLE AT THE TIME OF PLANTING \$ INSPECTION.



PRIOR TO DIGGING



Drawing Number



SERVICES, INC.

IIGHWAY 80

E 1

SAU DRIVE
CGIA 31410

932

BOSWELL DESIGN S.

OFFICE: 4700 EAST HI
Unit N, Suite
MAILING: 103 NASS,
SAVANNAH, GEORC
912 - 897 - 693

025

DATE : OCT. 6, 2025
JOB NO. ---

MOSAIC FIVE, LLC

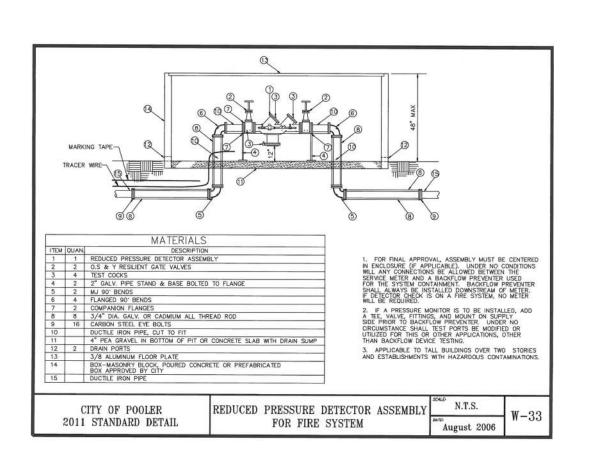
CONTACT A MINIMUM OF 72 HOUR PRIOR TO DIGGING

No. 28372
PROFESSIONAL
10-6-25

MARY A. BOSNE

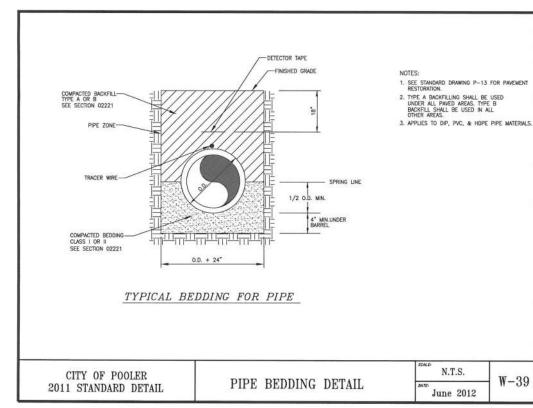
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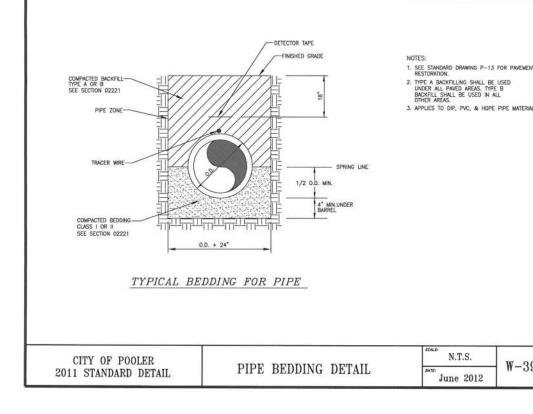
C-9

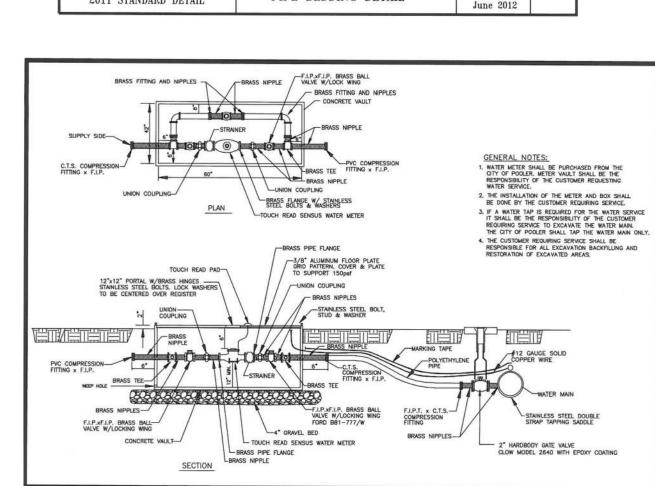


NOTE: 1. THE TAPPING SLEEVE AND VALVE MUST BE INSTALLED IN A MANHOLE. SEE DETAILS WISE & WISE FOR THE MANHOLE DETAILS

WATER MAIN







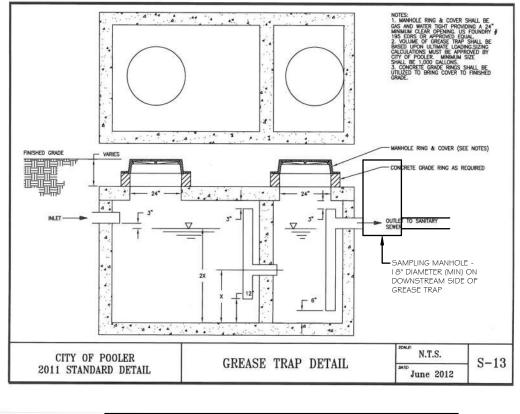
WATER METER INSTALLATION

DOMESTIC

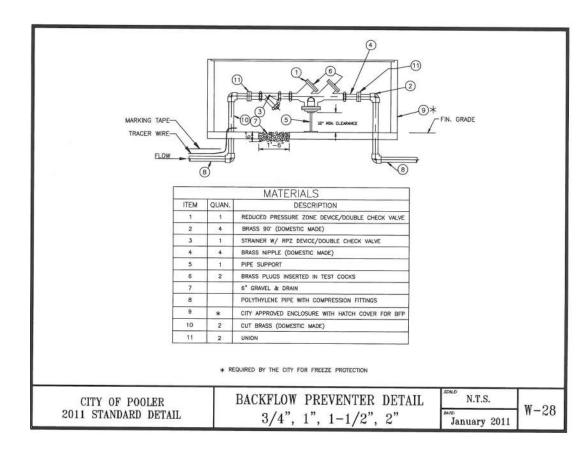
SERVICE PIPE & 1-1/2" & 2" WATER METERS

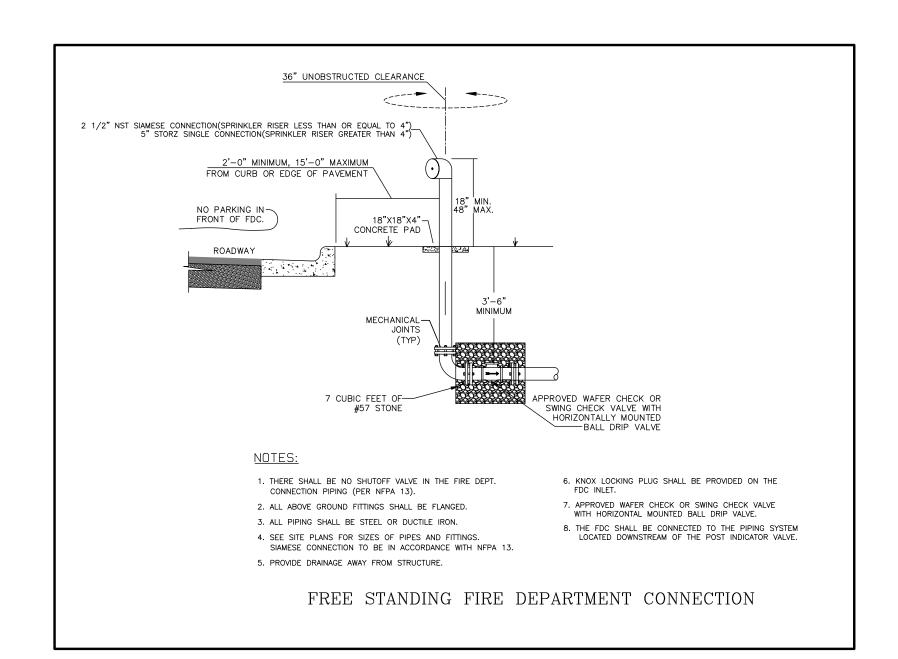
CITY OF POOLER

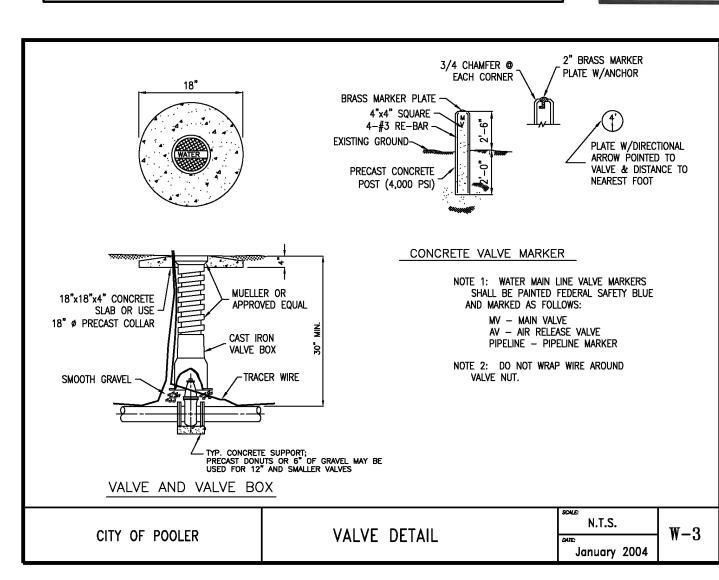
2011 STANDARD DETAIL











CORTEN BOLT, TYP.

--- TAPPING VALVE

/~ FLANGE JOINT

WATER MAIN

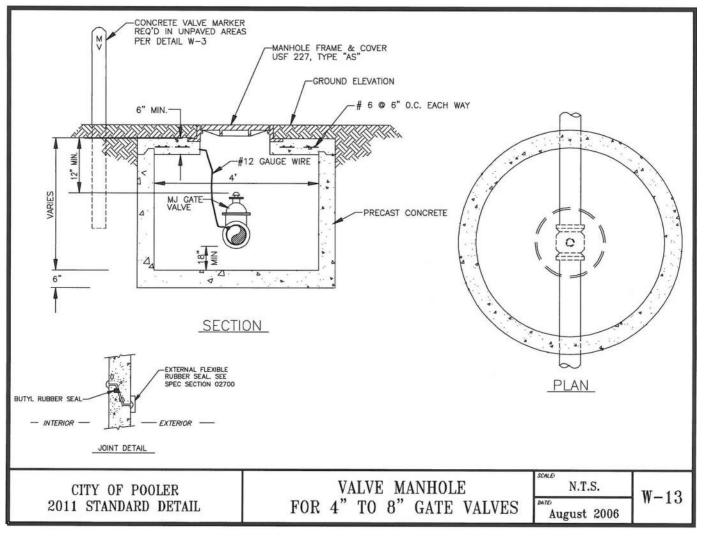
MECHANICAL JOINT

ALC ALS.

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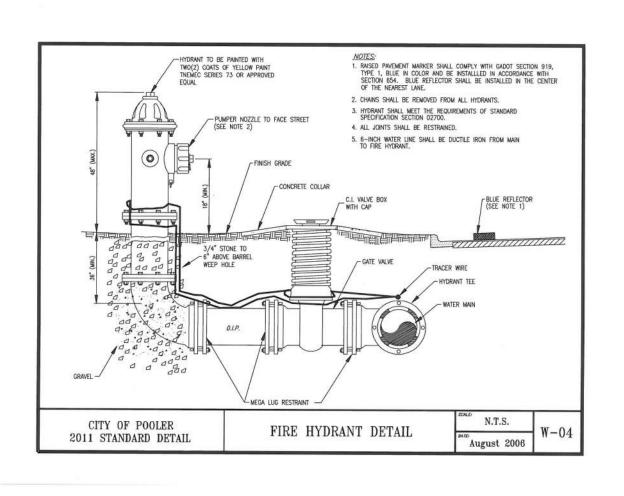
PLAN VIEW

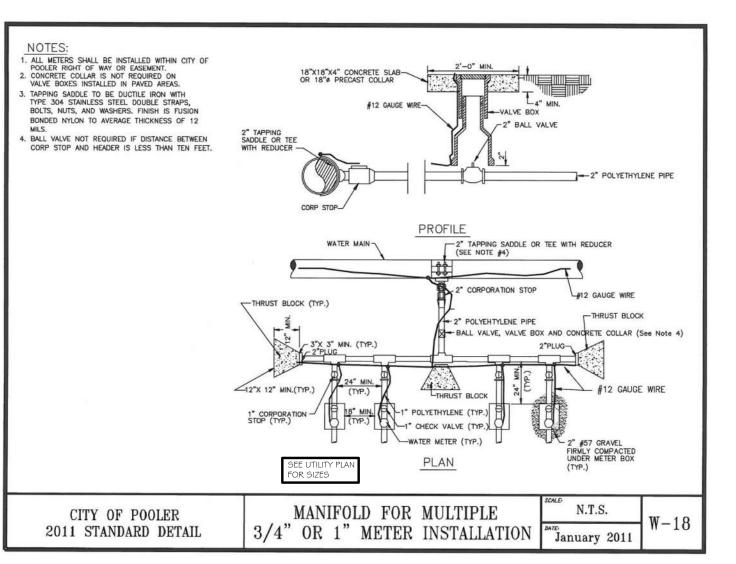
TAPPING SLEEVE DETAIL

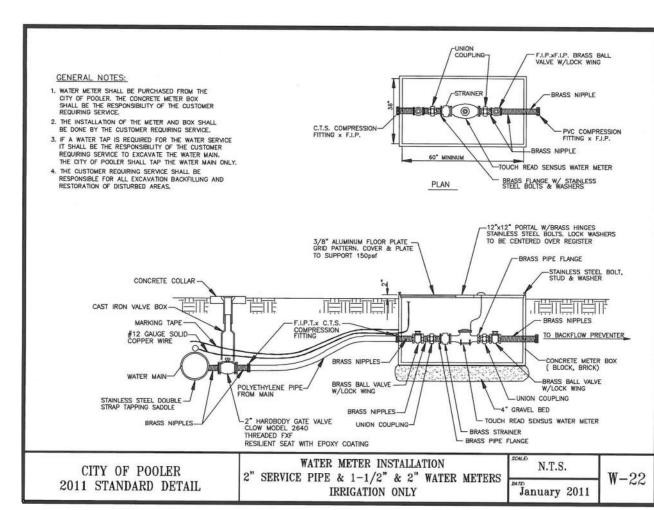


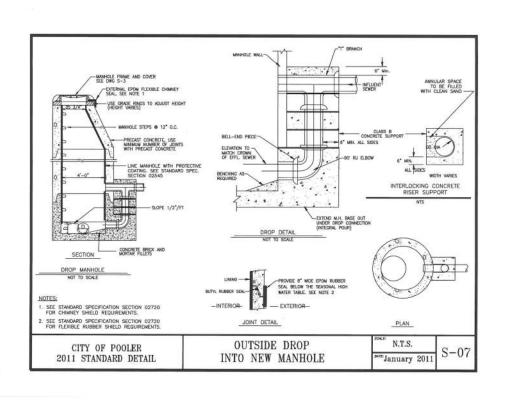
N.T.S.

August 2006



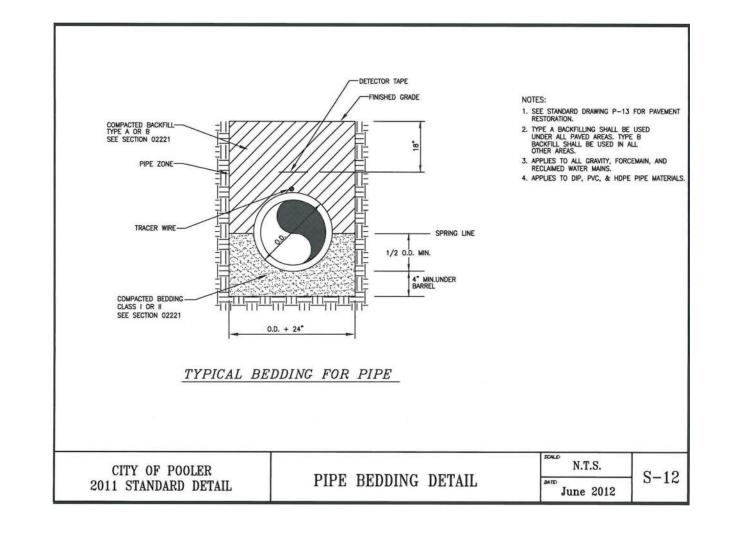


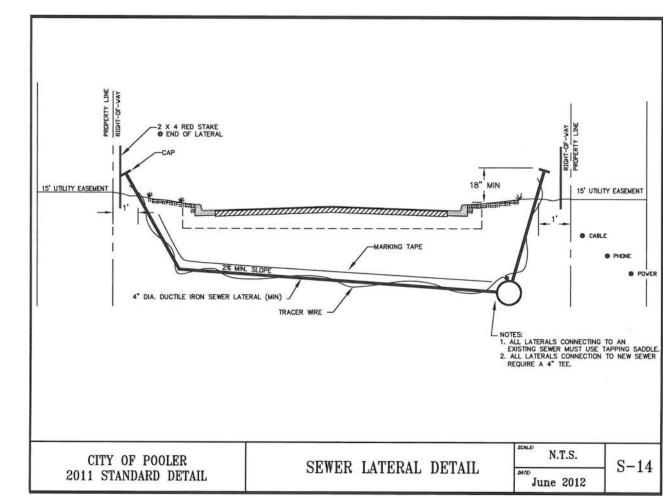






. ALL WATER MAINS, WATER LATERALS AND FIRE HYDRANTS ARE TO HAVE A #12 GAUGE SOLID COPPER WIRE INSTALLED WITH EACH UTILITY. IT SHALL BE INSTALLED IN SUCH A MANNER THAT THE WIRES ARE CONNECTED TO EACH OTHER AND CAN BE CONTINUOUSLY TRACED. THE WATER DEPARTMENT SHALL CONDUCT A TRACING TEST TO ENSURE COMPLIANCE.

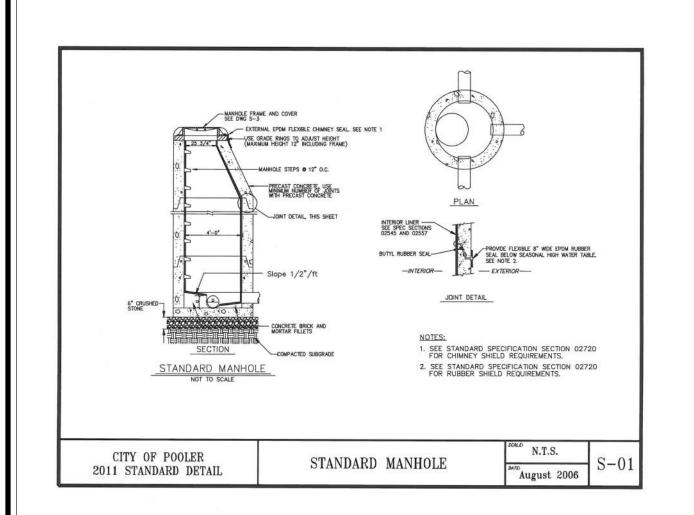


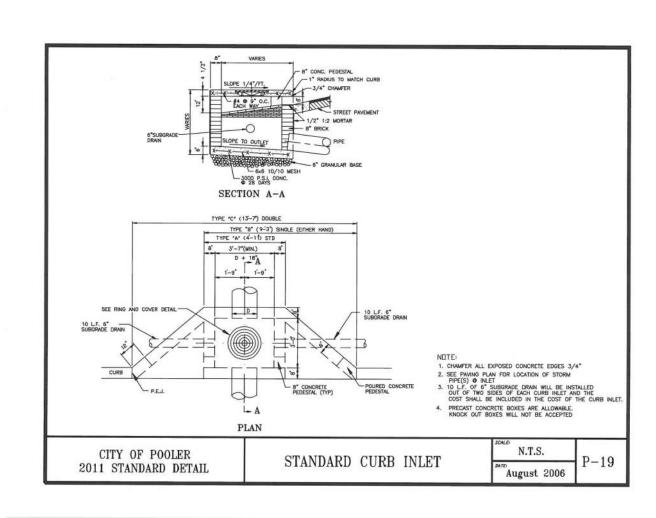


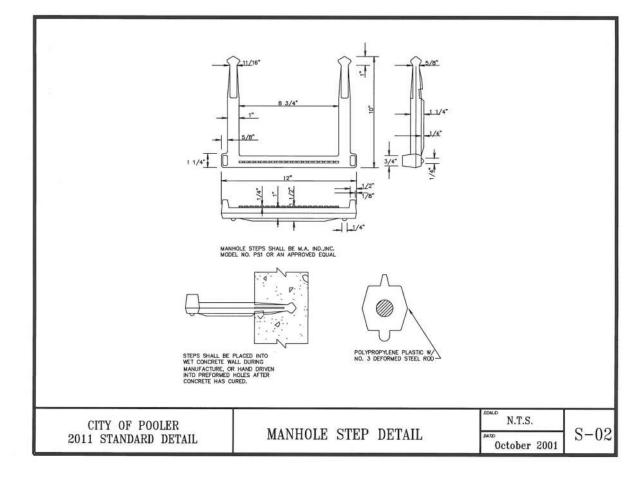
SPECIAL ORDINANCE NOTE . IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER. STANDARDS ARE TO TAKE PRECEDENCE.

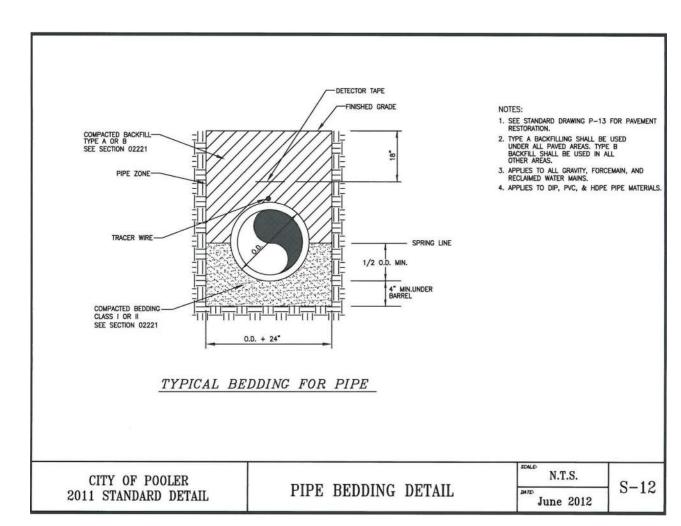


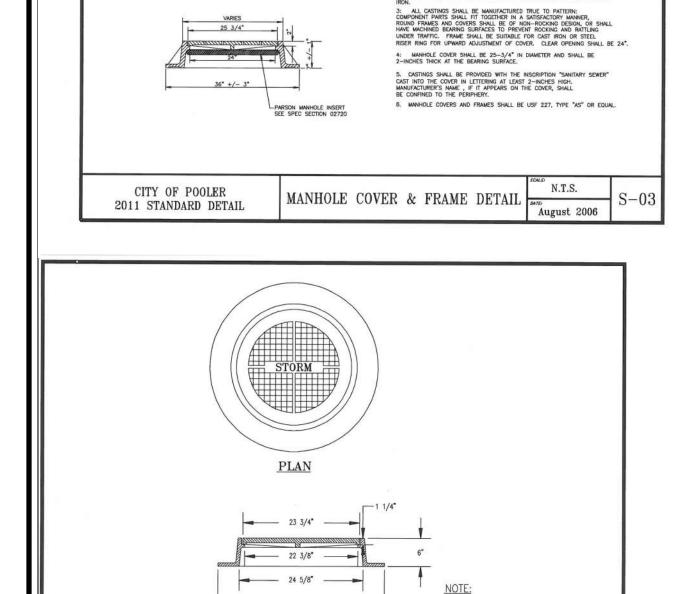
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SECTION

STORM MANHOLE RING & COVER

CITY OF POOLER

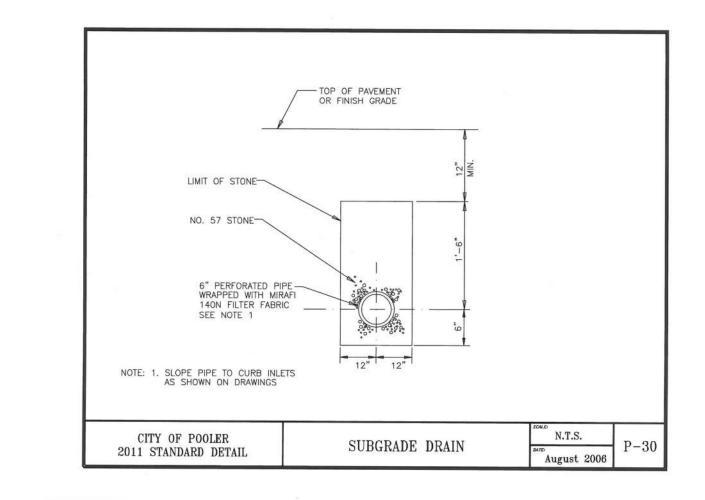
2011 STANDARD DETAIL

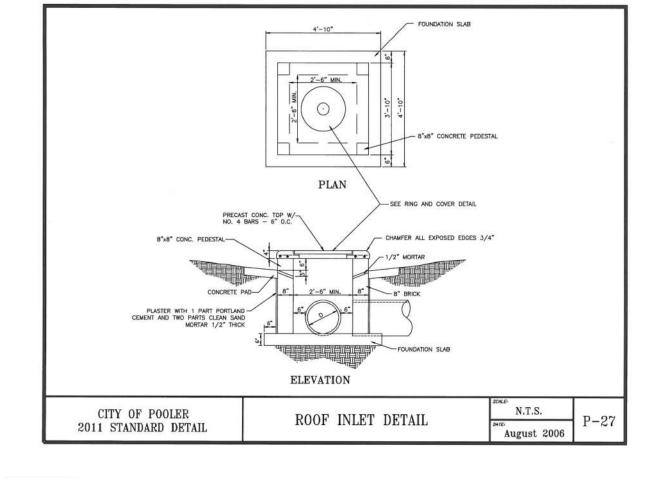
1: CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOTBLASTING OR BY SOME OTHER APPROVED METHOD. CASTING SHALL NOT BE PANTED.

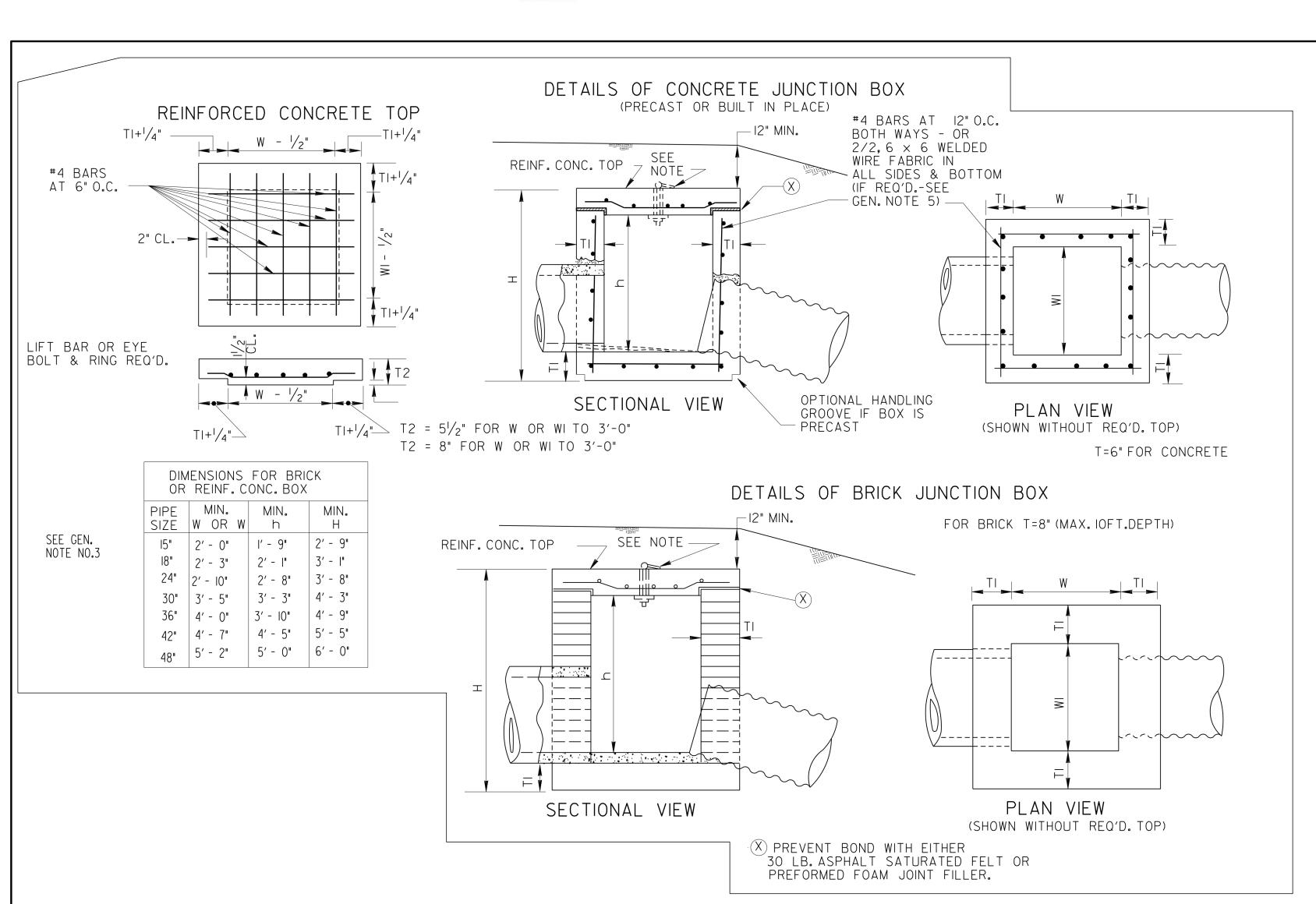
2: MATERIAS USED IN THE MANUFACTURE OF CASTINGS SHAULD CONFORM TO AASHO MIOS/ASTM A48, CLASS 358 OF ASTM A48, CLASS 30, FOR GRAY IRON.

August 2006

"SANITARY SEWER"
TO BE CAST ON COVER









I. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, STANDARDS ARE TO TAKE PRECEDENCE.

REVISIONS

T HIGHWAY 80

Take 1

ASSAU DRIVE
ORGIA 31410

BOSWELL DESIGN SERVIC

OFFICE: 4700 EAST HIGHWAY 8

Unit N, Suite 1

MAILING: 103 NASSAU DRIVE
SAVANNAH, GEORGIA 31410

6, 2025

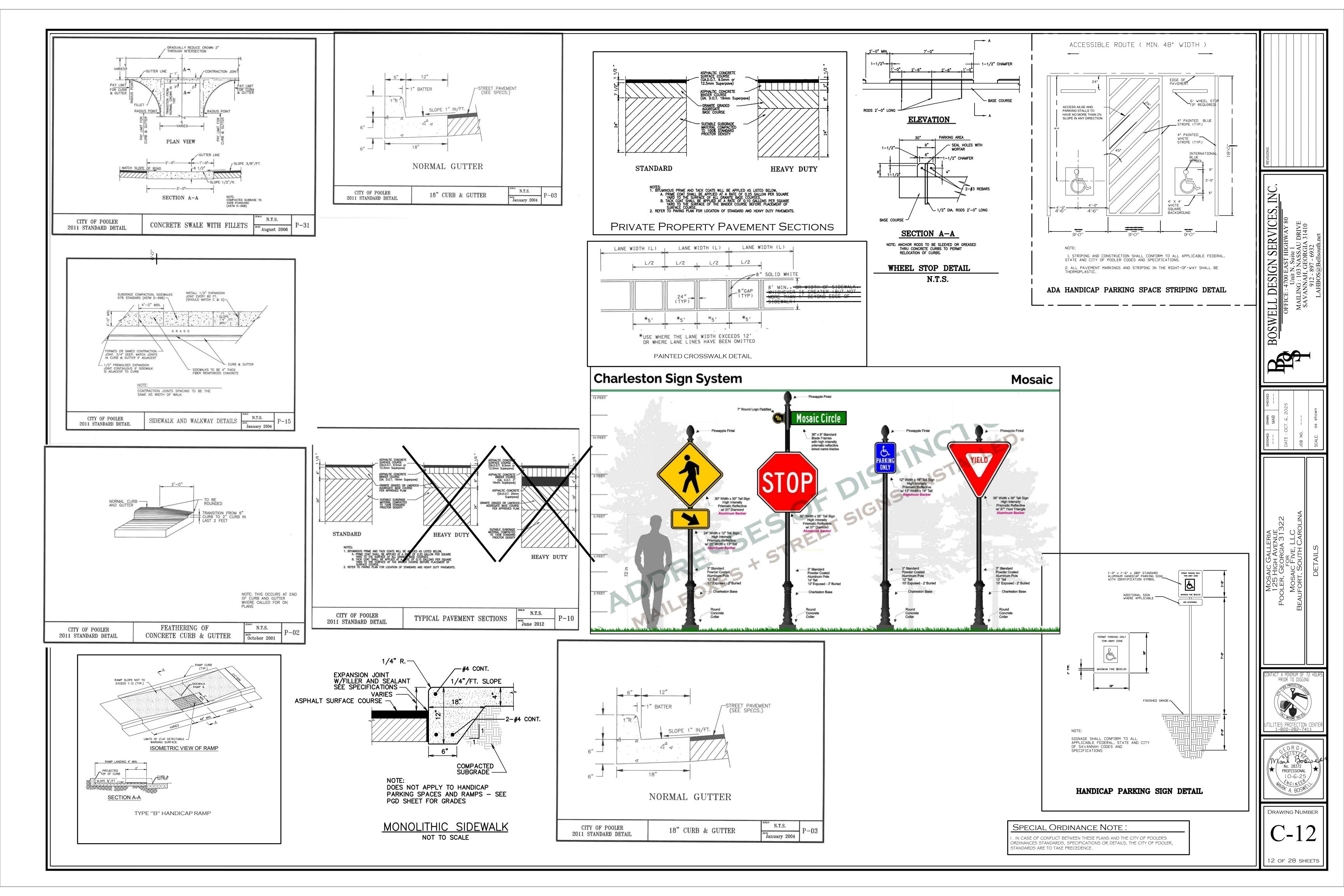
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JOB NO. --SCALE: ds shown

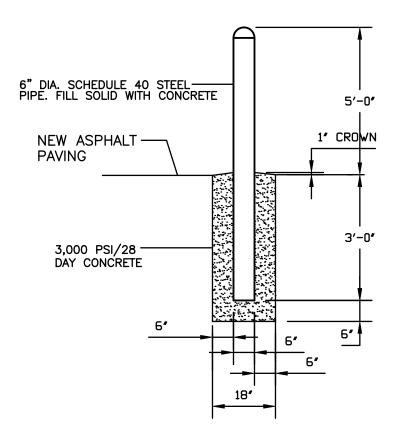
MOSAIC GALLERIA 125 HIGH AVENUE POOLER, GEORGIA 31322 FOR MOSAIC FIVE, LLC EAUFORT, SOUTH CAROLINA

CONTACT A MINIMUM OF 72 HOURS
PRIOR TO DIGGING
PROTECTION
OF THE P



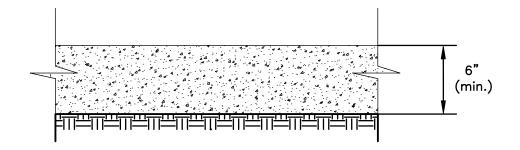
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NOTE: PAINT FINISH COAT: 2 COATS T Tnemec- GLOSS
OR 2 COATS V 34 SERIES OR 2 COATS G-5550-5552 EPOXIDE - TOTAL
DRY FILM THICKNESS 3.0 TO 5.0 MILS. PRIME COAT AS PER
PAINT MANUFACTURER'S INSTRUCTIONS. COLOR TO BE
YELLOW OR AS DIRECTED BY THE ENGINEER.

BOLLARD DETAIL NOT TO SCALE

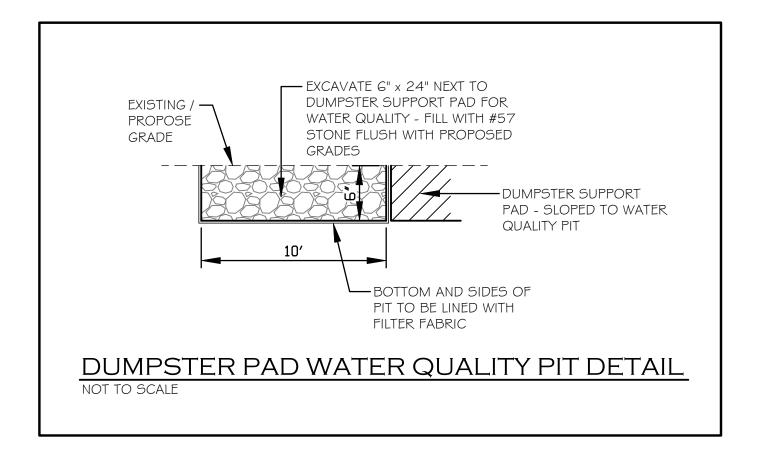


APPROACH NOTES :

1. DRIVEWAY SUBGRADE SHALL BE COMPACTED TO 100% AS PER SECTION 02200, PART 3.01 B.

2. MINIMUM COMPRESSIVE STRENGTH SHALL BE 5,000 psi AS PER SECTION 03300, PART 3.2 IN CITY OF SAVANNAH R.O.W. AND ELSEWHERE.

DUMPSTER PAD AND APPROACH PAD DETAIL



SPECIAL ORDINANCE NOTE:

I. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, STANDARDS ARE TO TAKE PRECEDENCE.

SPECIAL CONSTRUCTION NOTE:

IF THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

SERVICES, INC.

HIGHWAY 80

SAU DRIVE

OFFICE: 4700 EAST HIGHWAY
Unit N, Suite 1
MAILING: 103 NASSAU DRIV
SAVANNAH, GEORGIA 3141
912 - 897 - 6932

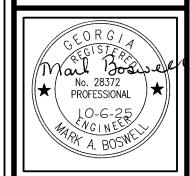


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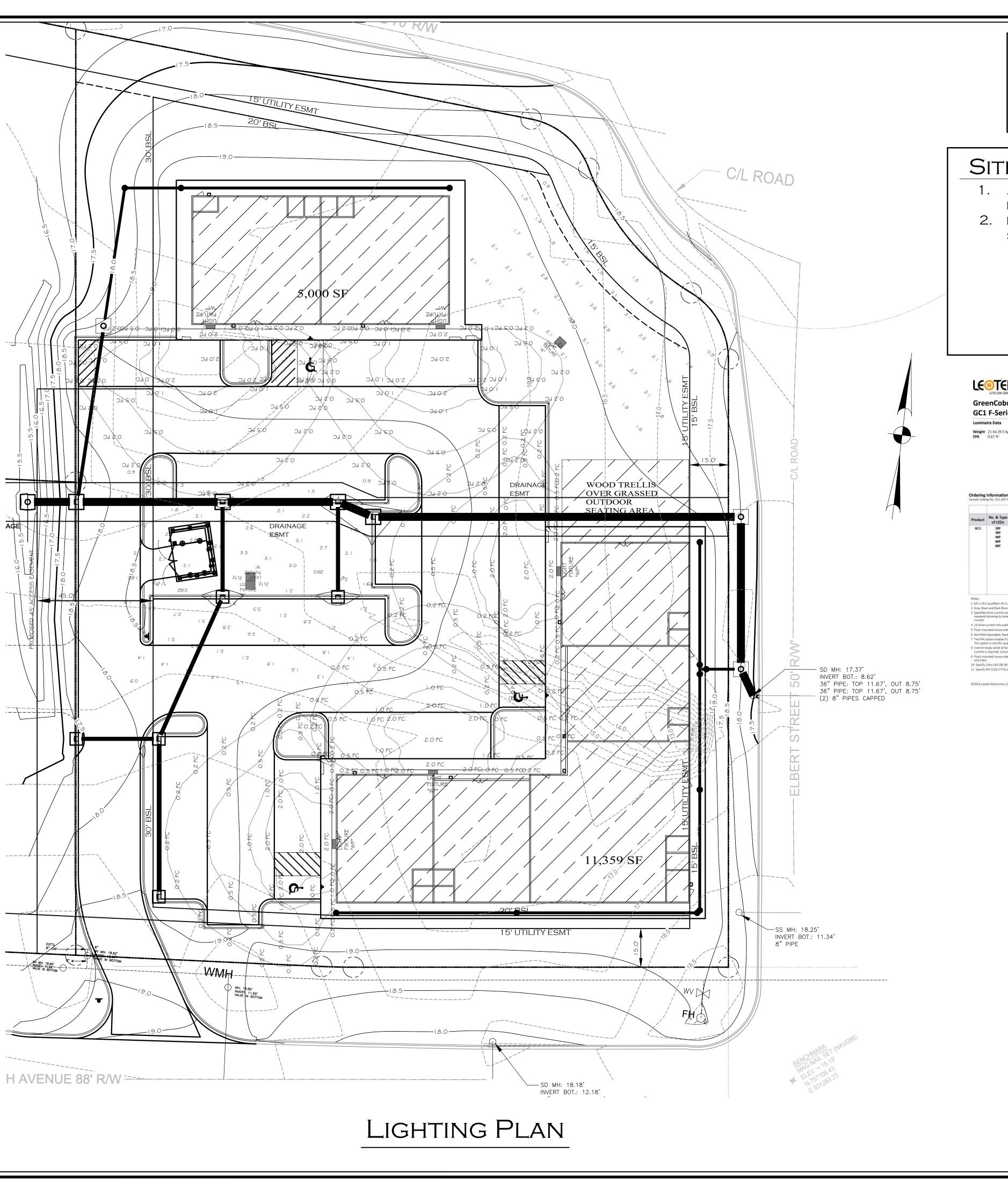
ER, GEORGIA 31322 ER, GEORGIA 31322 OSAIC FIVE, LLC ORT, SOUTH CAROLINA

CONTACT A MINIMUM OF 72 HOURS
PRIOR TO DIGGING



Drawing Number

C-13

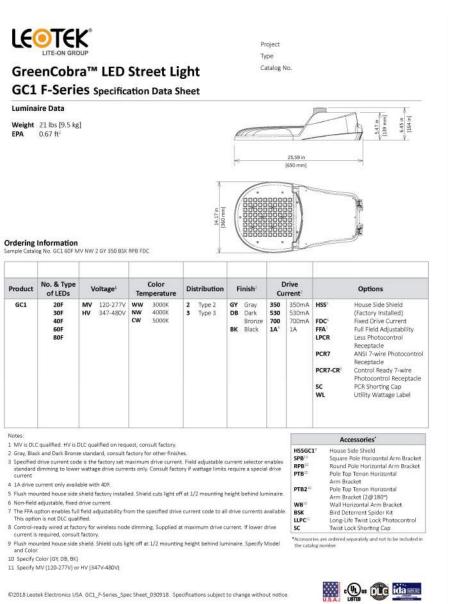


MOUNTING HEIGHT NOTES:

- LIGHTS ARE TO BE 30' MAX
- 2. MOUNTING HEIGHT FOR BUILDING MOUNTED WALL PACKS ARE TO BE 15' MAX.

SITE LIGHTING ORDINANCE NOTES:

- 1. ALL SITE LIGHTING SHALL MEET IESNA (ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA STANDARDS.
- 2. MAXIMUM LIGHT LEVELS PERMITTED AT PROPERTY INE SHALL BE AS FOLLOWS:
 - A. 0.5 FC AT ANY PROPERTY LINE ADJACENT TO A CONSERVATION OR RESIDENTIAL ZONING DISTRICT OR A CONFORMING RESIDENTIAL USE
 - B. 1.0 FC AT ANY PROPERTY LINE ABUTTING ANY MIXED-USE OR NON-RESIDENTIAL ZONING DISTRICT
 - C. 3.0 FC AT ANY PROPERTY LINE ALONG ANY STREET RIGHTS OF WAY





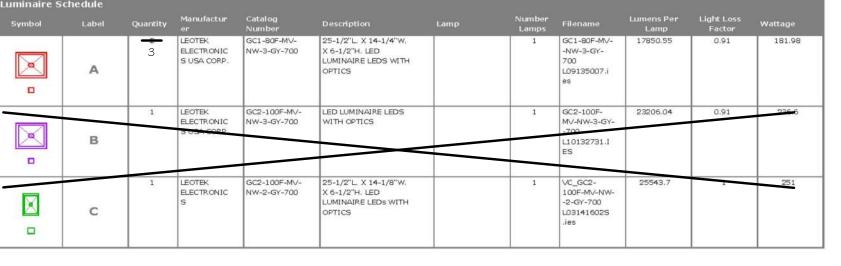
FINAL LIGHTING PLAN IS TO BE COORDINATED, DESIGNED AND APPROVED BY GEORGIA POWER

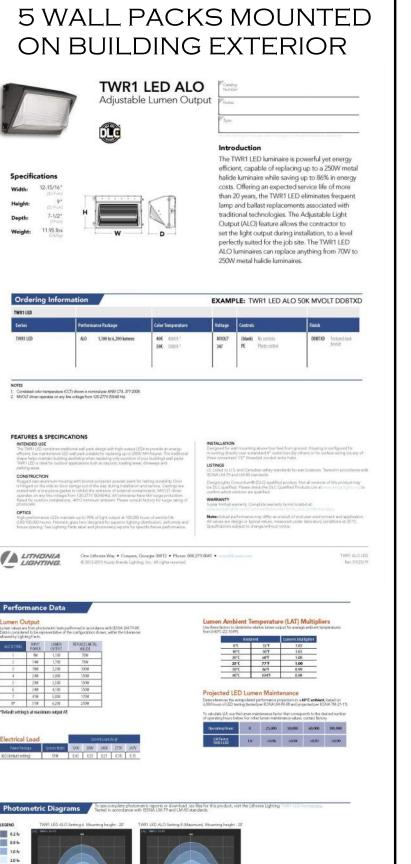
SPECIAL ORDINANCE NOTE:

. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER,

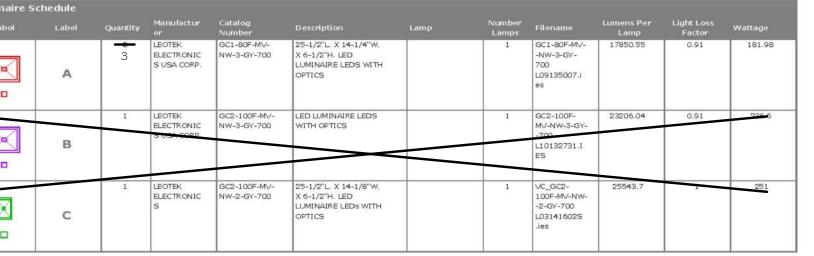
SITE LIGHTING NOTES:

- INSTALLED UTILIZING CUT OFF FIXTURES SO AS TO NOT CAUSE NEW LIGHT TO
- 3. FINAL LIGHTING IS TO BE APPROVED BY THE



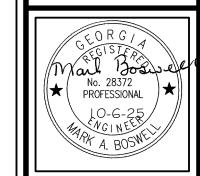


- PARKING AND SITE LIGHTING IS TO BE "SPILL OVER" ONTO ADJACENT PROPERTIES.
- 2. FINAL LIGHTING PLAN IS TO BE COORDINATED, AND SUPPLIED BY THE OWNER.
- CITY OF POOLER.

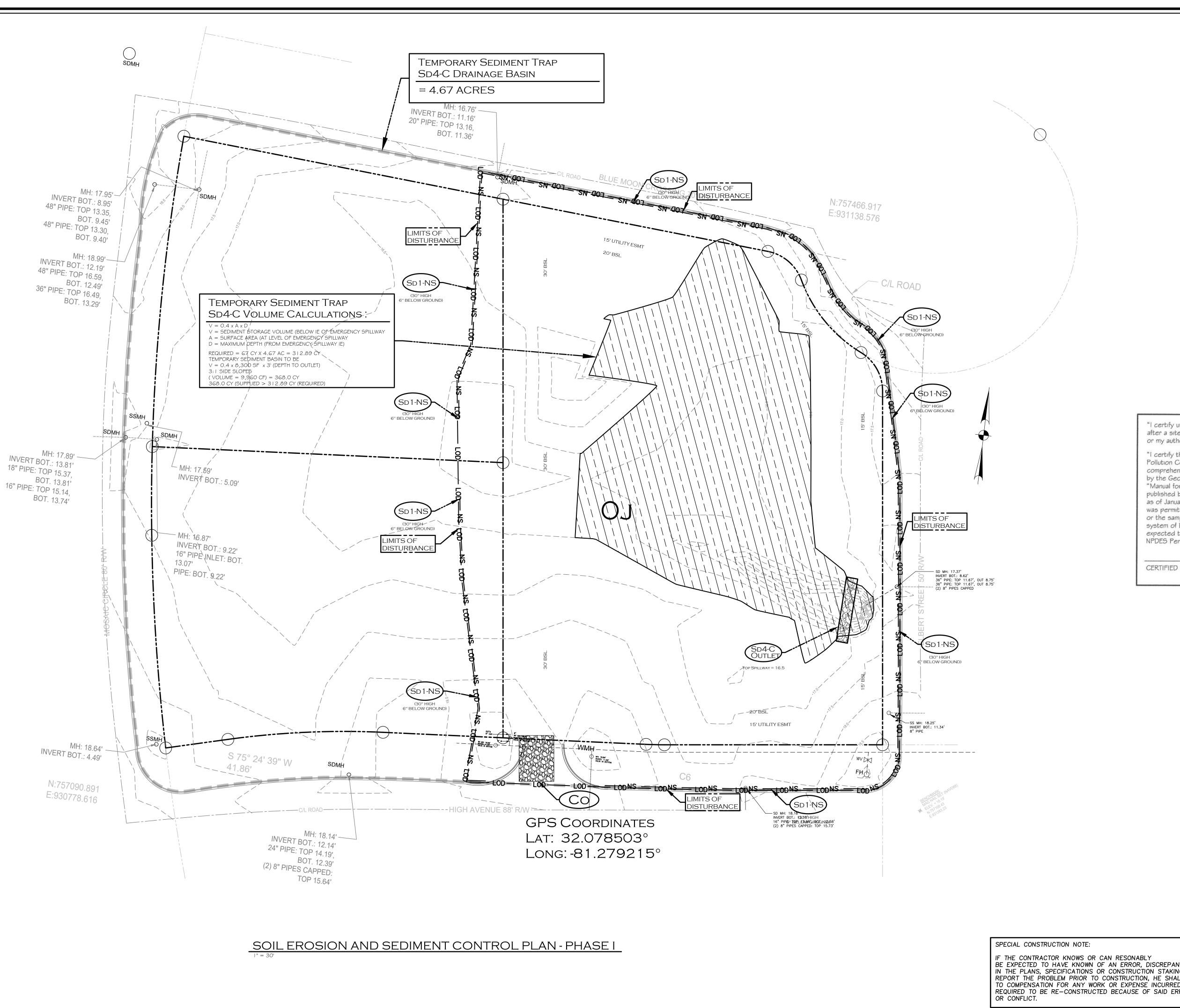




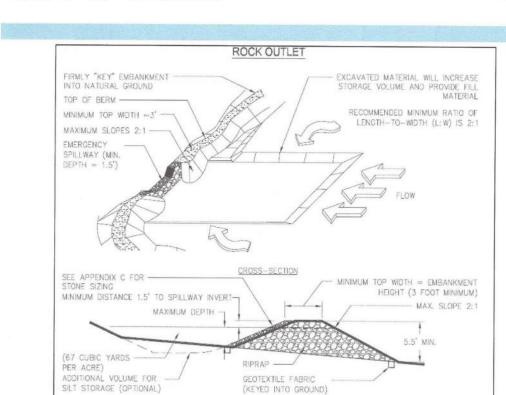
PRIOR TO DIGGING



Drawing Number



Sd4-C Detail



Sd4-C Detail



Sd4

PROFILE THROUGH EMBANKMENT TYPICAL RIPRAP DEPTH FOR -OVERFLOW WEIR = 2 FEET --- MAXIMUM SLOPE 2:1 NATURAL GROUND COMPACT FILL IN MAXIMUM 6" LAYERS TYPICAL WIDTH = 3 FEET Figure 6-30.3

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

"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 I 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 stormwater 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 1 00001."

Mal Bowell

CERTIFIED BY: Mark A. Boswell Level II Certification No. 2104

STREAM BUFFER ENCROACHMENT NOTES:

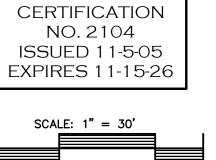
. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

SPECIAL ORDINANCE NOTE:

. IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, STANDARDS ARE TO TAKE PRECEDENCE.

BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY



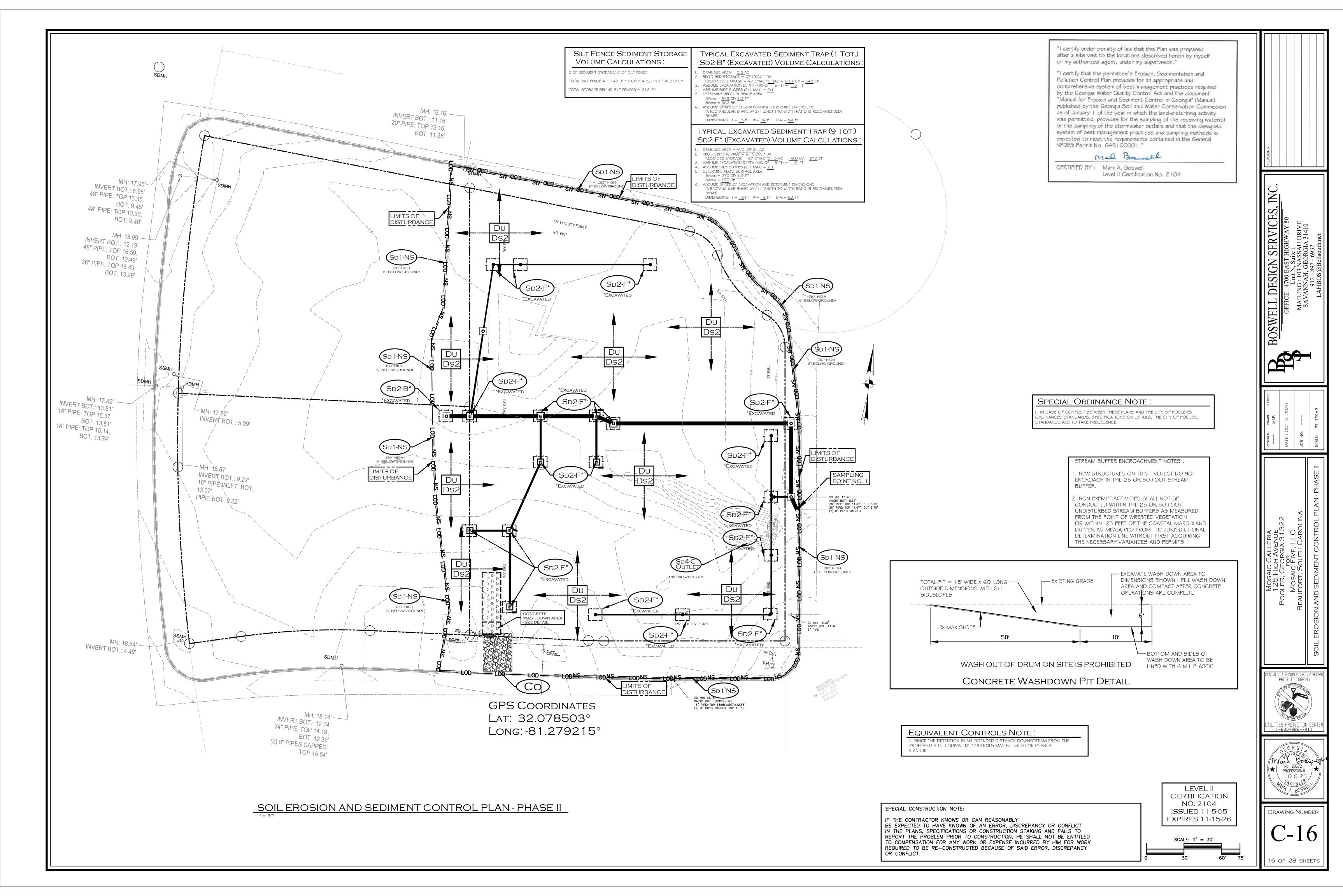
LEVEL II

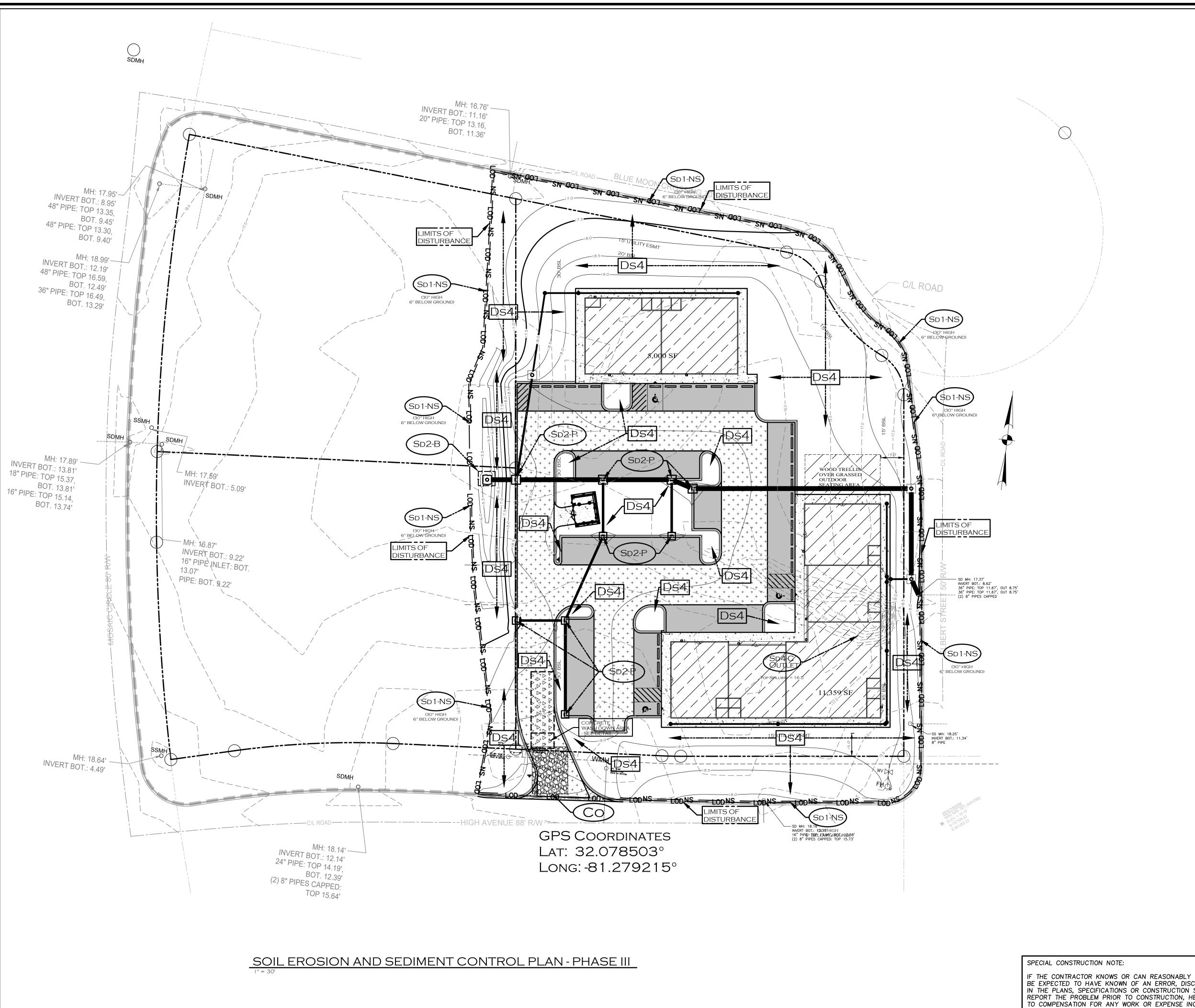


PRIOR TO DIGGING



DRAWING NUMBER





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"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 I 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 stormwater 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 I 00001."

Mal Boswell

CERTIFIED BY: Mark A. Boswell Level II Certification No. 2104

I . NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

STREAM BUFFER ENCROACHMENT NOTES:

2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

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EQUIVALENT CONTROLS NOTE:

I. SINCE THE DETENTION IS AN EXTENDED DISTANCE DOWNSTREAM FROM THE PROPOSED SITE, EQUIVALENT CONTROLS MAY BE USED FOR PHASES

IF THE CONTRACTOR KNOWS OR CAN REASONABLY
BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT
IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO
REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED
TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK
REQUIRED TO BE RE—CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY
OR CONFLICT.

LEVEL II
CERTIFICATION
NO. 2104
ISSUED 11-5-05
EXPIRES 11-15-26

SCALE: 1" = 30'

REVISIONS

: 4700 EAST HIGHWAY 80
Unit N, Suite 1
NG: 103 NASSAU DRIVE
NNAH, GEORGIA 31410

OB NO. --
CALE: as shown

DATE ::
JOB NA - DHASE III SCALE:

MOSAIC FIVE, LLC
AUFORT, SOUTH CAROLINA

TACT A MINIMUM OF 72 HOURS PRIOR TO DIGGING

JTILITIES PROTECTION CENTER

1-800-282-7411

OFFICIAL PROFESSIONAL

1 O-6-25

ACCUMENTS

Drawing Number

C-17

I. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER

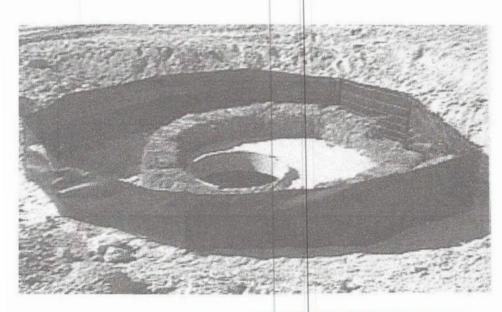
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LEVEL II
CERTIFICATION
NO. 2104
ISSUED 11-5-05
EXPIRES 11-15-26

Sd2 INLET SEDIMENT TRAP

DEFINITION

A temporary sediment barrier placed around a storm drain drop inlet.



PURPOSE

Prevent sediment from entering storm drainage systems.

INSTALLATION

- Install according to approved plan, if shown.
- Do not install where vehicular traffic will be affected.
- Install at or around all storm drain drop inlets that receive runoff from disturbed areas.
- Construct on natural ground surface, excavated surface, or on machine compacted fill.

Excavated Sediment Traps

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself

"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 I 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 stormwater 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 I 00001."

Level II Certification No. 2104

Mal Boansell

CERTIFIED BY: Mark A. Boswell

or my authorized agent, under my supervision."

- Minimum of 1.5 feet of sediment storage in excavated sediment traps.
- Must be self-draining unless otherwise protected.

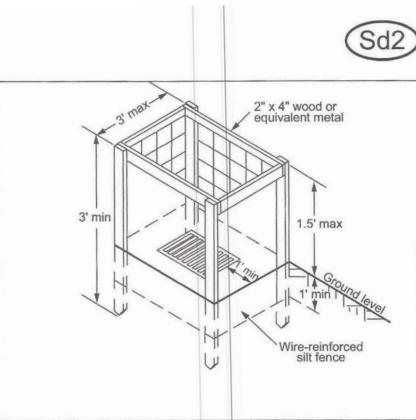
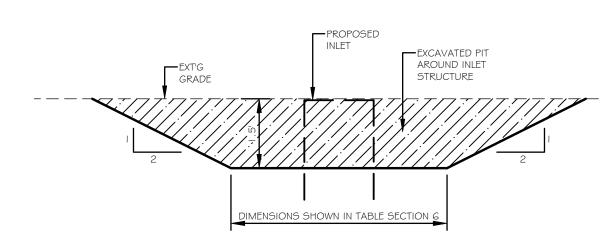


Figure 1. Fabric and supporting Frame for Inlet Protection (Sd2-F)





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SERVICES, I HIGHWAY 80 lite 1 SSAU DRIVE

OS W ELL DESIGN SE

OFFICE: 4700 EAST HIG

Unit N, Suite 1

MAILING: 103 NASSA!

SAVANNAH, GEORGI



--- MAB --DATE: OCT. 6, 2025

DATE : OCT. 6

125 HIGH AVENUE OLER, GEORGIA 31322 FOR MOSAIC FIVE, LLC JFORT, SOUTH CAROLINA

CONTACT A MINIMUM OF 72 HOUR PRIOR TO DIGGING



Drawing Number

1. NARRATIVE: THE EXISTING SITE IS VACANT AND THE GROUND IS GENERALLY FLAT WITH SLOPES BETWEEN 0 AND FOUR PERCENT WITH FEW TREES. THE PROPOSED DEVELOPMENT WILL BE TWO NEW RETAIL BUILDINGS AND TWO NEW RESTAURANTS AND WILL HAVE PAVING GRADING, DRAINAGE AND UTILTIES. DETENTION WILL BE ACHIEVED BY UTILIZING THE EXISTING PARK POND. THE TOTAL SITE IS APPROXIMATELY 1.9 ACRES WITH THE DISTURBED AREA BEING APPROXIMATELY 2.5 ACRES.

2. DEVELOPER / OWNER :

MOSAIC FIVE, LLC D.J. DESAI (CONTACT) P.O. BOX 6465

BEAUFORT, SOUTH CAROLINA 29906

PRIMARY PERMITTEE EMAIL: DJDESAI@HDCOMPANIES.COM

3. 24 HOUR CONTACT: D.J. DESAI 843-379-9405

4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CURRENT STATE SOIL AND WATER CONSERVATION COMMITTEE OF GEORGIA "MANUAL FOR EROSION CONTROL IN GEORGIA.

5. PRIOR TO ANY OTHER CONSTRUCTION, STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE. ALL ENTRANCES TO THE SITE WHICH ARE NOT PROTECTED SHALL BE BARRICADED.

6. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXITS, ALL PERIMETER EROSION CONTROL DEVICES AND STORM WATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION

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

8. THE LOCATIONS OF EROSION CONTROL DEVICES SHALL BE ADJUSTED AS CONSTRUCTION PROGRESSES IN ORDER TO MAINTAIN A FUNCTIONING EROSION CONTROL SYSTEM.

9. THE FAILURE OF ANY EROSION CONTROL DEVICE TO FUNCTION AS INTENDED, FOR ANY REASON, SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY!

10. EROSION CONTROL DEVICES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND AT LEAST DAILY DURING PROLONGED PERIODS OF CONTINUOUS RAINFALLS.

11. EROSION CONTROL DEVICES SHALL BE CLEANED WHEN THEY BECOME HALF FILLED

12. EROSION CONTROL DEVICES SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A

FUNCTIONING EROSION CONTROL SYSTEM. 13. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT COVER IS

ESTABLISHED AND THEN REMOVED SO THAT DRAINAGE FROM THE SITE IS NOT IMPAIRED.

14. STORM WATER DETENTION DEVICES SHALL BE CLEANED AS SPECIFIED ABOVE AND AFTER PERMANENT GROUND COVER HAS BEEN ESTABLISHED.

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

16. ANY DISTURBED AREAS WITH SLOPES 2:1 OR FLATTER WHICH ARE NOT STABILIZED BY ANY OTHER MEASURES SHALL BE SEEDED AS SPECIFIED IN "PERMANENT SEEDING".

A VEGETATIVE COVER SHALL BE ESTABLISHED AND MAINTAINED OVER ALL FINAL GRADING AND OTHER DISTURBED AREAS OF THE SITE. SEE COASTAL PLAIN VEGETATIVE COVERS FOR AN OUTLINE OF THE ESTABLISHMENT OF VEGETATIVE COVERS.

WEEKLY INSPECTION OF THE GRASS COVER SHALL BE PERFORMED TO IDENTIFY AREAS REQUIRING RE-ESTABLISHMENT OF GRASS.

LIME RATE: 1 TO 2 TONS PER ACRE FERTILIZER: 1500 POUNDS OF 6-12-12 PER ACRE

MULCH SHALL BE UNCHOPPED, UNROTTED, SMALL GRAIN DRY STRAW APPLIED AT A RATE OF 2 TONS PER ACRE. MULCH MATERIAL SHALL BE RELATIVELY FREE FROM ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS WHICH ARE AS FOLLOWS: CANADA THISTLE, JOHNSONGRASS AND QUACKGRASS. SPREAD MULCH MECHANICALLY OR UNIFORMLY BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDPLACEMENTPIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER.

19. SOIL TYPE: THE SOILS IN THIS AREA HAVE BEEN CLASSIFIED BY THE SOIL CONSERVATION SERVICE AS: Oj (Ocilla Complex) and Waf (Wahee Sandy Loam)Waf (Wahee Sandy Loam).

THIS MAY BE DONE BY PEG AND TWINE METHOD, MULCH ANCHORING TOOL, NETTING OR

20. THIS DEVELOPMENT IS WITHIN MINIMAL ZONING AREA "X" ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 13051C0109G, MAP REVISED 8-16-18.

21. THIS SITE IS IN FLOOD ZONE "X" AND IS NOT LOCATED WITHIN THE 100 YEAR FLOOD

<u>SPECIAL NOTES:</u>

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

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

3. 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.

4. CITY OF POOLER PERSONNEL SHALL HAVE THE RIGHT TO INSPECT STORMWATER FACILITIES AT ALL TIMES.

5. STATE WATERS DO NOT EXIST ON THIS PROPERTY.

6. FRESH WATER WETLANDS DO NOT EXIST ON THIS PROPERTY.

7. THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER HAS VISITED THE SITE PRIOR TO DESIGN OF THE E & SC PLANS.

8. THE RECEIVING WATERS FOR THIS PROJECT IS THE EXISTING POOLER DRAINAGE SYSTEM, PARK POND, SEVERAL UN-NAMED CONVEYANCES, OGEECHEE RIVER AND ULTIMATELY THE ATLANTIC OCEAN.

9. ANY DISTURBANCE AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABALIZED WITH TEMPORARY SEEDING. 10. AMENDMENTS OR REVISIONS TO THE ES & PC PLAN WHICH HAVE A HYDRAULIC EFFECT ON THE PROJECT MUST BE APPROVED BY THE DESIGN ENGINEER.

CLEARING NOTES:

1. ALL ELEVATIONS ARE BASED ON 88 NAVD DATUM.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

3. ALL WORK SHALL BE IN COMPLIANCE WITH THE STATE SOIL AND WATER CONSERVATION COMMITTEE'S "MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED ON A REGULAR BASIS AND SHALL BE REMOVED BY THE CONTRACTOR UPON ACCEPTANCE OF THE SITE BY THE OWNER. SEE LAND DISTURBING PLAN.

4. ALL DISTURBED AREAS AND PROPOSED EARTH GRADING NOT TO BE COVERED BY OTHER SURFACES SHALL BE GRASSED AS DESCRIBED ON THE LAND DISTURBING ACTIVITY PLAN.

5. EGRESS FROM THE SITE WILL BE SUCH THAT ALL VEHICLES MUST TRAVERSE CONSTRUCTION EXITS TO REMOVE MUD FROM TIRES BEFORE ENTERING ANY PAVED

6. BALES OF HAY, STRAW OR SILT FENCE SHALL BE PLACED AROUND ALL STORM INLETS TO PREVENT SEDIMENT FROM ENTERING NEW PIPE OR DRAINAGE WAYS DURING CONSTRUCTION. THESE MEASURES ARE TEMPORARY.

7. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE OF ALL AREAS WITHIN THE PROJECT SITE INCLUDING RIGHTS-OF-WAYS, EASEMENTS AND LOTS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY FILL AND OR GRADING TO MEET THE FINISHED PLAN GRADES AND ELIMINATE ANY AND ALL AREAS WHICH ARE LOW AND DO NOT DRAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING PROPER DRAINAGE OF ANY AREAS WHICH ARE CHANGED AS A RESULT OF FIELD ADJUSTMENTS TO THE CONSTRUCTION PLANS.

8. THE CONTRACTOR WILL NOT BEGIN CLEARING OR ANY CONSTRUCTION ACTIVITY UNTIL THE APPROPRIATE PERMITS HAVE BEEN ISSUED.

9. IF REQUIRED, TREE PROTECTION BARRICADES SHALL BE INSTALLED PRIOR TO ANY CLEARING ACTIVITY AND MAINTAINED UNTIL INSTRUCTED BY OWNER OR ENGINEER

10. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID DAMAGE TO TREES AND ROOT SYSTEMS WHILE WORKING WITHIN TREE PROTECTION BARRICADES. THE CONTRACTOR SHALL NOT WORK WITHIN TREE PROTECTION BARRICADES WITHOUT A REPRESENTATIVE FROM THE OWNER OR ENGINEER PRESENT.

11. PRUNING OF TREE LIMBS, BRANCHES AND ROOTS OF TREES WHICH ARE WITHIN TREE PROTECTION BARRICADES SHALL BE DONE IN CONFORMANCE WITH SPECIFICATIONS AND RECOMMENDATIONS OF THE "NATIONAL ARBORIST ASSOCIATION" (N.A.A.) IN "PRUNING STANDARDS FOR SHADE TREES". ANY VARIATION FROM THE RECOMMENDATION OF THE N.A.A. SHALL BE APPROVED BY THE OWNER IN WRITING PRIOR TO ANY PRUNING.

12. LIMITS OF GRADING AND GRASSING ARE INDICATED ON PLANS AS "LIMITS OF DISTURBANCE".

13. ALL DISTURBED AREAS FROM NEW CONSTRUCTION ACTIVITIES WILL BE SEEDED, MULCHED, FERTILIZED AND WATERED TO PROMOTE A SUFFICIENT GROUND COVER THAT WILL PREVENT SOIL EROSION. SUFFICIENT COVERAGE SHALL BE AS SPECIFIED IN "EROSION CONTROL GRASSING".

14. DRAINAGE: ALL EXCAVATION SHALL BE PERFORMED SO THAT THE SITE AND THE AREA IMMEDIATELY SURROUNDING THE SITE WHICH EFFECTS THE OPERATIONS WILL BE CONTINUALLY AND EFFECTIVELY DRAINED. SURFACE WATER, GROUNDWATER, OR ANY PERCHED WATER WHICH MIGHT BE ENCOUNTERED DURING EXCAVATIONS SHALL BE REMOVED BY ANY ACCEPTABLE MEANS APPROVED BY THE ENGINEER.

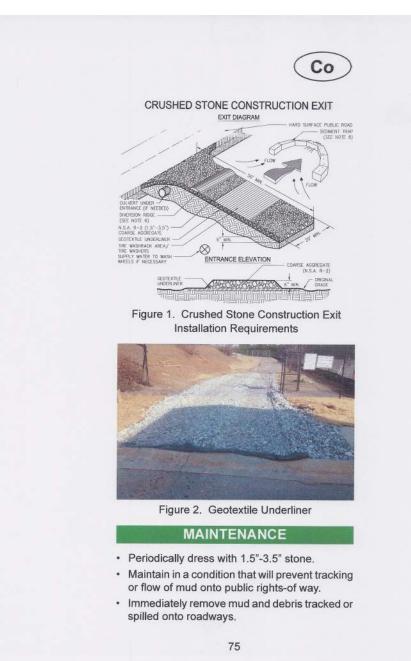
TENTATIVE ACTIVITY SCHEDULE

		2025								
	APR	MAY	JUNE JULY	AUG	SEPT					
DEMOLITION, CLEARING, GRUBBING										
INSTALLATION OF SEDIMENT CONTROLS AND TREE PROTECTION BARRICADES										
TEMPORARY GRASSING		1								
SITE GRADING										
UTILITY INSTALLATION										
BUILDING CONSTRUCTION										
PERMANENT GRASSING										
PAVING										
MAINTENANCE OF SEDIMENT CONTROL										
REMOVAL OF SEDIMENT CONTROL										
			• • • • • • • • • • • • • • • • • • • •		• • • • •					

SITE DATA

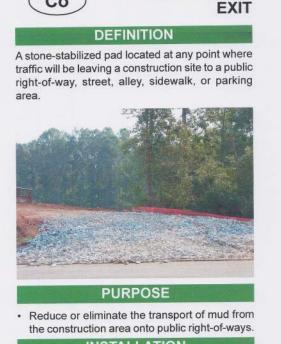
TOTAL ACREAGE... ..1.9 ACRES . 2.5 ACRES (OFFSITE + R/W) DISTURBED ACREAGE.. S.C.S. SOIL SURVEY MAP AS PER WEB SOIL SURVEY





Co

CONSTRUCTION



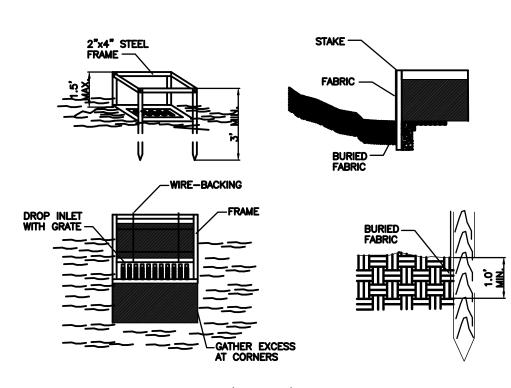
 Install according to the approved plan. Use 1.5"-3.5" stone.

Minimum pad thickness of 6".

the paved access, the length shall be from the edge of the existing pavement to the permitted

When washing is required, conduct on an area stabilized with crushed stone and route runoff to an approved sediment trap or sediment basin.

· Place the geotextile liner the full length and width of the entrance.



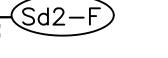
1. FOR STAKES, USE 2×4 INCH WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.

2. SPACE STAKES EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART AND SECURELY DRIVE THEM INTO THE GROUND, APPROXIMATELY 18 INCHES DEEP. 3. TO PROVIDE NEEDED STABILITY TO THE INSTALLATION, FRAME WITH 2x4 INCH WOOD STRIPS AROUND THE CREST OF THE OVERFLOW AREA AT MAXIMUM OF 1.5 FEET ABOVE THE DROP INLET CREST.

4. PLACE THE BOTTOM 12 INCHES OF THE FABRIC IN TRENCH AND BACKFILL THE TRENCH WITH AT LEAST 4 INCHES OF CRUSHED STONE OR 12 INCHES OF COMPACTED SOIL.

5. FASTEN FABRIC SECURELY TO THE STAKES AND FRAME. JOINTS MUST BE OVERLAPPED TO THE NEXT STAKE.

6. THE TOP OF THE FRAME AND FABRIC MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPI FROM THE DROP INLET TO KEEP RUNOFF FROM BYPASSING THE INLET. IT MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON THE DOWN SLOPE SIDE OF THE STRUCTURE TO PREVENT BYPASS



'I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

'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 I 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 stormwater 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."

Level II Certification No. 2104

Mal Bonnell CERTIFIED BY: Mark A. Boswell

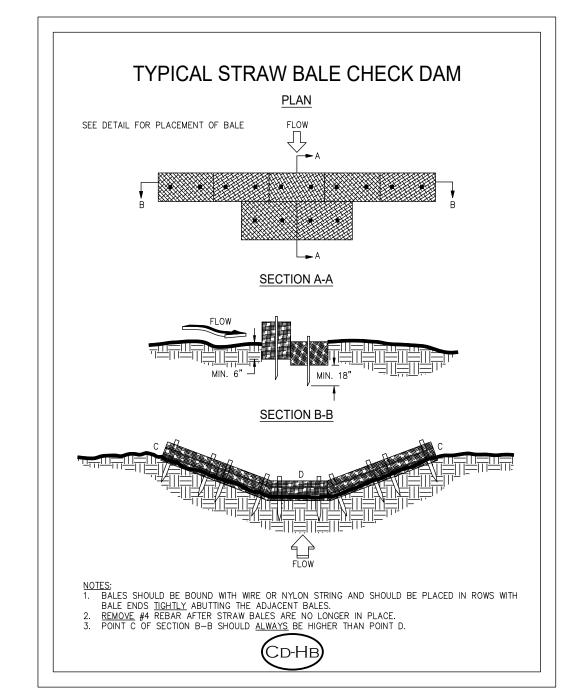
STREAM BUFFER ENCROACHMENT NOTES :

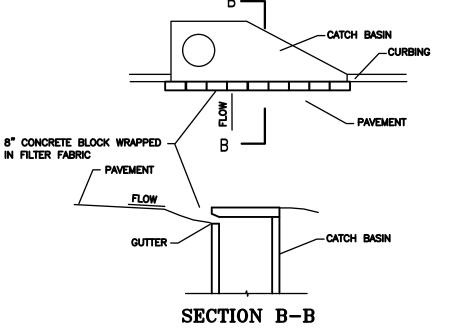
NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

. 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.

WEIGHTED RUN-OFF COEFFICIENTS

PRE-DEVELOPED = 74Post-Developed = 89





NOTE: INSTALL FILTER AFTER ANY ASPHALT PAVMENT INSTALLATION

INLET SEDIMENT TRAP DETAIL CURB INLET FILTER ("PIGS IN BLANKET")

SPECIAL ORDINANCE NOTE

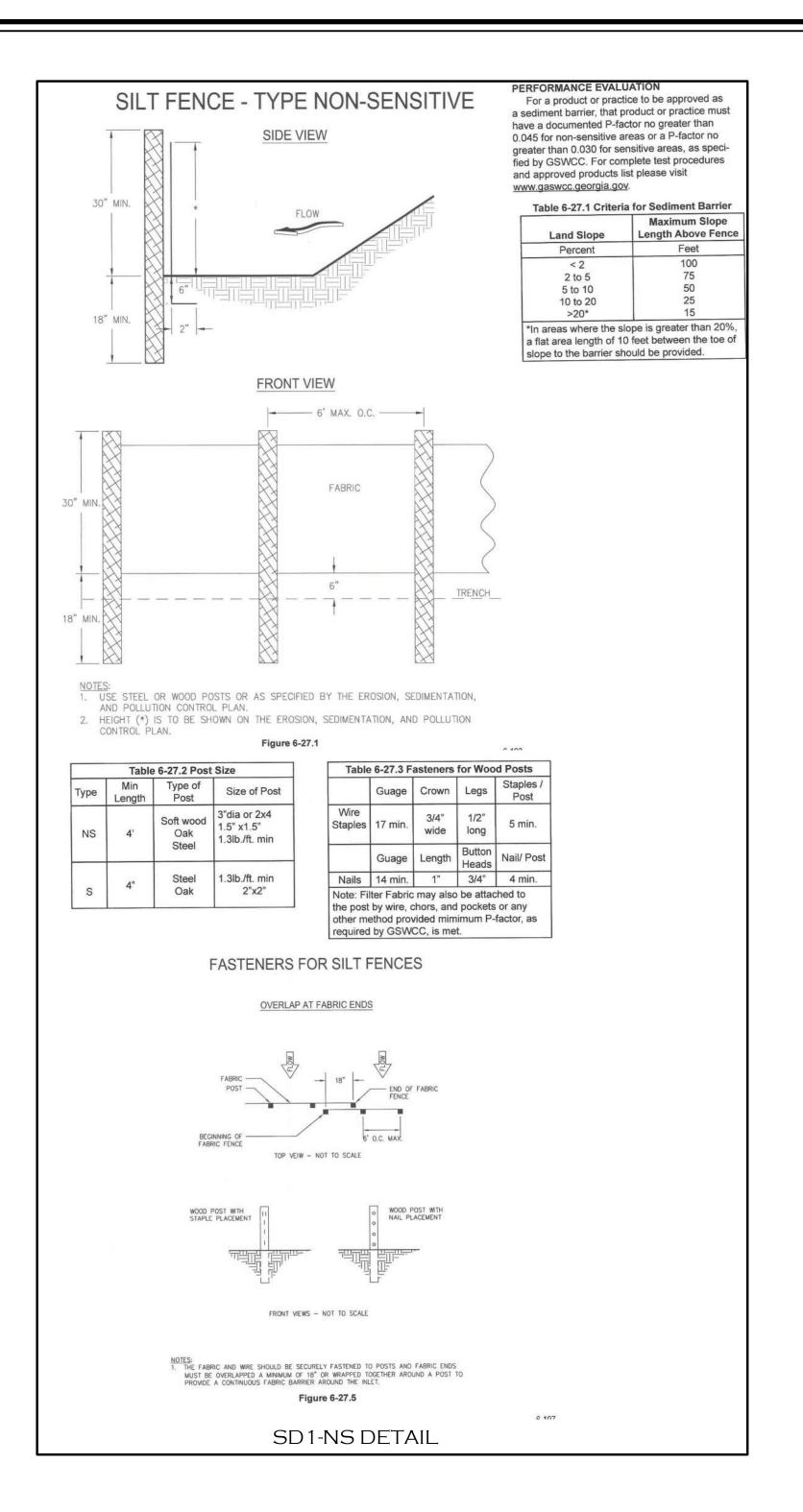
IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S RDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER, TANDARDS ARE TO TAKE PRECEDENCE.

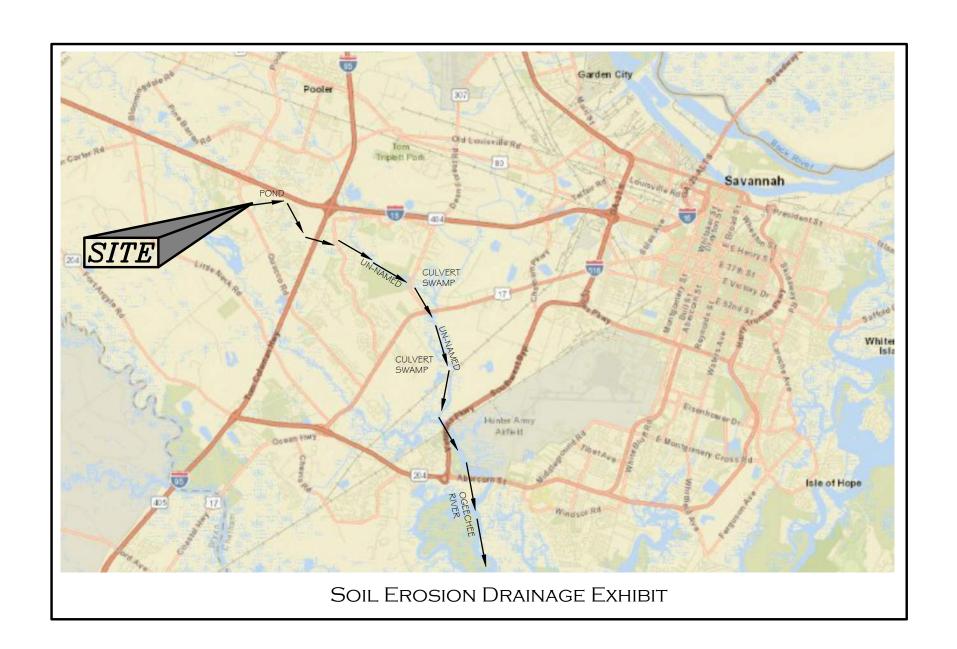
LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26

PRIOR TO DIGGING



Drawing Number





STORM AND UTILITIES MANHOLE AND BOX NOTES: . INVERT ELEVATIONS ARE TO BE CONSIDERED AS PIPE INVERTS AND NOT AS THE INVERT OF THE MANHOLE, BOX. ETC

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

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 I 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 stormwater 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."

Mal Boswell

CERTIFIED BY: Mark A. Boswell Level II Certification No. 2104

STREAM BUFFER ENCROACHMENT NOTES:

NEW STRUCTURES ON THIS PROJECT DO NOT BMP REMOVAL NOTE : ENCROACH IN THE 25 OR 50 FOOT STREAM RETROFITS, PERIMETER SILT FENCE AND ONSTRUCTION EXIT TO BE LEFT IN PLACE

. 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.

Erosion and Sediment Control Phasing

NTIL FINAL STABILIZATION HAS OCCURED.

XIT IS NO LONGER NEEDED

ONCE THE SITE IS PAVED THE CONSTRUCTION

I. This phase shall include Silt fencing and construction exits and sediment and detention ponds to be installed prior to any land disturbing activities to prevent sediment from leaving the site.

Intermediate Phase (Phase II)

. This phase shall include construction of any outlet structures, retrofits, check dams, inlets protection and temporary grassing.

Final Phase (Phase III)

. This phase shall include outfall protection, any revised inlet protection and any other permanent devices.

REQUIRED TEMPORARY SEDIMENT STORAGE SEDIMENT STORAGE WILL BE ACHIEVED IN BOTTOM OF TEMPORARY POND

REQUIRED SEDIMENT STORAGE TEMPORARY BASIN 1 :

 $\frac{67 \text{ C.Y.}}{\text{ACRE}} \times 4.67 \text{ ACRES DISTURBED} = 312.9 \text{ C.Y. REQUIRED}$

EMPORARY SEDIMENT TRAP = 368 CY 368 CY (supplied) > 3 | 2.9 CY (required)

PHASE II AND PHASE III

REQUIRED SEDIMENT STORAGE CALCULATIONS SEDIMENT STORAGE WILL BE ACHIEVED BEHIND SILT FENCES AND WITHIN SEDIMENT TRAPS

 $\frac{67 \text{ C.Y.}}{\text{ACRE}} \times 4.67 \text{ ACRES DISTURBED} = 312.9 \text{ C.Y. REQUIRED}$

BEHIND SIFT FENCE = 212 CY

WITHIN TRAPS = 2,844 CF = 105 CY (SEE C-16 AND C-19 FOR DETAILS) TOTAL SEDIMENT STORAGE = 105 + 212 = 317 CY 317 CY (supplied) > 312.9 CY (required)

DESCRIPTION OF STORM WATER POLLUTION

DISCHARGE PREVENTION PRACTICES

THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT

NOT LIMITED TO: A. CONSTRUCTION EXIT

B. SILT FENCING

E. STONE CHECK DAMS

G. GRASSING

+ DETENTION POND

J. DUST CONTROL

TANDARDS ARE TO TAKE PRECEDENCE.

K. CONCRETE WASHDOWN PIT

L. TEMPORARY SEDIMENT TRAPS

SPECIAL ORDINANCE NOTE:

IN CASE OF CONFLICT BETWEEN THESE PLANS AND THE CITY OF POOLER'S

ORDINANCES STANDARDS, SPECIFICATIONS OR DETAILS, THE CITY OF POOLER,

UNIFORM CODING SYSTEM

GEORGIA

FOR SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

STRUCTURAL PRACTICES CODE PRACTICE DETAIL MAP

A rough soil surface with horizontal depression

water (it may also be referred to as a floating boom, silt barrier, or silt curtain).

The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.

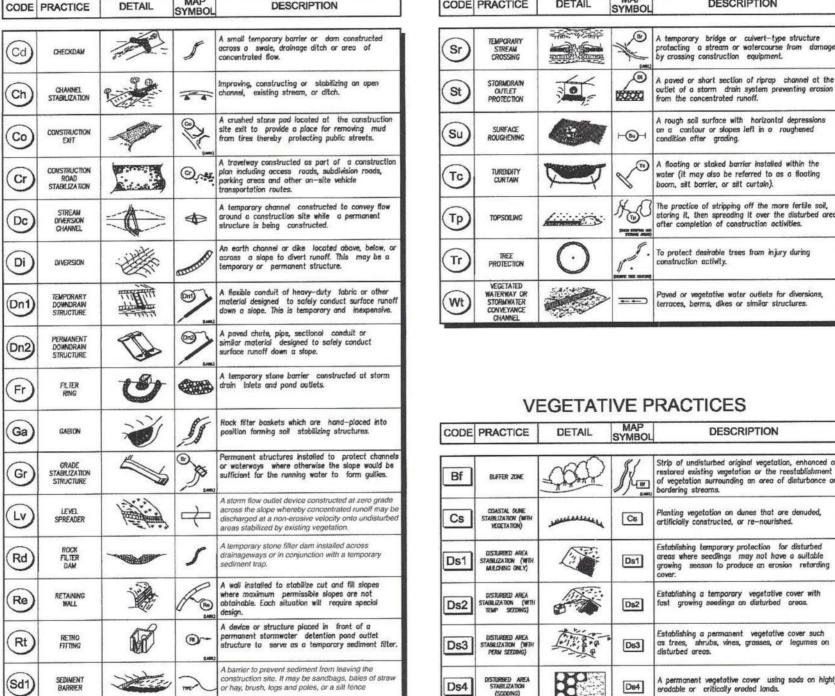
To protect desirable trees from injury during

Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.

Controlling surface and air movement of dust a

A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, share lines, or channels.

Substance used to anchor strum or not cousing the organic material to bind together.



GSWCC 2016 Edition

SPECIAL SOIL EROSION PREVENTION NOTES

A small temporary point can settle out. The principile feature distinguishing a temporary sediment trap

the surface of sediment ponds, trops, or basins at

A linear control device constructed as a diversion perpendicular to the direction of the runoff to enhance dissipation and infiltration of runoff, while creating multiple sedimentation chambers with the employment of intermediate dikes.

pipe or riser.

I. The state of Georgia requires that the initial soil erosion prevention

measures shall be inspected by the designer within 7 days after installation.

2. It is the responsibility of the contractor to notify the soil erosion prevention plan designer within 7 days after the initial soil erosion measures are in place for inspection.

SS SLOPE STABILIZATION

3. Soil erosion prevention plans shall be kept current and on site or readily accessible at all times during the duration of the project until after final stabilization has occurred.

- 5. Contractor is to keep a record of his inspections of the soil erosion control measures to include at
- least the following: a. date and scope of the inspection
- b. name of person performing inspection
- c. major observations (including noncompliance incidents) Inspection reports are to be kept current and on site or readily accessible at all times during the
- 6. Sampling of the outfall is the responsibility of the primary permittee and sampling requirements are to be as per the NPDES general permit.
- 7. Silt fencing is to remain in place until final stabilization.

duration of the project until after final stabilization has occurred.

- 8. Waste materials shall not be discharged to state waters except as
- authorized by a section 404 permit.
- 9. These ES & PC plans are in compliance with waste disposal, sanitary sewer and septic tank regulations.
- 10. Great care shall be taken to prevent oil spills and leaks. In the event that a spill shall occur, stop the spill source immediately and implement BMP's and clean-up for the spill.

LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26

SPECIAL CONSTRUCTION NOTE:

F THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR O CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.





PRIOR TO DIGGING



Drawing Number

7 DAY INSPECTION NOTE

The design professional is to inspect the installation of the initial sediment storage requirements and perimeter control BMP's. The design professional must be retained by the primary permittee to conduct a site inspection within seven (7) days after the the installation of the initial sediment storage requirements and perimeter control BMP's. The design professional must report the results of the inspection to the primary permittee within seven (7) days and the primary must correct all deficiencies identified in the report within two (2) business days after receiving the report (unless additional time is needed due to adverse weather). The primary permittee may use an alternate design professional to conduct the BMP inspection, provided that they make a written request to EPD to change from the design professional who developed the plan and EPD has agreed.

DESIGN PROFESSIONAL 7 DAY VISIT CERTIFICATION

Date of Inspection

certify the site was in compliance with the ES&PC Plan on the date of inspection.

Mark Boswell

SSWC LEVEL II DESIGN PROFESSIONAL

CERTIFICATION 3

Inspection revealed the following discrepancies from the ES&PC Plan.

proceed on the site until design Professional Certification is obtained.

These deficiencies must be addressed immediately and a re—inspection scheduled. Work shall not

PRODUCT SPECIFIC PRACTICES

Petroleum Based Products - Containers for products such as fuels, lubricants and tars vill be inspected daily for leaks and spills. This includes on—site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment naintenance 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

. Points / 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
- Coordinate with site superintendent to excavate a pit deep enough to contain the wash down water.
- Back equipment into pit.
- Wash down only the chute hopper and rear of the vehicle. DO NOT WASH OUT DRUM.
- Make sure wash down water goes into and stays in the pit.
- Coordinate with site superintendent to fill in pit and smooth out ground. Never allow wash down to enter a storm system.
- Fertilizer / Herbicides These products will be applied at rates that do not exceed the nanufactuer's specifications or above the guidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of
- hese materials will be under roof in sealed containers. . Building Materials — No building materials will be buried or disposed on-site. All such
- materials will be disposed of in proper waste disposal procedures.

Soil 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 for spill cleanup will be kept in the material storage areas. Typical materials and equipment includes, but is not limited to, brooms, dustpans, mops, rags, gloves, goggles, cat litter, sand, saw dust and properly labeled plastic and metal waste containers.
- 3. Spill prevention practices and procedures will be reveiwed after a spill and adjusted as necessary to prevent future
- 4. All spills wil be cleaned up immediately upon discovery. All spills will be reported as required by local, State and Federal
- 5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER). THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED
- 6. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
- 7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- 8. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE
- 9. The contractor shall notify the licensed professional who prepared this plan if more than 1,320 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 660 gallons. The Contactor will need a Spill Prevention Containment and Countermeasures Plan prepared by that licenseed

SANITARY WASTES

A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations

2. All sanitary waste units will be located in an area where the likelihood of the unit contributing to storm water discharge in negligible. Additional containment BMP's must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water dischages. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Phase Sheet by the contractor once the locations have been determined.

3. Sanitary Sewer will be provided by Municipal Authority/Septic System at the

HAZARDOUS WASTES

1. 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 jobsite superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Saftey Data Sheets (MSDS's) for each substance with hazradous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of the MSDS will be maintained in the ESPCP file at the jobsite construction trailer office. Each employee who must handle a substance with hazrdous 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

2. The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled , hazardous materials or hazardoud wastes will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be continued on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

APPENDIX B Nephelometric Turbidity Unit (NTU) Tables Cold Water (Trout Stream) Surface Water Drainage Area, square miles 0-4.99 5-9.99 10-24.99 25-49.99 50-99.99 100-249.99 250-499.99 500+ 1.00-10 500 SITE SIZE 10.01-2 500 25.01-5 300 50.01-10 100.01+ Warm Water (Supporting Warm Water Fisheries) Surface Water Drainage Area, square miles 0-4.99 5-9.99 10-24.99 25-49.99 50-99.99 100-249.99 250-499.99 500+ 1.00-10 SITE SIZE 25.01-5 ACRES 50.01-10 100.01+

DESCRIPTION OF STORM WATER POLLUTION

- DISCHARGE PREVENTION PRACTICES
- THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT NOT LIMITED TO
- A. CONSTRUCTION EXIT
- B. SILT FENCING
- E. STONE CHECK DAMS
- G. GRASSING
- L. TEMPORARY SEDIMENT TRAPS
- J. DUST CONTROL K. CONCRETE WASHDOWN PIT

EROSION, SEDIMENT AND POLUTION CONTROL NOTES:

4. Inspections.

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 and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure 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 a 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 certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5). of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction 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

Page 26 of 33

Permit No. GAR100001

accordance with Part V.G.2. of this permit. 5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures

GAR100001 PART IV.F (RETENTION OF RECORDS)

. The primary permittee shall retain the following records at the construction site or the records shall be readily

vailable at a designated alternate location from commencement of construction until such time as a NOT is

A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
 The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5.

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

Copies of all Notices of Intent. Notices of Termination, reports, plans, monitoring reports, monitoring

information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, 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

d. A copy of all monitoring information, results, and reports required by this permit;

g. Daily rainfall information collected in accordance with Part IV.D.4.a.(1)(c) of this permit.

identified in the site plan.

Department of Natural Resources

nvironmental Protection Division

submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD;

. Retention of Records

I. 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

construction waste will be buried on—site.

emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No

2. All personnel will be instructed on proper procedures for waste

jobsite and the Contractor will be responsible for seeing that these

WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE

disposal. A notice stating these practices will be posted at the

STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

WASTE MATERIALS:

rocedures are followed.

6. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed. The following procedures constitute EPD's guidelines for sampling turbidity.

a. Sampling Requirements shall include the following:

(1). A USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the site or the stand alone construction; (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the stormwater is discharged and (b) the receiving water and/or outfall sampling locations. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the stormwater(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic

- (2). A written narrative of site specific analytical methods used to collect, handle and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling
- (3). When the permittee has determined that some or all outfalls will be sampled, a rationale must be included on the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and
- (4). Any additional information EPD determines necessary to be part of the Plan. EPD will provide written notice to the permittee of the information necessary and the time line for submittal.
- b. 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 Part 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.

(1). Sample containers should be labeled prior to collecting the samples.

- (2). Samples should be well mixed before transferring to a secondary container.
- (3). Large mouth, well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

(4). Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. If automatic sampling is utilized and the automatic sampler is not activated during the qualifying event, the permittee must utilize manual sampling or rising stage sampling during the next qualifying event. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled.

(5). Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

c. Sampling Points.

(1). For construction activities the primary permittee must sample all receiving water(s), or all outfall(s), or a combination of receiving water(s) and outfall(s). Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the stormwater outfalls using the following minimum guidelines:

I certify under penalty of law that this Plan was prepared

or my authorized agent, under my supervision."

NPDES Permit No. GAR 100001."

CERTIFIED BY: Mark A. Boswell

after a site visit to the locations described herein by myself

'I certify that the permittee's Erosion, Sedimentation and

comprehensive system of best management practices required

"Manual for Erosion and Sediment Control in Georgia" (Manual)

as of January 1 of the year in which the land-disturbing activity

published by the Georgia Soil and Water Conservation Commission

was permitted, provides for the sampling of the receiving water(s)

Level II Certification No. 2104

STREAM BUFFER ENCROACHMENT NOTES:

. NEW STRUCTURES ON THIS PROJECT DO NOT

UNDISTURBED STREAM BUFFERS AS MEASURED

OR WITHIN 25 FEET OF THE COASTAL MARSHLAND

BUFFER AS MEASURED FROM THE JURISDICTIONAL

DETERMINATION LINE WITHOUT FIRST ACQUIRING

FROM THE POINT OF WRESTED VEGETATION

THE NECESSARY VARIANCES AND PERMITS.

ENCROACH IN THE 25 OR 50 FOOT STREAM

. NON-EXEMPT ACTIVITIES SHALL NOT BE

CONDUCTED WITHIN THE 25 OR 50 FOOT

or the sampling of the stormwater outfalls and that the designed

system of best management practices and sampling methods is

expected to meet the requirements contained in the General

Mal Boswall

BUFFER.

by the Georgia Water Quality Control Act and the document

Pollution Control Plan provides for an appropriate and

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first stormwater discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other stormwater discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity

Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

5. Maintenance. The Plan shall include a description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures

6. Sampling Requirements. This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. This paragraph shall not apply to any land disturbance associated with the construction of single-family homes which are not part of a subdivision or planned common development unless five (5) acres or more will be disturbed. The following procedures constitute EPD's guidelines for sampling turbidity.

a. Sampling Requirements shall include the following:

topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the location of the site or the stand alone construction; (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during mandatory field verification, into which the stormwater is discharged and (b) the receiving water and/or outfall sampling locations. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the stormwater(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic

(2). A written narrative of site specific analytical methods used to collect, handle

(3). When the permittee has determined that some or all outfalls will be sampled,

EPD will provide written notice to the permittee of the information necessary and the time line for submittal.

in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the stormwater discharge.

(a). For each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a stormwater discharge that occurs during normal business hours as defined in this permit after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations, in the drainage area of the location selected as the sampling location;

selected as the sampling location, whichever comes first;

BMPs in any area of the site that discharges to a receiving water or from an outfall are not properly designed, installed and maintained, corrective action shall be defined and implemented within two (2) business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are proper designed, installed and maintained;

possible (or not required because there was no discharge), the permittee, in accordance with Part IV.D.4.a.(6), must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling 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.

(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

7. Non-stormwater discharges. Except for flows from fire fighting activities, sources of nonstormwater listed in Part III.A.2. of this permit that are combined with stormwater discharges associated with construction activity must be identified in the Plan. The Plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with 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 stormwater discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD 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.

- a. The rainfall amount, date, exact place and time of sampling or 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;
- 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.

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

> LEVEL II NO. 2104 EXPIRES 11-15-26

(1). A USGS topographic map, a topographic map or a drawing (referred to as a

and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling

a rationale must be included on the Plan for the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the color catemation or the size of the surface water drainage area, and the type of receiving water(s) (i.e., trout stream or supporting warm water fisheries); and

(4). Any additional information EPD determines necessary to be part of the Plan.

(2). However, where manual and automatic sampling are impossible (as defined

(3). Sampling by the permittee shall occur for the following qualifying events:

(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 stormwater 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

(c). At the time of sampling performed pursuant to (a) and (b) above, if

(d). Where sampling pursuant to (a), (b) or (c) above is required but not

*Note that the permittee may choose to meet the requirements of (a) and

component(s) of the discharge.

E. Reporting.

2. All sampling reports shall include the following information:

b. The name(s) of the certified personnel who performed the sampling and

f. References and written procedures, when available, for the analytical techniques or

3. All written correspondence required by this permit shall be submitted by return receipt

CERTIFICATION ISSUED 11-5-05

Drawing Number

Mail

PROFESSIONAL

7 m

PRIOR TO DIGGING

Boshe

DRIVE 31410

Controlling surface and air movement of dust n construction sites, roads, and demolition sites.

•To prevent surface and air movement of dust from exposed soil surfaces.

•To reduce the presence of airborne substances that may be harmful or injurious to human health, welfare, or safety, or to animals or plant life.

CONDITIONS This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS

A. Temporary Methods

Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic esins may be used instead of asphalt to bind mulch material. Refer to specification Tac - Tackifiers. Resins should be used according to manufacturer's

Vegetative Cover. See specification Ds2 -Disturbed Area Stabilization (With Temporary

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off hese areas. Refer to specification Tac - Tackifiers.

Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency

measure that should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until he surface is wet. Repeat as needed.

Barriers. Solid board fences, snowfences,

burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

B. Permanent Methods

Permanent Vegetation. See specification Ds3 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.

Topsoiling. This entails covering the surface with less erosive soil material. See specification Tp - Topsoiling.

Stone. Cover surface with crushed stone or coarse gravel. See specification Cr-Construction Road Stabilization.

Cd

A temporary grade control structure, or dam constructed across a swale, drainage ditch, or area of concentrated flow.

PURPOSE To minimize the erosion rate by reducing the velocity of the storm water in areas of concen-

This practice is applicable for use in small open channels and is not to be used in a live stream. Specific applications include:

in need of protection during establishment of grass linings. 2. Temporary or permanent swales or ditches that, due to their short length of service or other reasons, cannot receive a permanent non-erodible lining for an

1. Temporary or permanent swales or ditches

extended period of time. 3.Other locations where small localized erosion and resulting sedimentation prob lems exist.

DESIGN CRITERIA

Check dams should be designed using 2.0 cfs. For any flows exceeding 2.0 cfs, check dams may be used in conjunction with other BMPs in the channel. Dam height should be 24 inches maximum measured to the center of the check

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For stone check dams, the drainage area shall not exceed two acres. For straw-bale check dams and compost filter socks, the drainage

Side Slopes Side slopes shall be 2:1 or flatter.

area shall not exceed one acre.

Drainage Area

Two or more check dams in a series shall be used for drainage areas greater than one (1) acre. Maximum spacing between dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam. (See Figure 6-12.1)

A geotextile should be used as a separator between the graded stone and the soil base and abutments. The geotextile will prevent the migra tion of soil particles from the subgrade into the graded stone. The geotextile shall be selected/ specified in accordance with AASHTO M288-06 Section 7.3, Separation Requirements, Table 3. Geotextiles shall be "set" into the subgrade soils. The geotextile shall be placed immediatel adjacent to the subgrade without any voids and extend five feet beyond the downstream toe of the dam to prevent scour.

CONSTRUCTION SPECIFICATIONS

Stone Check Dams Cd-S Stone check dams should be constructed of graded size 2-10 inch stone. Mechanical or hand placement shall be required to insure compete coverage of the entire width of the ditch or swale and that the center of the dam is lower than the edges. The center of the check dam must be at least 9 inches lower than the outer edges.

(See Figure 6-12.2) Straw-bale Check Dams (Cd-Hb)

Staked and embedded straw-bales may be used as temporary check dams in concentrated flow areas while vegetation is becoming established. They shall not be used where the drainage area exceeds one acre. Straw-bales should be installed per Figure 6-12.3.

a well-decomposed source of organic matter.

Bales should be bound with wire or nylon string. Twine bound bales are less durable. The bales should be placed in rows with bale ends tightly abutting the adjacent bales.

Downstream Row (Refer to Figure 6-12.3) Dig a trench across the small channel, wide enough and deep enough so that the top of the row of bales placed on their long, wide side is level with the ground. The tops of bales across the center of the channel should all be level and set at the same elevation. Place the bales in position and stake them according to the instructions below.

Upstream Row Dig another trench across the small channel, upstream and immediately adjacent to the first row of bales. The trench should be wide enough to accommodate a row of bales set vertically on their long edge. The trench should be deep enough so that at least 6 inches of each bale is below ground starting with the bale in the channel bottom. The trench should be as level as possible so that the tops of the bales across the center of the channel are level and water can flow evenly across them. Continue this trench up the side slopes of the small channel to a point where the unburied bottom line of the highest bale (Point "C", Figure 6-12.3) is higher than the top of the bales that are in the center of the channel (Point "D", Figure 6-12.3).

Drive standard 2 x 2 stakes or #4 rebar through the bales and into the ground 1 1/2 to 2 feet for anchorage. The first stake in each bale should be driven toward a previously laid bale to force the bales together (See Figure 6-12.3). Reference: Colorado NRCS Straw Bale Check

Compost Filter Sock (Cd-Fs) The filter sock should be staked in the center.

ment of permanent vegetation.

Compost filter media used for compost filter sock filler material shall be weed free and derived from

If the compost filter sock is to be left as a perma-

nent filter or part of the natural landscape, it may

be seeded at time of installation for establish-

The compost shall be produced using an aerobic composting process meeting CFR 503 regulations including time and temperature data.

inants or other materials toxic to plant growth. Non-composted products will not be accepted. Test methods for the items below should follow US Composting Council Test Methods for the Examination of Composting and Compost guidelines for laboratory procedures:

The compost shall be free of any refuse, contam-

A. pH - 5.0-8.0 in accordance with TMECC 04.11-A, "Electrometric pH Determinations

B. Particle size - 99% passing a 2-inch (50 mm) sieve and a maximum of 40% passing a 3/8-inch (~ 9.5 mm) sieve, in accordance with TMECC 02.02-B. "Sample Sieving for Aggregate Size Classification' (Note - In the field, product commonly is between 1/2 and 2 inches (12.5 and 50 mm)

C. Moisture content of less than 60% in accordance with standardized test methods for moisture determination.

D. Material shall be relatively free (<1% by dry weight) of inert or foreign manmade

E. Sock containment system for compost filter media shall be a photodegradable o biodegradable knitted mesh material and should have 1/8 to 3/8 inch (3.2 to 9.5 mm)

Periodic inspection and required maintenance must be provided. Sediment shall be removed when it reaches a depth of one-half the original dam height or before. If the area is to be mowed. check dams shall be removed once final stabilization has occurred. Otherwise check dams may remain in place permanently. After removal, the area beneath the dam shall be seeded and mulched immediately.

MAINTENANCE

Temporary

DEFINITION

lack of a pipe or riser.

CONDITIONS

in live streams.

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DESIGN CRITERIA

local, state and federal level.

ticles that remain suspended.

A small temporary pond that drains a dis-

principle feature distinguishing a temporary sedi

To collect and store sediment from uphill

ntended for use on small tributary areas with

no unusual drainage features. Effective against

coarse sediment, but not against silt or clay par-

Temporary sediment traps are constructed

early in the construction process at locations

that will require minimal clearing and grading.

Natural draws or swells are favorable locations

to build the traps. They should be easily acces-

sible for frequent maintenance and inspections.

Temporary sediment traps shall never be placed

Design and construction shall comply with

laws, ordinances, rules and regulations on the

The total drainage area of a temporary sed ment trap is up to 5 acres, depending on type of

The height of a temporary sediment trap em-

bankment shall not exceed 5.5 feet as measured

the berm. Top width of an embankment shall be

turbed area so that sediment can settle out. The

nent trap from a temporary sediment basin is the

Sediment Trap

at least as wide as the height of the sediment

trap embankment, with a minimum width of 3

Maximum pond depth of a sediment trap is

to the invert of the emergency spillway. Slopes shall not exceed 2:1 (H:V) for excavated areas

4 feet as measured from the bottom of the trap

and for compacted embankments. Side slopes

should be (3:1) or flatter allowing people and

the sediment trap.

equipment to safely negotiate slopes or to enter

maximize residence time of stormwater within

A typical baffle design uses 4'x8' sheets of

exterior grade plywood 1/2 inch thick, mounted

Minimum volume of a temporary sediment

drainage area. The volume shall be measured at

Volume of a temporary sediment trap in heav-

ily disturbed areas should be 134 cubic yards per

acre for the total drainage area. This includes an

upper area with a minimum of 67 cubic yards per

the outlet design methods provided, and a lower

The volume should be calculated from existing

acre drained, which is dewatered using one of

and proposed contours, or by measured cross

the volume of traps using a natural draw is:

of emergency spillway)

stake at the outlet of the trap.

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and

comprehensive system of best management practices required

"Manual for Erosion and Sediment Control in Georgia" (Manual)

published by the Georgia Soil and Water Conservation Commission as of January I 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 stormwater outfalls and that the designed system of best management practices and sampling methods is

Level II Certification No. 2104

I. CONTRACTOR IS TO VERIFY WETLAND PERMITS WITH OWNER

PRIOR ANY LAND DISTURBANCE IN WETLAND OR WETLAND

expected to meet the requirements contained in the General

Mal Boswell

by the Georgia Water Quality Control Act and the document

or my authorized agent, under my supervision."

NPDES Permit No. GAR 100001."

CERTIFIED BY: Mark A. Boswell

WETLAND AREA NOTE:

BUFFER AREAS.

sections. An approximate method for calculating

V = Sediment storage volume (below invert

The cleanout volume for a temporary sediment

trap is 1/3 of the total storage volume. Cleanout volume shall be calculated and marked with a

A = Surface area (at level of emerency

D = Maximum depth (from emergency

wet zone for sediment storage and settling.

an elevation equivalent to the spillway invert.

the sediment trap. Baffles may be required to

prevent short-circuiting of the flow.

on 4"x4" hardwood posts.

The length to width ratio must be greater than (2:1) (L:W) for the principal flowpaths in order to

State of Georgia Department of Natural Resources Environmental Protection Division

> (b). The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last stormwater discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other stormwater discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream

Page 35 of 46

Permit No. GAR100001

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the stormwater outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall stormwater channel.

(e). The sampling container should be held so that the opening faces

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheet flow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the Manual (excluding a crop of annual vegetation and a seeding of target crop perennials appropriate for the region).

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether stormwater runoff from the construction site is in compliance with the standard set forth in Parts III.D.3. or III.D.4., whichever is applicable.

d. 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 permittee shall sample at the beginning of any stormwater discharge to a monitored receiving water and/or from a monitored outfall location within in forty-five (45) minutes or as soon as possible.

CONSTRUCTION SPECIFICATIONS

erflow (Sd4-A)

water wil

barriers or gra

wire backing

the overflow v

The combination

Rock Outlet (Sd4-C)

Emergency Spillway

storm event.

The basic design guidlines are applicable to

he main differences are with regards to the type

the type of temporary sediment trap constructed.

overflow temporary sediment trap is

small areas less than 1 acre, typic

w velocities, the

the silt fence are

esist 1 foot or r

ed to 1 acre total drain:

quires frequent maintenance an

span of less than 1 year.

s to ensure the released stormwater

The rock outlet relies on filtering through

dewater the sediment trap. It is the sturdiest of

less maintenance. It can be used for drainage

area up to 5 acres and has a life span of 1 year

sediment trap must be stabilized with rock, geo-

textile, vegetation, or another suitable material that is resistant to erosion. It must be installed to

safely convey stormwater runoff for the 10-year

the sediment trap designs and generally requires

The emergency overflow outlet of a temporary

layers of aggregate, rock or riprap material to

n sediment. See Figure 6-30.2

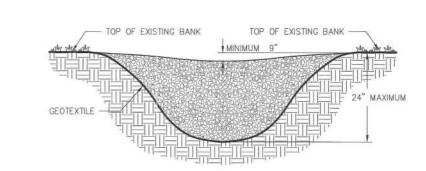
opes (1 or 2 percent) and with

of outlet structures. The following types of con-

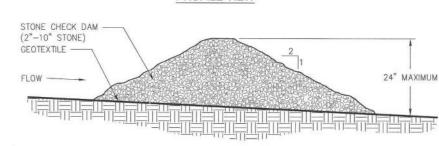
struction are acceptable under the designated

STONE CHECK DAM

CROSS SECTION



PROFILE VIEW



1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO

Figure 6-12.2

BE USED IN LIVE STREAMS). THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.

FIRMLY "KEY" EMBANKME INTO NATURAL GROUND

MINIMUM TOP WIDTH ~3'

MAXIMUM SLOPES 2:1 -

MINIMUM DISTANCE 1.5' TO SPILLWAY INVERT-

ADDITIONAL VOLUME FOR -

SILT STORAGE (OPTIONAL)

PER ACRE)

NATURAL GROUND

6" LAYERS

COMPACT FILL IN MAXIMUM -

GEOTEXTILE FABRIC BETWEEN — SOIL AND RIPRAP

MAXIMUM DEPTH -

TOP OF BERM ---

SPILLWAY (MIN. DEPTH = 1.5')

PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

ROCK OUTLET

(KEYED INTO GROUND)

TYPICAL WIDTH = 3 FEET

PROFILE THROUGH EMBANKMENT

Figure 6-30.3

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City of Knoxville BMP Manual Best Management

Practices, Knoxville, TN, May 2003

TEMPORARY SEDIMENT TRAP

RECOMMENDED MINIMUM RATIO OF

- MINIMUM TOP WIDTH = EMBANKMENT

HEIGHT (3 FOOT MINIMUM)

MAX. SLOPE 2:1

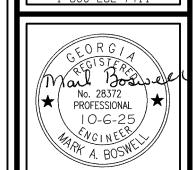
MAXIMUM SLOPE 2:1

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DRIVE 31410

- Ξ M

PRIOR TO DIGGING



Drawing Number

22 OF 28 SHEETS

SPECIAL CONSTRUCTION NOTE:

DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES

. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT NOT LIMITED TO : A. CONSTRUCTION EXIT B. SILT FENCING

D. HAY BALE CHECK DAMS

E. STONE CHECK DAMS

G. GRASSING H. DETENTION POND

J. DUST CONTROL K. CONCRETE WASHDOWN PIT

SD4-C

CERTIFICATION NO. 2104 ISSUED 11-5-05

LEVEL II

EXPIRES 11-15-26

THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS O REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

STREAM BUFFER ENCROACHMENT NOTES: . NEW STRUCTURES ON THIS PROJECT DO NOT

. 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.

ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

A temporary protective device formed at or around an inlet to a storm drain to trap sediment.

PURPOSE To prevent sediment from entering a storm drainage systems prior to permanent stabilization of the disturbed area draining to the inlet.

CONDITIONS All storm drain drop inlets that receive runoff from disturbed areas.

DESIGN CRITERIA

Through testing there are two different categories (high retention and high flow) supported. In areas where BMPs are being used on paved surfaces, or safety is a concern, the potentially negative effects of ponding should be taken into account. In such cases, a high flow BMP is preferred.

On unpaved areas where ponding will not cause a safety hazard, high retention shall be taken into account. If high retention is not used in this situation a rationale shall be given on the plan and an unpaved application should apply.

Sediment traps must be self-draining unless they are otherwise protected in an approved fashion that will not present a safety hazard. The drainage area entering the inlet sediment trap

shall be no greater than one acre. If runoff may bypass the protected inlet, a temporary dike should be constructed on the down slope side of the structure. Also, a stone

6-151

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filter ring may be used on the up slope side of the inlet to slow runoff and filter larger soil particles. Refer to Fr-Stone Filter Ring.

CONSTRUCTION SPECIFICATIONS

Excavated Inlet Sediment Trap An excavation may be created around the inlet sediment trap to provide additional sediment storage. The trap shall be sized to provide a minimum storage capacity calculated at the rate of 67 cubic yards per acre of drainage area. A minimum depth of 1.5 feet for sediment storage should be provided. Side slopes shall not be

Sediment traps may be constructed on natural ground surface, on an excavated surface, or on machine compacted fill, provided they have a non-erodible outlet.

Filter Fabric with Supporting Frame



This method of inlet protection is applicable where the inlet drains a relatively flat area (slope no greater than 5%) and shall not apply to inlets receiving concentrated flows, such as in street or highway medians. As shown in Figure 6-28.1, Type S silt fence supported by steel posts should be used. The stakes shall be spaced evenly around the perimeter of the inlet a maximum of 3 feet apart, and securely driven into the ground, approximately 18 inches deep. The fabric shall be 36 inches tall and entrenched 12 inches and backfilled with crushed stone or compacted soil. Fabric and wire shall be securely fastened to the posts, and fabric ends must be overlapped a minimum of 18 inches or wrapped together around a post to provide a continuous fabric barrier around the inlet.

(Sd2 -B) For inlets receiving runoff with a higher volume or velocity, a baffle box inlet sediment trap should be used. As shown in Figure 6-28.2, the baffle box shall be constructed of 2" x 4" boards

spaced a maximum of 1 inch apart or of plywood with weep holes 2 inches in diameter. The weep holes shall be placed approximately 6 inches on center vertically and horizontally. Gravel shall be placed outside the box, all around the inlet, to a depth of 2 to 4 inches. The entire box is wrapped

- 2"-4" GRAVEL - 2" WEEP HOLES

- INTERIOR BRACING

__ 2X4 OR 4X4 POSTS

SIDE

Figure 6-28.2 Baffle Box

- SILT FENCE MATERIAL ATTACHED

2" WEEP HOLES

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SILT FENCE MATERIAL

— 2"-4" GRAVEL

in Type C filter fabric that shall be entrenched 12 inches and backfilled.

Block and Gravel Drop Inlet Protection



This method of inlet protection is applicable where heavy flows are expected and where an overflow capacity is necessary to prevent excessive ponding around the structure. As shown in Figure 6-28.3, one block is placed on each side of the structure on its side in the bottom row to allow pool drainage. The foundation should be excavated at least 2 inches below the crest of the storm drain. The bottom row of blocks is placed against the edge of the storm drain for lateral support and to avoid washouts when overflow occurs. If needed, lateral support may be given to subsequent rows by placing 2" x 4" wood studs through block openings. Hardware cloth or comparable wire mesh with 1/2 inch openings shall be fitted over all block openings to hold gravel in place. Clean gravel should be placed 2 inches below the top of the block on a 2:1 slope or flatter and smoothed to an even grade. DOT

#57 washed stone is recommended.

Gravel drop Inlet Protection (Sd2-G) This method of inlet protection is applicable where heavy concentrated flows are expected. As shown in Figure 6-28.4, stone and gravel are used to trap sediment. The slope toward the inlet shall be no steeper than 3:1. A minimum 1 foot wide level stone area shall be left between the structure and around the inlet to prevent gravel from entering the inlet. On the slope toward the inlet, stone 3 inches in diameter and larger should be used. On the slope away from the inlet, 1/2 to 3/4 inch gravel (#57 washed stone) should be used at a minimum thickness of 1 foot.

Sod Inlet Protection (Sd2-S)

This method of inlet protection is applicable only at the time of permanent seeding, to protect the inlet from sediment and mulch material until permanent vegetation has become established. As shown in Figure 6-28.5, the sod shall be placed to form a turf mat covering the soil for

a distance of 4 feet from each side of the inlet structure. Sod strips shall be staggered so that adjacent strip ends are not aligned.

Sd2-P

all disturbed areas around the inlet.

Curb Inlet Protection

Once pavement has been installed, a curb inlet filter shall be installed on inlets receiving runoff from disturbed areas. This method of inlet protection shall be removed if a safety hazard is

One method of curb inlet protection uses "pigs-in-a-blanket"- 8-inch concrete blocks wrapped in filter fabric. See Figure 6-28.6. Another method uses gravel bags constructed by wrapping DOT #57 stone with filter fabric, wire, plastic mesh, or equivalent material.

A gap of approximately 4 inches shall be left between the inlet filter and the inlet to allow for overflow and prevent hazardous ponding in the roadway. Proper installation and maintenance are crucial due to possible ponding in the roadway, resulting in a hazardous condition. Several other methods are available to prevent the entry of sediment into storm drain in-

Figure 6-28.7 shows one of these alternative

MAINTENANCE

The trap shall be inspected daily and after each rain, and repairs made as needed. Sediment shall be removed when the sediment has accumulated to one-half the height of the trap. Sediment shall be removed from curb inlet protection immediately. For excavated inlet sedimen traps, sediment shall be removed when one-half of the sediment storage capacity has been lost to sediment accumulation. Sod inlet protection shall be maintained as specified in Ds4 - Disturbed Area Stabilization (With Sodding).

Sediment shall not be washed into the inlet. It shall be removed from the sediment trap, disposed of and stabilized so that it will not enter

When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed, and either

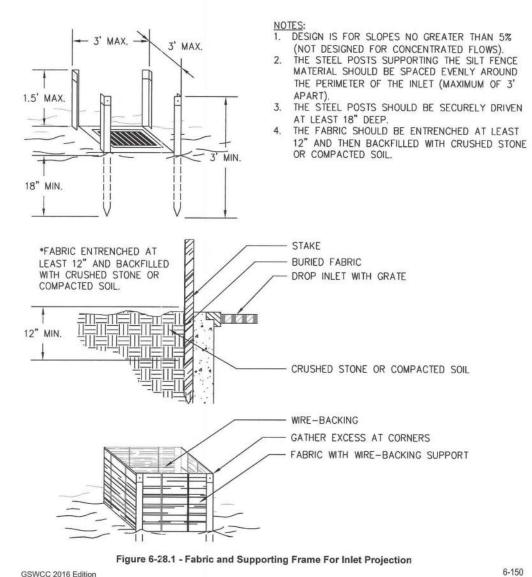
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salvaged or disposed of properly. The disturbed area shall be brought to proper grade, then smoothed and compacted. Appropriately stabilize

FABRIC AND SUPPORTING FRAME FOR **INLET PROTECTION**

STEEL FRAME AND TYPE C SILT FENCE INSTALLATION



"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

"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 stormwater 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."

Mal Boswell

CERTIFIED BY: Mark A. Boswell Level II Certification No. 2104

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CURB INLET FILTER "PIGS IN BLANKET"

8" CONCRETE BLOCK

- CATCH BASIN

WRAPPED IN FILTER FABRIC

INSTALL FILTER AFTER ANY

FACE OPENINGS IN BLOCKS OUTWARD.

4. LEAVE A GAP OF APPROXIMATELY

HAZARDOUS PONDING.

5. INSTALL OUTLET PROTECTION

8" CONCRETE BLOCKS

— CURB APRON (GUTTER)

- CATCH BASIN

ASPHALT PAVEMENT INSTALLATION. WRAP 8" CONCRETE BLOCKS IN

FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.

AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT

BELOW STORM DRAIN OUTLETS.

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TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN If the EXCAVATED INLET SEDIMENT TRAP is used, show the following information:

 Drainage area = _____ ac
 Required sediment storage = 67 cy/ac * drainage area Required sediment storage = 67 cy/ac * ____ ac

Required sediment storage = ____ cy = ___

Assume excavation depth (minimum of 1.5 ft.) = ____

Assume slope of sides (shall not be steeper than 2:1) = __:1 . Determine required surface area SA_{min} = Required sediment storage / excavation depth

6. Assume shape of excavation and determine dimensions. (A rectangular shape with 2:1 length to width ratio is recommended.) Dimensions: I = _____ ft w = ____ ft diameter (if applicable) = _____ ft

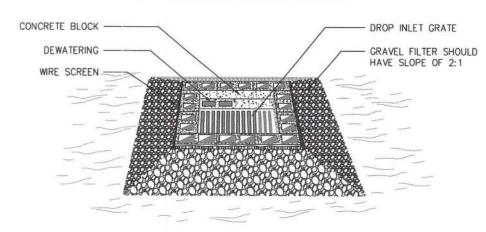
Provide a detail showing the depth, length and width, or diameter (if applicable), and side slopes of the

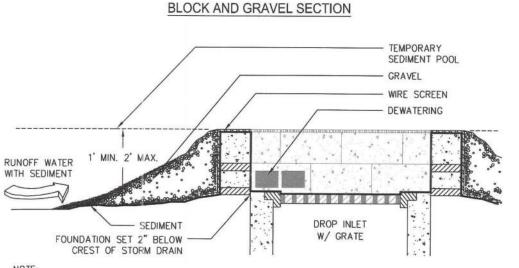


Figure 6-28.7 Equivalent Inlet Sediment Trap

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BLOCK AND GRAVEL PERSPECTIVE





HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½ INCH OPENINGS SHALL BE FITTED OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. THE FIRST ROW OF BLOCKS WILL BE PLACED HERE FOR LATERAL SUPPORT. 3. ONE BLOCK (AS SHOWN) IS TO BE PLACED ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW FOR POOL DRAINAGE.

Figure 6-28.3 Block and Gravel Drop Inlet Protections

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Figure 6-28.5 Sod Inlet Protection

Figure 6-28.4 Gravel Drop Inlet Protection

SOD STRIPS PROTECT INLET AREA FROM EROSION

(SOURCE: VA SWCC)

STORMWATER SAMPLING

SAMPLE ANALYSIS

6-154

FLOW

PAVEMENT -

8" CONCRETE -

CATCH BASIN -

IN FILTER FABRIC

GUTTER ---

BUILDING MATERIALS COVER NOTES :

Figure 6-28.6 Curb Inlet Filter "Pigs in Blanket"

. Building materials and building products which are stored outside on site are to be covered as soon as they arrive on site if not used the same day they arrive on site. Cover shall include but not be limited to tarps, heavy plastic or any other impervious materal which will not allow run-off from the materials from rain events. 2. Building materials and building products may be stored inside building if building has been "dried in" in lieu of storing and covering outside.

> POLUTANTS POTENTIALLY FOUND ON SITI DUE TO CONSTRUCTION ACTIVITIES)

Gasoline 2. Diesel fuel

3. Motor Oil 4. Hydraulic Fluid 5. Paints

6. Solvents . Concrete

LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26 INSTALLED MEASURES TO CONTROL POLLUTANTS AFTER CONSTRUCTION COMPLETION: l. The storm water detention pond shall remain in place, stabilized and functional at all times after construction has been completed. 2. The storm water pipes and outfall swales shall remian in place, stabilzed and funtional at all times after construction has been completed.

3. Rip—rap used at outlets which are used for velocity disipation are to remain in place and funtional at all times. These measures are to provide non-erosive flow so that the natural physical and biological characteristics and funtions of the water course are maintained and protected.

4. Final stabilization shall remain in place (permanent vegetation, sod, vegetated

swales,etc.). 5. Installation of these devices may be subject to section 404 of the Federal Clean Water Act.

6. The primary permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction

activities have been completed.

PRIOR TO DIGGING





Drawing Number

23 of 28 sheets

DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES I. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT

NOT LIMITED TO:

A. CONSTRUCTION EXIT B. SILT FENCING

E. STONE CHECK DAMS

F. STORM OUTLET PROTECTION

G. GRASSING

J. DUST CONTROL K. CONCRETE WASHDOWN PIT WASTE DISPOSAL

. Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges. Solid materials, including building materials, shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

Storm water samples are to be analyzed in accordance with methodology and test procedures established by 40 CFR Port 136 and the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-8-92-001." . Storm water is to be 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 conditions results in the turbidity of the discharge exceeding 75, the value that was selected from Appendix B in Permit No. GAR 100001. The NTU is based pon the disturbed acreage of 1.50 acres for the project

site, the surface water drainage area of < 5.0 square miles and receiving water which supports warm water fisheries.

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

•To reduce runoff and erosion To conserve moisture

•To prevent surface compaction or crusting To control undesirable vegetation

To modify soil temperature

To increase biological activity in the soil

REQUIREMENT FOR REGULATORY

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

appropriate depth and 90% cover. Temporary etation may be employed instead of mulch if he area will remain undisturbed for less than six

If any area will remain undisturbed for greater an six months, permanent vegetative tech-

iques shall be employed. Refer to Ds2 -Dis-

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

SPECIFICATIONS Mulching Without Seeding This standard applies to graded or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant

cover, but can be stabilized with a mulch cover.

3. Loosen compact soil to a minimum depth of

Select one of the following materials and

1. Dry straw or hay shall be applied at a depth of

2. Wood waste (chips, sawdust or bark) shall

applied at a depth of 2 to 3 inches. Organ

material from the clearing stage of develo

ment should remain on site, be chipped, ar

applied as mulch. This method of mulchin

banks or stockpiled soil material for tem

porary protection. This material can be sa

When mulch is used without seeding, mulch

1. Dry straw or hay mulch and wood chips

shall be applied uniformly by hand or b

shall be applied to provide full coverage of the

can greatly reduce erosion control costs.

3. Polyethylene film shall be secured over

2 to 4 inches providing complete soil cover

age. One advantage of this material is easy

Mulching Materials

apply at the depth indicated:

vaged and re-used.

mechanical equipment.

Applying Mulch

set straight or with a special "packer disk." Disks may be smooth or serrated 1. Grade to permit the use of equipment f and should be 20 inches or more in applying and anchoring mulch. diameter and 8 to 12 inches apart. The edges of the disk should be dull enough 2. Install needed erosion control measures a not to cut the mulch but to press it into the required such as dikes, diversions, berm soil leaving much of it in an erect position. terraces and sediment barriers. Straw or hay mulch shall be anchored immediately after application.

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

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

2. If the area will eventually be covered with

trogen per acre in addition to the normal

amount shall be applied to offset the uptake

3. Apply polyethylene film on exposed areas.

1. Straw or hay mulch can be pressed into

the soil with a disk harrow with the disk

the organic mulches.

Anchoring Mulch

of nitrogen caused by the decomposition of

nnial vegetation, 20-30 pounds of ni-

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

Disturbed Area Stabilization (With Temporary Seeding)



DEFINITION The establishment of temporary vegetative over with fast growing seedings for seasonal otection on disturbed or denuded areas.

•To reduce runoff and sediment damage of

plantings

down stream resources

 To protect the soil surface from erosion To improve wildlife habitat

 To improve aesthetics •To improve tilth, infiltration and aeration as well as organic matter for permanent

REQUIREMENT FOR REGULATORY

Mulch or temporary grassing shall be applied all exposed areas within 14 days of disturpance. Temporary grassing, instead of mulch, can be applied to rough graded areas that will exposed for less than six months. If an area s expected to be undisturbed for longer than six onths, permanent perennial vegetation shall be ised. If optimum planting conditions for tempoary grassing is lacking, mulch can be used as singular erosion control device for up to six onths but it shall be applied at the appropriate epth, anchored, and have a continuous 90% over or greater of the soil surface. Refer to cification Ds1-Disturbed Area Stabilization With Temporary Seeding).

shall be applied uniformly by hand, cyclone

seeder (slurry including seed and fertilizer).

Drill or cultipacker seeders should normally

Appropriate depth of planting is ten times the eed diameter. Soil should be "raked" lightly

rate determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulical applied, preferably in the first pass with seed

Agricultural lime is required unless soil tests

indicate otherwise. Apply agricultural lime at a

and some hydraulic mulch, then topped with the remaining required application rate. Select a grass or grass-legume mixture suitable to the area and season of the year. Seed seeder, drill, culti-packer-seeder, or hydraulic place seed one-quarter to one-half inch deep.

Lime and Fertilizer

CONDITIONS

cover seed with soil if seeded by hand. See Table 6-4.1 Temporary vegetation can, in most cases, he established without the use of mulch, provided here is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short erm protection. Refer to Ds1 - Disturbed Area

During times of drought, water shall be applied at a rate not causing runoff and osion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. ubsequent applications should be made when

Stabilization (With Mulching Only).

Temporary vegetative measures should be coordinated with permanent measures to Table 6-4.1 - Temporary Cover or Companion Cover Crops

assure economical and effective stabilization. PLANT, PLANTING RATE, AND PLANTING DATE FOR TEMPORARY COVER OR COMPANION CROPS Most types of temporary vegetation are ideal to use as companion crops until the permaner vegetation is established. Note: Some species of temporary vegetation are not appropriate for companion crop plantings because of their potential to out-compete the desired species (e.g. Solid lines indicate optimum dates, dotted lines indicate annual ryegrass). Contact NRCS or the local SWCD for more information. Rate Per Acre≥ sqft SPECIFICATIONS Grading and Shaping Excessive water run-off shall be reduced by properly designed and installed erosion control 3 bu. (144 lbs) 3.3 lbs practices such as closed drains, ditches, dikes, in mixture 1/2 bu. (24lbs) 0.6 lb diversions, sediment barriers and others.

14,000 seed per pound. Winter hardy. Use No shaping or grading is required if slopes can LESPEDEZA, ANNUAL be stabilized by hand-seeded vegetation or if hyespedeza striata draulic seeding equipment is to be used. 40 lbs 0.9 lb 00,000 seed per pound. May volunteer for sev-Seedbed Preparation 10 lbs 0.2 lb eral years. Use inoculant EL When a hydraulic seeder is used, seedbed preparation is not required. When using conver OVEGRASS, WEEPING tional or hand-seeding, seedbed preparation is not required if the soil material is loose and not Eragrostis curvula sealed by rainfall. 4 lbs 0.1 lb 1,500,000 seed per pound. May last for several When soil has been sealed by rainfall or con-2 lbs 0.05 lb P years. Mix with Sericea lespedeza. sists of smooth cut slopes, the soil shall be pitted trenched or otherwise scarified to provide a place for seed to lodge and germinate. Panicum fasciculatum

40 lbs 0.9 lb n mixture 10 lbs 0.2 lb 137,000 seed per pound. Quick dense cover. Vill provide excessive competion in mixtures if seeded at high rate. Solid lines indicate optimum dates, dotted lines indica (PLS) Per 1000 MILLET, PEARL Pennesetum glaucum 1.1 lbs 88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for Avena sativa bu. (128 lbs) 2.9 lbs 1 bu. (32 lbs) 0.7 lb Not as a winter hardy as rye or barley.

n mixture 3,000 seed per pound. Use on productive soils Secale cereale 3 bu. (168 lbs) 3.9 lbs in mixture 1/2 bu. (28 lbs) 0.6 lb 18,000 seed per pound. Quick cover. Drought olerant and winter hardy. YEGRASS, ANNUAL olium temulentum 40 lbs 0.9 lb 227,000 seed per pound. Dense cover, Very con orghum sudanese 60 lbs 1.4 lbs

Broadcast Rates Planting Dates by Resource Area Area³ Solid lines indicate optimum dates, dotted lines indicate TICALE riticosecale 3 bu. (144 lbs) 3.3 lbs Use on lower part of Southern Coastal Plain ar mixture 1/2 bu. (24 lbs) 0.6 lb in Atlantic Coastal Flatwoods only. icum aestivum 3 bu. (180 lbs) 4.1 lbs 1/2 bu. (30 lbs) 0.7 lb 15,000 seed per pound. Winter hardy.

> ¹Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily ²Reduce seeding rates by 50% when drilled. ³M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs P represents the Southern Piedmont MLRA C represents Southern Coastal Plan; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs (see Figure 6-4.1, p. 6-40)

Major Land Resource Areas 128 Southern Appalachian Ridges and Valle 129 Sand Mountain 130B Southern Blue Ridge 133A Southern Coastal Plain 136 Southern Piedmont 137 Carolina and Georgia Sand Hills 153A Atlantic Coast Flatwoods 153B Tidewater Area 0 5 10 20 30 40 Miles Natural Resources Conservation Service Revised 2006 Figure 6-4.1

GEORGIA

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

"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 stormwater 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."

Mal Bonnell

CERTIFIED BY: Mark A. Boswell

Level II Certification No. 2104

DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES

. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT

NOT LIMITED TO: A. CONSTRUCTION EXIT

B. SILT FENCING

D. HAY BALE CHECK DAMS

E. STONE CHECK DAMS

F. STORM OUTLET PROTECTION

G. GRASSING

J. DUST CONTROL K. CONCRETE WASHDOWN PIT

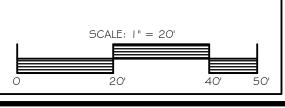
LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26 STREAM BUFFER ENCROACHMENT NOTES :

NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

. 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

SPECIAL CONSTRUCTION NOTE:

IF THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS O REPORT THE PROBLEM PRIOR TO CONSTRUCTION. HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.



1 AU DRIVE GIA 31410 32

PRIOR TO DIGGING



DRAWING NUMBER



 To reduce damage from sediment and runoff to down-stream areas •To improve wildlife habitat and visual resources

This practice shall be applied immediately to onger than six months. This practice or sodding hall be applied immediately to all areas at fina isturbing activities at the site have been comcated outside the waste disposal limits of a covered in permanent vegetation with density of 70% or greater, or landscaped ac-

into stands of rye is an excellent procedure. 4. Block sod provides immediate cover. It is especially effective in controlling erosion djacent to concrete flumes and other structures. Refer to Specification Ds4-Disturbed

Permanent vegetation shall consist of, planted

trees, shrubs, perennial vines; or a crop of peren

ial vegetation appropriate for the region, such

that within the growing season a 70% coverage

by perennial vegetation shall be achieved. Final

stabilization applies to each phase of construc

tion. For linear construction projects on land

used for agricultural or silvicultural purposes.

nal stabilization may be accomplished by sta-

bilizing the disturbed land for its agricultural or

silvicultural use. Until this standard is satisfied

and permanent control measures and facilities

are operational, interim stabilization measures

measures shall not be removed.

PLANNING CONSIDERATIONS

be used.

and temporary erosion and sedimentation control

Permanent perennial vegetation is used to

1. Use conventional planting methods where

2. When mixed plantings are done during mar-

3. No-till planting is effective when planting is

done following a summer or winter annual

ginal planting periods, companion crops shall

provide a protective cover for exposed areas

including cuts, fills, dams, and other denuded

Area Stabilization (With Sodding). Irrigation should be used when the soil is dry or when summer plantings are done. 6. Low maintenance plants, as well as natives, should be used to ensure long-lasting ero-

Mowing should not be performed during the quail nesting season (May to September). 8. Wildlife plantings should be included in critical area plantings.

700 lbs./ac. 4/

30 lbs./ac. 5/

30 lbs./ac.

50 lbs./ac./6/

50-100 lbs./ac. 2/6/

500 lbs./ac.

800 lbs./ac.

400 lbs./ac.

1500 lbs./ac.

1000 lbs./ac.

400 lbs./ac.

Wildlife Plantings Commercially available plants beneficial to wildlife species include the following:

Mast Bearing Trees

mainly by squirrels and bear.

Beech, Black Cherry, Blackgum, Chestnut, Chinkapin, Hackberry, Hickory, Honey Locust, Native Oak, Persimmon, Sawtooth Oak and All trees that produce nuts or fruits are favored by many game species. Hickory provides nuts used

Shrubs and Small Trees Bayberry, Bicolor Lespedeza, Crabapple, Dogwood, Huckleberry or Native Blueberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry,

Sumac, Wax Myrtle, Wild Plum and Blackberry. Plant in patches without tall trees to develop stable shrub communities. All produce fruits used by many kinds of wildlife, except for lespedeza that produces seeds used by quail and songbirds. Grasses, Legumes, Vines and Temporary Cover

Bahiagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Lespedeza, Orchardgrass (for mountains), Browntop Millet (for temporary cover), and Native grapes.

Provides herbaceous cover in clearings for a game bird brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with grass, but they may die out after a few years.

CONSTRUCTION SPECIFICATIONS Grading and Shaping Brading and shaping may not be required

where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment. When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely

Table 6-5.2- Permanent Cover Crops

BAHIA, PENSACOLA

Paspalum notatum

with other perennials

BAHIA, WILMINGTON

alone or with temporary

BERMUDA, COMMON

Cynodon dactylon

Cynodon dactylon

with temporary cover

with other perennials

CROWNVETECH

with winter annuals or cool

Coronilla varia

Table 6-5.2- Permanent Cover Crops

Unhulled seed

Paspalum notatum

alone or with temporary

and efficiently during seedbed preparation, seed-

PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER

60 lbs

60 lbs

10 lbs

10 lbs

6 lbs

PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER

0.1 lb

Seed (PLS) Rate Per Acre2 Per 1000 sqft

ng, mulching and maintenance of the vegetation. Concentrations of water that will cause excessive 6-35

soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Lime and Fertilizer Rates and Analysis Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate therwise. Graded areas require lime application. If lime is applied within six months of planting ermanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of

Lime spread by conventional equipment shall be und limestone." Ground limestone is calcitic or dolomitic limestone ground so that 90 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will pass through a 50-mesh sieve and not less than 25 percent will pass through

a 100-mesh sieve. Fast-acting lime spread by hydraulic seeding equipment should be "finely ground limestone spanning from the 180 micron size to the 5 micron size. Finely ground limestone is calcitic or dolomitic limestone ground so that 95 percent of the material will pass through a 100-mesh sieve.

It is desirable to use dolomitic limestone in the Sand Hills, Southern Coastal Plain and Atlantic Coast Flatwoods MLRAs. (See Figure 6-4.1) Agricultural lime is generally not required where

only trees are planted. Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species or combination of species are listed in Table

Lime and Fertilizer Application When hydraulic seeding equipment is used. the initial fertilizer shall be mixed with seed, innoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The innoculant, if needed, shall be mixed wit he seed prior to being placed into the hydraulic seeder. The slurry mixture will be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over

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the area within one hour after being placed in the

Planting Dates by Resource Area

Plant selection may also include annual companion crops. Annual companion crops should be used only when the perennial species are not planted during their optimum planting period. A common

Table 6-5.2- Permanent Cover Crops

LESPEDEZA

Lespedeza virgata Do

(Dumont) G. Don)

Lespedeza thumbergi

LOVEGRASS, WEEPIN

iticum aestivum

one

mixture

PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER

Finely ground limestone can be applied in the

When conventional planting is to be done, lime

mulch slurry or in combination with the top dressing.

Refer to Tables 6-4.1, 6-5.2, 6-5.3 and 6-5.4

for approved species. Species not listed shall be

approved by the State Resource Conservationist

of the Natural Resources Conservation Service

Plants shall be selected on the basis of species

characteristics, site and soil conditions, planned

planting, method of planting; and the needs and

Some perennial species are easily established

and can be planted alone. Examples of these are

Common Bermuda, Tall Fescue, and Weeping

Other perennials, such as Bahia Grass and Seri-

cea Lespedeza, are slow to become established

and should be planted with another perennial spe-

and ample soil protection until the target perennial

species become established. For example, Com-

rass with Sericea Lespedeza (scarified) and 2) Tall

mon seeding combinations are 1) Weeping Loveg-

Fescue with Sericea Lespedeza (unscarified).

cies. The additional species will provide quick cover

use and maintenance of the area; time of year of

the following ways:

ute in furrows.

seedling.

desires of the land user.

Lovegrass.

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166,000 seed per pound. Low growing.

deza or weeping lovegrass.

Same as above.

Good for athletic fileds.

Plant with winter annuals.

Plant with Tall Fescue

Sod forming. Slow to establish, Plant with a

stures and awns. Mix with Sericea lespe-

,787,000 seed per pound. Quick cover.

all. Mix with 30 pounds of Tall fescue or 15 ounds of rye. Inoculate see with M inocu

lant. Use from North Atlanta and Northward

Low growing and sod forming. Full sun.

pitted or trenched.

mixture is Brown Top Millet with Common Bermuda in mid-summer. Care should be taken in selecting companion crop species and seeding rates because annual crops will compete with perennial ecies for water, nutrients, and growing space. A high seeding rate of the companion crop may

and fertilizer shall be applied uniformly in one of prevent the establishment of perennial species. Ryegrass shall not be used in any seeding Apply before land preparation so that it will be mixtures containing perennial species due to its mixed with the soil during seedbed preparaability to out-compete desired species chosen

for permanent perennial cover. Mix with the soil used to fill the holes, distrib-The term "pure live seed" is used to expres the quality of seed and is not shown on the label Pure live seed, PLS, is expressed as a percent-

3. Broadcast after steep surfaces are scarified, age of the seeds that are pure and will germinate. Information on percent germination and 4. A fertilizer pellet shall be placed at root depth purity can be found on seed tags. PLS is deterin the closing hole beside each pine tree mined by multiplying the percent of pure seed with the percent of germination; i.e., (PLS = % germination x % purity)

> Common Bermuda seed 70% germination, 80% purity PLS = 70% germination x 80% purity

The percent of PLS helps you determine the amount of seed you need. If the seeding rate is 10 pounds PLS and the bulk seed is 56 % PLS, the bulk seeding rate is: 10 lbs. PLS/acre = 17.9 lbs/acre

You would need to plant 17.9 lbs/acre to provide 10 lbs/acre of pure live seed. Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used (but is strongly recommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation will be done as follows:

0.1 lb

Broadcast Rates

Rate Per Acre?

3 bu. (144 lbs) 3.3 lbs

1/2 bu. (24 lbs) 0.6 lb

3 bu. (180 lbs) 4.1 lbs

1/2 bu. (30 lbs) 0.7 lb

Planting Dates by Resource Area

²Reduce seeding rates by 50% when drilled.

P represents the Southern Piedmont MLRA

(see Figure 6-4.1, p. 6-40)

Broadcast plantings All inoculated seed shall be protected from the sun and high temperatures and shall be planted Tillage, at a minimum, shall adequately 6-37 6-38

the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

water and apply in a slurry uniformly over the

loosen the soil to a depth of 4 to 6 inches;

alleviate compaction; incorporate lime and

fertilizer; smooth and firm the soil; allow for

the proper placement of seed, sprigs, or

plants; and allow for the anchoring of straw

Tillage may be done with any suitable

Tillage should be done on the contour where

1. Where individual plants are to be set, the

2. For nursery stock plants, holes shall be

Where pine seedlings are to be planted,

dry, preferably in August or September.

All legume seed shall be inoculated with ap-

propriate nitrogen-fixing bacteria. The inoculant

shall be a pure culture prepared specifically for

the seed species and used within the dates on

facturer shall be used to bond the inoculant to

the seed. For conventional seeding, use twice

the amount of inoculant recommended by the

times the amount of inoculant recommended

by the manufacturer shall be used.

manufacturer. For hydraulic seeding, four

0,000 seed per pound. Height of growth is

s. Spreading-type growth. New growth has

18 to 24 inches. Advantageous in urban a

ss, common bermuda, bahia, tall fescue

Use on lower part of Southern Coastal Plain and

5,000 seed per pound. Winter hardy

¹Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily

C represents Southern Coastal Plan; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs

³M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs

deza. Slow to develop solid stands.

or winter annuals. Do not mix with Serice

ronze coloration. Mix with weepir

noculate seed with EL inoculant

subsoil under the row 36 inches deep on the

contour four to six months prior to planting.

Subsoiling should be done when the soil is

opening furrows, or dibble planting.

soil shall be prepared by excavating holes,

large enough to accommodate roots without

or hay mulch if a disk is to be used.

be used.

crowding.

the container.

Planting Dates by Resource Are

Individual Plants

rial from the following and apply as indicated: Hydraulic Seeding 1. Dry straw or dry hay of good quality and free Mix the seed (inoculated if needed), fertilize of weed seeds can be used. Dry straw shall and wood cellulose or wood pulp fiber mulch with be applied at the rate of 2 tons per acre. Dry

area to be treated. Apply within one hour after per acre. the mixture is made. 2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall Conventional Seeding be applied at the rate of 500 pounds per acre. Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.

4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall a culti-packer-seeder, drill, rotary seeder, other be pitted or trenched across the slope with mechanical seeder, or hand seeding to distribute appropriate hand tools to provide two places the seed uniformly over the area to be treated. 6 to 8 inches apart in which seed may lodge Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed and germinate. Hydraulic seeding may also when using a cultipacker or other suitable equip-

> No-till seeding is permissible into annual coer crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seed ing shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at

the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegeta

ing. The mulch may be spread by blower-type tion establishment enhancement, and erosion ontrol effectiveness. Select the mulching matespreading equipment, other spreading equipment

Anchoring Mulch

or by hand. Mulch shall be applied to cover 75% Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchor straw or hav mulch immediately after

application by one of the following methods: 1. Hay and straw mulch shall be pressed ow with the disks set straight may be used. 3. One thousand pounds of wood cellulose or The disks may be smooth or serrated and wood pulp fiber, which includes a tackifier, should be 20 inches or more in diameter and shall be used with hydraulic seeding on slopes 8 to 12 inches apart. The edges of the disks fertilizer rates are listed in Table 6-5.1. shall be dull enough to press the mulch into the ground without cutting it, leaving much Lime Maintenance Application 4. Sericea Lespedeza hay containing mature of it in an erect position. Mulch shall not be seed shall be applied at a rate of three tons

plowed into the soil. 2. Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be erified nontoxic through EPA 2021.0 testing.

Refer to Tackifiers-Tac 3. Rye or wheat can be included with Fall and tablishment. Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre.

4. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hav mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Common Name Scientific Name

Bedding Material Mulch is used as a bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

Grain straw Pine needles Wood waste 4" to 6"

Irrigation will be applied at a rate that will not

Topdressing will be applied on all temporary and permanent (perennial) species planted alone into the soil immediately after the mulch is or in mixtures with other species. Recommended spread. A special "packer disk" or disk har- rates of application are listed in Table 6-5.1.

> Second year fertilizer rates and maintenance Apply one ton of agricultural lime every 4 to 6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate

Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. Mow between

requirements, if desired.

November and March.

Bermudagrass. Bahiagrass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after es-

Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between May and

6-39 GSWCC 2016 Editio

Mature Height Plant Spacing Comments

salicifoluis 'Repens

establish new roots before hot weather.

Table 6-5.3.

Ground covers include a wide range of low-growing plants planted together in considerable numbers to cover large areas of the landscape. Ground covers grow slower than grasses. Weeds are likely to compete,

especially the first year. Maintenance is needed to insure survival. These ground covers will not be used unless

proper maintenance is planned. Maintain mulch at three-inch thickness until plants provide adequate cover.

Fall planting is encouraged because the need for constant watering is reduced and plants have time to

Applying Mulch

GSWCC 2016 Edition

Durable Shrubs and Ground Covers for Permanent Cover

hay shall be applied at a rate of 2 1/2 tons

5. Pine straw or pine bark shall be applied at a

thickness of 3 inches for bedding purposes.

Other suitable materials in sufficient quantity

may be used where ornamentals or other

ground covers are planted. This is not ap-

6. When using temporary erosion control blan-

kets or block sod, mulch is not required.

7. Bituminous treated roving may be applied on

planted areas, slopes, in ditches or dry water-

ways to prevent erosion. Bituminous treated

roving shall be applied within 24 hours after

an area has been planted. Application rates

and materials must meet Georgia Depart-

ment of Transportation specifications.

Wood cellulose and wood pulp fibers shall not

contain germination or growth inhibiting factors.

They shall be evenly dispersed when agitated in

water. The fibers shall contain a dye to allow visual

metering and aid in uniform application during

Straw or hav mulch will be spread uniformly

within 24 hours after seeding and/or plant-

propriate for seeded areas.

3/4:1 or steeper.

per acre.

Mature Height Plant Spacing Comments

2 feet high. Sun,

semi-shade. Semi

Vine. Yellow, trumpe

Native to Georgia.

Needs good drainage

Blue or white flowers

White flowers, red

fruit, Sun. Evergreen

fruit. Sun. Evergreen

Red in fall. Vine.

Shade only. Climbs

Very durable, sun.

partial shade.

Evergreen.

like flowers. Hardy, one

evergreen.

Table 6-5.3. Durable Shrubs and Ground Covers for Permanent Cover

Repandens 'Repandens' Andorra Juniperus Juniper horizontalis 'Plumosa Andorra Juniperus Compacta horizontalis Juniper 'Plumosa com Blue Chip 8-10 in. Blue Rug Very low. Sun. Juniper 'Wiltonii' Juniper davurica good winter cover 'Expansa' (Squamata Juniperus Feathery appearance. Wales Juniper 'Prince of Wales' Juniperus Full sun. Needs good drainage. Good winter 'Sargentii' Shore Juniper Juniperus conferta Emerald Sea or Blue Pacific cultivars are

Liriope muscari 8-10 in.

Table 6-5.3. Durable Shrubs and Ground Covers for Permanent Cover

Common Name Scientific Name Mature Height Plant Spacing Comments

Creeping Liriope	Liriope spicata	10-12 in.	1 ft.	Spreads by runners.
Big Leaf Periwinkle	Vinca major	12-15 in.	4 ft.	Lilac flowers in spring. Semi-shade.
Common Periwinkle	Vinca minor	5-6 in.	4 ft.	Lavender-blue flowers in spring. Semi-shade
Cherokee Rose	Rosa laevigata	2 ft.	5 ft.	Rampant grower. Not for restricted spaces. State flower,
Memoria Rose	Rosa weuchuriana	2 ft.	5 ft.	Rampant grower.
St. Johnswort	Hypericum calycenum	8-12 in.	3 ft.	Semi-shade.
Anthony Waterer Spirea	Spirea bumalda	3-4 ft.	5 ft.	Sun.
Thunberg	Spirea thinbergii	3-4 ft.	5 ft.	Sun.

Table 6-5.4. Trees for Erosion Control GSWCC 2016 Edition

SITE	SOIL MATERIAL	COMMON SOILS	PLANTING TREE SPECIES ¹	SPACING	PLANTING DATES		
Borrow areas, graded areas, and spoil material	Sandy	Lakeland, Troup	Loblolly pine (Pinus taeda) Longleaf pine (Pinus palustris)	2	M-L,P 12/1-3/15 C 12/1-3/1		
	Loamy	Orangeburg, Tifton	Loblolly pine Slash pine Loblolly pine	2	M-L,P 12/1-3/15 C 12/1-3/1		
	Clay	Cecil, Facevillle	Slash pine Virginia pine (Pinus virginiana)	2	M-L,P 12/1-3/15 C 12/1-3/1		
Streambanks			Willows ⁴ (Salix speciecs)	2 ft x 2 ft	ALL		

Other trees and shrubs listed on Table 6-25.3 may be interplanted with the pines for improved

2 Type of Planting Tree Spacing No. of Trees Per Acre Trees alone 4 ft. x 4 ft. 2722 Trees in combinatio with grasses and/or other plants 6 ft. x 6 ft.

M-L represents the Mountains; Blue Ridge; and Ridges and Vallevs MLRAs P represents the Southern Piedmont MLRA C represents the Southern Coastal Plain; Sand Hills; Black Lands; and Atlantic Coast Flatwoods ML RAs (See Figure 6-4.1).

Fertilization of companion crop is ample for this species

SPECIAL CONSTRUCTION NOTE

THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR. SCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS D REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATIO FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED

SCALE: I" = 20'

PRIOR TO DIGGING

Mail Bosse No. 28372 PROFESSIONAL PROFESSIONAL 10-6-25

The planting of perennial vegetation such xposed areas for final permanent stabilization

 To improve aesthetics REQUIREMENT FOR REGULATORY

rough graded areas that will be undisturbed for grade. Final Stabilization means that all soil oleted, and that for unpaved areas and areas andfill cell that has been certified by the GA PD for waste disposal, 100% of the soil surface

cording to the Plan (uniformly covered with land scaping materials in planned landscaped areas)

SWCC 2016 Edition

Shrub Lespedeza

seeded alone

. Warm season

grasses and

or equivalent permanent stabilization measures. Table 6-5.1. Fertilizer Requirements

Drawing Number

25 OF 28 SHEETS

'I certify under penalty of law that this Plan was prepared

"I certify that the permittee's Erosion, Sedimentation and

comprehensive system of best management practices required

"Manual for Erosion and Sediment Control in Georgia" (Manual)

as of January I of the year in which the land-disturbing activity

published by the Georgia Soil and Water Conservation Commission

was permitted, provides for the sampling of the receiving water(s)

or the sampling of the stormwater outfalls and that the designed

system of best management practices and sampling methods is expected to meet the requirements contained in the General

Level II Certification No. 2104

STREAM BUFFER ENCROACHMENT NOTES:

NON-EXEMPT ACTIVITIES SHALL NOT BE

CONDUCTED WITHIN THE 25 OR 50 FOOT

THE NECESSARY VARIANCES AND PERMITS

FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLANI

NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

UNDISTURBED STREAM BUFFERS AS MEASURED

BUFFER AS MEASURED FROM THE JURISDICTIONAL

DETERMINATION LINE WITHOUT FIRST ACQUIRING

Mal Bonnall

by the Georgia Water Quality Control Act and the document

Pollution Control Plan provides for an appropriate and

or my authorized agent, under my supervision."

NPDES Permit No. GAR 100001."

CERTIFIED BY: Mark A. Boswell

after a site visit to the locations described herein by myself

s trees, shrubs, vines, grasses, or legumes on Permanent perennial vegetation shall be used to achieve final stabilization. PURPOSE *To protect the soil surface from erosion

COMPLIANCE

TYPE OF SPECIES YEAR RATE TOP DRESSING **EQUIVALENT** RATE 50-100 lbs./ac. 1/2/ 1000 lbs./ac. 400 lbs./ac. 0-50 lbs./ac. 1/ grasses and 000 lbs./ac 0-10-10 400 lbs./ac. 1300 lbs./ac. 3/ 10-10-10 1100 lbs./ac. 4. Pine seedlings 20-10-5 one 21-gram pellet in the closing hole

10-10-10

10-10-10

0-10-10 0-10-10

/ Apply when plants are pruned Apply to grass species only.

6/ Apply when plants grow to a height of 2 to 4 inches.

Cynodon dactylon 40 cu ft 0.9 cu ft oastal, Common, Midland, A cubic foot contains approximately sprigs. A bushel contains 1.25 cubic feet or mixture sod plugs 3' x3' approximately 800 springs. Coastal, Common, of Tift 44 CENTIPEDE Eremochloa ophuiroides Block sod only ought tolerant. Full sun or partial shade. ffective adjacent to concrete and in con-

until fully established. Do not plant nea astures. Winterhardy as far as north rought tolerant and fire resistant. Attractive

Planting Dates by Resource Area

Species	Broadca	Broadcast Rates		esource Area ³ Planting Dates by Resource Area						ource	Remarks						
					Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.							dotter	d line es.	as in			
	Rate Per Acre	Pure Live Seed (PLS) Per 1000 sqft		J	F	М	A	М	J	J	A	S	0	5 1	N	D	
FESCUE, TALL Festuca arundinacea														1			
alone	50 lbs	1.1 lb	M-L P			H	\vdash	-				-	+				227,000 seed per pound. Use alone only on better sites. Mix with perennial lespededza or Crownvetch. Apply topdressing in spring
with other perennials	30 lbs	0.7 lb	P							\Box'		1	+	1			following fall plantings. Not for heavy use areas or athletic fields.
KUDZU Pueraria thumbergiana																	
Plants or crowns	3' - 7' a	apart	ALL														Rapid and vigorous growth, Excellent in gully erosion control. Will climb. Good livestock forage.
LESPEDEZA SERICEA Lespedeza cuneata									N.				1		1		
scarified	60 lbs	1.4 lb	M-L P C				F	F								1	350,000 seed per pound. Widely adapted. Low maintenace. Mix with Weeping loveg- rass, Common bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully
unscarified	75 lbs	1.7 lb	M-L P C									F	F	Ŧ	#		established. Excellent on roadbanks. Inocu- late seed with EL inoculant. Mix with Tall fesue or winter annuals.
seed- bearing hay	3 tons	1338 lbs	M-L P C										-			1	Cut when seed mixture is mature, but be- fore, it shatters. Add Tall fescue or winter annuals.

DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES

NOT LIMITED TO: A. CONSTRUCTION EXIT

D. HAY BALE CHECK DAMS E. STONE CHECK DAMS

. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT

B. SILT FENCING

G. GRASSING

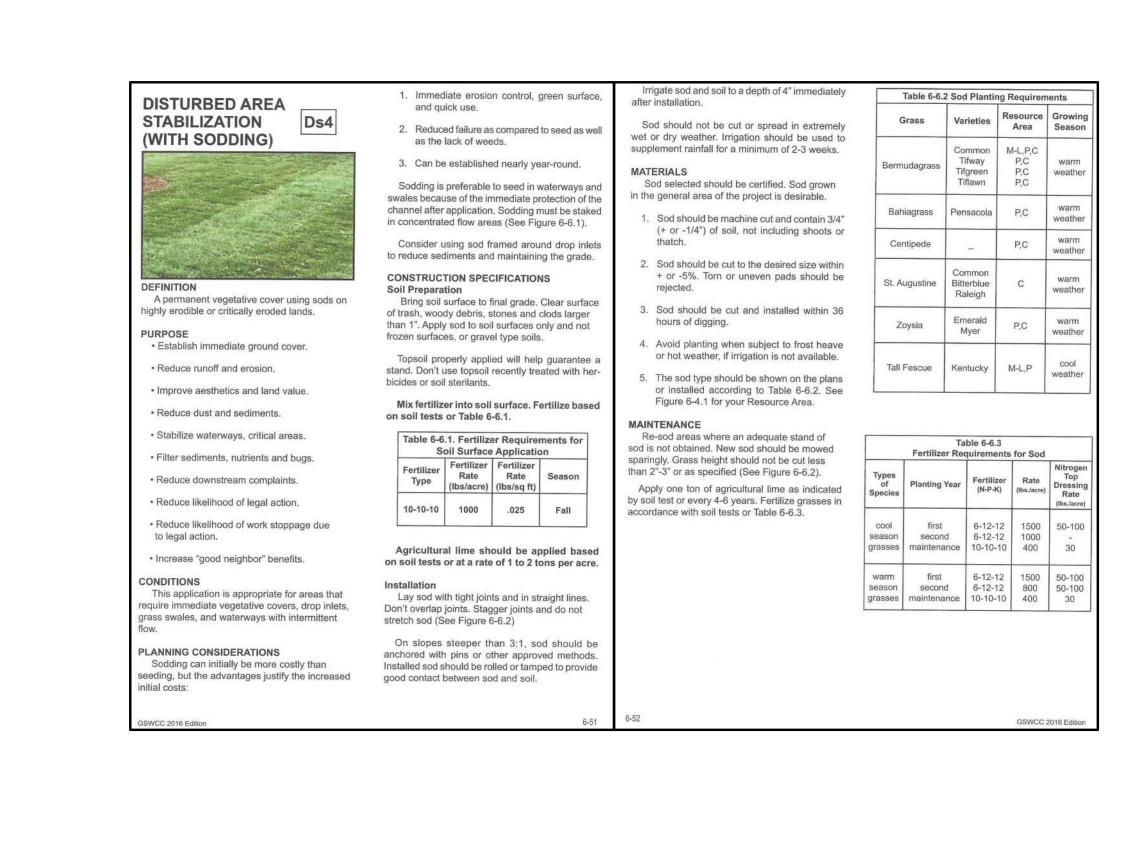
J. DUST CONTROL K. CONCRETE WASHDOWN PIT

GSWCC 2016 Edition

LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05

EXPIRES 11-15-26

BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.



DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES

I. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT NOT LIMITED TO:

A. CONSTRUCTION EXIT

B. SILT FENCING

-C. TEMPORY SEDIMENT-BASINS
-D. HAY BALE CHECK DAMS E. STONE CHECK DAMS

G. GRASSING H. DETENTION POND

J. DUST CONTROL

K. CONCRETE WASHDOWN PIT

"I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

"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 I 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 stormwater 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."

Mal Brandl

CERTIFIED BY: Mark A. Boswell Level II Certification No. 2104

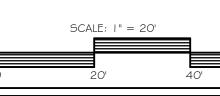
LEVEL II CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26 STREAM BUFFER ENCROACHMENT NOTES:

. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM

. 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.

SPECIAL CONSTRUCTION NOTE:

IF THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS O REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

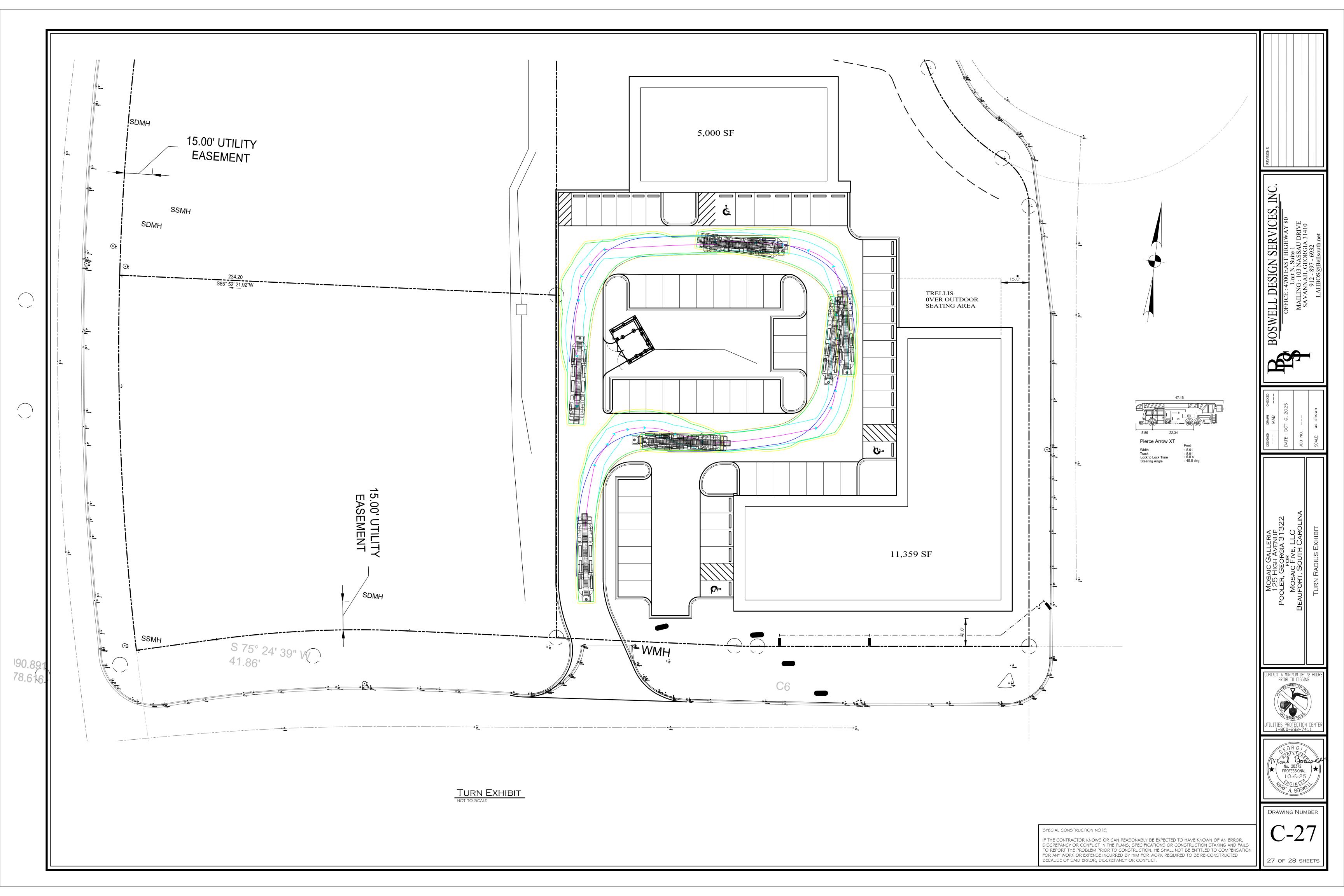


DRAWING NUMBER

PRIOR TO DIGGING

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1 AU DRIVE GIA 31410 32



Project Name: 50	EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST STAND ALONE GUIDANCE CONSTRUCTION PROJECTS GAR100001 SWCD: LEROSION PLANS Address: LOT 14C, MOSAIC CIRCLE	15-26 YES	Part IV page 20 of the permit. The following statement and signature of the design profe	re that the site was visited prior to development of the ES&PC Plan as stated on essional preparing the Plan must be shown on the ES&PC Plan or under ES&PC epared after a site visit to the locations described herein by myself or my		seeding." Must be shown on ES&PC Plan or under ES&PC notes.	sed for a period greater than 14 days shall be stabilized with mulch or temporary Permit IV.D.3.a.(1). pg 28 nto a Biota Impaired Stream Segment, or within 1 linear mile upstream of and	19 YES	temporary and final stabilization). Activity schedule must be site specific. The narrative description	major activities which disturb soils for the major portions of the site (i.e., initial pactivities, excavation activities, utility activities, grading, infrastructure,
Local Issuing Authori Name & Email of per	ty: POOLER Date on Plans: MARCH, 2025 son filling out checklist: MARK BOSWELL / LAHBOS@BELLSOUTH.NET	15-26 YES	authorized agent, under my supervision ."13 Design professional's certification statement and signature	e that the Permittee's ES&PC Plan provides for an appropriate and	NA NO	within the same watershed as any portion of a Biota Impa completed Appendix 1 of this checklist with at least 4 of t	naired Stream Segment, must comply with Part III.C. of the permit. Include the the chosen BMPs that will be used for those areas of the site which discharge to	19 YES	ES&PC Plan sheet or under ES&PC notes. Permit IV.D.2.c. 30 Provide complete requirements of <u>Inspections</u> and record ker	eping by the Primary Permittee. *
Plan Included Page # Y/N 28 YES	TO BE SHOWN ON ES&PC PLAN		The following statement and the signature of the design programmer of the design programmer of the design programmer of the design programmer of the design programmer.	ermit requirements as stated on Part IV page 20 of the permit. * professional must be shown on the ES&PC Plan or under ES&PC notes. "I certify		•	s discharges into a Biota Impaired Stream Segment that has been listed for the for "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5,			oing requirements of the Primary Permittee as stated in Part IV.D.4.a. on and record keeping requirements shall be shown on the Plan under ES&PS
28 YES	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.		Management Practices required by the Georgia Water Qu	Control Plan provides for an appropriate and comprehensive system of Best uality Control Act and the document "Manual for Erosion and Sediment Control in ter Conservation Commission as of January 1 of the year in which the land-		and the potential cause is either "NP" (nonpoint source) of	or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs red Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most	21 YES	31 Provide complete requirements of <u>Sampling Frequency</u> and <u>See Part IV.D.6.d. pages 36-37 Sampling Frequency</u> and <u>P</u>	Reporting of sampling results. * art IV.E. page 38 Reporting in the current permit. Complete Sampling
ALL YES	The completed Checklist <u>must</u> be submitted with the ES&PC Plan or the Plan will not be reviewed. Permit IV.D.1. pg 27 Level II certification number issued by the Commission, signature and seal of the certified design professional.		disturbing activity was permitted, provides for the sampling	ng of the receiving water(s) or the sampling of the storm water outfalls and that the sampling methods is expected to meet the requirements contained in the General			ist Documents" can be viewed on the GAEPD website (www.epd.georgia.gov). on the GSWCC website (www.gaswcc.georgia.gov). Permit III.C.2.au. pg 16-18	21 YES	Frequency and Reporting requirements are to be shown on t 32 Provide complete details for Retention of Records as per Pai	ne Plan under ES&PC notes.
	Signature, seal and Level II number <u>must</u> be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification must be issued to the Design Professional, after completion of a GSWCC approved course , and whose signature and seal are on the Plan.	21 YES		who prepared the ES&PC Plan is to inspect and certify the installation of the	NA NO		nalized for the Biota Impaired Stream Segment (identified in Item 22 above) at an must address any site-specific conditions or requirements included in the TMDL			rent permit. Complete details of Retention of Records are to be shown on the
15-17 YES	3 Limits of disturbance shall be less 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 must include the GAEPD approval letter and completed			mary Permittee must retain the design professional who prepared the Plan, except		Implementation Plan. *	e GAEPD website (www.epd.georgia.gov). The applicable TMDL Implementation	19 YES		es and shall include quality control/assurance procedures and precise
	Appendix 1 of this checklist with at least 4 of the chosen BMPs. * A copy of the written approval by GAEPD must be attached to the Plan for the Plan to be reviewed. Permit IV.D.3. pg 28		installation of the initial sediment storage requirements an	GAEPD has agreed to an alternate design professional, to inspect and certify the nd perimeter control BMPs which the design professional designed within seven determine if these BMPs have been installed and are being maintained as	NA	Plan for sediment should be delineated on the ES&PC Pl	(1 0 0 0 7 11	21 YES	sampling methodology for each sampling location. Permit IV 34 Appendix B rationale for NTU values at all outfall sampling po	oints where applicable. *
2,19 YES	The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls. May be shown on cover sheet, ES&PC Plan, or under ES&PC notes. Permit II.B.1.c. pg 13		designed. The design professional shall report the results permittee must correct all deficiencies within two (2) busin	s of the inspection to the Primary Permittee within seven (7) days and the ness days of receipt of the inspection report from the design professional prior to	10/	drum at the construction site is prohibited. *	s, concrete mixer chutes, hoppers and rear of the vehicles on the project site,		When the Permittee has determined that some or all outfalls which includes the NTU limit(s) selected from Appendix B .	will be monitored, a rationale must be shown on the Plan under ES&PC notes This rationale must include the size of the construction site, the calculation of eceiving water(s) (i.e., trout stream or supporting warm water fisheries).
2,19 YES	5 Provide the name, address, email address, and phone number of Primary Permittee. May be shown on cover sheet, ES&PC Plan, or under ES&PC notes. Permit II.B.1.b. pg 13	15-26 YES	additional time is required. Permit IV.A.5. pa 26	by Part III.D.2 of the Permit unless weather related site conditions are such that all not be conducted within the 25 or 50-foot undisturbed stream buffers as	l		nd provide detail of BMPs that will be used. If the project does not allow the	15-17 NO	Permit IV.D.6.a.(3). pg 34	nd perennial and intermittent streams and other water bodies into which storm
2,19 YES	6 Note total and disturbed acreages of the project or phase under construction. Must be shown on ES&PC Plan or under ES&PC notes. Permit IV.D.2.d. pg 27	10 20 120	1	25-feet of the coastal marshland buffer as measured from the Jurisdictional	21 YES	· · · · · · · · · · · · · · · · · · ·	ention of spills and leaks of petroleum products from any areas where such		water is discharged. *	nic map or a drawing (referred to as a topographic map) that is a scale equal
NA NO	7 Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees.	NA	See Part IV.(i) - (iv). on pages 20-25 of the permit and shall Provide a description of any buffer encroachments and inc				proper remediation of any spills and leaks that do occur. This information can be in ocument so long as that information accompanies the Plan. Permit III.B. pg 15		location of all perennial and intermittent streams and other w	s of the site or the stand alone construction. The map must include (a) the ater bodies as shown on a USGS topographic map, and all other perennial and
ALL YES	GPS location (decimal degrees) of the construction exit must be shown ES&PC Plan sheets and ES&PC notes. It <u>must</u> match the NOI. Permit II.B.1.a. pg 13 8 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.		1 2 1 11	pastal Marshland Interface buffer variance from the GAEPD, an indication shall be sment activity must be shown on the ES&PC Plan or under ES&PC notes.	23 YES	· · · · · ·	the construction process to control pollutants in storm water that will occur after		the receiving water and/or outfall sampling locations. When	e mandatory field verification, into which the storm water is discharged and (b) he Permittee has chosen to use a USGS topographic map and the receiving ation of the receiving water(s) must be hand-drawn on the USGS topographic
ALL	The initial Plan date should be shown on all pages. With each resubmittal, the revision date and entity requesting revisions should be shown on cover sheet and each sheet that has been revised.	19 YES	17 Clearly note the statement that "Amendments/revisions to component must be certified by the design professional."	the ES&PC Plan which have a significant effect on BMPs with a hydraulic *		water that will occur after construction operations have be	at will be installed during the construction process to control pollutants in storm been completed. These may include storm water detention and retention		map from where the storm water(s) enters the receiving water stream shown on the USGS topographic map. Sampling pc	r(s) to the point where the receiving water(s) combines with the first blue line ints shall be located on applicable pages of the Initial, Intermediate, and
19 YES	9 Descriptions of the nature of construction activity and existing site conditions. Provide a description of the existing site and a description of the proposed project. These must be shown on the ES&PC Plan or under		, , , , ,	in a narrative and shown under ES&PC notes. Revisions or amendments should		The Plan must also include a technical explanation of the	ions for flow attenuation or a combination of these practices (sequential systems). e basis used to select these placed at discharge locations and along the length of w so that the natural physical and biological characteristics and functions of the	20 YES	Final phases of the ES&PC Plans. Permit IV.D.6.a.(1). pg 36 A description of appropriate controls and measures that will be	34 and IV.D.6.c.(1). pg 35. e implemented at the construction site including: (1) initial sediment storage
1,19 YES	ES&PC notes. Permit IV.D.2.a. pg 27 10 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.	21 YES	18 Clearly note the statement that "Waste materials shall not permit." *	t be discharged to waters of the State, except as authorized by a Section 404		water course are maintained and protected. The installat	ation of these devices may be subject to Section 404 of the Federal Clean Water allation and maintenance of storm water management devices prior to final		requirements and perimeter control BMPs, (2) intermediate g there will be no mass grading and the initial sediment storage	rading and drainage BMPs, and (3) final BMPs. For construction sites where requirements and initial perimeter control BMPs, intermediate grading and
	Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for Plan Reviewers if a site visit is needed, or if the site needs to be		concrete washout, excavated sediment, etc., will be prope	als, including waste building materials, construction and demolition debris, erly disposed of. Any disposal of solid waste to waters of the State is prohibited	l	IV.D.3.b. pg 30	nance of such structures after construction activities have been completed. Permit		· · · · · · · · · · · · · · · · · · ·	each phase shown on a separate sheet. Initial phase of the Plan must include
19 YES	located on another map. 11 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands,	19 YES	·	n the site shall be prevented by the installation of erosion and sediment control	23 YES		terials and building products on site. * as plastic sheeting or temporary roofs, to cover building materials, building ls, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials		sediment from leaving the site, such as silt fence, inlet protect	kit, tree-save fence, if applicable, and any other BMPs necessary to prevent tion on existing storm drain structures, diversions, check dams, temporary are to be only the areas needed to install initial BMPs. The intermediate
	marshlands, etc. which may be affected. The name of the initial receiving water(s) or if unnamed, the first named blue line stream indicated on the appropriate USGS Topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the	1	measures and practices prior to land disturbing activities." Must be shown on ES&PC Plan or under ES&PC notes. P		20-26 YES	in order to minimize exposure to precipitation and to store 28 Description of the practices that will be used to reduce the	mwater. Permit IV.D.3.c.(2). pg 31		phase should show rough grading and utility construction. B revised sediment storage needed as drainage basins are alter	MPs should include initial inlet protection, additional silt fence as needed, any red, outlet protection, retrofit if applicable, matting with temporary or
	municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the Permittee's determination of whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring	19 YES	,	Il be maintained at all times. If full implementation of the approved Plan does not id sediment control measures shall be implemented to control or treat the		· · · · · · · · · · · · · · · · · · ·	er pollution expected to be present on the site and provide a narrative explaining		paving, if applicable, building construction, if applicable, etc.	er rings, etc. Final phase of Plan should show finished grade, curbing and BMPs should include permanent vegetation, appropriate inlet protection, etc. and the initial sediment storage requirements and perimeter control BMPs,
	area which could be affected by the post-developed runoff from the site. Permit IV.D.2.f. pg 28		Must be shown on ES&PC Plan or under ES&PC notes.	Permit IV.D.3. pg 28						are the same, the Plan may combine all BMPs into a single phase Plan. The
	overlaying the original contour lines. Elevations of all State Waters and wetlands local performance by the sum of the su	Contour Interval in accord Contour Intervals, ft. 0.5 or 1 1 or 2 2, 5 or 10 If the Plan must show the proposed of been documented to be equivaler PD or the Georgia Soil and Water georgia.gov. It and approved Equivalent BMP List. Refer to Appendict valent BMP List. Refer to Appendict and interval areas of impact. Lum undisturbed buffers adjacent to State all areas of impact. Lum undisturbed buffers, but the Loundisturbed buffer area that is impacted on or within 200 feet of the properties.	digrade in bold contour lines with the above intervals ontour lines must be shown. In to or superior to conventional BMPs as certified by a Conservation Commission). Refer to the Alternative st found at www.gaswcc.georgia.gov. Permit In XA-2 of the Manual for Erosion & Sediment Control in the Edition. In Waters and any additional buffers as required by the call Issuing Authorities are allowed to require more a State and all other buffers of State Waters required by the buffers of State Waters required by the project site must be noted on the Plan.	velocity (fps), and tailwater conditions. The dimension width (W2), average stone diameter (d50), and stone These should be shown in a chart on ES&PC intermordissipation devices shall be placed at all discharge to erosive velocity flow from the structure to a water commaintained and protected. 47 Soil series for the project site and their delineation. Soil series delineations are required for the Plan revision for the project site, such as a level three or level four. The soil series delineation should be shown on the eshould be shown on the sheet with their delineation. 48 The limits of disturbance for each phase of construct. The limits of disturbance for the initial phase should and initial sediment storage. The intermediate phase drainage, utilities installed, etc. The final phase should and initial sediment storage, and of 67 cubic yards of sediment storage, utilities installed, etc. The final phase should and disturbance activities until final stabilization of equivalent controls when a sediment basin is not attased iment basin is not attased iment basin is not provided. A written justification from the Manual must be included for structural BMF storage when using equivalent controls. When discharge when using equivalent controls.	the flow characteristics of the pons of the apron must include leadenth (D) designed in accordate diate and/or final phase sheet ocations and along the length of urse so that the natural physical ew and can be found on the NF survey for projects that will be existing site Plan or the initial physical can be found on the natural physical ew and can be found on the NF survey for projects that will be existing site Plan or the initial physical can be also as a survey for projects that will be existing site Plan or the initial physical existing site Plan or the initial physical existing site Plan or the initial physical can be also and delineate any additional area area area area area and delineate any additional area area area area area area area ar	pe at full flow including pipe diameter, flow rate (cfs), ngth (La), width at the headwall (W1), down-stream noe with Figures 6-34.1 and 6-34.2 in the Manual. or ES&PC detail sheet with outlet protection. Velocity any outfall channel for the purpose of providing a nonland biological functions and characteristics are CCS web site. The highest level of soil survey required using septic systems, must be delineated on the Plan. ase Plan. A chart listing the soils located on the project to be disturbed for the installation of perimeter control as to be disturbed for that phase, such as grading, as to be disturbed such as individual lots, etc. emporary sediment basin, retrofitted detention pond, at storage volume must be in place prior to and during a written justification explaining the decision to use Plan for each common drainage location in which a brage is not attainable must also be given. Worksheets the design professional to obtain the required sediment dimpoundments, Permittees are required to utilize		nual Chapter 6, with legend. th and no less stringent than the from the Manual must be included in the Manual must be included in the Manual must, at a minimow a detailed drawing for each significant or the Manual. Note the Plan or detail sheet. Inanent vegetative practices. It is specific for appropriate time of sheet, or under ES&PC notes than 1 acre and not the manual model.	the Manual and shown using uniform coding symbols cluded and may be shown on detail sheet or any of the imum, meet the guidelines set forth in the Manual for inch structural BMP shown on the Plan. All BMPs and that a worksheet is provided in the Manual for most include species, planting dates and seeding, fertilizer, of year that seeding will take place and for the	
	ALL STATE WATERS AND WETLANDS LOCAT ALL PHASES OF THE PLAN. When a project is I determination of State Waters that are not delines time allowed to the LIA, or the full thirty-five day r jurisdiction where there is no certified Local Issuir and there are no time limits for reviewing the Plan required buffer. REPORT YES 43 Delineation and acreage of contributing drainage All existing drainage basins on the project site an the Plan. As the basins are altered or new ones delineated throughout each phase of the Plan. P REPORT YES 44 Provide hydrology study and maps of drainage ba Hydrology study and drainage maps should be se from, the project site, with each one delineated, la REPORT YES 45 Estimate of the runoff coefficient or peak discharg projects, post-construction impervious area s The Plan must provide both pre- and post-constru the form of a hydrologic study so long as that stur not a required element of the Plan, only the pre a	ED ON OR WITHIN 200 FEET OF coated in a jurisdiction with a certifated on the Plan, the Plan review of eview time allowed to the District, ing Authority regulating that project, in If the Local Issuing Authority requires a single of the Issuing and Issuing Issui	THE PROJECT SITE MUST BE DELINEATED ON fied Local Issuing Authority and the LIA must make a could be delayed for beyond the full forty-five day review of the District is reviewing the Plan. For all projects in a GAEPD is responsible for State waters determinations uires an undisturbed buffer of wetlands, delineate I on the existing conditions and/or on the initial phase of all phases, the new basins and their acreage must be veloped conditions. * d include each individual basin draining to, through, and ge. Permit IV.D.2.e. pg 28 construction activities are completed. For solar farm all solar panel square footage. Icient or peak discharge flow for the site. This can be in accompanies the Plan. A complete hydrologic study is the runoff coefficient or peak discharge flow for the site. then determining the calculations and the post-	yards of storage per acre does not apply to flows froi undergone final stabilization where such flows are di not be appropriate for some common drainage locati be included in the Plan. Worksheets from the Manua temporary sediment basin designed for the project. A ES&PC detail section of the Plan. Completed works sediment trap. When the design professional choose	n must be included in the Plan. r Permanent) sediment basin (S nt control measures, shall be pri m off-site areas and flows from verted around both the disturbe ons and a written justification e al must be completed and show All cross sections and details re heets from the Manual must be es to use equivalent controls, th . If outlet structures that withd	d3, Sd4, Rt, or excavated Sd2) providing at least 67 oxided until final stabilization of the site. The 67 cubic consite areas that are either undisturbed or have darea and the sediment basin. Sediment basins may explaining the decision not to use sediment basins must non the Plan or attached to the Plan for each quired per the Manual for Sd3s must be shown on the shown on the Plan for each retrofit and excavated inlet e calculations used to obtain the required 67 cubic raw water from the surface are not feasible, a written				

WETLAND / BUFFER ENCROACHMENT NOTES:

1. NEW STRUCTURES ON THIS PROJECT DO NOT ENCROACH IN THE 25 OR 50 FOOT STREAM BUFFER.

2. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT STREAM BUFFER AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST OBTAINING THE NECESSARY VARIANCES AND PERMITS.

DESCRIPTION OF STORM WATER POLLUTION DISCHARGE PREVENTION PRACTICES I. THE FOLLOWING IS A DESCRIPTION OF THE PRACTICES TO BE USED BUT

NOT LIMITED TO:

A. CONSTRUCTION EXIT

B. SILT FENCING

C. TEMPORY SEDIMENT BASINS

G. GRASSING

J. DUST CONTROL K. CONCRETE WASHDOWN PIT

SPECIAL CONSTRUCTION NOTE:

IF THE CONTRACTOR KNOWS OR CAN REASONABLY BE EXPECTED TO HAVE KNOWN OF AN ERROR, DISCREPANCY OR CONFLICT IN THE PLANS, SPECIFICATIONS OR CONSTRUCTION STAKING AND FAILS TO REPORT THE PROBLEM PRIOR TO CONSTRUCTION, HE SHALL NOT BE ENTITLED TO COMPENSATION FOR ANY WORK OR EXPENSE INCURRED BY HIM FOR WORK REQUIRED TO BE RE-CONSTRUCTED BECAUSE OF SAID ERROR, DISCREPANCY OR CONFLICT.

CERTIFICATION NO. 2104 ISSUED 11-5-05 EXPIRES 11-15-26

LEVEL II

DRAWING NUMBER