**GENERAL NOTES** 

OWNER/DEVELOPER: SOUTHERN HERITAGE HOMES

390 BROGDON ROAD, SUWANEE GA, 30024 TEL: 770-527-3030 EMAIL: mp@southernheritagehomesga.com 24 HR CONTACT: MICHAEL PHELPS

CONTACT: TAYLOR ANDERSON, P

BLUE LANDWORKS LLC ENGINEER: 5019 WEST BROAD STREET SUITE M230 SUGAR HILL, GEORGIA 30518 TEL: 678-804-8586

GA SSWCC LEVEL II CERTIFIED DESIGN PROFESSIONAL #3414

- THIS PROPERTY IS SHOWN ON GWINNETT COUNTY TAX MAPS AS BEING PART OF THE 7TH LAND DISTRICT, LAND LOT 293 AND 294, PARCEL ID(S) 7270 044 AND CONTAINING 13.61 ACRES.
- THIS PROPERTY IS ZONED M-1 (LIGHT INDUSTRIAL DISTRICT). 4. PROPOSED USE: R-100 (SINGLE-FAMILY RESIDENTIAL DISTRICT)
- TOTAL AREA = 9.76 ACRES (PORTION OF PARCEL 7270 044)
- THIS SITE DOES NOT CONTAIN STATE WATERS REQUIRING AN UNDISTURBED 25' STATE WATERS BUFFER. THIS SITE DOES NOT CONTAIN AREAS. STREAMS, AND/OR BODIES OF WATER DEPICTED AS WETLANDS ON THE U.S
- DEPARTMENT OF INTERIOR FISH, AND WILDLIFE SERVICE. THERE IS NO FLOODPLAIN ON THIS PROPERTY FROM A WATERCOURSE WITH A DRAINAGE AREA EXCEEDING 100 ACRES OR FLOODPLAIN PER FIRM PANEL NO. 13135C0015G, DATED 3-4-2013.
- BOUNDARY INFORMATION BASED ON SURVEY PERFORMED BY BLUE LANDWORKS, LLC, DATED APRIL 2024. TOPOGRAPHIC INFORMATION IS TAKEN FROM GWINNETT COUNTY GIS AND GROUND RUN SURVEY PERFORMED BY BLUE
- LANDWORKS, LLC DATED APRIL 2024. CONTOUR INTERVAL IS TWO FEET.
- 10. ALL TEMPORARY TRAFFIC CONTROL MUST BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- EXISTING SITE CONDITIONS: VEGETATED VACANT LOT.
- 13. ALL CONSTRUCTION TO COMPLY WITH CITY OF BUFORD STANDARDS CONSTRUCTION DEBRIS WILL BE DISPOSED OF IN A REGULATED OFF-SITE LANDFILL.
- 15. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED.
- 17. ALL CONSTRUCTION SHALL COMPLY WITH CITY OF BUFORD STANDARDS AND SPECIFICATIONS 18. ANY UTILITY IMPROVEMENTS (WATER, SANITARY SEWER, NATURAL GAS AND/OR STORM DRAINAGE) TO BE DEDICATED TO THE CITY AND BECOME CITY RESPONSIBILITY MUST BE INSTALLED BY A CONTRACTOR ON THE CITY'S APPROVED

CONTRACTOR LIST, OR OBTAIN APPROVAL BY THE CITY TO BE ADDED TO THE LIST PRIOR TO THE BEGINNING OF

19. ALL UTILITIES (WATER, SANITARY SEWER, NATURAL GAS, AND ELECTRIC) PROVIDED BY CITY OF BUFORD.

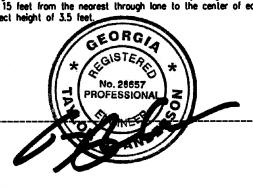
#Z-24-20: BBC Investment Group, LLC requested rezoning for the property located on Adams Street, out of parcel 7-270-044, containing 9.77 +/- acres from M-1 to R-100. Mike Phelps spoke on behalf of the applicant and explained the request to the Board. He stated they are proposing a small residential subdivision consisting of 25 lots. The lots will be a minimum of 7500 square feet with 75 foot lot width. He stated he is trying to propose affordable homes. He asked for the ranch homes to be a minimum of 1800 square feet and the two-story homes to be a minimum of 2200 square feet. He also asked for the homes to be 60% brick or stone on the front elevation with a 42" water table on the sides and rear elevations. No one spoke against the request. Motion by Mr. Weeks, seconded by Mr. Burge to approve the request with the following conditions:

- 1. The applicant shall submit subdivision development plans in conformance to Development Regulations Article 10 Section 10.2 and follow plan and plat specification in Development Regulations Section 10.3 for final plat approval when appropriate in the development process.
- 2. Each lot adjacent to the existing stream and having stream buffers and impervious setbacks within the lots shall be required to provide a residential drainage plan (RDP) prior to the issuance of building permits in conformance to Development Regulation Sections 10.5.1 and 10.5.2.
- 3. The approval of the zoning application provides no variances to the Buford City Zoning or Development Regulations with concern to code, construction specifications or procedures. Any variance request shall proceed as required per Buford City Code filing the property variance application, demonstrating hardships and approved under a separate public hearing.
- Minimum gross heated floor area for the proposed home(s) shall be a minimum of 2000 square feet for a ranch, 2800 square feet for a 2-story home, which shall exclude basement both finished and unfinished. The home shall have a minimum
- 5. All residential homes shall be constructed with four (4) sides brick or stone with architectural accents not to exceed twenty percent (20%) on the front elevation and not to exceed twenty percent (20%) on the side and rear elevations. Accents shall include brick, stone, wood, glass, metal, stucco, shakes, and painted cement siding, as approved by the Planning Director.
- Minimum lot size shall be 7500 square feet and 75 feet in width.
- 7. The front setback shall be a minimum of 25 feet or 50 feet on collector roads and the rear setback shall be a minimum of 30 feet. The side setback shall be a minimum of 10 feet.
- 8. The driveway shall be a minimum of 18 feet in width. The length of the driveway shall be 20 feet from the garage to the sidewalk so as not to block sidewalks. ). Each lot shall have sodded front yards.
- 10. Each lot shall have two (2) ornamental trees planted in the front yard. The trees shall be a species approved by the City of Buford and shall be a minimum of 3" caliper.
- 11. In conformance with this ordinance, substandard street improvement plans shall be approved and installation of the curb and gutter and binder course prior to the issuance of any building permits. A mandatory homeowner's association (HOA) shall be provided and responsible for maintenance of all common grounds, individual homeowner's lots, and stormwater detention facilities. Rental of the residential townhouse units shall be restricted to ten percent (10%) of the total units. This zoning condition shall be placed in the Declaration of Covenants, Restrictions, and Easements as enforced by the HOA.
- 12. A 3-way stop shall be provided at the intersection of Heraeus Boulevard/Smokey Road and South Street and the newly proposed subdivision street.
- 13. Adams Street shall be improved per the City of Buford Development Regulations and as outlined in the Request for Proposal.

#### SITE DATA [Z-24-20] PROPOSED ZONING USE = R-100 FRONT SETBACK(S) = 25SIDE SETBACK(S) = $10^{\circ}$ REAR SETBACK(S) = 30LOT AREA = 7.500 SFTOTAL ACREAGE = 9.76 AC DISTURBED ACREAGE = 9.5 AC EXISTING IMPERVIOUS ACREAGE = 0.11 AC PROPOSED IMPERVIOUS ACREAGE = 8.7 AC BUILDING SQUARE FOOTAGE = 2,000 SF (SLAB) 2,800 SF (2-STORY)

ARKING CALCULATIONS MINIMUM PARKING SPACES PER DWELLING UNIT EACH HOME SHALL HAVE A MINIMUM 2-CAR GARAGE PER 25 DWELLINGS x 2-CAR GARAGE = 50 PARKING SPACES

the undersigned, hereby certify that the proposed entrance and all interior streets for the "BRICKHAVEN ROW" project are designed with adequate corner sight distance for each intersection. The regulated speed limit on Adams Road and Smokey Road at the proposed entrances is 25 miles per hour. The sight distance required at the proposed entrance is 250 feet to the left and 250 feet to the right. The corner sight distance provided from the proposed entrances is equal to or exceeds the 250 feet of sight distance in both directions. The regulated speed limit for interior streets is 25 miles per hour. The sight distance for all interior intersections meets or exceeds 250 feet in each direction. Sight distance is measured with the driver's eye height of 3.5 feet at a distance of 15 feet from the nearest through lane to the center of each travel lane



KEEP ON





INSTALL SILT FENCE AND CONSTRUCTION OUTLET BEFORE STARTING WORK

> USE CITY OF BUFORD as your duidpster PROMIDED CHLY Please Contact: sanitation@cliponbuford.com 678-889-4846

"GRAVEL UNDER CURB IS REQUIRED"

5019 WEST BROAD STREET SUITE M230 SUGAR HILL, GA 30518 Tel: (678) 804-8586 info@bluelandworks.com

BLUE LANDWORKS LLC

www.bluelandworks.com

PROJECT# 2024.037



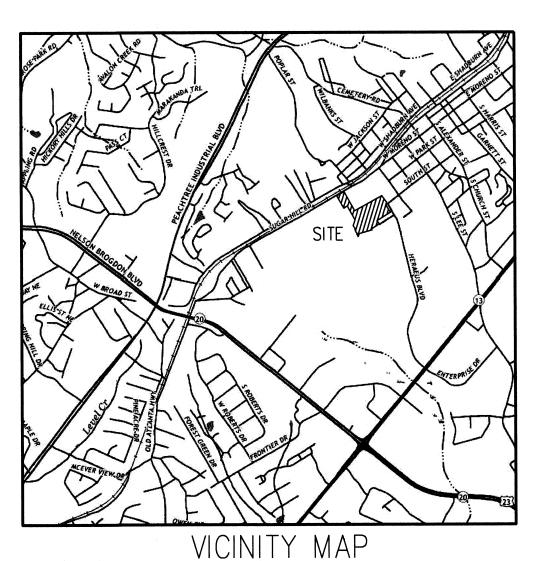
SCOPE OF WORK: THIS IS AN UNDEVELOPED VACANT LOT, PROPOSED AS A SINGLE-FAMILY RESIDENTIAL DEVELOPMENT WITH 25 LOTS. CLEARING, GRUBBING, SITE GRADING, STREET PAVING, INSTALLATION OF CITY OF BUFORD UNDERGROUND UTILITIES. AND LANDSCAPING IS PROPOSED.

# CONSTRUCTION PLANS

# BRICKHAVEN ROW

BUFORD, GA 30518 7TH LAND DISTRICT **LAND LOT 293 AND 294 GWINNETT COUNTY** PARCEL(S) 7270 044

**GWINNETT COUNTY EPN2024-03602** 



SCALE: NTS

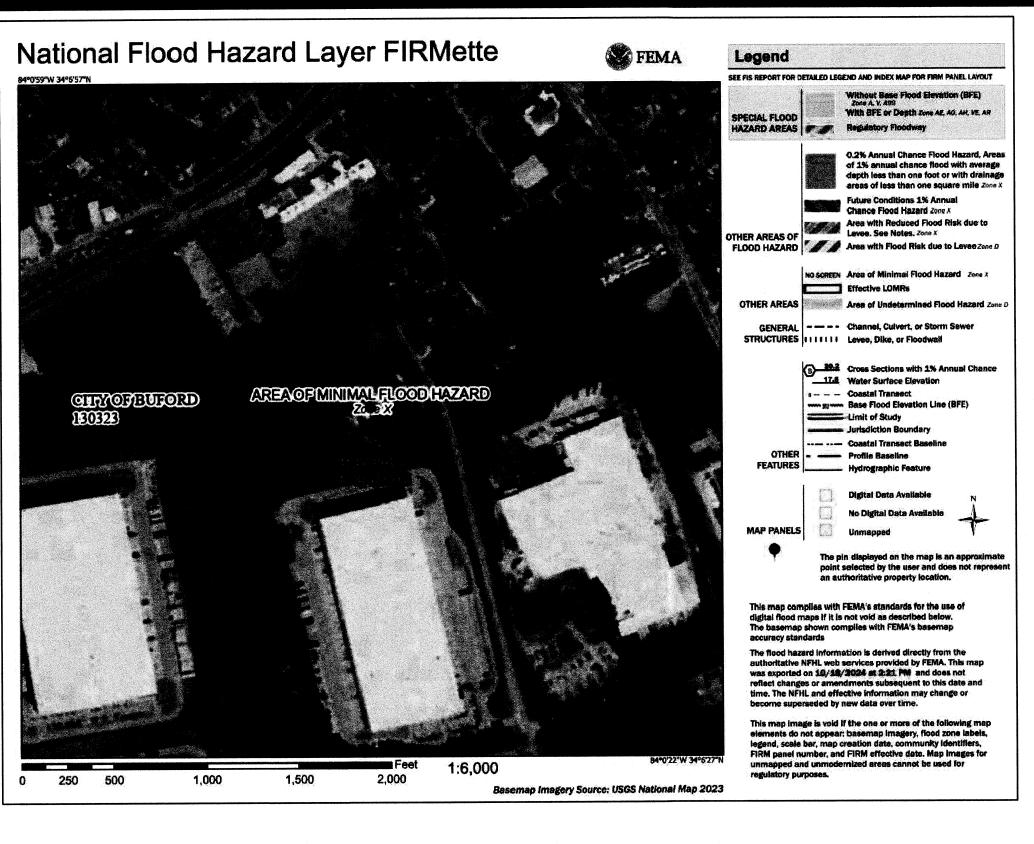
SOURCE: USGS

SHEET INDEX C-000 EXISTING CONDITIONS AND DEMOLITION PLAN C-001 SUBDIVISION DEVELOPMENT PLAN C-100 C-110 WATER DISTRIBUTION PLAN C-120 SANITARY SEWER PLAN C-130 GRADING AND DRAINAGE PLAN POND 'A' STORMWATER FACILITY PLAN AND DETAILS C-140 C-200 STREET AND SANITARY SEWER PROFILES C-201 SANITARY SEWER AND FORCE MAIN PROFILES C-202 STORM DRAINAGE PROFILES AND PIPE CHART C-500 - C-506 CONSTRUCTION DETAILS E-001 E-002 E-101 E-102 E-103 ESPCP - NOTES AND CERTIFICATIONS ESPCP - SAMPLING PLAN ESPCP - INITIAL PHASE ESPCP - INTERMEDIATE GRADING PHASE ESPCP - FINAL GRADING AND STABILIZATION PHASE E-500 - E-502 ESPCP - DETAILS - STRUCTURAL PRACTICES & **VEGETATIVE MEASURES** TREE PROTECTION AND REPLACEMENT PLAN TR-001 - TR-101

EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN OR FOR THE UTILITIES NOT SHOWN. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS ADVISED TO NOTIFY THE UTILITIES PROTECTION CENTER AT (800) 282-7411 PRIOR TO ANY EXCAVATION.



CALL 811 BEFORE ANY EXCAVATION WORK BEGINS OR ANY WORK BEGINS WITHIN TEN FT.(10') OF OVERHEAD POWER LINES OF 750 VOLTS OR MORE. SMART DIGGING MEAN'S CALLING 811 BEFORE EACH JOB. WHETHER YOU ARE A HOMEOWNER OR A PROFESSIONAL EXCAVATOR, ONE CALL TO 811 GETS YOUR UNDERGROUND UTILITY LINES MARKED FOR FREE.



#### INSTRUCTIONS TO CONTRACTORS

1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES AND ALL NECESSARY

- 2. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMAN LIKE MANNER TO THE ENTIRE SATISFACTION F THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES. THE CONTRACTOR SHALL WARRANTY ALL WORK TO THE OWNER FOR A MINIMUM PERIOD OF 18 MONTHS FOLLOWING
- COMPLETION OF CONSTRUCTION. DEVIATIONS FROM THESE PLANS WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVES MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT READY FOR USE. AND ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND
- 5. ALL MATERIALS SHALL BE NEW, UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND APPROPRIATE AUTHORITIES.
- THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK ND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS. HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S
- CONVENIENCE ONLY AND IS NOT GUARANTEED. THE CONTRACTOR IS TO CONTACT THE UTILIT COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. . CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING, AND COMPACTED SUBGRADE. ALL 4. SEWER SERVICE LATERALS SHALL BE PERMANENTLY MARKED ON THE CURB. UNDERGROUND UTILITIES. INCLUDING THOSE INSTALLED BY OTHERS (ELECTRICAL CONDUIT, GAS, TELEPHONE, AND ANY OTHER MISCELLANEOUS) SHALL BE IN-PLACE PRIOR TO THE PLACEMENT OF
- BASE COURSE MATERIAL IF POSSIBLE. 9. IF THE CONTRACTOR, IN THE COURSE OF WORK, FINDS ANY DISCREPANCY BETWEEN THE PLANS AND THE PHYSICAL CONDITIONS OF THE LOCALITY, OR ANY ERRORS OR OMISSIONS IN THE PLANS OR THE LAYOUT AS GIVEN BY THE ENGINEER, IT SHALL BE HIS DUTY TO IMMEDIATELY INFORM THE ENGINEER, IN WRITING, AND ENGINEER WILL PROMPTLY VERIFY THE SAME. ANY WORK DONE AFTER SUCH DISCOVERY, UNTIL AUTHORIZED, WILL BE AT THE CONTRACTOR'S RISK.
- 10. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ONE (1) RED-LINE COPY OF AN "AS-BUILT" PLAN OF ALL UNDERGROUND UTILITIES WITHIN PUBLIC EASEMENT OR RIGHT-OF-WAY SHOWING THE LOCATION OF EACH WITH ALL DIMENSIONS SHOWN NECESSARY TO ACCURATELY LOCATE EACH UNDERGROUND UTILITY, FOR USE BY THE ENGINEER IN PREPARING FORMAL RECORD DRAWINGS FOR GWINNETT COUNTY APPROVAL. SIGNS (EXCEPT HANDICAPPED PARKING SIGNS), LOCATION, NUMBER, AND SIZE ARE NOT APPROVED UNDER
- 12. "SIDEWALKS SHALL BE CONCRETE, MINIMUM OF 5 FT. WIDE AND INSTALLED ON COMPACTED SOIL. CONCRETE 3. SHALL BE CLASS "A"(GDOT) AND HAVE A STRENGTH OF 3,000 PSI AT 28 DAYS. THE AREA BETWEEN THE CURB AND SIDEWALK SHALL BE SODDED".
- 13. ALL WATER MAINS, CONNECTIONS AND OTHER APPURTENANCES ARE DESIGNED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY'S DEVELOPMENT REGULATIONS AND WATER AND SEWER STANDARD

THIS DEVELOPMENT PERMIT. A SEPARATE PERMIT IS REQUIRED.

- GEOTECHNICAL . SOILS TESTING AND ON-SITE INSPECTION MAY BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER SELECTED AND PAID BY THE OWNER. IN THE EVENT OF CONFLICT BETWEEN INSTRUCTIONS BY THE ENGINEER AND RECOMMENDATIONS PROVIDED BY THE OWNER'S GEOTECHNICAL ENGINEER, THE CONTRACTOR WILL ADHERE TO THE MOST STRINGENT.
- SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR TESTING SHALL BE THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR 3
- PROMPTLY SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS. COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO • UNDER STRUCTURES, BUILDING SLABS, STEPS, AND PAVEMENTS, COMPACT THE TOP 12 INCHES
- BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT DRY DENSITY. UNDER WALKWAYS, COMPACT THE TOP 6 INCHES BELOW THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95 PERCENT MAXIMUM DRY DENSITY. UNDER LAWN OR UNPAVED AREAS, COMPACT THE TOP 6 INCHES BELOW SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 90 PERCENT MAXIMUM DENSITY.

EARTHWORK AND GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S SPECIFICATIONS AND RECOMMENDATIONS, OR WITH SECTIONS 201-221 OF GA DOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IF NOT COVERED BY THE GEOTECHNICAL ENGINEER'S SPECIFICATIONS, EXCEPT AS OTHERWISE NOTED.

2. MAXIMUM SLOPE OF FILL EMBANKMENT SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL UNLESS

#### GWINNETT COUNTY FIRE NOTES

1. DURING CONSTRUCTION AND FOR PERMANENT ACCESS, ROADWAYS CONSTRUCTED OF AN ALL WEATHER SURFACE CAPABLE OF SUPPORTING 75,000 POUNDS GROSS WEIGHT SHALL BE PROVIDED PER INTERNATIONAL FIRE CODE, CHAPTER 5, SECTION 503.2.3, 2018 EDITON. 2. PLACEMENT OF FIRE HYDRANTS SHALL BE A MINIMUM OF 3 FT. AND A MAXIMUM OF 15 FT. FROM THE BACK

- OF THE CURB OR ROAD EDGE WITH THE LARGE FIRE DEPARTMENT CONNECTION FACING THE NEAREST FIRE DEPARTMENT ACCESS POINT AND SET A MINIMUM OF 18" AND A MAXIMUM OF 36" ABOVE FINISHED GRADE TO THE CENTER OF THE LARGE FIRE DEPARTMENT CONNECTION. AUTHORITY HAVING JURISDICTION. FIRE HYDRANTS AND WATER MAINS ARE TO BE INSTALLED, FLUSHED AND UNDER PRESSURE BEFORE ANY COMBUSTIBLE CONSTRUCTION IS STARTED. GWINNETT COUNTY ORDINANCE FOR FIRE PROTECTION AND LIFE
- GROUND & FLOOR SURFACES ALONG ACCESSIBLE ROUTES AND WALKS, RAMPS, STAIRS, AND CURB RAMPS SHALL BE STABLE, FIRM, SLIP-RESISTANT, AND SHALL COMPLY WITH 2010 ADA STANDARD FOR ACCESSIBLE

SEE NOTE 4 UNDER "PAVING AND CURBS" SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING. EXCESS EARTH CUT MATERIALS, IF ANY, SHALL BE PLACED AT A LOCATION ON OR NEAR THE SITE AS

#### ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH, CONTINUOUS GRADES WITH NO VISIBLE BENDS AT THE JOINTS. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL

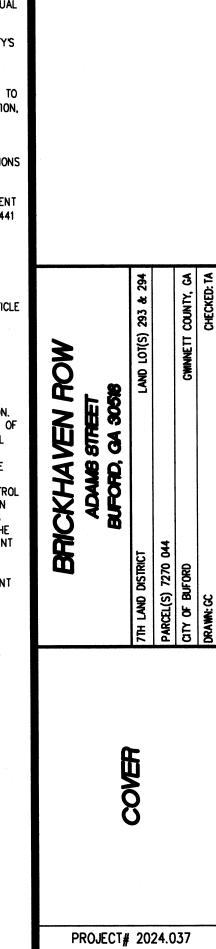
- OSHA REGULATIONS AND WITH CITY OF SUWANEE DEVELOPMENT REGULATIONS. CONSTRUCTION OF STORM DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH THE DETAILS INCLUDED IN THE CONSTRUCTION DRAWINGS AND RELATED GEORGIA D.O.T. AND CWINNETT COUNTY SPECIFICATIONS. THE DESIGN PROFESSIONAL CERTIFIES THAT THE STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT
- WAS PREPARED IN ACCORDANCE WITH THE CITY OF BUFORD DEVELOPMENT REGULATIONS AND THE GWINNETT COUNTY STORMWATER MANAGEMENT MANUAL.

- ALL SANITARY SEWER PIPE SHALL BE LAID ON SMOOTH, CONTINUOUS GRADES WITH NO VISIBLE BENDS AT HE JOINTS. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATION AND WITH THE APPLICABLE SECTIONS OF THE GWINNETT COUNTY SANITARY SEWER
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN PUBLIC WATER AND SEWER LINES IS TEN FEET. THE MINIMU VERTICAL CLEARANCE SHALL BE EIGHTEEN INCHES. ALL SANITARY SEWER LATERALS SHALL BE PLUGGED AND MARKERS INSTALLED SO THAT THEY CAN BE
- EASILY FOUND AFTER BACKFILLING. ALL TIE-INS TO EXISTING MANHOLES SHALL BE CORED. ALL MANHOLES REQUIRE "KOR-N-SEAL" OR EQUAL
- CONTRACTOR SHALL SET THE SANITARY SEWER MANHOLE LIDS AT FINISHED GRADE. ALL SANITARY SEWER SYSTEMS, ARE DESIGNED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY'S
- DEVELOPMENT REGULATIONS AND WATER AND SEWER STANDARD SPECIFICATIONS. BASE COURSE MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO
- "DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS", MOST RECENT EDITION SECTION 300 AND OTHER SECTIONS REFERRED TO THEREIN. ASPHALTIC CONCRETE SURFACE COURSE AND ASPHALT PRIME MATERIALS, EQUIPMENT, METHODS OF
- CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO "DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS", MOST RECENT EDITION, SECTION 400, 412, 413, AND OTHER SECTIONS CONCRETE CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN ON THE PLANS. MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO "DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS", MOST RECENT EDITION, SECTION 441
- AND OTHER SECTIONS REFERRED TO THEREIN. THE CONTRACTOR IS RESPONSIBLE FOR THE BACKFILLING OF CURB. 5. ALL CONCRETE SHALL BE 3,000 PSI AT 28 DAYS, WITH A MAXIMUM SLUMP OF 2", UNLESS NOTED
- ALL EXPOSED CONCRETE TO HAVE A FINE HAIR-BROOMED FINISH. CONCRETE CURBING SHALL BE CLASS "A" AND HAVE A MINIMUM STRENGTH OF 3,000 PSI AT 28 DAYS. 8. ALL CURB AND GUTTER SHALL HAVE AT MINIMUM 3"GAB INSTALLED UNDER CURB AND GUTTER PER ARTICLE 6.11.6 OF THE DEVELOPMENT REGULATIONS.

#### CONTRACTOR SHALL PROVIDE ANY EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED EROSION AND SEDIMENT CONTROL

SEE "ESPCP NOTES & DETAILS" SHEETS FOR EROSION AND SEDIMENT CONTROL NOTES. CONSTRUCTION EXIT PADS SHALL BE INSTALLED BY THE CONTRACTOR AT EACH CONSTRUCTION ACCESS

- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION. PROVISIONS TO PREVENT EROSION OF THE SOIL FROM THE SITE SHALL CONFORM TO THE REQUIREMENTS OF THE "EROSION AND SEDIMENTATION ACT OF 1975" AS SHOWN HEREON AND STIPULATED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" BY THE STATE SOIL AND WATER CONSERVATION COMMITTEE AND SHALL BE FOLLOWED AND INSTALLED IN A MATTER SO AS TO MINIMIZE EROSION OF THE DISTURBED AREAS AND PREVENT SEDIMENT FROM LEAVING THE SITE.
- THE CONTRACTOR WILL BE REQUIRED TO INCORPORATE ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES INTO THE PROJECT AT THE EARLIEST PRACTICABLE TIME DURING CONSTRUCTION. THE EROSION CONTROL MEASURES DETAILED HEREON SHALL BE CONTINUED UNTIL THE GRASS ON PLANTED SLOPES IS SUFFICIENTLY ESTABLISHED TO BE AN EFFECTIVE EROSION DETERRENT. THE SEDIMENT REMOVED FROM THE CONTROL STRUCTURES SHALL BE EVENLY DISTRIBUTED OUTSIDE CONSTRUCTION LIMITS. DISPOSED SEDIMENT SHALL BE PERMANENTLY GRASSED.
- TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 11, SECTIONS 2-11 AND 2-12 OF THE "MANUAL FOR EROSION AND SEDIMENT



5019 WEST BROAD STREET SUITE M230

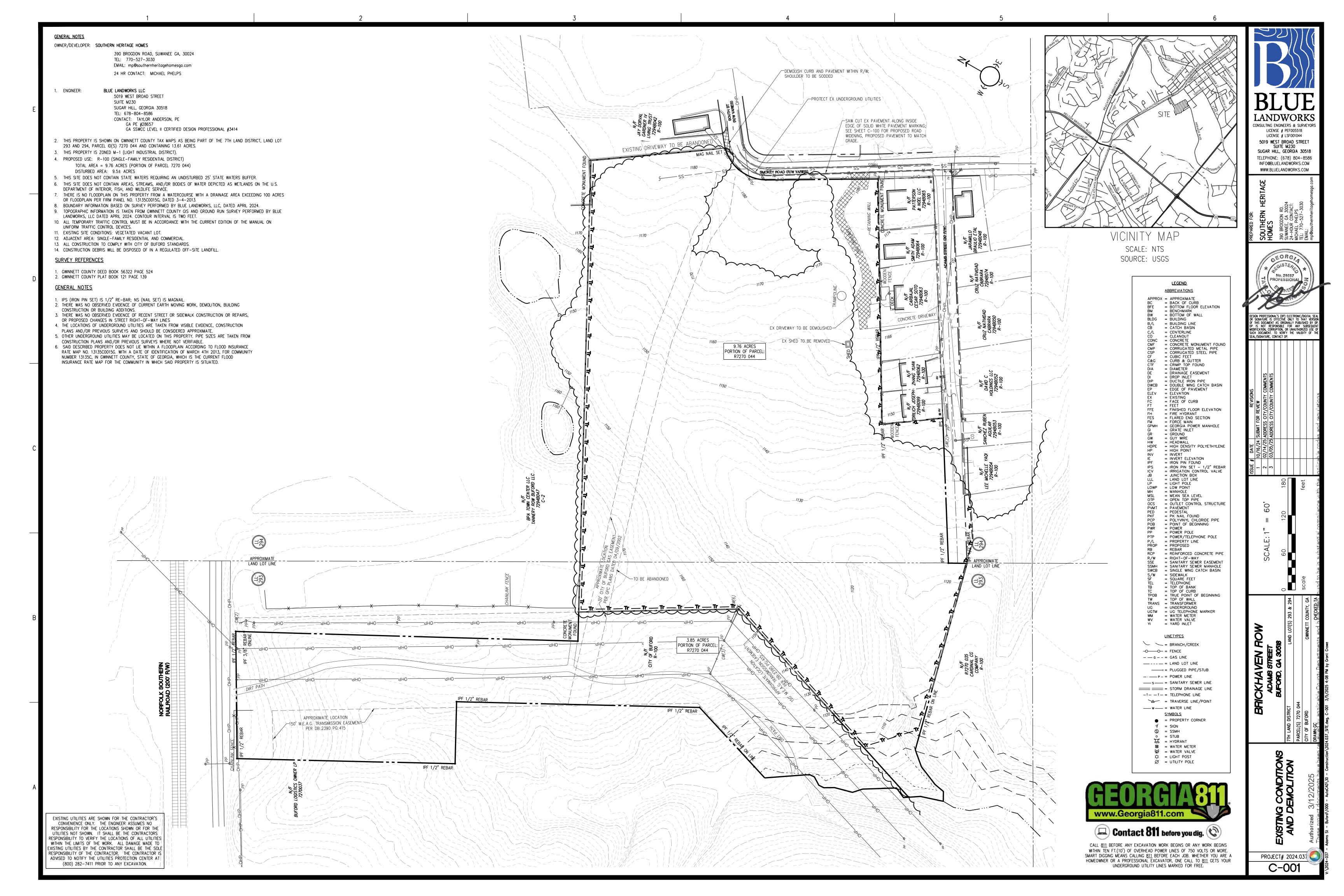
SUGAR HILL, GEORGIA 30518

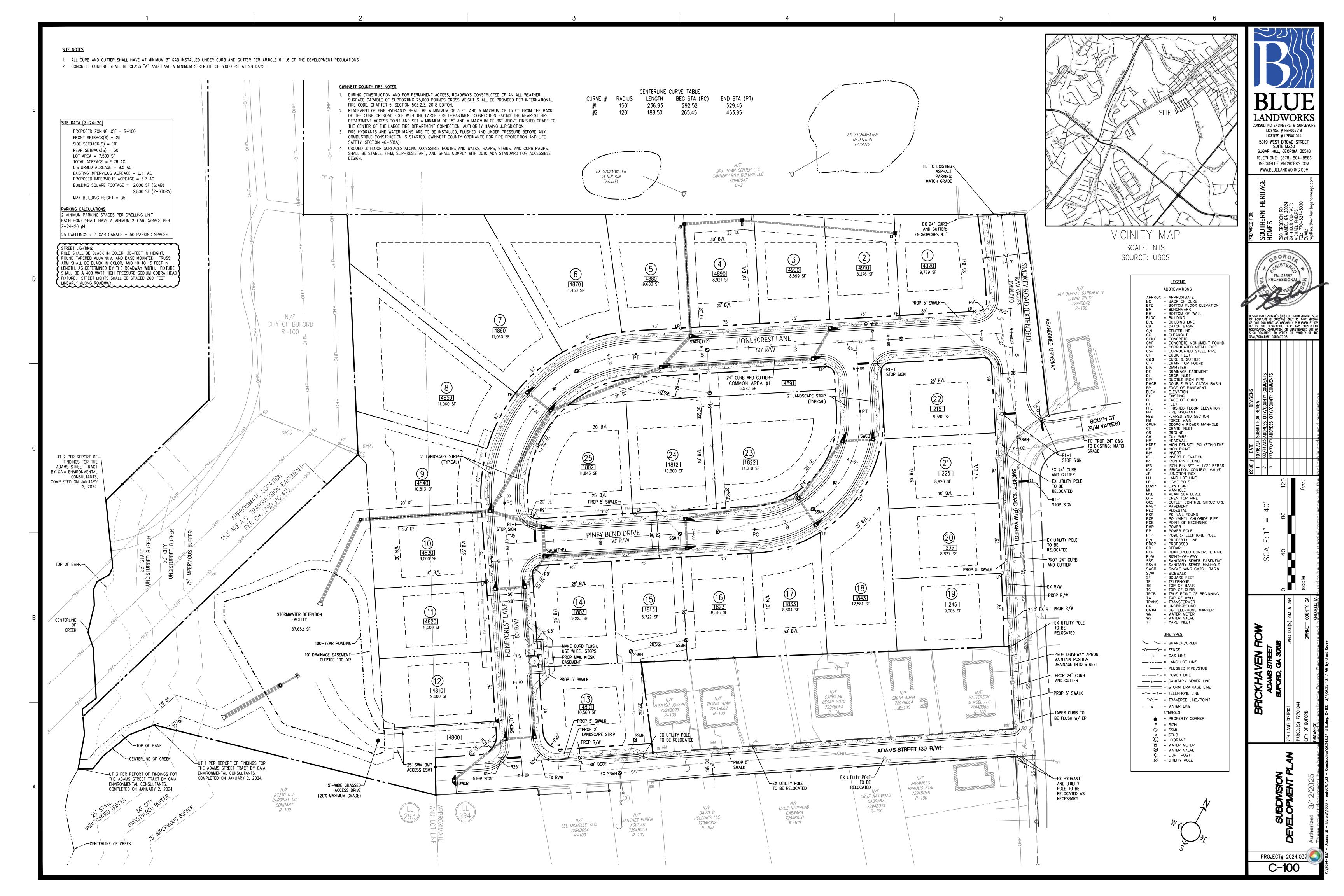
TELEPHONE: (678) 804-8586

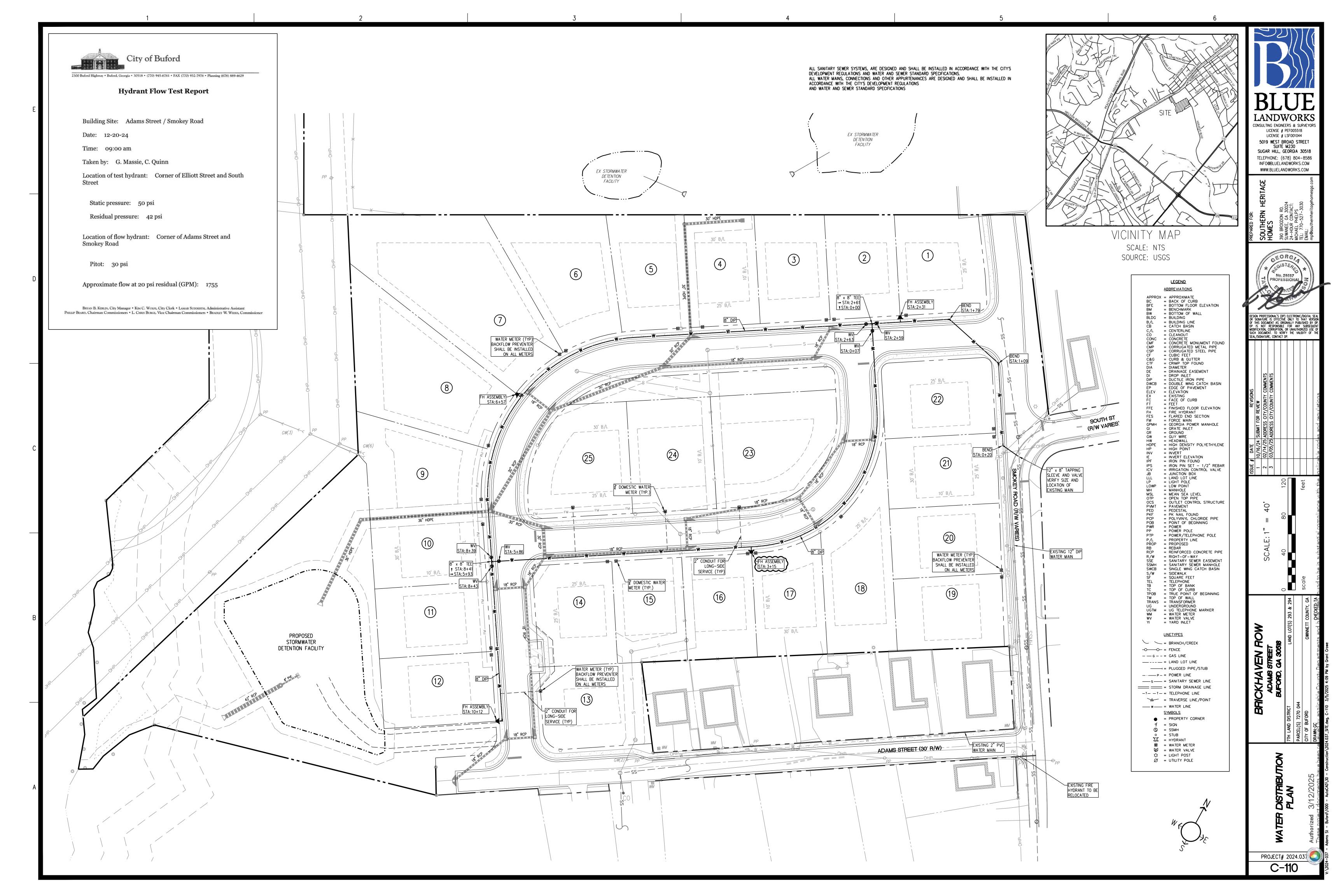
INFO@BLUELANDWORKS.COM

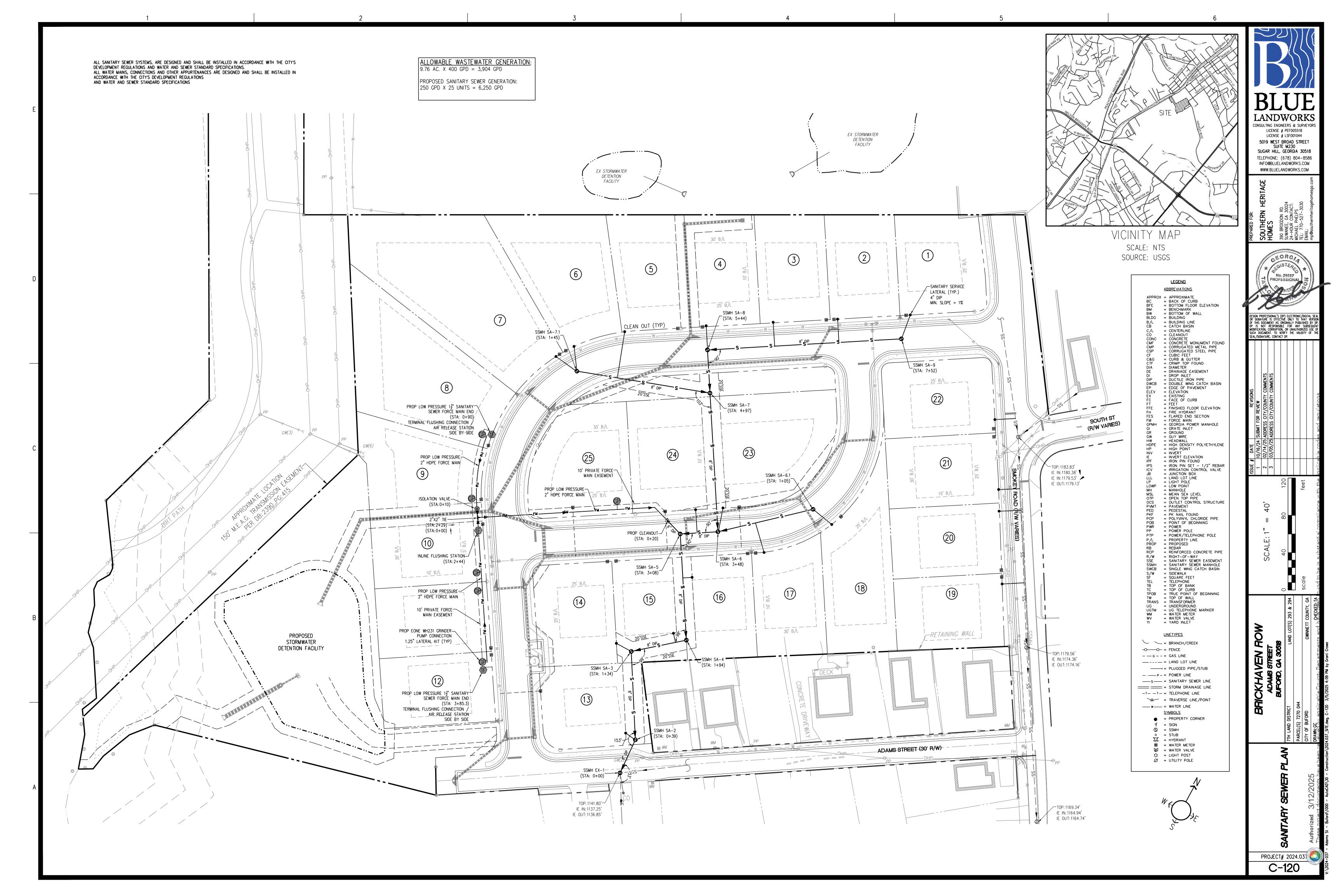
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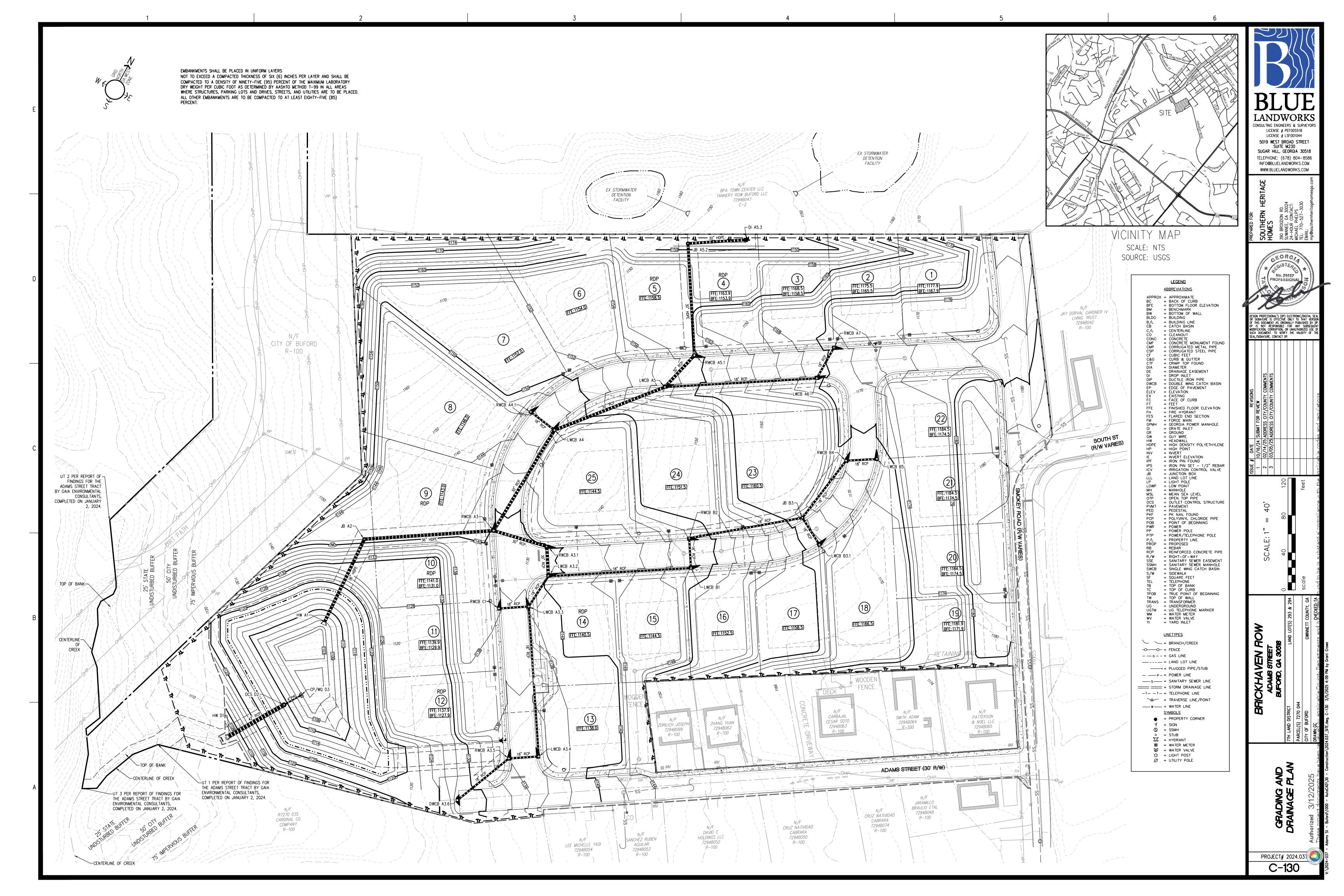
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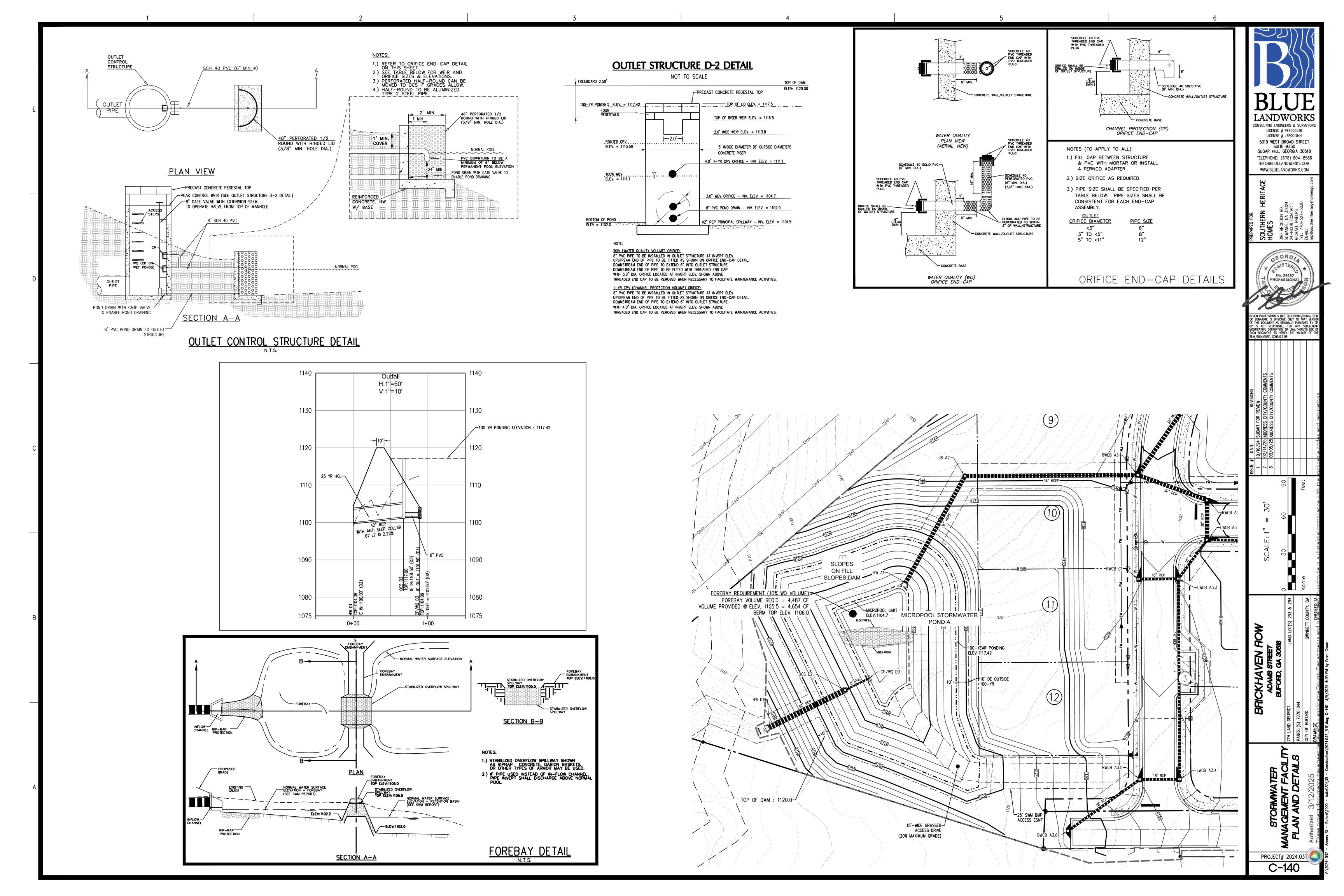


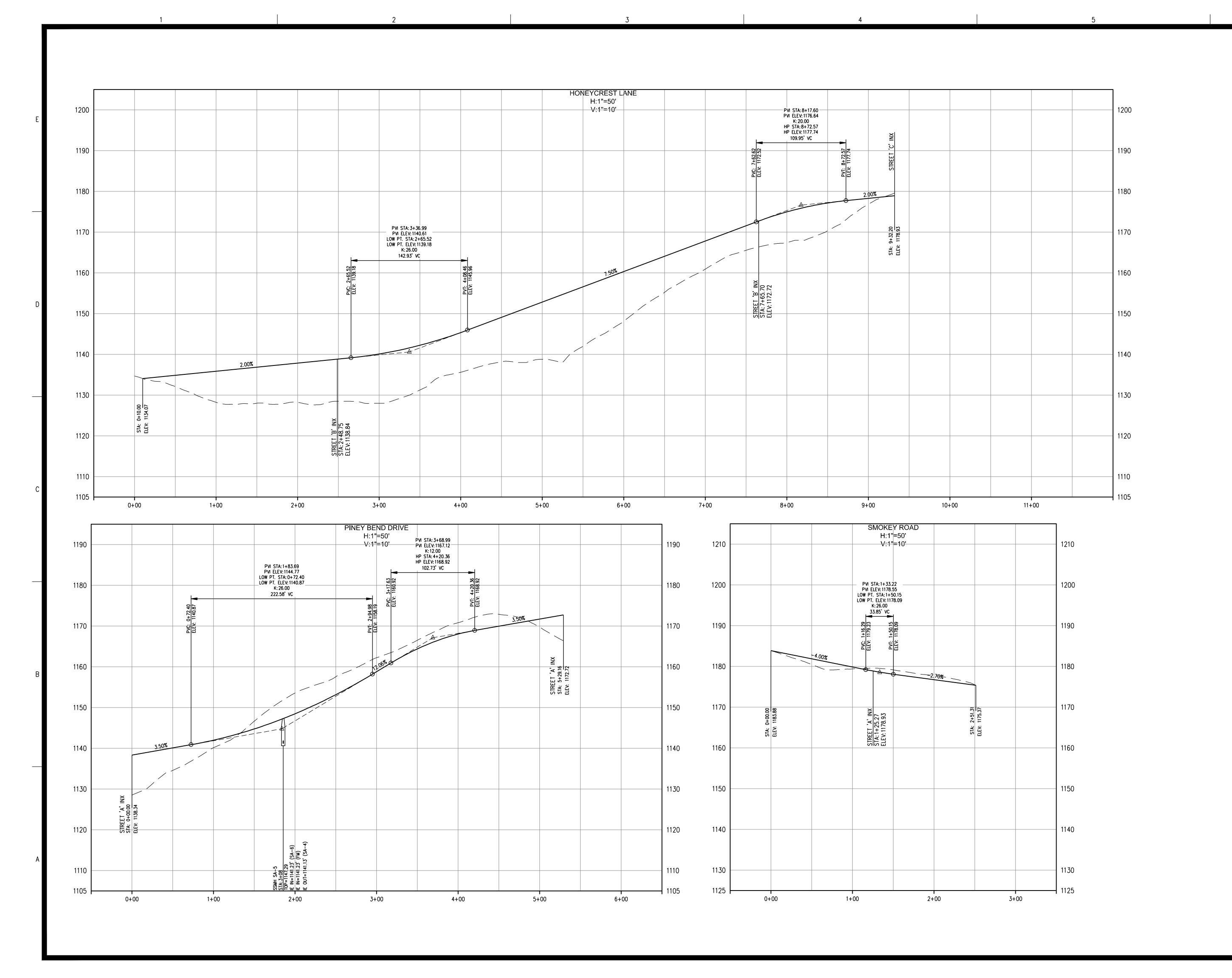


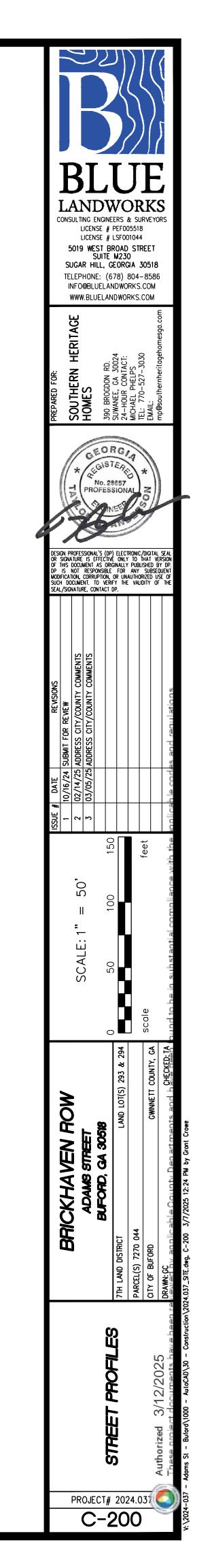


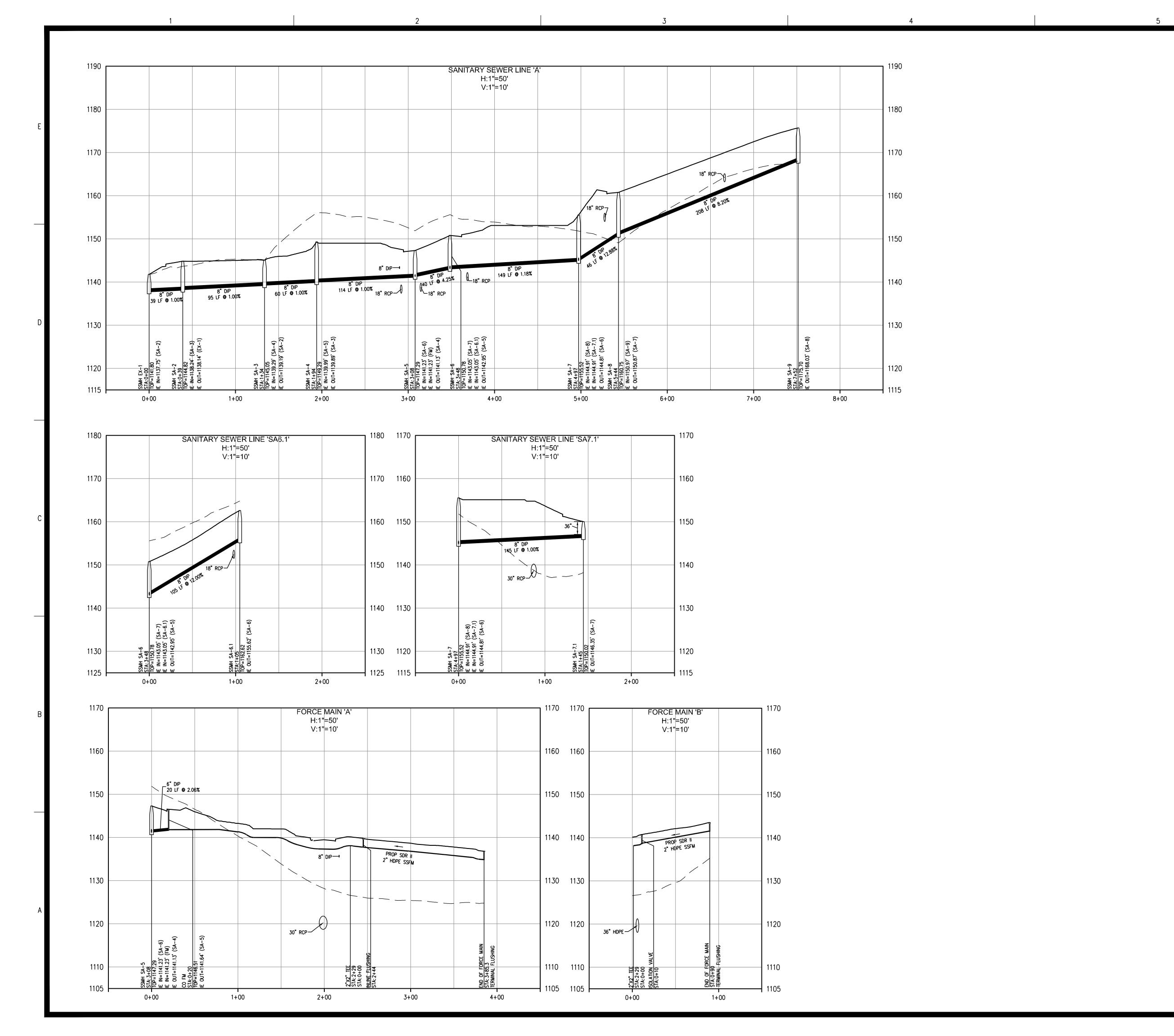










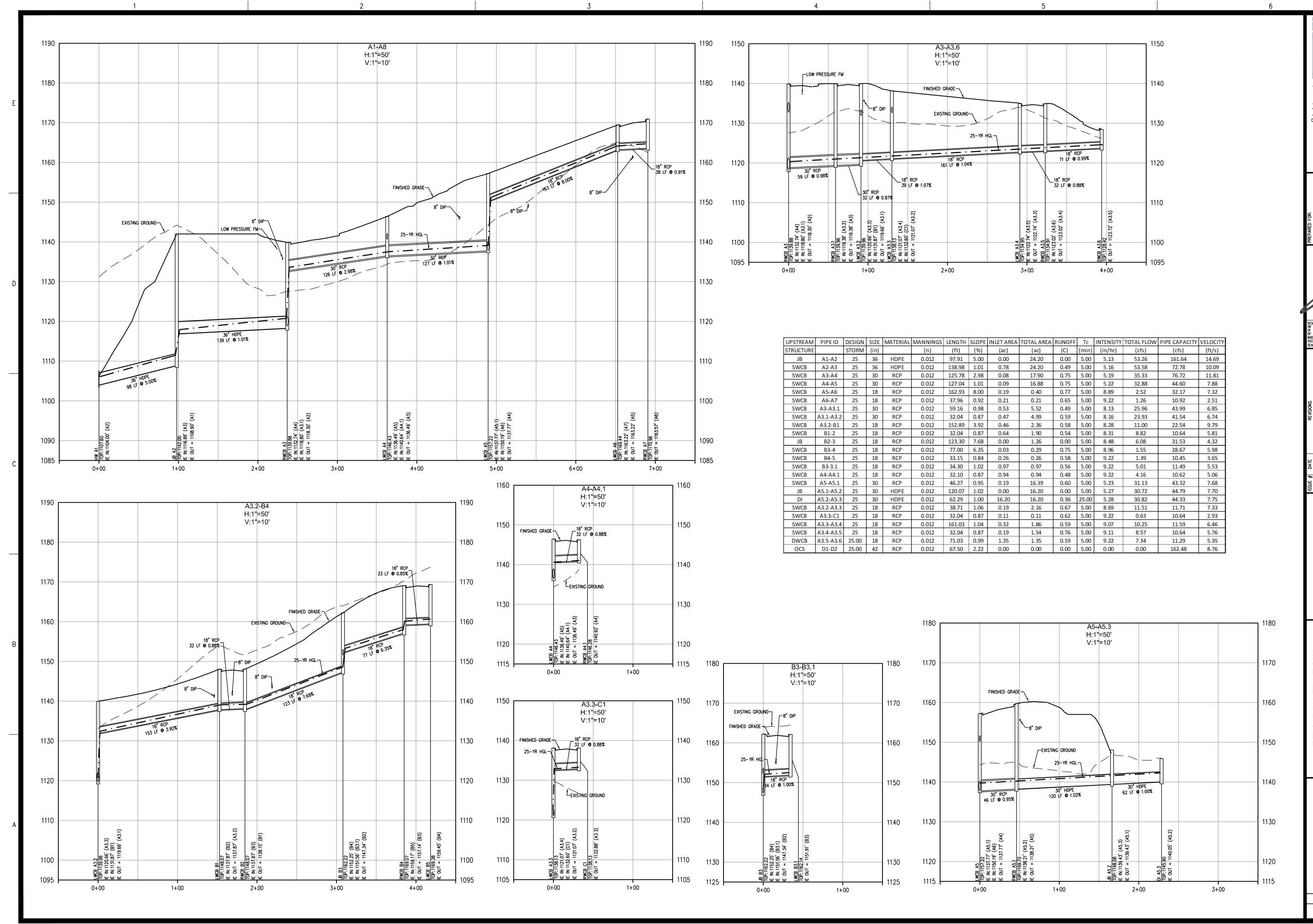


LANDWORKS

CONSULTING ENGINEERS & SURVEYORS
LICENSE # PEF005518
LICENSE # LSF001044

5019 WEST BROAD STREET
SUITE M230
SUGAR HILL, GEORGIA 30518 TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM WWW.BLUELANDWORKS.COM ANITARY SEWER PROFILES

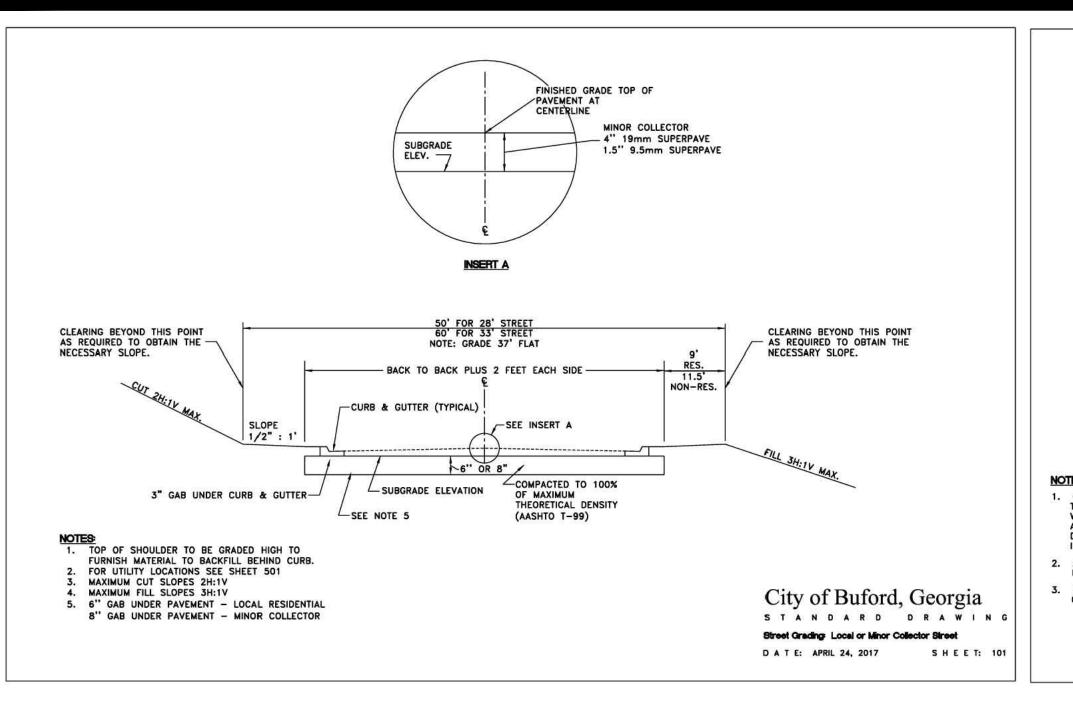
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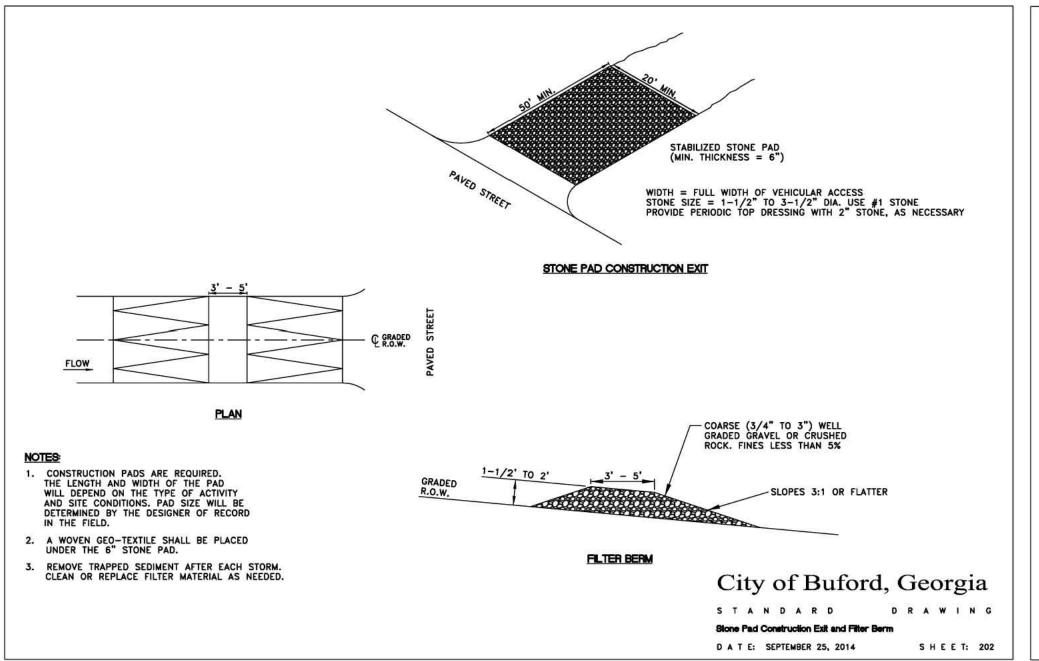


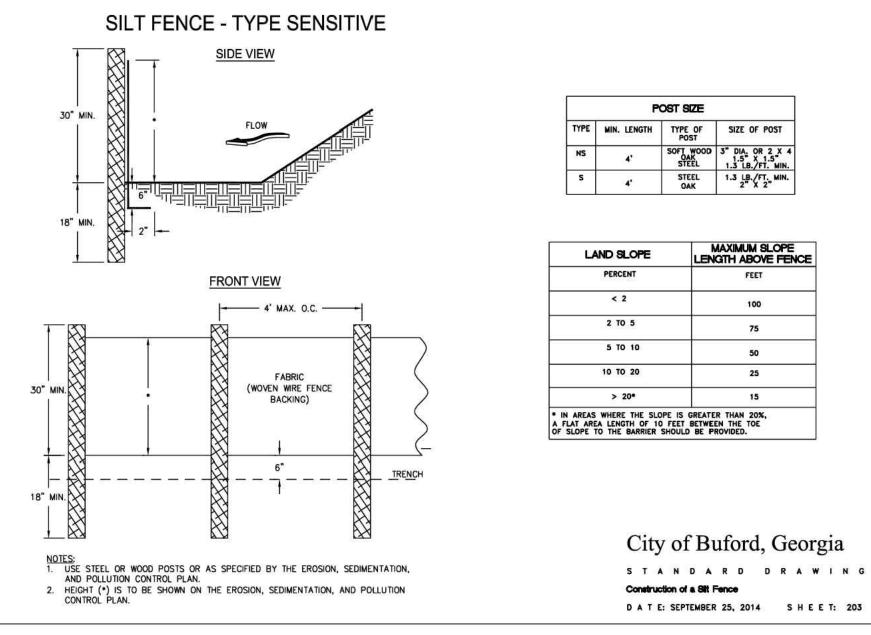


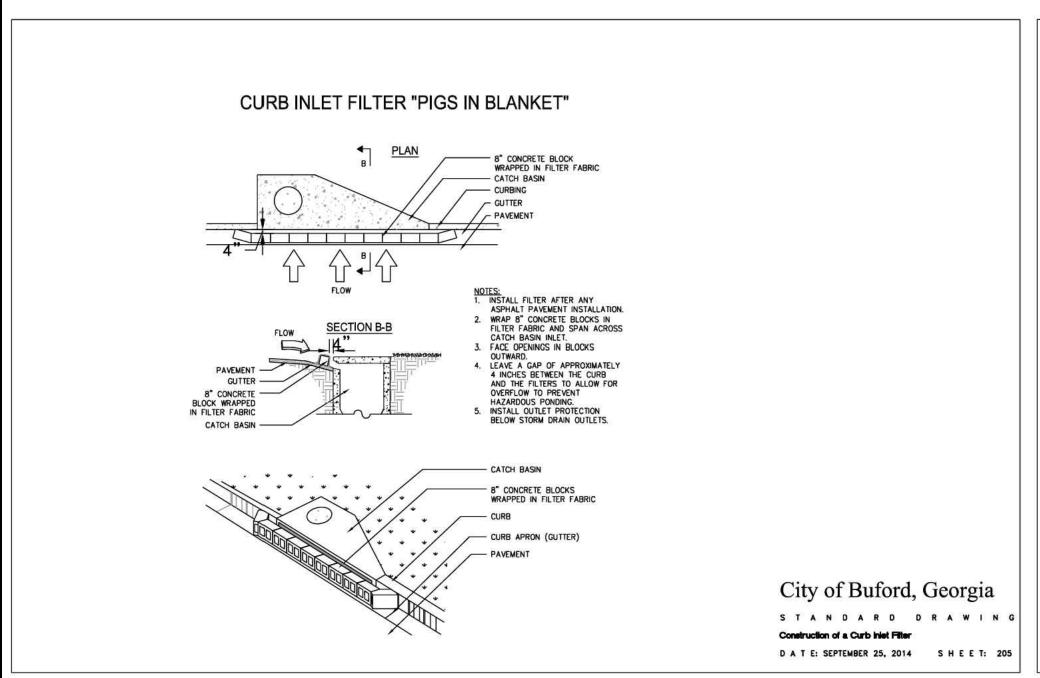
TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM WWW.BLUELANDWORKS.COM

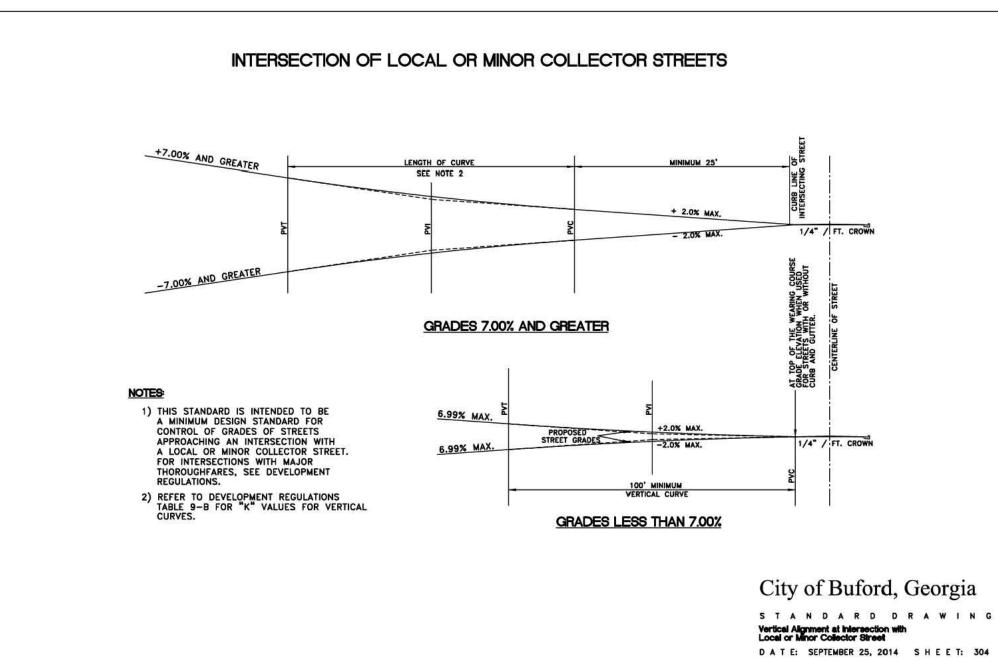
PROJECT# 2024.037 C-202

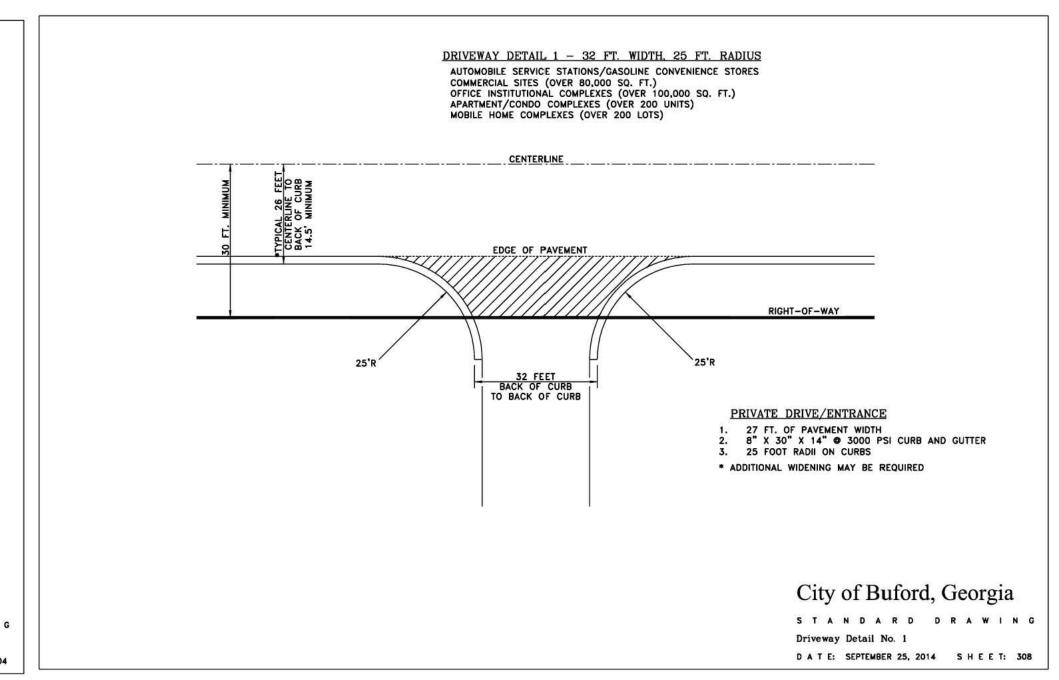


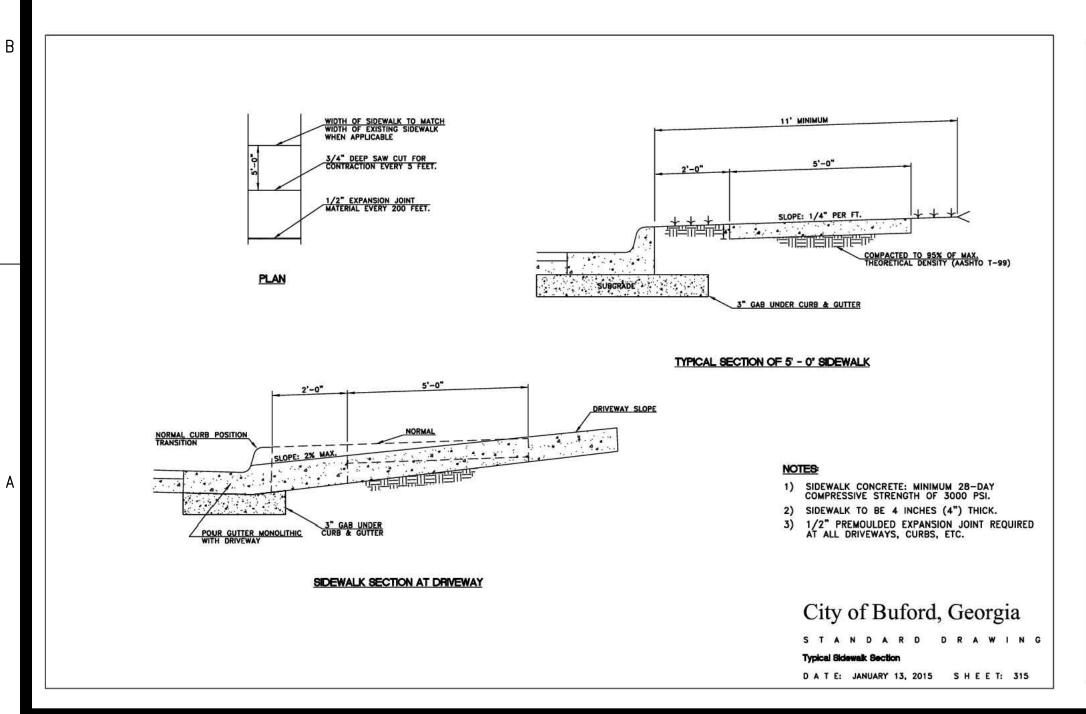


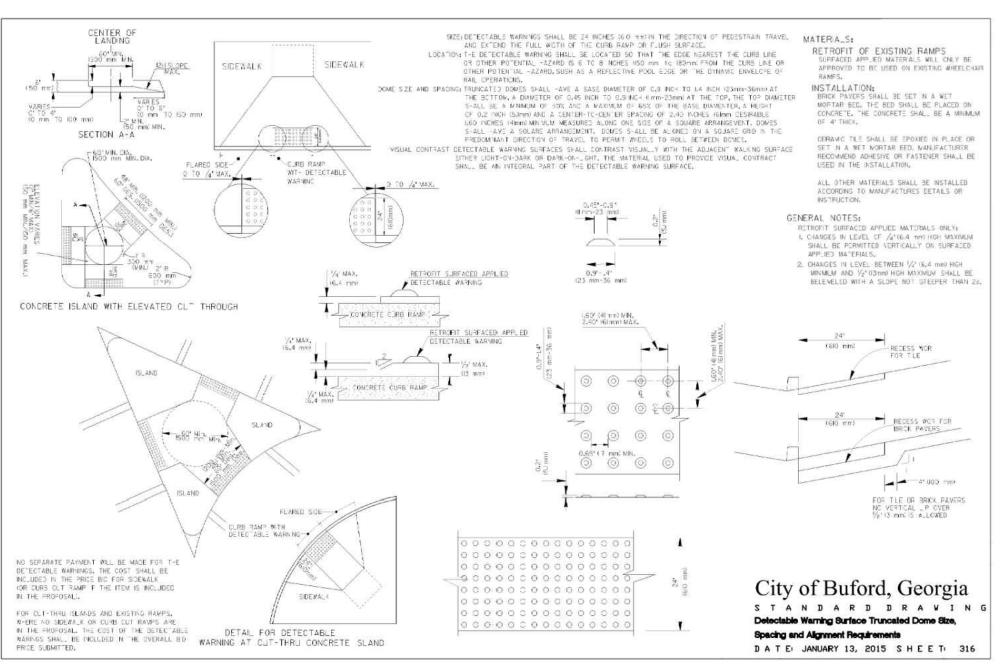


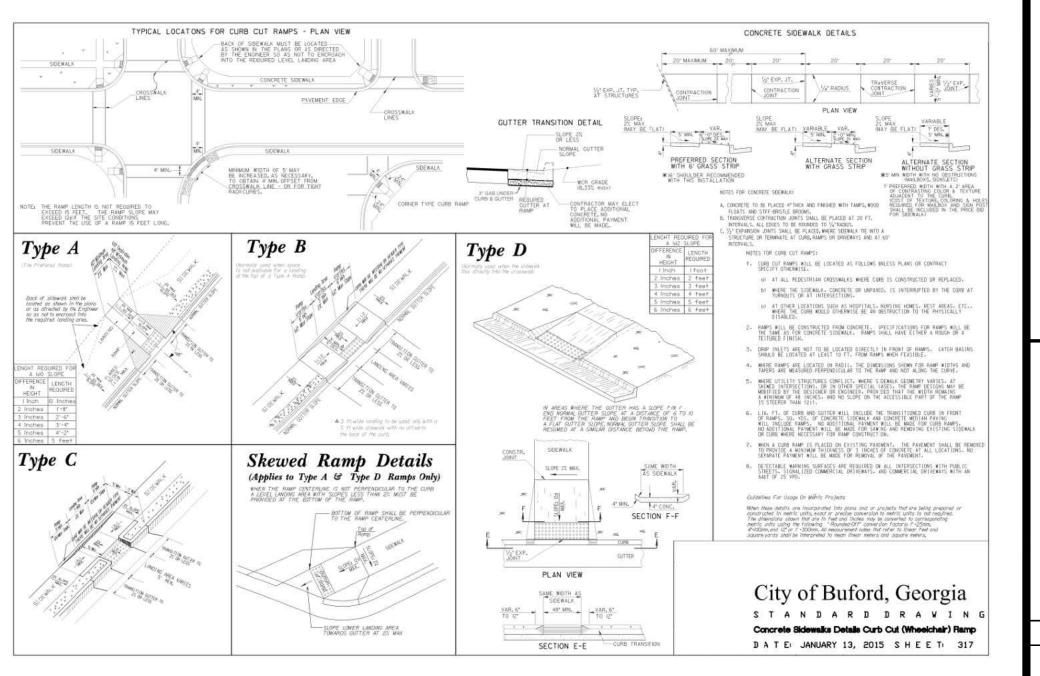


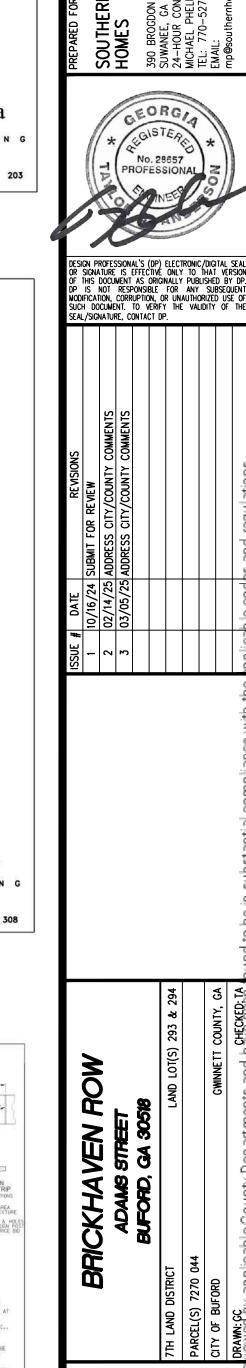












NOL

NSTRUC: DETAILS

PROJECT# 2024.037

C-500

CONSULTING ENGINEERS & SURVEYORS
LICENSE # PEF005518

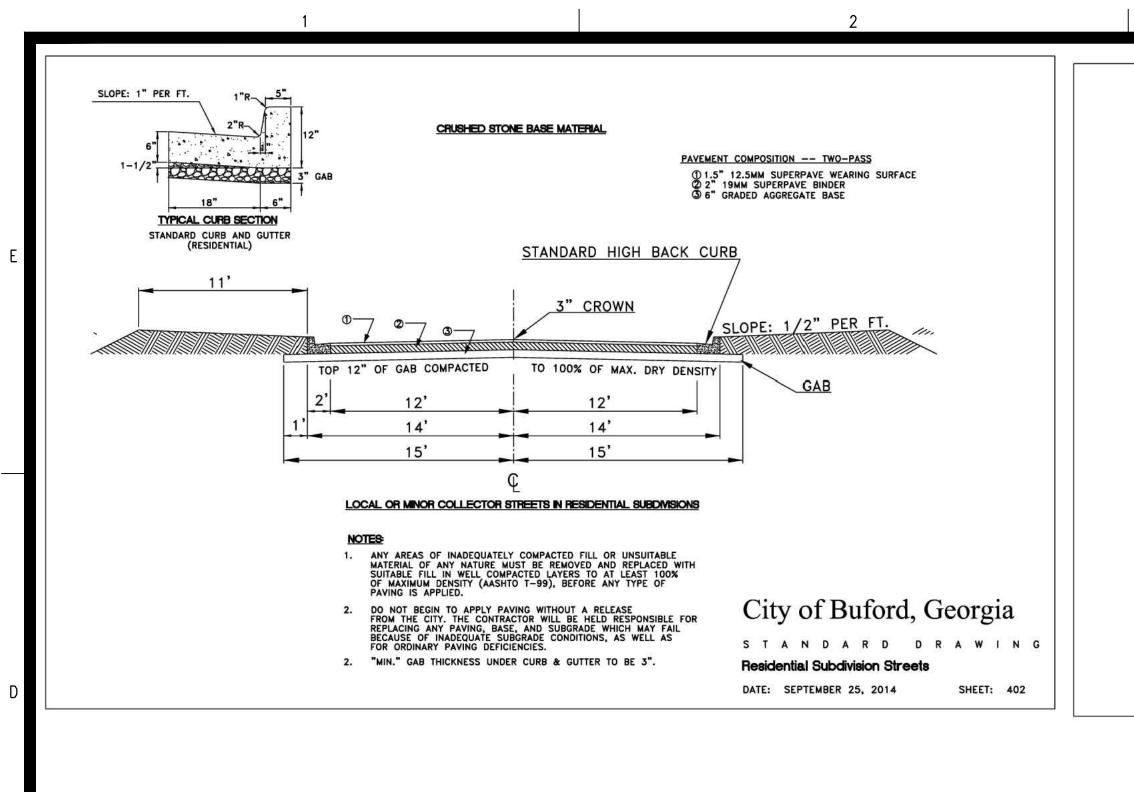
LICENSE # LSF001044

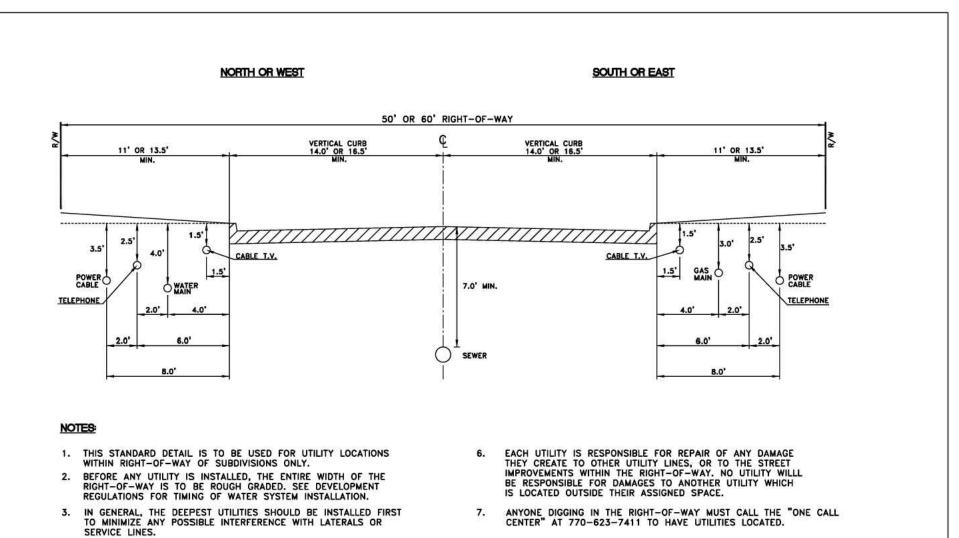
5019 WEST BROAD STREET SUITE M230

SUGAR HILL, GEORGIA 30518

TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM

WWW.BLUELANDWORKS.COM





 IN CUL-DE-SAC OR EYEBROW TURNAROUNDS, THE DIMENSIONS FROM THE CURB WILL VARY. HOWEVER, THE STANDARD UTILITY SPACING IS TO BE MAINTAINED.

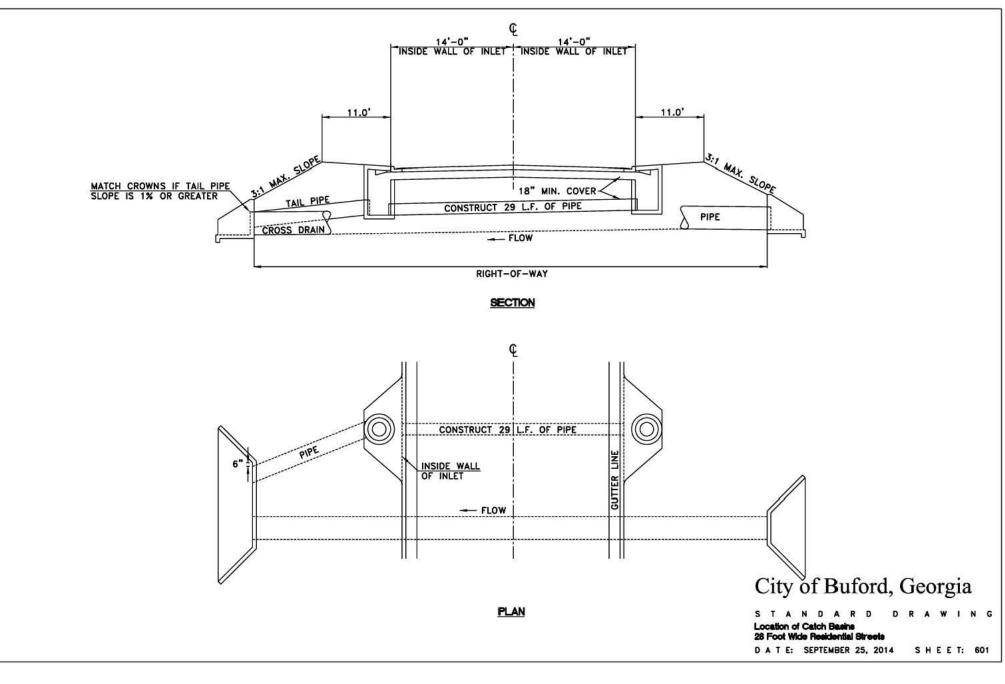
 BACKFILL OF ALL UTILITY TRENCHES CONSTRUCTED IN THE ROADWAY SHOULDER IS TO BE COMPACTED TO 95% OF STANDARD PROCTOR ONCE THE ROAD BASE HAS BEEN PLACED, ALL FURTHER INSTALLATION OF UTILITIES UNDER THE ROADWAY MUST BE BORED OR OTHERWISE COMPLY WITH THE STREET CUT REQUIREMENTS OF SECTION 7.5 OF THE DEVELOPMENT REGULATIONS.

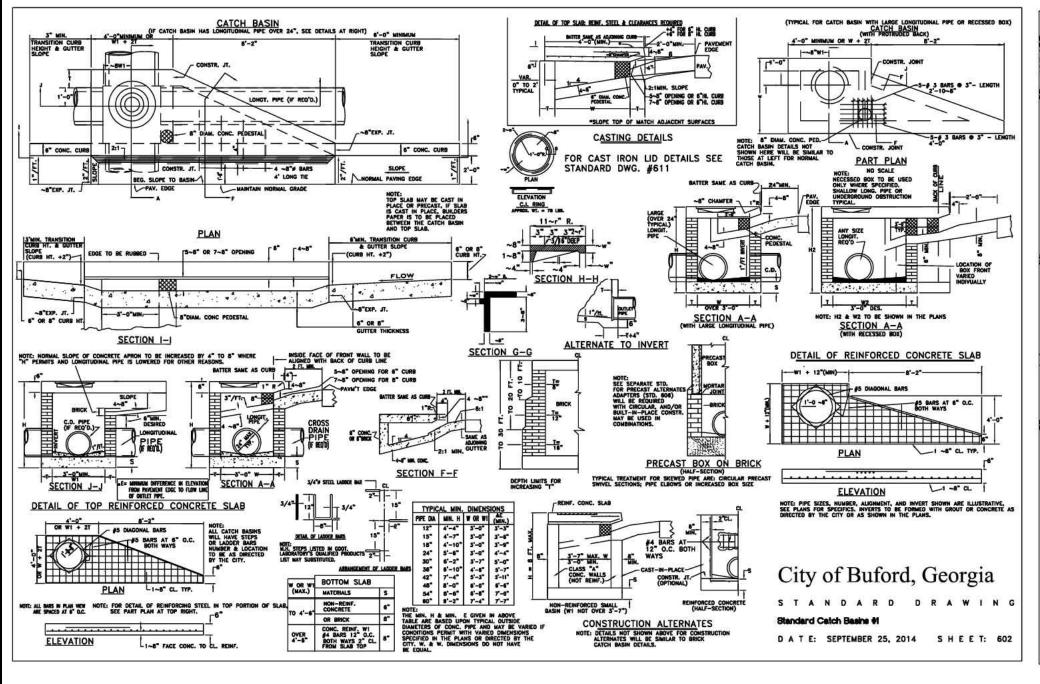
City of Buford, Georgia

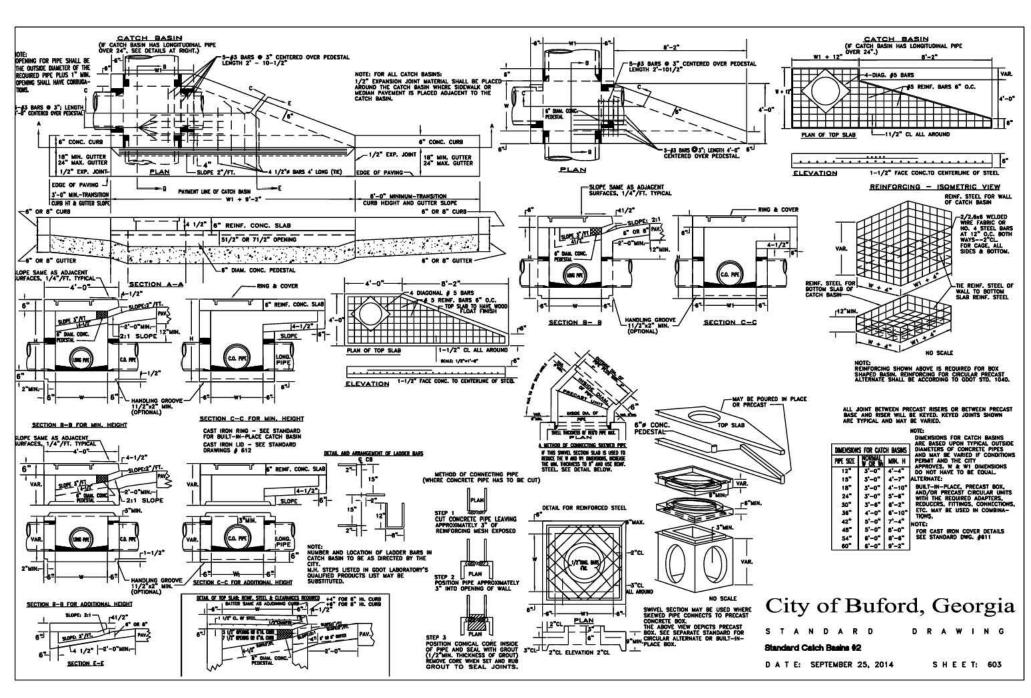
Utility Placement in Rights-of-Way

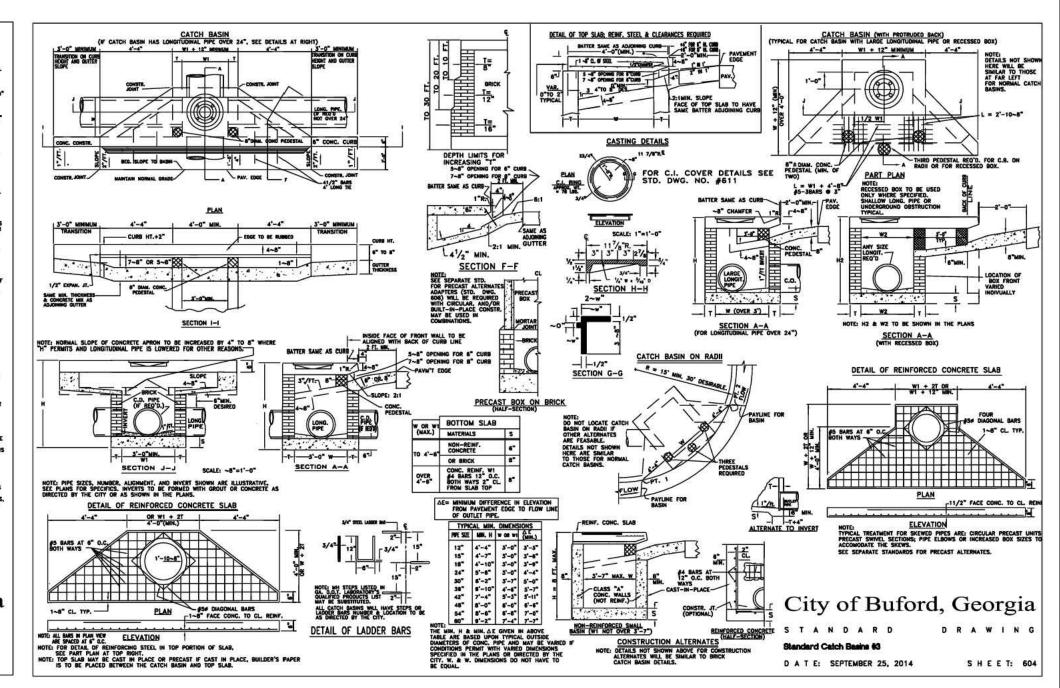
STANDARD DRAWING

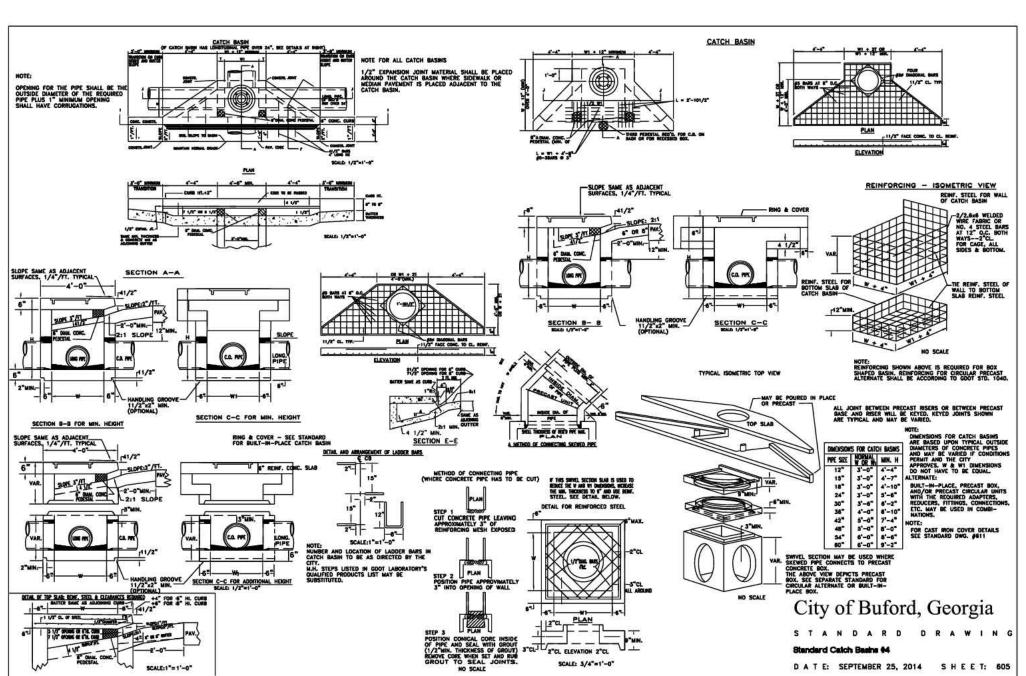
D A T E: SEPTEMBER 25, 2014 S H E E T: 501

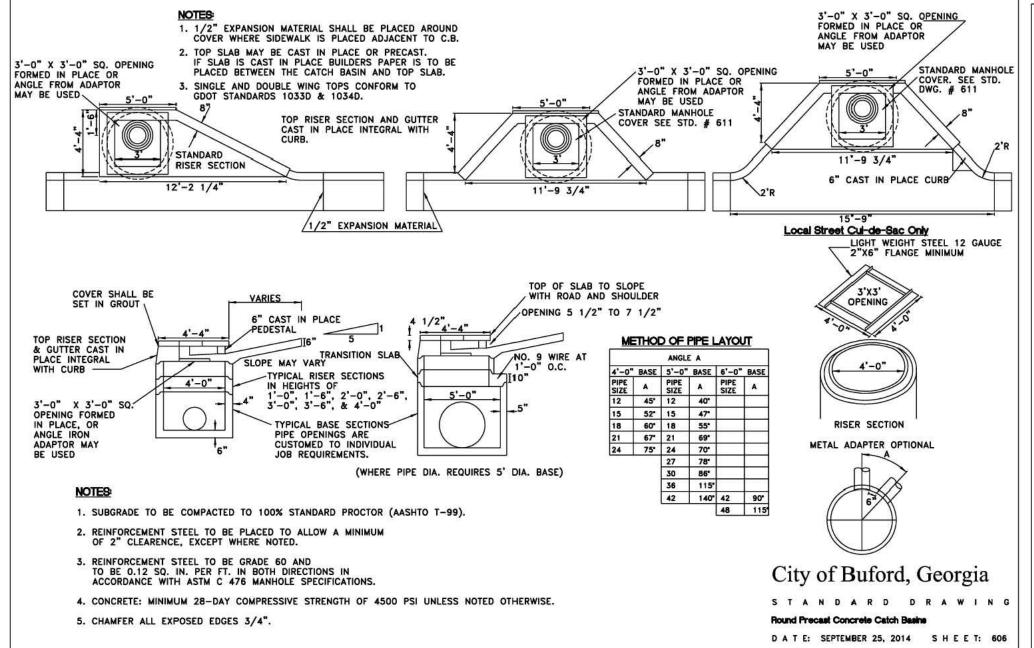


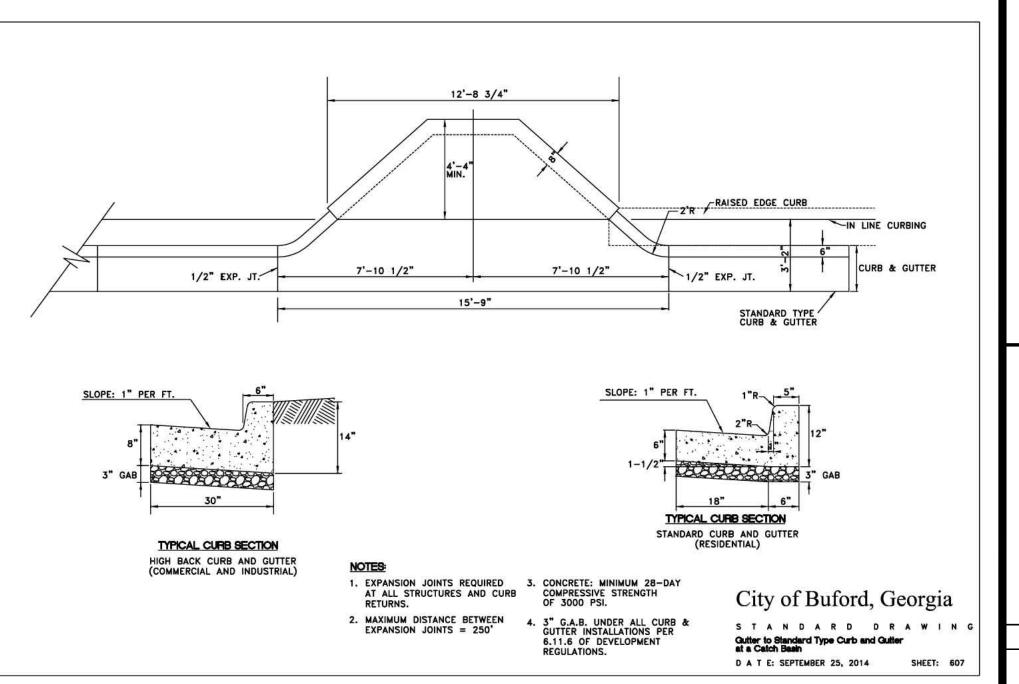


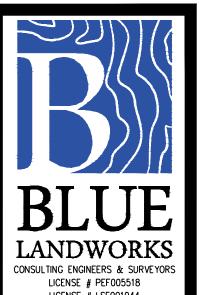








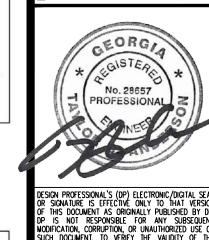




CONSULTING ENGINEERS & SURVEYOR LICENSE # PEF005518
LICENSE # LSF001044

5019 WEST BROAD STREET
SUITE M230
SUGAR HILL, GEORGIA 30518
TELEPHONE: (678) 804-8586
INFO@BLUELANDWORKS.COM
WWW.BLUELANDWORKS.COM

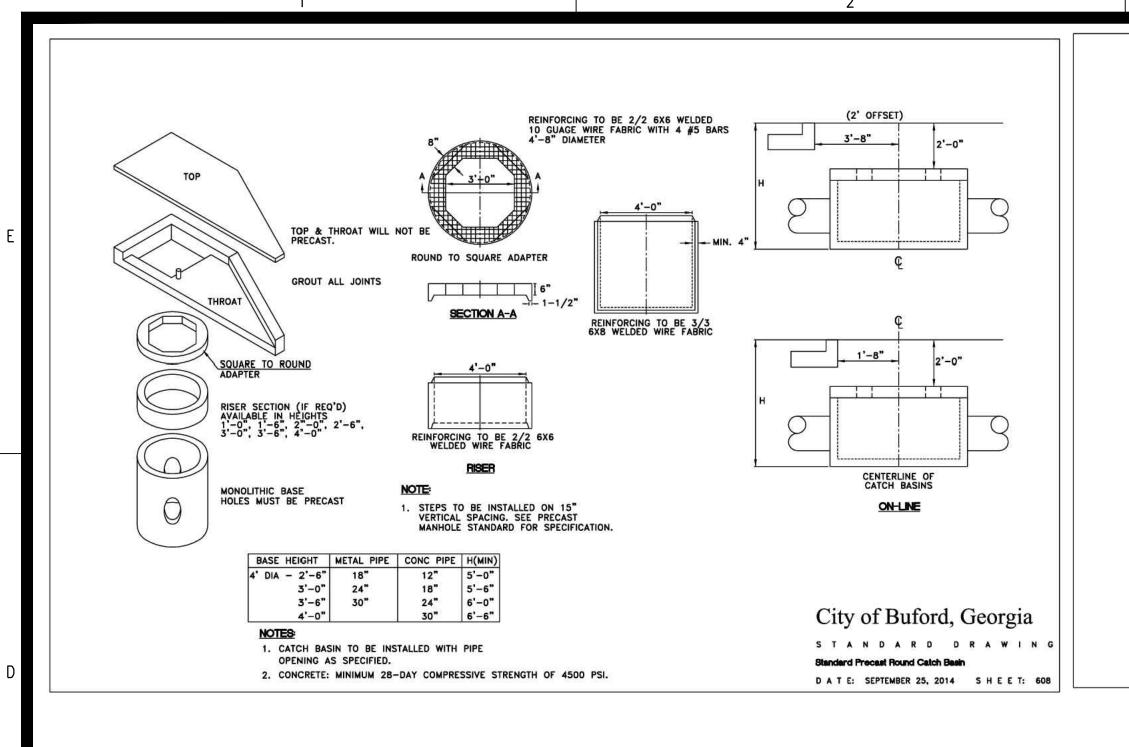
SOUTHERN HERITAG HOMES
390 BROGDON RD.
SUWANEE, GA 30024
24-HOUR CONTACT:
MICHAEL PHELPS
TEL: 770-527-3030
EMAIL:
mp@southernheritagehomesga.c

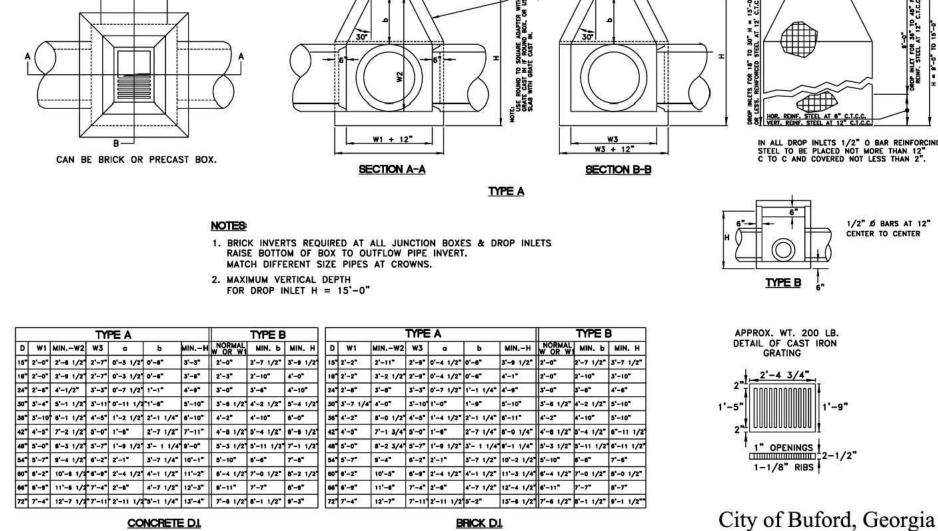


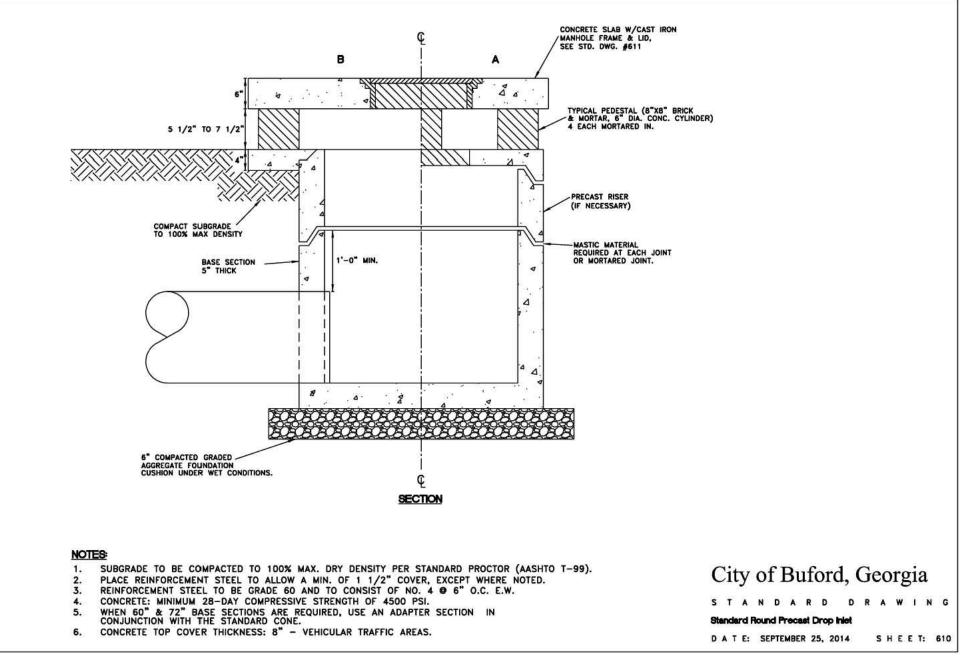
BRICKHAVEN ROW
ADAMS STREET
BUFORD, GA 305/8
TRICT
LAND LOT(S) 293 & 29

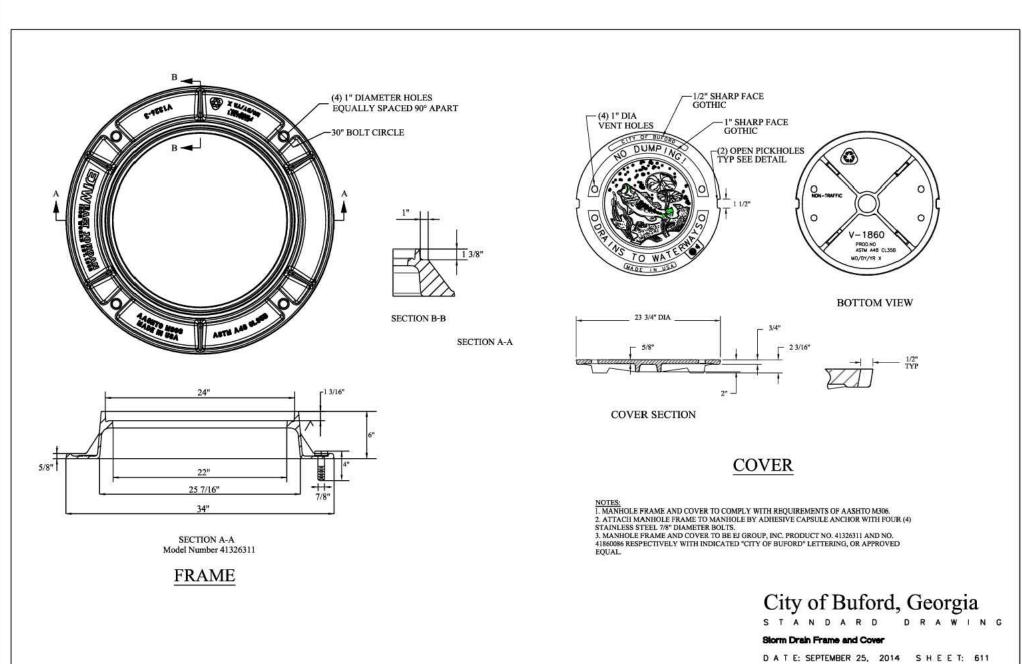
STREET AND
STORMWATER
CONSTRUCTION
AuthorEDETAMOS

PROJECT# 2024.031









MINIMUM PIPE AND PIPE COATING REQUIREMENTS: a. REINFORCED CONCRETE PIPE SHALL COMPLY WITH ASTM C-76 AND/OR AASHTO M-170. JOINTS SHALL BE BELL AND SPIGOT TYPES, WITH A RUBBER GASKET CONFORMING TO ASTM C-443. PIPE SHALL BE FURNISHED IN NOT LESS THAN EIGHT (8) FOOT LENGTHS. CLASS OF PIPE AND WALL THICKNESS SHALL BE IN ACCORDANCE WITH TABLE NO. 1 OF GEORGIA DOT STANDARD NUMBER 1030-D, LATEST REVISION. ALL CULVERTS AND DRAINAGE PIPE WITHIN STREET RIGHTS-OF-WAY SHALL BE REINFORCED CONCRETE. CULVERTS AND DRAINAGE PIPE NOT WITHIN A STREET RIGHT-OF-WAY MAY, AT THE DEVELOPER'S OPTION, BE

b. CORRUGATED, ALUMINUM-COATED STEEL PIPE AND PIPE ARCHES SHALL CONFORM TO THE REQUIREMENTS OF TYPE 2 PIPE PER AASHTO M-196 FOR MATERIAL AND FABRICATION. COATING SHALL COMPLY WITH AASHTO M-274. PIPE FABRICATION SHALL

COMPLY WITH AASHTO M-36. 1. ALL CORRUGATED ALUMINUM COATED STEEL PIPE OR ALUMINUM ALLOY PIPE NOT CARRYING A LIVE STREAM MAY BE PLAIN. ALL CORRUGATED ALUMINUM COATED STEEL PIPE OR ALUMINUM ALLOY PIPES, WHICH WILL CARRY A LIVE STREAM WITHIN A DRAINAGE EASEMENT OR DETENTION FACILITY SHALL HAVE PAVED INVERTS PER AASHTO M-190, TYPE C, EXCEPT THAT THE PIPE NEED NOT BE FULLY COATED. 2. SEE THE STANDARD DRAWINGS FOR MINIMUM ACCEPTABLE COMBINATIONS OF GAUGES, DIAMETERS, AND CORRUGATION

CONFIGURATIONS FOR CORRUGATED ALUMINUM ALLOY PIPE AND FOR CORRUGATED ALUMINUM COATED STEEL PIPE AND 3. EACH END OF PIPE SECTION, TO BE JOINTED BY A COUPLING BAND, SHALL HAVE A MINIMUM OF TWO (2) ANNULAR CORRUGATIONS. COUPLING BANDS SHALL BE SO CONSTRUCTED AS TO LAP ON AN EQUAL PORTION OF EACH OF THE PIPE SECTIONS TO BE CONNECTED. THE CONNECTING BANDS SHALL HAVE A MINIMUM OF TWO (2) ANNULAR CORRUGATIONS AND SHALL FULLY ENGAGE, OVER THE ENTIRE PIPE PERIPHERY, ONE CORRUGATION ON EACH PIPE END.

RESPECTIVELY. TYPE, AND SHALL MEET THE REQUIREMENTS FOR GASKETS AS SPECIFIED IN SECTION 9.3 OF AASHTO M-36. c. CORRUGATED PLASTIC PIPE, NOMINAL FIFTEEN (15) INCH TO FORTY EIGHT (48) INCH DIAMETERS, SHALL BE HIGH DENSITY CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE AND FITTINGS CONFORMING TO AASHTO M-294, TYPE S. JOIN PIPE

FITTINGS COMPARABLE TO PIPE WITH WHICH CONNECTED. AND GALVANIZED BOLTS AND NUTS OF THE SIZE, SHAPE AND THICKNESS AS SHOWN ON THE APPROVED PLANS. THESE PIPE INSTALLATION:

INSTALL CORRUGATED PLASTIC PIPE IN ACCORDANCE WITH PIPE SYSTEM MANUFACTURE'S PUBLISHED LITERATURE, ASTM D-2321, AASHTO SECTION 30, OR CITY SPECIFICATIONS, WHICHEVER IS MORE

STANDARD DRAWING

D A T E: SEPTEMBER 25, 2014 S H E E T: 609

Standard Drop Inlet

REINFORCED CONCRETE PIPE, CORRUGATED STEEL PIPE AND ASPHALT COATED PIPE SHALL BE BEDDED AND BACKFILLED IN THE SAME MANNER.

a. BEDDING: ALL PIPE STRUCTURES SHALL BE PLACED ON STABLE EARTH OR FINE GRANULAR FOUNDATION, THE CHARACTERISTICS OF WHICH WOULD BE EXPECTED TO PROVIDE LONG-TERM STABILITY. IN ALL LIVE STREAM PIPE INSTALLATION, IN AREAS OF LOW BEARING SOILS OR NON UNIFORM FOUNDATIONS, IN AREAS WHERE ROCK IS ENCOUNTERED AT THE FOUNDATION LEVEL, OR IN OTHER LOCATIONS WHERE CONDITIONS WARRANT, A MINIMUM OF SIX (6) INCHES OF CRUSHED STONE BEDDING IS REQUIRED, (MAXIMUM SIZE OF STONE SHALL BE 3/4"). GEOTEXTILES OR GEOGRIDS MAY

ALSO BE REQUIRED BY THE CITY IN PROBLEM AREAS. BACKFILLING: BACKFILL ON ALL PIPE INSTALLATIONS SHALL BE CONSTRUCTED USING FOUNDATION BACKFILL MATERIAL TYPE I OR TYPE II, AS SPECIFIED IN SECTION 812.01 AND 812.02 RESPECTIVELY, IN GEORGIA DOT STAND SPECIFICATIONS. THESE MATERIALS SHALL BE PLACED IN LAYERS OF NOT MORE THAN SIX (6) INCHES LOOSE. COMPACTION OF THESE MATERIALS SHALL BE ACCOMPLISHED BY HAND TAMPING OR MACHINE TAMPING. REQUIRED COMPACTION LEVELS ARE AS FOLLOWS:

1. BACKFILL WITHIN ALL STREET RIGHTS-OF-WAY SHALL BE COMPACTED TO NINETY-FIVE (95) PERCENT MAXIMUM DENSITY, TESTED USING THE AASHTO METHOD T-99. 2. BACKFILL IN ALL OTHER AREAS SHALL BE COMPACTED TO NINETY-FIVE (95) PERCENT

MAXIMUM DENSITY, TESTED USING THE AASHTO METHOD T-99. CONSTRUCTION LOADS AND MINIMUM COVERS: IF DRAINAGE PIPE IS INSTALLED PRIOR TO THE COMPLETION OF GRADING, A MINIMUM OF FOUR (4) FEET OF FILL SHOULD BE PROVIDED WHERE NEEDED TO ADEQUATELY PROTECT THE DRAINAGE STRUCTURE DURING THE LAND DEVELOPMENT PHASE, UNLESS THE STRUCTURE ITSELF IS DESIGNED TO WITHSTAND THE ANTICIPATED LIVE LOAD DURING

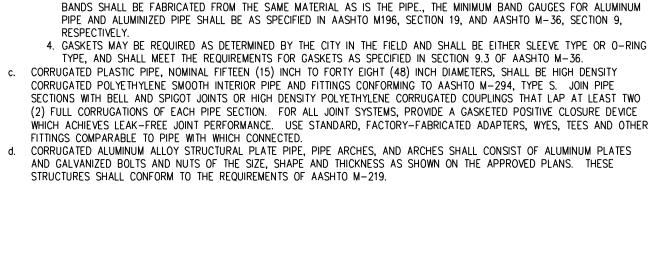
CONSULTING ENGINEERS & SURVEYORS

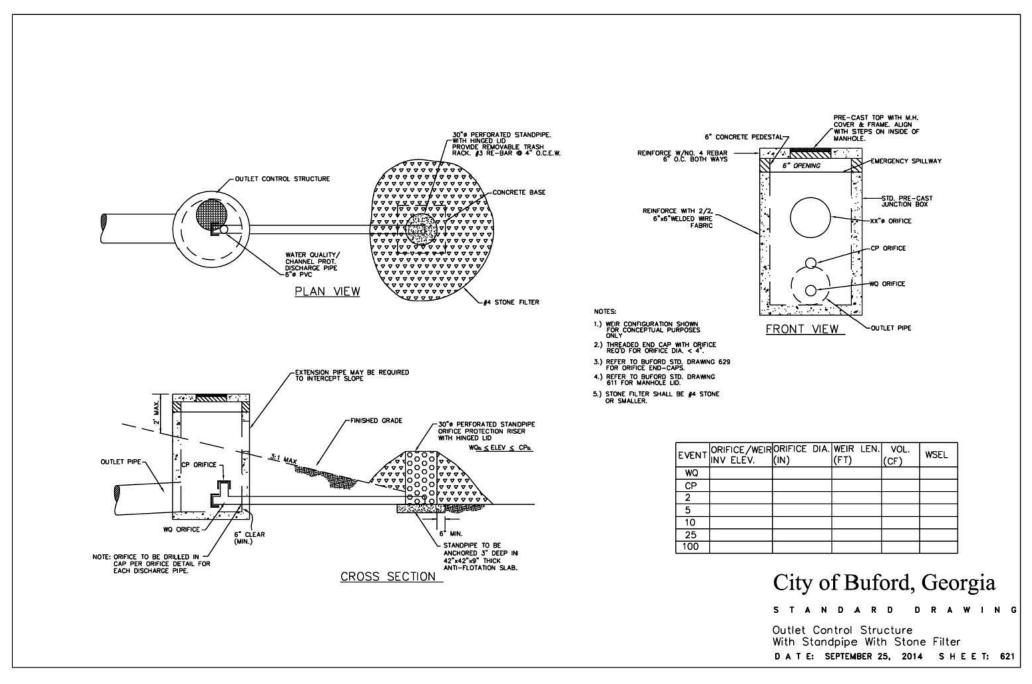
LICENSE # PEF005518 LICENSE # LSF001044 5019 WEST BROAD STREET SUITE M230 SUGAR HILL, GEORGIA 30518 TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM WWW.BLUELANDWORKS.COM

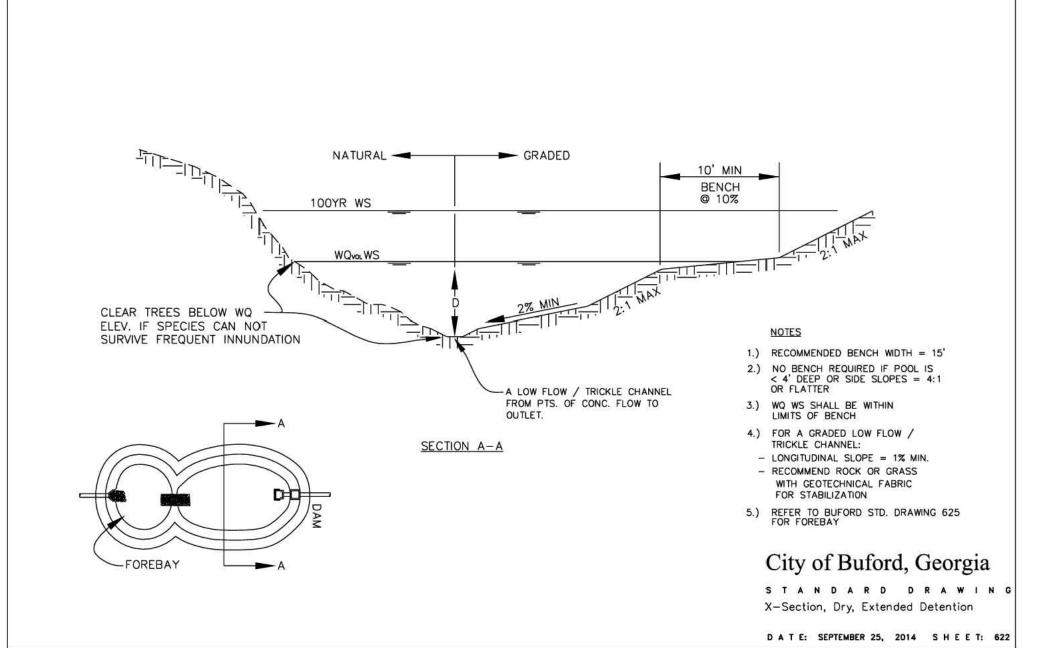
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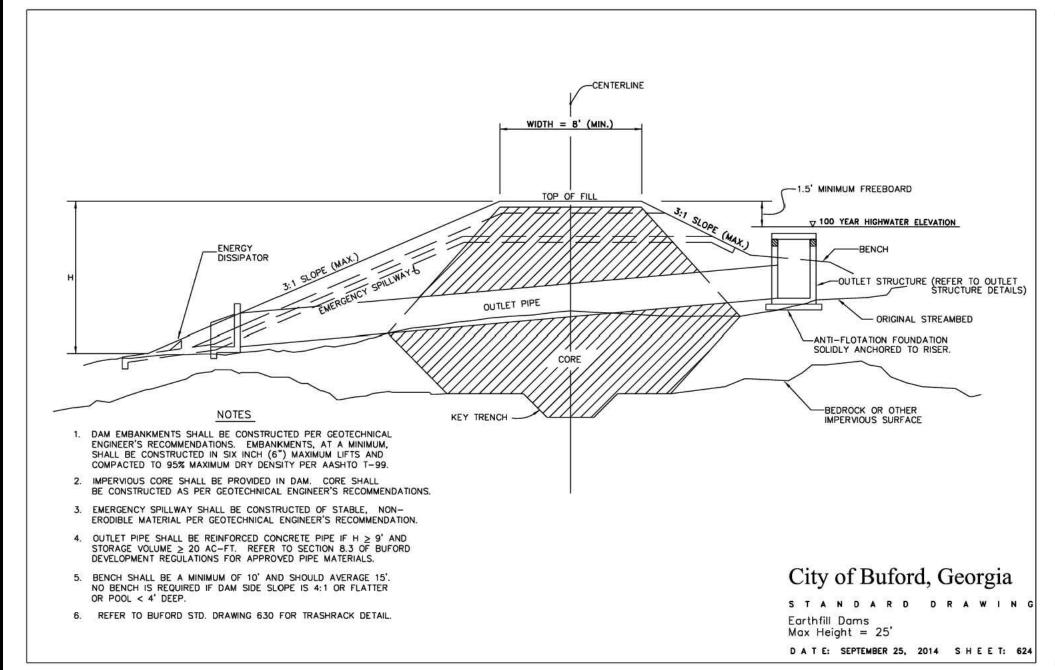
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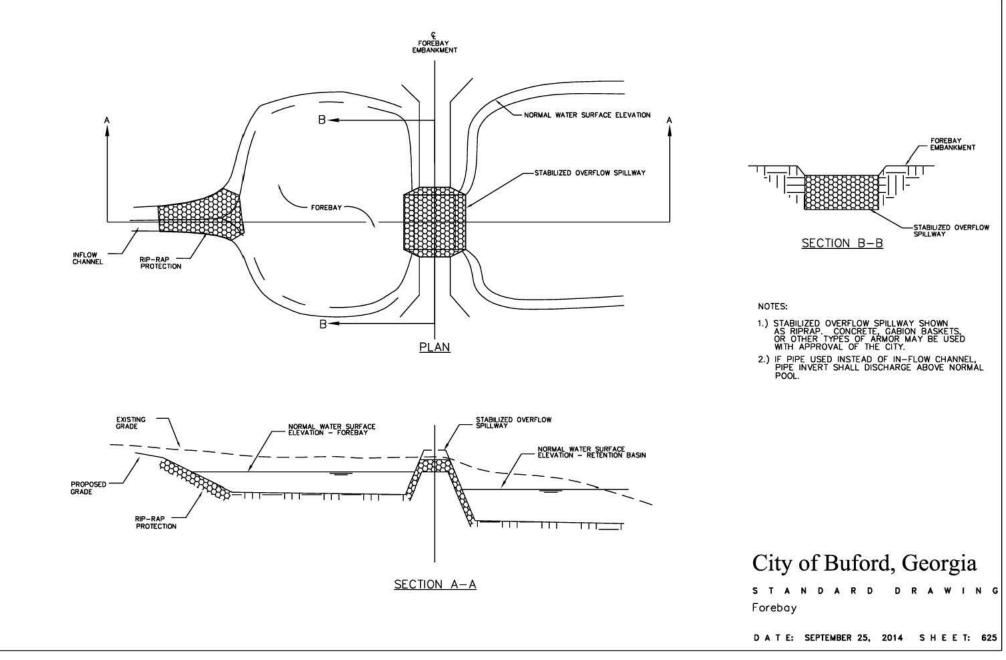
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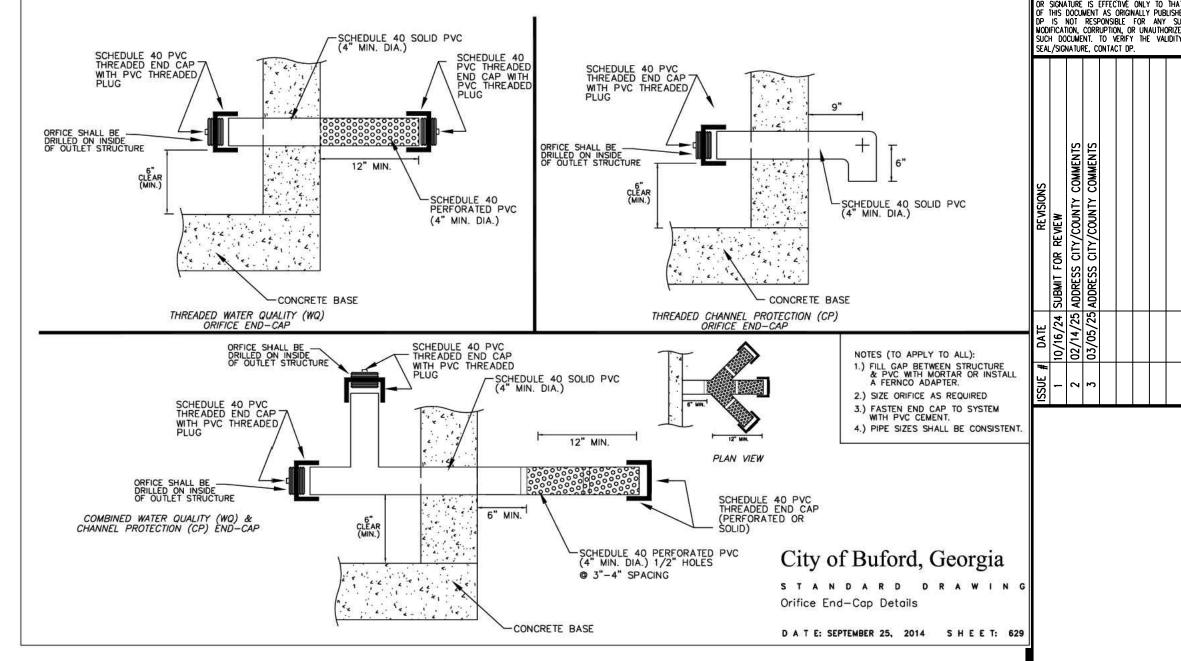


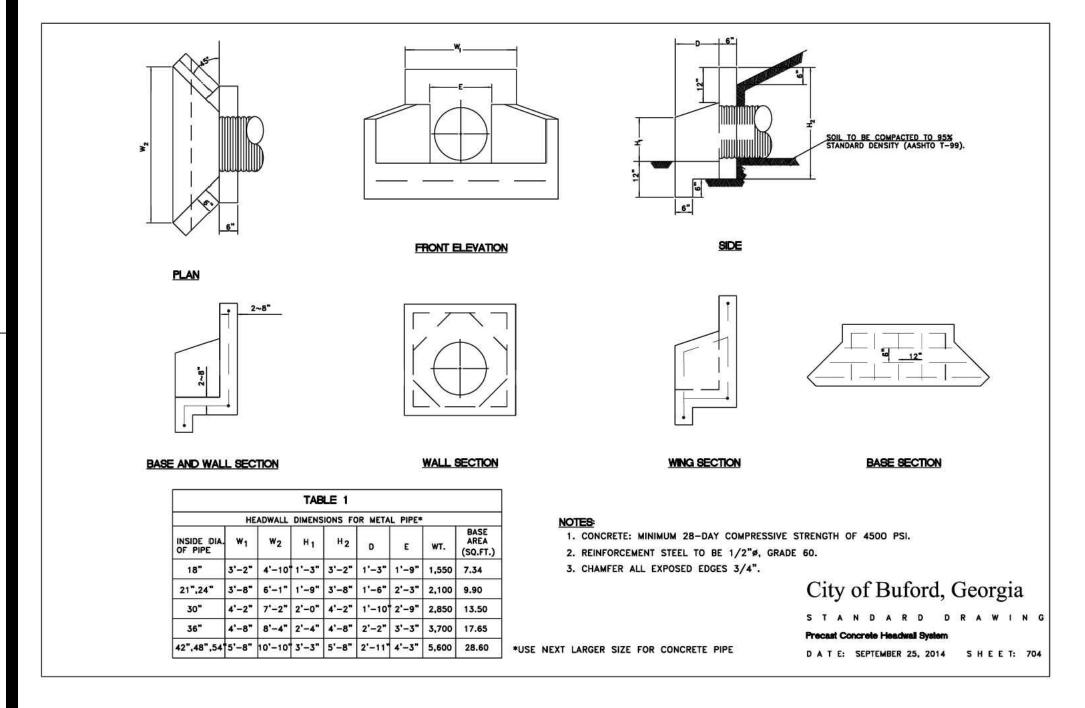














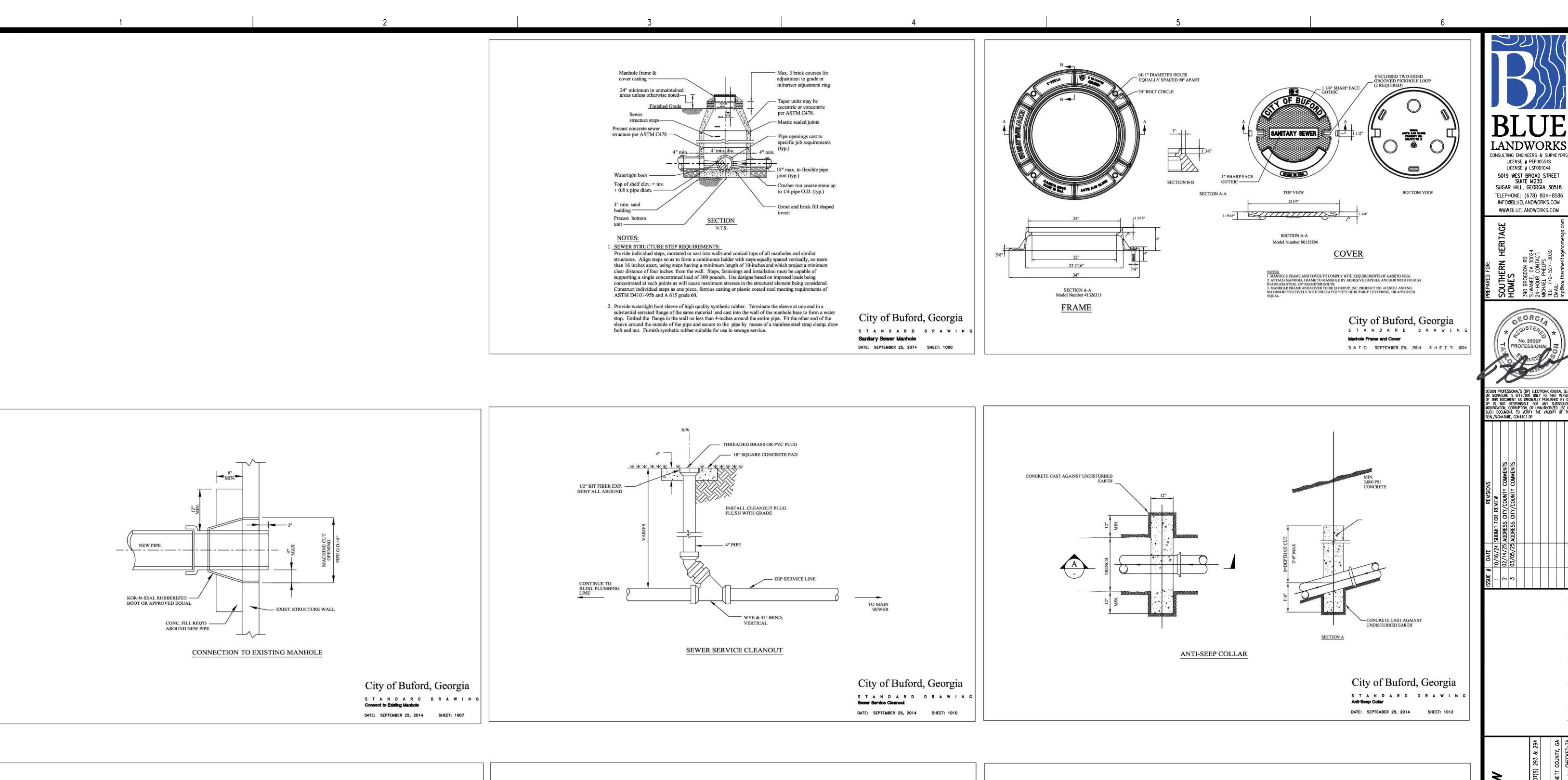
C-503

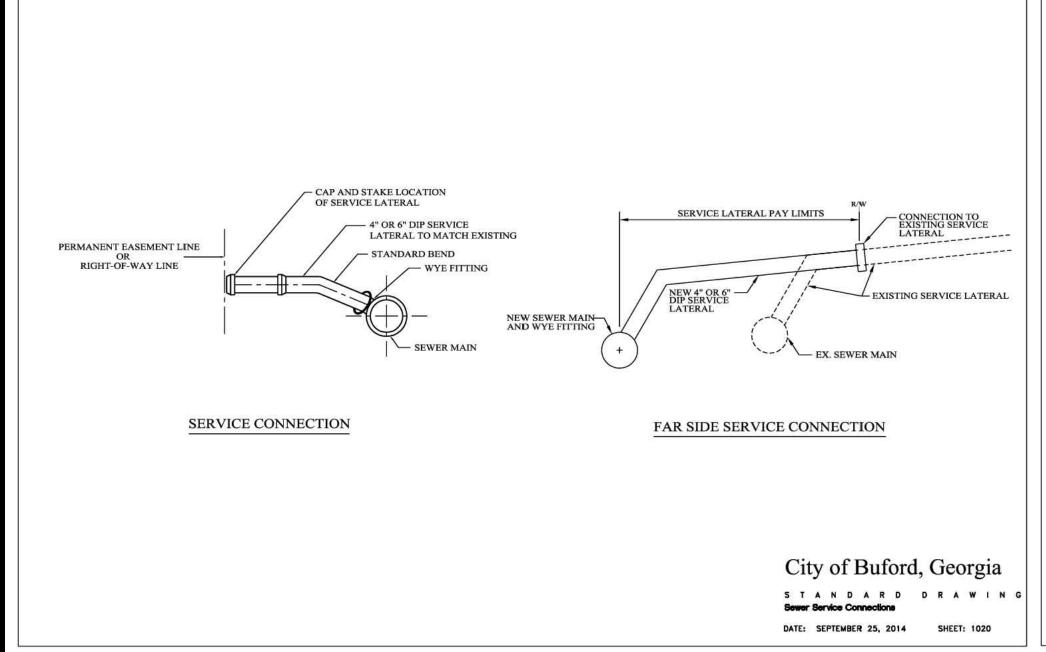
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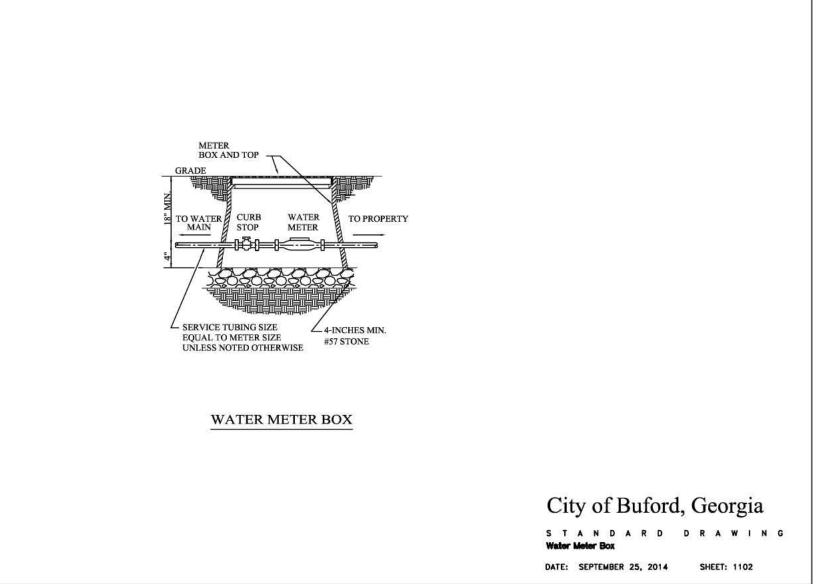
LICENSE # PEF005518

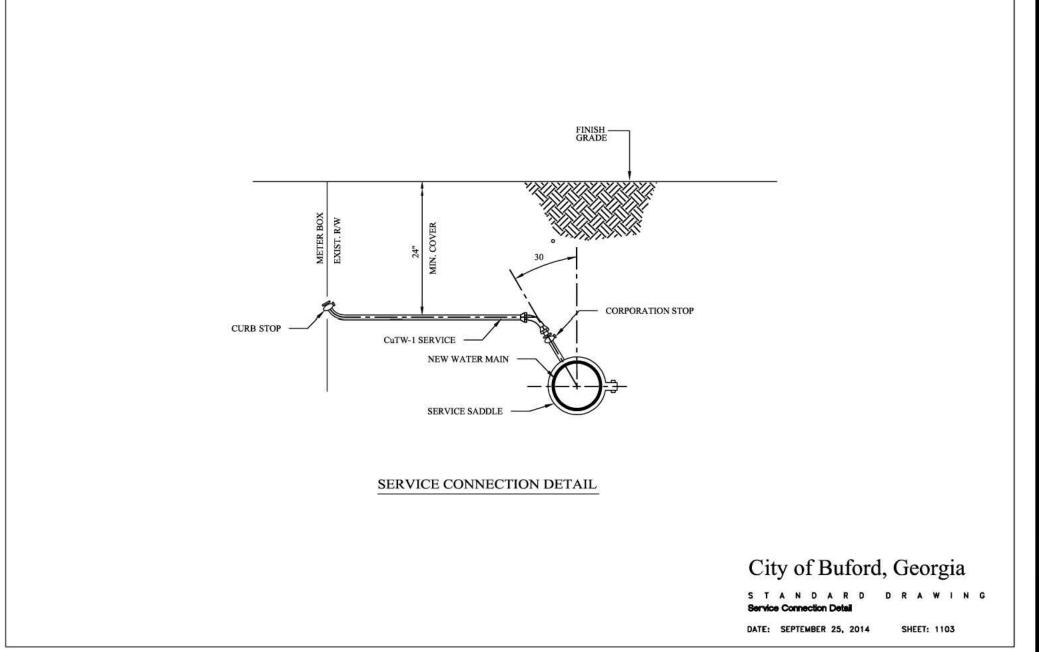
LICENSE # LSF001044
5019 WEST BROAD STREET
SUITE M230
SUGAR HILL, GEORGIA 30518

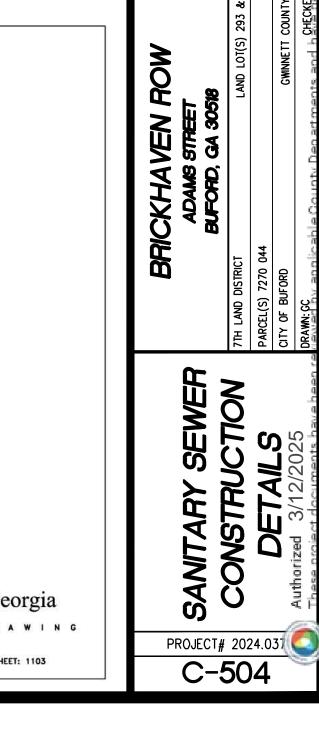
TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM WWW.BLUELANDWORKS.COM

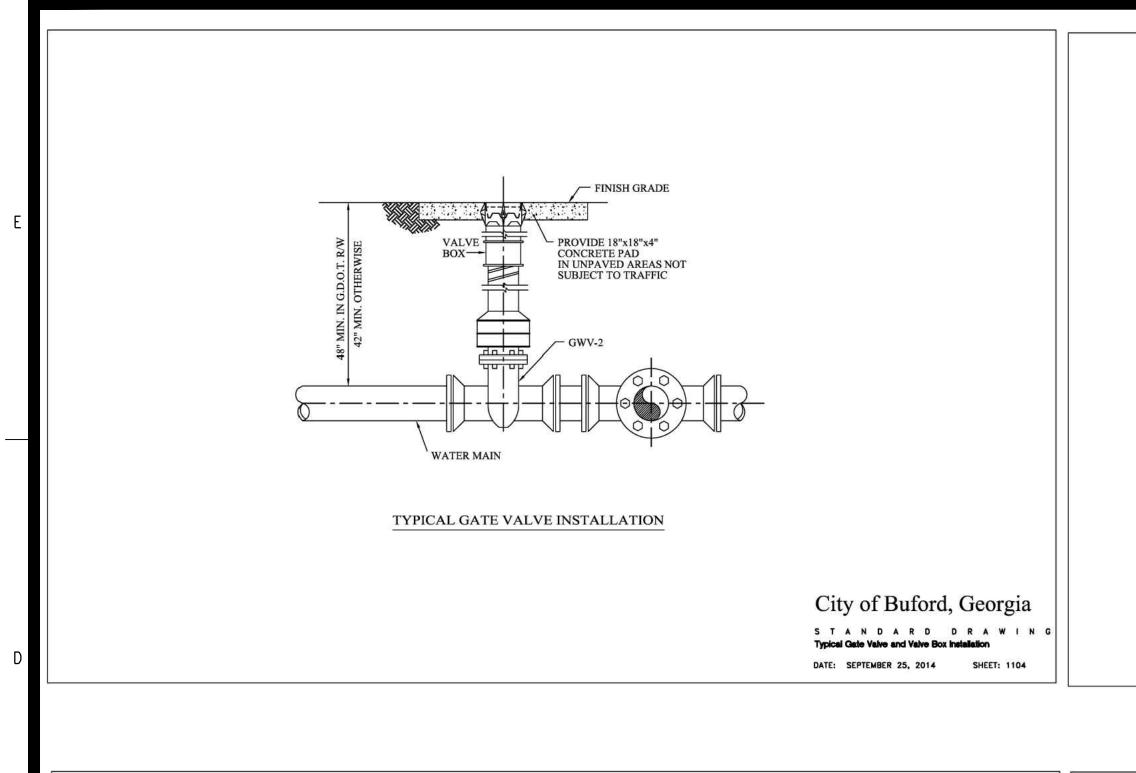


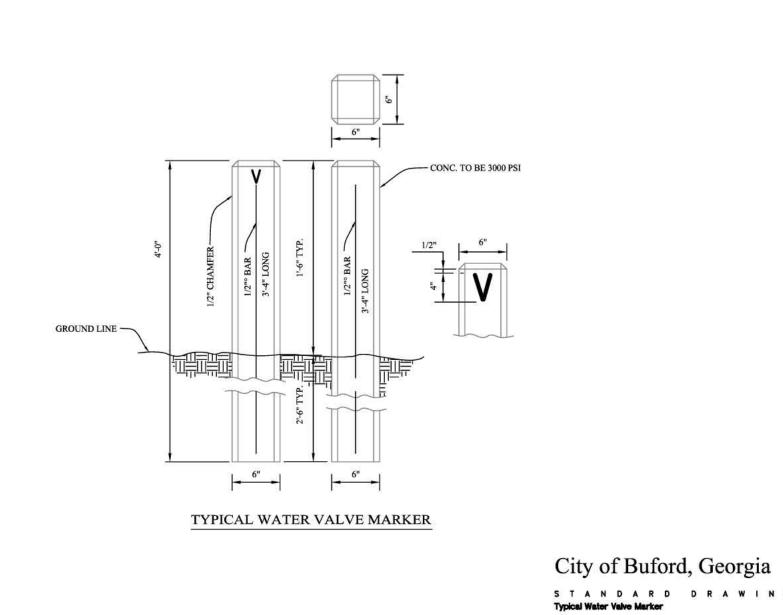




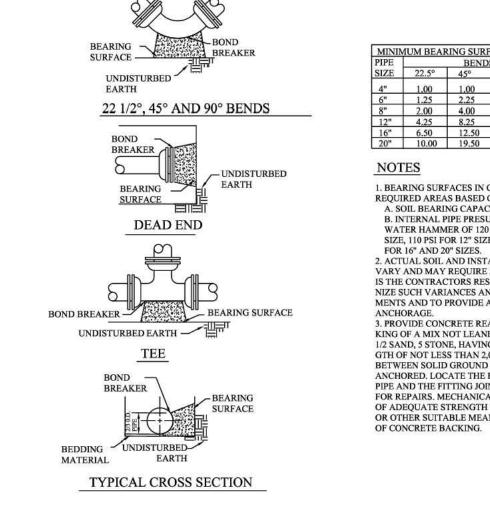








DATE: SEPTEMBER 25, 2014 SHEET: 1105



4" 1.00 1.00 2.00 1.50
6" 1.25 2.25 4.75 3.00
8" 2.00 4.00 8.20 5.25
12" 4.25 8.25 16.75 11.00
16" 6.50 12.50 23.00 16.50
20" 10.00 19.50 35.50 25.00

NOTES

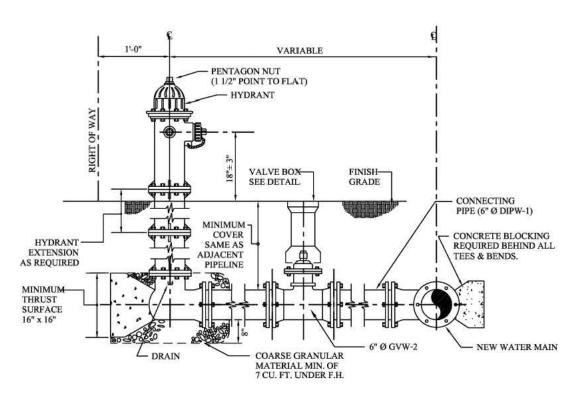
1. BEARING SURFACES IN CHART ARE MINIMUM
REQUIRED AREAS BASED ON THE FOLLOWING:
A. SOIL BEARING CAPACITY = 3000 PSF
B. INTERNAL PIPE PRESURE = 150 PSI+
WATER HAMMER OF 120 PSI FOR 4"- 8"
SIZE, 110 PSI FOR 12" SIZE, AND 70 PSI
FOR 16" AND 20" SIZES.
2. ACTUAL SOIL AND INSTALLATION CONDITIONS
VARY AND MAY REQUIRE ADDITIONAL ANCHORAGE, IT
IS THE CONTRACTORS RESPONSIBILITY TO RECOGNIZE SUCH VARIANCES AND ADDITIONAL REQUIREMENTS AND TO PROVIDE APPROPRIATE ADDITIONAL
ANCHORAGE.
3. PROVIDE CONCRETE REACTION OR THRUST BACKING OF A MIX NOT LEANER THAN I CEMENT, 212 SAND, S STONE, HAVING COMPRESSIVE STRENGTH OF NOT LESS THAN 2,000 PSI, PLACE BACKING
BETWEEN SOILD GROUND AND THE FITTING TO BE
ANCHORED. LOCATE THE BACKING SO THAT THE
PIPE AND THE FITTING JOINT WILL BE ACCESSILE
FOR REPAIRS, MECHANICAL JOINT WILL BE ACCESSILE
FOR REPAIRS, MECHANICAL JOINT WILL BE ACCESSILE
FOR REPAIRS, MECHANICAL JOINT RETAINER GLANDS
OF ADEQUATE STRENGTH TO PREVENT MOVEMENT
OR OTHER SUTTABLE MEANS MAY BE USED INSTEAD
OF CONCRETE BACKING.

CONCRETE THRUST RESTRAINT

City of Buford, Georgia

S T A N D A R D D R A W I N
Concrete Thrust Restraint

DATE: SEPTEMBER 25, 2014 SHEET: 1107



#### TYPICAL HYDRANT INSTALLATION

NOTES:

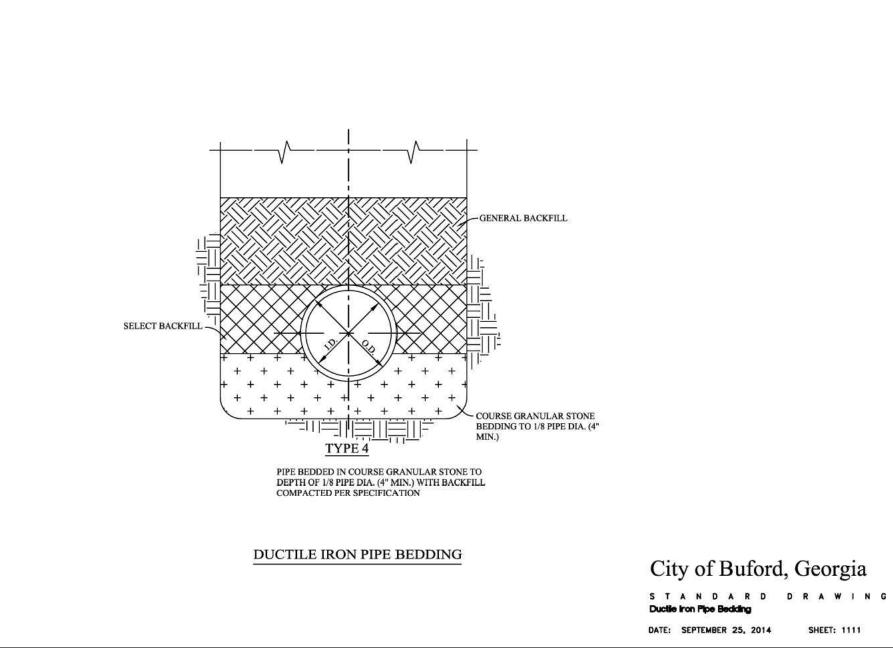
1. HYDRANT LUGS AND TIE RODS MAY
BE USED IN LIEU OF CONCRETE REACTION
BRACING AT CONTRACTOR'S OPTION.

2. PAINT HYDRANT IN ACCORDANCE W/AWWA
C502 COLOR TO BE APPROVED BY CITY.
3. EXACT LOCATION OF HYDRANTS TO BE DETERMINED
IN FIELD BY ENGINEER & CITY.

City of Buford, Georgia

S T A N D A R D D R A W I N G
Typical Hydrant Installation

DATE: SEPTEMBER 25, 2014 SHEET: 1109



SOUTHERN HERITAGE

HOMES

SOUTHERN HERITAGE

HOMES

390 BROGDON RD.
SUWANEE, GA 30024
24-HOUR CONTACT:
MICHAEL PHELPS
TEL: 770-527-3030
EMAIL:
mo@southernheritagehomesago.com

CONSULTING ENGINEERS & SURVEYORS

LICENSE # PEF005518 LICENSE # LSF001044 5019 WEST BROAD STREET SUITE M230

SUGAR HILL, GEORGIA 30518
TELEPHONE: (678) 804–8586

ISSUE # DATE

REWISIONS

1 10/16/24 SUBMIT FOR REVIEW

2 02/14/25 ADDRESS CITY/COUNTY COMMENTS

3 03/05/25 ADDRESS CITY/COUNTY COMMENTS

4 03/05/25 ADDRESS CITY/COUNTY COMMENTS

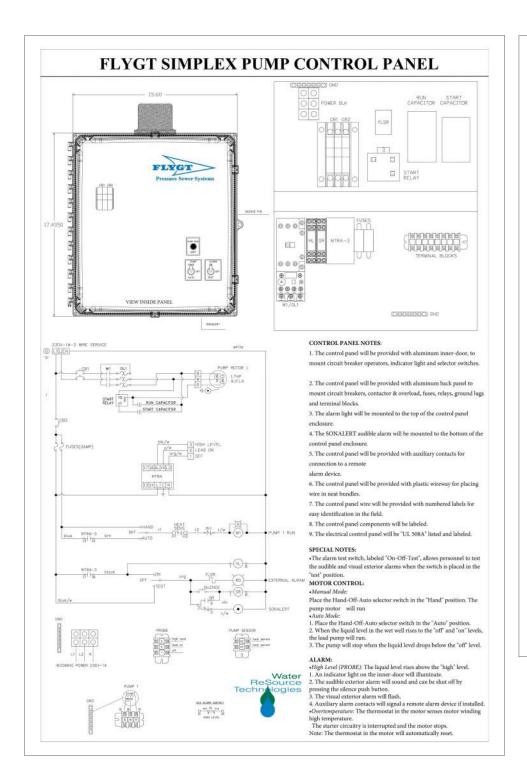
5 03/05/25 ADDRESS CITY

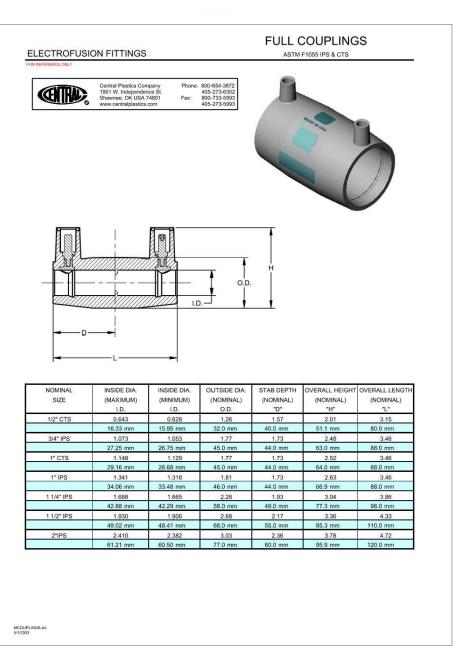
**305/8**LAND LOT(S) 293 & 294
GWINNETT COUNTY, GA

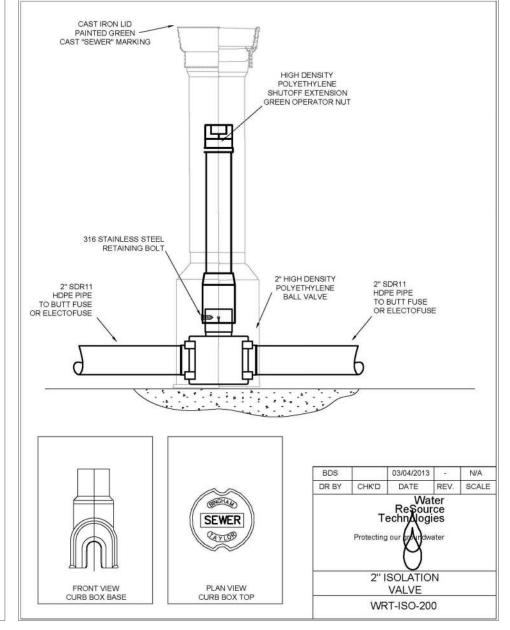
BUFORD, GA
IND DISTRICT
(S) 7270 044
F BUFORD

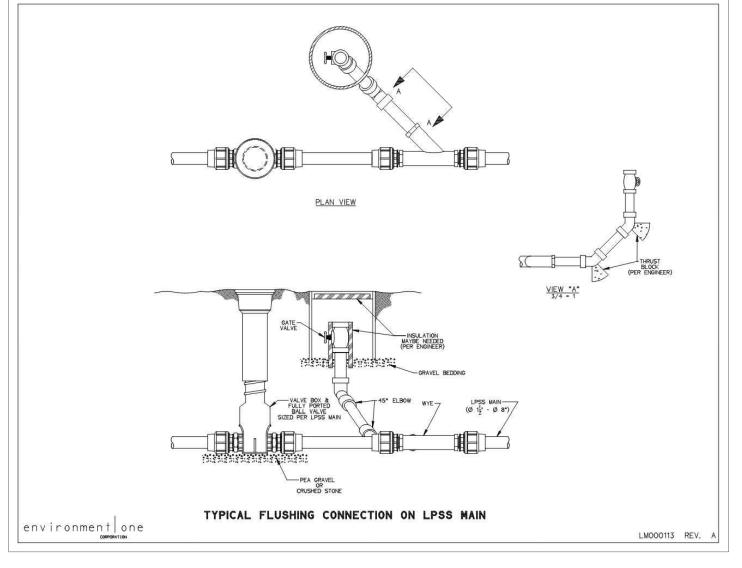
WATER
SISTRIBUTION
DETAILS

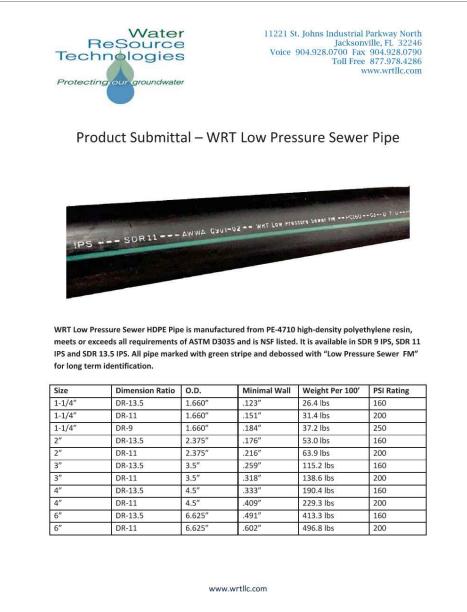
PROJECT# 2024.031 C-505

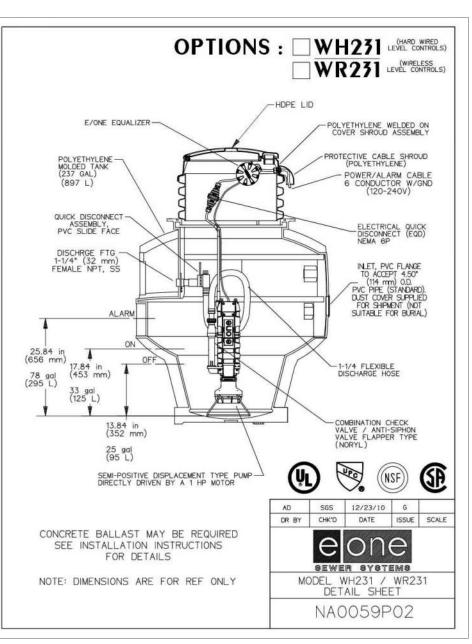


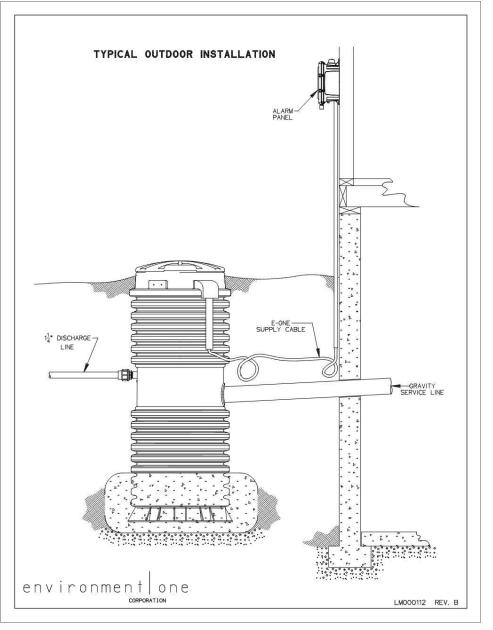


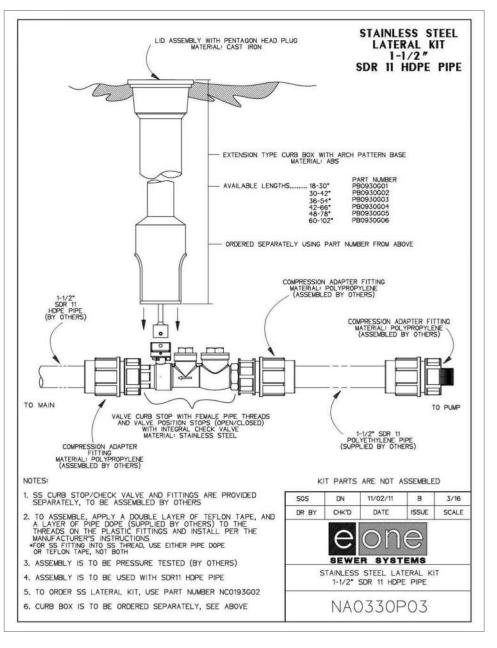


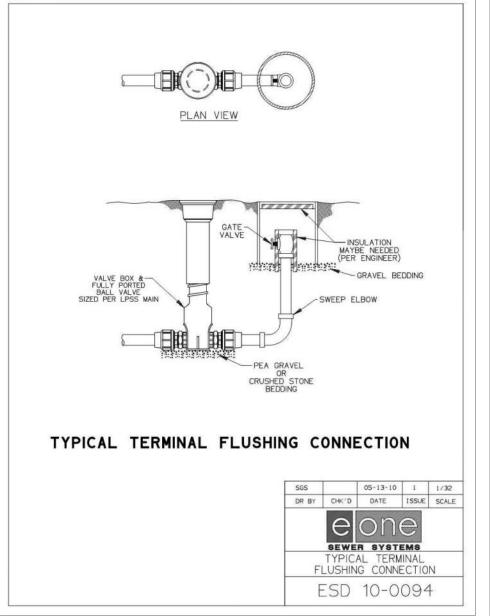


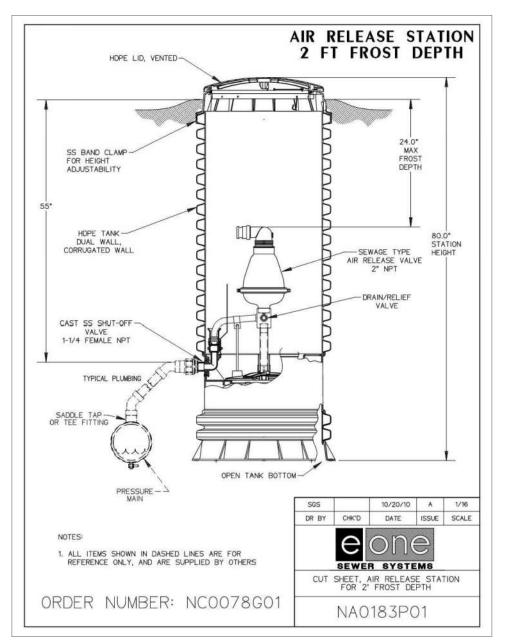














JTHERN HERITAGE

MES

BROGDON RD.
INNEE, GA 30024
IOUR CONTACT:
AEL PHELPS

770-527-3030

WOO



ISSUE ## DATE

1 10/16/24 SUBMIT FOR REVIEW
2 02/14/25 ADDRESS CITY/COUNTY COMMENTS
3 03/05/25 ADDRESS CITY/COUNTY COMMENTS
4 ADDRESS CITY/COUNTY COMMENTS
5 ADDRESS CITY/COUNTY COUNTY COMMENTS
5 ADDRESS CITY/COUNTY COMMENTS
5 ADDRESS CITY/COUNTY COMMENTS
5 ADDRESS CITY/COUNTY COUNTY COU

**VS STREET TD, GA 30518**LAND LOT(S) 293 & 294

CWINNETT COUNTY, GA

BUFORD, G
7TH LAND DISTRICT
PARCEL(S) 7270 044
CITY OF BUFORD

FORCE MAIN
DETAILS

Authorized 3/12/2025
These project documents have been re-

PROJECT# 2024.037 (

C-506

Erosion, Sedimentation, and Pollution Control Plan General Notes (IN CONFORMANCE WITH GENERAL NPDES PERMIT NO. GAR 100003. IT IS HIGHLY RECOMMENDED THAT THE PERMITTEE READ AND UNDERSTAND THE TERMS AND CONDITIONS OF THE PERMIT.) Project Data SOUTHERN HERITAGE HOMES 5) Primary Permittee: 390 BROGDON ROAD, SUWANEE GA, 30024 TEL: 770-527-3030 EMAIL: MP@SOUTHERNHERITAGEHOMESGA.COM 24 HR CONTACT: MICHAEL PHELPS (18) <u>WASTE MATERIALS:</u> BLUE LANDWORKS LLC Engineer: 9) STABILIZATION MEASURES: 5019 WEST BROAD STREET, SUITE M230 SUGAR HILL, GA 30518 (678) 804-8586 Contact: Taylor Anderson, PE (ta@bluelandworks.com) (2) GSWCC Level II Certification No. 3414 (20) MAINTENANCE: 6 Total Gross Area: 9.76 AC Total Disturbed Area: 9.7± AC (7)Construction Exit GPS Location: 34.112525\*, -84.010727\* 25 CONCRETE WASHDOWN Existing Land Use / Site Description: Existing Wooded Site chute and hopper: (9) Proposed Construction Activity: Clearing and grubbing, grading, paving, utility installation for proposed subdivision. Back in equipment. (11)Name of Receiving Waters: SUWANEE CREEK PETROLEUM SPILL AND LEAK CLEANUP CONTROL PRACTICES: Construction activity DOES discharge storm water into or within 1 linear mile upstream of and within the same ③watershed as, any portion of a Impaired Stream Seament that has been listed for the criteria violated. "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff) per 2014 Integrated 305(b)/303(d) List. 43)Adjacent Area Impacts: There are NO known impacts to wetlands or state waters located adjacent to the project site and adjacent residential areas shall not be affected. be prevented. period, the permittee is required to notify EPD at (404) 656-4863 or (800) 241-4113 and the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of (44)Area of On—Site Waters and Wetlands: There are NO wetlands and state waters located on—site. NO wetland or amount, the National Response Center (NRC) shall be contacted within 24 hours at (800) stream impacts are shown. The Developer is responsible for contracting with a qualified wetland consultant to perform a wetlands delineation and USACE permitting, if necessary. Pre-Construction runoff coefficient/curve number = 55 Post-Construction runoff coefficient/curve number = 62oil resulting from an on-site spill. Design Professional's Certification: (12)1) 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. -, 2) I certify that the permittee's Erosion, Sedimentation, and Pollution Control Plan provides for an appropriate 3) and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR 100003. GSWCC Level II Certification No. 3414 The design professional who prepared the erosion, sedimentation, and pollution control plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within seven (7) days after installation. It is the responsibility of the primary permittee to notify the licensed professional when initial construction activities will commence. The licensed professional shall determine if these BMPs have been installed and to waters of the State, except as authorized by a Section 404 permit. are being maintained as designed. The licensed professional shall notify the primary permittee and the permittee must correct all deficiencies within two business days of the inspection by the licensed professional. DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION I certify the site was in compliance with the ESPCP Plan on the date of inspection. **HAZARDOUS WASTES:** GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # Inspection revealed the following discrepancies from the ESPCP Plan. regarding spill control. These deficiencies must be addressed immediately and a re-inspection scheduled. Work shall not proceed on the site until Design Professional Certification is obtained. General Construction Specifications 1) All timber having a marketable value shall be salvaged. Timber logs, rubbish, and vegetative matter which will interfere with the grading operations or affect the CRITICAL WORK ZONE: planned stability of fill areas shall be removed and disposed of according to the permittee's instructions and in accordance with all local and state laws. 2) Topsoil is to be stripped and stockpiled in amounts necessary or available on site to complete final grading of all exposed greas. 3) Fill material is to be free of brush, rubbish, rocks, logs, and stumps in amounts that are detrimental to constructing stable fills. 4) Cut slopes which are to be topsoiled will be scarified to a minimum depth of 3 inches prior to placement of topsoil. 5) Compaction of fills will be as required to reduce slipping, erosion, or excess 6) Frozen mixtures of soft, mucky, or easily compressible materials are not to be incorporated in fills intended to support buildings, parking lots, roads, structures. sewers, or conduits. 7) Consult the geotechnical engineer for recommendations concerning proper placement and compaction of structural fill. 8) All disturbed areas shall be left with a neat and finished appearance and stabilized with the appropriate permanent protective cover. 9) Cut or fill slopes to be no greater than 2 feet horizontal to 1 foot vertical. with a tarpaulin. 10) All proposed grades shown are finished rough grades, unless otherwise noted. 11) All construction shall conform with the specifications, the details shown within these plans, and/or the current version of the "Manual for Erosion and Sediment Control in

5) NON-EXEMPT ACTIVITIES: Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as mentioned from the Jurisdictional Determination Line without first acquiring the necessary variances (16) There are NO buffer encroachments; NO buffer variances required. Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional. Waste materials shall not be discharged to waters of the State, except as

(17) AMENDMENTS/REVISIONS:

authorized by a section 404 permit.

e escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities.

(21) Any disturbed area left exposed for a period of greater than 14 days shall be stabilized with mulch or

The stabilization measures shown on this Plan have been designed to stabilize the disturbed areas following the temporary or permanent completion of construction. All grubbed areas shall be stabilized with temporary mulching (Ds1) prior to grading if they are to remain inactive for 14 days or more. All disturbed areas shall be stabilized with temporary (Ds2) or permanent (Ds3) vegetation as indicated on the plan. Ditches, temporary diversion berms, and slopes (which have 3:1 or steeper slope and 10 feet or more height) are to be stabilized with channel stabilization (Ch) and slope stabilization (Ss). Dust control (Du) shall also be provided as needed during grading activities.

Erosion control measures will be maintained at all times. If the 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. Refer to the details contained within this Plan for additional maintenance instruction.

Washout of the drum at the construction site is prohibited. Following is a procedure to washdown tools, Coordinate with site superintendent to excavate a pit deep enough to contain washdown water.

Washdown only the chute, hopper and rear of the vehicle do not wash out the drum. Make sure washdown water goes into and stays in the pit. Coordinate with site superintendent to fill in pit and smooth out ground.

Local, State, and manufacturer's recommended methods for spill cleanup shall be clearly posted and procedures shall be made available to site personnel.

Material and equipment necessary for spill cleanup shall be kept in the material storage areas. Spill prevention practices and procedures shall be reviewed after a spill and adjusted as necessary to prevent future spills.

All spills will be cleaned immediately upon discovery. All spills shall be reported as required by local, State and Federal regulations.

The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall (6) Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil or Hazardous Material Spills or Release Act (O.C.G.A. Sec. 12-14-2, et seq.), 40 CFR 117, or 40 CFR 302 occurs during a 24-hour

Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. Sec. 12-14-2, et seg.), 40 CFR 117, and 40 CFR 302 as soon as he has knowledge of the discharge. (7) For spills that impact surface water (leave a sheen on surface water) or spills of an unknown

For spills greater than 25 gallons and no surface water impacts, the Georgia EPD shall be contacted within 24 hours at (404) 656-4863 or (800) 241-4113.

(9) For spills less than 25 gallons and no surface water impacts, the spill shall be cleaned and local agencies shall be contacted as required. (10) General NPDES Permit No. GAR 100001 does not authorize the discharge of hazardous substances or

(27) BUILDING MATERIALS AND PRODUCTS CONTROL PRACTICES:

Use plastic sheeting or temporary roofs to cover building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials in order to minimize exposure to precipitation and stormwater

Petroleum Based Products — Containers for products such as fuels, lubricants, and tars will be inspected daily for leaks and spills. This includes onsite vehicle and machinery daily inspections and reaul preventative maintenance of such equipment. Equipment maintenance areas will be located away from State Waters, natural drains, and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels, and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

Paints/Finishes/Solvents - All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products, and product containers will be disposed of according to manufacturer's specifications and

Concrete Truck Washing - NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum

Fertilizer/Herbicides - These products will be applied at rates that do not exceed the manufacturer's specifications or above the quidelines set forth in the crop establishment or in the GSWCC Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

Building Materials - No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

WASTE MATERIALS AND DISPOSAL:

Waste Disposal: No solid materials, including building materials, shall be discharged

All waste materials shall be collected and stored in a securely lidded metal dumpster or other appropriate waste management facility permissible under GAR permit No. 100001. Waste management facilities shall meet all solid waste management regulations. All trash and construction debris from the site shall be deposited in the waste management facilities. Waste management facilities shall be emptied a minimum of once per week or more often if necessary and trash shall be hauled as required by local regulations. No construction waste shall be

All personnel shall be instructed on proper procedures for waste disposal. A notice stating these practices shall be posted at the job site and the Contractor shall be responsible for seeing that these procedures are followed.

All hazardous waste materials shall be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, shall instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site shall be obtained and used for the proper management of potential wastes that may result from these products. An MSDS shall be posted in the immediate area where such product is stored and/or used and another copy of each MSDS shall be maintained in the ESPCP file at the job site construction trailer office. Each employee who handles a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly

No spilled hazardous materials or hazardous wastes shall be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge shall be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm

NON-STORM WATER DISCHARGES:

Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water 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-storm water component(s) of the discharge.

All slopes 2:1 or steeper and higher than 5 feet shall receive surface roughening, polymers, and erosion control matting. Additionally, all fill slopes shall receive a diversion dike and temporary down drains along the top of the slope preventing drainage spilling over the edge and down the face of the slope. The temporary down drains shall be constructed with perforated stand pipes at the top of the slope and reconstructed as the slope increases in

KEEPING THE PLANS CURRENT:

The primary permittee(s), as applicable, who began construction on or before the effective date of this permit shall amend their Plan whenever their is a change in design, construction, operation, or maintenance, which has significant effect on BMPs with a hydraulic component, i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms or on the potential for the discharge of pollutants to the waters of Georgia and which has not otherwise been addressed in the Plan, if the Plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.2 of this permit, or if the plan proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Amendments to the Plan must be certified by a design professional.

OFFSITE VEHICLE TRACKING A stabilized construction exit (Co) shall be provided to reduce vehicle tracking of sediment. See ESPCP plan sheets for the construction exit locations and detail. The paved street adjacent to the construction exit shall be inspected daily for tracking of mud, dirt, or rock. Dump trucks hauling material from the construction site shall be covered

All permittees shall ensure that this Plan is in compliance with applicable State and/or local waste disposal, and sanitary sewer or septic system regulations

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

All sanitary waste units shall be located in an area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment of BMP's shall be implemented as necessary, such as gravel bags of specifically designed plastic skid containers around the base, to prevent waste from contributing to storm water

Sanitary sewer shall be provided by municipal authority at the completion of this project.

STORM WATER MANAGEMENT Storm water detention for the site will be provided by a proposed onsite stormwater management facility.

SEDIMENT STORAGE: Sediment storage will be provided by the proposed onsite stormwater management facility.

(28) POST-CONSTRUCTION STORM WATER POLLUTANT CONTROL: A dry extended stormwater detention facility will serve as a water quality BMP's to control pollutants in storm water discharges that occur after construction operations have been completed. The facility has also been designed to detain the one-year channel protection volume and to provide peak flow attenuation. Storm outlet protection aprons shall be placed downstream of storm water discharge locations to provide non-erosive flow so that the natural, physical, and biological characteristics and functions of the watercourse are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act. The permittee is only responsible for the installation and maintenance of stormwater management devices prior to final stabilization of the site and is not responsible for the operation and maintenance of such structures after construction activities have been completed.

(20) STRUCTURAL PRACTICES: The structural practices shown on this Plan have been designed to divert flows from exposed soils, store  $(\overline{37})$  flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. For sediment and erosion control purposes, structural practices have been shown in three different phases, based on construction activities. These phases include initial, intermediate grading and final stabilization.

During the initial phase (sheet E-101), there will one construction exit (Co) off Smokey Road for the project site. Prior to clearing the entire site, provide tree save fencing (Tr) and silt fence (Sd1-S) as shown within the limits of disturbance. The proposed stormwater management (SWM) facility with floating surface skimmer (Sk) connected to the outlet control structure (at the water quality orifice location) in the SWM facility to dewater from the surface to provide sediment control. Storm outlet protection (St) will be installed at the SWM facility outfall location. Diversion berms (Di) with channel stabilization (Ch-1 & Ch-2) will be constructed to divert stormwater flows into the SWM facility. Mulching (Ds1), temporary seeding (Ds2) along with Dust control (Du) shall be utilized as needed and if soil is left exposed for a period greater than 14

During the intermediate grading phase (sheet E-102), storm drainage systems will be installed. Floating surface skimmers (Sk) shall remain at the SWM facility. Roads and building sites will be brought to subgrade and water lines will be installed. Excavated inlet sediment traps (Sd2-G) will be installed at storm drainage inlets to prevent sediment from entering the drainage system. Storm outlet protection (St) will remain at the outfall locations. Permanent seeding (Ds3) shall be utilized on sloped areas at final grade. Mulching (Ds1), temporary seeding (Ds2) along with Dust control (Du) shall be utilized as needed and if soil is left exposed for a period greater than 14 days.

During the final grading phase (sheet E-103), fine grading will occur and pavement will be provided. All non-paved disturbed areas shall receive permanent seeding (Ds3) and slope stabilization (Ss). Silt fence (Sd1-S) shall be removed from the existing detention facility. Once permanent vegetation has been established and site is stabilized, the skimmer (Sk) shall be removed from SWM facility.

RECORD OF DATES - MAJOR GRADING ACTIVITIES

(Note to primary, secondary, and tertiary permittees: complete the following table to include the dates when initial construction activities commence, when all major construction activities (e.g. clearing and grubbing activities, excavation activities, grading activities, infrastructure activities, intermediate and final stabilization activities) occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated. The licensed professional who prepared this plan shall be notified

DATE	DESCRIPTION OF CONSTRUCTION ACTIVITY

The primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site.

31) The primary permittee must provide a copy of the Plan or applicable portions of the Plan and copy of the primary permittee's most current Notice of Intent to each secondary permittee prior to the secondary permittee conducting any construction activity. Any revisions to the Plan and/or the Notice of Intent must be provided to the secondary permittees in a timely manner. A written acknowledament of receipt of the Plan and Notice of Intent must be made by the secondary permittee and a copy of such be retained in the primary permittee's records in accordance with Part IV.F. of this permit. If the primary permittee changes after the Plan is prepared and implemented, any subsequent primary permittee must ensure that the Plan complies with all terms and conditions of this permit and that each secondary permittee is provided with any revisions to the Plan and Notice of Intent made by the new primary permittee. A written acknowledgment of receipt of the Plan or amendments to the Plan and Notice of Intent must be made by the secondary permittee and a copy of such be retained in the new primary permittee's

(22) Secondary permittees are unknown at the time of plan submittal. Secondary permittees shall be identified prior to NOT.

#### SECONDARY PERMITTEES

records in accordance with Part IV.F. of the NPDES Permit No. GAR 100003.

NAME	Phone:	
Company	Fax:	
Address		
Address		
GSWCC LEVEL IA CERTIFICATION	N NO	Signature
NAME	Phone:	
Company	Fax:	
Address		
Address		
GSWCC LEVEL IA CERTIFICATION	N NO	Signature
NAME	Phone:	
Company	Fax:	
Address		
Address		
GSWCC LEVEL IA CERTIFICATION	N NO	Signature

I certify that I will adhere to the Primary Permittee's ES&PC Plan or the portion of the Plan applicable to my construction activities.

22) FINAL STABILIZATION CERTIFICATION

(a) the portion of the site as indicated above has met final stabilization, all storm water discharges associated with construction activity authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. (b) I am no longer an Owner or Operator at the construction site and a new Owner or Operator has assumed operational control of the permitted construction site where I previously had ownership or operational control. understand that by signing this Final Stabilization Certification which has been incorporated into the Primary Permittee's Plan, that I am no longer authorized to discharge storm water associated with construction activity

**GEORGIA** 

**UNIFORM CODING SYSTEM** 

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

**VEGETATIVE PRACTICES** 

CODE PRACTICE DETAIL MAP

FI-CO FLOCCULANTS AND COAGULANTS

Tac TACKIFIERS AND BINDERS

DESCRIPTION

To protect desirable trees from injury during

DESCRIPTION

CODE PRACTICE DETAIL MAP

TEMPORARY STREAM CROSSING

STRUCTURAL PRACTICES

DESCRIPTION

Improving, constructing or stabilizing an open channel, existing stream, or ditch.

A flexible conduit of heavy-duty fabric or oth

or waterways where otherwise the slope would be sufficient for the running water to form gullies.

nstruction site. It may be sandbags, bales hay, brush, logs and poles, or a silt fence

A buoyant device that releases/drains water from

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

A DUOyant device and releases or units water from the surface of sediment ponds, trops, or basins a controlled rate of flow.

CODE PRACTICE DETAIL MAP

PERMANENT DOWNDRAIN STRUCTURE

by the general permit, and that discharging pollutants in storm water associated with construction activity to waters of Georgia is unlawful under the Georgia Water Quality Control Act and the Clean Water Act where the discharge is not authorized by a NPDES permit.

SI	ECONDARY PERMITEES
N.	AME:
C	OMPANY:
A	DDRESS:
G:	SWCC LEVEL 1A CERTIFICATION NUMBER:
N.	AME:
C	OMPANY:
Α	DDRESS:
G	SWCC LEVEL 1A CERTIFICATION NUMBER:
N.	IAME:
C	OMPANY:
A	DDRESS:

GSWCC LEVEL 1A CERTIFICATION NUMBER: \_

SWCD: GWINNETT COUNTY SWCD Project Name: BROOKHAVEN ROW Address: ADAMS STREET Local Issuing Authority: CITY OF BUFORD Date on Plans: 10/16/2024 Plan Included TO BE SHOWN ON ES&PC PLAN FOR SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES which the land-disturbing activity was permitted. completed Appendix 1 of this checklist with at least 4 of the chosen BMPs. \* Note total and disturbed acreages of the project or phase under construction. Descriptions of the nature of construction activity and existing site conditions. water (it may also be referred to as a floating boom, silt barrier, or silt curtain). marshlands, etc. which may be affected. Determination Line without first acquiring the necessary variances and permits." component must be certified by the design professional." \* include the information required by Part II.B.2. \* the Impaired Stream Segment. Du Controlling surface and air movement of dust construction site, roadways and similar sites. TMDI Implementation Plan \* Substance formulated to assist in the solids/liquiseparation of suspended particles in solution. ne drumat the construction site is prohibited. Provide BMPs for the remediation of all petroleumspills and leaks. A protective covering used to prevent erosion construction operations have been completed. Substance used to anchor straw or hay mulch causing the organic material to bind together. temporary and final stabilization). \* Provide complete details for Retention of Records as per Part IV.F. of the permit. Appendix B rationale for NTU values at all outfall sampling points where applicable. Graphic scale and North arrow Contour Intervals, ft. Map Scale Ground Slope Rolling 2 - 8% Alternative BMP Guidance Document found at www.gaswcc.georgia.gov. Local Issuing Authority Clearly note and delineate all areas of impact Delineation and acreage of contributing drainage basins on the project site. stormwater discharge points. 49 Soil series for the project site and their delineation. feasible, a written justification explaining this decision must be included in the Plan.

Name & Email of person filling out checklist:\_\_\_\_\_\_ Taylor Anderson ta@bluelandworks.com The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in 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 28** Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed) Limit 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 (A copy of the written approval by GAEPD must be attached to the Plan for the Plan to be reviewed.) The name and phone number of the 24-hour contact responsible for erosion, sedimentation and pollution controls. CONSULTING ENGINEERS & SURVEYORS Provide the name, address, email address, and phone number of the Primary Permittee or Tertiary Permittee. Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees. 5019 WEST BROAD STREET Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. SUGAR HILL, GEORGIA 30518 TELEPHONE: (678) 804-8586 Provide viginity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary, INFO@BLUELANDWORKS.COM Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands WWW.BLUELANDWORKS.COM Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Design professional's certification statement and signature that the Permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 22 of the permit. Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect and certify the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." \* Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed streambuffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional 6 Provide a description of any buffer encroachments and indicate whether a buffer variance is required. Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic 8 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary 22-A Prior to a Secondary Permittee conducting any construction activity, the applicable portion of the Primary Permittee's ES&PC Plan is to be provided. The Plan shall include a section for each Secondary Permittee to sign the Secondary Permittee Certification Statement and B For all Secondary Permittees, a Final Stabilization Certification must be signed when final stabilization has been achieved, stormwater discharge for activities has ceased, and temporary BMPs have been removed for their portion of the site. The Plan shall include a THIS DOCUMENT AS ORIGINALLY PUBLISHED BY DISCOULD BY THE NOT RESPONSIBLE FOR ANY SUBSCOULD DIFFICATION, CORRUPTION, OR UNAUTHORIZED USE UCH DOCUMENT. TO VERIFY THE VALIDITY OF 1 section for each Secondary Permittee to sign the Final Stabilization Certification and include the information required by Part VI.D. Any construction activity which discharges stormwater into a Biota Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as any portion of a Biota Impaired Stream Segment, must comply with Part III.C. of the permit. Include the AL/SIGNATURE, CONTACT DP. completed Appendix 1 of this checklist with at least 4 of the chosen BMPs that will be used for those areas of the site which discharge to 24 If a TMDL Implementation Plan for sediment has been finalized for the Biota Impaired Stream Segment (identified in Item 23 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the 25 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Include statement that washout of Description of practices to provide cover for building materials and building products on site. \* Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, dearing and grubbing activities, excavation activities, utility activities, grading, infrastructure, Provide complete requirements of <u>Inspections</u> and record keeping by the Primary or Tertiary Permittee. 2 Provide complete requirements of <u>Sampling Frequency</u> and <u>Reporting</u> of sampling results. \* 4 Description of analytical methods to be used to collect and analyze the samples from each location. 36 Delineate all sampling locations on all phases of the Plan, and perennial and intermittent streams and other water bodies into which requirements and perimeter control BMPs (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial sediment storage requirements and initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all BMPs into a single phase plan. 38 Plan addresses BMPs for all phases of common development, including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include typical and any applicable situational lot plans 41 Use of Alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by GAEPD or the Georgia Soil and Water Conservation Commission). Refer to the N/A Y Use of Alternative BMP for application to the Equivalent BMP List. Refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State Waters and any additional buffers as required by the Delineation of all State Waters and wetlands located on or within 200 feet of the project site. Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. \* 47 Estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed. 48 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate at all Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofited detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sedimen storage when using equivalent controls. When discharging from sediment basins and impoundments, Permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not PLANS Y 52 Location of Best Management Practices that are consistent with, and no less stringent than, the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual Chapter 6, with legend. Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia. 54 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia. \* This requirement of the Common Development permit is not applicable to Tertiary Permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each individual lot is less than one (1) acre. If applicable, the checklist item would be N/A.

**EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST** 

COMMON DEVELOPMENT CONSTRUCTION PROJECTS (Primary and Tertiary Permittees) GAR100003

LICENSE # PEF005518

LICENSE # LSF001044

GEORG!

No. 28657

**PROFESSIONA** 

evel II Cert. No. 14356

PROJECT# 2024.037 E-001

EGIN DATE: MARCH 2025 MONTH END DATE: FEBRUARY 2026

1 2 3 4 5 6 7 8 9 10 11 1 INITIAL PHASE INSTALL TREE PROTECTION FENCING INSTALLATION OF PERIMETER SILT FENCE INSTALLATION OF CONSTRUCTION EXIT. INTERMEDIATE PHASE A CONSTRUCTION OF TEMP. SEDIMENT PONDS INCLUDING SKIMMER DEMOLITION OF EXISTING FEATURES. SEE DEMOLITION SHEET FOR DETAILS. CLEARING & GRUBBING APPLICATION OF TEMPORARY VEGETATIVE MEASURES INSTALL GRADING PHASE EROSION MEASURES INTERMEDIATE PHASE B PRELIMINARY GRADING INSTALLATION OF UTILITY LINES INCLUDING STORM SEWER CONSTRUCTION OF SEDIMENT TRAPS SD2-F CURB & GUTTER AND PAVEMENT CONSTRUCTION OF SEDIMENT TRAPS SD2-P FINE GRADING AND BUILDING PAD CONSTRUCTION LANDSCAPING FINAL STABILIZATION REMOVE TEMPORARY EROSION MEASURES AND TREE PROTECTION FENCING MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES

(30) ANTICIPATED CONSTRUCTION SCHEDULE

#### PART III.D MANAGEMENT PRACTICES AND PERMIT VIOLATIONS

. Best management practices, as set forth in this permit, are required for all construction activities, and must be implemented in accordance with the design specifications contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia. Proper design, installation, and maintenance of best management practices shall constitute a complete defense to any action by the Director or to any other allegation of noncompliance with Part III.D.3. and Part III.D.4.

2. Except as required to install the initial sediment storage requirements and perimeter control BMPs as described in Part IV.D.3., the initial sediment storage requirements and perimeter control BMPs must be installed and implemented prior to conducting any other construction activities (e.g., clearing, grubbing and grading) within the construction site or when applicable, within phased sub-parts or segments of the construction site. Failure to comply shall constitute a violation of this permit for each day on which construction activities occur. The design professional who prepared the Plan must inspect the initial sediment storage requirements and perimeter control BMPs in accordance with Part IV.A.5. within seven (7) days after installation.

3. Failure to properly design, install, or maintain best management practices shall constitute a violation of this permit for each day on which such failure occurs. BMP maintenance as a result of the permittee's routine inspections shall not be considered a violation for the purposes of this paragraph. If during the course of the permittee's routine inspection BMP failures are observed which have resulted in sediment deposition into Waters of the State, the permittee shall correct the BMP failures and shall submit a summary of the violations to EPD in accordance with Part V.A.2, of this permit.

4. A discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such discharge results in the turbidity of receiving water(s) being increased by more than ten (10) nephelometric turbidity units for waters classified as trout streams or more than twenty-five (25) nephelometric turbidity units for waters supporting warm water fisheries, regardless of a permittee's certification under Part II.B.1.j. and Part

5. When the permittee has elected to sample outfall(s), the discharge of storm water runoff from disturbed areas where best management practices have not been properly designed, installed, and maintained shall constitute a separate violation for each day on which such condition results in the turbidity of the discharge exceeding the value selected from Appendix B applicable to the construction site. As set forth therein, the nephelometric turbidity unit (NTU) value shall be selected from Appendix B based upon the size of the construction site, the surface water drainage area and whether the receiving water(s) supports warm water fisheries or is a trout stream as indicated in the Rules and Regulations for Water Quality Control, Chapter 391-3-6 at www.gaepd.org.

#### PART IV.D.4. INSPECTIONS (31)

a. Primary Permittee.

(1). Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2). Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the primary permittee) shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials 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 is submitted to EPD) 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).

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. The primary permittee must amend the Plan in accordance with Part IV.D.4.b.(5). when a secondary permittee notifies the primary permittee of any Plan deficiencies.

(6). A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.(5).. of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by 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 an incident, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this

#### b. Secondary Permittee.

(1). Each day when any type of construction activity has taken place at a secondary permittee's site, certified personnel provided by the secondary permittee shall inspect: (a) all areas used by the secondary permittee where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; and (b) all locations at the secondary permittee site where that permittee's 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. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(2). Certified personnel (provided by the utility companies and utility contractors if they are secondary permittees) shall inspect the following each day any type of construction activity has taken place at the construction site: (a) areas of the construction site disturbed by the utility companies and utility contractors that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; (b) areas used by the utility companies and utility contractors for storage of materials that are exposed to precipitation that have not undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region or established a crop of annual vegetation and a seeding of target perennials appropriate for the region; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the utility companies and utility contractors' construction activities 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). This paragraph is not applicable to utility companies and utility contractors when they are secondary permittees performing service line installations or when conducting repairs on existing line installations.

(3). Certified personnel (provided by the secondary permittee) shall inspect the following at least once every seven 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 secondary permittee's construction site; (b) areas used by the secondary 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 secondary 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.b.(4). These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors if they are secondary

(4). Certified personnel (provided by the secondary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites 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) Frasion 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). This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees.

(5). Based on the results of each inspection, the secondary permittee must notify the primary permittee within 24-hours of any suspected BMP design deficiencies. The primary permittee must evaluate whether these deficiencies exist within 48-hours of such notice, and if these deficiencies are found to exist must amend the Plan in accordance with Part IV.C. of this permit to address those deficient BMPs within seven (7) days of being notified by the secondary permittee. When the Plan is amended, the primary permittee must notify and provide a copy of the amendment to all affected secondary permittee(s) within this seven (7) day period. The secondary permittees must implement any new Plan requirements affecting their site(s) within 48-hours of notification by the primary permittee.

(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.b.(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 has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and /or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion. Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit. This paragraph is not applicable to utility companies and utility contractors if they are secondary permittees performing only service line installations or when conducting repairs on existing line installations.

## c. Tertiary Permittee

(1). Each day when any type of construction activity has taken place at a tertiary permittee's site, certified personnel provided by the tertiary permittee shall inspect: (a) all areas used by the tertiary permittee where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment; and (b) all locations at the tertiary permittee site where that permittee's 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. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(2).Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3). Certified personnel (provided by the tertiory permittee) shall inspect at least the following once every seven 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 tertiary permittee's construction site ; (b) areas used by the tertiary 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 tertiary 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.c.(4). These inspections must be conducted until a Notice of Termination is submitted. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(4). Certified personnel (provided by the tertiary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is submitted to EPD) the areas of their sites 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). This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

(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 the 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.c.(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 has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by the end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit. This paragraph is not applicable to utility companies and utility contractors performing only service line installations or when conducting repairs on existing line installations.

## 32 PART IV.D.6. SAMPLING REQUIREMENTS

This permit requires the monitoring of nephelometric turbidity in receiving water(s) or outfalls in accordance with this permit. This section is applicable to primary permittees with a total planned disturbance equal to or greater than one (1) acre and tertiary permittees with a total planned disturbance equal to or greater than five (5) acres. This section is not applicable to secondary permittees. The following procedures constitute EPD's quidelines 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 common development; (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 storm water 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 storm water(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 map:

(2). The analytical method used to collect and analyze the samples including quality control/quality assurance procedures. This narrative must include precise sampling methodology for each sampling location;

(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

(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.

water(s) (i.e., trout stream or supporting warm water fisheries); and

(2). Samples should be well mixed before transferring to a secondary container.

(3). Large mouth, clean 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 using a direct reading, 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 with a total planned disturbance equal to or greater than one (1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres 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 storm water outfalls using the following minimum guidelines:

(a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity the discharge farthest upstream at the site) but downstream of any other storm water 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 value.

(b). The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water 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 turbidity value.

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

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

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

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

(g). Permittees do not have to sample sheetflow 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 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 storm water 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 with a total planned disturbance equal to or greater than one 1) acre and tertiary permittee with a total planned disturbance equal to or greater than five (5) acres must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, the permittee shall sample at the beginning of any storm water discharge to a monitored receiving water and/or from a monitored outfall within forty—five (45) minutes or as soon as possible.

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

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

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

(b). In addition to (a) above, for each area of the site that discharges to a receiving water or from an outfall, the first rain event that reaches or exceeds 0.5 inch with a storm water discharge that occurs during normal business hours as defined in this permit either 90 days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT, in the drainage area of the location selected as the sampling location, whichever comes first:

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

(d). Where sampling pursuant to (a), (b) or (c) above is required but not possible (or not required because there was no discharge), the primary permittee, in accordance with Part IV.D.4.a.(6),, or the tertiary permittee, in accordance with Part IV.D.4.c.(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.

\*Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for sampling at any time of the day or week.

#### ②PART IV.E. REPORTING

I. 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 storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G.2. Sampling reports must be submitted to EPD until such time as a NOT is

2. All sampling reports shall include the following information:

 a. The rainfall amount, date, exact place and time of sampling or measurements; b. The name(s) of the certified personnel who performed the sampling and measurements;

c. The date(s) analyses were performed; d The time(s) analyses were initiated:

e. The name(s) of the certified personnel who performed the analyses; References and written procedures, when available, for the analytical techniques or methods used; g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or

topes, etc., used to determine these results: h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU;" and i. Certification statement that sampling was conducted as per the Plan.

3. All written correspondence required by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate District Office of the EPD according to the schedule in Appendix A of this permit. The applicable permittees shall retain a copy of the proof of submittal at the construction site or the proof of submittal shall be readily available at a designated location from commencement of construction until such time as a NOT

is submitted in accordance with Part VI. If an electronic submittal is provided by EPD then the written

correspondence may be submitted electronically; if required, a paper copy must also be submitted by return

## PART IV.F. RETENTION OF RECORDS

receipt certified mail or similar service.

III.D.2. of this permit.

permittee.

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

The primary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

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

of this permit; d. A copy of all sampling information, results, and reports required by this permit; e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit:

f. A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Each secondary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

 a. A copy of all Notices of Intent submitted to EPD; b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit or the applicable portion of the Erosion, Sedimentation and Pollution Control Plan for their activities at the construction site required by this permit c. A copy of all inspection reports generated in accordance with Part IV.D.4.b. of this permit: and

d. A copy of all violation summaries and violation summary reports generated in accordance with Part

3. Each tertiary permittee shall retain the following records at the construction site or the records shall be readily available at a designated alternate location from commencement of construction until such time as a NOT is submitted in accordance with Part VI:

a. A copy of all Notices of Intent submitted to EPD; b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;

The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;

A copy of all sampling information, results, and reports required by this permit; A copy of all inspection reports generated in accordance with Part IV.D.4.c. of this permit; A copy of all violation summaries and violation summary reports generated in accordance with Part III.D.2. of this permit; and.

Daily rainfall information collected in accordance with Part IV.D.4.c.(2). of this permit. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business 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

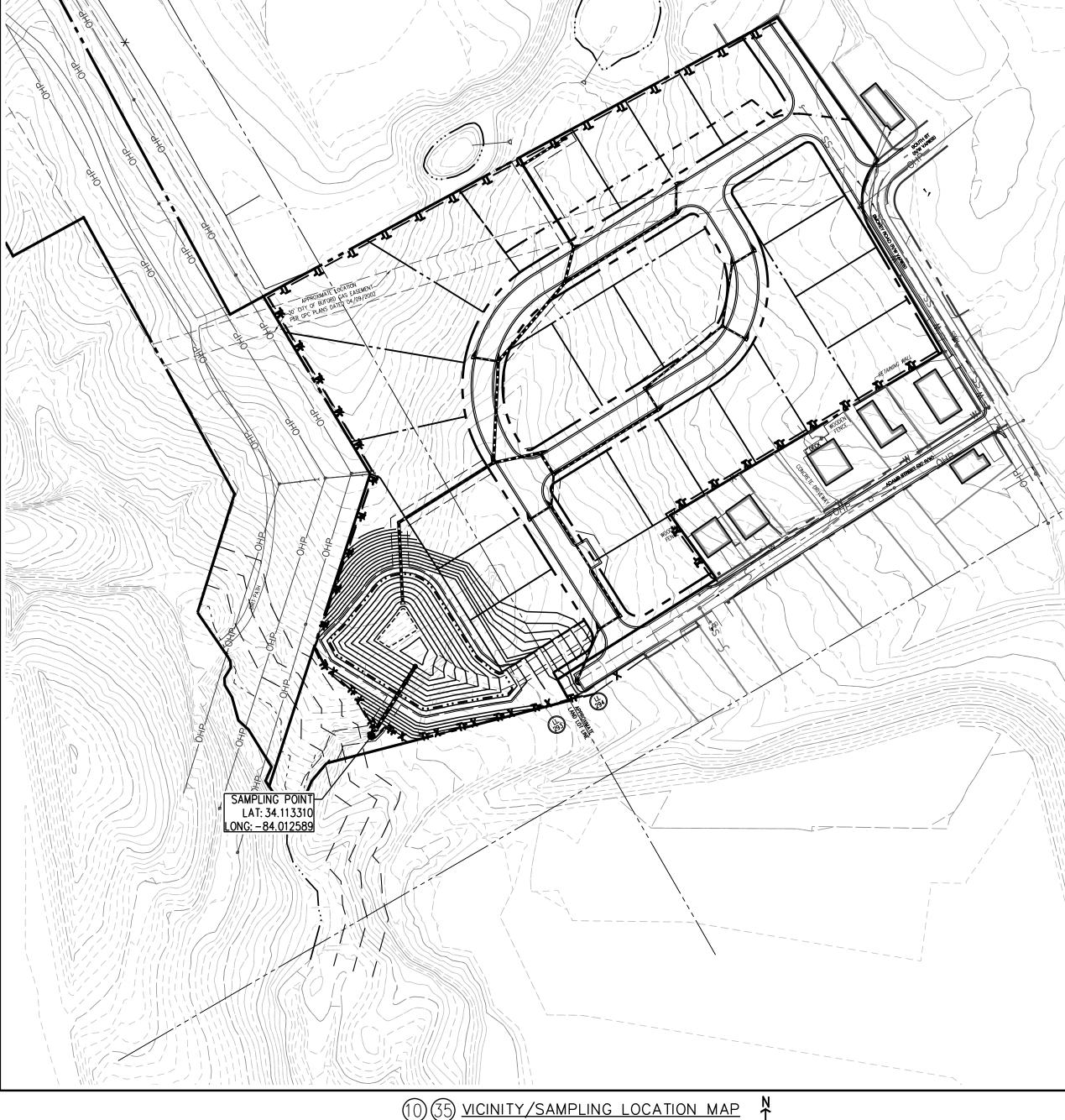
#### 343536 SAMPLING NARRATIVE

THERE IS ONE (1) OUTFALL SAMPLING LOCATIONS FOR THIS PROJECT.

SAMPLING POINT 1 IS LOCATED AT HEADWALL AT THE DISCHARGE POINT FOR THE STORMWATER MANAGEMENT FACILITY 'A' AND SHALL BE MONITORED THROUGHOUT CONSTRUCTION. THE FACILITY SHALL UTILIZE A SKIMMER UNTIL FINAL STABILIZATION HAS OCCURRED. THE SITE SIZE IS 9.76 ACRES AND SURFACE WATER DRAINAGE AREA IS LESS THAT 4.99 SQ. MILES, THEREFORE, FROM APPENDIX B, THE MAXIMUM ALLOWED TURBIDITY VALUE IS 50 NTU's.

AN SS101 STORMWATER SAMPLER BY GLOBAL WATER (OR EQUIVALENT) WILL BE USED TO COLLECT AND HANDLE THE STORM WATER DISCHARGE SAMPLES PRIOR TO ANALYSIS. PART OF THIS SAMPLING PLAN INCLUDES THE SS101 STORMWATER SAMPLER USER'S MANUAL BY GLOBAL WATER

THE STORM WATER SAMPLES WILL BE ANALYZED USING THE LAMOTTE 2020 TURBIDIMETER (OR EQUIVALENT). PART OF THIS SAMPLING PLAN INCLUDES THE INSTRUCTION MANUAL FOR THE LAMOTTE 2020 TURBIDIMETER BY LAMOTTE COMPANY (OR EQUIVALENT).



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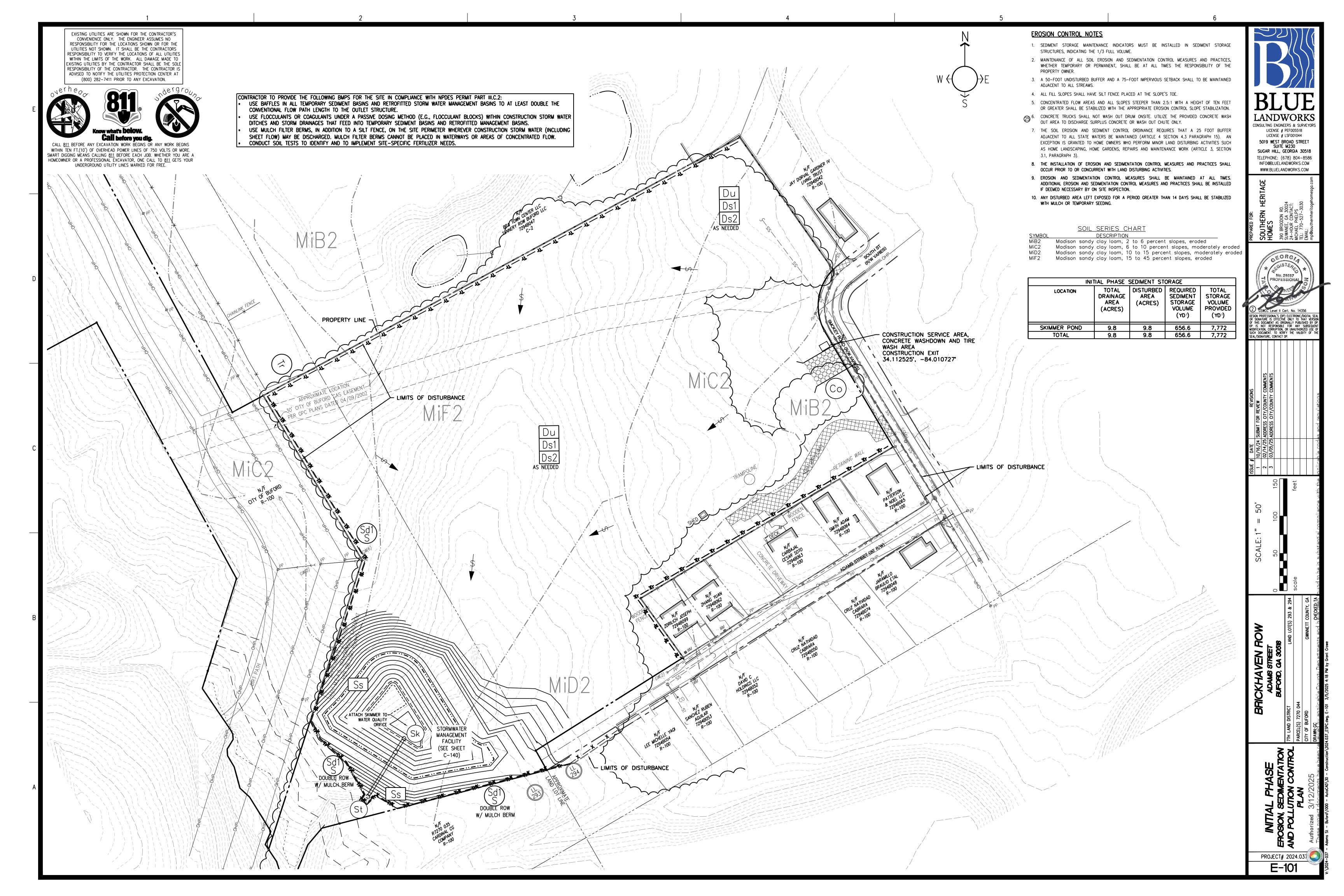
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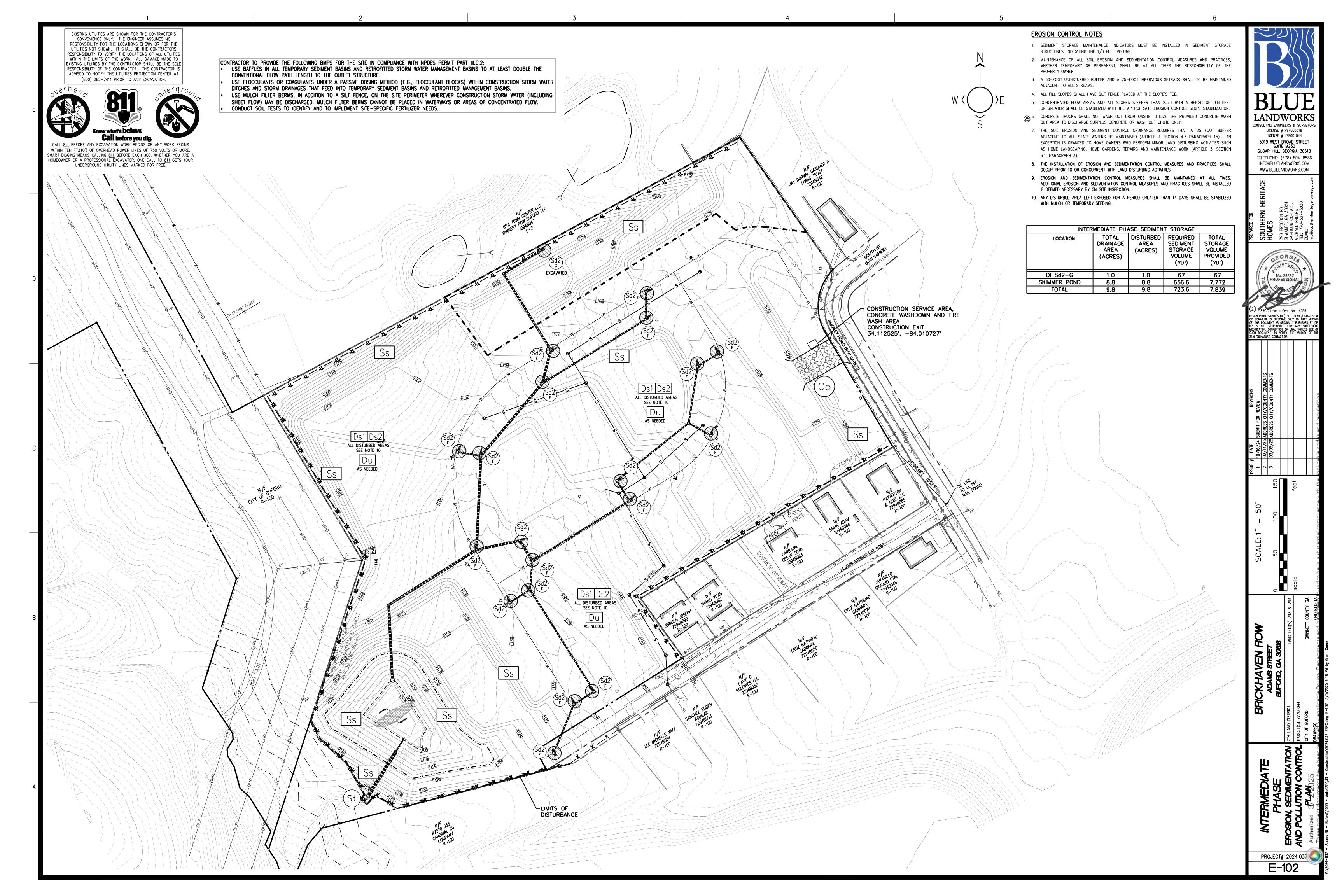
5019 WEST BROAD STREET SUGAR HILL, GEORGIA 30518 TELEPHONE: (678) 804-8586 INFO@BLUELANDWORKS.COM WWW.BLUELANDWORKS.COM

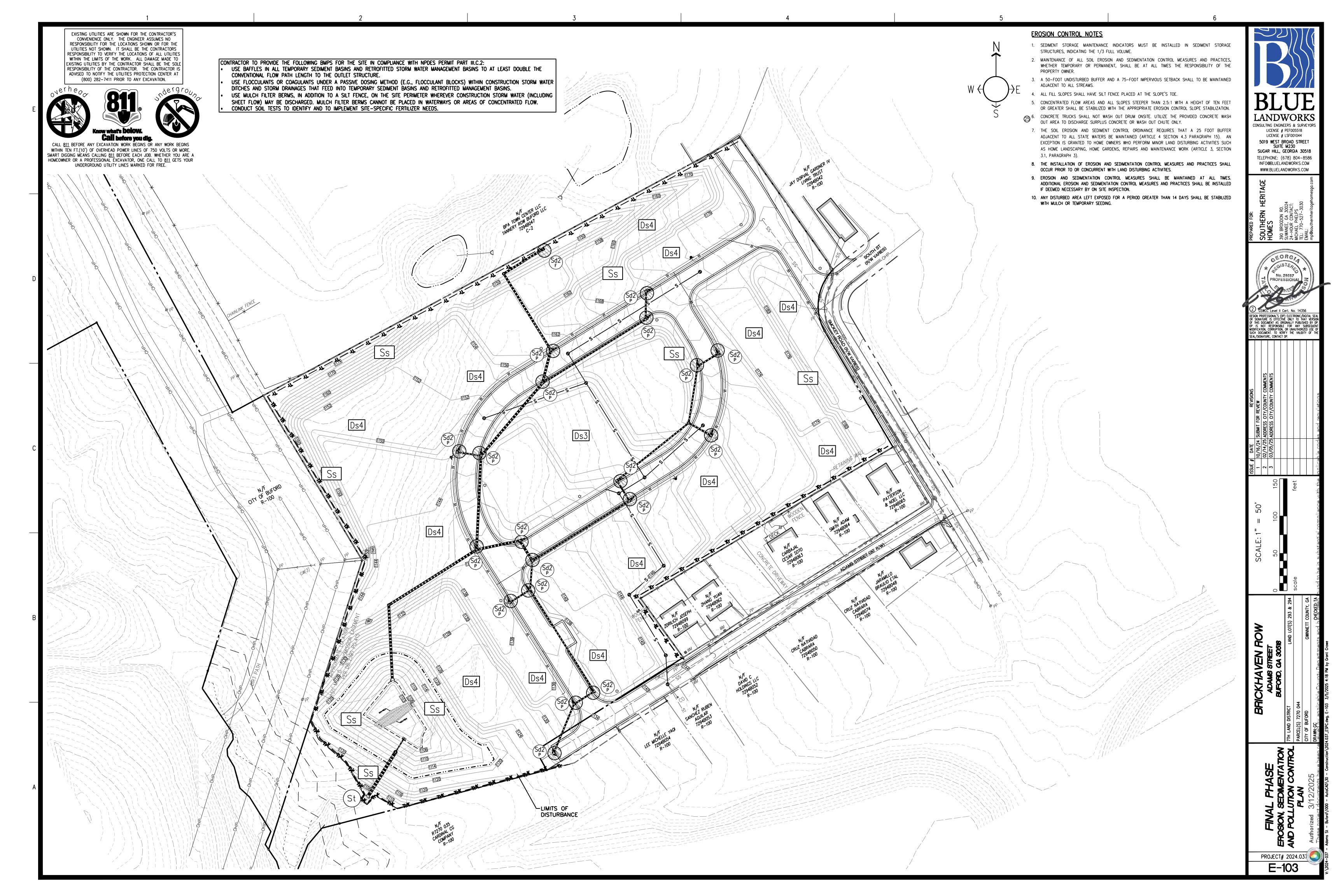
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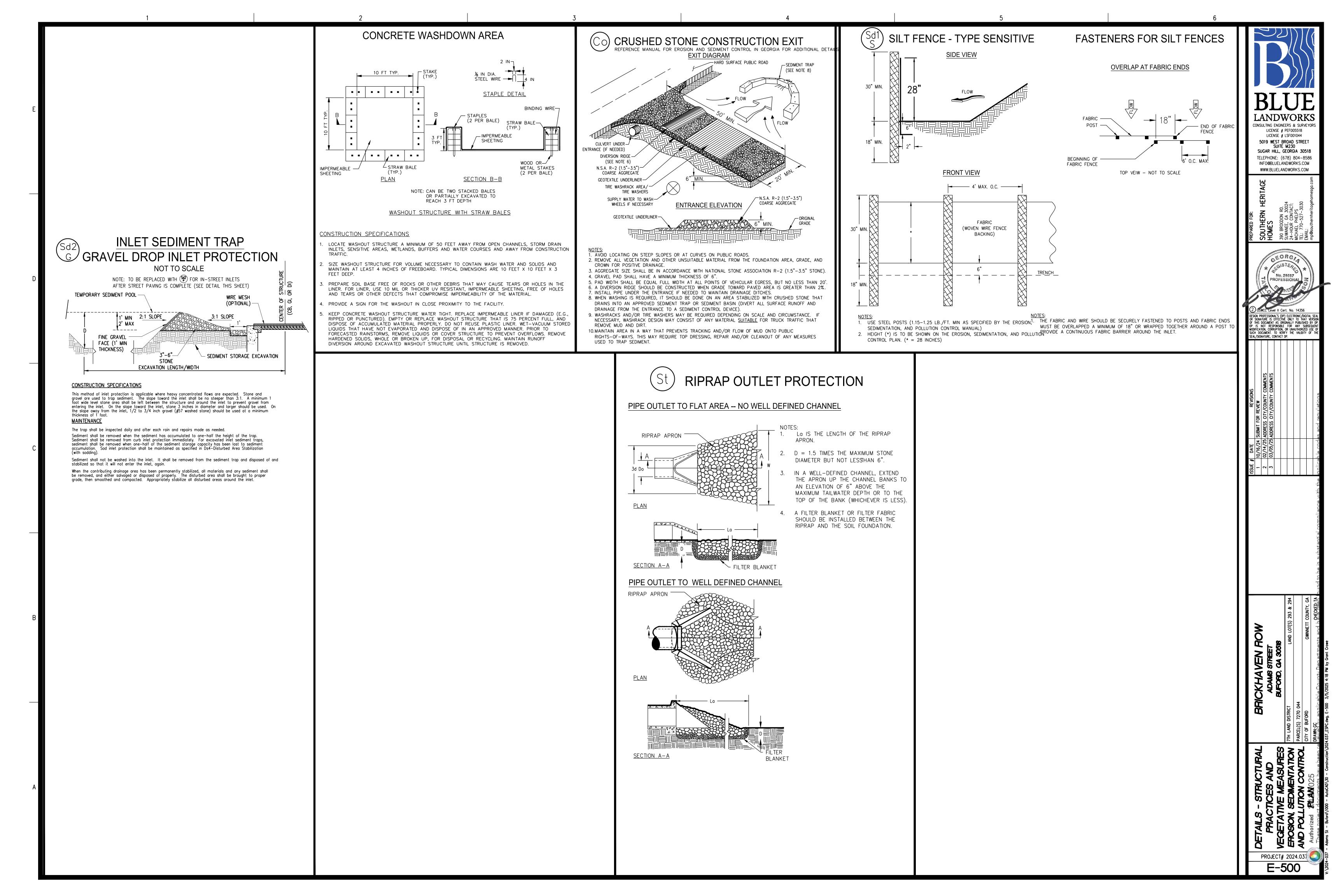
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E-002









See standard Ds1—Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Tac—Tackifiers. Resins such as Curasol or Terratack should be used according to manufacturer's recommendations.

See specification Ds2-Disturbed Area Stabilization (With Temporary Seeding).

These are used on mineral soils (not effective on much soils). Keep traffic off these areas. Refer to specification Tac-Tackifiers.

This practice is designed to roughen and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel type plows spaced about 12 inches apart, spring—toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

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

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 time their height are effective in controlling wind erosion.

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

B. PERMANENT METHODS

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

Calcium Chloride. Apply at rate that will keep surface moist. May need re—treatment.

Cover surface with crushed stone or coarse gravel. See standard Cr—Construction Road Stabilization

DUST CONTROL ON DISTURBED AREAS

CONSTRUCTION SPECIFICATIONS

excessive water runoff shall be reduced by properly designed and installed erosion control practices such as closed drains, litches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by handseeded vegetation or if hydraulic seeding equipment is to

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

gricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. aded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or bil material, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10—10—10 fertilizer or the equivalent per acre (1216 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and

Select a grass or grass legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one—quarter to one—half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT-TERM PROTECTION. REFER TO DS1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

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

	SPECIES BROADCAST RATES		RESOURCE AREA <sup>3</sup>			.ANTII						REMARKS					
		Rate per Acre²	PLS per 1000 SF		line	s in	dicc	ite	pern	nissi	ble	but	dat ma	ırgin	al		
	BARLEY (Hordeum vulgare)			Р							,						14,000 seed per pound
	alone	3 bu. (144 lbs.)	3.3 lb														Winterhardy, Use on productive soils.
	in mixture	1/2 bu. (24 lbs.)	0.6 lb.		J	F	М	Α	м	J	J	А	S	0	N	D	
	LESPEDEZA, ANNUAL (Lespedeza striata)			Р													
	alone	40 lbs.	0.9 lb.														200,000 seed per pound. May volunteer for several years.
ı	in mixtures LOVEGRASS, WEEPING	10 lbs.	0.2 lb.		J	F	М	Α	М	J	J	Α	S	0	N	D	Use inoculant EL.
	(Eragrostis curvula)			Р													
	alone	4 lbs.	0.1 lb.														1,500,000 seed per pound. May last for several years. Mix
	in mixtures	2 lbs.	0.05 lb.		J	F	М	Α	м	J	J	Α	S	0	N	D	with Sericea lespedeza.
	MILLETT, BROWNTOP (Panicum fasciculatum)			Р				-									
	alone	40 lbs.	0.9 lb.														137,000 seed per pound. Quick dense cover. Will provide too
	in mixtures	10 lbs.	0.2 lb.		J	F	М	A	м	J	J	A	S	0	N	D	much competition in mixtures if seeded at high rates.
	MILLET, PEARL (Pennesetum glaucum)			Р													88,000 seed per pound. Quick dense cover. May reach 5 feet
	alone	50 lbs.	1.1 lb.		J	F	М	A	м	J	J	A	S	0	N	D	in height. Not recommended for mixtures.
	OATS (Avena sativa)			Р											•		13,000 seed per pound. Use on productive soils. Not as
	alone in mixtures	4 bu. (128 lbs.) 1 bu. (32 lbs.)	2.9 lb. 0.7 lb.		J	F	М		м	J	J		S		N		winterhardy as rye or barley.
	RYE	(32 105.)		P	J	Г	IVI	A	I M	)	٦		3		IN		40,000 1
	(Secale cereale) alone	3 bu.	3.9 lb.	P													18,000 seed per pound. Quick cover. Drought tolerant and winterhardy
	in mixtures	(168 lbs.) 1/2 bu. (28 lbs.)	0.6 lb.			F	м	Δ	   <sub>M</sub>	.I		Δ	S	0	N	ם	
ı	RYEGRASS, ANNUAL (Lolium temulentum)	(20 103.)		Р							Ť		_				
	alone	40 lbs.	0.9 lb.	·													227,000 seed per pound. Dense cover. Very competitive and isot to be used in mixtures.
	SUDANGRASS				J	F	М	A	M	J	J	A	S	0	N	D	
	(Sorghum sudanese)	60 lbs.	1.4 lb.	Р	J	F	м	Α	м	J	J	A	S	0	N	D	55,000 seed per pound. Good recommended for mixtures.
	WHEAT (Triticum aestivum) alone	3 bu.	4.1 lb.	Р									<u>-</u>		_	,	15,000 seed per pound. Winterhardy
	in mixtures	(180 lbs.) 1/2 bu. (30 lbs.)	0.7 lb.		   J	F	М	A	м	J	J	A	S	0	N	D	

Temporary cover crops are very competitive and will crown out perennials if seeded to heavily. / Reduce seeding rates by 50% when drilled.

/ PLS is an abbreviation for Pure Live Seed 1/ P represents the Southern Piedmont MLRA

DISTURBED AREA STABILIZATION (WITH TEMPORARY VEGETATION)

CONSTRUCTION SPECIFICATIONS

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

. Grade to permit the use of equipment for applying and anchoring mulch. 2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.

3. Loosen compact soil to a minimum depth of 3 inches.

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

. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion

3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re—used.

When mulch is used without seeding, mulch shall be applied to provide full coverage of . Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by

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

. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk". Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but

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

to press it into the soil leaving much of it in an erect position. Straw or hay

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.

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

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

SOD LAYOUT AND PREPARATION LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER, DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES. <u>BUTTING</u>: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

<u>DIRECTIONS FOR INITIAL MAINTENANCE</u>

ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD

Step 3. Mow when the sod is established -- in 2-3 weeks. Set the mower

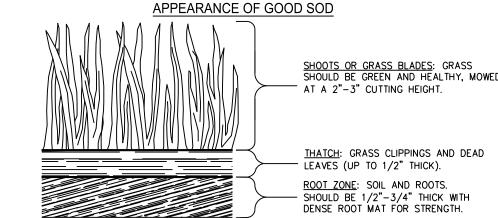


FIGURE 6-6.2 - SOD MAINTENANCE AND INSTALLATION

CONSTRUCTION SPECIFICATIONS INSTALLATION Soil Preparation

Bring soil surface to final grade. Clear surface of trash, woody debris, stones and clods larger than 1". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils. Topsoil properly applied will help guarantee a stand. Don't use topsoil recently treated with herbicides or soil sterilants. Mix fertilizer into soil surface. Fertilize based on soil tests or the Table 6-6.1 below.

> Table 6-6.1 Fertilizer Requirements for Soil Surface Application (lbs./sq.ft.) 10-10-10 1000 .025

Agricultural lime should be applied based on soil tests or at a rate of 1 to 2 tones per acre.

Lay sod with tight joints and in straight lines. Don't overlap joints. Stagger joints and do not stretch sod. (See Figure 6-6.2) On slopes steeper than 3:1, sod should be anchored with pins or other approved methods. nstalled sod should be rolled or tamped to provide good contact between sod and soil. Irrigate sod and soil to a depth of 4" immediately after installation. Sod should not be cut or spread in extremely wet or dry weather. Irrigation should be used to supplement rainfall for a minimum of 2-3 weeks.

Sod selected should be certified. Sod grown in the general area of the project is desirable. 1. Sod should be machine cut and contain 3/4" (+ or -1/4") of soil, not including shoots or

?. Sod should be cut to the desired size within + or -5%. Torn or uneven pads should be rejected. 3. Sod should be cut and installed within 36 hours of digging. 4. Avoid planting when subject to frost heave or hot weather, if irrigation is not available. 5. The sod type should be shown on the plans or installed according to Table 6-6.2. See Figure

6-4.1 for your Res	ource Area.								
	Table 6-6.2 Sod Planting Requirement								
	Grass	Varieties	Growing Season						
	Bermudagrass	Common Tifway Tifgreen Tiflawn	Warm Weather						
	Zoysia	Emerald Myer	Warm Weather						
	Tall Fescue	Kentucky	Cool Weather						

Re—sod areas where an adequate stand of sod is not obtained. New sod should be mowed sparingly. Grass height should not be cut less than 2"-3" or as specified (See figure 6-6.2). Apply one ton of agricultural lime as indicated by soil test or every 4-6 years. Fertilize grasses in accordance with the soil tests or Table 6-6.3.

Table 6-6.3 Fertilizer Requirements for Sod

Types Of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Dressing (Ibs./ac
Cool Season Grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50 –100 - 30
Warm Season Grasses	First Second Maintenance	6 –12–12 6 –12–12 10–10–10	1500 800 400	50- 10 50- 10 30
· · · · · · · · · · · · · · · · · · ·			<u> </u>	

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

1. Use conventional planting methods where possible. 2. When mixed plantings are done during marginal planting periods, companion crops shall be used. 3. No—till planting is effective when planting is done following a summer or winter annual cover crop. Sericea lespedeza planted no—till into stands of rye is an excellent procedure. 4. Block sod provides immediate cover. It is especially effective in controlling erosion adjacent to

concrete flumes and other structures. Refer to Specification Ds4-Disturbed Area Stabilization (With 5. 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 erosion control.

7. Mowing should not be performed during the quail nesting season (May to September). 8. Wildlife plantings should be included in critical area plantings. Wildlife plantings Commercially available plants beneficial to wildlife species include the following:

grass, but they may die out after a few years.

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

Shrubs and Small Trees Bayberry, Bicolor Lespedeza, Crabapple, Dogwood, Huckleberry or Native Huckleberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac, Wax Myrtle, Wild Plum and Blackberry. Plant in patches without tall trees to develop stable shrub communities. All produce fruits used by many kinds of wildlife, except for lespedeza which produces seeds

used by quail and songbirds. <u>Grasses, Legumes, Vines and Temporary Cover</u> Bahiagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Lespedeza, Orchardgrass (for mountains), Browntop Millet (for temporary cover), and Provides herbaceous cover in clearings for a game bird brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with

CONSTRUCTION SPECIFICATIONS

PLANNING CONSIDERATIONS

<u>Grading and Shaping</u> Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment. When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

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

Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate otherwise. Graded areas require lime application. If lime is applied within six months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of Agriculture. Lime spread by conventional equipment shall be "ground limestone." Ground limestone is calcitic or dolomitic limestone ground so that 90 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will pass through a 50-mesh sieve and not less than 25 percent will pass

through a 100-mesh sieve. 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

Agricultural lime is generally not required where only trees are planted. Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species are listed in Table 6-5.1.

When hydraulic seeding equipment is used, the initial fertilizer shall be mixed with seed, inoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The inoculant, if needed, shall be mixed with the seed prior to being placed into the hydraulic seeder. The slurry mixture will be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within on hour after being placed in the hydroseeder. Finely ground limestone can be applied in the mulch slurry or in combination with the top

When conventional planting is to be done, lime and fertilizer shall be applied uniformly in one of the following ways: 1. Apply before land preparation so that it will be mixed with the soil during seedbed

> 2. Mix with the soil used to fill the holes, distribute in furrows. 3. Broadcast after steep surfaces are scarified, pitted or trenched. 4. A fertilizer pellet shall be placed at root depth in the closing hole beside each pine tree seedling.

Refer to the tables provided for approved species. Species not listed shall be approved by the <u>Bedding Material</u> State Resource Conservationalist of the Natural Resources Conservation Service before they are used Plants shall be selected on the basis of species characteristics, site and soil conditions, planned use and maintenance of the area; time of year of planting, method of planting; and the needs and Some perennial species are easily established and can be planted alone. Examples of these are

Common Bermuda, Tall Fescue, and Weeping Lovegrass. Other perennials, such as Bahia Grass and Sericea Lespedeza, are slow to become established and should be planted with another perennial species. The additional species will provide quick cover and ample soil protection until the target perennial species become established. For example, Common seeding combinations are 1) Weeping Lovegrass with Sericea Lespedeza (scarified) and 2) Tall Fescue with Sericea Lespedeza (unscarified). Plant selection may also include annual companion crops. Annual companion crops should be

used only when the perennial species are not planted during their optimum planting period. A common mixture in Brown Top Millet with Common Bermuda in mid-summer. Care should be taken in selecting companion crop species and seeding rates because annual crops will compete with perennial species for water, nutrients, and growing space. A high seeding rate of the companion crop may prevent the establishment of perennial species. Ryegrass shall not be used in any seeding mixtures containing perennial species due to

<u>Seed Quality</u> The term "pure live seed" is used to express the quality of seed and is not shown on the label.

its ability to out-compete desired species chosen for permanent perennial cover.

Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. nformation on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination; i.e., (PLS = % germination x % purity)

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

PLS = 56%The percent of PLS helps you determine the amount of seed you need. 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

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: Broadcast Plantings

1. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used. . Tillage may be done with any suitable equipment.

5. Tillage should be done on the contour where feasible. 4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to

provide two places 6 to 8 inches apart in which seed may lodge and germinate. Hydraulic seeding may also be used. Individual Plants 1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.

2. For nursery stock plants, holes shall be large enough to accommodate roots without crowding. 3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferable in August or September.

All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. The inoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the

A mixing medium recommended by the manufacturer shall be used to bond the inoculant to the

For hydraulic seeding, four times the amount of inoculant recommended by the manufacturer shall be All inoculated seed shall be protected from the sun and high temperatures and shall be planted the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

seed. For conventional seeding, use twice the amount of inoculant recommended by the manufacturer.

Mix the seed (inoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding Seeding will be done on a freshly prepared firmed seedbed. For broadcast planting, use cultipacker—seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a

No-till Seeding No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with

appropriate no—till seeding equipment. The seed must be uniformly distributed and planted at the proper depth. Individual Plants Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manne

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.

Mulching is required for all permanent vegetation applications. Mulch applied to seed areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegetation establishment enhancement, a erosion control effectiveness. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.

2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 lbs/arcre. Dry straw or dry hay shall be

applied (at the rate indicated above) after hydraulic seeding 3. 1000 lbs. of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper. 4. Sericea Lespedeza hay containing mature seed shall be applied at a rate of 3

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 appropriate for seed

6. When using temporary erosion control blankets or block sod, mulch is not require 7. Bituminous treated roving may be applied on planted areas, slopes, in ditches, or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must

meet Georgia Department of Transportation specifications. Wood Cellulose and wood pulp fibers shall not contain germination or growth inhibitir factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment or by hand. Mulch shall be applied to cover

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment. Anchor straw or hay mulch immediately after application by one of the following methods:

1. Hay or straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be 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 much 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 verified nontoxic through EPA 2021.0 testing. Refer to Tac-Tackifiers. 3. Rye or wheat can be included with Fall and Winter plantings to stabilize the mulch. T

shall be applied at a rate of 1/4 to 1/2 bushel per acre. 4. Plastic mesh or netting with mesh no larger than one inch by one inch may be neede to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Material Grain Straw 4"-6" Grass Hay Pine Needles 3"-5" Wood Waste

Irrigation will be applied at a rate that will not cause runoff.

Second Year Maintenance Fertilization

should not take place between May and September.

ornamental beds, around shrubs, and on bare areas on lawns.

Topdressing will be applied on all temporary and permanent (perennial) species planted alone or in mixtures with other species. Recommended rates of application are listed in Table 6-5.1.

Mulch is used as a bedding material to conserve moisture and control weeds in nurseries,

Second year fertilizer rates and maintenance fertilizer rates are listed in Table 6-5.1. 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 requirements, if desired.

<u>Use and Management</u> Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. Mow between November and March. Bermudagrass, Bahiagrass and Tall Fescue may be mowed as desired. Maintain at least 6 inche of top growth under any use and management. Moderate use of top growth is beneficial after Exclude traffic until the plants are well established. Because of the quail nesting season, mowin

FERTILIZER REQUIREMENTS

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs.ac.	50-100 lbs./ac. 1/ 2/  30
Cool season     grasses and     legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs/ac. 400 lbs.ac.	0-50 lbs./ac. 1/ 
3. Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs.ac 3/ 1300 lbs./ac. 3/ 1100 lbs./ac.	
4. Pine Seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
7. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./oc. 800 lbs./oc. 400 lbs./oc.	50-100 lbs./ac. 2/ 6/ 50-100 lbs./ac. 2/ 30 lbs./ac.
8. Warm season grasses and	First Second	6-12-12 0-10-10	1500 lbs./ac. 1000 lbs./ac.	50 lbs./ac. 6/

Apply in spring following seeding.

Apply in split applications when high rates are used. / Apply in 3 split applications. Apply when plants are pruned. Apply to grass species only.

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

PLANTS, PLANTING RATES, AND PLANTING DATES FOR PERMANENT COVER

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	SPECIES	BROADC	AST RATES	RESOURCE AREA	PLANTING DATES BY RESOURCE AREAS							SOUF	RCE	REMARKS			
		Rate Per	PLS Per		lin	es ir	ndico	ote p	oerm	e op issib	le b	ut r	març	inal	dat	es.)	
	BAHIA, PENSACOLA (Paspalum notatum)	Acre <sup>2</sup>	1000 SF		J	F	<u>M</u>	<u>A</u>	М	J	J	<u>A</u>	<u>s</u>	0	N	D	166,000 seed per pound. Low growing. Sod forming. Slow to establish. Plant with a compan-
	alone or with temporary cover with other	60 lbs. 30 lbs.	1.4 lb. 0.7 lb.	P C													ion crop. Will spread into bermuda pastures and lawns. Mix with Sericea lespedeza or weeping lovegrass.
L	Perennials  BAHIA, WILMINGTON (Paspalum notatum)			-	J	F	м	A	М	J	J	A	S	0	N	D	
	alone or with temporary cover	60 lbs.	1.4 lb.	M-L													Same as above.
	with other perennials	30 lbs.	0.7 lb.	Р		 F	м	_	М				 S				
	BERMUDA, COMMON (Cynodon dactylon) hulled seed								4		U		,		11		1,787,000 seed per pound.
	alone	10 lbs.	0.2 lb.	P													Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
-	perennials  BERMUDA, COMMON	6 lbs.	0.7 lb.	С	_												
	(Cynodon dactylon) Unhulled seed with temporary	10 lbs.	0.2 lb.	P													Plant with winter annuals
	cover	6 lbs.	0.1 lb.	С	_												Plant with Tall fescue
	perenials  BERMUDA SPRIGS (Cynodon dactylon)				J	F	м	A	М	J	J	A	S	0	N	D	A cubic foot contains
	Coostal, Common Midland, or Tift 44	40 cu. Ft.	0.9 cu. Ft. or gs 3' x 3'	M-L				<u>-</u>									approximately 650 sprigs. A bushel containes 1.25 cubic feet or approximately
	Coastal, Common or Tift 44			P C				<u>-</u>				ļ		ļ			800 sprigs. Same as above
-	Tift 78  CENTIPEDE			С	 J	F	 М	A	М	 J	J	A	 S	0	N	 D	Southern Coastal Plain Only.  Drought tolerant. Full sun or
	(Eremochloa ophiuroides)	Block s	od only	P C													partial shade. Effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until fully established. Do not
	CDOMANICATION																plat near postures. Winterhordy as for north as Athens and Atlanta.
	CROWNVETECH (Coronilla varia) with winter			M-L										ļ			100,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink, and white bloosoms spring
F	annuals or cool season grasses FESCUE, TALL	15 lbs.	0.3 lb.	Р	L												to late fall. Mix with 30 pounds of Tall fescue or 15 pounds of rye.
	(Festuca arunidnacea) alone	50 lbs.	1,1 lb,	M-L								ļ					227,000 seed per pound. Use alone only on better sites. Not for droughty soils. Mix with perennial lespedezas or
	with other perennials	30 lbs.	0.7 lb.	P										 			Crownvetch. Apply topdressing in spring following fall plantings. Not for heavy use areas or athletic fields.
	KUDZU (Pueraria thumbergiana)				J	F	M	A	M	J	J	A	S	0	N	D	Rapid and vigorous growth.
	plants or crowns	3' -	7' apart	ALL	_												Excellent in gully erosion control. Will climb. Good livestock forage.
	LESPEDEZA SERICEA (Lespedeza cuneata)			M-L													
	scarified	60 lbs.	1.4 lb.	P C						_::							350,000 seed per pound. Widely adapted. Low maintenance. Mix with Weeping lovegrass, Common
				M-L													bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on roadbanks. Inoculate seed
	unscarified	75 lbs.	1.7 lb.	P C													with EL inoculant  Mix with Tall Fescue or winter annuals.
			470 "	M-L	L												Cut when seed is mature, but before it shatters. Add
	seed-bearing hay	3 tons	138 lb.	P C										-			Tall fescue or winter annuals.
	LESPEDEZA Ambro virgata (Lespedeza virgata DC)																300,000 seed per pound. Height of growth is 18 to 24
	or Appalow (Lespedeza cuneata [Dumont] G. Don)																inches. Advantageous in urban areos. Spreading-type growth. New growth has bronze coloration. Mix with
	scorified	60 lbs.	1.4 lb.	M-L P C													weeping lovegrass, common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to
	unscarified	75 lbs.	1.7 lb.	M-L P	<u> </u>	F		A				ļ	s	_		D	develop solid stands.  Inoculate seed with EL  inoculant.
	LESPEDEZA, SHRUB (Lespedezo bicolor) (Lespedezo thumbergii)			M-L	J	_	М	A	M	J	J	A	3	_	N	U	Provide wildlife food and
	plants	3' >	x 3'	P C	J	F	M	_ A	M	J	J	A	S	- 0	_ N	D	cover.
	LOVECRASS, WEEPING (Eragrostis curvula)	1 n	01 =	M-L													1,500,000 seed per pound. Quick cover. Drought
	alone with other perennials	4 lbs. 2 lbs.	0.1 lb. 0.05 lb.	P C			<u> </u>										tolerant. Grows well with Sericea lespedeza on roadbanks.
	MAIDENCANE (Panicum hemitomon)																For very wet sites. May clog channels. Dig sprigs from
	sprigs	2' x 3' spac	cing ALL		 J	F	м		м	J	J	A	S	0	N	D	local sources. Use along river banks and shorelines.
	PANICGRASS, ATLANTIC COASTAL (Ponicum amorum vor. amorukum)	20 lbs.	0.5 lb.	Р													Grows well on coastal sand dunes, borrow areas, and grovel pits. Provides winter cover for wildlife. Mix with
ig	REED CANARY GRASS			С	J	F	М	A	М	J	J	A	s	0	N	D	Sericea lespedeza except
	(Phalaris arundinacea)	50 lbs.	1.1 lb.	M-L								   <u>-</u>		<u> </u>			Grows similar to Tall fescue.
1	with other perennials	30 lbs.	0.7 lb.	Р	J	F	м	A	М	J	J		S	0	N	D	
L	SUNFLOWER, 'AZTEC'	1			1	ı			. '							1	1

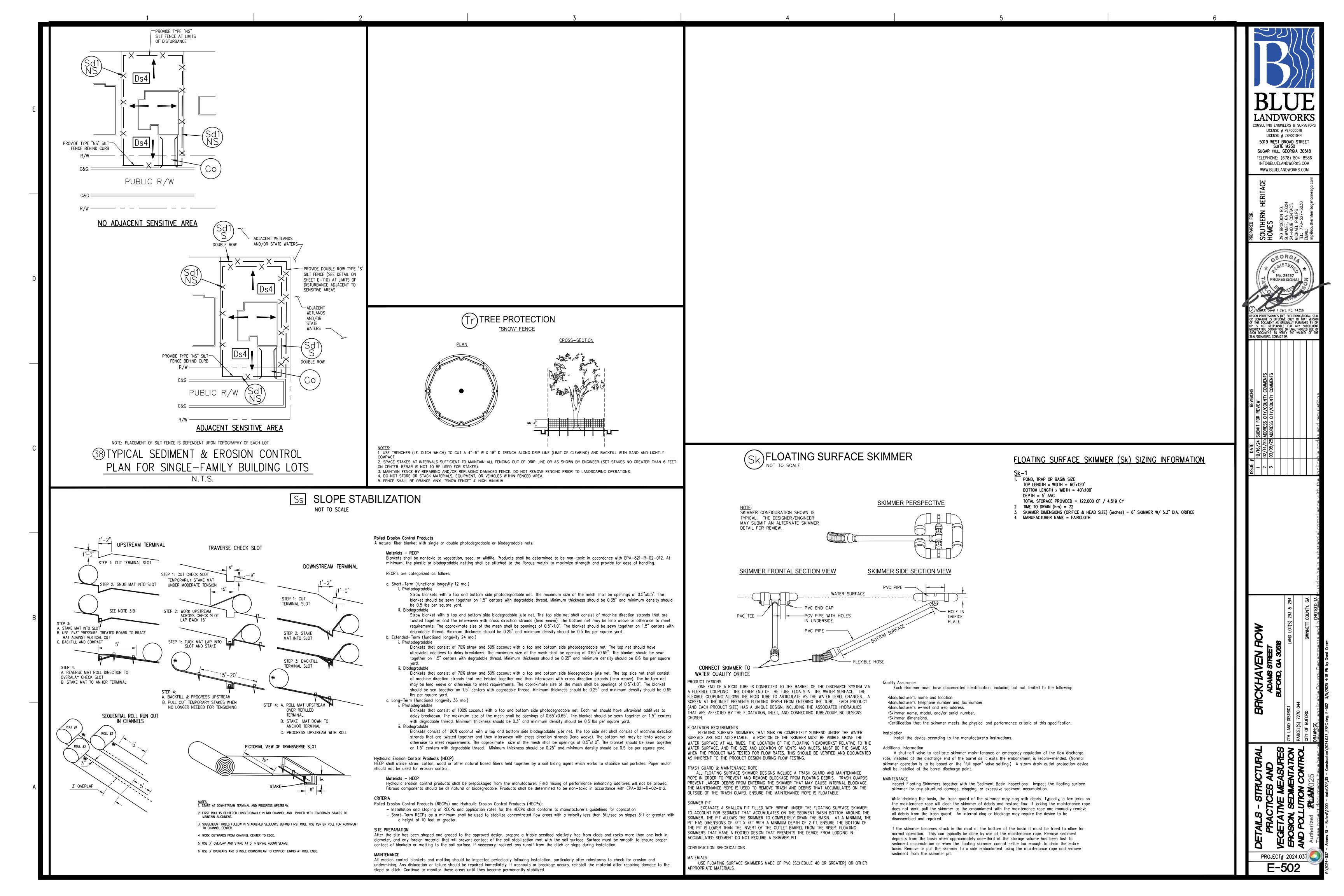
2/ PLS is an abbreviation for Pure Live Seed. Refer to Section V.E. of these specifications.

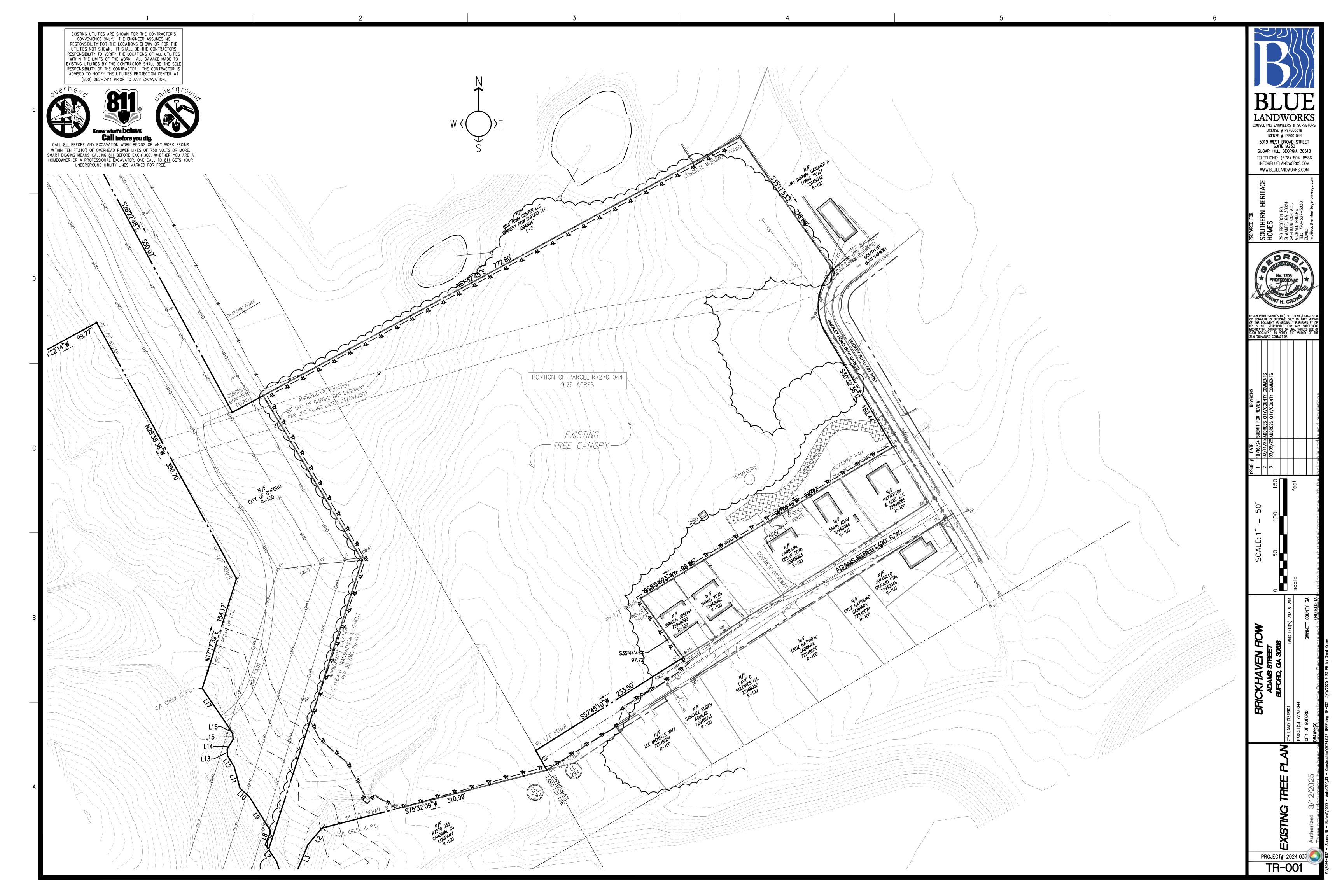
5/ C represents the Southern Coostal Plain; Sand Hills; Black Lands; and Atlantic Coost Flatwoods MLRAs

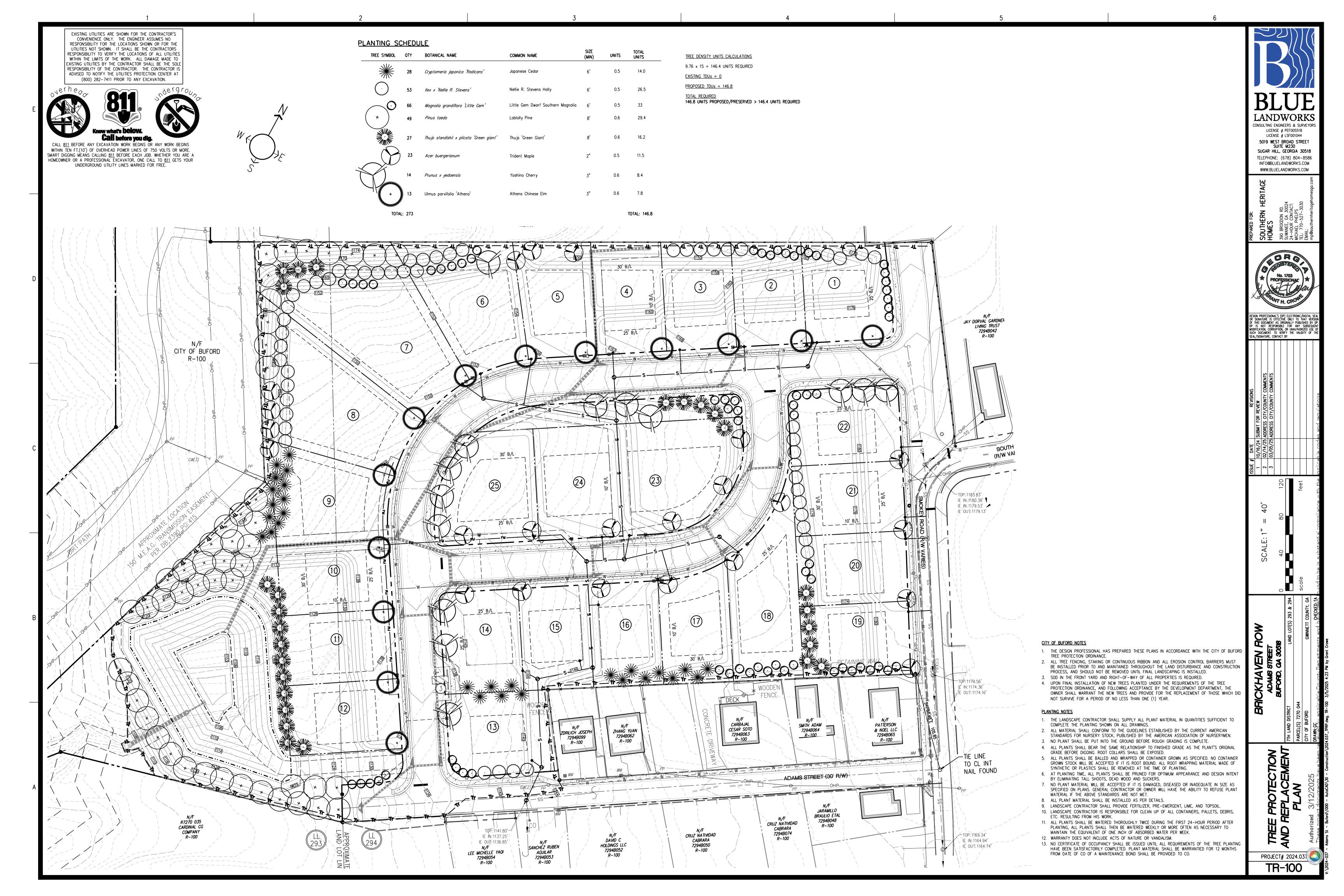
3/ M-L represents to Mountain; Blue Ridge; and Ridges and Valleys MLRAs 4/ P represents the Southern Piedmont MLRA

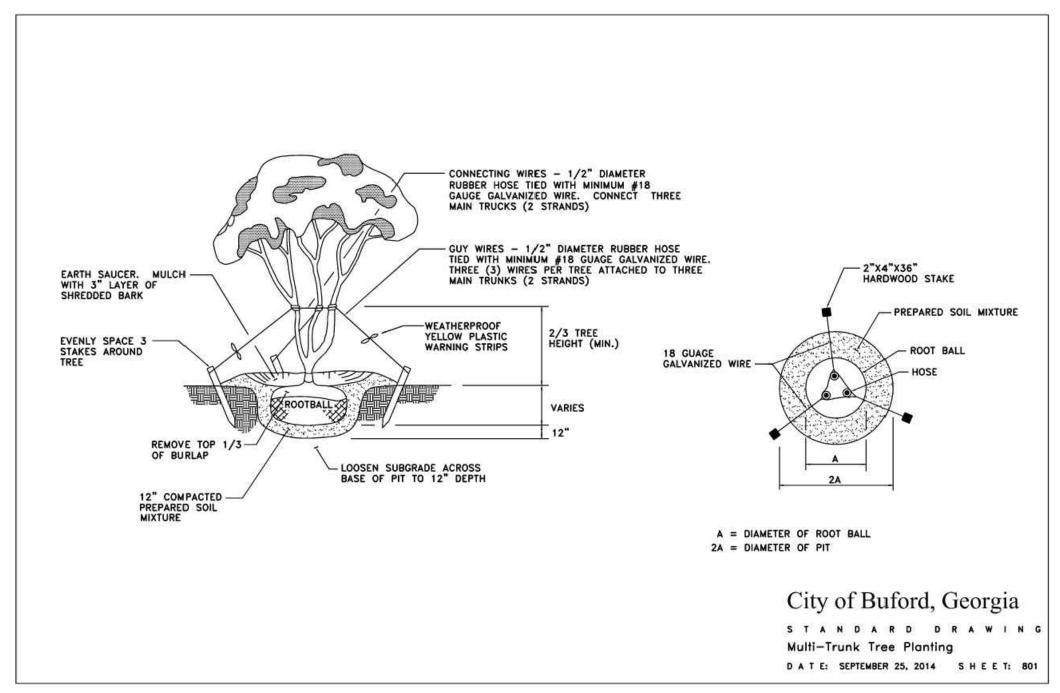
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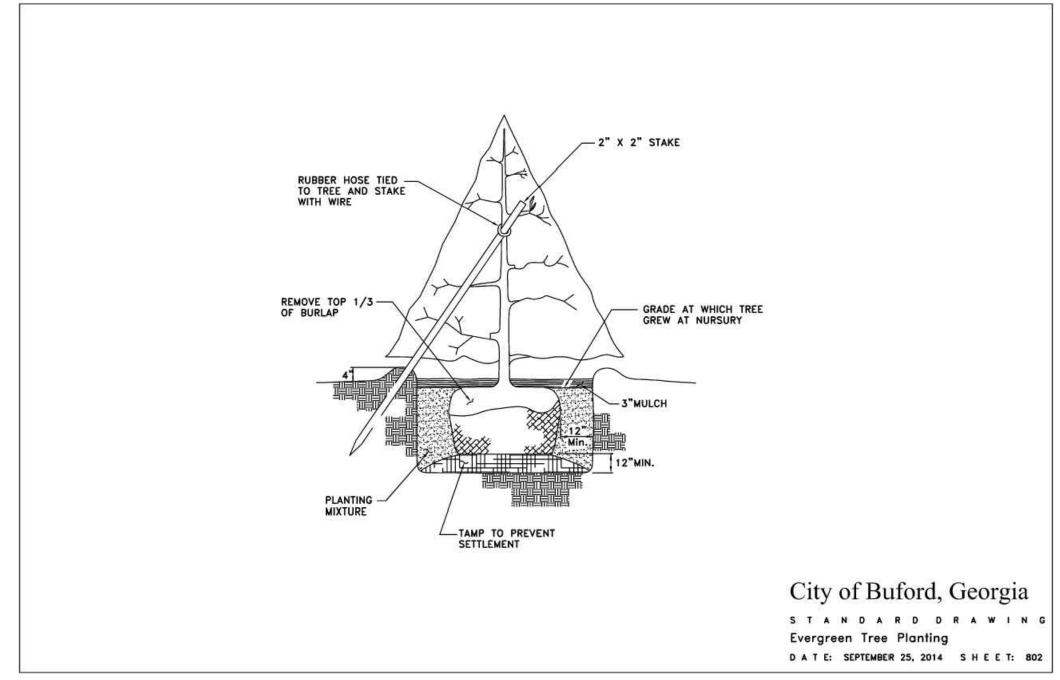
Ds4 DISTURBED AREA STABILIZATION (WITH SODDING)

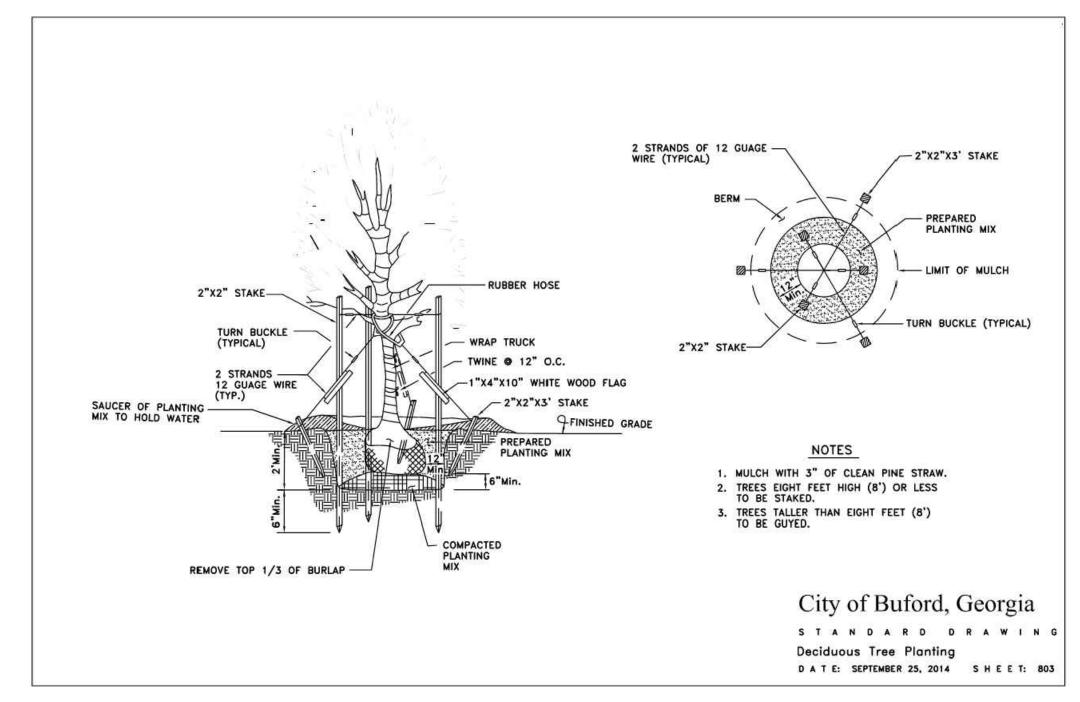


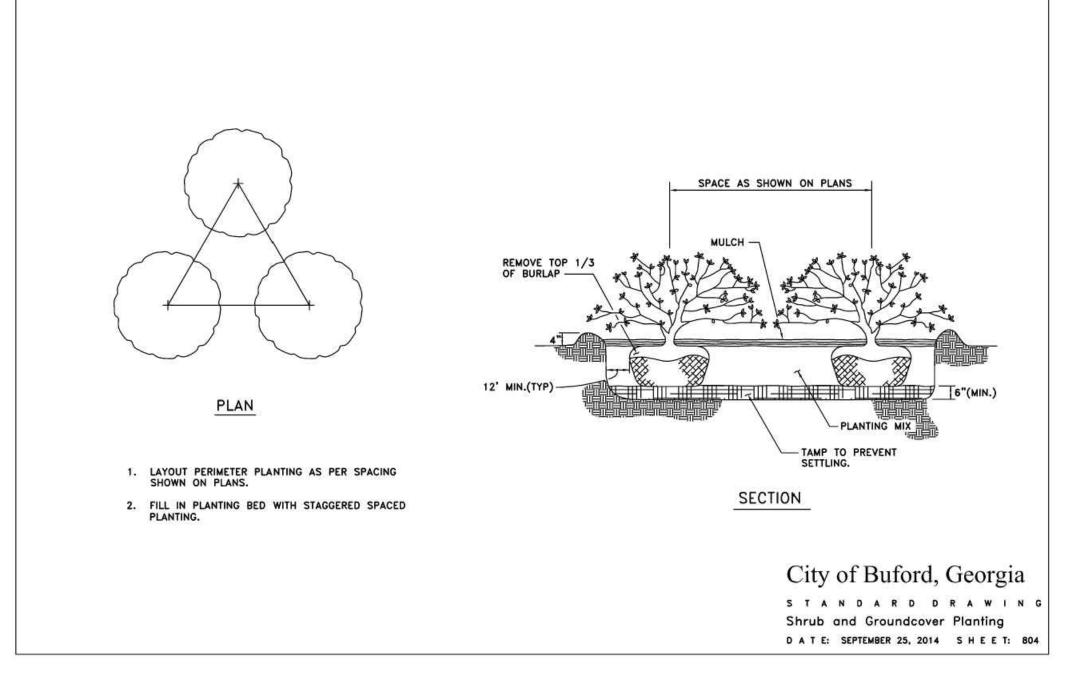








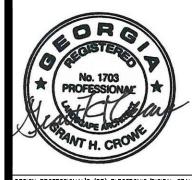




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1 10/16/24 SUBMIT FOR REVIEW
2 02/14/25 ADDRESS CITY/COUNTY COMMENTS
3 03/05/25 ADDRESS CITY/COUNTY COMMENTS
blicable codes and requilations

LAND LOT(S) 293 & 294
GWINNETT COUNTY, GA

SHICKHAVEN HO
ADAMS STREET
BUFORD, GA 305/8

7TH LAND DISTRICT
PARCEL(S) 7270 044
CITY OF BUFORD

REE PROTECTION ANI REPLACEMENT PLAN DETAILS

PROJECT# 2024.037