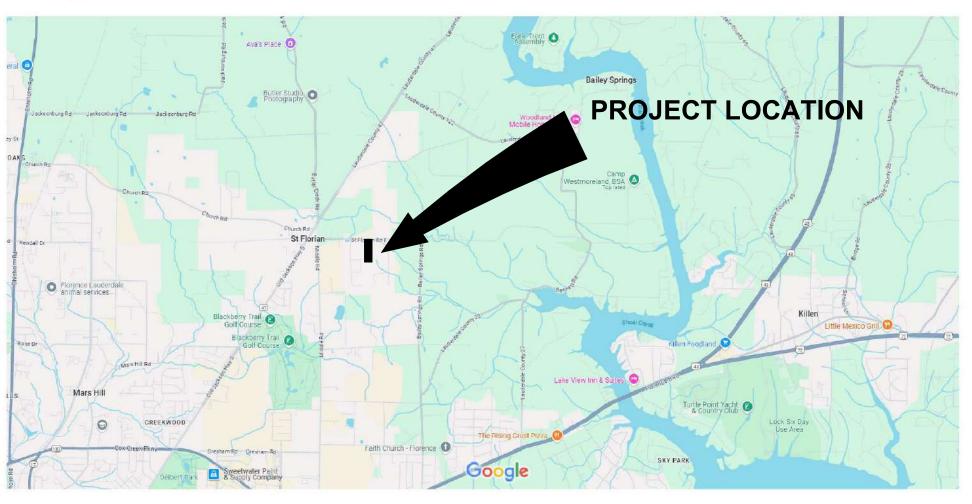
CIVIL CONSTRUCTION PLANS FOR BLUE RIDGE ESTATES

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FOR PERMITTING

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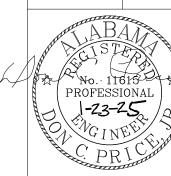
GENERAL NOTES:

1. NO CHANGES SHALL BE MADE TO THESE APPROVED PLANS WITHOUT THE ENGINEER OF RECORD BEING NOTIFIED BEFORE CHANGES ARE MADE, AND THE ENGINEER OF RECORD ACQUIRING APPROVAL FROM THE COUNTY ENGINEER.

2. ALL CONSTRUCTION MUST CONFORM TO THE SUBDIVISION REGULATIONS FOR LAUDERDALE COUNTY, AL, LATEST EDITION.

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UE RIDGE ESTATES
FOR
DEVELOPMENT, LLC

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A. THE CONTRACTOR SHALL VERIFY ALL PROPOSED AND EXISTING CONDITIONS INCLUDING UTILITIES (INVERTS. CONNECTIONS, MATERIALS, ETC.) AND DIMENSIONS WITHIN THE LIMITS OF WORK PRIOR TO THE START OF THE CONSTRUCTION.

B. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILED BUILDING INFORMATION

C. THE CONTRACTOR IS RESPONSIBLE FOR ALL NOTIFICATIONS AND LIAISONS WITH UTILITY COMPANIES DURING THE PROCESS OF LOCATING, RELOCATING, AND TYING INTO PUBLIC UTILITIES.

D. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE APPROVED LIMITS INDICATED ON

THE APPROVED PLANS.

A. ANY DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

B. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. THE ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC

C.IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

D. ALL CONSTRUCTION MUST CONFORM TO THE STANDARDS, SPECIFICATIONS, AND CODES OF THE GOVERNING

E. CONSTRUCTION SHALL MEET ALL CURRENT STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT. F. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

G. SUFFICIENT BARRICADES, LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS IN ACCORDANCE WITH GOVERNING ORDINANCES MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. SAID CONTROL DEVICES SHALL BE PER THE MANUAL OF TRAFFIC CONTROL DEVICES, M.U.T.C.D., CURRENT EDITION. AND SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.

H. TRAFFIC CONTROLS AND OTHER WARNING DEVICES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORK ON CITY, COUNTY, OR AL DEPARTMENT OF TRANSPORTATION ROADS. THEY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE CONCLUSION OF ALL WORK.

I. ALL WARNING DEVICES SHALL BE EITHER TYPE I BARRICADES OR DRUMS WITH WARNING LIGHTS ON EVERY OTHER DEVICE. THEY SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION, AND MUSCLE SHOALS STANDARDS FOR COLOR, SIZE, REFLECTIVITY, HEIGHT, AND PLACEMENT.

J. FIRE DEPARTMENT ACCESS SHALL BE MAINTAINED AT ALL TIMES.

K. CONTRACTOR SHALL SHORE AND BRACE ALL EARTH, FORMS, CONCRETE, STEEL, WOOD, AND MASONRY TO RESIST GRAVITY, EARTH, WIND, THERMAL, CONSTRUCTION, AND MISCELLANEOUS LOADS DURING CONSTRUCTION.

L. ON-SITE BURIAL OF DEBRIS IS PROHIBITED.

M.UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS TO THE ENGINEER. DESIGN DOCUMENTS SHALL NOT BE REPRODUCED AS SHOP DRAWINGS.

N. IN CASE OF UNFORESEEN CONSTRUCTION COMPLICATIONS OR DISCREPANCIES, THE CONTRACTOR IS TO

IMMEDIATELY NOTIFY THE ENGINEER IN WRITING. O. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

P. AS-BUILT DRAWINGS OF ROADWAYS, STORM DRAINS, SANITARY SEWER AND WATER LINES, FIELD APPROVAL BY THE ENGINEER, AND ALL APPLICABLE BONDS ARE REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE OWNER.

Q. CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL EXISTING BUILDING THROUGHOUT CONSTRUCTION UNLESS APPROVAL FOR SERVICE INTERRUPTION IS OBTAINED FROM THE OWNERS IN ADVANCE. R. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DIFFERENCES. NOTIFICATION SHALL BE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO

S. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.

T. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, WHETHER CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.

U. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL NECESSARY TEMPORARY WORKS FOR THE PROTECTION OF THE WORK AND THE PUBLIC, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

V. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER. THE CONTRACTOR WILL INDEMNIFY THE OWNER & OWNER'S REPRESENTATIVE FROM LIABILITY AT THE SITE THROUGHOUT THE

CONSTRUCTION PROCESS. W. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY AND STATE BUILDING LAWS, ORDINANCES OR REGULATIONS RELATING TO BUILDING SIDEWALKS, STREETS, BLASTING, PUBLIC INFRASTRUCTURE, STORMWATER

REGULATIONS, ETC. X. THE CONTRACTOR IS TO CHECK AND VERIFY ALL MEASUREMENTS, LEVELS, ETC. BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK, AND IS TO BE RESPONSIBLE FOR THE SAME.

Y. CARE SHALL BE TAKEN TO PROTECT ANY UTILITIES, TREES, ETC. WHICH ARE TO REMAIN AND NOT TO BE DISTURBED BY THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO SUCH

DEMOLITION INFORMATION:

1. NOTIFICATIONS
A.THE CONTRACTOR SHALL NOTIFY THE OWNER AND CITY INSPECTOR(S) 24 HOURS PRIOR TO AND DEMOLITION OR CONSTRUCTION.

A.ONLY ITEMS SPECIFICALLY NOTED TO BE DEMOLISHED SHALL BE REMOVED FROM THE SITE. B.REMOVE EXISTING PAVED AREAS AS SHOWN INCLUDING DRIVEWAYS, SIDEWALKS, PARKING AREAS, SERVICE AREAS, EQUIPMENT PADS, AND ALL MISCELLANEOUS PAVING.

C. ALL DEBRIS RESULTING FROM DEMOLITION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REGULATIONS. BACKFILL ALL TRENCHES AND EXCAVATIONS RESULTING FROM DEMOLITION.

D. ALL DEMOLISHED MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.

A.PROTECT ALL EXISTING TREES NOTED "TO REMAIN" AND ALL ITEMS TO BE TURNED OVER TO THE OWNER DURING DEMOLITION. TAKE ALL NECESSARY PRECAUTIONS AND PROTECTIVE MEASURES. ANY EXISTING ITEMS TO BE TURNED OVER TO THE OWNER WHICH ARE DAMAGED DURING DEMOLITION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. TREES WHICH ARE DAMAGED WILL BE REPLACED OR REIMBURSED AT A RATE TO BE DETERMINED BY THE OWNER.

A.PRIOR TO REMOVING OR ABANDONING ANY UTILITY THE CONTRACTOR SHALL VERIFY THAT NO UPSTREAM SERVICE WILL BE TERMINATED. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY TERMINATION NOT SHOWN ON THE PLANS.

B.ALL ABANDONED WATER LINES, STORM SEWER PIPE, SANITARY SEWER PIPES, GAS LINES, OR ANY OTHER ABANDONED UNDERGROUND UTILITY SHALL BE ABANDONED IN PLACE UNLESS NOTED OTHERWISE.

SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:
A.WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY

FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON THE PLANS.

B.EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS.

C. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTH BASED

ON PROPOSED PIPE SLOPE. E.PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

EROSION AND SEDIMENT CONTROL INFORMATION:

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

B. PROVISIONS TO PREVENT EROSION OF SOIL FROM THE SITE SHALL BE AT A MINIMUM IN CONFORMANCE WITH THE REQUIREMENTS OF THE AL EROSION AND SEDIMENT CONTROL

HANDBOOKS. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. C. FAILURE TO INSTALL, OPERATE, OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED

CURRENT EDITION. D. 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

BACK TO THE STANDARDS SPECIFIED IN THE AL EROSION AND SEDIMENT CONTROL HANDBOOKS,

THE SEDIMENT SOURCE. E. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF

CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY F. THE CONSTRUCTION OF THE SITE WILL COMMENCE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN

G.CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY OR EXIT FROM THE SITE AND SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE AS CONDITIONS DEMAND, REPAIR, AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OFF SITE ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. ACCESS POINTS PROTECTED WITH A CONSTRUCTION EXIT SHALL BE OTHERWISE BARRICADED UNTIL THE SITE IS STABILIZED.

1. CURB RAMPS ALONG PUBLIC STREETS AND IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED BASED ON THE CITY STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS. 2.PRIVATE CURB RAMPS ON THE SITE (I.E. OUTSIDE PUBLIC STREET RIGHT-OF-WAY) SHALL CONFORM TO ADA STANDARDS AND SHALL HAVE A DETECTABLE WARNING SURFACE THAT IS FULL

WIDTH AND FULL DEPTH OF THE CURB RAMP, NOT INCLUDING FLARES. 3. ALL ACCESSIBLE ROUTES, GENERAL SITE AND BUILDING ELEMENTS, RAMPS, CURB RAMPS STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE

4. ANY COMPONENTS OF THE PROJECT SERVING MULTIFAMILY DWELLINGS IN BUILDINGS THAT HAVE 4 OR MORE UNITS PER DWELLING SHALL ALSO CONFORM TO THE FAIR HOUSING ACT (FHA), AND COMPLY WITH THE FAIR HOUSING ACT DESIGN MANUAL BY THE US DEPARTMENT OF HOUSING AND

URBAN DEVELOPMENT. 5.BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE ACCESSIBLE PEDESTRIAN ROUTES (PER ADA AND FHA) EXIST TO AND FROM EVERY DOOR AND ALONG SIDEWALKS, ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTES. IN NO CASE SHALL AN ACCESSIBLE RAMP SLOPE EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPE EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPE EXCEED 5.0 PERCENT. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0 PERCENT SLOPE IN ANY DIRECTION.

6. CONTRACTOR SHALL TAKE FIELD SLOPE MEASUREMENTS ON FINISHED SUBGRADE AND FORM BOARDS PRIOR TO PLACING PAVEMENT TO VERIFY THAT ADA SLOPE REQUIREMENTS ARE PROVIDED. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR ADA SLOPE COMPLIANCE ISSUES.

CONCRETE INFORMATION (SITE WORK ONLY):

3/4" - 540, 1/2" - 590, 3/8" - 610.

A. UNLESS OTHERWISE NOTED CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C150.

AGGREGATES SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C33 B. CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318-89). UNLESS NOTED CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3,500 P.S.I.

C. SLUMP SHALL BE 3" TO 5" FOR REGULAR MIX. LARGER SLUMP SHALL BE PERMITTED WITH WATER REDUCING ADMIXTURES AND WRITTEN CONSENT OF THE ENGINEER. D. THE RELATIONSHIP BETWEEN MAXIMUM AGGREGATE SIZE TO MINIMUM AMOUNT OF CEMENT IN CONCRETE PAVEMENT (LB. PER C.Y. OR MIX) SHALL BE AS FOLLOWS: 1" - 520,

CONCRETE CURING SHALL COMPLY WITH ACI 308. CURING PROCESS SHALL START IMMEDIATELY FOLLOWING INITIAL SET. CURING SHALL BE BY CURING COMPOUND.

B. CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH ACI 318-89 TABLE 4.1.1. NORMAL WEIGHT CONCRETE SLABS SHALL HAVE AIR CONTENT IN ACCORDANCE WITH ACI 302.IR-89 TABLE 5.2.7A.

C. HOT WEATHER CONCRETING SHALL COMPLY WITH ACI 305. NO CONCRETE ABOVE 90 DEGREES FAHRENHEIT SHALL BE POURED. LOWER CONCRETE TEMPERATURE BY COOLING WATER AND AGGREGATE. FORMS, STEEL, AND SUBGRADE SHALL BE SPRINKLED WITH COLD WATER. AFTER FINISHING CONCRETE USE LIGHT FOG SPRAY UNTIL CURING COMPOUND IS USED

D. COLD WEATHER CONCRETING SHALL COMPLY WITH ACI 306. SPECIAL MATERIAL PROCEDURES SHALL BE PROVIDED DURING PLACING AND CURING OF CONCRETE BELOW 40 DEGREES FAHRENHEIT.

CURING, HOT, AND COLD WEATHER CONCRETING PROCEDURES ARE ONLY GIVEN AS A GUIDE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREVENT CONCRETE DAMAGE AND CRACKS. DAMAGED OR CRACKED CONCRETE WILL NOT BE ACCEPTED.

REINFORCING STEEL INFORMATION (SITE WORK ONLY):

A. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 48" DIAMETER.

B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185, MINIMUM LAP SHALL BE 8". C. REINFORCING THAT IS WELDED SHALL BE WELDABLE TYPE AND CONFORM TO

PAVEMENT INFORMATION:

A. ALL MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION, AND WORKMANSHIP SHALL CONFORM TO THE AL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. B. SEE PAVEMENT DETAILS ON CONSTRUCTION DOCUMENTS FOR SPECIFIC DESIGN

INFORMATION AND REQUIREMENTS. C. ALL CURB AND GUTTER TO BE 24" AND CONSTRUCTED OF 3000 P.S.I. CONCRETE UNLESS

OTHERWISE NOTED.

A. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE DRAWINGS AND SPECIFICATIONS.

. ALL PAVEMENT MARKINGS SHALL CONFORM TO CURRENT MUTCD STANDARDS. ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE PAINT, UNLESS NOTED OTHERWISE. ALL PAVEMENT MARKINGS ON PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC, UNLESS NOTED OTHERWISE.

CLEARING AND GRUBBING:

1. DO NOT EXCEED CLEARING AND GRUBBING LIMITS OF CONSTRUCTION LINES

INDICATED ON THE PLANS. 2. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE SHALL NOT BE CROSSED BY

HEAVY EQUIPMENT OR USED FOR STORING HEAVY EQUIPMENT OR MATERIALS. 3. NO EQUIPMENT SHALL BE STORED UNDER THE DRIP LINE OF TREES TO REMAIN

4. DO NOT FALL ANY TREES OR PUSH PILES OF DEBRIS AGAINST ANY TREES TO REMAIN 5. REMOVE ALL STUMPS, ROCKS, ASPHALT & CONCRETE DEBRIS, ETC. AND DISPOSE OFF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS.

6. CONTACT ALL UTILITY AUTHORITIES WHO HAVE LINES WITHIN THE CLEARING AND GRUBBING LIMITS BEFORE STARTING WORK 7. ALL EROSION CONTROL SEDIMENT BARRIERS, SILT FENCES, AND TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO STARTING CLEARING AND GRUBBING.

8. AFTER STAKING IS COMPLETED, TREES WITHIN GRADING LIMITS TO BE SAVED WILL BE IDENTIFIED BY THE OWNER'S REPRESENTATIVE. FIELD CHANGES TO GRADING PLANS SHALL BE MADE FOR SMOOTH TRANSITION OF GRADES AROUND ALL TREES WHICH REQUITE TREE WELLS WITHIN THE GRADING LIMITS.

9. ALL CLEARING SHALL BE LIMITED TO AREAS TO BE GRADED WITHIN 15 CALENDAR

GRADING NOTES:

TESTS AS REQUIRED.

1. TOPSOIL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUT AROUND THESE TOPSOIL STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL

PREVENT THE LOSS OF TOPSOIL MATERIAL. 2. UNSUITABLE SOILS SHALL BE UNIFORMLY SPREAD ACROSS NON-STRUCTURAL FILL AREAS AND COVERED WITH TOPSOIL AND SEEDED.

3. FILL AREA SHALL BE PROOF-ROLLED WITH RUBBER-TIRED EQUIPMENT WITH A MINIMUM WEIGHT OF FIFTEEN TONS PRIOR TO BEGINNING FILL OPERATION. AREAS WHICH ARE SOFT OR UNSTABLE SHALL BE UNDERCUT UNTIL STABLE SOILS ARE FOUND. RE-COMPACTION OF THESE SOILS SHALL BE TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

4. CUT AREA SHALL BE PROOF-ROLLED AFTER FINAL SUBGRADE IS ACHIEVED IN THE SAME MANNER AS FILLED AREAS. SOFT OR UNSTABLE SOILS SHALL BE SCARIFIED TO A DEPTH OF 12" AND RE-COMPACTED TO 98% MAXIMUM DRY DENSITY AS PER ASTM D698 (STANDARD PROCTOR).

5. ALL GRADING SHALL BE COMPLETED TO THE LEVEL INDICATED BY THE SCOPE OF WORK LISTED IN THE BID DOCUMENTS.

6. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION. GRADING SHALL BE SEQUENCED SO THAT BASE STONE IS PLACED WITHIN 10 CALENDAR

DAYS PF ACHIEVING OPTIMUM SUBGRADE COMPACTION. 8. SOILS TESTING LABORATORY/ SOILS ENGINEER. CONTRACTOR WILL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ ENGINEER TO OBSERVE THIS WORK AND MAKE

9. HAVE EARTH BORROW FILL, AGGREGATE, AND TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED TESTING LABORATORY BEFORE MOVING IT TO THE JOB

10. CONTRACTOR SHALL OBSERVE PROOF-ROLLING OF AREAS WHERE BUILDING AND PAVING WILL BE LOCATED TO DETERMINE ADEQUACY OF SOIL COMPACTION AND IN-PLACE SOILS. OTHER AREAS WILL BE INSPECTED BY SOILS ENGINEER TO DETERMINE ADEQUACY IN THOSE AREAS. IF SOILS ARE NOT ADEQUATE TO BEAR WEIGHTS THAT WILL BE IMPOSED, TESTING LABORATORY WILL OBSERVE AND REPORT CORRECTIVE ACTION TAKEN.

11. TEST IN-PLACE SOIL AND FILLED AND COMPACTED AREAS. IF THESE ARE NOT ADEQUATE TO BEAR WEIGHTS IMPOSED, TESTING LABORATORY WILL ADVICE THE OWNER'S REPRESENTATIVE OF THEIR RECOMMENDATIONS. HE WILL DIRECT ANY CORRECTIVE MEASURES THAT ARE NECESSARY.

12. SOILS COMPACTION TESTING OF IN-PLACE AND FILLED AND COMPACTED AREAS WILL BE PERFORMED BY TESTING LABORATORY IN ACCORDANCE WITH THEIR REQUIREMENTS. 13. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES WILL BE PAID BY THE

14. APPLICABLE SPECIFICATIONS FOR COMPACTED FILL: THE FOLLOWING CURRENT AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) STANDARDS ARE HEREBY MADE PART OF THIS SPECIFICATION:

15. * D422-63, STANDARD METHOD OF PARTICLE SIZE ANALYSIS OF SOILS. 16. *D1140-54, METHOD OF TEST FOR AMOUNT OF MATERIAL IN SOILS FINER THAN NO.200

17. *D698, METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT 18. *D1557-78, STANDARD TEST METHODS FOR MOISTURE-DENSITY RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10 LB. (4.54-KG) RAMMER AND 18-INCH (457 MM)

19. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. 20. CONTRACTOR SHALL REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT PRIOR TO COMMENCING WITH GRADING OPERATIONS. WHERE CONFLICTS BETWEEN THE GRADING

NOTES AND GEOTECHNICAL REPORT EXIST, THE MORE STRINGENT REQUIREMENT

SHALL APPLY. **WATER INSTALLATION NOTES:**

1. ALL MATERIAL, INSTALLATION, TESTING AND SPECIFICATIONS SHALL BE IN REQUIREMENTS OF THE CITY OR COUNTY. CURRENT STANDARDS WHERE DISCREPANCIES, OMISSIONS OR MODIFICATIONS EXIST BETWEEN THE PLANS AND THE CITY OR COUNTY MINIMUM CONSTRUCTION SPECIFICATIONS, THE CITY OR COUNTY SPECIFICATIONS SHALL GOVERN.

2. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ALL INSTALLATIONS SHALL BE MADE IN SUCH A MANNER AS NOT TO INTERFERE WITH EXISTING OR FUTURE UTILITIES, DRAINAGE OR ROADWAY CONSTRUCTION. ALL PAVEMENT RESTORATION TO BE MADE IN IN ACCORDANCE WITH THE CITY, COUNTY, OR ALDOT SPECIFICATIONS, WHERE APPLICABLE.

TRENCHES SHALL BE DE-WATERED TO ENABLE PIPE AND APPURTENANCES TO BE INSTALLED FREE OF WATER. IF PIPE BED IS ROCK, EXCAVATE AN EXTRA 6" AND BACKFILL WITH 3/4" GRAVEL. CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY UNSUITABLE MATERIAL ENCOUNTERED AND REPLACE WITH SUITABLE

4. PVC SHALL BE LAID IN STRICT CONFORMANCE TO MANUFACTURING SPEC. BACKFILLING OF UTILITY TRENCHES WILL NOT BE ALLOWED UNTIL INSPECTED BY THE CITY INSPECTOR. ALL PIPE SHALL BE INSTALLED IN COMPLIANCE WITH OSHA TRENCH

AND EXCAVATION STANDARDS. 5. CONTRACTOR MUST GIVE MINIMUM (1) ONE WEEK PRIOR NOTIFICATION TO ALL WATER CUSTOMERS BEFORE RELOCATING SERVICE CONNECTIONS OR MAKE CONNECTIONS TO EXISTING SYSTEM. WORK SHALL BE COORDINATED WITH OWNER AND PERFORMED AT NIGHT DURING LOW DEMAND PERIODS IF REQUIRED.

THE CITY/COUNTY SHALL BE NOTIFIED BEFORE WORK BEGINS. 7. ALL WATER MAIN PIPE SHALL MEET THE FOLLOWING REQUIREMENTS: INTEGRAL BELL GASKET OR DOUBLE BELL GASKET TYPE. PIPE TO BE SDR-21 CLASS 200. ALL PIPE TO

BEAR THE NSF SEAL OF APPROVAL. 8. ALL WATER MAIN PIPE SHALL MEET OR EXCEED THE FOLLOWING PHYSICAL PROPERTIES TEST: LONG TERM TENSILE @ 73.4 DEG. F - 4000 PSI ASTM-D1598-67 QUICK TERM TENSILE @ 73.4 DEG. F - 8500 PSI ASTM-D1598-67 QUICK TERM COMPREHENSIVE STRENGTH @ 73.4 DEG. F - 9400 PSI AST-D695 QUICK TERM FLEX STRENGTH @ 73.4 DEG. F - 15000 PSI ASTM-D740-0 ALL RESINS USED IN MANUFACTURING OF PIPE TO BE IN ACCORDANCE WITH ASTM-D740-0.

9. ALL GATE VALVES SHALL BE M.J. TYPE NON-RISING STEM TYPE. 10. ALL TEES, 90 DEG. ELLS AND COUPLINGS SHALL BE M.J. TYPE

11. ALL VALVE BOXES SHALL BE CAST IRON.

12. A GATE VALVE WILL BE INSTALLED BETWEEN THE FIRE HYDRANT AND THE WATER

MAIN SO THAT THE FIRE HYDRANT MAY BE ISOLATED. 13. THE WATER LINE SHALL BE FLUSHED AND DISINFECTED IN ACCORDANCE WITH A.D.E.M. REGULATIONS. PRESSURE TESTING SHALL BE DONE IN SHALL BE DONE IN ACCORDANCE WITH WATER AUTHORITY'S CURRENT STANDARD WHICH WILL BE FURNISHED UPON REQUEST. A PRESSURE RECORDING OF THE PRESSURE TEST WILL

BE REQUIRED. 14. DETECTOR WIRE (NOT TAPE) SHALL BE INSTALLED ABOVE ALL REQUIRED WATER

MAINS AS SHOWN ON THE UTILITY DETAIL SHEETS. 15. ALL MATERIALS AND APPURTENANCES ARE TO BE APPROVED BY THE CITY/ COUNTY ENGINEER PRIOR TO CONSTRUCTION. THE WATER AUTHORITY SHALL BE NOTIFIED

BEFORE WORK BEGINS. 16. APPROVED BACKFLOW PREVENTERS SHALL BE INSTALLED ON ALL FIRE LINES LEADING TO FDC'S AS APPROVED BY WATER DEPT'S CONSTRUCTION SUPERINTENDENT OR ENGINEER.

TO PREVENT SETTLEMENT. 18. ALL BURIED FITTINGS SHALL BE COMPACT DUCTILE IRON MJ WITH RESTRAINING

17. ALL DUCTILE IRON PIPE AND FITTING SHALL BE CEMENT LINED UNLESS APPROVED OR

NOTED OTHERWISE. ALL TRENCHES TO BE COMPACTED PER THE STANDARD DETAILS

GENERAL NOTES:

1. THE OWNER AND ENGINEER MAKE NO WARRANTY FOR THE ACCURATE LOCATION OF UNDERGROUND UTILITIES. ALL PLAN LOCATIONS ARE BASED ON MARKINGS BY ALABAMA ONE CALL (1-800-292-8525) AND REFLECTS ONLY THE LINES PAINTED PRIOR TO SURVEYING. THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE WORK. LOCATIONS AND DEPTH WILL VARY AND ADDITIONAL UTILITIES MAY EXIST.

2. SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR SAFETY, MEANS, OR METHODS OF THE

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AGENCIES BEFORE WORK COMMENCES TO VERIFY THE TYPE, LOCATION, PROTECTION REQUIREMENTS, DEPTH OF ALL EXISTING UTILITIES, DRAINAGE FACILITIES, AND OTHER OBSTRUCTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH REPAIRING AND/OR REPLACING ANY SUCH ITEMS DAMAGED DURING CONSTRUCTION. 4. UTILITIES ON PLANS AND PROFILES ARE SHOWN IN APPROXIMATE LOCATIONS AND

MAYBE AT ASSUMED ELEVATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR

VERIFYING LOCATIONS OF EXISTING UTILITIES, OBSTRUCTIONS, AND DRAINAGE STRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION AND SATISFACTORY REPAIR OR REPLACEMENT OF DAMAGED FACILITIES. 5. CONTRACTOR SHALL LOCATE AND UNCOVER ALL POTENTIALLY CONFLICTING

UTILITIES BEFORE CONSTRUCTION GRADES OR DEPTHS OF CUT ARE FINALIZED AND

6. ELEVATIONS SHOWN ON THE PLANS IS THE FINISH GRADE ELEVATION. 7. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE TRAFFIC CONTROL AND SIGNAGE FOR THE DURATION OF THE PROJECT AS REQUIRED BY THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROI DEVICES - PART VI, AND/OR ALL OTHER APPLICABLE GUIDELINES OF THE ALDOT, COUNTY, CITY, OR ANY OTHER AUTHORITIES HAVING JURISDICTION OVER THE PROJECT AREAS.

8. CONTRACTOR SHALL MAINTAIN TRAFFIC FLOW TO RESIDENCIES AND BUSINESS WITH MINIMUM DISRUPTION OF ACCESS. ALL STREETS AND DRIVEWAYS SHALL BE OPEN CUT UNLESS NOTED OTHERWISE.

10. ALL ASPHALT AND AND CONCRETE PAVING REMOVED AND REPLACED SHALL BE NEAT 11. ALL OPEN CUT TRAFFIC WAYS (ROADS, PARKING LOTS, DRIVES, ETC.) AND ALL ARE AS LYING WITHIN PRISM OF TRAFFIC WAYS, SHALL HAVE CRUSHED STONE BACKFILL COMPACTED WITH VIBRATORY COMPACTOR MAX 6" LIFTS AND COMPACTED TO MINIMUM 98%-100% STANDARD PROCTOR DENSITY TO PREVENT SETTLEMENT FOR ITS ENTIRE TRENCH HEIGHT AND WIDTH, COMPACTED "PUG-MIX" SHALL BE USED AND

MAINTAINED IN THE TOP 12" OF TRENCH HEIGHT AS REQUIRED TO PREVENT AGGREGATE LOSS DUE TO TRAFFIC. 12. ALL EXCAVATION BACKFILL SHALL BE COMPACTED TO MIN 95% STANDARD PROCTOR

DENSITY TO PREVENT SETTLEMENT. 13. ROCK SHALL BE UNDERCUT A MINIMUM OF 4" AND PIPE BEDDING IN STONE. NO SEPARATE PAY ITEM EXISTS FOR ROCK EXCAVATION. ALL ROCK REMOVAL SHALL BE CONSIDERED TO BE UNCLASSIFIED EXCAVATION AND SUBSIDIARY TO OTHER BID

14. ALL LANDSCAPED AREAS AFFECTED BY CONSTRUCTION SHALL BE REPLACED AND RESTORED IN-KIND (UNLESS SPECIFICALLY NOTED ON THE PLANS)

15. THE REMOVAL OF EXISTING HEADWALLS, FENCES (ALL TYPES), BRICK WALLS, ABANDONED UTILITIES AND OTHER MISCELLANEOUS ITEMS ARE INCLUDED IN THE PRICE BID FOR PVC PIPE UNLESS A PAY ITEM IS PROVIDED ON THE SUMMARY SHEET FOR REMOVAL 16. THE CONTRACTOR WILL CLEAN UP THE SITE DAILY. ALL PAPER, CUPS, CONSTRUCTION

17. CONTRACTOR WILL CLEAN MUD FROM PUBLIC ROADS DAILY IF REQUIRED AND WILL KEEP ALL DRAINAGE WAYS OPEN DURING CONSTRUCTION. 18. THE CONTRACTOR WILL PROVIDE ALL CONSTRUCTION STAKING 19. EROSION CONTROL WILL BE PROVIDED BY THE CONTRACTOR TO PREVENT PIPES

FROM RECEIVING SILT AND SEDIMENT, AND TO PREVENT SILT FROM LEAVING THE

DEBRIS, ETC. WILL BE DISPOSED OF PROPERLY.

20. TOP ELEVATIONS OF MANHOLES MAY NEED ADJUSTING IN THE FIELD TO FIT EXACT CONDITIONS. THE ENGINEER WILL APPROVE FINISHED ELEVATIONS PRIOR TO CONSTRUCTION OF THE TOP SECTION. 21. LEAVING OPEN PIPELINE TRENCHES OVER NIGHT WILL NOT BE ALLOWED. OPEN

EXCAVATION WILL BE BARRICADED AS DIRECTED BY THE ENGINEER. PROPER

WARNING . INCLUDING SAFETY FENCE AND WARNING LIGHTS WILL BE PLACED AROUND THE EXCAVATION. PAYMENT FOR BARRICADES WILL BE INCIDENTAL TO THE 22. ALL EXISTING CONCRETE STRUCTURE, FLAT WORK AND ASPHALT PAVING TO BE REMOVED WILL BE DISPOSED OF OFF SITE BY CONTRACTOR AT A LOCATION

APPROVED BY THE ENGINEER. 23. ALL ROADWAY BORES, CASING INSTALLATION, AND PIPE THRU CASING TO BE COMPLETED WITH FINAL ELEVATIONS AND GRADES ESTABLISHED PRIOR TO INSTALLATION OF ANY OTHER REQUIRED GRAVITY SEWER LINES OR MANHOLES.

24. THE UPPER 6 INCHES OF SUBGRADE ARE TO BE COMPACTED TO 100% STANDARD PROCTOR DENSITY. 25. THE CRUSHED AGGREGATE BASE LAYER MUST BE COMPACTED TO 100% STANDARD PROCTOR DENSITY

QUALIFIED TESTING AGENCY, ON A SUBGRADE, BASE, AND ASPHALT LAYERS EVERY 500 FT OF ROADWAY. 27. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION. CALL BEFORE YOU DIG 811, 48 HR NOTICE. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM LOCATION

26. THE CONTRACTOR IS REQUIRED TO FURNISH TEST REPORTS, PERFORMED BY A

OF EXISTING UTILITIES. CONTACT THE ENGINEER IF ADJUSTMENTS NEED TO BE MADE. SITE INFORMATION:

1. THE FOLLOWING ARE APPLICABLE TO ALL CIVIL DOCUMENTS:

A.WHERE A DETAIL SECTION, TYPICAL SECTION, OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED ON

B.EXISTING AND PROPOSED CONTOURS ARE AT ONE (1) FOOT INTERVALS. C. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTH BASED ON PROPOSED PIPE SLOPE. E.PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF

D. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND

STORM SEWER NOTES:

STRUCTURE UNLESS OTHERWISE NOTED.

1. REINFORCED CONCRETE PIPE SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED WITH BELL-AND-SPIGOT AND

GASKETED JOINTS WITH ASTM C 443 RUBBER GASKETS. 2. FILL HEIGHTS OVER 13' REQUIRE CLASS IV RCP STORM PIPE.

3. STORM INLETS SHALL BE PRECAST IN ACCORDANCE WITH CITY/COUNTY SPECIFICATIONS WHICH MEET OR EXCEED ASTM C 4. ALL MANHOLE FRAMES AND COVERS ARE TO BE PER CITY/COUNTY STANDARD DETAILS FOR DIMENSIONS AND MATERIALS AND AS BELOW IF NOT OTHERWISE INDICATED. FERROUS; 24-INCH (610-MM) ID BY 7- TO 9-INCH (175- TO 225-MM) RISER WITH 4-INCH- (102-MM-) MINIMUM WIDTH FLANGE AND 26-INCH- (660-MM-) DIAMETER COVER. INCLUDE INDENTED TOP DESIGN

WITH LETTERING CAST INTO COVER, USING WORDING EQUIVALENT TO "STORM SEWER." 5. MATERIAL: GRAY IRON ASTM A48 CLASS 30 UNLESS OTHERWISE INDICATED.

6. ALL HDPE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE SMOOTH INTERIOR PIPE. HDPE PIPE SHALL CONFORM TO ASTM D3350 WITH SOIL TIGHT JOINTS.

ALL HDPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND AASHTO SECTION 30. 8. CONTRACTOR TO PROVIDE AND INSTALL MANUFACTURER RECOMMENDED FITTINGS ON RCP CONNECTIONS TO HDPE

STRUCTURES. 9. REFER TO PIPE CHART FOR CASTING TYPES. INSTALL REDUCERS AS NECESSARY PER MANUFACTURER'S SPECIFICATIONS TO ACCOMMODATE LARGER INLET SIZES. 10. FOLLOW CONSTRUCTION PLANS AND MANUFACTURER DETAILS, SPECIFICATIONS, AND INSTALLATION INSTRUCTION AS

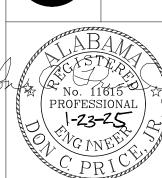
11. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STORM SEWER PIPE, STRUCTURES, WATER QUALITY STRUCTURES, AND DETENTION STRUCTURES FOR ENGINEER AND OWNER APPROVAL PRIOR TO ORDERING MATERIALS.

INCLUDED WITHIN THE PLANS AND PROVIDED BY MANUFACTURER FOR THE INSTALLATION OF WATER QUALITY AND

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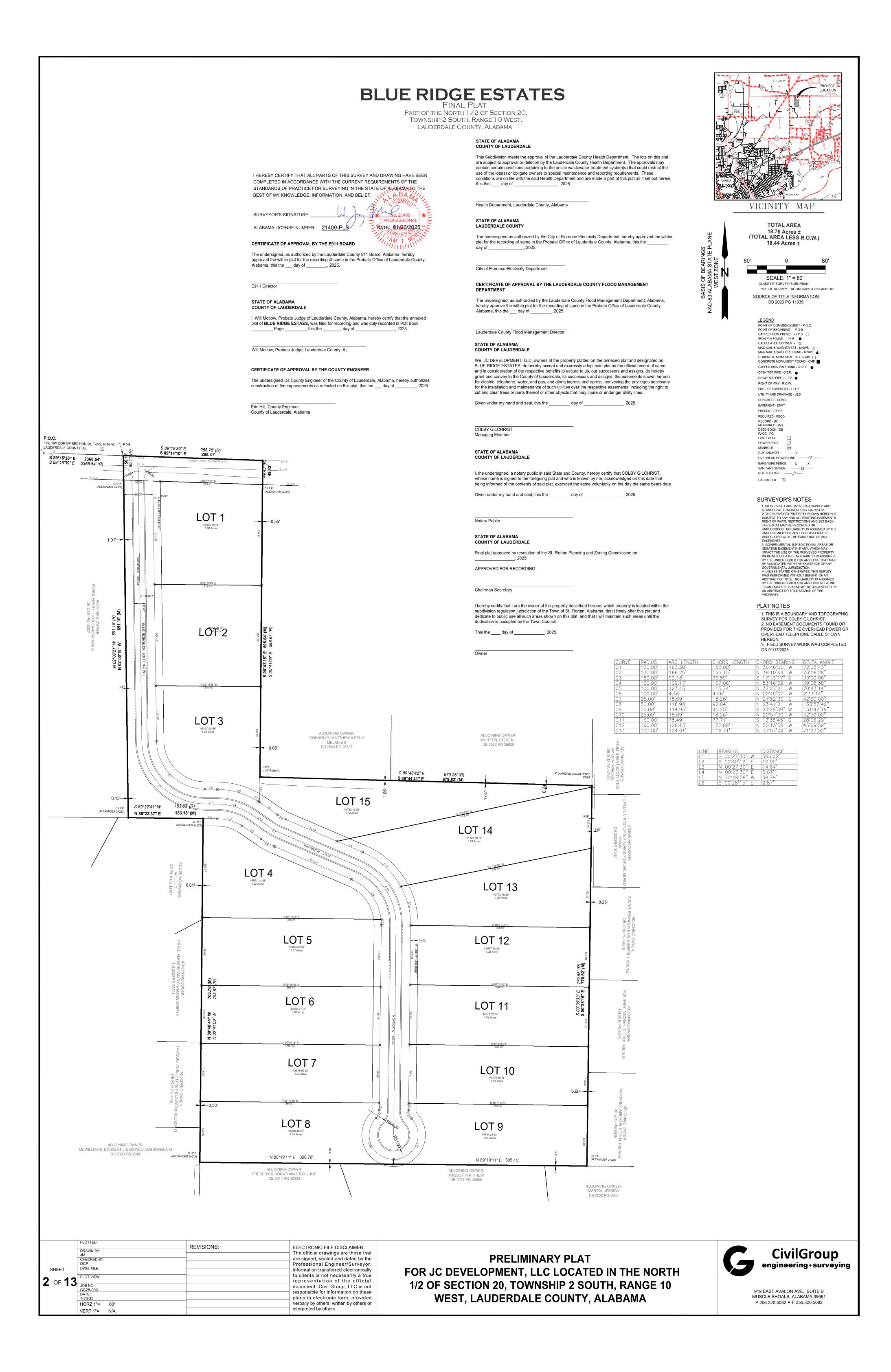
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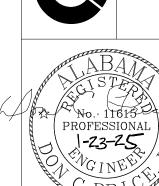
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SHEET of **13**









FOR JC DEVELOPMENT, LLC FLORENCE AL. TYPICAL SECTION BLUE RIDGE ESTATES

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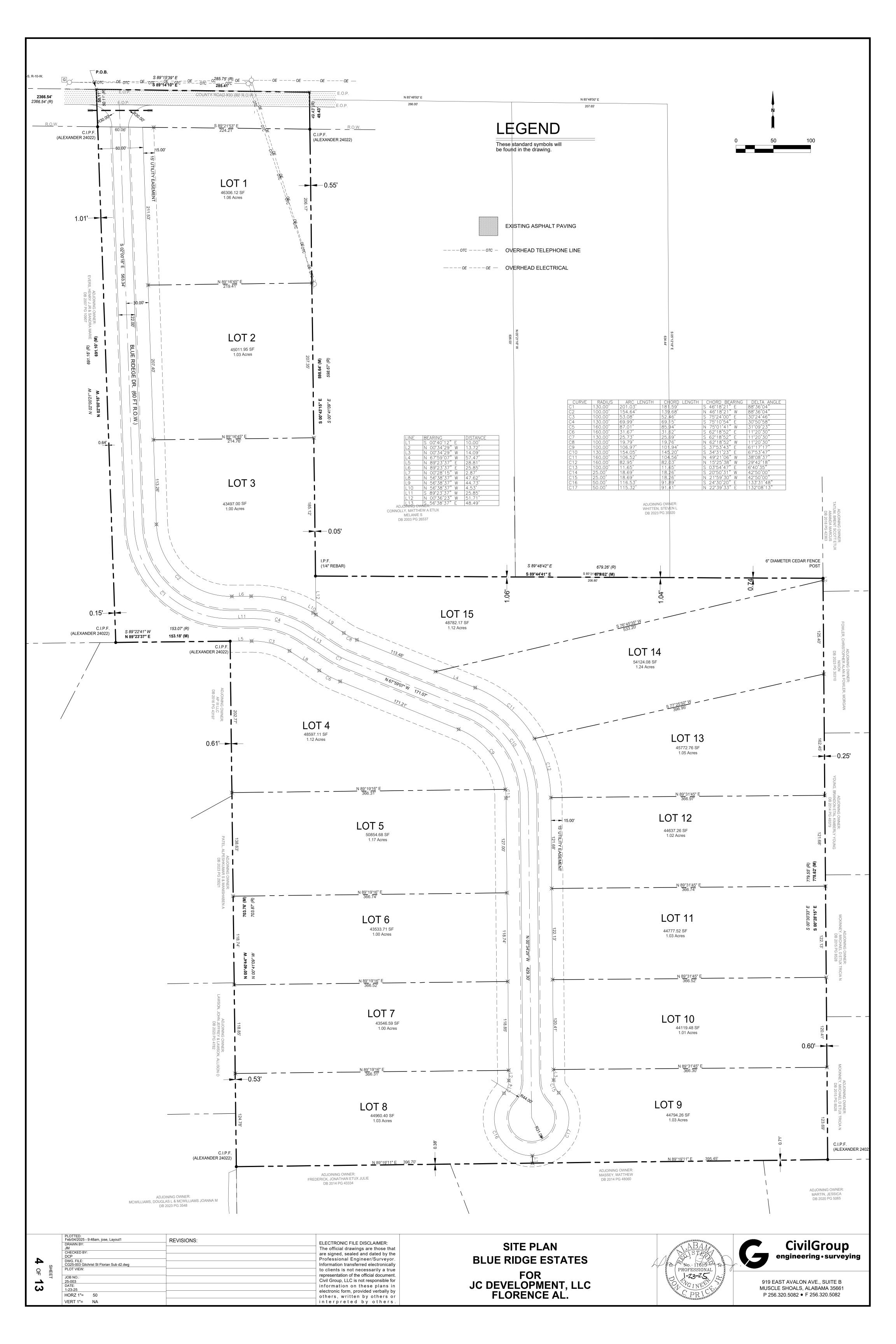
2.00% TYPICAL SECTION MAIN ENTRANCE ROAD 1 REQD. 424A-340 SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 1/2" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE A/B (APPROX. 100 LBS/SY)

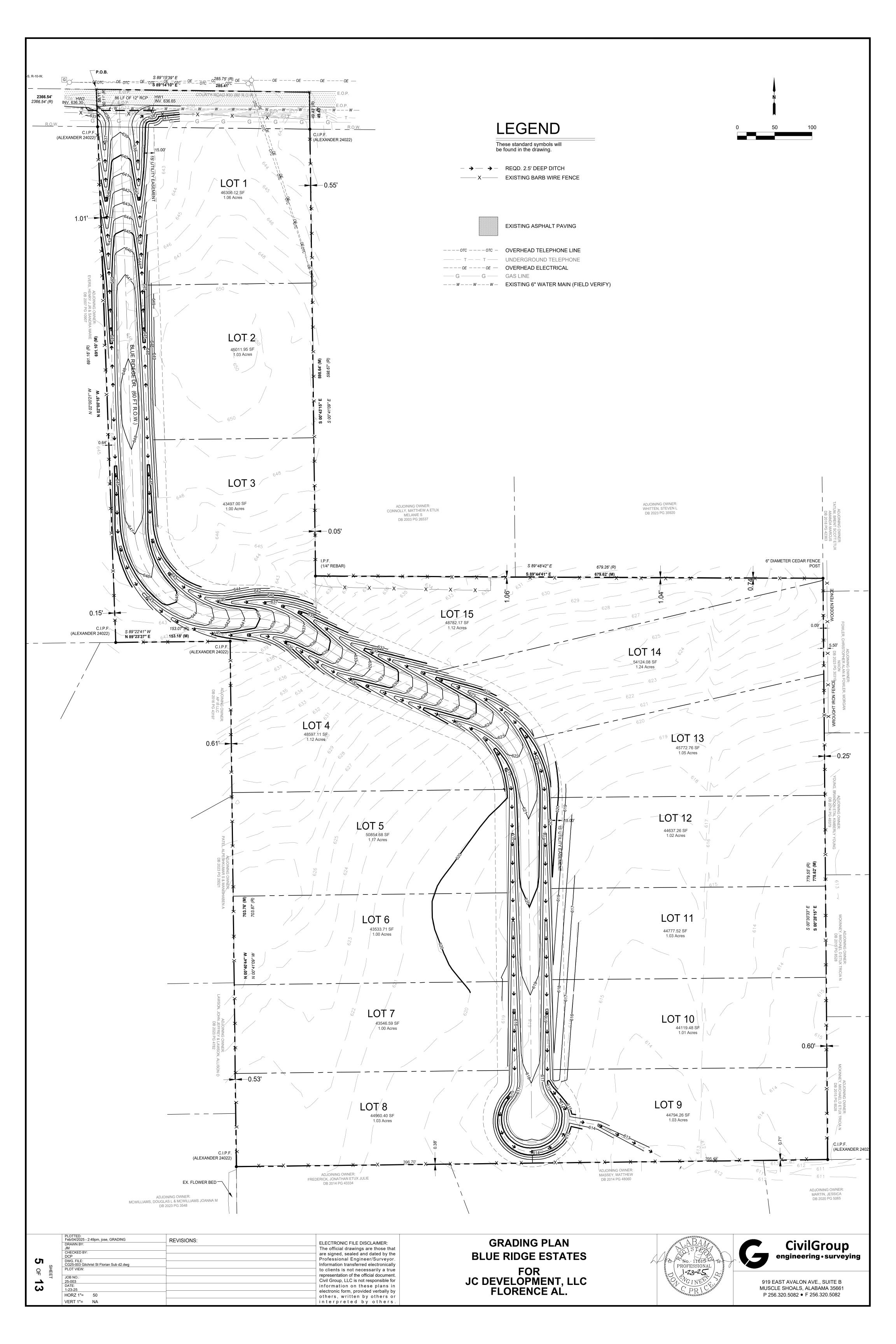
2 REQD. 424B-635 SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER, 1" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE A/B (APPROX. 200 LBS/SY)

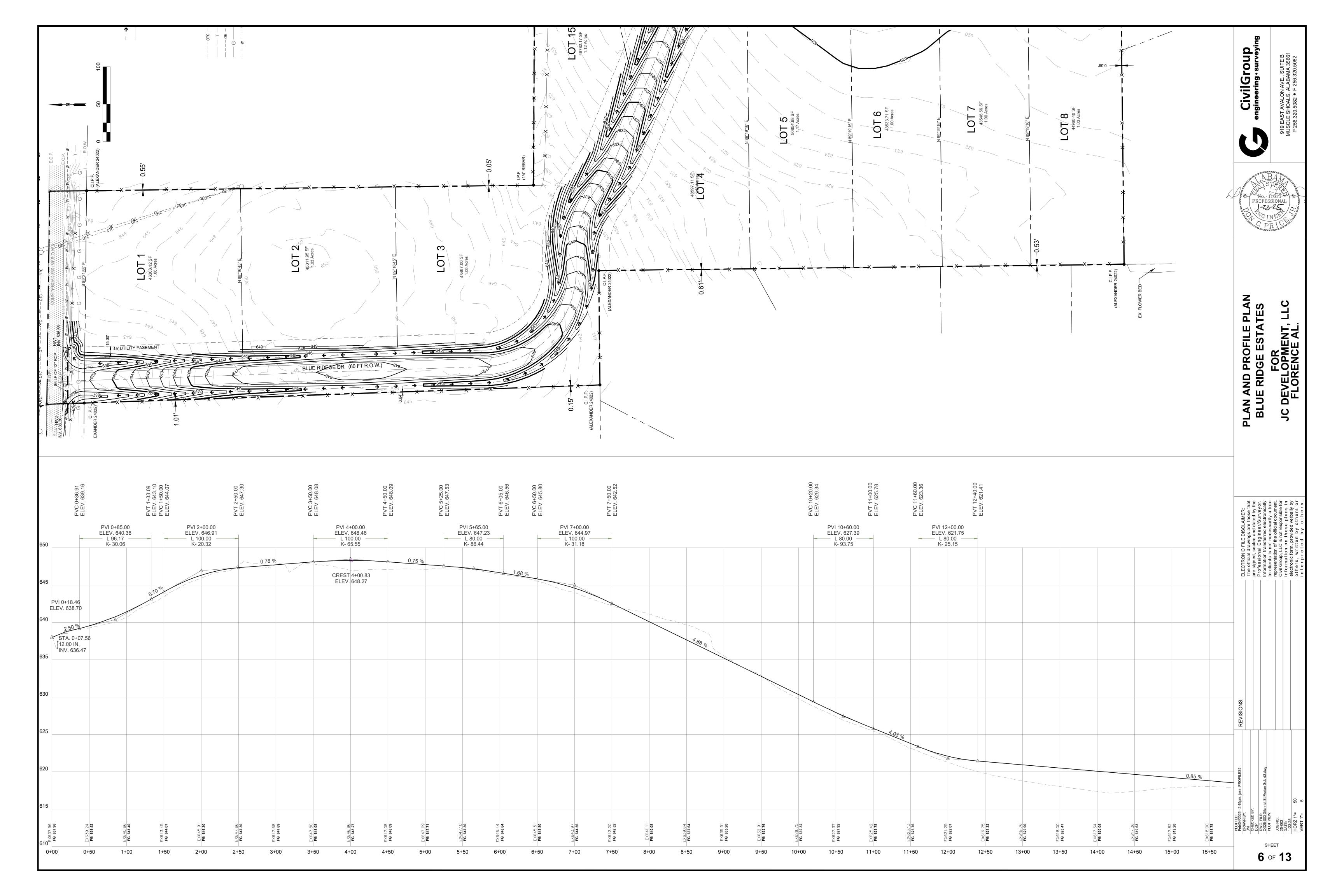
3 REQD. 301A-008 CRUSHED AGGREGATE BASE COURSE, TYPE B, PLANT MIXED, 6" COMPACTED THICKNESS

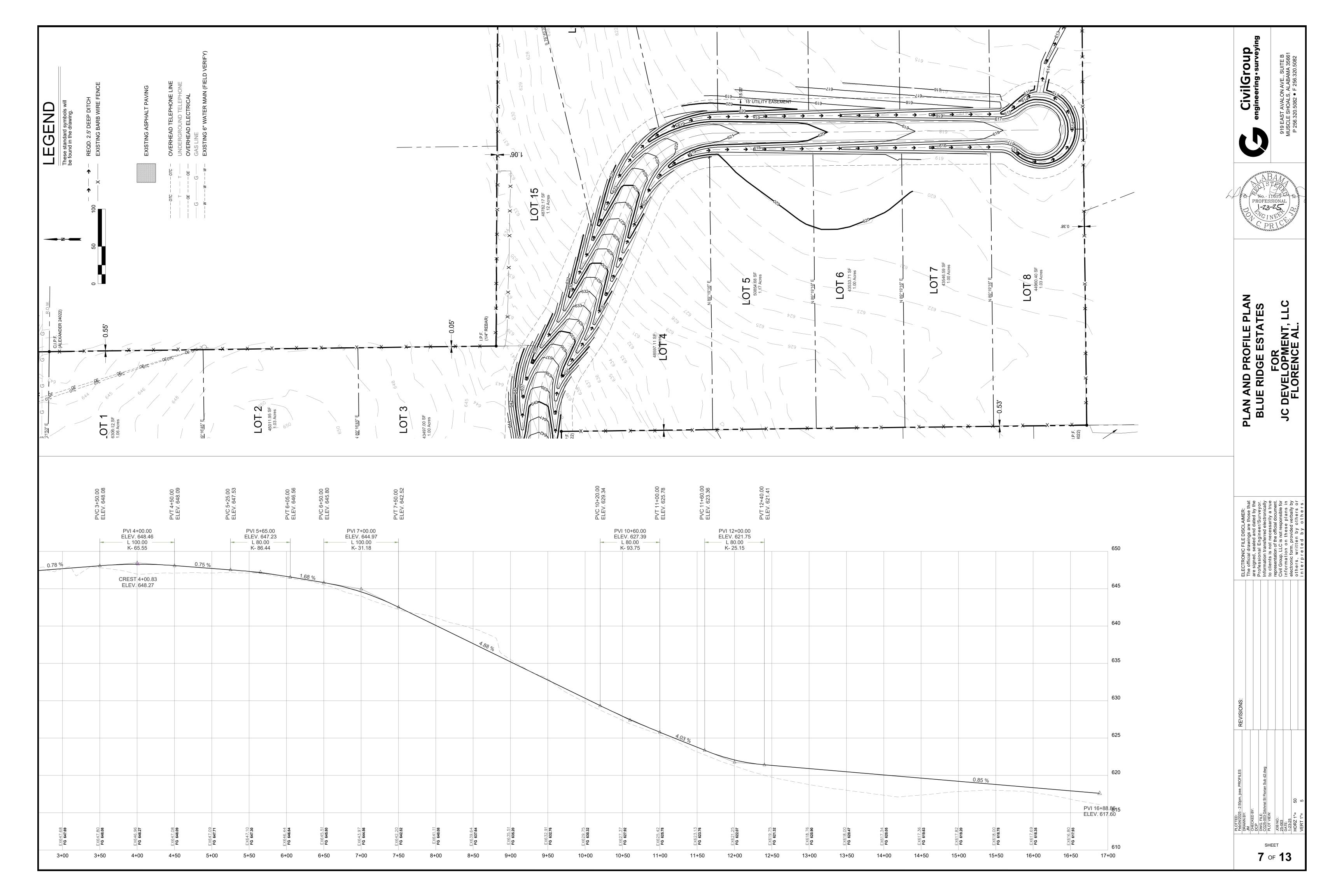
4 REQD. 650B-000 TOPSOIL FROM STOCKPILES (4IN. MIN. THICKNESS) APPROVED BORROW MATERIAL

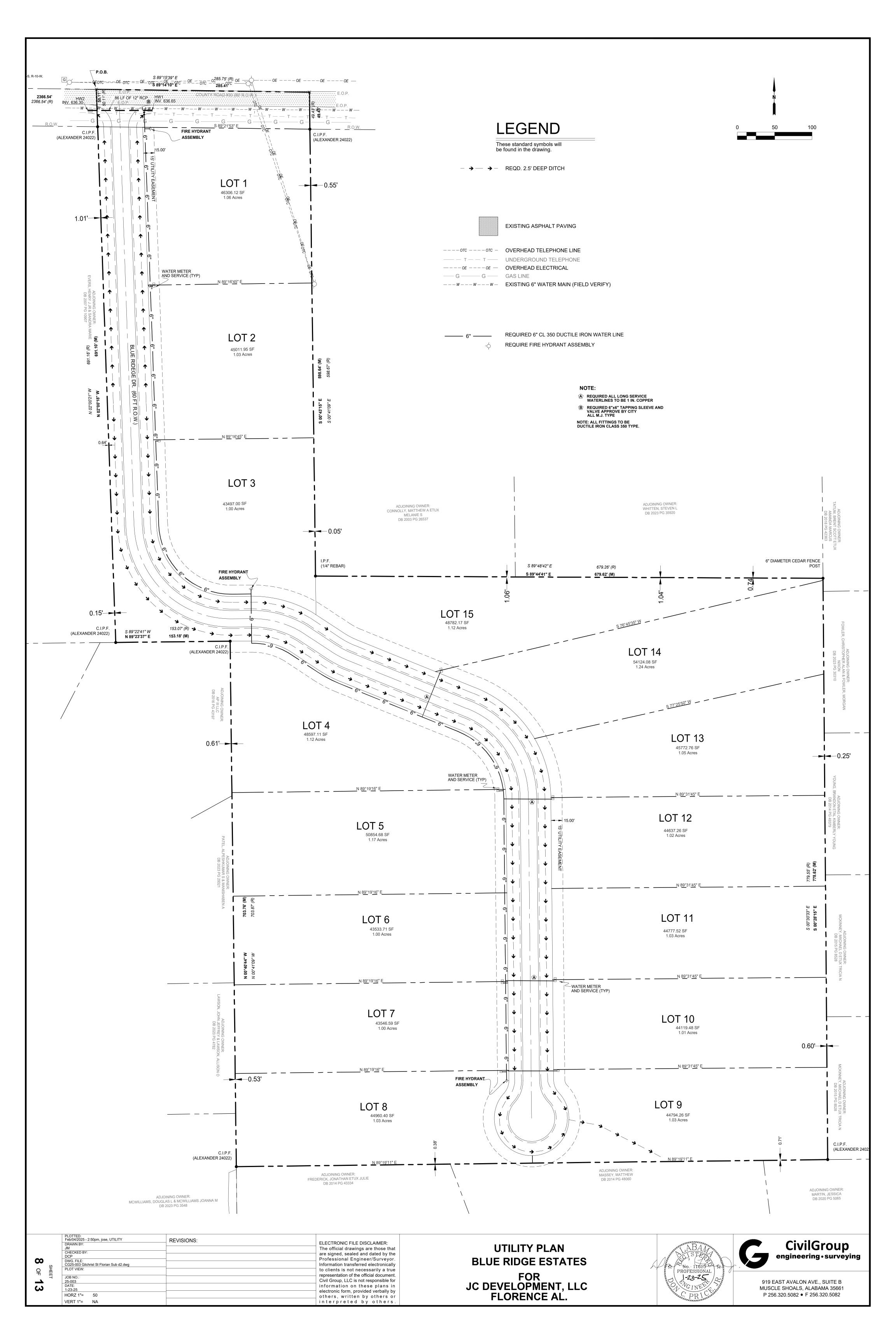
ROADBED PROCESSING

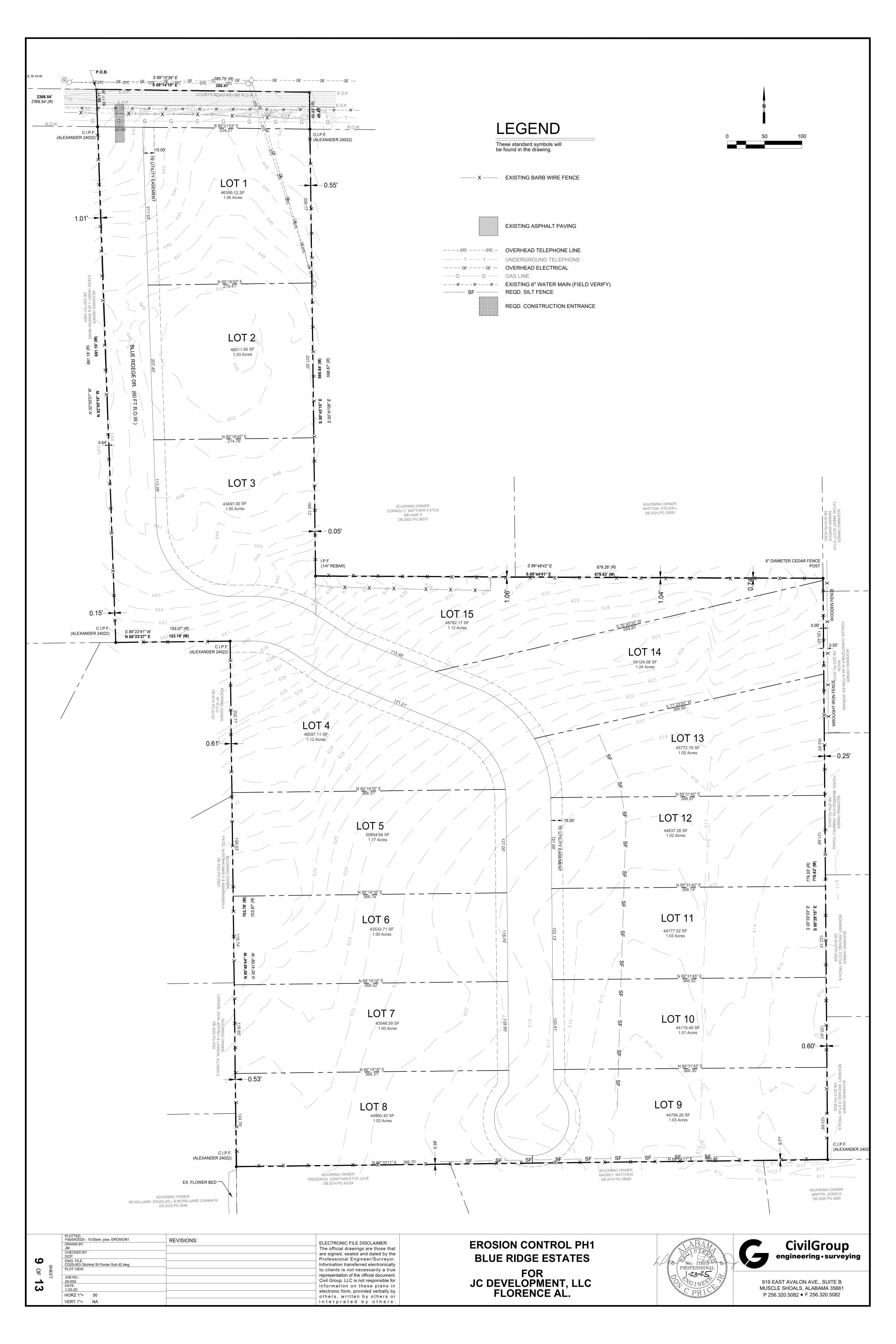


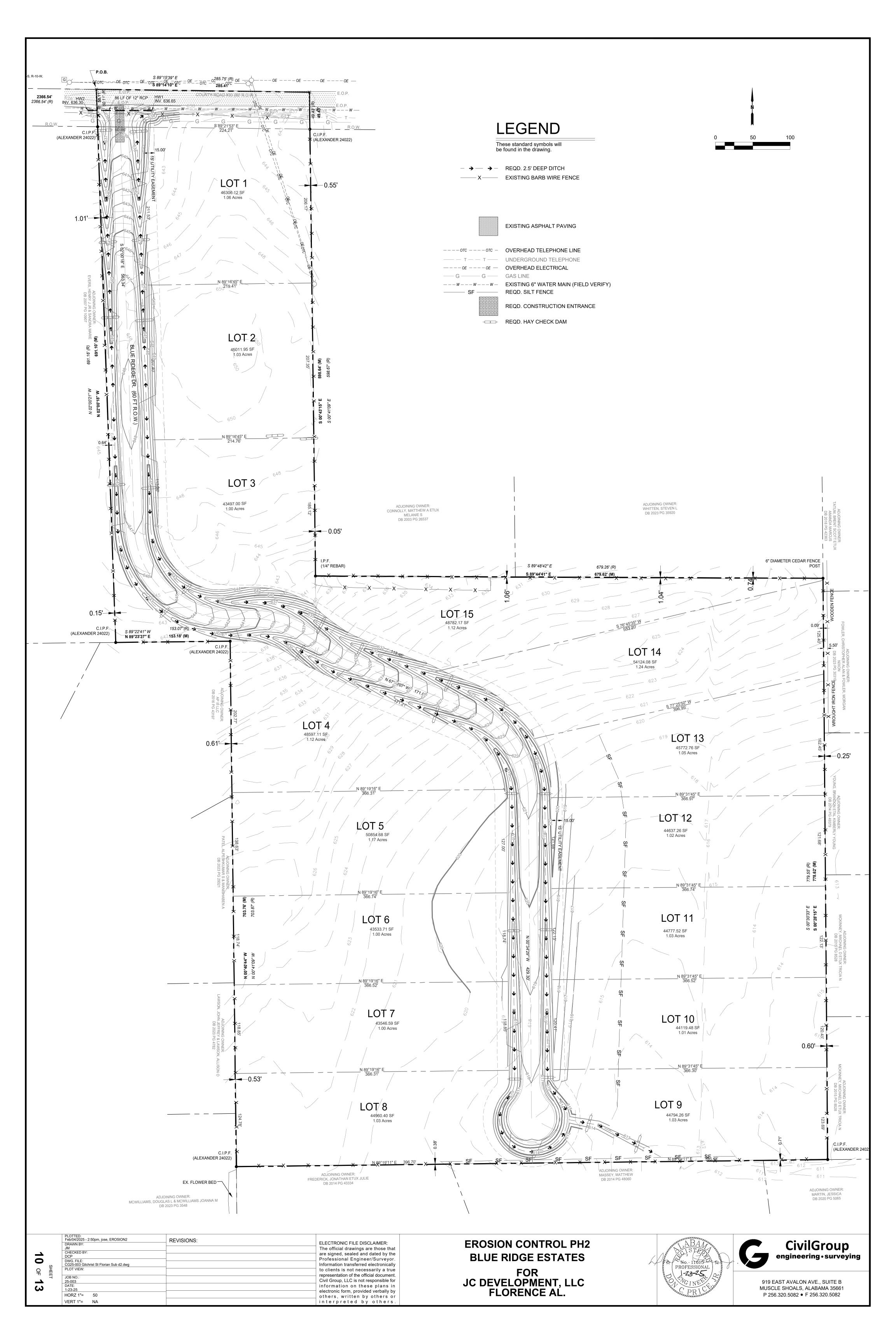


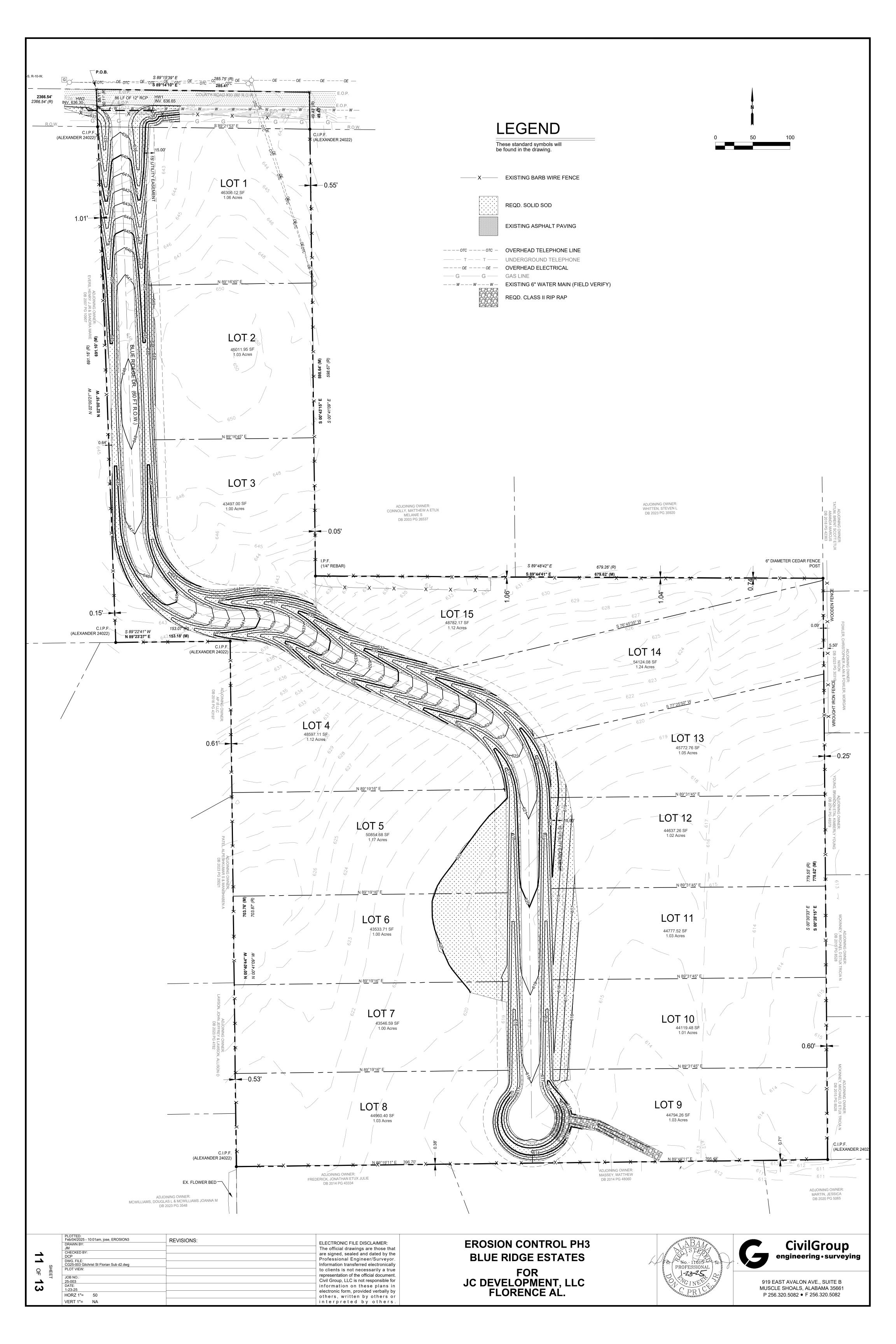


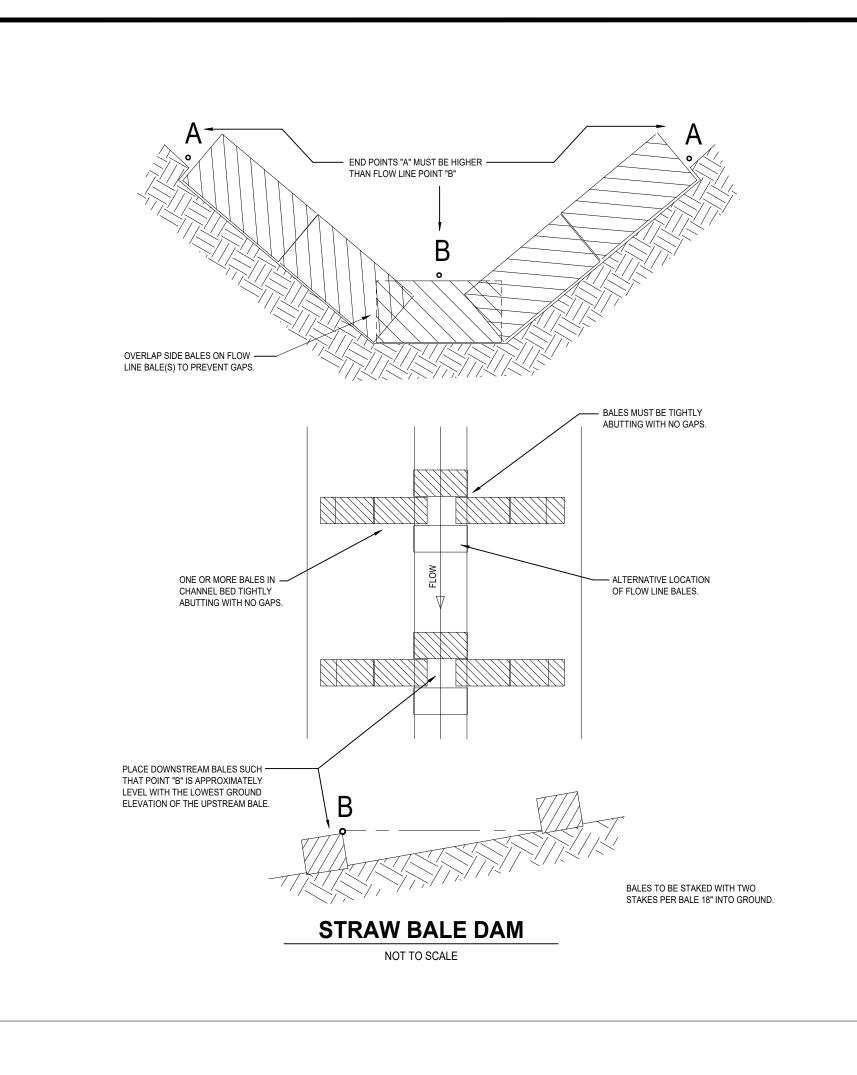


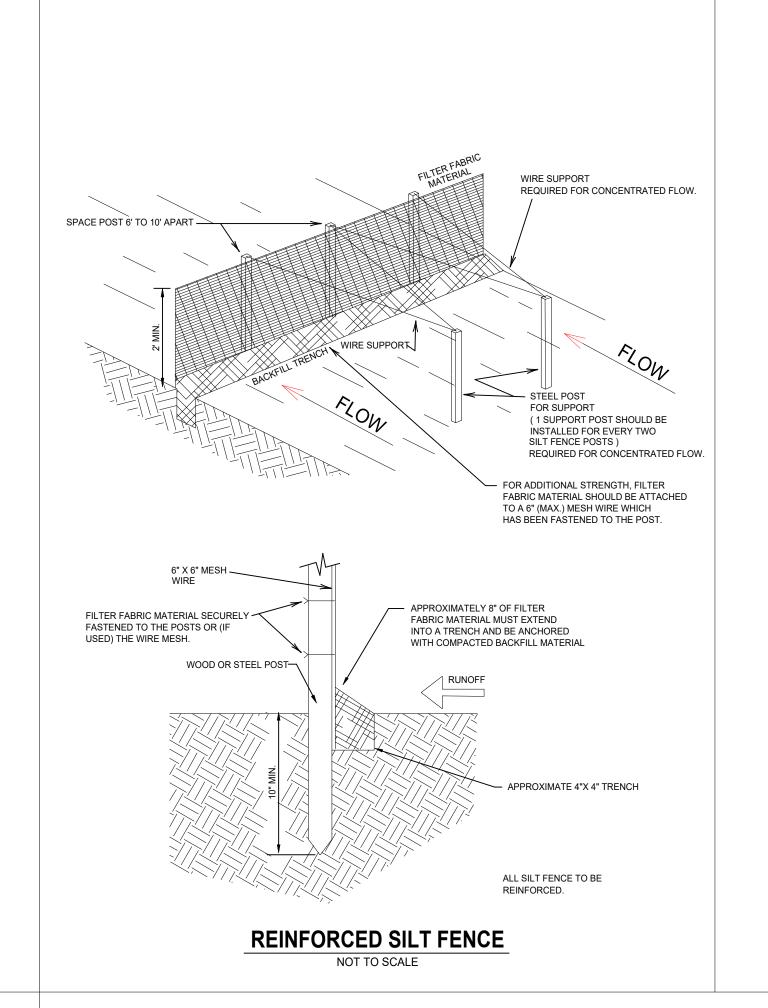


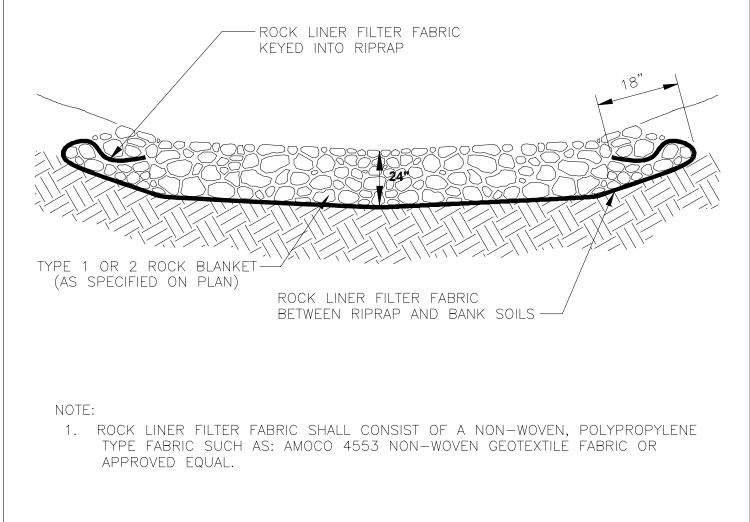












RIP RAP CLASS II

EXCAVATIONS".

7. TO THE EXTENT POSSIBLE, AS DETERMINED BY THE CONTRACTOR, TRENCH

WALL SHORING METHODS SHALL BE USED IN PAVED AREAS TO MINIMIZE

PAVING REPAIR REQUIREMENTS.

2 TO 3 INCH AGGREGATE **GRAVEL CONSTRUCTION ENTRANCE**

NOT TO SCALE

MIN WIDTH = 24" + OD AT BOTTOM, SEE NOTE 1		BEDDING/BACKFILL REQUIREMENTS & MAT'L DESIGNATIONS (SEE MATERIAL DESIGNATION/DESCRIPTOINS TABLE)			
I	I	ROADWAY PIPE		SIDE DRAINS	
SLOPE DETERMINE AS NECESSARY FO CONDITIONS, SEE N	SAFE WORKING	CONC	CMP	CONC	СРР
	TOP FILL	6 **	5	5	5
WARNING TAPE, IDENTIFYING TYPE SERVICE WIDTH OF COMPACTION EQUIP, 10" MIN	FINAL BACKFILL (6"-12" LIFTS TYP, 6" LIFTS MAX. UNDER PAVING, CONC, STRUCTURES, ETC.)	1	4	4	4
PIPE AS SPECIFIED ON PLANS	INITIAL BACKFILL (6" LIFTS)	1	3	3	3
4" MIN*	HAUNCHING (4" LIFTS, NOTE 5)	1	1	1	1
6" FOR 18"Ø - 36"Ø PIPE 12" FOR > 36"Ø PIPE	BEDDING (4" LIFTS)*	1	1	1	1

* SEE NOTE 2 ** SEE NOTE 4 1. SLOPE, BENCHING, SHORING, ETC. AS DETERMINED AND DESIGNED BY THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING * NOTE: WHERE EXISTING LINES ARE DEEPER & REMOVED FOR THE INSTALLATION OF NEW WITH ALL APPLICABLE OSHA REGULATIONS FOR "OPEN TRENCH LINES. THE BEDDING MATERIAL SHALL EXTEND TO THE FULL DEPTH AND WIDTH OF EXCAVATION. 2. BEDDING REQ'D FOR STORM SEWERS, ALL PVC LINES AND ALL CONCRETE LINES. BEDDING REQUIRED IN ALL AREAS OF ROCK MATERIAL DESIGNATION/DESCRIPTOINS TABLE EXCAVATION OR UNSUITABLE SOILS. BELL HOLES REQ'D FOR PIPES > 4" DESIGNATION/ DESCRIPTION MATERIALS 3. ALL MATERIALS SHALL BE COMPACTED TO MINIMUM 95% STANDARD CRUSHED STONE, ASTM-448 NO. 57 GRADATION PROCTOR DENSITY AT 2%± OPTIMUM MOISTURE CONTENT. MATERIALS UNDER PAVING, CONCRETE, STRUCTURES, ETC. SHALL BE COMPACTED TO TO MIN 98%-100% STANDARD PROCTOR. MECHANICAL COMPACTION SHALL BE BY VIBRATORY SHEEPSFOOT OR OTHER EQUIP. SPECIFICALLY SELECT EXCAVATED MAT'L REASONABLY DRY (WITHIN LIMITS REQ'D FOR DESIGNED FOR THE COMPACTION OF EARTH. COMPACTION EQUIP. SHALL COMPACTION) NO STONES > 1" DIA. BE ON-SITE PRIOR TO BEGINNING OF WORK. MECHANICAL COMPACTION SHALL BE COMPLETED IN LOOSE LIFTS AS SHOWN ON THE DETAIL. EXCAVATED MAT'L REASONABLY DRY (WITHIN LIMITS REQ'D FOR 4. TEMPORARY COMPACTED PUG-MIX BACKFILL REQ'D UNTIL PAVEMENT COMPACTION) NO STONES > 12" DIA. PLACEMENT IS COMPLETE. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THIS PUGMIX TO KEEP IT FLUSH WITH THE ADJACENT PAVING, SELECT TOPSOIL MAT'L TO SUPPORT VEGETATION, NO STONES OR ROCK ETC. UNTIL THE FINAL PAVING IS PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ASPHALT OR CONCRETE PATCHES WHEN NEEDED FOR PUBLIC SAFETY AND/OR CONVENIENCE. CRUSHED STONE, MOIST "PUG-MIX" PER ALDOT SECTION 825 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND UTILIZE APPROPRIATE MEANS AND METHODS OF CONSTRUCTION TO ENSURE THAT THE ENTIRE AREAS UNDER THE HAUNCHES OF THE PIPE ARE FILLED WITH STORM AND SANITARY SEWER THE REQUIRED MATERIALS AND COMPACTED APPROPRIATELY. 6. ADDITIONAL AND/OR SPECIAL REQUIREMENTS MAY BE REQ'D BY THE PLANS, SPECIFICATIONS AND/OR CONTRACT DOCUMENTS.

BEDDING AND BACKFILL FOR TRENCHES

SCALE: NOT TO SCALE

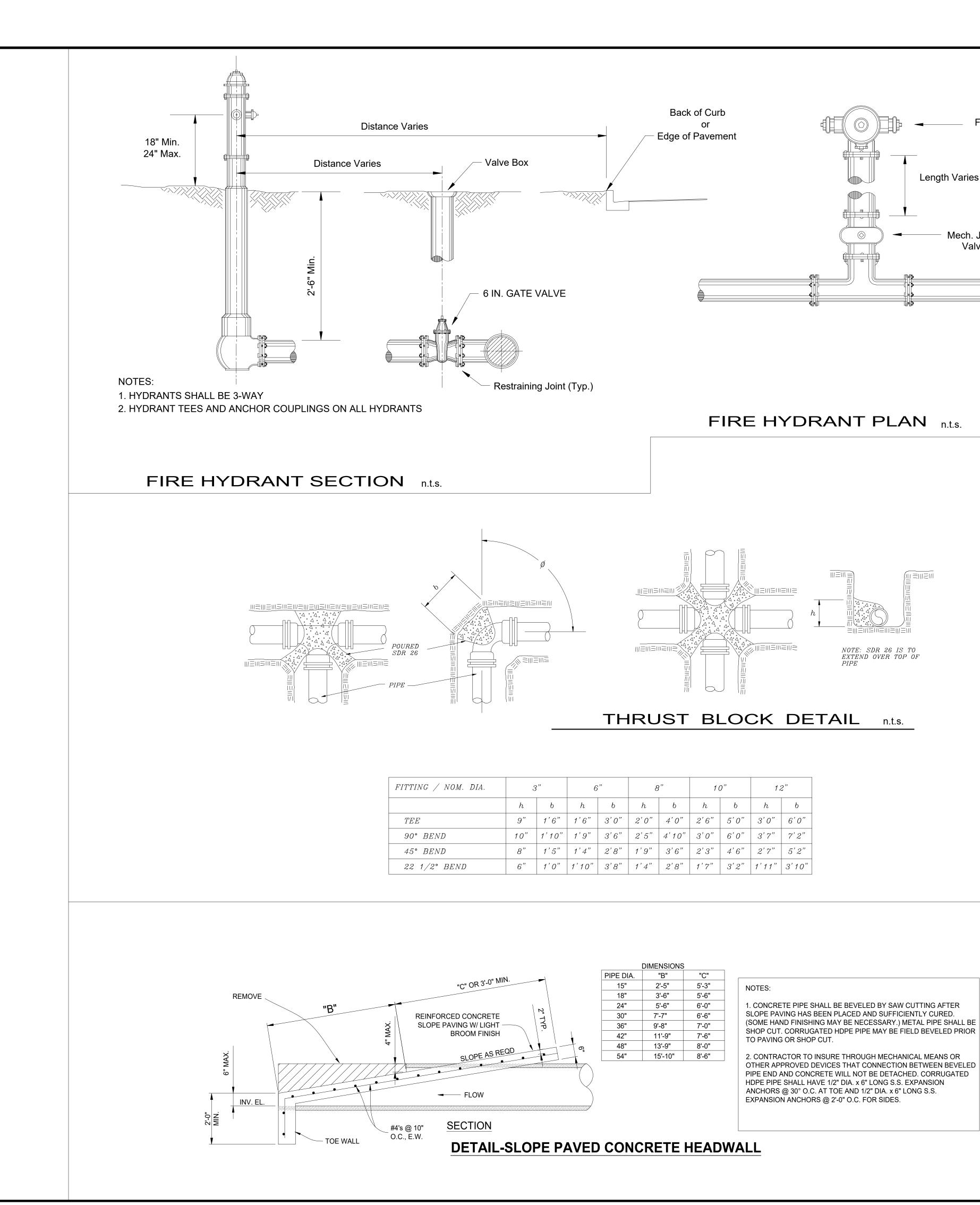
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CONSTRUCTION DETAILS
BLUE RIDGE ESTATES FOR DEVELOPMENT, I FLORENCE AL.

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NOTE: SAFE-UP 6" MIN. OVER PIPE WITH CLEAN COMPACTED DIRT BEFORE BACKFILLING

WATER LINE

__ ROCK___

WATER LINE TRENCH DETAIL

NOTE: WATER LINES INSTALLED IN ROCK CUTS ARE TO HAVE A 4" THICK COMPACTED EARTH CUSHION.

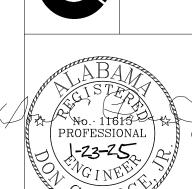
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Fire Hydrant Assembly

(Typ.)

Length Varies

NOTE: SDR 26 IS TO EXTEND OVER TOP OF



Water Main

CONSTRUCTION DETAILS
BLUE RIDGE ESTATES FOR JC DEVELOPMENT, LLC FLORENCE AL.

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