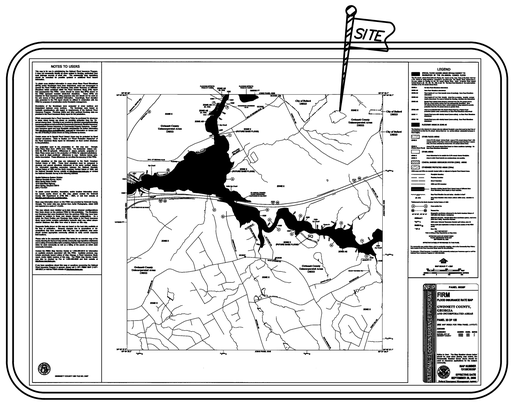
SITE DEVELOPMENT PLANS

MORGAN FALLS SUBDIVISION

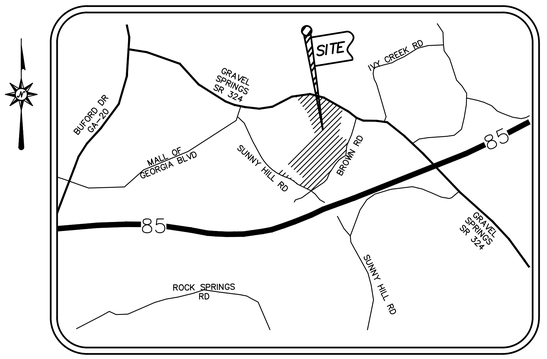
GRAVEL SPRINGS ROAD - BROWN ROAD
GWINNETT COUNTY
143RD LL- 7TH DISTRICT

PARCEL # 010

CASE NUMBER: SDP 2017-00053



FIRM PANEL
N.T.S.



VICINITY MAP
N.T.S.

LOT CHART

BLOCK	NUMBER OF LOTS
A	27
B	15
C	22
D	9
E	18
F	59
TOTAL	150 LOTS

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER
C0.1	NOTES
C0.2	ZONING STIPULATION NOTES
C1.0	BOUNDARY SURVEY
C2.0	OVERALL SITE PLAN
C2.1	PRELIMINARY PLAT
C2.2	PRELIMINARY PLAT
C3.1	GRADING AND DRAINAGE PLAN
C3.2	GRADING AND DRAINAGE PLAN
C3.4	POND 1 DETAILS
C3.5	POND 2 DETAILS
C3.5	RESIDENTIAL ROAD PROFILES
C3.6	RESIDENTIAL ROAD PROFILES
C3.7	BROWN ROAD IMPROVEMENTS
C3.8	BROWN ROAD IMPROVEMENTS
C3.9	BROWN ROAD IMPROVEMENTS
C3.10	BROWN ROAD IMPROVEMENTS
C4.1	WATER DISTRIBUTION PLAN
C4.2	WATER DISTRIBUTION PLAN
C4.3	SANITARY SEWER PLAN
C4.4	SANITARY SEWER PLAN
C5.1	INITIAL EROSION CONTROL PLAN
C5.2	INITIAL EROSION CONTROL PLAN
C5.3	INTERMEDIATE EROSION CONTROL PLAN
C5.4	INTERMEDIATE EROSION CONTROL PLAN
C5.5	FINAL EROSION CONTROL PLAN
C5.6	FINAL EROSION CONTROL PLAN
C5.7	EROSION CONTROL NOTES
C5.8	EROSION CONTROL NOTES
C5.9	EROSION CONTROL DETAILS
C5.10	EROSION CONTROL DETAILS
C5.11	EROSION CONTROL DETAILS
C5.12	EROSION CONTROL DETAILS
C6.1	STORM PROFILES
C6.2	STORM PROFILES
C6.3	STORM PROFILES
C6.4	STORM PROFILES
C6.5	STORM PIPE CHARTS
C6.6	SANITARY SEWER PROFILES
C6.7	SANITARY SEWER PROFILES
C7.1	CONSTRUCTION DETAILS
L1.1	TREE PROTECTION AND REPLACEMENT PLAN
L1.2	TREE PROTECTION AND REPLACEMENT PLAN
L1.3	TREE PROTECTION AND TREE REPLACEMENT DETAILS

Preliminary Plat Data

Please Provide the following data on your plan in the listed format:

General			
Zoning	R-SR		
Project Data			
Number of Lots	150		
Total Area (Acres)	72.59ac		
Total Disturbed Acres	43.0 ac		
Net Area (Acres)*	72.59 ac		
Floodplain Area (Acres)	NA		
Floodplain (% of floodplain acres vs total acres))	NA		
Power/Gas Easement or Right of way (Acres)	NA		
Sanitary Service	Sewer X		Septic
Density (Units/Acre)			
Gross	2.07 units/ac		
Net	2.07 units/ac		
Lot & Dwelling Data			
Minimum Lot Size	7,200 SF		
Minimum Dwelling Size	1,700 SF 1-STORY	2,000 SF 2- STORY	MIN 2,000 SF AVERAGE

*Net Density is the Total Acreage minus 50% of flood hazard area and/or electricity or gas easements or r/w

Recreation/Open Space			
Recreation Area (Acres)			
Required	Yes X	No	N/A
Reduced 50%	Yes	No	N/A X
Area Required	3% - 2.18 ac		
Area Provided	7.16 ac		
Open Space (Acres)			
Required	Yes	No X	N/A
Total Area (%)	15%		
Area Required	10.89 ac		
Area Provided	28.77 ac		
Trees			
Ordinance Compliance Option	16 TDU's per Acre X	2 Trees Per Lot - 300	Exempt
	Street Trees 1 per 35 LF of street 212		
Buffer Trees Planted	49		
Trees (Buffer)			
Type			
Width			

Related Cases			
Type Case #	RZR2016-00018	STC2017-00094	CPL2017-00018
Approval Date	JUNE 7, 2016	OCT 26, 2017	TBD

CERTIFICATION OF DEVELOPMENT PLANS APPROVAL.

ALL REQUIREMENTS OF THE GWINNETT COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) RELATIVE TO THE PREPARATION AND SUBMISSION OF A SUBDIVISION DEVELOPMENT PERMIT APPLICATION HAVING BEEN FULFILLED, AND SAID APPLICATION AND ALL SUPPORTING
PLANS AND DATA HAVING BEEN REVIEWED AND APPROVED BY ALL AFFECTED COUNTY DEPARTMENTS AS REQUIRED UNDER THEIR RESPECTIVE AND APPLICABLE REGULATIONS, APPROVAL OF THIS SUBDIVISION DEVELOPMENT PLAN IS HEREBY GRANTED, ON THIS SUBDIVISION
DEVELOPMENT PLAN AND ALL OTHER DEVELOPMENT PLANS ASSOCIATED WITH THIS SUBDIVISION, SHALL BE SUBJECT TO ALL FURTHER
PROVISIONS OF SAID UDO.

_____
DIRECTOR, DATE

DEPARTMENT OF PLANNING AND DEVELOPMENT

THIS CERTIFICATE EXPIRES TWELVE MONTHS FROM THE DATE OF APPROVAL UNLESS A DEVELOPMENT PERMIT IS ISSUED.

NOTE: THE BOUNDARIES OF THE LOTS SHOWN ON THIS PLAT HAVE NOT BEEN SURVEYED. THIS PLAT IS NOT FOR RECORDING.

CORNER SIGHT DISTANCE CERTIFICATION FOR SUBDIVISIONS

I, the undersigned, hereby certify that the proposed entrance all interior streets for the Gravel Springs Road Development project are designed with adequate corner sight distance for each intersection. The regulated speed limit at the entrance is 25 miles per hour. The sight distance provided at the entrance is 700+ feet in the left direction and 400+ feet in the right direction. The corner sight distance provided from the entrance is equal to or exceeds 280 feet of sight distance required in the Unified Development Ordinance. The regulated speed limit for interior streets is 25 miles per hour. The sight distance for all interior intersections meets or exceeds 280 feet in each direction. Sight Distance is measured with the drivers eye height of 3.5 feet at a distance from the nearest through lane to the center of each travel lane.

_____
Signed Date

SITE AREA = 72.59
DISTURBED AREA = 43.0

CONTRACTORS SHALL CONDUCT ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) AND ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS. PROPER SAFETY PROCEDURES ARE OF SPECIAL CONCERN ON THIS PROJECT CONSIDERING THAT WORKERS WILL BE IN OPEN TRENCHES FOR A PORTION OF THE SCOPE OF WORK THIS SITE.

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION.

UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

OBSTRUCTIONS ENCOUNTERED

IN ADDITION TO SHOWING THE STRUCTURES TO BE BUILT FOR THIS PROJECT, THE DRAWINGS SHOW CERTAIN INFORMATION OBTAINED BY THE ENGINEER REGARDING THE PIPES, POLE LINES, CONDUITS AND OTHER STRUCTURES WHICH EXIST ALONG THE LINE OF THE WORK, BOTH AT AND BELOW THE SURFACE OF THE GROUND. THE ENGINEER AND THE OWNER EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION GIVEN ON THE DRAWINGS WITH REGARD TO EXISTING STRUCTURES, AND THE CONTRACTOR WILL NOT BE ENTITLED TO ANY EXTRA COMPENSATION ON ACCOUNT OF INACCURACY OR INCOMPLETENESS OF SUCH INFORMATION, SAID STRUCTURES BEING INDICATED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR, WHO MUST VERIFY THE INFORMATION TO HIS OWN SATISFACTION. THE GIVING OF THIS INFORMATION UPON THE CONTRACT DRAWINGS WILL NOT RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO SUPPORT AND PROTECT ALL PIPES, CONDUITS, AND OTHER STRUCTURES WHICH MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF WORK, AND TO MAKE GOOD ALL DAMAGES DONE TO SUCH PIPES, CONDUITS, AND OTHER STRUCTURES, AS PROVIDED IN THESE SPECIFICATIONS. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND OBSTRUCTIONS PRIOR TO EXCAVATION SO AS TO PREVENT DAMAGE TO THOSE SERVICES OR OTHER UTILITIES. ANY SUCH DAMAGES MUST BE REPAIRED WITHOUT DELAY AND THE COST OF SUCH REPAIRS SHALL BE PAID FOR BY THE CONTRACTOR.

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

WETLAND CERTIFICATION

THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING:1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND, 2) THE APPROPRIATE PLAN SHEET DOES (X) / DOES NOT ( ) INDICATE AREAS OF THE UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS; AND, 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION (SECTION "404") PERMIT HAS BEEN OBTAINED.

NOTICE OF INTENT

OPERATOR SHALL SUBMIT A NOTICE OF INTENT (N.O.I.) FOR COVERAGE UNDER NPDES GENERAL PERMIT TO THE FOLLOWING OFFICE AT LEAST 14 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AS INDICATED IN THESE CONSTRUCTION DOCUMENTS.

MOUNTAIN DISTRICT – ATLANTA SATELLITE
GEORGIA ENVIRONMENTAL PROTECTION DIVISION
4244 INTERNATIONAL PARKWAY, SUITE 114
ATLANTA, GA 30354–3906
(404) 362 – 2671

NOTES

1. THERE IS NO FLOODPLAIN ON THIS PROPERTY FROM A WATER COURSE WITH A DRAINAGE AREA EXCEEDING 100 ACRES PER FIRM PANEL 13135C0035F, EFFECTIVE SEPT. 29, 2006.

2. ALL WETLANDS TO BE DISTURBED ARE DELINEATED ON THIS SITE.

3. WETLANDS EXIST ON THE PROJECT SITE AND HAVE BEEN DELINEATED BY UNITED CONSULTING, DATED APRIL 11, 2017.

4. STATE WATERS EXIST ON THE PROJECT SITE AND HAVE BEEN DELINEATED BY UNITED CONSULTING, DATED APRIL 11, 2017.

5. A 50-FOOT UNDISTURBED BUFFER AND A 75-FOOT IMPERVIOUS SETBACK ADJACENT TO ALL STREAMS SHALL BE MAINTAINED UNLESS AN APPROPRIATE STREAM BUFFER VARIANCE IS OBTAINED.

6. STORM WATER MANAGEMENT FOR THIS PROJECT WILL BE PROVIDED ON SITE.

7. PRIOR TO THE WETLANDS BEING DISTURBED, AN APPROPRIATE PERMIT SHALL BE OBTAINED.

SIDEWALK NOTE

1. DEVELOPERS SHALL INSTALL SIDEWALKS ON ABUTTING EXTERNAL STREETS, "PASSIVE" RECREATION AREA LOTS, AND OPEN SPACE LOTS, AND SHALL INSTALL INTERSECTION RADIUS CURB RAMPS AT NEW STREET INTERSECTIONS, AND L–SHAPED MIDBLOCK RAMPS AT CUL–DE–SACS TURNAROUNDS, WITHIN 60 DAYS OF APPROVAL OF THE FINAL PLAT.
2. SIDEWALKS AND CURB RAMPS, WHERE REQUIRED, SHALL BE INSTALLED ALONG BOTH SIDES OF THE INTERNAL STREETS (INCLUDING "EYEBROW" TURNAROUNDS AND CUL–DE–SACS). SIDEWALKS SHALL BE AT LEAST 2 FEET FROM THE BACK OF CURB AND SHALL BE CONSTRUCTED OF CONCRETE A MINIMUM OF FOUR FEET (4') IN WIDTH AND FOUR INCHES (4") THICK WITH A CROSS SLOPE OF ,25 PER FOOT. CONCRETE SHALL BE CLASS "B" AND HAVE A STRENGTH OF 2200 PSI AT 28 DAYS.
3. SIDEWALKS SHALL BE LOCATED AT LEAST 2 FEET FROM THE BACK OF CURB AND SHALL BE CONSTRUCTED OF CONCRETE A MINIMUM FIVE FEET (5') IN WIDTH AND 4" THICK WITH A CROSS SLOPE OF 0.25" PER FOOT. CONCRETE SHALL BE CLASS "B" AND HAVE A STRENGTH OF 2200 PSI AT 28 DAYS.
4. SIDEWALKS ON "ACTIVE" RECREATION AREA LOTS SHALL BE INSTALLED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY OR SHALL BE INSTALLED BY THE DEVELOPER PRIOR TO RELEASE OF THE SUBDIVISION MAINTENANCE SURETY, WHICHEVER IS EARLIER.
5. DEVELOPERS SHALL INSTALL SIDEWALKS ON ANY VACANT LOTS REMAINING BETWEEN DEVELOPED LOTS (I.E. DWELLING UNDER CONSTRUCTION OR COMPLETED) PRIOR TO THE RELEASE OF THE SUBDIVISION MAINTENANCE SURETY
6. HOMEBUILDERS TO INSTALL SIDEWALKS, AND CURB RAMPS NOT REQUIRED TO BE INSTALLED BY DEVELOPERS, ON BUILDING LOTS PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY.
7. INTERSECTION RADIUS CURB RAMPS SHALL BE PROVIDED AT STREET INTERSECTIONS. STRAIGHT RAMPS MAY BE PROVIDED AT INTERSECTIONS OF CURBED DRIVEWAYS AND STREETS WITHOUT SIDEWALKS.
8. SIDEWALKS ARE NOT ALLOWED WITHIN THIRTEEN FEET FROM THE EDGE OF ROADWAY WITHOUT CURB AND GUTTER AND ANY NECESSARY DRAINAGE STRUCTURES

GWINNETT COUNTY DOT NOTES:

1. ALL RESIDENTIAL CURBING SHALL BE 6" x 24" X 12" (VERTICAL CURBING ONLY).
2. SIDEWALKS ARE NOT ALLOWED WITHIN THIRTEEN FEET FROM THE EDGE OF THE ROADWAY WITHOUT CURB AND GUTTER AND ANY NECESSARY DRAINAGE STRUCTURES.

GENERAL NOTES:

1. TOTAL ACREAGE = 72.59 ACRES
2. TOTAL NUMBER OF LOTS = 150
3. ZONING = R-SR
4. NET ACREAGE = 72.59 ACRES
5. LOT DENSITY = 2.06 UNITS/AC.
6. TREE CANOPY = 32%
7. DIGITAL BOUNDARY & ON SITE TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY PRECISION PLANNING, INC.
8. TOPOGRAPHIC INFORMATION BASED ON MEAN SEA LEVEL AS TAKEN FROM GWINNETT COUNTY GIS SURVEY REFERENCE DATUM: NGVD-1989
9. ALL LOTS TO BE SERVED BY GWINNETT COUNTY GRAVITY SEWER.
10. WATER PROVIDED BY GWINNETT COUNTY.
11. MINIMUM 20' FOOT CURB RADIUS ON ALL INTERNAL STREET INTERSECTIONS, AND 9 FEET FOR RIGHT OF WAY.
12. MAIN ENTRANCE CURB RADIUS TO BE 25' MINIMUM.
13. YARD REQUIREMENTS:

    FRONT = 20 FT, 25 FT BEHIND SW FOR FRONT FACING GARAGES
    REAR = 25 FT
    SIDE = 5 FT
    MINIMUM LOT SIZE =7,200 SF
    MINIMUM LOT WIDTH = 52 FT

14. GWINNETT COUNTY ASSUMES NO RESPONSIBILITY FOR OVERFLOW OR EROSION OF NATURAL OR ARTIFICIAL DRAINS BEYOND THE RIGHT-OF-WAY OR FOR THE EXTENSION OF CULVERTS BEYOND THE POINT SHOWN ON THE APPROVED AND RECORDED SUBDIVISION PLAT.
15. PORTIONS OF THIS DEVELOPMENT DO NOT LIE WITHIN A 100 YEAR FLOOD HAZARD AREA PER FIRM PANELS 13135C0035F DATED SEPT. 29, 2006.
16. EXISTING STRUCTURES LOCATED ON SITE TO BE REMOVED.
17. THERE ARE NO SIGNIFICANT WILDLIFE HABITATS OR SCENIC VISTAS AS LISTED BY GWINNETT COUNTY.
18. OPEN SPACE MUST BE DEEDED TO AND MAINTAINED BY A QUALIFIED HOMEOWNERS ASSOCIATION AND LANDSCAPES.
19. MAXIMUM BUILDING HEIGHT TO BE 35'.
20. UTILITIES SHALL BE LOCATED UNDERGROUND
21. NATURAL VEGETATION SHALL REMAIN ON THE PROPERTY UNTIL THE ISSUANCE OF A DEVELOPMENT PERMIT.
22. A MINIMUM 50-FOOT LANDSCAPED BUILDING SESTBACK SHALL BE PROVIDED ADJACENT TO ABUTTING EXTERIOR STREETS. THE LANDSCAPED SETBACK SHALL INCORPORATE A 25-FOOT LANDSCAPED BUFFER WITH A SIX FOOT IN HEIGHT FENCE OR WALL CONSISTENT WITH GWINNETT COUNTY GUIDELINES.
23. DEVELOPERS SHALL INSTALL SIDEWALKS ON ABUTTING EXTERNAL STREETS, "PASSIVE" RECREATION AREA LOTS, AND OPEN SPACE/COMMON AREAS PRIOR TO THE FINAL PLAT APPROVAL. THE LOT BUILDER SHALL INSTALL SIDEWALKS AND INTERSECTION RADIUS CURB RAMPS AT NEW STREET INTERSECTIONS, "EYEBROW" TURNAROUNDS AND CUL-DE-SACS PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR EACH LOT.
24. SIDEWALKS ARE NOT ALLOWED WITHIN 13' FROM THE EDGE OF THE ROADWAY WITHOUT CURB AND GUTTER AND ANY NECESSARY DRAINAGE STRUCTURES.

NOTES:

1. THE DEVELOPMENT SHALL BE RESTRICTED TO OCCUPANCY BY RESIDENTS AGED 55 YEARS OR OLDER.
2. THE HOMEOWNER'S ASSOCIATION SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL COMMON AREA/FACILITIES, STREET FRONTAGE LANDSCAPING, AND LAWN AND ORNAMENTAL PLAITING MAINTENANCE ON INDIVIDUAL LOTS.
3. THE MINIMUM HEATED FLOOR AREA PER DWELLING UNIT SHALL BE 1,700 SQUARE FEET FOR ONE-STORY AND 2,000 SQUARE FEET FOR TWO-STORY WITH AN OVERALL AVERAGE HEATED FLOOR AREA OF AT LEAST 2,000 SQUARE FEET.
4. HOMES SHALL BE CONSTRUCTED OF BRICK OR STACKED STONE ON FOUR SIDES (EXCEPT MINOR TREATMENTS, I.E. CHIMNEYS, ROOF GABLES, BAY WINDOWS). MINOR TREATMENTS MAY BE OF THE SAME OR WOOD, FIBER-CEMENT OR SHAKE SIDING.
5. THE FRONT FACADE DESIGN SHALL INCLUDE AT LEAST TWO OF THE FOLLOWING ELEVATION FEATURES: SHUTTERS, COVERED PORCHES, BAY WINDOWS, ROOF EAVE BRACKETS, CORNICE, ARCHITECTURAL ENTRANCE DOOR SURROUND.
6. TWO-STORY HOMES SHALL BE PERMITTED IN ADDITION TO DWELLINGS WITH BONUS ROOMS OVER GARAGES.
7. ALL DWELLINGS TO HAVE A MINIMUM TWO-CAR GARAGE.
8. CUL-DE-SACS SHALL BE PERMITTED AND NO ALLEYS SHALL BE REQUIRED (RZR2016-00018, 1.I)
9. ALL UTILITIES SHALL BE PLACED UNDERGROUND.
10. NATURAL VEGETATION SHALL REMAIN ON THE PROPERTY UNTIL THE ISSUANCE OF A DEVELOPMENT PERMIT.
11. MINIMUM FRONT SETBACK: 20', EXCEPT FRONT-FACING GARAGES SHALL BE SETBACK A MINIMUM OF 25 FEET BEHIND SIDEWALKS.
12. ARCHITECTURAL ELEVATIONS FOR ALL LOTS SHALL BE SUBMITTED FOR DIRECTOR'S APPROVAL PRIOR TO ISSUANCE OF ANY BUILDING PERMITS.
13. GWINNETT COUNTY DOES NOT ENFORCE PROTECTIVE COVENANTS. IT IS THE RESPONSIBILITY OF THE HOMEOWNERS TO ENSURE COMPLIANCE WITH PROTECTIVE COVENANTS.
14. SITE IS LOCATED IN BRASELTON HIGHWAY (S.R. 124)/GRAVEL SPRINGS RD. (S.R. 324)/HAMILTON MILL RD. OVERLAY DISTRICT. NO LAND DISTURBANCE ALLOWED PRIOR TO ISSUANCE OF DEVELOPMENT PERMIT.

OWNER / DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE: 404.260.0701
EMAIL: PGRIFFIN@SATILLACAPITAL.COM

ENGINEER
PRECISION PLANNING, INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GA 30046
CONTACT: ERIC SIMPSON
PHONE: 770.338.8000
EMAIL: 827ES@PPI.US

PROJECT DATE: 10/26/2017

DATE	No.	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/8/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND REMOVED GRADING OF AMENITY AREA OUT OF LOT IN CITY LIMITS OF BUFORD.

PRECISION Planning Inc.
planners • engineers • architects • surveyors

400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

PLOT DATE: 9/28/2018 10:37 AM FILE PATH: E:\PROJECTS\2017\17191-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17191_COVER PAGE.DWG — 2018–08–28 — LONNIE HIGGINS

DEMOLITION NOTES

1. THE CONTRACTOR SHALL PROTECT AND MAINTAIN SERVICE IN ALL UTILITIES ENCOUNTERED, UNDERGROUND AND ABOVE GROUND.

2. THE CONTRACTOR SHALL EXECUTE THE DEMOLITION PART OF HIS CONTRACT IN A MANNER WHICH WILL PREVENT DAMAGE TO EXISTING FACILITIES OR CONSTRUCTION AND IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE.

3. DEMOLISHED MATERIAL & DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF RUBBISH SHALL NOT BE ALLOWED TO ACCUMULATE.

4. DAMAGE TO ANY ITEMS THAT ARE TO REMAIN IN SERVICE DURING AND AFTER DEMOLITION SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

5. USE WATER SPRINKLING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR, TO THE LOWEST LEVEL POSSIBLE.

6. EXISTING CONDITIONS ARE SHOWN FROM REFERENCE DRAWINGS. IF ADDITIONAL PIPING/STRUCTURES ARE ENCOUNTERED, OR ACTUAL LOCATION OF EXISTING STRUCTURES ARE OTHER THAN SHOWN, CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER PRIOR TO DEMOLITION.

7. CONTRACTORS ARE RESPONSIBLE FOR OBTAINING ALL DEMOLITION PERMITS.

8. ENVIRONMENTAL PROTECTION AGENCY PERMITS ARE REQUIRED FOR ALL PROPERTIES CONTAINING HAZARDOUS MATERIALS.

9. SAFETY & PROTECTION: CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO ALL EMPLOYEES ON THE WORK AND OTHER PERSONS OR ORGANIZATIONS WHO MAY BE EFFECTED THEREBY.

10. CONSTRUCTION IS TO BE LIMITED TO AREAS SO INDICATED ON THE DRAWINGS AND AS DESIGNATED BY OTHERS, OFFSITE AREAS SHALL BE ENCROACHED UPON ONLY BY WRITTEN PERMISSION OR EASEMENT. THIS PROVISION APPLIES TO BOTH PERSONNEL AND EQUIPMENT.

11. ANY NATURAL, NATIVE AREA OR TREE OUTSIDE OF THE DESIGNATED CONSTRUCTION AREA SHALL BE RESTORED TO A SATISFACTORY CONDITION AS DETERMINED BY OWNER, IF DAMAGED.

12. CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES, ORDINANCES, RULES, REGULATIONS, AND LAWS OF LOCAL, MUNICIPAL, STATE OR FEDERAL AUTHORITIES HAVING JURISDICTION OVER THE PROJECT.

13. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, **SHALL NOT BE DISCHARGED** TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT (NPDES IV.D.2.c(1)).

14. CONTRACTOR SHALL STAGE DEMOLITION & CONSTRUCTION IN A MANNER THAT WILL MINIMIZE DISRUPTION OF VEHICULAR AND PEDESTRIAN TRAFFIC FLOW.

15. CONTRACTOR RESPONSIBLE FOR PROVIDING REQUIRED TRAFFIC CONTROL AND SAFETY FEATURES DURING CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES, LANE CONTROL AND TRAFFIC CONTROL SHALL COMPLY WITH MUTCD STANDARDS AND GEORGIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATION, LATEST EDITION.

16. ALL EXISTING SIGNS, SHALL BE RE-SET OR REPLACED IF DAMAGED OR RELOCATED BY CONSTRUCTION ACTIVITIES. ALL STOP BARS, CROSSWALKS, AND OR LANE MARKINGS REMOVED OR ALTERED BY PROJECT CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH EQUIVALENT MATERIALS THAT MEET LCCAL STANDARDS.

17. EXISTING UTILITY SERVICE IS NOT TO BE INTERRUPTED BY ANY PHASE OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITY FACILITIES WILL BE REPLACED/REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

18. EXISTING STRUCTURES DESIGNATED TO REMAIN ARE NOT TO BE DAMAGED DURING CONSTRUCTION. ANY DAMAGED STRUCTURES ARE TO BE REPLACED BY THE CONTRACTOR AT THE EXPENSE OF THE CONTRACTOR.

19. ALL WATER METERS, WATER AND GAS VALVES, AND EXISTING MANHOLES IN PROPOSED PAVING SHALL BE RAISED/LOWERED TO MATCH PROPOSED GRADE.

20. CONTRACTOR(S) SHALL PROTECT EXISTING POWER AND UTILITY POLE FOOTINGS WHICH ARE DESIGNATED TO REMAIN.

GENERAL NOTES

1. THE PROPERTY IS LOCATED IN LAND LOT 147 OF THE 7TH DISTRICT.
2. THE SUBJECT PROPERTY DOES NOT CONTAIN A DESIGNATED 100 YEAR FLOOD HAZARD AREA AS DEPICTED ON F.I.R.M. PANEL 13135C0034F , EFFECTIVE SEPTEMBER 29, 2006.
3. ALL CURB DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
4. ALL CONSTRUCTION TO COMPLY WITH GWINNETT COUNTY STANDARDS.
5. SEE ARCHITECTURAL PLANS FOR BUILDING FLOOR PLAN DIMENSIONS, DOOR LOCATIONS, AND OTHER ARCHITECTURAL DETAILS.
6. ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED BY FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
7. EACH BUILDING AND ITS RELATIVE LOCATION TO PROPERTY LINES AND OTHER STRUCTURES SHALL COMPLY WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) WITH GEORGIA STATE AMENDMENTS WITH REGARDS TO THE HEIGHT AND AREA REQUIREMENTS OF IBC TABLE 503 AND THE FIRE RESISTANCE AND HORIZONTAL SEPARATION REQUIREMENTS OF IBC TABLES 601 AND 602.
8. ALL UTILITY LINES SHALL BE LOCATED UNDERGROUND.
9. A SEPARATE BUILDING PERMIT SHALL BE OBTAINED PRIOR TO CONSTRUCTION FOR ALL RETAINING WALLS GREATER THAN 4 FEET IN HEIGHT PRIOR TO CONSTRUCTION OF THE WALLS.
10. WORK WITHIN THE POWER EASEMENT REQUIRES PERMISSION FROM THE GEORGIA POWER COMPANY AND PARTICULAR CARE IS REQUIRED WHEN WORKING AROUND OVERHEAD POWER LINES.
11. THE WORK INCLUDES WORK ON THE GWINNETT COUNTY RIGHT OF WAY. ALL WORK PERFORMED ON THE RIGHT OF WAY MUST BE IN ACCORDANCE WITH THE COUNTY'S REQUIREMENTS AND IS SUBJECT TO THEIR INSPECTIONS AND APPROVALS.
12. NOTIFY GWINNETT COUNTY INSPECTIONS 24 HOURS BEFORE BEGINNING OF EVERY PHASE OF CONSTRUCTION (678-518-6000).
13. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED.
14. NO DRIVE-UP WINDOWS ARE TO BE INSTALLED.
15. HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
16. NO OUTSIDE STORAGE PROPOSED. THIS INCLUDES SUPPLIES, EQUIPMENT, VEHICLES, PRODUCTS, ETC.
17. SIGNS, LOCATION, NUMBER, AND SIZE ARE NOT APPROVED UNDER THIS BUILDING PERMIT. A SEPARATE PERMIT IS REQUIRED FOR EACH SIGN.
18. ALL CONSTRUCTION TO COMPLY WITH GWINNETT COUNTY STANDARDS.
19. NO BILLBOARDS ARE PERMITTED.
20. *ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY GWINNETT COUNTY OR PRECISION PLANNING, INC. OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS, JURISDICTIONAL WATER OF THE STATE, AREAS OF THREATENED/ENDANGERED SPECIES, OR AREAS OF HISTORICAL SIGNIFICANCE. IT IS THE OWNER'S RESPONSIBILITY TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR ANY REQUIRED APPROVALS AND PERMITS.*
21. *NO OVERSIZED SIGNS ARE PERMITTED.*

GRADING AND EARTHWORK NOTES

1. ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED BY PROTECTIVE TREE FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.
2. ALL EARTHWORK OPERATIONS SHALL COMPLY WITH REQUIREMENTS OF OSHA CONSTRUCTION STANDARDS, PART 1926, SUBPART P, EXCAVATIONS, TRENCHING, AND SHORING, AND SUBPART O, MOTOR VEHICLES, MECHANIZED EQUIPMENT, AND MARINE OPERATIONS, AND SHALL BE CONDUCTED IN A MANNER ACCEPTABLE TO ENGINEER.
3. FILL MATERIALS SHALL CONSIST OF CLEAN SOIL, FREE OF ORGANIC OR DELETERIOUS MATERIALS, ROCKS, OR BROKEN PIECES OF CONCRETE LARGER THAN THREE INCHES IN SIZE, OR OF ANY OTHER FOREIGN OBJECTS THAT COULD IMPEDE THE COMPACTION RESULTS.
4. FILL MATERIALS SHALL BE SPREAD EVENLY IN HORIZONTAL LAYERS AND COMPACTED IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
5. SEE GEOTECHNICAL ENGINEER FOR RECOMMENDATIONS CONCERNING PROPER PLACEMENT AND COMPACTION OF STRUCTURAL FILL.
6. DISPOSAL OF TOPSOIL WILL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. ALL LANDSCAPE AREAS ARE TO RECIEVE MINIMUM 4" OF TOPSOIL.
7. THE CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING SITE CONDITIONS BY SITE VISITATION, DETAILED REVIEW OF ALL CURRENT SITE PLANS, PREVIOUS INFORMATION OR SURROUNDING LAND USES AND ZONING CONDITIONS OR OTHER MATERIALS TO FULLY ASCERTAIN THE SCOPE OF THE WORK IMPLIED WITHIN THE PLANS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT AND MAINTENANCE OF HORIZONTAL AND VERTICAL BENCHMARKS THROUGHOUT THE DURATION OF THE PROJECT.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AN "AS-BUILT" SURVEY OF ALL SITE IMPROVEMENTS INCLUDING WATER AND FIRE PROTECTION SYSTEMS; SAID "AS-BUILT" SURVEY SHALL BE PERFORMED BY AN EXPERIENCED GEORGIA REGISTERED LAND SURVEYOR AND SHALL ILLUSTRATE ALL FINAL GRADE ELEVATIONS, HORIZONTAL AND VERTICAL RELATIONSHIPS BETWEEN BUILT STRUCTURES, PIPING, DETENTION PONDS, FINISHED GRADIENTS OF PIPES AND MATERIAL TYPES. THE CONTRACTOR SHALL RENDER THE AS-BUILT DRAWINGS AT AN ACCEPTABLE MEASURED SCALE(S) AND SHALL DELIVER A REPRODUCIBLE COPY OF SAID "AS-BUILT" TO THE OWNER PRIOR TO APPLICATION OF FINAL PAYMENT.
10. A GEOTECHNICAL ENGINEER, EMPLOYED BY THE OWNER WILL MONITOR ALL EARTHWORK OPERATIONS AND PROVIDE TESTING AS TO THE STANDARDS AND QUALITY OF BEARING SURFACES AND THE MINIMUM QUALITY STANDARDS OF MATERIALS. THE GEOTECHNICAL ENGINEER SHALL MAKE THE SOLE INTERPRETATION OF ROCK AND UNSUITABLE SOILS AND SHALL MAKE RECOMMENDATIONS AS TO IT'S REMOVAL OR FINAL DISPOSITION.
11. THE CONTRACTOR SHALL LIMIT CONSTRUCTION OPERATIONS TO THE PROJECT SITE AND WITHIN THE LIMITS OF THE EASEMENTS SHOWN AND SHALL PROTECT ADJACENT PROPERTIES AND PROPERTY OWNERS FROM ENCROACHMENT BY SOIL EROSION.
12. THE SCOPE OF WORK IMPLIED WITHIN THIS PLAN INCLUDES ALL GRADING OPERATIONS FOR FINAL GRADE ELEVATIONS AS SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR ALL EARTH QUANTITIES, GRADING OPERATIONS, AND MISCELLANEOUS HAULING AND/OR DISPOSAL OPERATIONS TO RENDER THE SITE TO THE FINAL CONTOUR AND GRADE ELEVATIONS SHOWN ON THE PLAN. FILL REQUIRED SHALL BE FURNISHED, INSTALLED, AND COMPACTED AS PART OF CONTRACTOR'S BASE BID. IF "EXCESS" CUT IS GENERATED FROM EXCAVATION, SAID "EXCESS" SHALL BE DISTRIBUTED AND FINE GRADED AND GRASSED ON DESIGNATED OR APPROVED AREA OF THE OWNER'S PROPERTY OR HAULED OFF-SITE AT NO ADDITIONAL COST TO THE OWNER.
13. NO BURNING ALLOWED, ALL TREES MUST BE GROUND. MULCH MAY BE USED FOR TEMPORARY EROSION CONTROL AND SHOULD BE INSTALLED INSIDE ROWS OF SILT FENCE AND BETWEEN DOUBLE ROWS OF SILT FENCE.

UTILITY NOTES:

1. ALL UTILITY PIPING TO BE IN ACCORDANCE WITH GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES (GCDWR) REQUIREMENTS.
2. THIS SITE PLAN INDICATES POTABLE WATER SERVICE LINES AND SANITARY SEWER LATERALS. GEORGIA STATE LAW REQUIRES THIS WORK TO BE INSTALLED BY A GEORGIA LICENSED MASTER PLUMBER. THIS WORK REQUIRES A SEPARATE SITE PLUMBING PERMIT FOR WORK TO BE COMPLETED WITHIN THE COUNTY EASEMENT WHICH SHALL BE OBTAINED FROM GWINNETT COUNTY BUILDING PERMITS. ALL WORK WITHIN THE EASEMENT SHALL BE INSPECTED BY THE GWINNETT COUNTY PLUMBING INSPECTION UNIT. INSPECTIONS SHALL BE REQUESTED BY PHONING 678-518-6277.
3. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY. CALL THE UTILITIES PROTECTION CENTER AT 811 BETWEEN 7:00 A.M. AND 7:00 P.M. MONDAY THRU FRIDAY.
4. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO EXCAVATION OR DEMOLITION. ADDITIONAL UTILITIES MAY NOT BE SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN. FIBER OPTICS LINES MAY EXIST ON SITE CONSULT OWNER FOR LOCATIONS PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
5. IF THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, HAVE REPLACED OR REPAIRED THE UTILITIES TO THEIR ORIGINAL OR BETTER CONDITION AND QUALITY, AS APPROVED BY THE OWNER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITIES PRIOR TO CONSTRUCTION.
6. MINIMUM COVER FOR ALL WATER LINES SHALL BE 48 INCHES.
7. A MINIMUM HORIZONTAL SEPARATION OF 10' SHALL BE MAINTAINED BETWEEN WATER LINES AND SANITARY SEWERS. AN 18" MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS. WHEN CROSSING A WATERLINE OR SEWER LINE, PIPE JOINTS SHALL BE PLACED AS FAR AWAY AS POSSIBLE FROM THE OTHER PIPE.
8. FOR ANY WORK WITHIN THE COUNTY EASEMENT SHOWN ON THE PLANS, A GCDWR CONSTRUCTION PERMIT IS TO BE ACQUIRED BY GCDWR APPROVED CONTRACTOR PRIOR TO INSTALLATION. CALL 678-518-6175 FOR INFORMATION AND COPY OF APPROVED CONTRACTOR'S LIST. A MANDATORY PRECONSTRUCTION CONFERENCE WITH INSPECTOR, BY APPOINTMENT ONLY, IS REQUIRED 24 HOURS PRIOR TO ANY UTILITY CONSTRUCTION. ANY UTILITY DESIGN CHANGES MUST BE APPROVED BY GCDPU PRIOR TO INSTALLATION.
9. FIRE HYDRANTS AND MAINS ARE TO BE INSTALLED, FLUSHED, AND UNDER PRESSURE BEFORE ANY COMBUSTIBLE CONSTRUCTION IS STARTED.
10. HYDRANTS ARE TO BE INSTALLED SO THAT THE LARGE FIRE DEPT. CONNECTION FACES THE STREET, THAT SAME CONNECTION IS TO BE NO LESS THAN 18" OR MORE THAN 36" ABOVE FINISHED GRADE. HYDRANTS LOCATED IN PARKING AREAS SHALL BE PROTECTED BY BARRIERS THAT WILL PREVENT PHYSICAL DAMAGE BY VEHICLES. (NFPA 1141 3-6.5, 3-6.6 AND GCFO-37.)
11. ALL WORK TO BE DONE IN ACCORDANCE WITH GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES WATER MAIN STANDARDS, CURRENT EDITION. ACTUAL FIELD CONDITIONS COULD DICTATE MORE STRINGENT REQUIREMENTS, IF DEEMED NECESSARY BY DESIGN PROFESSIONAL.
12. CURB SHALL BE IN PLACE PRIOR TO INSTALLATION OF WATER MAIN.
13. NOTE TO CONTRACTOR: VALVES AND FITTINGS MAY NOT BE DRAWN TO SCALE. VALVES ARE NOT TO BE INSTALLED UNDERNEATH ROAD PAVING. CONSTRUCTION OF WATER AND SEWER LINES MAY REQUIRE INSTALLATION OF MORE FITTINGS THAN ARE SHOWN ON THE PLANS.
14. ALL NEW UTILITY LINES ARE TO BE LOCATED UNDERGROUND.
15. GWINNETT COUNTY DOT IS NOT ON THE ONE-CALL SYSTEM. CALL (770) 822-7474 WHEN LOCATING UTILITIES FOR CONSTRUCTION.

STORMWATER NOTES

1. STORM WATER MANAGEMENT FOR THIS PROJECT WILL BE PROVIDED ON SITE.
2. WETLAND CERTIFICATION: THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND, 2) THE APPROPRIATE PLAN SHEET [ ] DOES / [x] DOES NOT (CIRCLE APPROPRIATE BOX) INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS; AND, 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION ("SECTION 404") PERMIT HAS BEEN OBTAINED.
3. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNERS OF THE STORM WATER MANAGEMENT FACILITY TO KEEP THE ACCESS DRIVE FREE OF OBSTRUCTIONS AND TO MAINTAIN THE FACILITY FREE OF OBSTRUCTIONS, SILT AND DEBRIS, AND OPERATIONAL.
4. CONTOURS ARE SHOWN AT 2 FOOT INTERVALS.
5. GRADE ALL HANDICAP RAMPS TO A 12:1 SLOPE TO TOP OF CURB.
6. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS INTO STORM INLETS.
7. MAXIMUM SLOPE FOR CUT OR FILL IS 2H:1V EXCEPT EARTHEN DAM EMBANKMENTS SHALL BE 3H:1V.
8. TEMPORARY SEDIMENT POND FEATURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
9. HDPE PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
10. ALL RCP PIPE JOINTS SHALL BE BELL & SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-443. THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH AASHTO M-170 AND/OR ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE IN ACCORDANCE WITH 1030-D, GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
11. DEVELOPER TO CLEAN OUT ACCUMULATED SILT IN DETENTION POND AT END OF CONSTRUCTION WHEN DISTURBED AREAS HAVE BEEN STABILIZED. (THIS RESPONSIBILITY OF ASSIGNED BY CONTRACT TO THE CONTRACTOR).
12. GWINNETT COUNTY ASSUMES NO RESPONSIBILITY FOR OVERFLOW OR EROSION OF NATURAL OR ARTIFICIAL DRAINS BEYOND THE EXTENT OF THE STREET RIGHT-OF-WAY, OR FOR THE EXTENSION OF CULVERTS BEYOND THE POINT SHOWN ON THE APPROVED AND RECORDED PLAN. GWINNETT COUNTY DOES NOT ASSUME THE RESPONSIBILITY FOR THE MAINTENANCE OF PIPES IN DRAINAGE EASEMENTS BEYOND THE COUNTY RIGHT-OF-WAY.
13. ACCESS EASEMENT TO BE CLEARED AND GRUBBED.

FIRE DEPARTMENT NOTES

1. A GEORGIA CERTIFICATE OF COMPETENCY HOLDER FOR AUTOMATIC FIRE SPRINKLER SYSTEMS WILL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE UNDERGROUND SUPPLY PIPING, STARTING AT THE POINT WHERE THE PIPING IS SOLELY DEDICATED TO FIRE PROTECTION (HB 1491).
2. MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS UNDER CONSTRUCTION; I.E., IN TIMES OF RAIN OR MUD, ROADS SHALL BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE, ETC. WITH A MINIMUM WIDTH OF 20 FEET. THIS ACCESS TO BUILDINGS THAT HAVE SPRINKLER OR STANDPIPE SYSTEMS SHALL BE TO WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTOR. (NFPA 1141 3-1 AND GCFO-15)
3. DISABLE ACCESSIBLE ROUTE SHALL START AT HANDICAPPED PARKING AND GO INTO THE PRIMARY ENTRANCE OF ALL NEW OR RENOVATED BUILDINGS OR TENANT SPACES. IT IS ALSO REQUIRED THAT THE PARKING SPACE AND ITS ADJACENT AISLE BE RELATIVELY LEVEL, THAT IS, HAVE LESS THAN A 1:50 SLOPE, LESS THAN 2.
4. OUTDOOR RAMPS & THEIR APPROACHES SHALL BE DESIGNED SO THE WATER WILL NOT ACCUMULATE ON WALKING SURFACES PER 120-3-20-.19(8). GEORGIA ACCESSIBILITY CODE.
5. (FIRE DEPARTMENT CONNECTIONS) IF INSTALLED UNDERGROUND SHALL HAVE A LISTED CHECK VALVE, AN AUTO-DRIP VALVE, A SIGN ON A PLATE OR FITTING READING, "AUTO-SPRINKLER OR AUTO-SPRINKLER/STANDPIPES", AND HOSE CONNECTIONS SHALL HAVE STANDARD THREADS AS SPECIFIED IN NFPA 1963.
6. (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.
7. (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 SAFETY, SECTION 46-38(A).
8. 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, 2003 EDITION.
9. EVERY (DEAD-END ACCESS ROAD) IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED AREA FOR TURNING AROUND FIRE APPARATUS. INTERNATIONAL FIRE CODE, CHAPTER 5 SECTION 503.2.5, 2003 EDITION.
10. (TRANSFORMER PAD) SHALL COMPLY WITH THE REQUIREMENTS OF GEORGIA STATE MINIMUM FIRE SAFETY STANDARDS. MODIFICATION TO CHAPTER 7, SECTION 7.1.11, NFPA 101 LIFE SAFETY CODE, 2000 EDITION.
11. APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED FOR EVERY FACILITY, BUILDING OR PORTION OF A BUILDING. THE FIRE APPARATUS ACCESS ROAD SHALL EXTEND TO WITHIN 150 FEET OF ALL PORTIONS OF THE FACILITY OR ANY PORTION OF THE EXTERIOR WALL OF THE FIRST STORY OF THE BUILDING AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY. INTERNATIONAL FIRE CODE, CHAPTER 5, SECTION 503.1.1, 2003 EDITION.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND ITEMS FURNISHED HEREWITH, IN WHOLE OR IN PART, ARE INSTRUMENTS OF SERVICE FOR USE SOLELY WITH RESPECT TO THIS PROJECT AND, UNLESS OTHERWISE PROVIDED, PRECISION PLANNING, INC. SHALL BE DEEMED THE AUTHOR OF THESE DOCUMENTS AND SHALL RETAIN ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THEREIN. THESE DOCUMENTS SHALL NOT BE REPRODUCED OR CONVEYED IN WHOLE OR IN PART TO ANY OTHER PERSON OR ENTITY FOR ANY OTHER PROJECTS OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

NOTES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GROUND OF AMENITY AREA

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C0.1

GWINNETT COUNTY

BOARD OF COMMISSIONERS

LAWRENCEVILLE, GEORGIA

RESOLUTION ENTITLED: Amendment to the Official Zoning Map of Gwinnett County

ADOPTION DATE: DECEMBER 20, 2016

At the regular meeting of the Gwinnett County Board of Commissioners held in the Gwinnett Justice and Administration Center, Auditorium, 75 Langley Drive, Lawrenceville, Georgia.

Name	Present	Vote
Charlotte J. Nash, Chairman	Yes	Aye
Jace Brooks, District 1	Yes	Aye
Lynette Howard, District 2	Yes	Aye
Tommy Hunter, District 3	Yes	Aye
John Heard, District 4	Yes	Aye

On motion of Commissioner COMM. HEARD, which carried a 5-0 vote, the following Resolution to Amend the Official Zoning Map of Gwinnett County is hereby adopted:

WHEREAS, the Municipal-Gwinnett County Planning Commission has held a duly advertised public hearing and has filed a formal recommendation with the Gwinnett County Board of Commissioners upon an Application to Amend the Official Zoning Map from RA-200 to R-SR by SATILLA CAPITAL PARTNERS for the proposed use as SENIOR ORIENTED RESIDENCES on a tract of land described by the attached legal description, which is incorporated herein and made a part hereof by reference; and

WHEREAS, notice to the public regarding said Amendment to the Official Zoning Map has been duly published in THE GWINNETT DAILY POST, the Official News Organ of Gwinnett County; and

WHEREAS, a public hearing was held by the Gwinnett County Board of Commissioners on DECEMBER 6, 2016 and objections were filed.

NOW, THEREFORE, BE IT RESOLVED by the Gwinnett County Board of Commissioners, that the aforesaid application to amend the Official Zoning Map from RA-200 to R-SR is hereby **APPROVED** with the following enumerated conditions:

Approval as R-SR (Senior Oriented Residence District) for a senior-oriented subdivision, subject to the following enumerated conditions:

1. To restrict the use of the property as follows:
   A. Single-family detached dwellings and accessory uses and structures, not to exceed 150 lots. The minimum lot area shall be 7,200 square feet and the minimum lot width shall be 52 feet.
   B. The development shall be restricted to occupancy by residents aged 55 years or older.
   C. The homeowner's association shall be responsible for maintenance of all common areas/facilities, street frontage landscaping, and lawn and ornamental planting maintenance on individual lots.
   D. The minimum heated floor area per dwelling unit shall be 1,700 square feet for one-story, and 2,000 square feet for two-story with an overall average heated floor area of at least 2,000 square feet.
   E. Homes shall be constructed of brick or stacked stone on four sides (except minor treatments, i.e. chimneys, roof gables, bay windows). Minor treatments may be of the same or wood, fiber-cement or shake siding.
   F. The front façade design shall include at least two of the following elevation features: shutters, covered porches, bay windows, roof eave brackets, cornice, architectural entrance door surround.
   G. Two-story homes shall be permitted in addition to dwellings with bonus rooms over garages.
   H. All dwellings shall have a minimum two-car garage.
   I. Cul-de-sacs shall be permitted and no alleys shall be required.
2. To satisfy the following site development considerations:
   A. Provide a 50-foot wide landscaped building setback adjacent to property lines abutting Gravel Springs Road and Brown Road, as required by UDO Section 210.90, and a 50-foot wide landscaped buffer adjacent to the side and rear property lines abutting all adjacent properties, except where adjacent to the senior residential uses building where no setback shall be required. The landscaped

building setbacks along Gravel Springs Road and Brown Road shall incorporate the 25-foot landscaped strips required for those property lines. No pine trees shall be allowed in any required landscaped area or buffer.

B. Provide 25-foot wide landscape strips adjacent to Gravel Springs Road and Brown Road. Landscape strips may be located within the buffer. Buffers may be enhanced and disturbed for landscaping, planting, grading and construction of fences and utilities.

C. Landscape strips shall create a screen from the public view along Gravel Springs Road and Brown Road rights-of-way. They shall contain a combination of at least two of the following to provide a minimum of three levels of scale: vegetative ground cover, herbaceous ornamentals, and low to mid-level shrubs in addition to a combination of large canopy trees. Tree placement may be grouped and staggered rather than following a regulated line along the road frontage. Plantings shall be in compliance with Chapters 620 and 630 of the UDO. The final approval of the landscape plan subject to the approval by the Director of Planning and Development.

D. A minimum of 10-feet of the required 25-foot landscape strip shall be located behind utility easements so that plant material will not be disturbed after installment.

E. The landscape strip along Gravel Springs Road shall include, in addition to plantings, a six-foot high decorative black metal fence, with brick/stacked stone columns. The design shall be consistent with the brick/stone wall required for the landscape strip of the proposed adjacent senior living multi-story building. No fence shall be required along Brown Road.

F. Natural vegetation shall remain on the property until the issuance of a development permit.

G. All utilities shall be placed underground.

H. Detention pond(s) shall be fenced with a black vinyl-coated chain link fence a minimum of four feet in height, and shall be fully screened from view of adjacent residences with a double staggered row of evergreens.

I. A recreational area consisting of a minimum of two tennis courts, a swimming pool and a clubhouse shall be provided on the subject property or on property adjacent to the site, located within the city limits of Buford.

J. There shall be five-foot wide sidewalks and curb ramps constructed along all abutting or internal streets, in accordance with UDO Section 900-90. Pedestrian and common area connectivity shall be provided throughout the development.

Department of Planning and Development

446 West Crogan Street • Lawrenceville, GA 30046-2440
(tel) 678.518.6000
www.gwinnettcounty.com

gwinnettcounty

DIRECTOR REVIEW PLAN SUBMITTAL APPLICATION

Project Name: Gravel Springs Development Case Number: SDPZ017-00053
Contact Name: Connier Henderson Phone Number: (770)338-8121
Contact Email Address: chenderson@ppi.us
Submitted By: Connier Henderson Date: 02-02-2018
Zoning/Special Use/Variance/Waiver Case Number(s): RZR2016-00018
Condition Number(s) for Review: Condition 2.A, 2.B, 2.C

Indicate below the authorization(s) required:

- [X] Landscape Plan Approval
- [ ] Monument Sign Approval
- [ ] Fence Detail Approval
- [ ] Architectural Elevations Approval
- [X] Buffer Plan Approval
- [ ] Tree Preservation/Tree Replacement Plan Approval for a redeveloped site (UDO Section 630-90)
- [X] Other: PEDESTRIAN ACCESS PLAN.

Checklist of plan submittal items (*only complete applications will be accepted*):

- [X] Four hard copies of the plan(s).
- [X] One hard copy of rezoning /special use permit/variance/waiver case (if applicable).

DEPARTMENT AUTHORIZATION USE ONLY

[X] Approved
Approved with conditions: EXISTING 50' BUFFERS ARE TO BE REVEGETATED FOR SCREENING VALUE ONCE SITE IS CLEARED
[ ] Denied:

DIRECTOR SIGNATURE — DATE 03.01.18

DPR_Director Review Submittal Application_121714

K. Development project access shall not be located within 150 feet of the centerline of an intersection of internal roads with Gravel Springs Road or Brown Road, per UDO Section 210.90.

L. Developer shall create nature trails and open spaces as amenities consistent with the site plan dated November 21, 2016.

M. Prior to the issuance of a Development Permit, the applicant shall provide a traffic impact study for the intersection of Brown Road and Ivy Church Road with Gravel Springs Road. It will be the developer's responsibility to upgrade the existing substandard Brown Road to the minimum 24-foot edge-of-pavement to edge-of-pavement roadway with drainage ditches or curb and gutter from the southernmost driveway to the intersection of Gravel Springs Road. All additional right-of-way required for roadway improvements shall be required by the developer at no expense to the County.

N. All grassed areas shall be sodded.

GWINNETT COUNTY BOARD OF COMMISSIONERS

By: Charlotte J. Nash
Charlotte J. Nash, Chairman

Date Signed: 1/5/17

ATTEST:

County Clerk/Deputy County Clerk

Legal Description: Tract 1

All that tract or parcel of land lying and being in Land Lot 143, 7th District, Gwinnett County, Georgia and being more particularly described as follows:

Beginning at a rock found that the Land Lot Corner common with Land Lots 136, 137, 142 & 143, aforementioned district, thence North 73°35'33" West, a distance of 1067.43 feet to an iron pin found (1/2" rebar) on the western right-of-way of Brown Road (60' R/W) and the ***True Point of Beginning***; thence leaving said right-of-way and along the property now or formerly belonging to Ronald Cropper, William C. Cropper, Nancy Evans & Cathy Cropper North 79°21'23" West, a distance of 173.35 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484"); thence South 64°40'24" West, a distance of 149.44 feet to an iron pin found (3/4" open top pipe); thence South 21°43'27" East, a distance of 365.97 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484")on the northwestern right-of-way of said Brown Road; thence along said right-of-way the following courses and distances: South 58°23'18" West, a distance of 65.87 feet to a point; thence 366.40 feet along the arc of a curve to the left having a radius of 642.80 feet and a chord bearing and distance of South 42°03'32" West 361.46 feet to a point; thence South 25°43'46" West, a distance of 478.86 feet to a point; thence 228.64 feet along the arc of a curve to the right having a radius of 394.86 feet and a chord bearing and distance of South 42°19'04" West 225.46 feet to a point; thence South 58°54'22" West, a distance of 118.73 feet to a point; thence 35.19 feet along the arc of a curve to the left having a radius of 2222.00 feet and a chord bearing and distance of South 58°27'09" West 35.18 to a point; thence along the property now or formerly belonging to Georgia Department of Transportation North 79°01'42" West, a distance of 785.47 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484"); thence North 60°26'20" West, a distance of 551.01 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484"); thence North 36°31'09" West, a distance of 1053.77 feet to an iron pin found (1/2" rebar); thence North 36°01'03" West, a distance of 6.39 feet to an iron pin found (1/2" rebar); thence along the property now or formerly belonging to Carter Wilson North 46°57'35" East, a distance of 905.07 feet to an iron pin found (3/8" rebar); thence along the property now or formerly belonging to Carter B. Wilson and Vicky Wilson South 12°50'33" East, a distance of 923.58 feet to an iron pin found (1/4" rebar); thence North 60°27'16" East, a distance of 1313.63 feet to an iron pin found (1/4" rebar); thence North 31°34'09" West, a distance of 409.12 feet to an angle iron found; thence along the property now or formerly belonging to Joey Allen Wilson & Sandra Ann Wilson North 35°49'02" East, a distance of 1040.76 feet to an iron pin found (1/2" rebar) on the southwestern right-of-way of Gravel Springs Road (R/W Varies); thence along said right-of-way 362.70 feet along the arc of a curve to the right having a radius of 6608.36 feet and a chord bearing and distance of South 58°19'28" East 362.66 feet to a concrete monument found; thence South 33°14'52" West, a distance of 13.00 feet to a concrete monument found; thence South 56°01'19" East, a distance of 300.70 feet to an iron pin found (1/2" rebar; thence leaving said right-of-way and along the property now or formerly belonging to Gary D. Brown & Cecil Breedlove South 00°10'27" East, a distance of 319.06 feet to a 3/4" open top pipe found; thence along the property now or formerly belonging to Jerry Brown and Barbara Brown South 13°49'51" West, a distance of 259.88 feet to a 1" open top pipe found; thence along the properties now or formerly belonging to Su-Tzu Huang and James H. Cowart North 71°18'33" West, a distance of 615.67 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484"); thence along the property now or formerly belonging to James H. Cowart South 23°52'17" West, a distance of 300.00 feet to an iron pin set (1/2" rebar with a yellow plastic cap stamped "Rochester LSF 000484"); thence along the properties now or formerly belonging to James H. Cowart and Su-Tzu Huang South 73°18'24" East, a distance of 755.88 feet to a point on the western right-of-way of Brown Road (60' R/W); thence along said right-of-way 147.16 feet along the arc of a curve to the left having a radius of 1110.86 feet and a chord bearing and distance of South 19°38'23" West 147.05 feet to a point; thence 86.16 feet along the arc of a curve to the left having a radius of 1368.80 feet and a chord bearing and distance of South 14°02'29" West 86.15 feet and a radius of 1368.80 feet to a point; thence South 06°34'46" West, a distance of 21.43 feet to the ***True Point of Beginning***.
Said tract contains 83.120 acres.

LESS & EXCEPT:
All that tract or parcel of land lying and being in Land Lot 143, 7th District, Gwinnett County, Georgia and being more particularly described as follows:

Beginning at a rock found that the Land Lot Corner common with Land Lots 136, 137, 142 & 143, aforementioned district, thence North 32°48'48" West, a distance of 678.21 feet to an iron pin found (1/2" rebar) on the southwestern right-of-way of Gravel Springs Road, a.k.a. State Route 324 (R/W Varies) and the ***True Point of Beginning***; thence leaving said right-of-way and along the property now or formerly belonging to Gary D. Brown & Cecil Breedlove South 00°10'27" East, a distance of 319.06 feet to an iron pin found (3/4" open top pipe); thence along the property now or formerly belonging to Jerry Brown & Barbara Brown South 13°49'51" West, a distance of 259.88 feet to an iron pin found (1" open top pipe); thence along the properties now or formerly belonging to Su-Tzu Huang and ACM Satilla LN V, LLC North 71°18'33" West, a distance of 520.43 feet to a point; thence into the property now or formerly belonging to Ronald Cropper, William C. Cropper, Nancy Evans & Cathy Cropper North 13°17'45" West, a distance of 153.85 feet to a point; thence North 31°42'15" East, a distance of 553.07 feet to a point on the southwestern right-of-way of said Gravel Springs Road; thence along said right-of-way 67.49 feet along the arc of a curve to the right having a radius of 6608.36 feet and a chord bearing and distance of South 57°02'41" East 67.49 feet to a concrete monument found; thence South 33°14'52" West, a distance of 13.00 feet to a concrete monument found; thence South 56°01'19" East, a distance of 300.70 feet to the ***True Point of Beginning***.
Said tract contains 7.000 acres.

RECEIVED
JAN 16 2018
Planning & Development

RZR '16 0 18

RECEIVED
JAN 16 2018
Planning & Development

RZR '16 0 18

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY STATUTE. FURTHER REPRODUCTION, PUBLICATION OR DISCLOSURE OF PRECISION PLANNING, INC. SALES DRAWINGS IN ANY FORM IS PROHIBITED. NOT TO BE REPRODUCED OR CONVEYED IN ANY FORM OR MEDIUM WITHOUT PERMISSION. FOR ANY OTHER PROJECTS OTHER THAN THOSE SPECIFICALLY CONTRACTED FOR WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

ZONING STIPULATION NOTES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES REVISED LOCATION AND GRADING OF AMENITY AREA	06/19/18

RELEASE

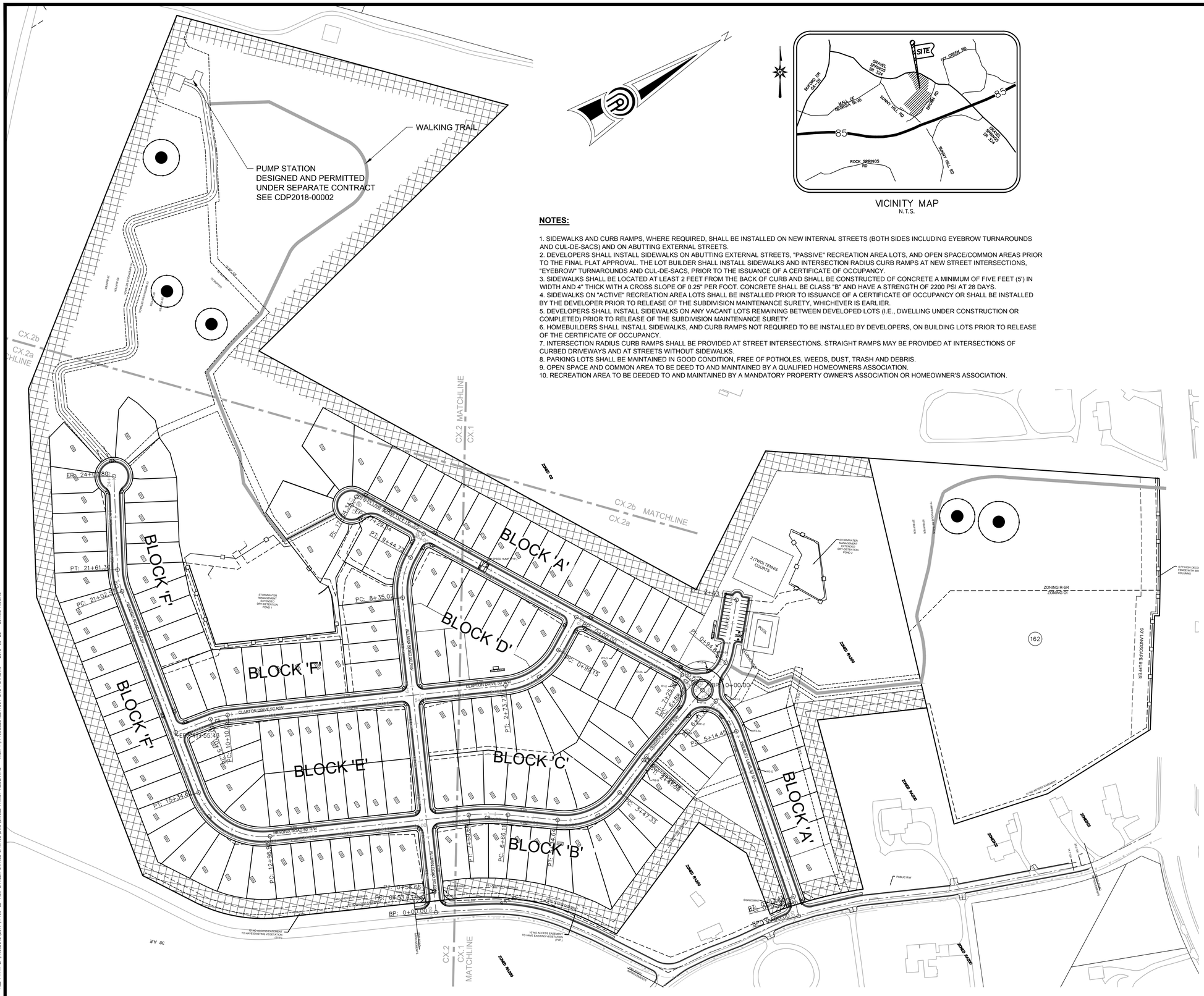
OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C0.2



VICINITY MAP
N.T.S.

LOT CHART

BLOCK	NUMBER OF LOTS
A	27
B	15
C	22
D	9
E	18
F	59
TOTAL	150 LOTS

NOTES:

1. SIDEWALKS AND CURB RAMPS, WHERE REQUIRED, SHALL BE INSTALLED ON NEW INTERNAL STREETS (BOTH SIDES INCLUDING EYEBROW TURNAROUNDS AND CUL-DE-SACS) AND ON ABUTTING EXTERNAL STREETS.
2. DEVELOPERS SHALL INSTALL SIDEWALKS ON ABUTTING EXTERNAL STREETS, "PASSIVE" RECREATION AREA LOTS, AND OPEN SPACE/COMMON AREAS PRIOR TO THE FINAL PLAT APPROVAL. THE LOT BUILDER SHALL INSTALL SIDEWALKS AND INTERSECTION RADIUS CURB RAMPS AT NEW STREET INTERSECTIONS, "EYEBROW" TURNAROUNDS AND CUL-DE-SACS, PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
3. SIDEWALKS SHALL BE LOCATED AT LEAST 2 FEET FROM THE BACK OF CURB AND SHALL BE CONSTRUCTED OF CONCRETE A MINIMUM OF FIVE FEET (5') IN WIDTH AND 4" THICK WITH A CROSS SLOPE OF 0.25" PER FOOT. CONCRETE SHALL BE CLASS "B" AND HAVE A STRENGTH OF 2200 PSI AT 28 DAYS.
4. SIDEWALKS ON "ACTIVE" RECREATION AREA LOTS SHALL BE INSTALLED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR SHALL BE INSTALLED BY THE DEVELOPER PRIOR TO RELEASE OF THE SUBDIVISION MAINTENANCE SURETY, WHICHEVER IS EARLIER.
5. DEVELOPERS SHALL INSTALL SIDEWALKS ON ANY VACANT LOTS REMAINING BETWEEN DEVELOPED LOTS (I.E., DWELLING UNDER CONSTRUCTION OR COMPLETED) PRIOR TO RELEASE OF THE SUBDIVISION MAINTENANCE SURETY.
6. HOMEBUILDERS SHALL INSTALL SIDEWALKS, AND CURB RAMPS NOT REQUIRED TO BE INSTALLED BY DEVELOPERS, ON BUILDING LOTS PRIOR TO RELEASE OF THE CERTIFICATE OF OCCUPANCY.
7. INTERSECTION RADIUS CURB RAMPS SHALL BE PROVIDED AT STREET INTERSECTIONS. STRAIGHT RAMPS MAY BE PROVIDED AT INTERSECTIONS OF CURBED DRIVEWAYS AND AT STREETS WITHOUT SIDEWALKS.
8. PARKING LOTS SHALL BE MAINTAINED IN GOOD CONDITION, FREE OF POTHOLES, WEEDS, DUST, TRASH AND DEBRIS.
9. OPEN SPACE AND COMMON AREA TO BE DEED TO AND MAINTAINED BY A QUALIFIED HOMEOWNERS ASSOCIATION.
10. RECREATION AREA TO BE DEEDED TO AND MAINTAINED BY A MANDATORY PROPERTY OWNER'S ASSOCIATION OR HOMEOWNER'S ASSOCIATION.

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

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

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED, IN WHOLE, OR IN PART, BY COPYRIGHT LAWS OF PRECISION PLANNING, INC. UNLESS PERMISSION IS GRANTED, THESE PLANS SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER, NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY WERE PREPARED, WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA
PROJECT

OVERALL SITE PLAN
SHEET TITLE

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

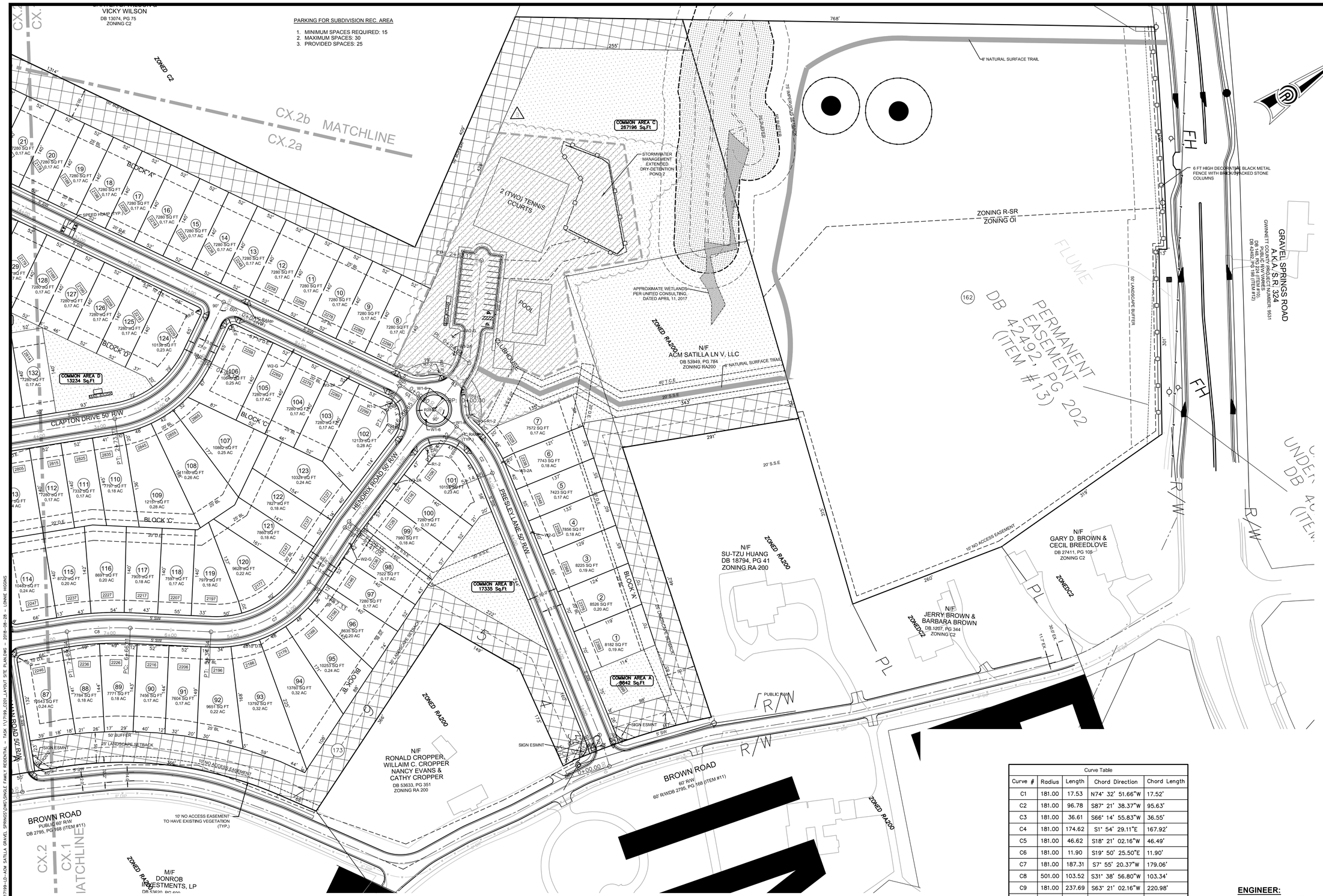
RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

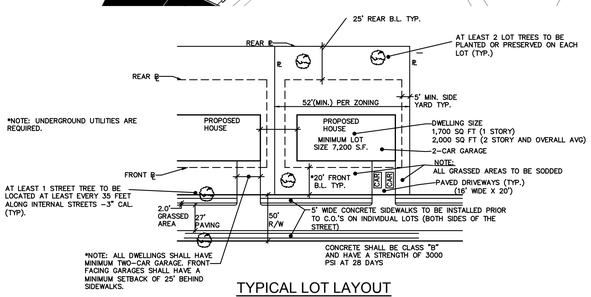
OCT. 26, 2017
DATE
R17-199
PROJ. NUMBER
FILE NAME
FILE NUMBER

C2.0

PLOT DATE: 8/28/2018 10:37 AM FILE PATH: E:\PROJECTS\2017\17199-01-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C2D_LAYOUT SITE PLAN.DWG - 2018-08-28 - LONNIE HIGGINS



Curve Table				
Curve #	Radius	Length	Chord Direction	Chord Length
C1	181.00	17.53	N74° 32' 51.66"W	17.52'
C2	181.00	96.78	S87° 21' 38.37"W	95.63'
C3	181.00	36.61	S66° 14' 55.83"W	36.55'
C4	181.00	174.62	S1° 54' 29.11"E	167.92'
C5	181.00	46.62	S18° 21' 02.16"W	46.49'
C6	181.00	11.90	S19° 50' 25.50"E	11.90'
C7	181.00	187.31	S7° 55' 20.37"W	179.06'
C8	501.00	103.52	S31° 38' 56.80"W	103.34'
C9	181.00	237.69	S63° 21' 02.16"W	220.98'
C10	181.00	58.72	N69° 44' 01.00"W	58.47'



TYPICAL LOT LAYOUT

UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

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

ZONING NOTES:
1. THE DEVELOPMENT SHALL BE RESTRICTED TO OCCUPANCY BY RESIDENTS AGED 55 YEARS OR OLDER.
2. THE HOMEOWNER'S ASSOCIATION SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL COMMON AREA/FACILITIES, STREET FRONTAGE LANDSCAPING, AND LAWN AND ORNAMENTAL PLAITING MAINTENANCE ON INDIVIDUAL LOTS.
3. THE MINIMUM HEATED FLOOR AREA PER DWELLING UNIT SHALL BE 1,700 SQUARE FEET FOR ONE-STORY AND 2,000 SQUARE FEET FOR TWO-STORY WITH AN OVERALL AVERAGE HEATED FLOOR AREA OF AT LEAST 2,000 SQUARE FEET.
4. HOMES SHALL BE CONSTRUCTED OF BRICK OR STACKED STONE ON FOUR SIDES (EXCEPT MINOR TREATMENTS, I.E. CHIMNEYS, ROOF GABLES, BAY WINDOWS). MINOR TREATMENTS MAY BE OF THE SAME OR WOOD, FIBER-CEMENT OR SHAKE SIDING.
5. THE FRONT FACADE DESIGN SHALL INCLUDE AT LEAST TWO OF THE FOLLOWING ELEVATION FEATURES: SHUTTERS, COVERED PORCHES, BAY WINDOWS, ROOF EAVE BRACKETS, CORNICE, ARCHITECTURAL ENTRANCE DOOR SURROUND.
6. TWO-STORY HOMES SHALL BE PERMITTED IN ADDITION TO DWELLINGS WITH BONUS ROOMS OVER GARAGES.
7. ALL DWELLINGS TO HAVE A MINIMUM TWO-CAR GARAGE.
8. CUL-DE-SACS SHALL BE PERMITTED AND NO ALLEYS SHALL BE REQUIRED (RZR2016-00018, 1.i)
9. ALL UTILITIES SHALL BE PLACED UNDERGROUND.
10. NATURAL VEGETATION SHALL REMAIN ON THE PROPERTY UNTIL THE ISSUANCE OF A DEVELOPMENT PERMIT.
11. MINIMUM FRONT SETBACK: 20', EXCEPT FRONT-FACING GARAGES SHALL BE SETBACK A MINIMUM OF 25 FEET BEHIND SIDEWALKS.
12. ARCHITECTURAL ELEVATIONS FOR ALL LOTS SHALL BE SUBMITTED FOR DIRECTOR'S APPROVAL PRIOR TO ISSUANCE OF ANY BUILDING PERMITS.

USPS KIOSK NOTE:
1. CENTRALIZED MAIL DELIVERY KIOSK TO BE APPROVED BY U.S. POSTAL SERVICE. CONTACT ROBERTANN W. USHER FOR APPROVAL AT 770-717-3478 OR robertann.w.usher@usps.gov.
2. ALL MAIL KIOSK SHALL BE HANDICAP ACCESSIBLE AND MEET ADA REQUIREMENTS

NOTE:
1. REFER TO DETAIL TC-07 AND TC-08 ON C7.1 FOR ROUNDABOUT CONSTRUCTION AND SIGN PLACEMENT
2. NO OVERSIZED SIGNS ARE PERMITTED

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY COPYRIGHT LAWS AND ARE THE PROPERTY OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR PUBLICATION OF THESE DOCUMENTS, IN WHOLE OR IN PART, MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER OR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT INTENDED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PRELIMINARY PLAT

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

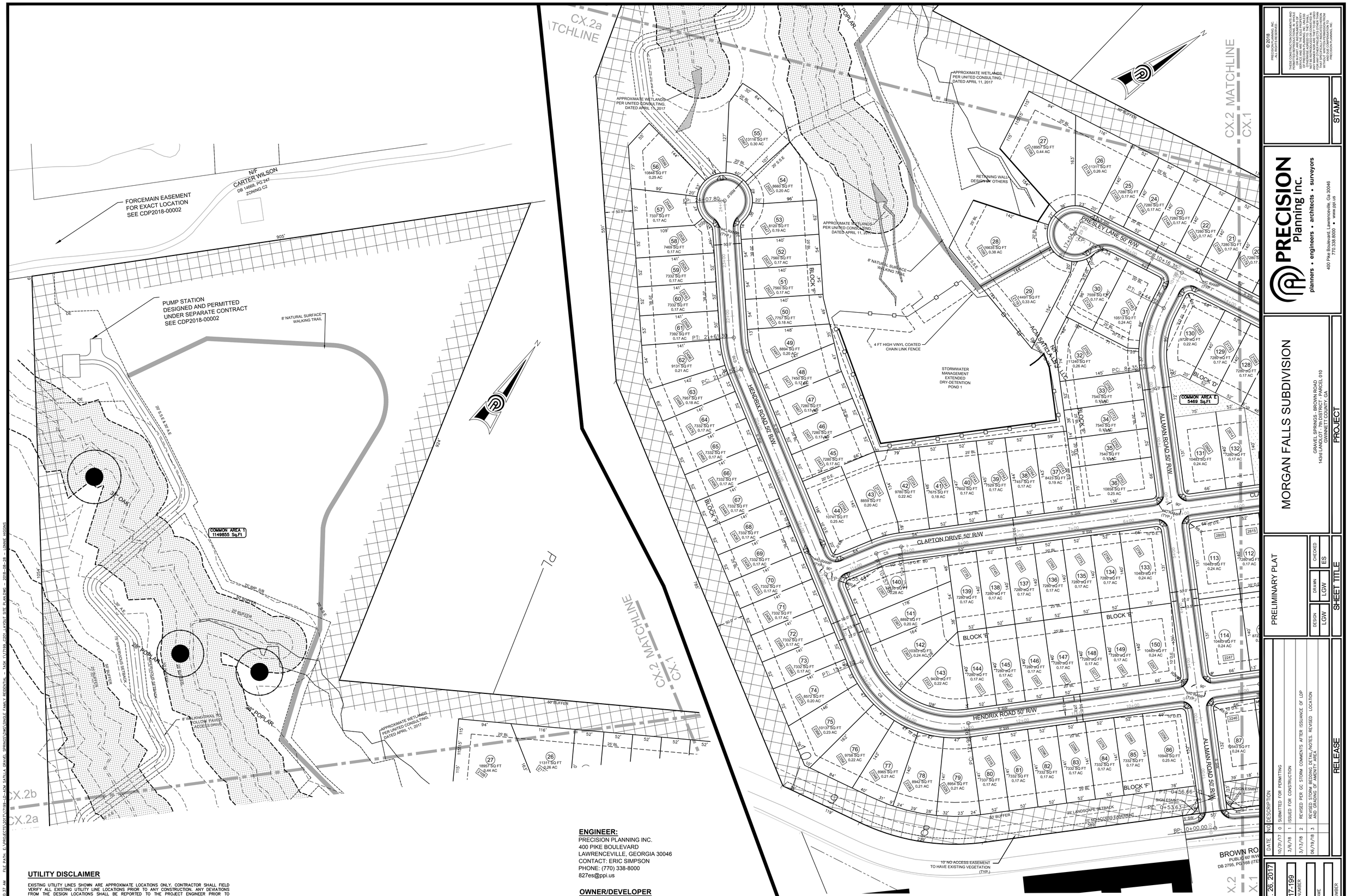
SHEET TITLE
RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

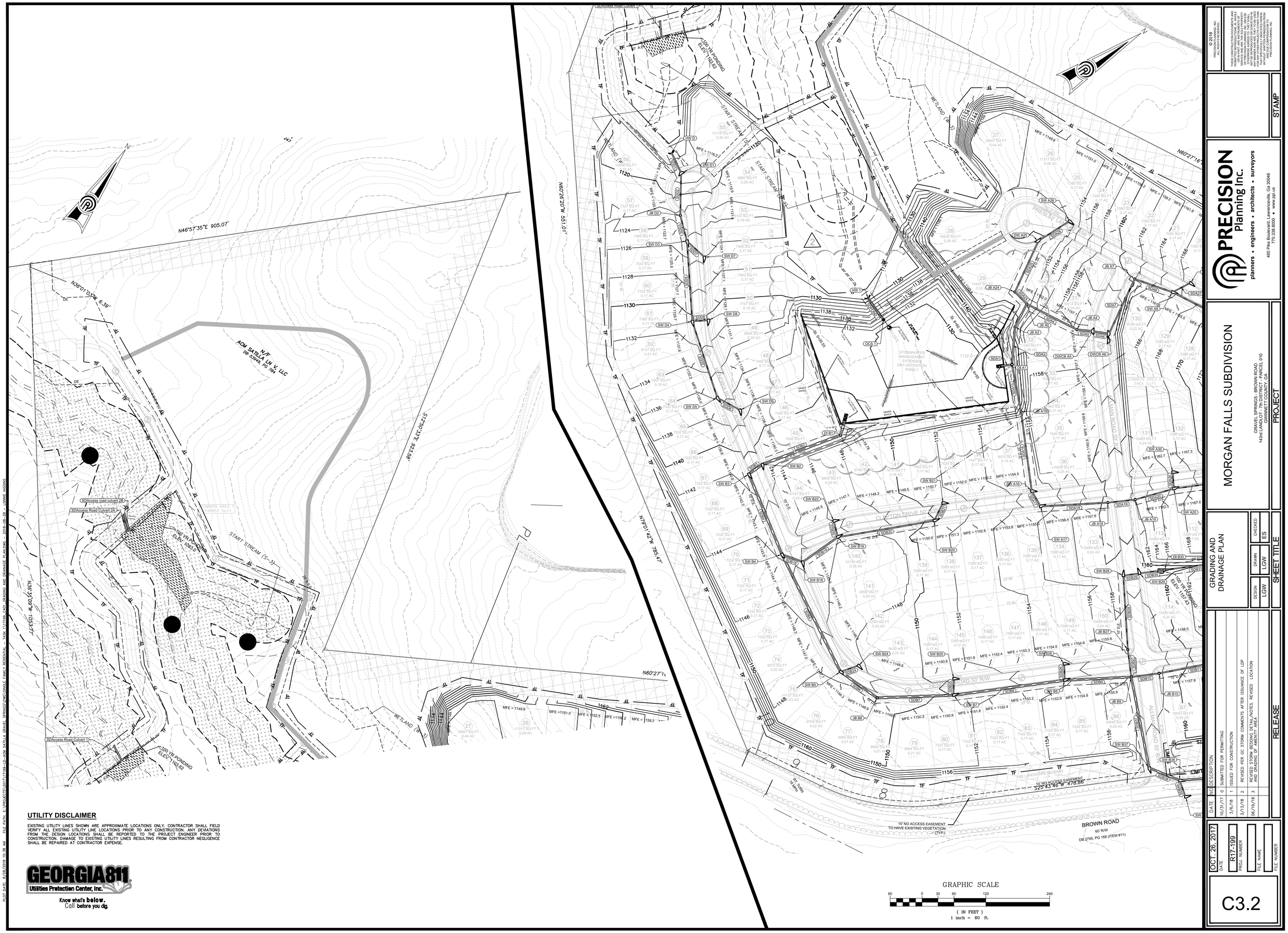
OCT. 26, 2017
DATE
R17-199
PROJ. NUMBER
FILE NAME
FILE NUMBER

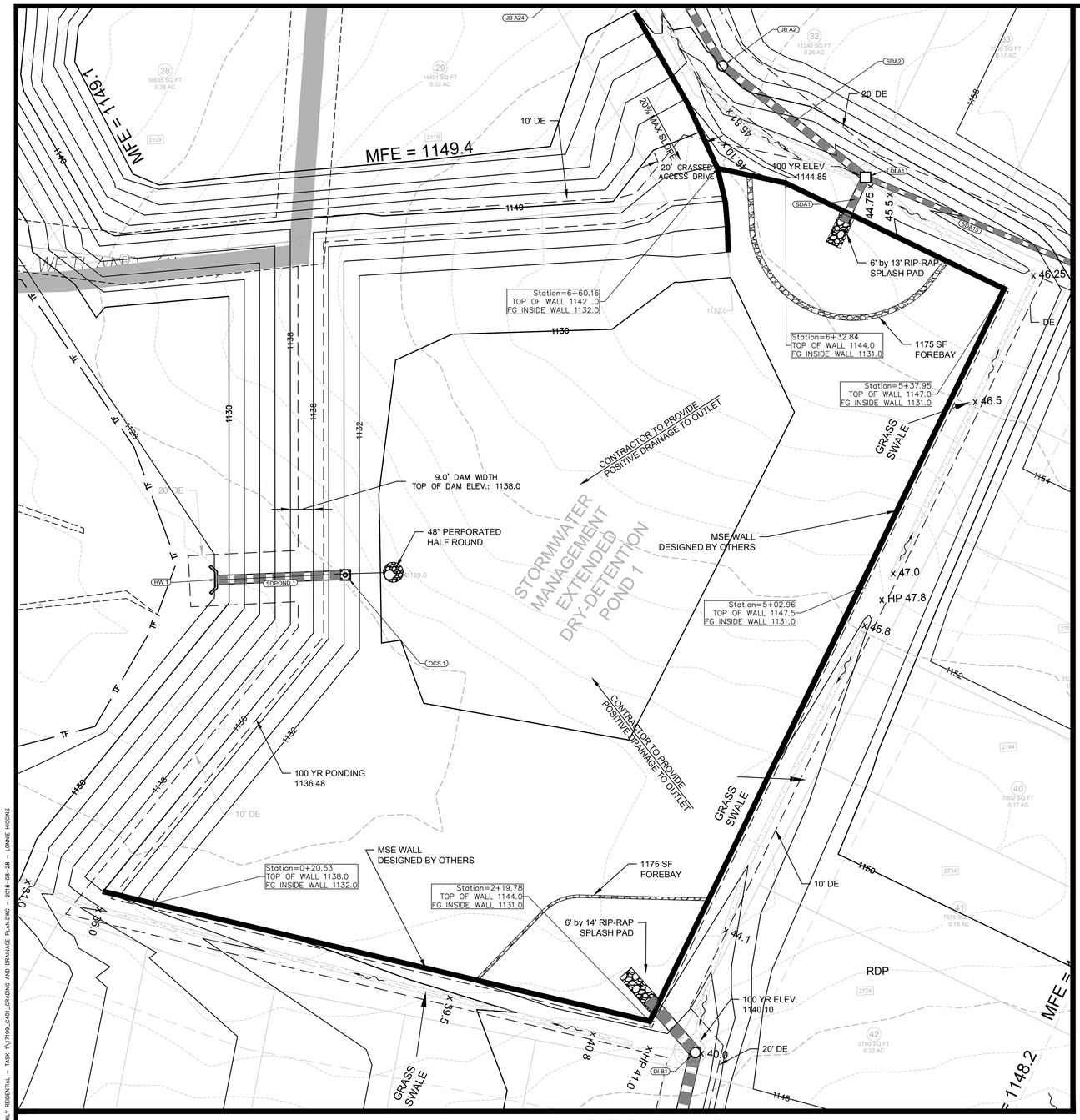
C2.1

PLOT DATE: 8/28/2018 10:37 AM FILE PATH: E:\PROJECTS\2017\17199-GD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_GDO LAYOUT SITE PLAN.DWG - 2018-08-28 - LONNIE HIGGINS


N/F
CARTER WILSON
DB 14668, PG 247
ZONING C2
FORCEMAIN EASEMENT
FOR EXACT LOCATION
SEE CDP2018-00002
PUMP STATION
DESIGNED AND PERMITTED
UNDER SEPARATE CONTRACT
SEE CDP2018-00002
905'
8' NATURAL SURFACE WALKING TRAIL
DE
20' D.E.
30' A.E.
COMMON AREA 1
1149855 Sq.Ft
105'
75' IMPERVIOUS SETBACK
40' WATER
20' BUFFER
8' WALKING TRAIL W/ FOLLOW PAVED ACCESS DRIVE
398' POPLAR
APPROXIMATE WETLANDS PER UNITED CONSULTING, DATED APRIL 11, 2017
CX.2a MATCHLINE
CX.1
CX.2b
CX.2a
PL
POPLAR
APPROXIMATE WETLANDS PER UNITED CONSULTING, DATED APRIL 11, 2017
20' BUFFER
30' BUFFER
20' D.E.
30' A.E.
8' NATURAL SURFACE WALKING TRAIL
RETAINING WALL DESIGN BY OTHERS
4 FT HIGH VINYL COATED CHAIN LINK FENCE
STORMWATER MANAGEMENT EXTENDED DRY-DETENTION POND 1
PRESLEY LANE 50' R/W
HENDRIX ROAD 50' R/W
CLAPTON DRIVE 50' R/W
ALLMAN ROAD 50' R/W
BLOCK 'A'
BLOCK 'B'
BLOCK 'C'
BLOCK 'D'
BLOCK 'E'
BLOCK 'F'
HENDRIX ROAD 50' R/W
COMMON AREA 2
5469 Sq.Ft
SIGN ESMNT
40' LANDSCAPE SETBACK
10' NO ACCESS EASEMENT
10' NO ACCESS EASEMENT TO HAVE EXISTING VEGETATION (TYP.)
BROWN RO
PUBLIC 60' R/W
DB 2795, PG 168 (ITE
X.2
X.1
PP: 0+00.00
PC: 0+56.66
PC: 0+53.63
PT: 2+61.30
PC: 2+71.30
PT: 3+13.54
PC: 8+35.10
PT: 9+44.54
PC: 12+04.54
PT: 17+07.80
PC: 17+07.80
PT: 19+50.00
PC: 19+50.00
PT: 21+50.00
PC: 21+50.00
PT: 23+50.00
PC: 23+50.00
PT: 25+50.00
PC: 25+50.00
PT: 27+50.00
PC: 27+50.00
PT: 29+50.00
PC: 29+50.00
PT: 31+50.00
PC: 31+50.00
PT: 33+50.00
PC: 33+50.00
PT: 35+50.00
PC: 35+50.00
PT: 37+50.00
PC: 37+50.00
PT:

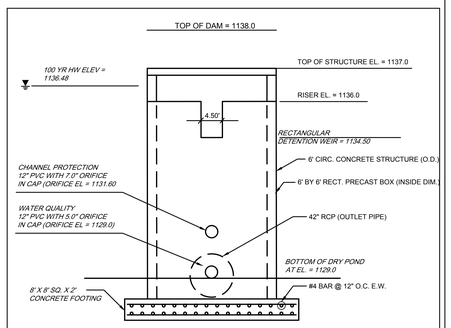
AMENITY AREA TO BE PERMITTED UNDER SEPARATE CDP CASE NUMBER
CARTER B. N/F WILSON & JOYCE L. WILSON DB 5207, PG 79 ZONED C2
N/F ACM SATILLA LN V, LLC DB 53949, PG 784 ZONED RA200
N/F ACM SATILLA LN V, LLC DB 53949, PG 784
ZONING R-SR ZONING OI
GRAVEL SPRINGS ROAD
GWINNETT COUNTY PROJECT NUMBER: 9931 A.K.A. S.R. 324
DB 146, PG 224 (ITEM #10), DB 42492, PG 196 (ITEM #12) VARIES
PERMANENT EASEMENT DB42492, PG222 (ITEM #12)
FLUME
STREAM (S-1)
WETLAND (W-4)
START STREAM (S-5)
COMMON AREA "C" 267196 SqFt
STORMWATER MANAGEMENT EXTENDED DRY DETENTION POND
LANDSCAPE BUFFER
HWF
GWF
FH
P
R/W
LAPTOP DRIVE (PUBLIC)
HIDDEN SPRING DRIVE (PUBLIC)
LANDSCAPE ROAD (PUBLIC)
BROWN ROAD
60' R/W
DB 2795, PG 168 (ITEM #11)
N/F HUANG SU-TZU DB 53949, PG 784 ZONED RA200
GARY D. BROWN & CECIL BREEDLOVE DB 57411, PG 105
ZONEDC2
10' NO ACCESS EASEMENT
N/F ROBIN C. BROWN DB 53949, PG 784 ZONED RA200
ROBIN C. N/F DB 53949
ROWLAND CROMLEY, WILLIAM C. CROMLEY, NANCY C. EVANS & CATHERINE C. CROMLEY DB 53949, PG 784 ZONED RA200
N/F DONROB INVESTMENTS 6 DB 53949, PG 784 ZONED RA200
10' NO ACCESS EASEMENT TO HAVE EXISTING VEGETATION (TYP.)
100-YR PONDING ELEV. 1161.31
100-YR PONDING ELEV. 1158.75
100-YR PONDING ELEV. 1168.63
100-YR PONDING ELEV. 1162.45
SLOPE TO HEAD
SLOPE TO DRAIN
SLOPE TO DRAIN
SLOPE TO HEAD


N46°5'7"35"E 905.07'
N35°0'1"0"W 6.39'
N/F
ACH SATILLA LN V, LLC
DB 55946, PG 784
S72°30'13"E 923.58'
N60°26'20"W 551.01'
N35°31'09"W 1053.77'
N73°01'42"W 785.47'
N60°27'16"
S25°43'46"W 476.86'
SDAccess road culvert 2B
SDAccess Road Culvert 2A
SDAccess Road Culvert 1
100 YR PONDING ELEV= 1063.0
100 YR PONDING ELEV= 1102.62
START STREAM (S-3)
WETLAND (W-2)
SIMMON AREA = 49855 Sq.Ft.
SDAccess Road Culvert 3
100 YR PONDING ELEV= 1103.82
START STREAM (S-1)
WETLAND (W-1)
STORMWATER MANAGEMENT EXTENDED DRY-DETENTION POND 1
OCS 1
HW 1
HW D
HW D1
SW D3
SW D7
SW D4
SW D8
SW D5
SW D6
SW B2
SW B3
SW B21
SW A16
SW B22
SW B4
SW B20
SW B19
SW B18
SW B5
SW B7
SW B8
SW B37
SW B38
SW A30
SW A20
SW A17
SW A18
SW A19
SW A25
SW A26
SW A8
SW A7
SW A6
SW A5
SW A4
SW A3
SW A2
SW A1
SW B6
SW B9
SW B10
SW B11
SW B12
SW B13
SW B14
SW B15
SW B16
SW B17
SW B23
SW B24
SW B25
SW B26
SW B27
SW B28
SW B29
SW B30
SW B31
SW B32
SW B33
SW B34
SW B35
SW B36
DI A1
DI B1
DI B30
JB D2
JB A24
JB A23
JB A22
JB A21
JB A20
JB A19
JB A18
JB A17
JB A16
JB A15
JB A14
JB A13
JB A12
JB A11
JB A10
JB A9
JB A8
JB A7
JB A6
JB A5
JB A4
JB A3
JB A2
JB A1
JB B1
JB B2
JB B3
JB B4
JB B5
JB B6
JB B7
JB B8
JB B9
JB B10
JB B11
JB B12
JB B13
JB B14
JB B15
JB B16
JB B17
JB B18
JB B19
JB B20
JB B21
JB B22
JB B23
JB B24
JB B25
JB B26
JB B27
JB B28
JB B29
JB B30
JB B31
JB B32
JB B33
JB B34
JB B35
JB B36
JB B37
JB B38
SDA1
SDA2
SDA3
SDA4
SDA5
SDA6
SDA7
SDA8
SDA9
SDA10
SDA11
SDA12
SDA13
SDA14
SDA15
SDA16
SDA17
SDA18
SDA19
SDA20
SDA21
SDA22
SDA23
SDA24
SDA25
SDA26
SDA27
SDB1
SDB2
SDB3
SDB4
SDB5
SDB6
SDB7
SDB8
SDB9
SDB10
SDB11
SDB12
SDB13
SDB14
SDB15
SDB16
SDB17
SDB18
SDB19
SDB20
SDB21
SDB22
SDB23
SDB24
SDB25
SDB26
SDB27
SDB28
SDB29
SDB30
SDB31
SDB32
SDB33
SDB34
SDB35
SDB36
SDB37
SDB38
DWCB A5
DWCB A6
DWCB A7
DWCB A8
DWCB A9
DWCB A10
DWCB A11
DWCB A12
DWCB A13
DWCB A14
DWCB A15
DWCB A16
DWCB A17
DWCB A18
DWCB A19
DWCB A20
DWCB A21
DWCB A22
DWCB A23
DWCB A24
DWCB



DETENTION POND 1 SITE PLAN

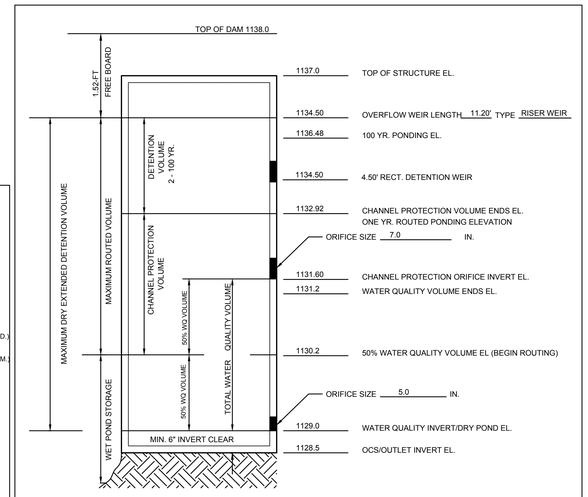
SCALE 1"= 20'



OUTLET CONTROL STRUCTURE SCHEMATIC

NTS

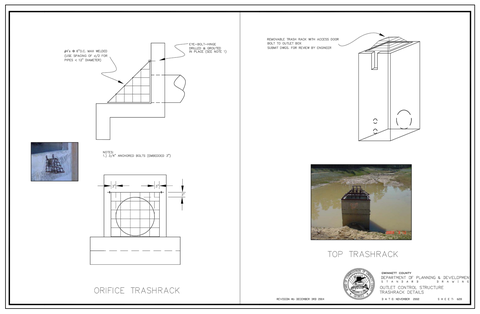
NOTES:
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
2. STEEL REBAR SHALL MEET ASTM A615 SPECIFICATIONS.

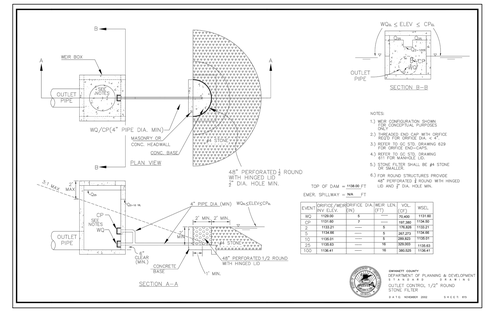


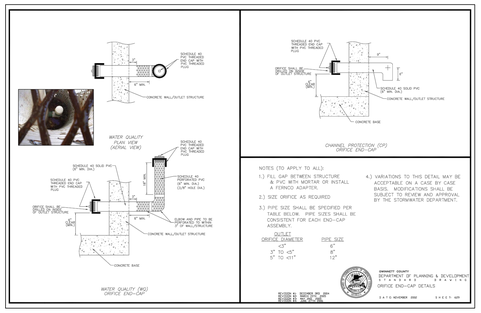
WATER QUALITY VOL. REQ'D 66,176 CF PROPOSED 70,400 CF CU. FT.
CHANNEL PROTECTION VOL. REQ'D 180,739 CF PROPOSED 197,380 CF CU. FT.

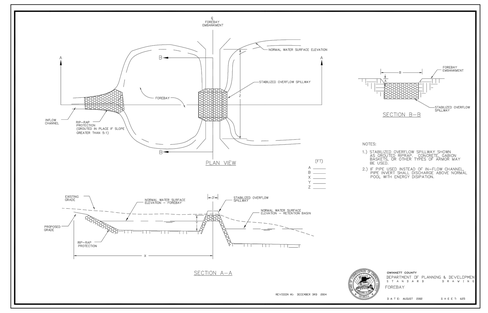
OUTLET CONTROL STRUCTURE SCHEMATIC

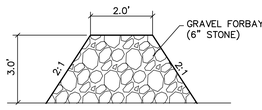
NTS











FOREBAY BERM DETAIL

*FOREBAY AREA = 1175 SF
HEIGHT = 3 FT
VOLUME = 3520 CF

UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

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

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE COPYRIGHTED, IN WHOLE, OR IN PART, BY PRECISION PLANNING, INC. OR ONE OF PRECISION PLANNING, INC.'S SALES REPRESENTATIVES AND SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE ONE SPECIFICALLY INDICATED HEREIN WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

POND 1 DETAILS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

OCT. 26, 2017
DATE

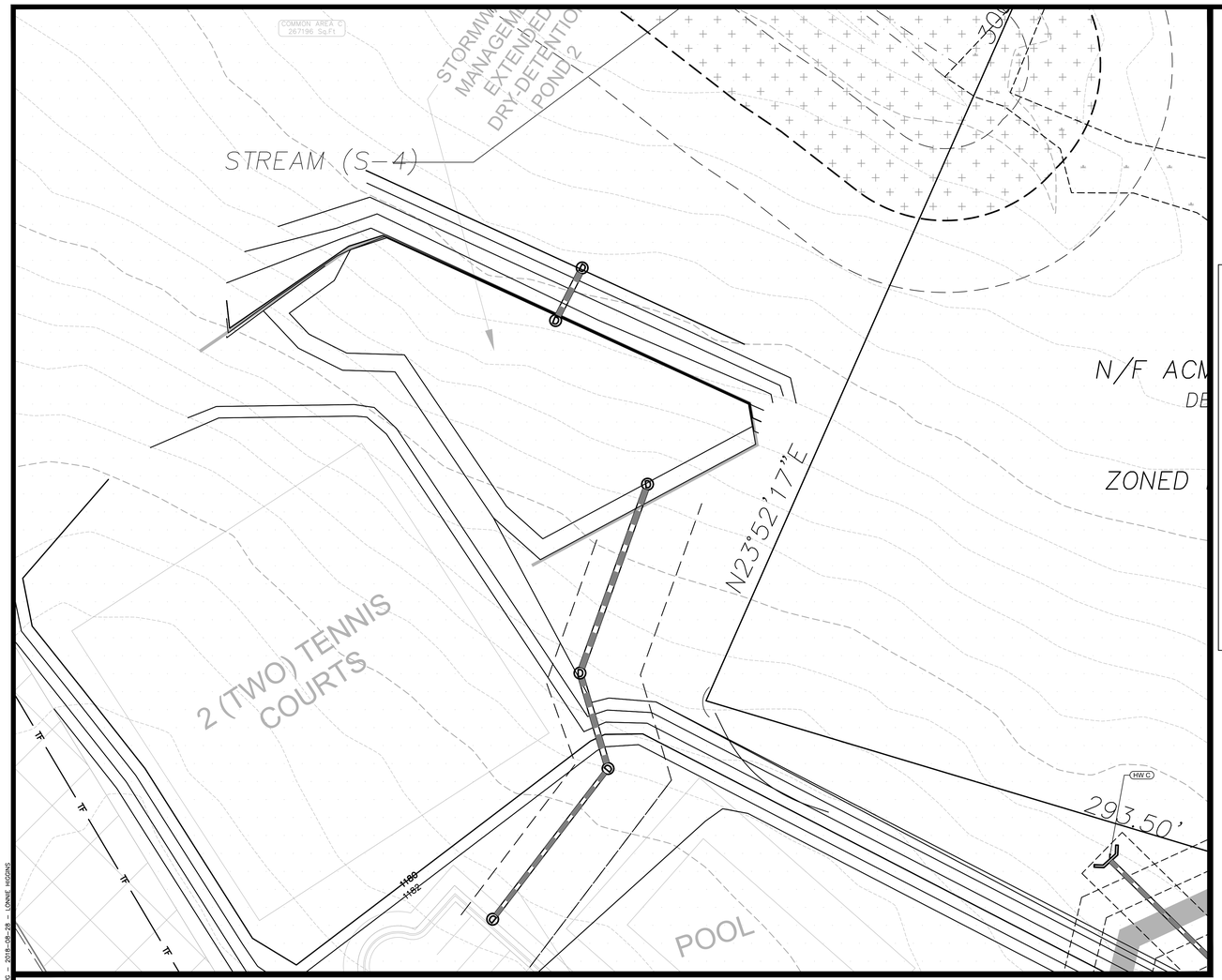
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

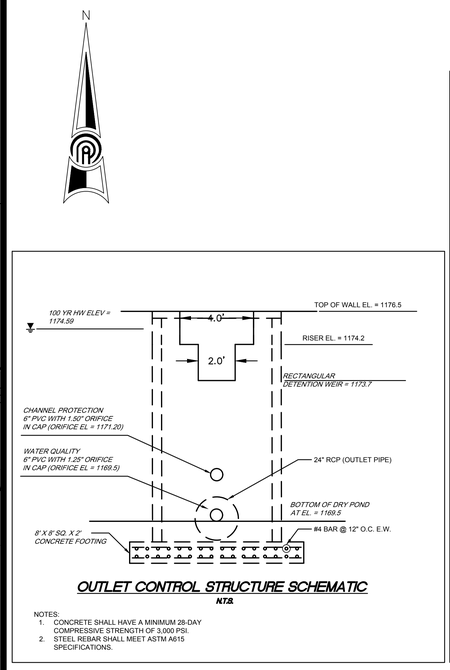
C3.4

PLOT DATE: 8/28/2018 10:38 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C401_GRADING AND DRAINAGE PLAN.DWG - 2018-08-28 - LONNIE HIGGINS



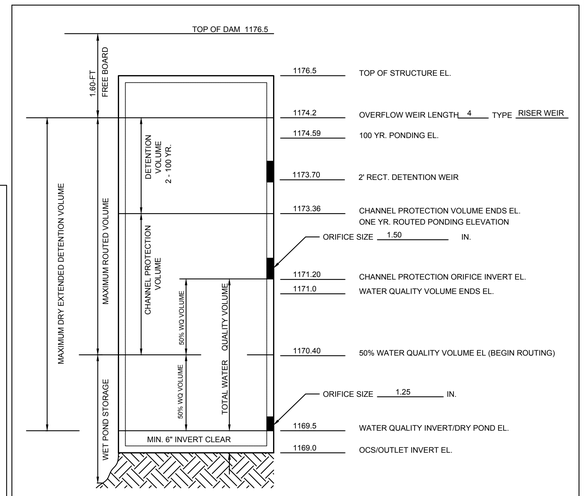
DETENTION POND 2 SITE PLAN
SCALE 1"= 20'

POND TO BE PERMITTED WITH AMENITY AREA



OUTLET CONTROL STRUCTURE SCHEMATIC
N.T.S.

NOTES:
1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
2. STEEL REBAR SHALL MEET ASTM A615 SPECIFICATIONS.



WATER QUALITY VOL. REQ'D 3,877 CF PROPOSED 3,956 CF CU. FT.
CHANNEL PROTECTION VOL. REQ'D 10,285 CF PROPOSED 11,640 CF CU. FT.

OUTLET CONTROL STRUCTURE SCHEMATIC
N.T.S.

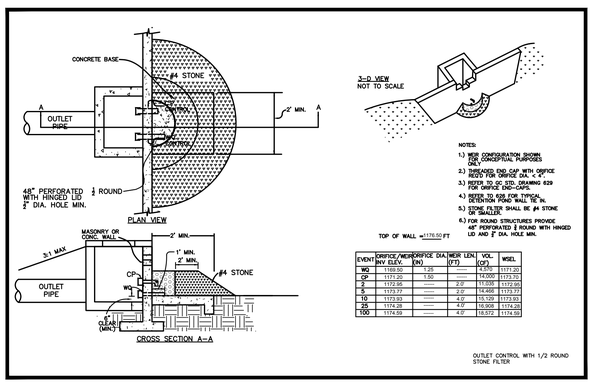
GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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

UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

FOREBAY BERM DETAIL
*FOREBAY AREA = 153 SF
HEIGHT = 3 FT
VOLUME = 457 CF



NOTES:
1.) WEIR CONFIGURATION SHOWN FOR CONCEPTUAL PURPOSES ONLY.
2.) THREADED END CAP WITH ORIFICE PLATE TO ORIFICE CONTROL PER GA STANDARD 629 FOR ORIFICE SIZE/TYPE.
3.) REFER TO 629 FOR TYPICAL DETENTION POND WALL TIE IN.
4.) STONE FILTER SHALL BE #4 STONE OR SMALLER.
5.) FOR ROUND STRUCTURES PROVIDE 48" PERFORATED ½ ROUND WITH HINGED LID AND 2" DIA. HOLE MIN.

EVENT	ORIFICE/WEIR (INV. ELEV.	ORIFICE DIA. (IN)	WEIR LEN. (FT)	VOL. (CF)	WSEL
WQ	1169.50	1.25	----	4,570	1171.20
CP	1171.20	1.50	----	11,000	1173.70
2	1172.96	----	2.0'	11,035	1172.96
5	1173.77	----	2.0'	14,466	1173.77
10	1173.93	----	4.0'	15,129	1173.93
25	1174.29	----	4.0'	16,908	1174.29
100	1174.59	----	4.0'	18,572	1174.59

OUTLET CONTROL WITH 1/2 ROUND STONE FILTER

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY ARCHITECTURAL WORKS COPYRIGHT PROTECTION AS A WORK OF PRECISION PLANNING, INC. SALES OF PRECISION PLANNING, INC. PLANS ARE LIMITED TO ONE USE ONLY AND MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER WITHOUT PRIOR WRITTEN PERMISSION FROM PRECISION PLANNING, INC. FOR ANY OTHER PROJECTS OTHER THAN THE ONE SPECIFICALLY DESIGNED FOR WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
POND 2 DETAILS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

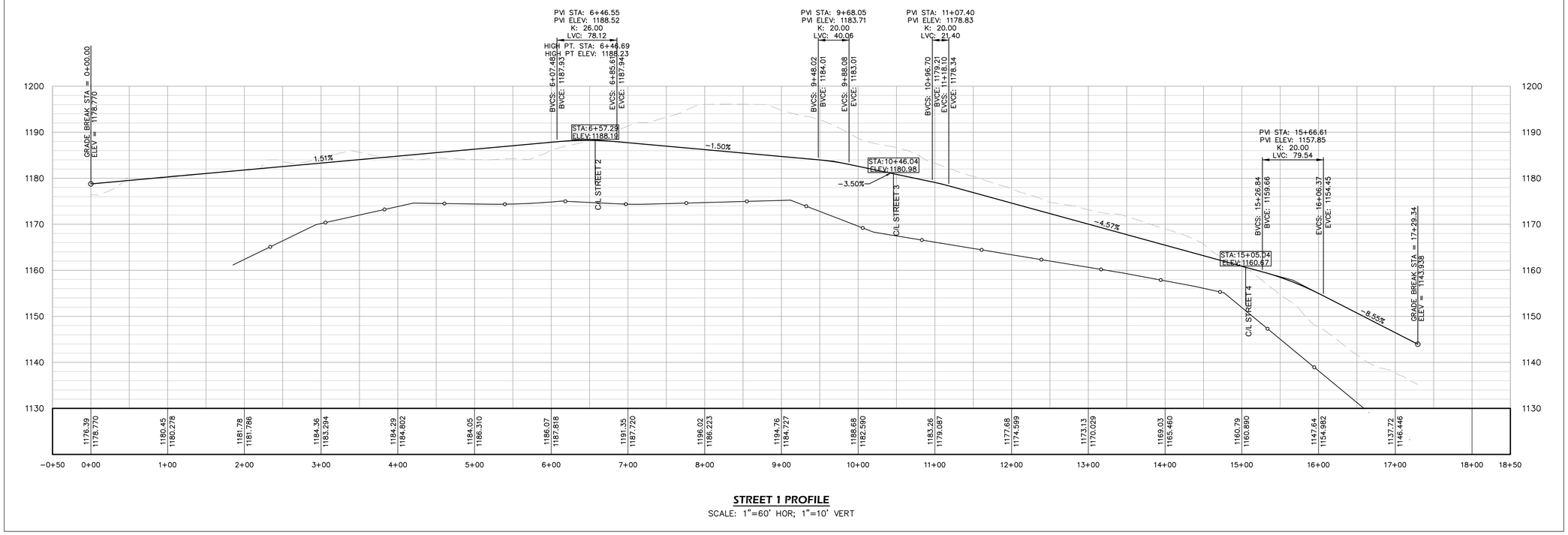
RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.

OCT. 26, 2017
DATE
R17-199
PROJ. NUMBER
FILE NAME
FILE NUMBER

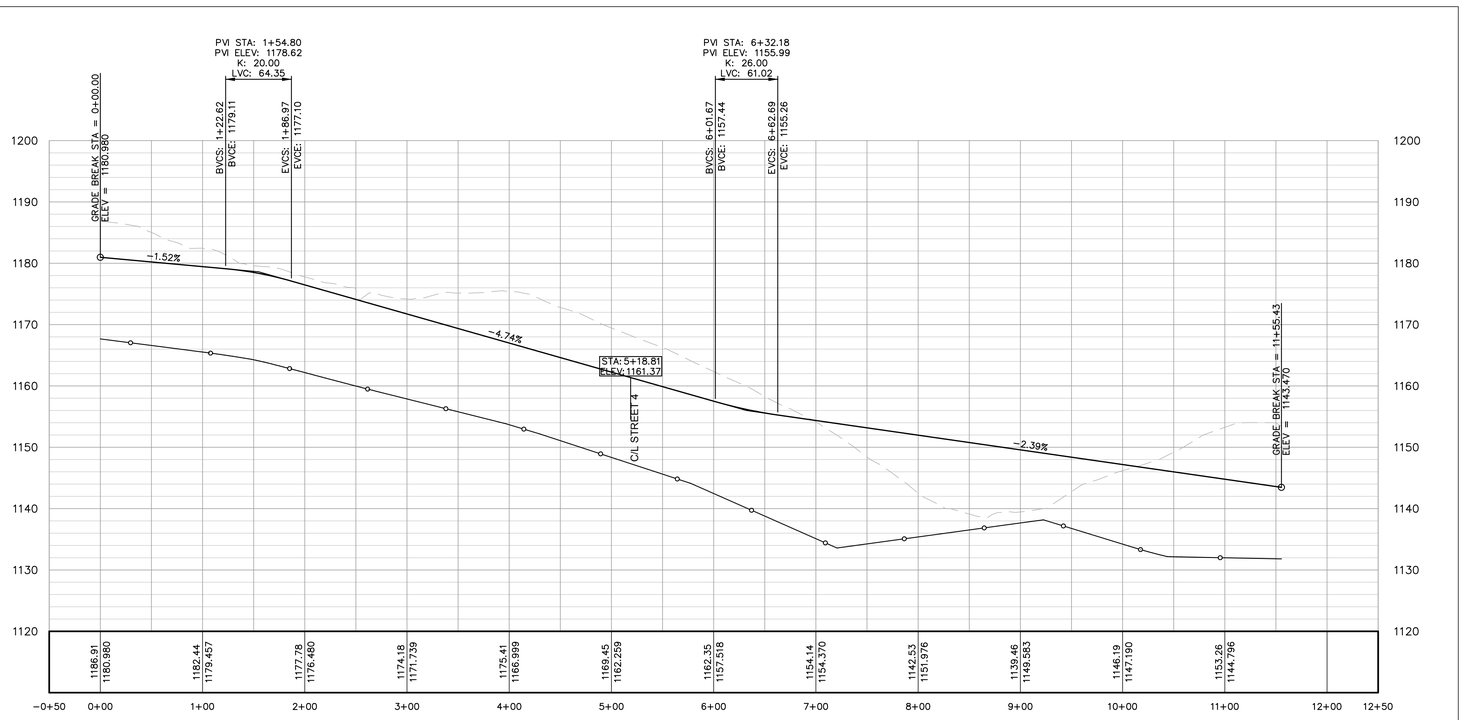
C3.5

PLOT DATE: 6/20/2018 10:39 AM FILE PATH: E:\PROJECTS\2017\R17-199-MORGAN FALLS\4 GRAVEL SPRINGS\WORKING\PHASE I FINAL\RESIDENTIAL - TASK LAYER\4 ADD GRADING AND DRAINAGE PLANS.dwg - 2018-06-20 - LONNIE HUGHES



STREET 1 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



CLAPTON DRIVE PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE

© 2017
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL BY ARCHITECTURAL COPYRIGHT LAWS AND ARE THE PROPERTY OF PRECISION PLANNING, INC. SALES OR OTHER DISPOSITION BY THE OWNER OF ANY OF THESE DOCUMENTS IS PROHIBITED. NOT TO BE REPRODUCED OR CONVEYED IN ANY FORM OR MANNER WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

Missing or invalid reference
File: H:\TEMP\LAH\2099595993
Sheet: 1

PROJECT

MORGAN FALLS SUBDIVISION

address
land lot, district parcel no.
county, state

RESIDENTIAL ROAD PROFILES

DESIGN: LGW | DRAWN: LGW | CHECKED: ES

SHEET TITLE

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION

OCT. 26, 2017
DATE

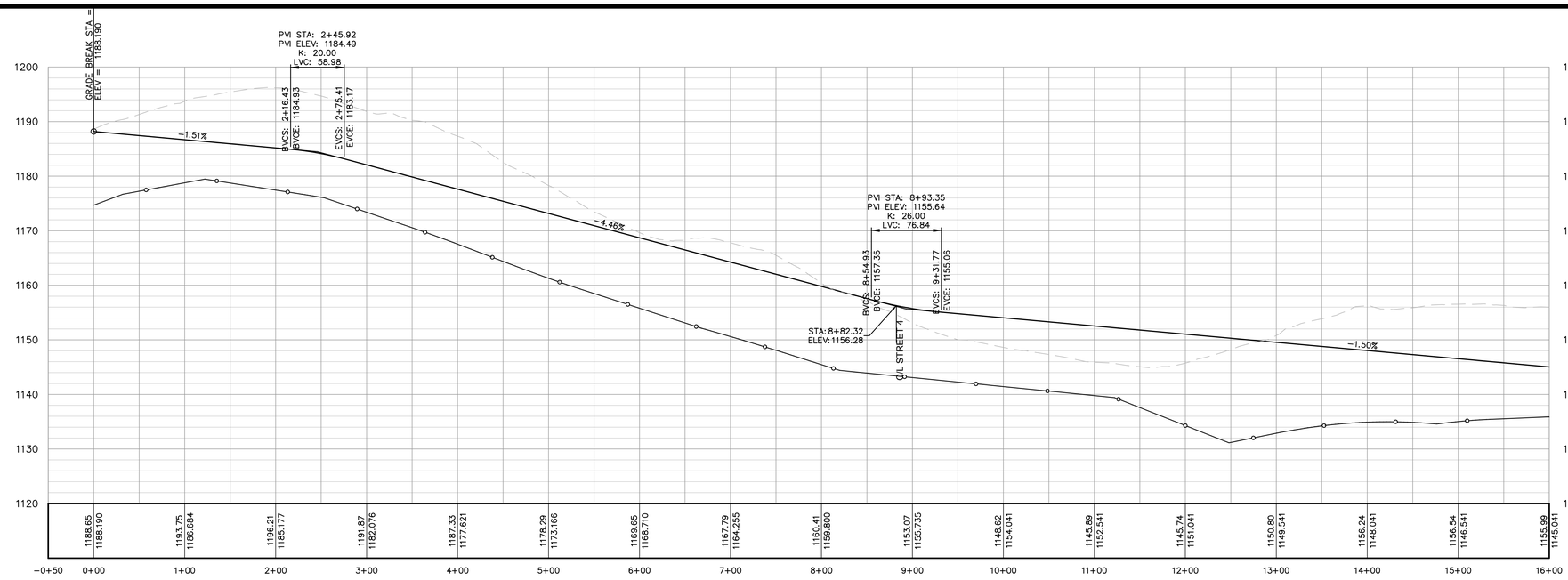
R17.199
PROJ. NUMBER

FILE NAME

FILE NUMBER

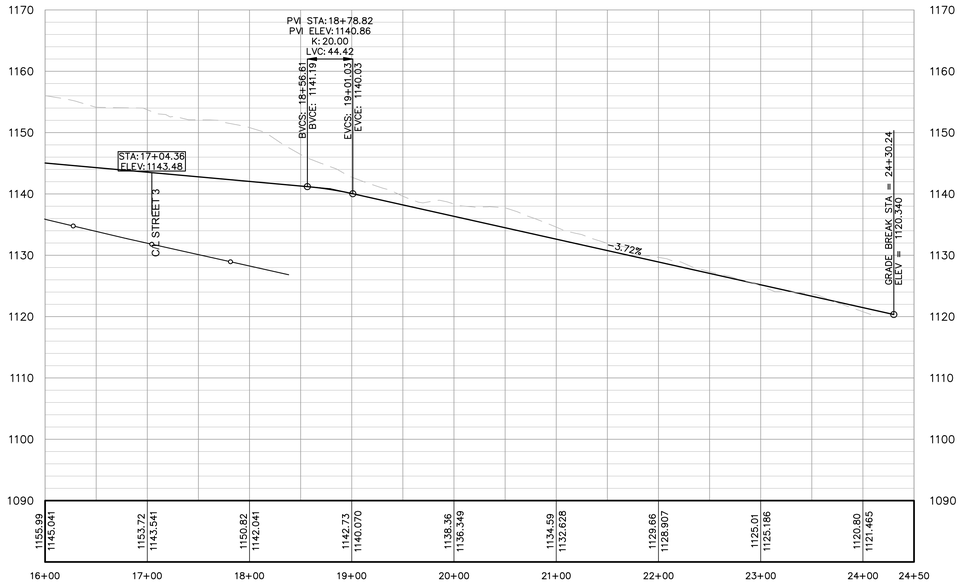
C3.5

PLOT DATE: 8/28/2018 10:39 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_BASE DESIGN.DWG - 2018-08-28 - LONNIE RIGGINS



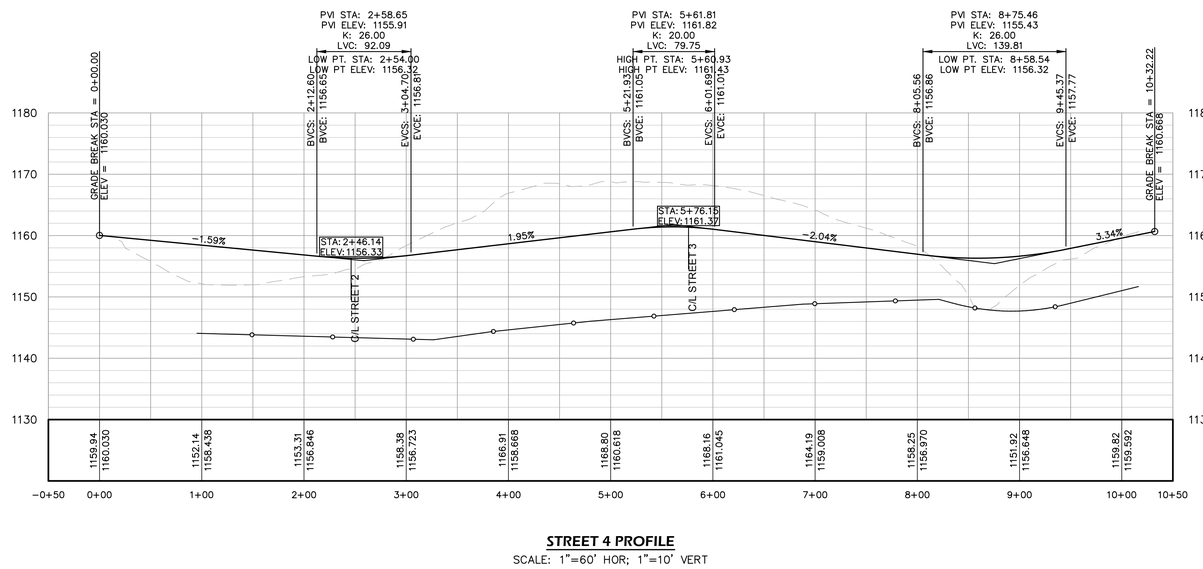
STREET 2 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



STREET 2 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



STREET 4 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

LEGEND:

PROPOSED GRADE

EXISTING GRADE

ROCK SURFACE

© 2017
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL IN NATURE, AND ARE THE PROPERTY AND COPYRIGHT OF PRECISION PLANNING, INC. UNLESS OTHERWISE AGREED TO IN WRITING, THEY ARE NOT TO BE REPRODUCED OR CONVEYED IN ANY FORM OR MANNER WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

Missing or invalid reference
File: H:\TEMP\LAH\20[illegible]09595993
Sheet: 1

PROJECT

MORGAN FALLS SUBDIVISION

address
land lot, district parcel no.
county, state

SHEET TITLE

RESIDENTIAL ROAD PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION

OCT. 26, 2017
DATE

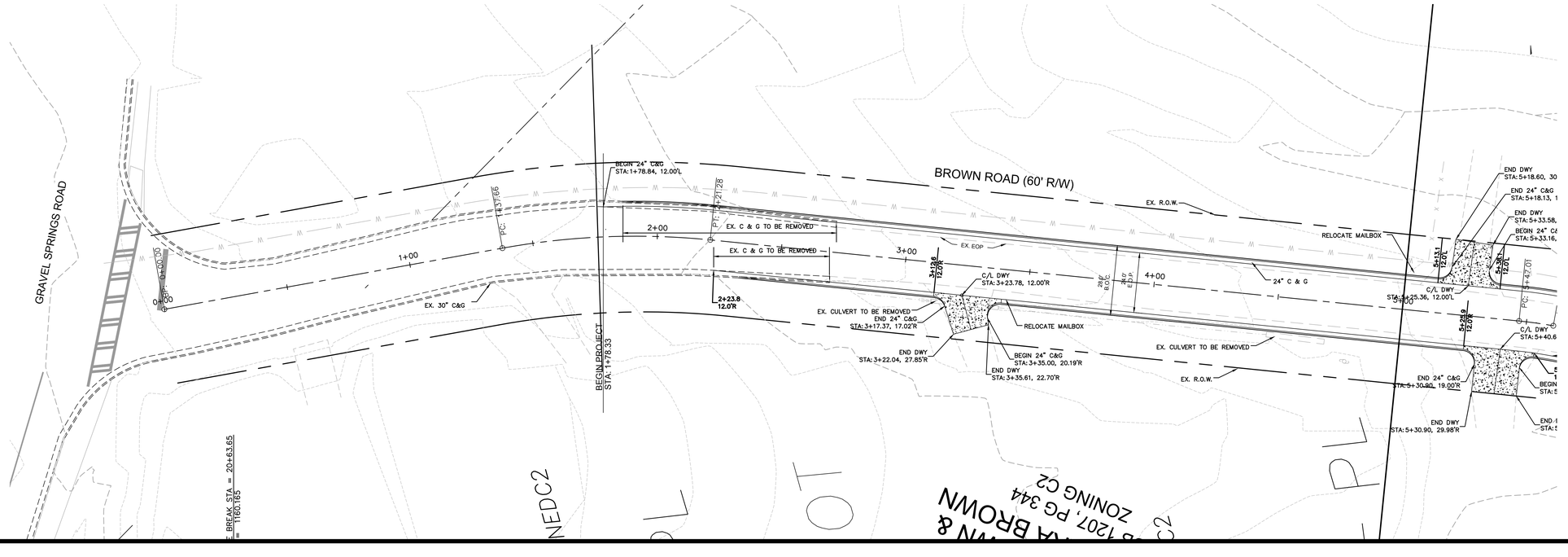
R17-199
PROJ. NUMBER

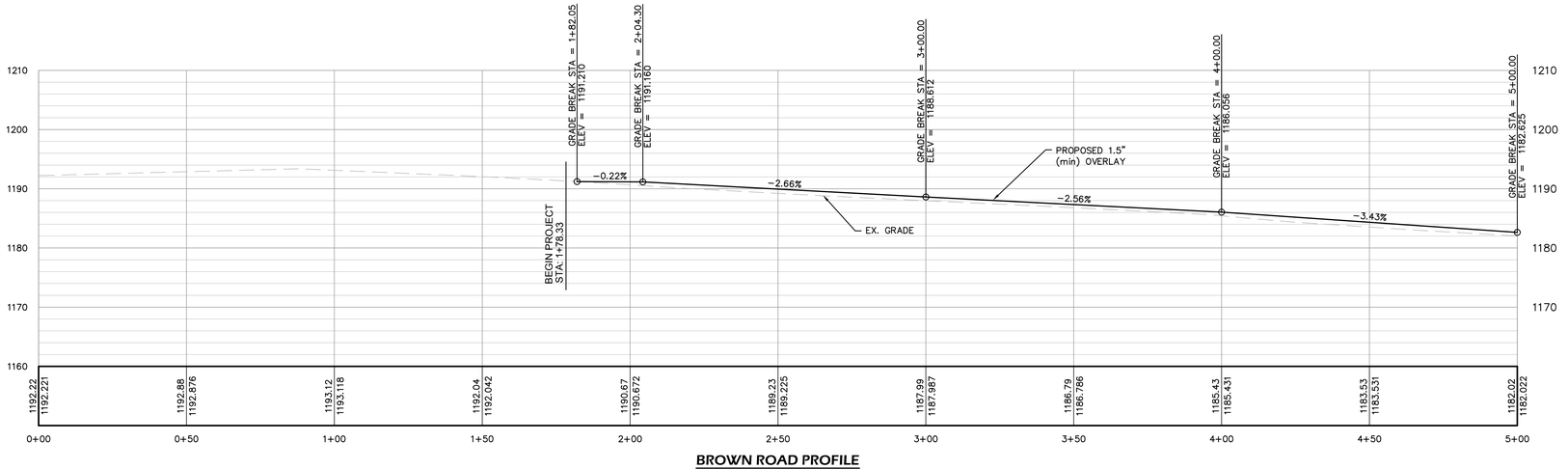
FILE NAME

FILE NUMBER

C3.6

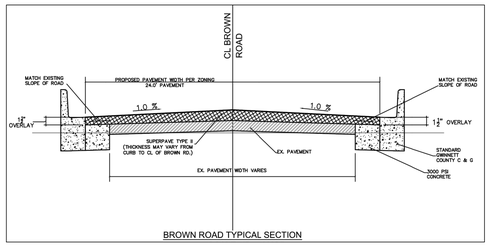
PLOT DATE: 9/28/2018 10:39 AM FILE PATH: E:\PROJECTS\2017\17099-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17099_BASE DESIGN.DWG - 2018-08-28 - LONNIE HIGGINS





BROWN ROAD PROFILE

SCALE: 1"=20' HOR; 1"=10' VERT



BROWN ROAD TYPICAL SECTION

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION.

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

NOTES:
1. ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
2. CONTRACTOR TO VERIFY ALL ABOVE GROUND AND UNDERGROUND UTILIZES PRIOR TO CONSTRUCTION.
3. OVERLAY PAVEMENT SHALL HAVE A MINIMUM THICKNESS OF 1.5 " AND SHALL BE SUPERPAVE-TYPE II.
4. ALL SIGNS SHALL MEET MUTCD STANDARDS AND SPECIFICATIONS.
5. SAW CUT ALONG THE EXISTING E.O.P. OF THE ENTIRE LENGTH OF PROJECT.
6. ALL CONSTRUCTION DEBRIS TO BE DISPOSED OF PROPERLY.
7. NO CONSTRUCTION DEBRIS TO BE BURIED WITHIN LIMITS OF CONSTRUCTION LIMITS.

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PERMITTED REPRODUCTIONS, IN WHOLE OR IN PART, ARE AND SHALL REMAIN THE SERVICE AND ARE THE EXCLUSIVE PROPERTY OF PRECISION PLANNING, INC. AND SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER, NOR USED FOR ANY OTHER PROJECTS OTHER THAN THAT SPECIFICALLY INTENDED BY THIS DRAWING WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT OF RECORD PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8900 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7TH DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

BROWN ROAD
IMPROVEMENTS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	5/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA	06/19/18

OCT. 26, 2017
DATE

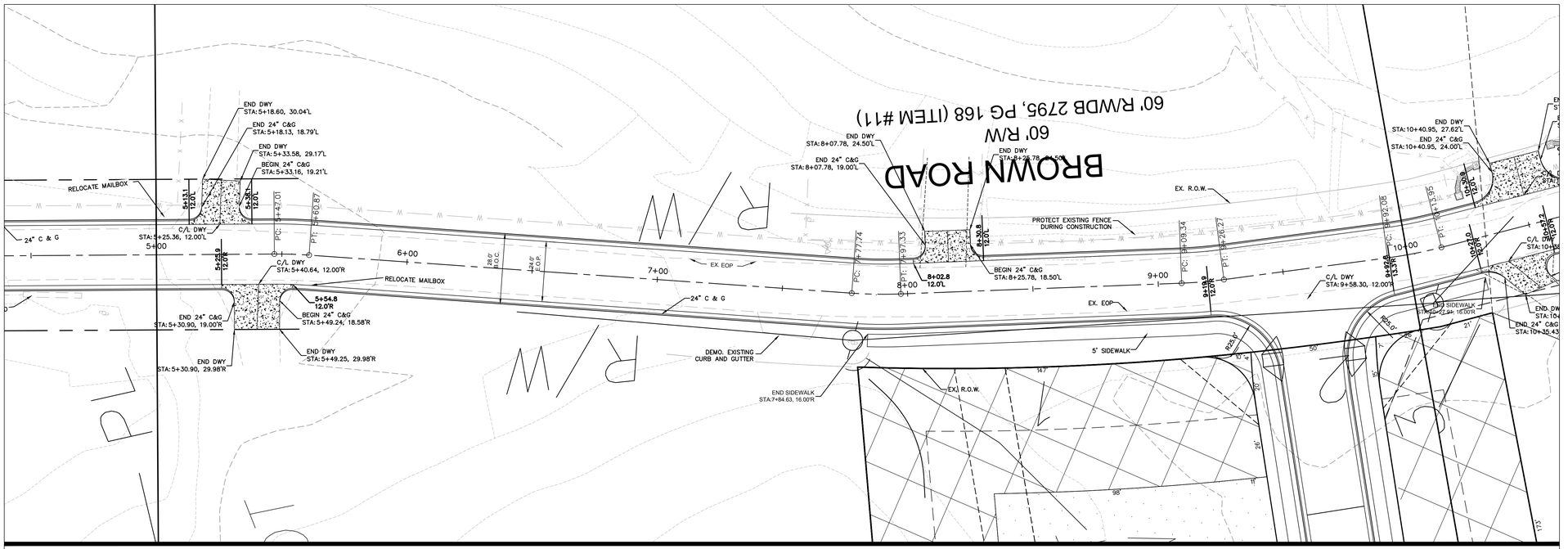
R17-199
PROJ. NUMBER

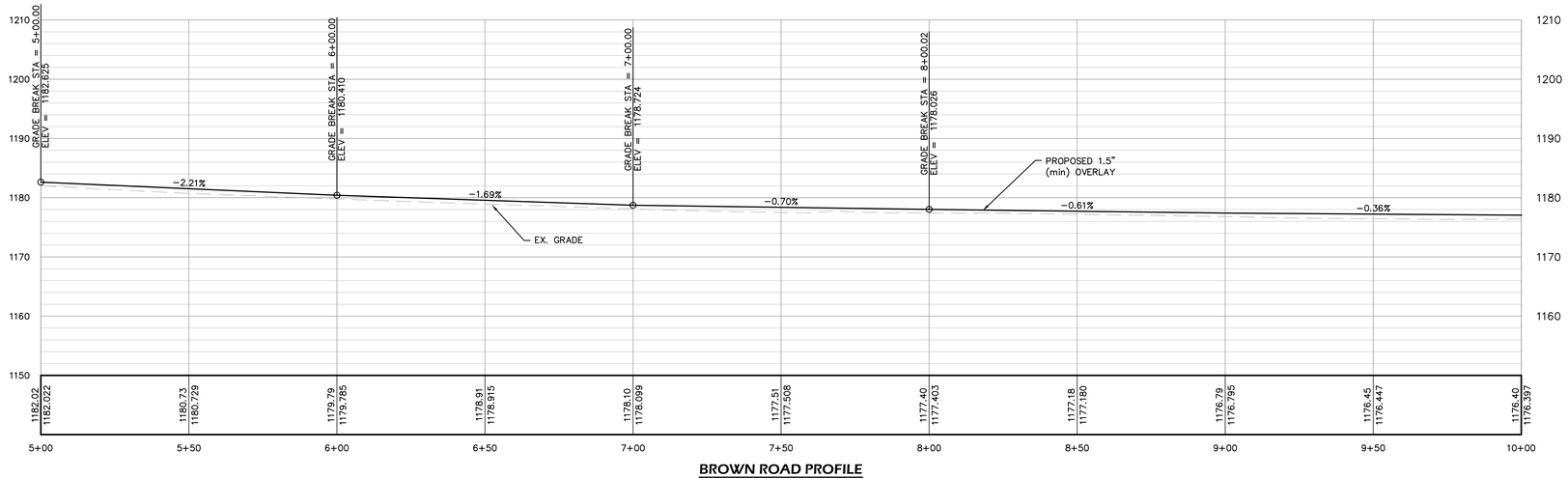
FILE NAME

FILE NUMBER

C3.7

PLOT DATE: 8/28/2018 10:40 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C701_BROWN ROAD-GDOT.DWG - 2018-08-28 - LONNIE HIGGINS





BROWN ROAD PROFILE
SCALE: 1"=20' HOR; 1"=10' VERT

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION.

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

NOTE:
SEE SHEET C3.7 FOR BROWN RD. TYPICAL SECTION DETAIL

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PERMITTED REPRODUCTIONS, IN WHOLE OR IN PART, ARE AND SHALL REMAIN THE SERVICE AND ARE THE SOLE PROPERTY OF PRECISION PLANNING, INC. (PPI) AND MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7TH DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

BROWN ROAD IMPROVEMENTS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

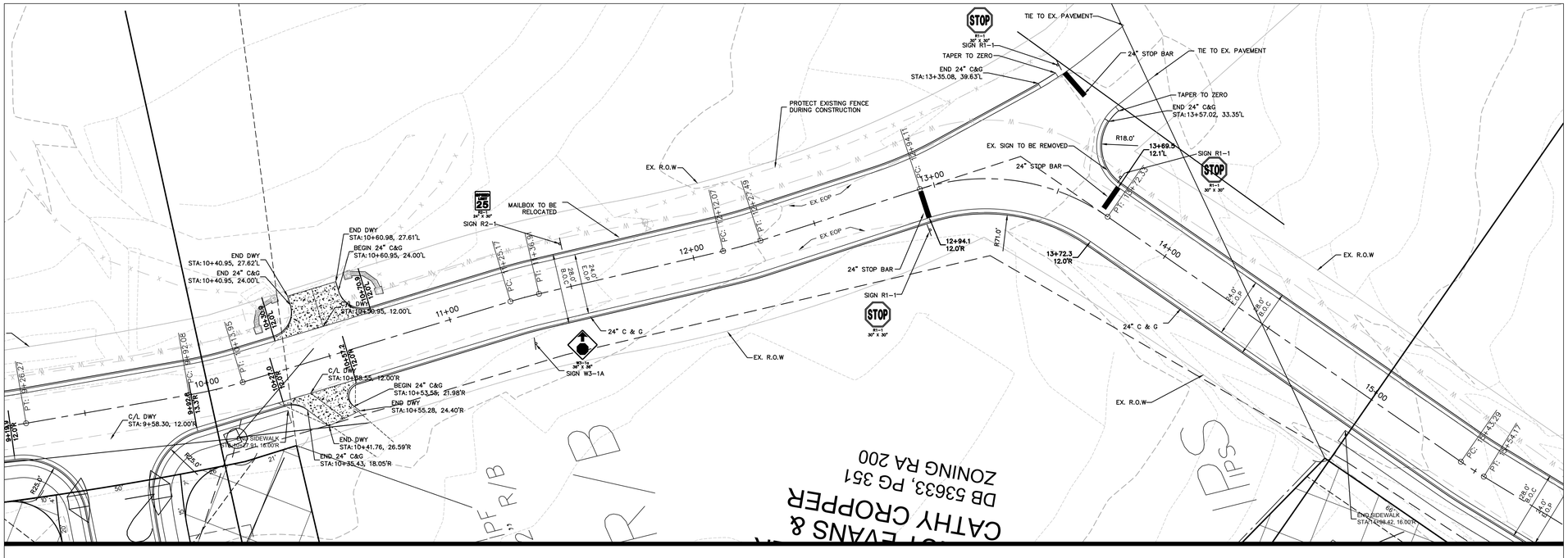
RELEASE

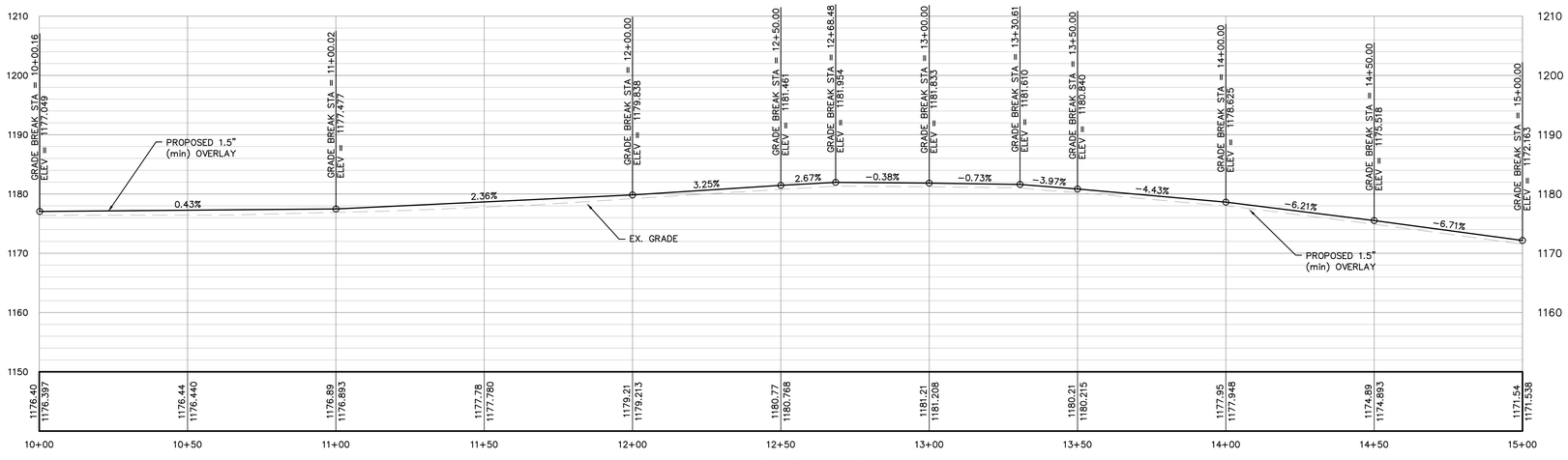
NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017	R17.199		
DATE	PROJ. NUMBER	FILE NAME	FILE NUMBER

C3.8

PLOT DATE: 8/28/2018 10:40 AM FILE PATH: E:\PROJECTS\2017\17199-CI-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C701_BROWN ROAD-GDOT.DWG - 2018-08-28 - LONNIE HIGGINS





BROWN ROAD PROFILE
SCALE: 1"=20' HOR; 1"=10' VERT

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION.

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

NOTE:
SEE SHEET C3.7 FOR BROWN RD. TYPICAL SECTION DETAIL

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PERMITTED REPRODUCTIONS IN WHOLE OR IN PART ARE AND SHALL REMAIN OUR SERVICE AND ARE OUR SOLE PROPERTY AND MAY NOT BE USED ON ANY PROJECT NOT BE REPRODUCED OR CONVEYED IN ANY MANNER TO ANY PERSON OR ENTITY FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7TH DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

BROWN ROAD
IMPROVEMENTS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

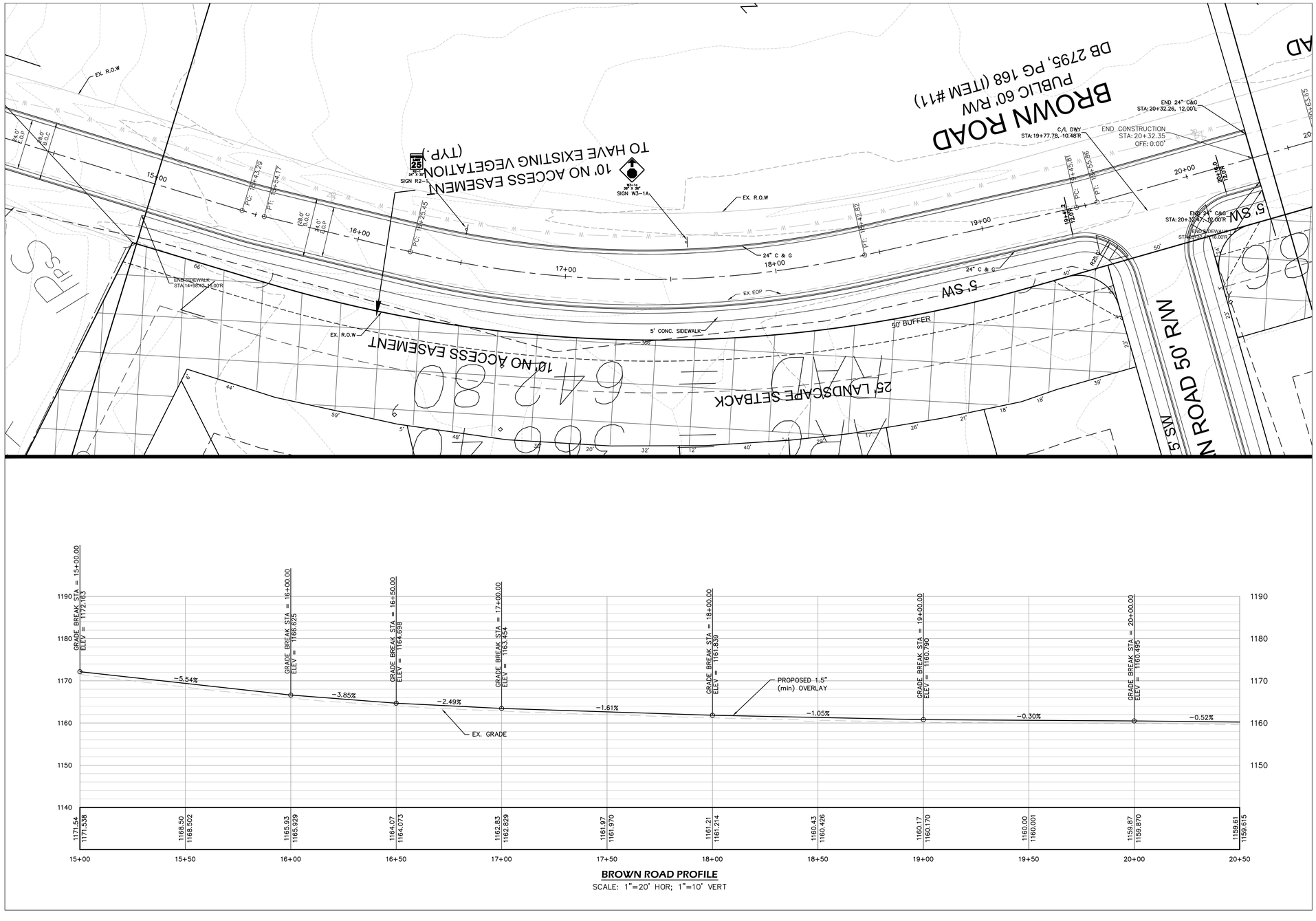
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C3.9

PLOT DATE: 6/20/2018 10:40 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - 7450\17199_C070 BROWN ROAD-CROSSTURN.DWG - 2018-06-28 - LONNIE HOPKINS



BROWN ROAD PROFILE
SCALE: 1"=20' HOR; 1"=10' VERT

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION.

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

NOTE:
SEE SHEET C3.7 FOR BROWN RD. TYPICAL SECTION DETAIL

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PERMITTED REPRODUCTIONS, IN WHOLE OR IN PART, ARE AND SHALL REMAIN THE SERVICE AND ARE THE EXCLUSIVE PROPERTY OF PRECISION PLANNING, INC. AND SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THAT FOR WHICH THEY HAVE BEEN PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8900 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
LAND LOT 279 - 7TH DISTRICT - PARCEL 010
143rd LAND DISTRICT - GWINNETT COUNTY, GA

BROWN ROAD IMPROVEMENTS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE
RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

R17.199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C3.10

PLOT DATE: 6/28/2018 10:40 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C701 BROWN ROAD-CCSDT.DWG - 2018-06-28 - LONNIE HOOKS

Department of Water Resources

684 Winder Highway • Lawrenceville, GA 30045-5012
678.376.6700 • www.gwinnetth2o.com

gwinnettcounty

Fire Flow Test Report

Report Date: 10/12/2017

Test Date: 10/12/2017
Location: BROWN RD
Start Time: 11:20 am
Residual Hydrant ID: 315984
Flow @ 20 psi (gpm): 2393.98
Main Size: 8.00 in.
End Time: 11:25 am
Static Pressure (psi): 75.00
Total Test Flow Discharge: 5,934.50
Test Type: Dual Hydrant
Total Flow Time: 5.00 min
Residual Pressure (psi): 60.00

Flow Hydrant Results

Flow Hydrant ID	Pitot Pressure	Nozzle Size (in.)	Coefficient	Conversion Factor	Test Flow (gpm)
357232	50.00	2.50	0.90	29.84	1186.90

Providing Superior Water Service on an Excellent Value

Page 1 of 1

WATER NOTES:

1. Min. Horizontal separation of 10 ft shall be maintained between water and sanitary sewer facilities.
2. Subdivision of free standing single family homes shall have 8" water mains with 3-way hydrants spaced no more than 450 feet apart.
3. Hydrants are to be installed so that the large Fire Dept. connection faces the street. That same connection is to be no less than 18" or more than 36" above finished grade. Hydrants located in parking areas shall be protected by barriers that will prevent physical damage by vehicles.
4. Hydrants and mains shall be installed and under pressure before any combustible construction is started.
5. A construction permit is to be acquired by G.C.D.W.R. approved contractor prior to installation. Call 678-518-6000 for more information and copy of approved contractor's list. A mandatory pre-construction conference with inspector, by appointment only, is required 48 hours prior to any utility construction. Any utility design changes must be approved by GCDPU prior to installation.
6. All work to be performed according to Gwinnett County Department of Water Resources - Water Main and Sanitary Sewer Design and Construction Standards and Specifications (April 5, 2016). Actual field conditions could dictate more stringent requirements, if deemed necessary by inspector.
7. As-built\record drawings for water system required prior to requesting final plat approval. Temporary certificate of occupancy or issurance of certificate of occupancy. Allow min. 10 business days for initial review &i additional time for re-review(s). Drawings to be submitted & approved by department of water resources.
8. Curb shall be in place prior to installation of water main.
9. GCDWR does not permit any pavement cut. If pavement cut is required, contractor is responsible for obtaining proper approval from owner of street.
10. Note to Contractor: Valves and fittings may not be drawn to scale. Valves are not to be installed underneath road paving.
11. Note to Contractor: Coordinate with P&D Inspector as assigned on the construction permit for temporary hydrant meter prior to flushing or chlorinating new water mains.
12. Note to contractor: Place valve street side of sidewalk, place fire hydrant back side of sidewalk to within one foot of r/w.
13. Per the Fee Resolution there is a "Penalty Fee" of 100% of the permit fee for site activity prior to issuance of appropriate permits (Land Disturbance, Development, Utility Construction, or Grease Trap installations)
14. ALL WATER, SANITARY SEWER AND STORM SEWER TO BE INSPECTED BY DEPARTMENT OF WATER RESOURCES.
15. Contractor shall install 1" copper live service with meter boxes during construction of the water main as shown on plans.
16. All proposed water main shall be 8" DIP

UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

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

UTILITY LEGEND

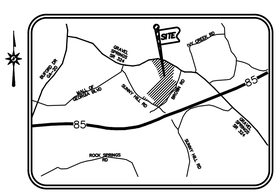
- SANITARY SEWER LINE
- WATER LINE
- PLUG
- TEE
- VALVE
- WATER METER
- FIRE HYDRANT
- SANITARY SEWER MH
- SANITARY SEWER CLEANOUT

ENGINEER:

PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER

ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM



VICINITY MAP
N.T.S.

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY COPYRIGHT AND OTHER STATUTORY PROTECTIONS. IN PARTICULAR, THE ARCHITECTURAL WORKS EMBODIED IN THESE DRAWINGS ARE PROTECTED AS AN ARCHITECTURAL WORK UNDER SECTION 102 OF THE COPYRIGHT ACT. THESE DRAWINGS MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER, NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE ONE SPECIFICALLY INDICATED HEREIN, WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

WATER DISTRIBUTION PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER CC STORM COMMENTS AFTER ISSUANCE OF LDP	5/15/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

RELEASE

OCT. 26, 2017
DATE

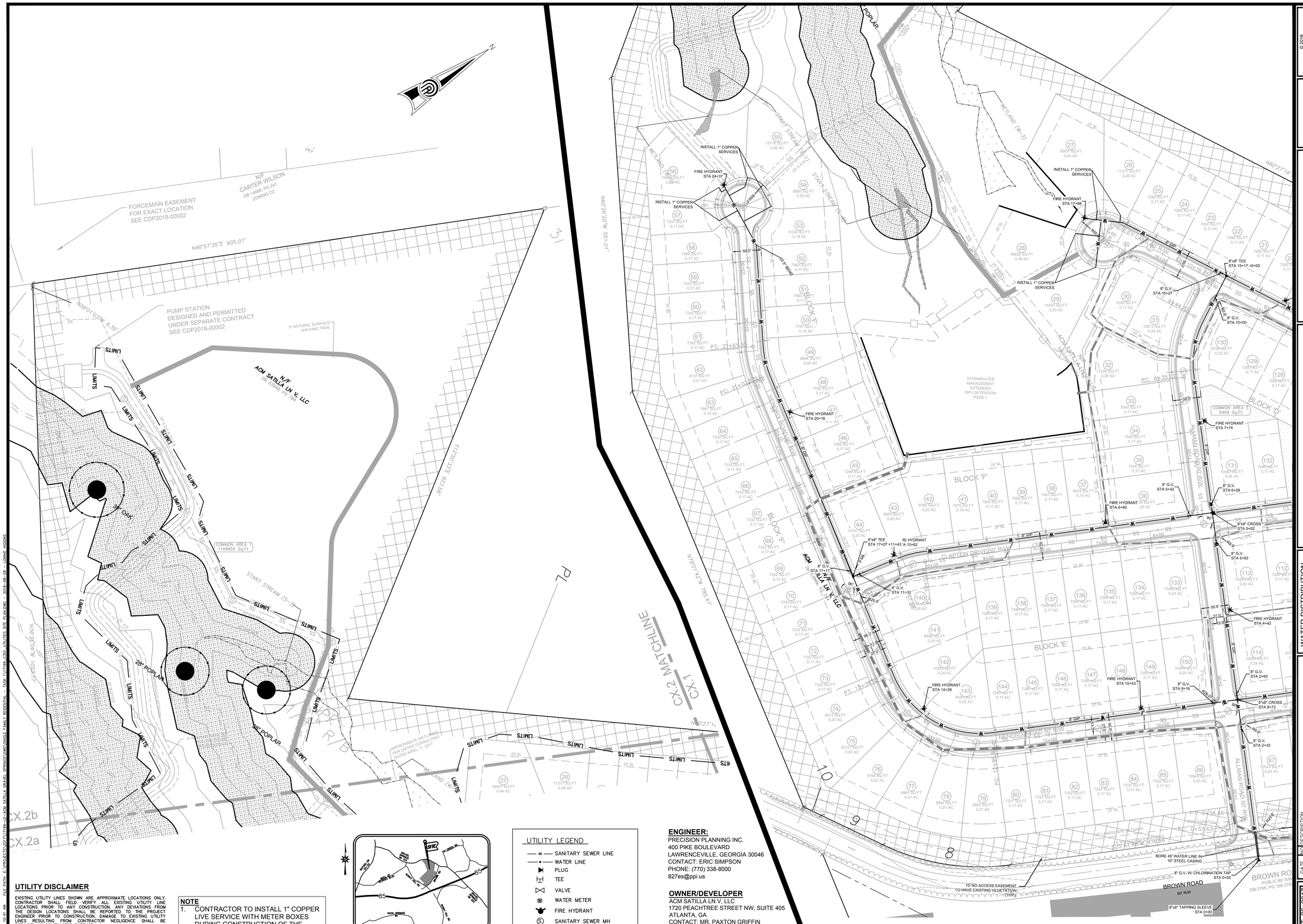
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C4.1

PLOT DATE: 6/28/2018 10:41 AM FILE PATH: E:\PROJECTS\2017\17198-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17198_CDD_UTILITIES SITE PLAN.DWG - 2018-06-28 - LONNIE HIGGINS



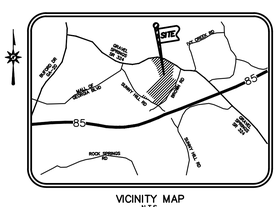
UTILITY DISCLAIMER

EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

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

NOTE

1. CONTRACTOR TO INSTALL 1" COPPER LIVE SERVICE WITH METER BOXES DURING CONSTRUCTION OF THE WATER MAIN AS SHOWN ON PLANS.
2. ALL PROPOSED WATER MAIN SHALL BE 8" DIP



VICINITY MAP
N.T.S.

UTILITY LEGEND

- SS — SANITARY SEWER LINE
- W — WATER LINE
- PLUG
- TEE
- VALVE
- WATER METER
- FIRE HYDRANT
- SANITARY SEWER MH
- SANITARY SEWER CLEANOUT

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND FIRM PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF PRECISION PLANNING, INC. (PPI) AND ARE THE EXCLUSIVE PROPERTY OF PRECISION PLANNING, INC. (PPI) AND SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED WITHOUT WRITTEN AUTHORIZATION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

WATER DISTRIBUTION PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GROUND OF AMENITY AREA

RELEASE

OCT. 26, 2017
DATE

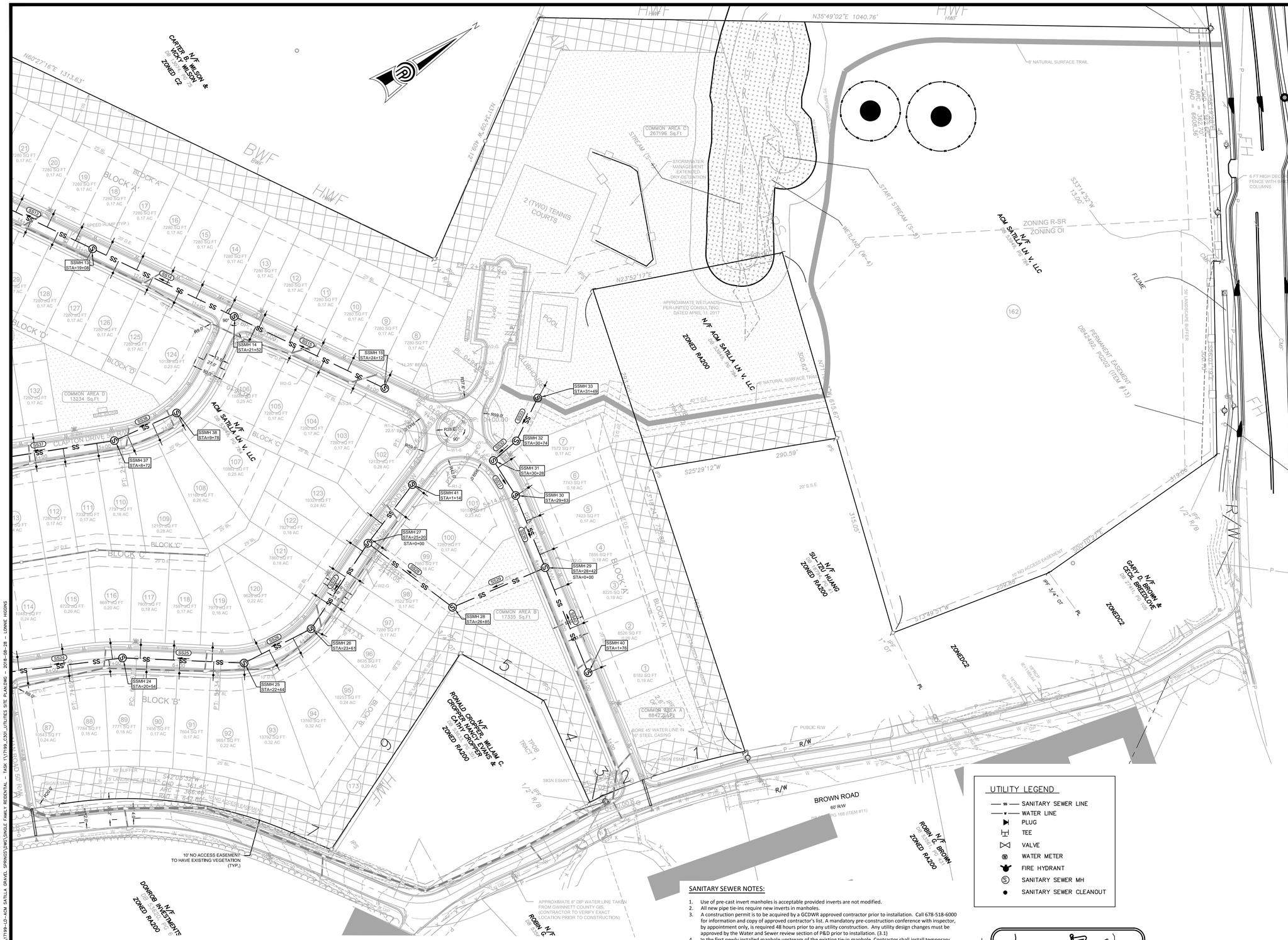
R17-199
PROJ. NUMBER

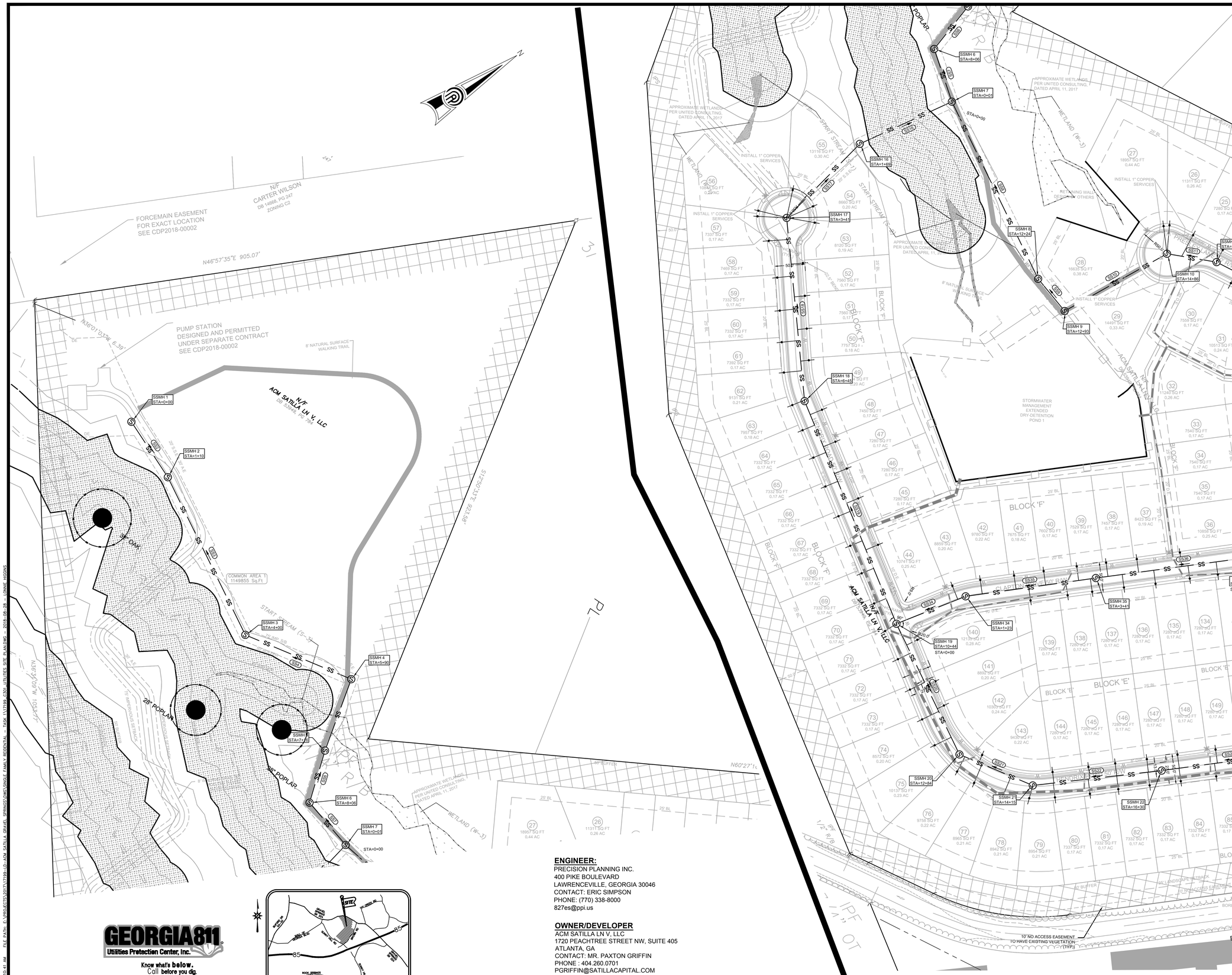
FILE NAME

FILE NUMBER

C4.2

PLOT DATE: 6/29/2018 10:44 AM FILE PATH: E:\PROJECTS\R17\R17-199-MORGAN FALLS\CAD\GRADING\GRADING PLANS\R17-199-GRADING - 2018-06-29 - LOANE.DWG


N
N60°27'16"E 1313.63'
N35°49'02"E 1040.76'
N17°34'09"W 408.12'
N23°52'17"E
S25°29'12"W
290.59'
315.05'
N77°15'57"W 815.67'
S37°14'52"W 13.00'
CARTER B. N/F WILSON & VICKY WILSON ZONED C2
ACM SATILLA LN V, LLC
ZONING R-SR
ZONING OI
N/F AOM SATILLA LN V, LLC ZONED RA200
SU-TZU HUANG ZONED RA200
GARY D. BROWN & CECIL BREEDLOVE ZONED C2
RONALD CROPPER & NANCY CROPPER ZONED RA200
WILLIAM C. EVANS & CATHY EVANS ZONED RA200
ROBIN G. BROWN ZONED RA200
DONROB INVESTMENTS ZONED RA200
ROBIN N/F ZONED RA200
GRAVEL SPRINGS ROAD
GWINNETT COUNTY PROJECT NUMBER: 9931 A.K.A. S.R. 324
DB 146 PG 224 (ITEM #10) DB 42450 PG 196 (ITEM #12) (VAR WIDES
BROWN ROAD
60' R/W
DB 146 PG 168 (ITEM #11)
PERMANENT EASEMENT DB42492, PG202 (ITEM #13)
GA POWER CO. DB 46230, PG
6 FT HIGH DECORATIVE BLACK METAL FENCE WITH BRICK CLADDED STONE COLUMNS
4' NATURAL SURFACE TRAIL
50' LANDSCAPE BUFFER
50' BUFFER
25' LANDSCAPE SETBACK AMD = 361.45 ARC = 386.46 RAD = 642.96
10' NO ACCESS EASEMENT TO HAVE EXISTING VEGETATION (TYP.)
COMMON AREA C 267196 Sq.Ft
COMMON AREA D 13234 Sq.Ft
COMMON AREA B 17335 Sq.Ft
COMMON AREA A 88472 SF
2 (TWO) TENNIS COURTS
POOL
CLUBHOUSE
STREAM (S-3)
STORMWATER MANAGEMENT EXTENDED DRY DETENTION POND 2
WETLAND (W-4)
START STREAM (S-4)
APPROXIMATE WETLANDS PER UNITED CONSULTING DATED APRIL 2017
BORE 45' WATER LINE IN 16" STEEL CASING
CLAYTON DRIVE
BLOCK 'A'
BLOCK 'B'
BLOCK 'C'
BLOCK 'D'
SSMH 13 STA=19+08
SSMH 14 STA=21+52
SSMH 15 STA=24+12
SSMH 38 STA=9+78
SSMH 37 STA=8+72
SSMH 24 STA=20+54
SSMH 25 STA=22+44
SSMH 26 STA=23+61
SSMH 27 STA=25+20
STA=0+00
SSMH 28 STA=26+85
SSMH 29 STA=28+42
STA=0+00
SSMH 30 STA=29+63
SSMH 31 STA=30+28
SSMH 32 STA=30+74
SSMH 33 STA=31+49
SSMH 40 STA=1+76
SSMH 41 STA=1+14
SPEED HUMP (TYP.)
PROPOSED 8" SANITARY SEWER
EXISTING 8" SANITARY SEWER
EXISTING 12" WATER MAIN
EXISTING 8" WATER MAIN
PROPOSED 8" WATER MAIN
PROPOSED 6" WATER MAIN
PROPOSED 2" WATER MAIN
PROPOSED 1" WATER MAIN
PROPOSED 1" IRRIGATION
PROPOSED 2" IRRIGATION



© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF PRECISION PLANNING, INC. AND SHALL REMAIN THE PROPERTY OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR PUBLICATION SHALL NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT INTENDED WITHOUT WRITTEN AUTHORIZATION FROM PRECISION PLANNING, INC.

STAMP

PRECISION
Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

SANITARY SEWER PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

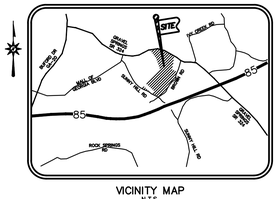
FILE NUMBER

C4.4

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

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



VICINITY MAP
N.T.S.

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

PLOT DATE: 8/29/2018 10:47 AM - FILE PATH: E:\PROJECTS\2017\R17-199-01-ACM SATILLA GRAVEL SPRINGS\CIVIL\CIVIL FAMILY #1\RESIDENTIAL - TASK 1\17199-CSW-UTILITIES SITE PLAN.DWG - 2018-08-29 - LOUIE HIGGINS

VICINITY MAP
N.T.S.

PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

SOIL SERIES

SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

EROSION CONTROL LEGEND

Sd1-S	SILT FENCE (TYPE"S")	Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Di	DIVERSION - VEGETATED CHANNEL WITH BERM	Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Co	CONSTRUCTION EXIT	Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Wa	CONCRETE WASHOUT AREA	Du	DUST CONTROL ON DISTURBED AREAS
Sk	SKIMMER	Ss	SLOPE STABILIZATION
Sd2-F	INLET SEDIMENT TRAP - FILTER FABRIC	#	SAMPLING LOCATION
Sd2-C	INLET SEDIMENT TRAP - CURB INLET PROTECTION		

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

TOTAL AREA: 72.59 AC
DISTURBED AREA: 43.0 AC

STATE WATER NOTE:
STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

CONSTRUCTION EXIT GPS LOCATIONS:
LAT: 34.065464
LONG: -83.957742
LAT: 34.063197
LONG: -83.959322

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND FOR-MATS THEREOF PROTECTED BY ARTICLE 5 OF THE COPYRIGHT LAWS OF THE UNITED STATES OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR CONVEYED TO A THIRD PARTY IS PROHIBITED. THESE PLANS ARE NOT TO BE REPRODUCED OR CONVEYED TO ANY OTHER PROJECTS OTHER THAN FOR ANY OTHER PROJECTS OTHER THAN THE ONE SPECIFICALLY DESIGNED FOR WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
INITIAL EROSION CONTROL PLAN

DESIGN LGW | DRAWN LGW | CHECKED ES

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GROUPING OF AMENITY AREA.

OCT. 26, 2017 DATE
R17-199 PROJ. NUMBER
FILE NAME
FILE NUMBER

C5.1

PLOT DATE: 8/28/2018 10:42 AM FILE PATH: E:\PROJECTS\2017\7199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 11\7199_C060_INITIAL EROSION CONTROL.DWG - 2018-08-28 - LONNIE WIGGINS

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

CONSTRUCTION EXIT GPS LOCATIONS:

LAT: 34.065464
LONG: -83.957742

LAT: 34.063197
LONG: -83.959322

STATE WATER NOTE:

STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:

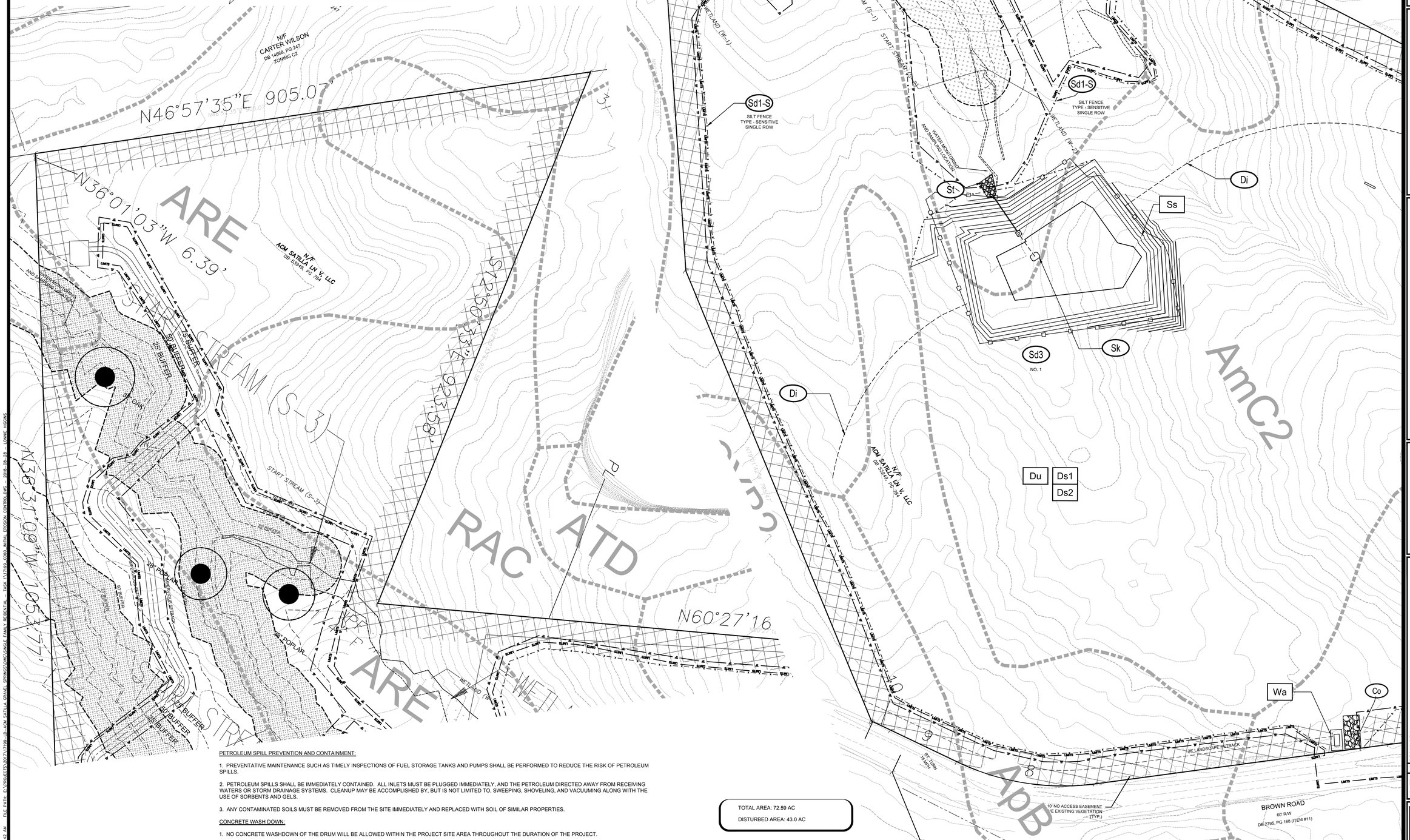
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM



PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

TOTAL AREA: 72.59 AC

DISTURBED AREA: 43.0 AC

SOIL SERIES	
SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF THE ORIGINAL WORKS OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR PUBLICATION MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER OR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT INTENDED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

INITIAL EROSION CONTROL PLAN

DESIGN LGW | DRAWN LGW | CHECKED ES

SHEET TITLE

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND OPENING OF AMENITY AREA

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C5.2

PLOT DATE: 8/29/2018 10:42 AM FILE PATH: E:\PROJECTS\2017\R17-199 - MORGAN FALLS - GRAVEL SPRINGS\ENGINEERING\CAD\PERMITTING - TASK 1\17199 EROSION CONTROL.DWG - 2018-08-29 - LGW

VICINITY MAP
N.T.S.

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

SOIL SERIES

SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

EROSION CONTROL LEGEND

Sd1-S	SILT FENCE (TYPE"S")	Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Di	DIVERSION - VEGETATED CHANNEL WITH BERM	Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Co	CONSTRUCTION EXIT	Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Wa	CONCRETE WASHOUT AREA	Du	DUST CONTROL ON DISTURBED AREAS
Sk	SKIMMER	Ss	SLOPE STABILIZATION
Sd2-F	INLET SEDIMENT TRAP - FILTER FABRIC	#	SAMPLING LOCATION
Sd2-P	INLET SEDIMENT TRAP - CURB INLET PROTECTION		

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

CONSTRUCTION EXIT GPS LOCATIONS:
LAT: 34.065464
LONG: -83.957742
LAT: 34.063197
LONG: -83.959322

TOTAL AREA: 72.59 AC

DISTURBED AREA: 43.0 AC

STATE WATER NOTE:
STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF PRECISION PLANNING, INC. AND SHALL REMAIN THE EXCLUSIVE PROPERTY OF PRECISION PLANNING, INC. UNLESS OTHERWISE AGREED TO IN WRITING. THEY ARE NOT TO BE REPRODUCED OR CONVEYED TO ANY OTHER PERSON OR ORGANIZATION FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

INTERMEDIATE EROSION CONTROL PLAN

DESIGN: LGW | DRAWN: LGW | CHECKED: ES

SHEET TITLE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

RELEASE

OCT. 26, 2017
DATE

PROJ. NUMBER: R17-199
FILE NAME
FILE NUMBER

C5.3

PLOT DATE: 8/28/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_CONS_INITIAL EROSION CONTROL.DWG - 2018-08-28 - LONNIE HIGGINS

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

CONSTRUCTION EXIT GPS LOCATIONS:

LAT: 34.065464
LONG: -83.957742

LAT: 34.063197
LONG: -83.959322

STATE WATER NOTE:

STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:

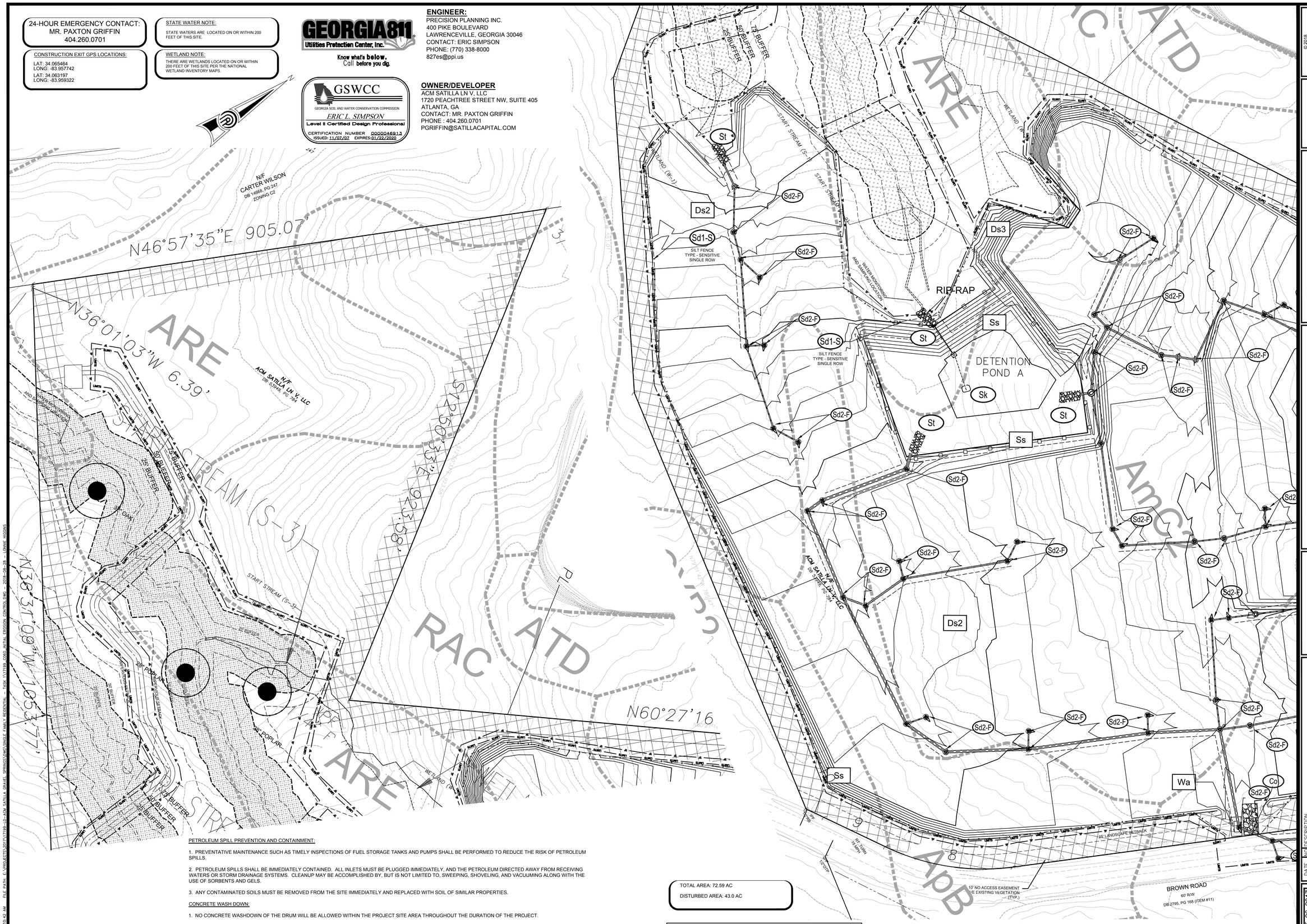
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES:01/22/2020

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM



PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING $\frac{1}{3}$ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

TOTAL AREA: 72.59 AC

DISTURBED AREA: 43.0 AC

SOIL SERIES	
SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF THE CONSTRUCTION ARTS OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR PUBLICATION MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT INTENDED WITHOUT WRITTEN REPRESENTATION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

INTERMEDIATE EROSION CONTROL PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GROUND OF AMENITY AREA

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C5.4

PLOT DATE: 8/29/2018 10:42 AM FILE PATH: E:\PROJECTS\2017\R17-199 - ACM SATILLA (BRAVE SPRINGS)\ENGINEERING\ACM SATILLA - 2018-08-29 - CONST. PLANS\R17-199 - ERO INITIAL EROSION CONTROL.dwg - 2018-08-29

VICINITY MAP
N.T.S.

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

SOIL SERIES	
SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

EROSION CONTROL LEGEND

Sd1-S SILT FENCE (TYPE"S")	Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
Di DIVERSION - VEGETATED CHANNEL WITH BERM	Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
Co CONSTRUCTION EXIT	Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)
Wa CONCRETE WASHOUT AREA	Du DUST CONTROL ON DISTURBED AREAS
Sk SKIMMER	Ss SLOPE STABILIZATION
Sd2-P INLET SEDIMENT TRAP - FILTER FABRIC	# SAMPLING LOCATION
Sd2-P INLET SEDIMENT TRAP - CURB INLET PROTECTION	

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

CONSTRUCTION EXIT GPS LOCATIONS:
LAT: 34.065464
LONG: -83.957742
LAT: 34.063197
LONG: -83.959322

TOTAL AREA: 72.59 AC

DISTURBED AREA: 43.0 AC

STATE WATER NOTE:
STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED, IN WHOLE, OR IN PART, BY COPYRIGHT LAWS OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR CONVERSION TO A DIFFERENT MEDIUM OF THESE PLANS IS NOT TO BE REPRODUCED OR CONVERTED TO A DIFFERENT MEDIUM OR USED IN WHOLE OR IN PART FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA
PROJECT

FINAL EROSION CONTROL PLAN

DESIGN: LGW | DRAWN: LGW | CHECKED: ES

SHEET TITLE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.

RELEASE

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C5.5

PLOT DATE: 8/28/2018 10:42 AM FILE PATH: E:\PROJECTS\2017\17199-DI-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_COND_INITIAL EROSION CONTROL.DWG - 2018-08-28 - LONNIE HIGGINS

24-HOUR EMERGENCY CONTACT:
MR. PAXTON GRIFFIN
404.260.0701

CONSTRUCTION EXIT GPS LOCATIONS:

LAT: 34.065464
LONG: -83.957742

LAT: 34.063197
LONG: -83.959322

STATE WATER NOTE:

STATE WATERS ARE LOCATED ON OR WITHIN 200 FEET OF THIS SITE.

WETLAND NOTE:

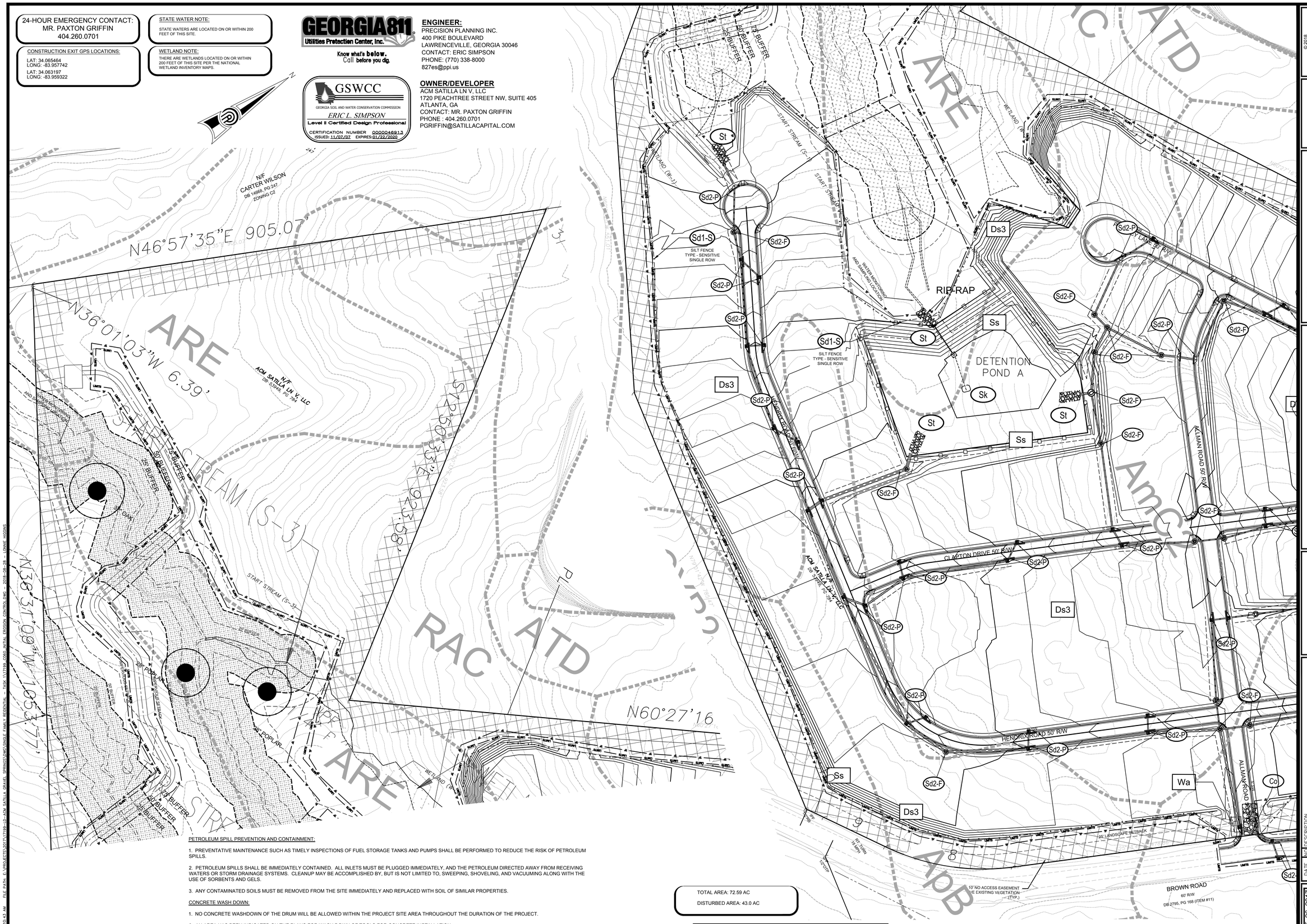
THERE ARE WETLANDS LOCATED ON OR WITHIN 200 FEET OF THIS SITE PER THE NATIONAL WETLAND INVENTORY MAPS.

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

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES:01/22/2020

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM



PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.

2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.

3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.

2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.

2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET

3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.

4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

TOTAL AREA: 72.59 AC

DISTURBED AREA: 43.0 AC

SOIL SERIES	
SYMBOL	DESCRIPTION
AmC2	APPLING SANDY LOAM, 6 TO 10 PERCENT SLOPES, MODERATELY ERODED
AnC2	APPLING SANDY CLAY LOAM, 6 TO 10 PERCENT SLOPES, ERODED
ApB	APPLING-HARD LABOR COMPLEX, 2 TO 6 PERCENT SLOPES
ARE	ASHLAR, RION, AND WATEREE SOILS, 10 TO 25 PERCENT SLOPES
CYB2	CECIL SANDY LOAM, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED
RAC	RAWLINGS AND RION SOILS, 2 TO 10 PERCENT SLOPES
Ub	URBAN LAND-UDORTHENTS COMPLEX

SEDIMENT POND (SD3) CALCULATIONS

NO.1
DRAINAGE AREA (DA) = 30.21 AC
REQUIRED VOL = 67 CY/DA x DA = 2,024.07 CY (54,650 CF)
TOTAL VOLUME PROVIDED = 14,101.21 CY (380,732.71 CF)

NO.2
DRAINAGE AREA (DA) = 6.98 AC
REQUIRED VOL = 67 CY/DA x DA = 467.67 CY (12,627 CF)
TOTAL VOLUME PROVIDED = 716.03 CY (19,332.77 CF)

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS, IN WHOLE, OR IN PART, OF THE INTELLECTUAL EFFORTS OF PRECISION PLANNING, INC. SALES, REPRODUCTION OR PUBLICATION MAY NOT BE REPRODUCED OR CONVEYED TO ANY PERSON OR ENTITY OTHER THAN FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

FINAL EROSION CONTROL PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C5.6

PLOT DATE: 6/28/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\R17-199-ACM SATILLA DEVELOPMENT - MORGAN FALLS\CAD\CONSTRUCTION\R17-199-ACM SATILLA DEVELOPMENT-EROSION CONTROL.dwg - 2018-06-28 - CONST WORKS

The following statements are referenced from "Authorization to Discharge Under The National Pollutant Discharge Elimination System Storm Water Discharges Associated With Construction Activity for Common Construction Projects" General Permit No. GAR 100003. For the purposes of this plan the term Precision Planing, Inc. (PPI) is the Design Professional of these construction documents.

GAR 100003 PART IV.

Part IV. EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN
An Erosion, Sedimentation and Pollution Control Plan (Plan) has been designed, for the phase or phases of the development covered by this permit. The Erosion, Sedimentation and Pollution Control Plan has been prepared by Precision Planning, Inc. as defined by this permit.

Certification Statement:

A site-specific Erosion, Sedimentation and Pollution Control Plan (Plan) shall be designed, installed and maintained for the entire construction activity covered by this permit. The Erosion, Sedimentation and Pollution Control Plan must be prepared by a design professional as defined by this permit. All persons involved in Plan preparation shall have completed the appropriate certification course, pursuant to O.C.G.A. 12-7-19 (b), approved by the State Soil and Water Conservation Commission. The design professional preparing the Plan must include and sign the following certification in the Plan:

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the 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 100001."

Signature of Design Professional

The Plan shall include any additional certifications regarding the design professional's site visit in accordance with the Rules for Erosion and Sedimentation Control promulgated by the Board of Natural Resources:

"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."

Signature of Design Professional

The Plan shall include, as a minimum, best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices 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 and O.C.G.A. 12-7-6, as well as the following:

(i) Except as provided in Part IV.(iii). below, no construction activities shall be conducted within a 25 foot buffer along the banks of all State waters, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, except where the Director has determined to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7- 6, or where a drainage structure or a roadway drainage structure must be constructed, provided that adequate erosion control measures are incorporated into the project plans and specifications and are implemented, or along any ephemeral stream, or where bulkheads and seawalls must be constructed to prevent the erosion of the shoreline on Lake Oconee and Lake Sinclair. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1)public drinking water system reservoirs,
(2)stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(3)stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit, and
(4)buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(5)stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(6)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(7)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(8)Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service.

(ii). No construction activities shall be conducted within a 50 foot buffer, as measured horizontally from the point where vegetation has been wrested by normal stream flow or wave action, along the banks of any State waters classified as 'trout streams' except when approval is granted by the Director for alternate buffer requirements in accordance with the provisions of O.C.G.A. 12-7-6, or where a roadway drainage structure must be constructed; provided, however, that small springs and streams classified as 'trout streams' which discharge an average annual flow of 25 gallons per minute or less shall have a 25 foot buffer or they may be piped, at the discretion of the permittee, pursuant to the terms of a rule providing for a general variance promulgated by the Board of Natural Resources including notification of such to EPD and the Local Issuing Authority of the location and extent of the piping and prescribed methodology for minimizing the impact of such piping and for measuring the volume of water discharged by the stream. Any such piping must stop short of the downstream permittee's property, and the permittee must comply with the buffer requirement for any adjacent trout streams. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications are implemented:

(1)public drinking water system reservoirs,
(2)stream crossings for water lines and sewer lines, provided that the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(3)stream crossings for any utility lines of any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the stream crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, (b) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(4)buffer crossing for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and cause a width of disturbance of not more than 50 feet within the buffer, and native riparian vegetation is re-established in any bare or disturbed areas within the buffer
(5)stream crossings for aerial utility lines, provided that: (a) the new utility line right-of-way width does not exceed 100 linear feet, (b) utility lines are routed and constructed so as to minimize the number of stream crossings and disturbances to the buffer, (c) only trees and tree debris are removed from within the buffer resulting in only minor soil erosion and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(6)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(7)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(8)Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service.

(iii). Except as provided in Part IV(iv) below, no construction activities shall be conducted within a 25 foot buffer along coastal marshlands, as measured horizontally from the coastal marshland-upland interface, as determined in accordance with Part 4 of Article 4 of Chapter 5 of Title 12, the "Coastal Marshlands Protection Act of 1970, and the rules and regulations promulgated thereunder, except where the director determines to allow a variance that is at least as protective of natural resources and the environment in accordance with the provisions of O.C.G.A. 12-7-6, or where otherwise allowed by the director pursuant to Code Section 12-2-8, or where an alteration within the buffer area has been authorized pursuant to Code Section 12-5-286, or for maintenance of any currently serviceable structure, landscaping, or hardscaping, including bridges, roads, parking lots, golf courses, golf cart paths, retaining walls, bulkheads, and patios, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or where a drainage structure or roadway drainage structure is constructed or maintained, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented, or on the landward side of any currently serviceable shoreline stabilization structure, or for the maintenance of any manmade storm-water detention basin, golf course pond, or impoundment that is located entirely within the property of a single individual, partnership, or corporation, provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented. The buffer shall not apply to the following activities provided that adequate erosion control measures are incorporated into the project plans and specifications and such measures are fully implemented:

(1)Public drinking water system reservoirs,
(2)Crossings for utility lines that cause a width of disturbance of not more than 50 feet within the buffer
(3)Any land-disturbing activity conducted pursuant to and in compliance with a valid and effective land-disturbing permit issued subsequent to April 22, 2014, and prior to December 31, 2015,
(4)Any lot for which the preliminary plat has been approved prior to December 31, 2015 if roadways, bridges, or water and sewer lines have been extended to such lot prior to the effective date of this Act and if the requirement to maintain a 25 foot buffer would consume at least 18 percent of the high ground of the platted lot otherwise available for development,
(5)Buffer crossings for fences, provided that the crossings occur at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the Jurisdictional Line and cause a width of disturbance of not more than 50 feet within the buffer, and vegetation is re-established in any bare or disturbed areas within the buffer.
(6)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way undertaken or financed in whole or in part by the Department of Transportation, the Georgia Highway Authority or the State Road and Tollway Authority or undertaken by any county or municipality, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit,
(7)right-of-way posts, guy-wires, anchors, survey markers and the replacement or maintenance of existing utility structures within the current right-of-way by any electric membership corporation or municipal electrical system or any public utility under the regulatory jurisdiction of the Public Service Commission, any utility under the regulatory jurisdiction of the Federal Energy Regulatory Commission, any cable television system as defined in Code Section 36-18-1, or any agency or instrumentality of the United States engaged in the generation, transmission or distribution of power, provided that: (a) the area of land disturbance does not exceed 100 square feet per structure, (b) the area of buffer vegetation to be cut (not grubbed) does not exceed 1,000 square feet per structure, (c) native riparian vegetation is re-established in any bare or disturbed areas within the buffer and (d) the entity is not a secondary permittee for a project located within a common development or sale under this permit; and
(8)Maintenance (excluding dredging), repair and/or upgrade of Soil and Water Conservation District watershed dams when under the technical supervision of the USDA Natural Resources Conservation Service

(iv) Except as provided above, for buffers required pursuant to Part IV.(i). and (ii) and (iii), no construction activities shall be conducted within a buffer and a buffer shall remain in its natural, undisturbed, state of vegetation until all land-disturbing activities on the construction site are completed. During coverage under this permit, a buffer cannot be thinned or trimmed of vegetation and a protective vegetative cover must remain to protect water quality and aquatic habitat and a natural canopy must be left in sufficient quantity to keep shade on the stream bed or marsh.

The Erosion, Sedimentation and Pollution Control Plan shall identify all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the Plan shall describe and the applicable permittee shall ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the site and to assure compliance with the terms and conditions of this permit. The applicable permittee must implement and maintain the provisions of the Plan required under this part as a condition of this permit.
Except as provided in Part IV.A.2., a single Erosion, Sedimentation and Pollution Control Plan must be prepared by the primary permittee for the stand alone construction project.

A. Deadlines for Plan Preparation and Compliance.

1.Except as provided in Part IV.A.2. and Part IV.A.6., the Erosion, Sedimentation and Pollution Control Plan shall be completed prior to submitting the NOI and prior to conducting any construction activity by any permittee.

2.For construction activities that began on or before the effective date of this permit and were subject to the regulations under the previous permit, the permittee(s) shall continue to operate under the existing Plan.

3.For construction activities that begin after the effective date of this permit, the primary permittee shall be required to prepare the Plan for that phase of the stand alone development that corresponds with the NOI being submitted and the primary permittee(s) shall implement the Plan on or before the day construction activities begin.

4. Additional Plan Submittals.

a.For all projects identified under Part I.C.1.b., which begin after the effective date of this permit, in a jurisdiction where there is no certified Local Issuing Authority regulating that project, a single copy of the Plan must be submitted to the EPD Watershed Protection Branch and a second copy of the Plan must be submitted to the appropriate EPD District Office prior to or concurrent with the NOI submittal. The second copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device. The EPD Watershed Protection Branch will review Plans for deficiencies using the applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted.

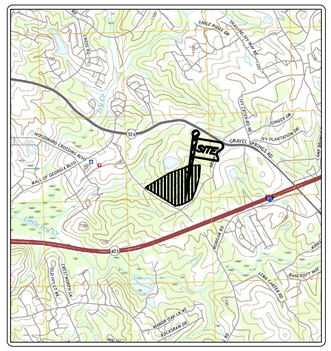
b.For sites that are equal to or greater than 50 acres of disturbed area, regardless of the existence of a certified Local Issuing Authority in the jurisdiction, one of the following submissions is also required:

(i)for all projects which begin after the effective date of this permit a single copy of the NOI and a single copy of the Plan shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

(ii) for all projects which began on or before the effective date of this permit single copy of the NOI and a single copy of the Plan, if amended, shall be submitted to the appropriate EPD District Office. This copy of the Plan may be submitted to the appropriate EPD District Office as a Portable Document Format (PDF) file on CD-ROM or other storage device.

c.For all projects where the construction activity as indicated on the existing NOI has changed, the amended Plans must be submitted in accordance with Part IV.A.4.a. In addition, the permittee must file a change of information NOI in accordance with Part II.

5.For stand alone projects that begin construction activity after the effective date of this permit, the primary permittee must retain the design professional who prepared the Erosion, Sedimentation and Pollution Control Plan, or an alternate design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs which the design professional designed within seven (7) days after installation. The design professional shall determine if these BMPs have been installed and are being maintained as designed. The design professional shall report the results of the inspection to the primary permittee within seven (7) days and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report from the design professional unless weather related site conditions are such that additional time is required.
6.For storm- or emergency-related repair work, the permittee shall implement appropriate BMPs and certified personnel (provided by the primary permittee) shall inspect 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. If the storm- or emergency-related repair work will not be completed within sixty (60) days of commencement of construction activity, a single copy of the Plan shall be submitted to EPD and the permittee shall comply with all requirements of this permit on the sixty-first (61st) day.


GRAVEL SPRINGS ROAD
GRAVEL SPRINGS ROAD
SITE
GRAVEL SPRINGS ROAD
GRAVEL SPRINGS ROAD
GRAVEL SPRINGS ROAD

A.Reporting.

1. The applicable permittees are required to submit the sampling results to the EPD at the address shown in Part II.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittee to submit the sampling results on a more frequent basis. Sampling and analysis of any 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 submitted in accordance with Part VI.

2. All sampling reports shall include the following information:

a. The rainfall amount, date, exact place and time of sampling or measurements;
b. The name(s) of the certified personnel who performed the sampling and measurements;
c. The date(s) analyses were performed;
d. The time(s) analyses were initiated;
e. The name(s) of the certified personnel who performed the analyses;
f. References and written procedures, when available, for the analytical techniques or methods used;
g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results;
h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU," and
i. Certification statement that sampling was conducted as per the Plan.

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

B. Retention of Records.

1. 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:

a. A copy of all Notices of Intent submitted to EPD;
b. A copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit;
c. The design professional's report of the results of the inspection conducted in accordance with Part IV.A.5. of this permit;
d. A copy of all sampling information, results, and reports required by this permit;
e. A copy of all inspection reports generated in accordance with Part IV.D.4.a. of this permit;
f. A copy of all violation summaries and violation summary reports generated in accordance with Part II.D.2. of this permit; and
g. Daily rainfall information collected in accordance with Part IV.D.4.a.(2). of this permit.

2. Copies of all Notices of Intent, Notices of Termination, inspection reports, sampling reports (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) or other reports requested by the EPD, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date that the NOT is submitted in accordance with Part VI. of this permit. These records must be maintained at the permittee's primary place of business or at a designated alternative location once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

Sampling Rationale Summary

SAMPLING POINT	NTU Limit Selected	Drainage Area	Type of Receiving Water
1	50 NTU	<5.0 SQ MI	WARM

Part V. STANDARD PERMIT CONDITIONS

A.Duty to Comply.

1. Each permittee must comply with all applicable conditions of this permit. Any permit noncompliance constitutes a violation of the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) and is grounds for enforcement action; for permit termination, or for denial of a permit renewal application. Failure of a primary permittee to comply with any applicable term or condition of this permit shall not relieve any other primary permittee from compliance with their applicable terms and conditions of this permit.

2. Each permittee must document in their records any and all known violations of this permit at his/her site within seven (7) days of his/her knowledge of the violation. A summary of these violations must be submitted to EPD by the permittee at the addresses shown in Part II.C. within fourteen (14) days of his/her discovery of the violation.

3. Penalties for violations of permit conditions. The Federal Clean Water Act and the Georgia Water Quality Control Act (O.C.G.A. §§12-5-20, et seq.) provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Acts, any permit condition or limitation established pursuant to the Acts, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director.

B.Continuation of the Expired General Permit. This permit expires on the date shown on the cover page of this permit. However, an expired general permit continues in force and effect until a new general permit is issued, final and effective.

C.Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D.Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E.Duty to Provide Information. The permittee shall furnish to the Director; a State or local agency approving soil erosion and sedimentation control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the local government operating the municipal separate storm sewer system, any information which is requested to determine compliance with this permit. In the case of information submitted to the EPD such information shall be considered public information and available under the Georgia Open Records Act.

F. Other Information. When the permittee becomes aware that he failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report required to be submitted to the EPD, the permittee shall promptly submit such facts or information.

G.Signatory Requirements. All Notices of Intent, Notice of Terminations, inspection reports, sampling reports or other reports requested by the EPD shall be signed as follows:

1. All Notices of Intent and Notices of Termination shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this permit, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision- making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official; and

d. Changes to authorization. If an authorization under Part II.B. is no longer accurate, a change of information NOI satisfying the requirements of Part II.B. must be submitted to the EPD prior to or together with any inspection reports, sampling reports, or other reports requested by the EPD to be signed by a person described above or by a duly authorized representative of that person.

2. All inspection reports, sampling reports, or other reports requested by the EPD shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person(s) described above and submitted to the EPD;

b. The authorization specifies either an individual or a position having responsibility for specified operation(s) of the regulated facility or activity, such as the position of manager, Operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and

c. Certification. Reports delineated in Part V.G.2. shall be signed by the permittee or duly authorized representative and shall make the following certification:

"I certify under penalty of law that this report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Design Professional

H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-60, et seq, or under Chapter 14 of Title 12 of the Official Code of Georgia Annotated; nor is the Operator relieved from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or Section 106 of Comprehensive Environmental Response Compensation And Liability Act.

I. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

J.Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Other Applicable Environmental Regulations and Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act. Nothing in this permit, unless explicitly stated, exempts the permittee from compliance with other applicable local, state and federal ordinances, rules, regulations, and laws. Furthermore, it is not a defense to compliance with this permit that a local government authority has approved the permittee's Erosion, Sedimentation and Pollution Control Plan or failed to take enforcement action against the permittee for violations of the Erosion, Sedimentation and Pollution Control Plan, or other provisions of this permit.

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

L.Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the required plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

M. Inspection and Entry. The permittee shall allow the Director or an authorized representative of EPA, EPD or to designated officials of the local government reviewing soil erosion and sediment control plans, grading plans, or storm water management plans; or, in the case of a construction site which discharges through a municipal separate storm sewer system, an authorized representative of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1.Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit; and

2.Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3.Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions. This permit may be revoked and reissued, or terminated for cause including but not limited to changes in the law or regulations. The filing of a request by the permittee for termination of the permit, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Part VI. TERMINATION OF COVERAGE

A. Notice of Termination Eligibility. Notice of Termination signed in accordance with Part V.G.1. of this permit must be submitted:

1.For construction activities, by the permittee where the entire stand alone development has undergone final stabilization, all storm water discharges associated with construction activity that are authorized by this permit have ceased, the site is in compliance with this permit and all temporary BMPs have been removed. For construction activities where the primary permittee has elected to submit NOIs for separate phases of the stand alone development, the phase or phases of the stand alone development on the NOT shall correspond to the phase or phases on the NOI.

2.By the Owner or Operator when the Owner or Operator of the site changes. Where storm water discharges will continue after the identity of the Owner or Operator changes, the permittee must, prior to filing the Notice of Termination, notify any subsequent Owner or Operator of the permitted site as to the requirements of this permit.

B. Notice of Termination Contents:

1.The NPDES permit number for the storm water discharge associated with construction activity identified by the Notice of Termination (i.e., GAR100001 - Stand Alone);

2.The project construction site name, GPS location (decimal degrees) of construction exit t, construction site location, city (if applicable) and county of the construction site for which the notification is submitted. This information must correspond to the similar information as provided on the NOI. Where an address for the construction site is not available, the construction site location information must be sufficient to accurately locate the construction site;

3.The owner's legal name, address, telephone number and email address and the operator's legal name, address, telephone and email address;

4.The name of the initial receiving water(s), and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4;

5.Copies of all sampling reports and/or a written justification why sampling was not conducted. Copies of all sampling reports may be submitted as a Portable Document Format (PDF) file on CD-ROM or other storage device;

6.Copy of the permittee's most current Notice of Intent;

7.Any other information specified on the NOT in effect at the time of submittal; and

8.The following certification signed in accordance with Part V.G.1. (signatory requirements):

"I certify under penalty of law that either: (a) 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 or (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, 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."

Signature of Design Professional

C. Notice of Termination Submittal. All Notices of Termination by this permit shall be submitted by return receipt certified mail (or similar service) to the appropriate EPD District Office according to the schedule in Appendix A of this permit and to the Local Issuing Authority in jurisdictions authorized to issue a Land Disturbance Activity permit for the permittee's construction site pursuant to O.C.G.A. 12-7-1, et seq. If an electronic submittal service is provided by the EPD then the Notice of Termination may be submitted electronically; if required, a paper copy must also be submitted by return receipt certified mail or similar service.

BMP NOTE: (Petroleum spill and leaks cleanup)
- Local State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage area. Material and equipment includes the following list, but not limited to : brooms, mops, rakes, gloves, goggles,cat litter, sand, sawdust and properly label plastic and metal waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary so to prevent future spills.
- All Spills that impact the surface water(Leave a sheen on surface water) The National Response Center will be contacted within 24 hours at 1-800-426-2675.
- For spills less than 25 gallons and no surface water impacts, The Georgia EPD will be contacted within 24 hours.

The contractor shall notify the licensed professional who prepared this plan if more than 1320 gallons of petroleum are stored onsite.(this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 660 gallons. the Contractor will need a spill prevention Containment and countermeasures plan prepared by the licensed professional.

BMP NOTE: (Waste Materials)
Solid materials, including building materials, shall not be discharged to waters of the State, except by a Section 404 Permit. All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No construction waste will be buried onsite.

All personnel will be instructed on proper procedures for waste disposal. A notice stating these practices will be posted at the jobsite and the contractor will be responsible for seeing that these procedures are followed.

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

- All sanitary waste units will be located in one area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment BMP's must be implemented such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the Erosion Control Plan Grading Phase, Sheet C7.1, by the contractor once the locations have been determined.

STORMWATER NOTES:
- Structural BMPs such as Silt Fence, a Construction Entrance, and a Sediment Pond and Vegetative BMPs such at Temporary Mulching, Temporary Vegetation, Permanent Vegetation, and Matting Blankets will be installed to help limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable.

PRODUCT SPECIFIC PRACTICES

PETROLEUM BASED PRODUCTS - CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ONSITE VEHICLES AND MACHINERY DAILY INSPECTIONS AND REGULAR 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 PREVENUMINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.

PAINTS/FINISHES/SOLVENTS - ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

FERTILIZER/HERBICIDES - THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE 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.

HAZARDOUS WASTES

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

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

EROSION CONTROL NOTES:

1. THE EXTENT AND LOCATION OF EROSION CONTROL MEASURES SHOWN ARE THE ESTIMATED REQUIRED. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO ACTUAL FIELD CONDITIONS, AND WILL BE INSTALLED AT CONTRACTOR'S EXPENSE WHEN DIRECTED BY THE PROPER GOVERNING AUTHORITY.
2. IT SHALL BE THE RESPONSIBILITY OF THE PERSON PERFORMING THE CONSTRUCTION OPERATIONS TO INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES INDICATED ON THESE DRAWINGS, OR TO PROVIDE ADDITIONAL MEASURES AS DEEMED NECESSARY BY SITE CONDITIONS.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (SCS MANUAL) (LATEST EDITION), PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION.
4. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO INDICATE CONTROL OF EROSION AT THE SOURCE AND NOT TO TRAP ERODED SOIL AS IT LEAVES THE CONSTRUCTION AREA. SEDIMENT TRAPS AND STRUCTURES ARE INTENDED FOR USE AS BACKUP TO THE PRIMARY MEASURES SHOWN.
5. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
7. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CHECKED DAILY.
8. EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
9. THE SOIL EROSION AND SEDIMENT CONTROL ORDINANCE REQUIRES THAT A 25 FOOT BUFFER ADJACENT TO ALL STATE WATERS BE MAINTAINED (ARTICLE 4, SECTION 4.3 PARAGRAPH 15). AN EXCEPTION IS GRANTED TO HOMEOWNERS WHO PERFORM MINOR LAND DISTURBING ACTIVITIES SUCH AS HOME LANDSCAPING, HOME GARDENS, REPAIRS AND MAINTENANCE WORK (ARTICLE 3, SECTION 3.1, PARAGRAPH 3).
10. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
11. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
12. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE ½ FULL VOLUME.
13. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITH THE 25-FT OR 50-FT UNDISTURBED STREAM BUFFER AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT REQUIRING THE NECESSARY VARIANCES AND PERMITS.
14. ADEMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON THE BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
15. WASTE MATERIALS SHALL NOT DISCHARGE IN WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

I certify that I, as the design professional who prepared the ES&PC plan, will inspect the installation of the initial sediment storage requirements and perimeter control BMP's within seven (7) days after installation

PETROLEUM SPILL PREVENTION AND CONTAINMENT:

1. PREVENTATIVE MAINTENANCE SUCH AS TIMELY INSPECTIONS OF FUEL STORAGE TANKS AND PUMPS SHALL BE PERFORMED TO REDUCE THE RISK OF PETROLEUM SPILLS.
2. PETROLEUM SPILLS SHALL BE IMMEDIATELY CONTAINED. ALL INLETS MUST BE PLUGGED IMMEDIATELY, AND THE PETROLEUM DIRECTED AWAY FROM RECEIVING WATERS OR STORM DRAINAGE SYSTEMS. CLEANUP MAY BE ACCOMPLISHED BY, BUT IS NOT LIMITED TO, SWEEPING, SHOVELING, AND VACUUMING ALONG WITH THE USE OF SORBENTS AND GELS.
3. ANY CONTAMINATED SOILS MUST BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED WITH SOIL OF SIMILAR PROPERTIES.

CONCRETE WASH DOWN:

1. NO CONCRETE WASHDOWN OF THE DRUM WILL BE ALLOWED WITHIN THE PROJECT SITE AREA THROUGHOUT THE DURATION OF THE PROJECT.
2. AN AREA HAS BEEN INDICATED ON THE PLANS FOR WASH DOWN OF TOOLS FOR CONCRETE INSTALLATION.

MISC:

1. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING ½ FULL VOLUME.
2. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2.5:1 WITH A HEIGHT OF 10' OR GREATER SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET
3. A REVISION OF THE EROSION CONTROL PLAN IS REQUIRED WHENEVER THERE IS A CHANGE IS DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, THAT WILL HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING POLLUTANT DISCHARGE.
4. ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPE'S TOE.

NOTES

1. THERE IS NO FLOODPLAIN ON THIS PROPERTY FROM A WATER COURSE WITH A DRAINAGE AREA EXCEEDING 100 ACRES PER FIRM PANEL 13135C0035F, EFFECTIVE SEPT. 29, 2006.
2. ALL WETLANDS TO BE DISTURBED ARE DELINEATED ON THIS SITE.
3. APPROXIMATELY 0.5 ACRES OF WETLANDS EXIST ON THE PROJECT SITE AND HAVE BEEN DELINEATED BY UNITED CONSULTING, DATED APRIL 11, 2017.
4. STATE WATERS EXIST ON THE PROJECT SITE AND HAVE BEEN DELINEATED BY UNITED CONSULTING, DATED APRIL 11, 2017.
5. A 50-FOOT UNDISTURBED BUFFER AND A 75-FOOT IMPERVIOUS SETBACK ADJACENT TO ALL STREAMS SHALL BE MAINTAINED UNLESS AN APPROPRIATE STREAM BUFFER VARIANCE IS OBTAINED.
6. STORM WATER MANAGEMENT FOR THIS PROJECT WILL BE PROVIDED ON SITE.
7. PRIOR TO THE WETLANDS BEING DISTURBED, AN APPROPRIATE PERMIT SHALL BE OBTAINED.

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES:01/22/2020

© 2018
PRECISION PLANNING INC.
ALL RIGHTS RESERVED.

THESE CONSTRUCTION DOCUMENTS AND ANY DATA THEREON ARE THE PROPERTY OF PRECISION PLANNING INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT OTHERWISE AGREED TO THEY SHALL NOT BE LOANED COPIED OR DISCLOSED IN ANY MANNER NOR ARE THEY TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH THEY ARE EXPRESSLY FURNISHED UNLESS THAT SPECIFICALLY INDICATED HEREIN TO THE CONTRARY WITHOUT THE PRIOR WRITTEN CONSENT OF PRECISION PLANNING INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.339.8800 • www.ppi.us

MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA.
PROJECT

EROSION CONTROL NOTES

DESIGN	DRAWN	CHECKED
	LGW	ES

SHEET TITLE

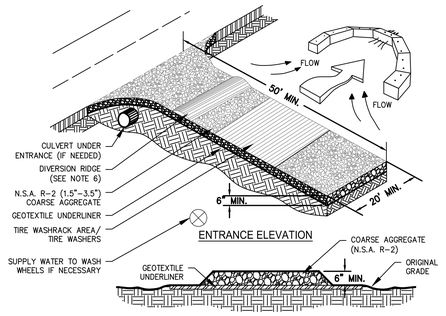
DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.

RELEASE

Oct. 26, 2017 — DATE
R17-199 — PROJ. NUMBER
FILE NAME
FILE NUMBER

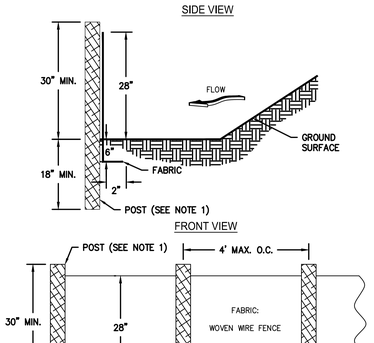
C5.8

PLOT DATE: 6/20/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\R17199-LD-ACM-SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_CSD_EROSION CONTROL NOTES.DWG - 2018-06-28 - LONNIE HIGGINS



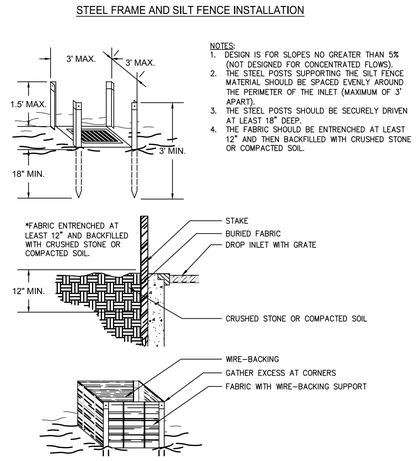
NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD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

Co CONSTRUCTION EXIT



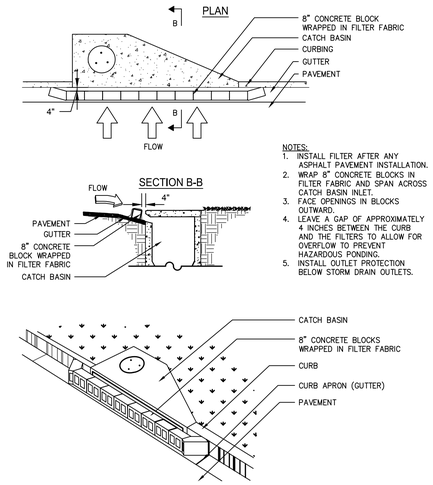
NOTES:
1. USE STEEL POSTS AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. SILT FENCE FABRIC SHALL BE APPROVED BY GWINNETT COUNTY AT PRE-CONSTRUCTION MEETING AND BEFORE INSTALLATION.

Sd1-S SEDIMENT BARRIER
TYPE (SENSITIVE)



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

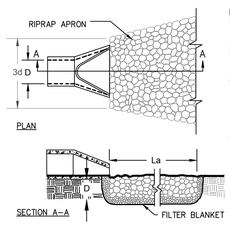
Sd2-F INLET SEDIMENT TRAP
TYPE (FILTER FABRIC W/SUPPORTING FRAME)



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

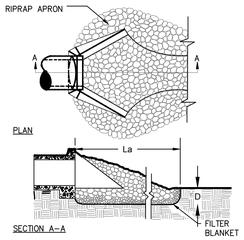
Sd2-P INLET SEDIMENT TRAP
TYPE (PIG-IN-BLANKET)

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESSTHAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

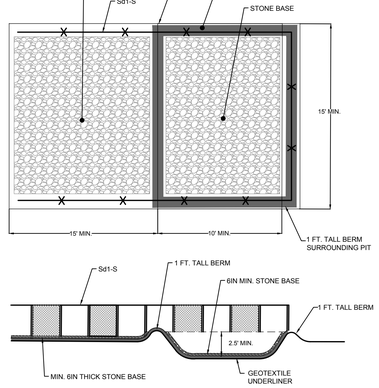
PIPE OUTLET TO WELL DEFINED CHANNEL



Velocity Dissipation Summary (25 year storm)

Headwall ID	Pipe Diameter (D_o)	Pipe Discharge (cfs)	Pipe Velocity (fps)	Rip-Rap Size d_{50}	Width of Apron $W = 3D_o$	Apron Length (La)	Width of Apron $W = D_o + La$	Filter Bedding Stone	Graded Rip Rap Stone
POND A	36	100.1	14.16	1.09	9.0	30.0	66.0	No. 57	TYPE 3
POND B	24	25.54	8.13	0.49	4.0	16.0	40.0	No. 57	TYPE 3
SD-3 NO. 1	36	100.1	14.16	1.09	9.0	30.0	66.0	No. 57	TYPE 3
SD-3 NO. 2	24	25.54	8.13	0.49	4.0	16.0	40.0	No. 57	TYPE 3

St STORM DRAIN OUTLET PROTECTION



CONCRETE WASHDOWN OF THE DRUM IS NOT ALLOWED ON-SITE.
TO BE INSTALLED AND OPERATIONAL PRIOR TO ANY CONCRETE WORK ON-SITE.
STONE BASE SIZE = N.S.A R-2 1 1/2" TO 3 1/2" DIA, COARSE AGGREGATE.
PROVIDE PERIODIC TOP DRESSING AS NECESSARY WITH 1 1/2" TO 3 1/2" DIA. STONE.

Wa CONCRETE WASHDOWN

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES:01/22/2020

© 2018 PRECISION PLANNING, INC.
ALL RIGHTS RESERVED.

THESE CONSTRUCTION DOCUMENTS AND THE INFORMATION CONTAINED THEREIN ARE AND SHALL REMAIN THE PROPERTY OF PRECISION PLANNING INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART, FOR ANY PURPOSE OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY WERE PREPARED AND DEVELOPED, WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC. ANY MODIFICATIONS TO THESE PLANS WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC. IS AT THE SOLE RISK OF THE PARTY MAKING SUCH MODIFICATIONS. ANY REUSE OF THESE PLANS FOR OTHER PROJECTS OR EXTENSIONS OF THIS PROJECT, OR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC. IS PROHIBITED. ANY VERBAL AGREEMENTS OR TRANSFER OF INFORMATION NOT SPECIFICALLY PROVIDED FOR HEREIN AND/OR CONFIRMED IN WRITING BY PRECISION PLANNING INC. SHALL BE AT THE SOLE RISK OF THE PARTY USING SUCH INFORMATION AND/OR MAKING SUCH AGREEMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC. ANY MODIFICATIONS TO THESE PLANS AND/OR ANY REUSE OF THESE PLANS FOR OTHER PROJECTS OR EXTENSIONS OF THIS PROJECT, OR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC. IS PROHIBITED. ANY VERBAL AGREEMENTS OR TRANSFER OF INFORMATION NOT SPECIFICALLY PROVIDED FOR HEREIN AND/OR CONFIRMED IN WRITING BY PRECISION PLANNING INC. SHALL BE AT THE SOLE RISK OF THE PARTY USING SUCH INFORMATION AND/OR MAKING SUCH AGREEMENTS WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
EROSION CONTROL DETAILS

DESIGN LGW | DRAWN LGW | CHECKED ES

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

Oct. 26, 2017 DATE
R17-199 PROJ. NUMBER
FILE NAME
FILE NUMBER

C5.9

PLOT DATE: 8/28/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_CONS_EROSION DETAILS AND NOTES.DWG, 2018-08-28 - LONNIE HIGGINS

CONSTRUCTION SPECIFICATIONS

SITE PREPARATION

1. 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.

MULCHING MATERIALS

SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:
1. 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.
2. 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 CONTROL COSTS.
3. CUTBACK ASPHALT (SLOW CURING) SHALL BE APPLIED AT 1200 GALLONS PER ACRE (OR ¼ GALLON PER SQ. YD.)
4. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

APPLYING MULCH

WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF EXPOSED AREA.
1. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
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.
3. CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OR DAMAGE TO SHOES, CLOTHING, ETC.
4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

ANCHORING MULCH

1. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK". DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.

METHODS AND MATERIALS

A. TEMPORARY METHODS

MULCHES
SEE STANDARD DS1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO STANDARD TB-TACKIFIERS AND BINDERS. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

VEGETATIVE COVER
SEE STANDARD DS2-DISTURBED AREAS STABILIZATION (WITH TEMPORARY SEEDING).

SPRAY-ON ADHESIVES
THESE ARE USED ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. REFER TO STANDARD TB-TACKIFIERS AND BINDERS.

TILLAGE
THIS PRACTICE IS DESIGNED TO ROUGHEN AND BRING CLODS TO THE SURFACE. IT IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE WIND EROSION STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

IRRIGATION
THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. REPEAT AS NEEDED.

BARRIERS
SOLID BOARD FENCES, SNOWFENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 15 TIME THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING WIND EROSION. CALCIUM CHLORIDE. APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RE-TREATMENT.

B. PERMANENT METHODS

PERMANENT VEGETATION
SEE STANDARD DS3-DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION).
EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING
THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE STANDARD TP-TOPSOILING.

STONE
COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. SEE STANDARD CR-CONSTRUCTION ROAD

Ds1 DISTURBED AREA STABILIZATION (W/ MULCHING ONLY)

Du DUST CONTROL ON DISTURBED AREAS

DEFINTION

THE ESTABLISHMENT OF TEMPORARY COVER WITH FAST GROWING SEEDINGS FOR SEASONAL PROTECTION ON DISTURBED OR DENUDED AREAS.

CONDITIONS

TEMPORARY GRASSING, INSTEAD OF MULCH, CAN BE APPLIED TO ROUGH GRADED AREAS THAT WILL BE EXPOSED FOR LESS THAN SIX MONTHS. TEMPORARY VEGETATION MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL PERMANENT VEGETATION IS ESTABLISHED.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATE PER 1,000 S.F	RATE PER ACRE*	PLANTING DATES***
RYE	3.9 lbs	3 bu.	9/1 - 3/1
RYEGRASS	0.9 lbs	40 lbs	8/15- 4/1
ANNUAL LESPEDEZA	0.9 lbs	40 lbs	1/15 - 3/15
WEEPING LOVE GRASS	0.1 lbs	4 lbs	2/15 - 6/15
SUDANGRASS	1.4 lbs	60 lbs	3/1 - 8/1
BROWNTOP MILLET	0.9 lbs	40 lbs	4/1 - 7/15
WHEAT	4.1 lbs	3 bu	9/15 - 2/1

CONSTRUCTION SPECIFICATIONS

GRADING AND SHAPING

EXCESSIVE WATER RUNOFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.

NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HANDSEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR 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.

LIME AND FERTILIZER

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE. GRADED AREAS REQUIRE LIME APPLICATION. SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED. FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (1216 LBS./1,000 SQ. FT.) SHALL BE APPLIED. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER OR CHISEL.

SEEDING

SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, 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.

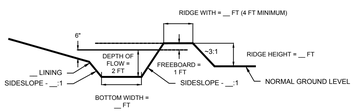
MULCHING

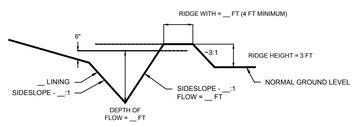
TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT-TERM PROTECTION. REFER TO DS1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

IRRIGATION

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

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY VEGETATION)





Di DIVERSION DITCH

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

CONDITIONS

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

SPECIFICATIONS

GRADING AND SHAPING

GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.

WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF THE VEGETATION.

CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

SEEDBED PREPARATION

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

BROADCAST PLANTINGS
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.
2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
3. 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, PREFERABLY IN AUGUST OR SEPTEMBER.

PLANTING

HYDRAULIC SEEDING

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

CONVENTIONAL SEEDING

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

NO-TILL SEEDING

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

INDIVIDUAL PLANTS

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

MULCHING

MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. 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 POUNDS PER ACRE. DRYSTRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
3. ONE THOUSAND POUNDS 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 THREE TONS PER ACRE.
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 SEEDED AREAS.
6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
7. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS ON SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH

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, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE.

WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH

ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:
1. EMULSIFIED ASPHALT CAN BE (A) SPRAYED UNIFORMLY ONTO THE MULCH AS IT IS EJECTED FROM THE BLOWER MACHINE OR (B) SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.

THE COMBINATION OF ASPHALT EMULSION AND WATER SHALL CONSIST OF A HOMOGENEOUS MIXTURE SATISFACTORY FOR SPRAYING. THE MIXTURE SHALL CONSIST OF 100 GALLONS OF GRADE SS-1H OR CSS-1H EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
CARE SHALL BE TAKEN AT ALL TIMES TO PROTECT STATE WATERS, THE PUBLIC, ADJACENT PROPERTY, PAVEMENTS, CURBS, SIDEWALKS, AND ALL OTHER STRUCTURES FROM ASPHALT DISCOLORATION.
2. HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE 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.
3. SYNTHETIC TACKIFIERS ON BINDERS APPROVED BY GDOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. REFER TO TB - TACKIFIERS AND BINDERS.
4. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPROPRIATELY COVER THE AREA AT A RATE OF ONE-QUARTER TO ONE HALF BUSHEL PER ACRE.
5. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

IRRIGATION

IRRIGATION SHALL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

SEEDING RATES FOR PERMANENT SEEDING

SPECIES	RATE PER 1,000 S.F	RATE PER ACRE*	PLANTING DATES***
BAHA	1.4 LBS	60 LBS	1/1-12/31
BERMUDA	0.2 LBS	10 LBS	2/15-7/1
CENTIPEDE	BLOCK SOD ONLY	BLOCK SOD ONLY	4/1-7/1
LESPEDEZA	1.7 LBS	75 LBS	1/1-12/31
WEEPING LOVE GRASS	0.1 LBS	4 LBS	2/1-6/15
SWITCH GRASS	0.9 LBS	4 LBS	3/15-6/1

FERTILIZER REQUIREMENTS

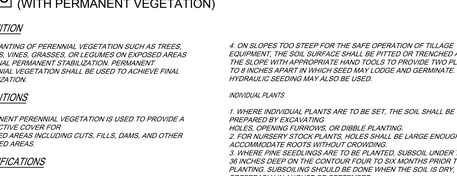
TYPES OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 100 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/2/ 30
2. Cool season grasses and Second legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10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

SKIMMER PERSPECTIVE

NOTE:
SKIMMER CONFIGURATION SHOWN IS TYPICAL. THE DESIGNER/ENGINEER MAY SUBMIT AN ALTERNATE SKIMMER DETAIL FOR REVIEW.

SKIMMER FRONTAL SECTION VIEW

SKIMMER SIDE SECTION VIEW

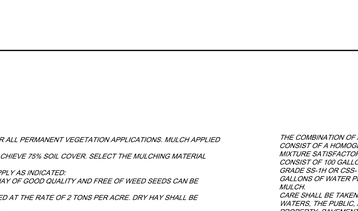


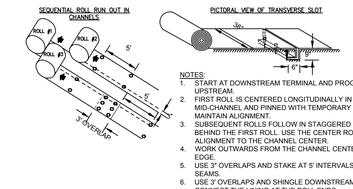
POND ID	POND OR TRAP SIZE LENGTH (TOP&BOTTOM), WIDTH (TOP & BOTTOM) AND DEPTH	DRAIN TIME (HOURS)	SKIMMER DIM. (ORIFICE & HEAD SIZE) (IN)	MFG NAME**
Sd3 1	L: 406'&234'; W:170'&149'; D:8'	72	6.0" SKIMMER 2.8" ORIFICE RADIUS	J.W FAIRCLOTH & SONS
Sd3 2	L:144'&53'; W:69'&19'; D:8'	72	2.0" SKIMMER 0.625" ORIFICE RADIUS	J.W FAIRCLOTH & SONS
A	L: 406'&234'; W:170'&149'; D:8'	72	6.0" SKIMMER 2.8" ORIFICE RADIUS	J.W FAIRCLOTH & SONS
B	L:144'&53'; W:69'&19'; D:8'	72	2.0" SKIMMER 0.625" ORIFICE RADIUS	J.W FAIRCLOTH & SONS

Sk FLOATING SURFACE SKIMMER

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS





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

Ss SLOPE STABILIZATION

TYPE (BLANKET AND MATTING)

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PORTIONS THEREOF INCLUDING, IN WHOLE OR IN PART, THE DESIGN AND LAYOUT OF PRECISION PLANNING INC.'S SALES AND MARKETING MATERIALS, ARE NOT TO BE REPRODUCED OR CONVEYED IN ANY FORM OR MEDIUM WHATSOEVER FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY ARE PREPARED WITHOUT THE EXPRESS WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

EROSION CONTROL DETAILS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	5/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

Oct. 26, 2017
DATE

R17-199
PROJ. NUMBER

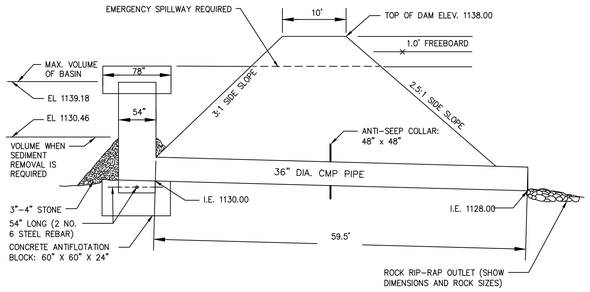
FILE NAME

FILE NUMBER

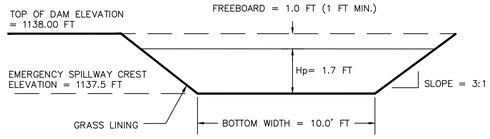
GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

C5.10

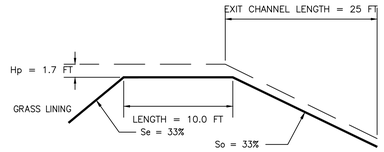
PLOT DATE: 8/28/2018 10:43 AM
FILE PATH: E:\PROJECTS\2017\17199 LD-ACM SATILLA GRAVEL SPRINGS\DGN\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C000_EROSION DETAILS AND NPDES.DWG - 2018-08-28 - LONNIE HIGGINS



CROSS-SECTIONAL DETAIL

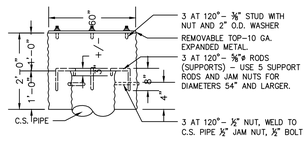


PROFILE ALONG CENTERLINE

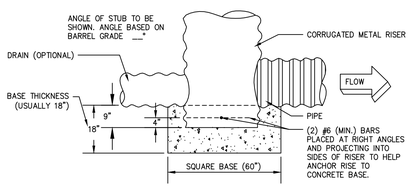


EMERGENCY SPILLWAY

CROSS-SECTIONAL DETAIL OF EMERGENCY SPILLWAY



TYPICAL TRASH RACK



CONCRETE RISER BASE DETAIL

Sd3 TEMPORARY SEDIMENT POND 1

Computed by CH Date 10.16.2017
Checked by ES Date

Project Name: Gravel Springs Development
Basin Number: 1
Total Area Draining to Basin 49.99 acres
Disturbed Area Draining to Basin 30.21 acres

Volume

1. Compute minimum required storage volume (V_s).
   V_s = 67 cy/ac * 30.21 acres = 2024 cy 54,650 cf
2. Compute minimum volume of basin at clean-out (V_c).
   V_c = 22 cy/ac * 30.21 acres = 665 cy 17,945 cf
3. Determine elevation corresponding to minimum required storage volume, V_s.
   Minimum riser crest elevation 1131.4 feet (determined by stage/storage relationship)
4. Determine elevation corresponding to clean-out volume V_c.
   Clean-out elevation = 1130.5 feet (determined by stage/storage relationship)
   Note: Clean-out elevation shall be clearly marked on the riser or marked by a post near the riser.
5. Compute length of riser.
   Riser length = Minimum elevation of riser crest - Lowest elevation of pipe at riser
   Riser length = 1135.8 ft - 1130 ft.
   Riser length = 5.8 ft.

		GWINNETT c	I	a
Stormwater Runoff				
6.	Compute peak discharge from a 2-year, 24-hour storm event. Q_2 = 96.0 cfs (Attach runoff computation sheet)	0.50	3.84	49.99
7.	Compute peak discharge from a 25-year, 24-hour storm event. Q_{25} = 162.0 cfs (Attach runoff computation sheet)	0.50	6.48	49.99

Surface Area/Configuration Design

8. Compute minimum basin surface area (SA_{min}).
   SA_{min} = .01 ac/cfs * Q_2
   SA_{min} = .01 ac/cfs * 96.0 cfs
   SA_{min} = 0.96 ac = 43,560 sf/ac * 0.96 ac = 41,809 sf
9. Check available area at elevation of riser crest.
   Available area = 62,711 sf (determined by stage/storage relationship)
   Available area >/= SA_{min}? Yes=1/No=2 **Yes**
10. Compute required length to achieve 2:1 L:W ration.
    Average width = 170 ft
    Required length = 2 * average width
    Required length = 2 * 170 ft
    Required length = 339 ft
    Available length = 405.33 ft
    2:1 L:W ratio satisfied? Yes=1/No=2 **Yes**
    If "no", refer to Figure 6-22.2 for baffle designs. Note any required baffles on E&SC plan and include calculations and details for baffle.

Principal Spillway (ps)

11. Determine maximum principal spillway capacity.
    Q_{max} = Q_2 96.0 cfs
12. Compute the vertical distance between the centerline of the outlet pipe and the emergency spillway crest (H).
    H = 5.98 ft

25. Determine size of anti-seep collar required.
    YES 18-inch projection (for heads (H) less than or equal to 10 feet).
    No 24-inch projection (for heads (H) greater than 10 feet).

Emergency Spillway (es)

26. Compute minimum capacity of emergency spillway.
    Q_{es} = Q_{25} - Q_{ps} (allowable) 161.97 cfs - 100.01
    Q_{es} = 62.0 cfs SPILLWAY REQ'D "Principal Spillway Capcitates the 25-year storm"
27. Determine stage (H_s), bottom width (b), velocity (V) and minimum exit slope (S) using Table 6-22.4 and Q_{es}.
    Hp = 1.7 ft **b =** 10 ft **V =** 5.2 fps
    S = 2.6 %
28. Actual entrance channel slope, S_e = 33 %
29. Actual exit channel slope, S_e = 33 %
    Note: If S_e is steeper 8
    a.) Calculate new exit velocity V_e
    $V_e = V(S_e/S)^{0.3}$ = 5.2 fps * (33 / 2.6) $^{0.3}$
    V_e = 11.14 fps
    Note: Refer to Channel Stabilization (Ch) to determine the proper lining for the emergency spillway.
    Grass X **Rip-rap** _____ **Concrete** _____

Design Elevations

30. **Riser crest elevation =** 1135.8 ft.
31. Compute minimum emergency spillway crest elevation.
    Minimum emergency spillway crest elevation = Riser crest elevation + h
    Minimum emergency spillway crest elevation = 1135.8 ft + 1.73 ft
    Minimum emergency spillway crest elevation = 1137.5 ft
32. Determine design high water elevation
    Design high water elevation = Minimum emergency spillway crest elevation + Stage elevation (Hp)
    Design high water elevation = 1137.5 ft + 1.7 ft
    Design high water elevation = 1139.2 ft
33. Determine elevation of top of dam
    Elevation of top of dam = Design high water elevation + 1 ft freeboard
    Minimum Elevation of top of d 1139.2 ft + 1 ft = 1140.2
    Elevation of top of dam = 1138.0 ft **Freeboard not provided**

PLEASE NOTE THAT DESIGN VALUES DETERMINED BY THIS SHEET REPRESENT THE MINIMUM REQUIREMENTS FOR A TEMPORARY SEDIMENT BASIN.

Impervious Area	Disturbed Area	Undisturbed Area
0.00	0.50	0.50
0.00	30.21	19.78

Composite C 0.50

13. Compute the total pipe length of the principal spillway, L using Figure 6-22.3.
    L = [A-(B+C)/2][Z$_H$ + Z$_E$] + T + E

A=	1138.00
B=	1130.00
C=	1128.00
Z$_H$=	3
Z$_E$=	2.5
T=	10
E=	0

    L = 59.5 ft
14. Determine diameter of principal spillway (D_{ps}) and flow through the principal spillway (Q) from Table 6-29.1 using H and Q_{max}.
    D_{ps} = 36 in.
15. Compute actual flow through the principal spillway, using Table 6-22.1 to determine the correction factor for pipe length, L.
    Qps = Q * correction factor = 96.0 cfs * 1.04
    Q_{ps} (actual) 100.01 cfs
16. Compute riser diameter (D_r).

Riser Pipe Dia. (in.)	Bouyant Force (lbs./v.f. of Riser Height)	Vol. Of Concrete per vertical foot of Riser Height (c.f./v.f.) needed to prevent floatation
12	49	0.69
18	110.3	1.54
21	150.1	2.1
24	196	2.75
30	306.3	4.29
36	441.1	6.18
48	784.1	10.98
54	992.4	13.9
60	1225.2	17.16

    D_r = 1.5 D_{ps}
    D_r = 1.5 * 36 in.
    D_r = 54 in.
    D_r = 54 in.
17. Compute trash rack diameter (D_t).
    D_t = 1.4 * D_r
    D_t = 1.4 * 54 in.
    D_t = 75.6 in.
    D_t = 78 in.
18. Determine the minimum distance between the riser crest and the emergency spillway crest, h, using Table 6-22.2, D_r and Q_{es}.
    h = 1.73 ft.

Concrete Riser Base Design

19. Determine the volume of concrete per vertical foot of riser height needed, from Table 6-22.3 to prevent flotation.
    Required volume of concrete per vertical foot = 13.9 cf/v.f.
20. Compute total volume of concrete required.
    Total required volume of concrete = Required volume per vertical foot * Riser length
    Total required volume of concrete = 13.9 cf/v.f. * 5.8 ft.
    Total volume of concrete required = 79.93 cf.
21. Assume base thickness (usually 18").
    B = 18 in. = 1.5 ft.
22. Compute the required surface area.
    Required surface area = Total volume required/B
    Required surface area = 79.93 cf / 1.5 ft
    Required surface area = 53.28 sf
23. Compute riser base length (l) and width (w) (assume square base).
    l = w = (required surface area)$^{1/2}$
    l = w = (53.28 sf)$^{1/2}$
    l = w = 7.30 ft = 12in/f 7.30 ft = 87.59 in **102** in

Anti-Seep Collar Design

24. Determine if anti-seep collar is required. If yes, to any of the following conditions, a collar is required:
    No The settled height of the dam is greater than 15 feet
    Yes The principal spillway diameter (D_{ps}) is smooth pipe larger than 8".
    Yes The principal spillway diameter (D_{ps}) is corrugated metal pipe larger than 12".

SD3: TEMPORARY SEDIMENT BASIN

Stage Storage Relationship - Basin

Contour Elevation	Depth (ft)	Contour Area (s.f.)	Volume /4' height	Cummulative Volume (cu. ft)	Cummulative Volume (cu. yd)
1130	0.00	22,316.73		0.00	0.00
			77,559		
1132	2.00	55,241.96	0	77,558.69	2,872.54
			114,704		
1134	4.00	59,462.21	0	192,262.86	7,120.85
			122,637		
1136	6.00	63,174.75	0	314,899.82	11,662.96
			131,666		
1138	8.00	68,491.02	0	446,565.59	16,539.47

MINUMUM STORAGE REQUIRED	54,649.89 c.f
MIN. RISER CREST ELEVATION	1131.41 feet
TOTAL VOL. PROVIDED	380,732.71 c.f
MAXIMUM PONDING ELEVATION	1139.18 feet
CLEANOUT STORAGE REQUIRED	17,944.74 c.f
MIN. CLEANOUT ELEVATION	1130.46 feet

Design Riser Crest Elevation 1135.75 feet
Available Area at Riser Crest Elevation 62,711 s.f.

Emergency Spillway Crest Elevation 1137.48

Top of Dam Elevation 1138
Top of Freeboard Elevation 1137

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES: 01/22/2020

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY WORLD COPYRIGHT LAWS AND ARE THE PROPERTY OF PRECISION PLANNING, INC. (AS ES DESIGNATED ON THE DRAWINGS) AND SHALL NOT BE REPRODUCED OR CONVEYED IN ANY FORM OR MANNER WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THAT SPECIFICALLY DESIGNATED HEREIN WITHOUT THE EXPRESSED WRITTEN PERMISSION AND CONSENT FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

EROSION CONTROL DETAILS

DESIGN LGW | DRAWN LGW | CHECKED ES

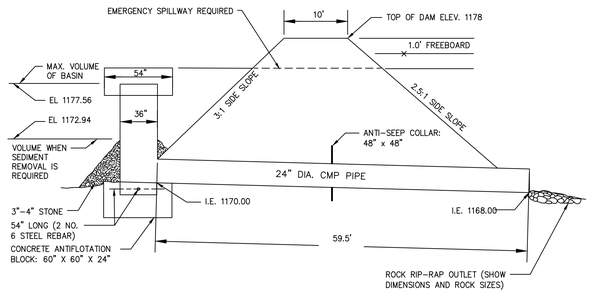
SHEET TITLE
RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA	06/19/18

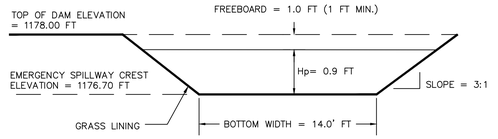
Oct. 26, 2017 DATE
R17-199 PROJ. NUMBER
TILE NAME
FILE NUMBER

C5.11

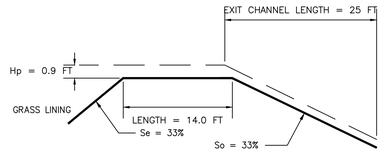
PLOT DATE: 8/28/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM-SATTLA\GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_CSW_EROSION DETAILS AND NOTES.DWG - 2018-08-28 - LONNIE HIGGINS



CROSS-SECTIONAL DETAIL

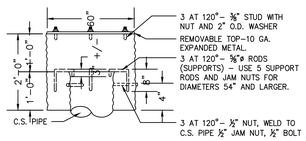


PROFILE ALONG CENTERLINE

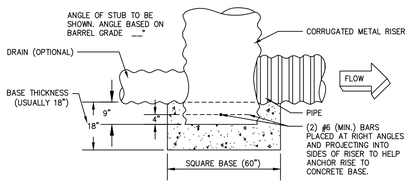


EMERGENCY SPILLWAY

CROSS-SECTIONAL DETAIL OF EMERGENCY SPILLWAY



TYPICAL TRASH RACK



CONCRETE RISER BASE DETAIL

Sd3 TEMPORARY SEDIMENT POND 2

Computed by CH Date 10.16.2017
Checked by ES Date

Project Name: Gravel Springs Development
Basin Number: 2
Total Area Draining to Basin 12.64 acres
Disturbed Area Draining to Basin 6.98 acres

Volume

1. Compute minimum required storage volume (V_s).
   V_s = 67 cy/ac * 6.98 acres = 468 cy 12,627 cf
2. Compute minimum volume of basin at clean-out (V_c).
   V_c = 22 cy/ac * 6.98 acres = 154 cy 4,146 cf
3. Determine elevation corresponding to minimum required storage volume, V_s.
   Minimum riser crest elevation 1175.7 feet (determined by stage/storage relationship)
4. Determine elevation corresponding to clean-out volume V_c.
   Clean-out elevation = 1172.9 feet (determined by stage/storage relationship)
   Note: Clean-out elevation shall be clearly marked on the riser or marked by a post near the riser.
5. Compute length of riser.
   Riser length = Minimum elevation of riser crest - Lowest elevation of pipe at riser
   Riser length = 1175.8 ft - 1170 ft.
   Riser length = 5.8 ft.

Stormwater Runoff

		c	I	a
6.	Compute peak discharge from a 2-year, 24-hour storm event.	0.50	3.84	12.64
	Q_2 = 24.3 cfs (Attach runoff computation sheet)			
7.	Compute peak discharge from a 25-year, 24-hour storm event.			
	Q_{25} = 41.0 cfs (Attach runoff computation sheet)	0.50	6.48	12.64

Surface Area/Configuration Design

8. Compute minimum basin surface area (SA_{min}).
   SA_{min} = .01 ac/cfs * Q_2
   SA_{min} = .01 ac/cfs * 24.3 cfs
   SA_{min} = 0.24 ac = 43,560 sf/ac * 0.24 ac = 10,571 sf
9. Check available area at elevation of riser crest.
   Available area = 4,320 sf (determined by stage/storage relationship)
   Available area >/= SA_{min}? Yes=1/No=2 No
10. Compute required length to achieve 2:1 L:W ration.
    Average width = 68 ft
    Required length = 2 * average width
    Required length = 2 * 68 ft
    Required length = 136 ft
    Available length = 143.62 ft
    2:1 L:W ratio satisfied? Yes=1/No=2 Yes
    If "no", refer to Figure 6-22.2 for baffle designs. Note any required baffles on E&SC plan and include calculations and details for baffle.

Principal Spillway (ps)

11. Determine maximum principal spillway capacity.
    $Q_{max} = Q_2$ 24.3 cfs
12. Compute the vertical distance between the centerline of the outlet pipe and the emergency spillway crest (H).
    H = 5.66 ft

Project Name: Gravel Springs Development **Page 3**

25. Determine size of anti-seep collar required.
    YES 18-inch projection (for heads (H) less than or equal to 10 feet).
    No 24-inch projection (for heads (H) greater than 10 feet).

Emergency Spillway (es)

26. Compute minimum capacity of emergency spillway.
    $Q_{es} = Q_{25} - Q_{ps\ (allowable)}$ 40.95 cfs - 25.64
    Q_{es} = 15.4 cfs SPILLWAY REQ'D "Principal Spillway Capcitates the 25-year storm"
27. Determine stage (H_s), bottom width (b), velocity (V) and minimum exit slope (S) using Table 6-22.4 and Q_{es}.
    Hp = 0.9 ft **b =** 14 ft **V =** 3.8 fps
    S = 3.1 %
28. Actual entrance channel slope, S_e = 33 %
29. Actual exit channel slope, S_o = 33 %
    Note: If S_o is steeper 8
    a.) Calculate new exit velocity V_e
    $V_e = V(S_e/S)^{0.3}$ = 3.8 fps * (33 / 3.1)$^{0.3}$
    V_e = 7.73 fps
    Note: Refer to Channel Stabilization (Ch) to determine the proper lining for the emergency spillway.
    Grass X **Rip-rap** _____ **Concrete** _____

Design Elevations

30. **Riser crest elevation =** 1175.8 ft.
31. Compute minimum emergency spillway crest elevation.
    Minimum emergency spillway crest elevation = Riser crest elevation + h
    Minimum emergency spillway crest elevation = 1175.8 ft + 0.91 ft
    Minimum emergency spillway crest elevation = 1176.7 ft
32. Determine design high water elevation
    Design high water elevation = Minimum emergency spillway crest elevation + Stage elevation (Hp)
    Design high water elevation = 1176.7 ft + 0.9 ft
    Design high water elevation = 1177.6 ft
33. Determine elevation of top of dam
    Elevation of top of dam = Design high water elevation + 1 ft freeboard
    Minimum Elevation of top of d 1177.6 ft + 1 ft = 1178.6
    Elevation of top of dam = 1178.0 ft **Freeboard not provided**

PLEASE NOTE THAT DESIGN VALUES DETERMINED BY THIS SHEET REPRESENT THE MINIMUM REQUIREMENTS FOR A TEMPORARY SEDIMENT BASIN.

Impervious Area	Disturbed Area	Undisturbed Area
0.00	0.50	0.50
0.00	6.98	5.66

Composite C 0.50

Project Name: Gravel Springs Development **Page 2**

13. Compute the total pipe length of the principal spillway, L using Figure 6-22.3.
    L= [A-(B+C)/2][Zu + Zd] + T + E
    L = 59.5 ft
14. Determine diameter of principal spillway (D_{ps}) and flow through the principal spillway (Q) from Table 6-29.1 using H and Q_{max}.
    D_{ps} = 24 in.
15. Compute actual flow through the principal spillway, using Table 6-22.1 to determine the correction factor for pipe length, L.
    Q_{ps} = Q_t * correction factor = 24.3 cfs * 1.05
    $Q_{ps\ (actual)}$ 25.54 cfs
16. Compute riser diameter (D_r).
    D_r = 1.5 D_{ps}
    D_r = 1.5 * 24 in.
    D_r = 36 in.
    D_r = 36 in.
17. Compute trash rack diameter (D_t).
    D_t = 1.4 * D_r
    D_t = 1.4 * 36 in.
    D_t = 50.4 in.
    D_t = 54 in.
18. Determine the minimum distance between the riser crest and the emergency spillway crest, h, using Table 6-22.2, D_r and Q_{ps}.
    h = 0.91 ft.

Concrete Riser Base Design

19. Determine the volume of concrete per vertical foot of riser height needed, from Table 6-22.3 to prevent flotation.
    Required volume of concrete per vertical foot = 6.18 cf/v.f.
20. Compute total volume of concrete required.
    Total required volume of concrete = Required volume per vertical foot * Riser length
    Total required volume of concrete = 6.18 cf/v.f. * 5.8 ft.
    Total volume of concrete required = 35.54 cf.
21. Assume base thickness (usually 18").
    B = 18 in. = 1.5 ft.
22. Compute the required surface area.
    Required surface area = Total volume required/B
    Required surface area = 35.54 cf / 1.5 ft
    Required surface area = 23.69 cf
23. Compute riser base length (l) and width (w) (assume square base).
    l = w = (required surface area)$^{1/2}$
    l = w = (23.69 sf)$^{1/2}$
    l = w = 4.87 ft = 12in/f 4.87 ft = 58.41 in 102 in

Anti-Seep Collar Design

24. Determine if anti-seep collar is required. If yes, to any of the following conditions, a collar is required:
    No The settled height of the dam is greater than 15 feet
    Yes The principal spillway diameter (D_{ps}) is smooth pipe larger than 8".
    Yes The principal spillway diameter (D_{ps}) is corrugated metal pipe larger than 12".

SD3: TEMPORARY SEDIMENT BASIN

Stage Storage Relationship - Basin

Contour Elevation	Depth (ft)	Contour Area (s.f.)	Volume /d' height	Cummulative Volume (cu. ft)	Cummulative Volume (cu. yd)
1170	0.00	582.34		0.00	0.00
			2,088		
1172	2.00	1,506.06	0	2,088.40	77.35
			4,358		
1174	4.00	2,852.42	0	6,446.88	238.77
			7,382		
1176	6.00	4,529.22	0	13,828.52	512.17
			11,008		
1178	8.00	6,479.27	0	24,837.01	919.89

MINUMUM STORAGE REQUIRED	12,626.82 c.f
MIN. RISER CREST ELEVATION	1175.67 feet
TOTAL VOL. PROVIDED	19,332.77 c.f
MAXIMUM PONDING ELEVATION	1177.56 feet
CLEANOUT STORAGE REQUIRED	4,146.12 c.f
MIN. CLEANOUT ELEVATION	1172.94 feet

Design Riser Crest Elevation 1175.75 feet
Available Area at Riser Crest Elevation 4,320 s.f.

Emergency Spillway Crest Elevation 1176.66

Top of Dam Elevation 1178
Top of Freeboard Elevation 1177

A=	1178.00
B=	1170.00
C=	1168.00
Zu=	3
Zd=	2.5
T=	10
E=	0

Riser Pipe Dia. (in.)	Bouyant Force (lbs./v.f. of Riser Height)	Vol. Of Concrete per vertical foot of Riser Height (c.f./v.f.) needed to prevent floatation
12	49	0.69
18	110.3	1.54
21	150.1	2.1
24	196	2.75
30	306.3	4.29
36	441.1	6.18
48	784.1	10.98
54	992.4	13.9
60	1225.2	17.16

GSWCC
GEORGIA SOIL AND WATER CONSERVATION COMMISSION
ERIC L. SIMPSON
Level II Certified Design Professional
CERTIFICATION NUMBER 0000046913
ISSUED: 11/07/07 EXPIRES:01/22/2020

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PLANS ARE NATIONAL IN SCOPE. FOR THAT REASON, ALL OR PORTIONS OF PRECISION PLANNING, INC.'S DESIGNS AND DRAWINGS ARE PROTECTED BY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER OR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAD BEEN PREPARED WITHOUT THE EXPRESS WRITTEN CONSENT FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

EROSION CONTROL DETAILS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

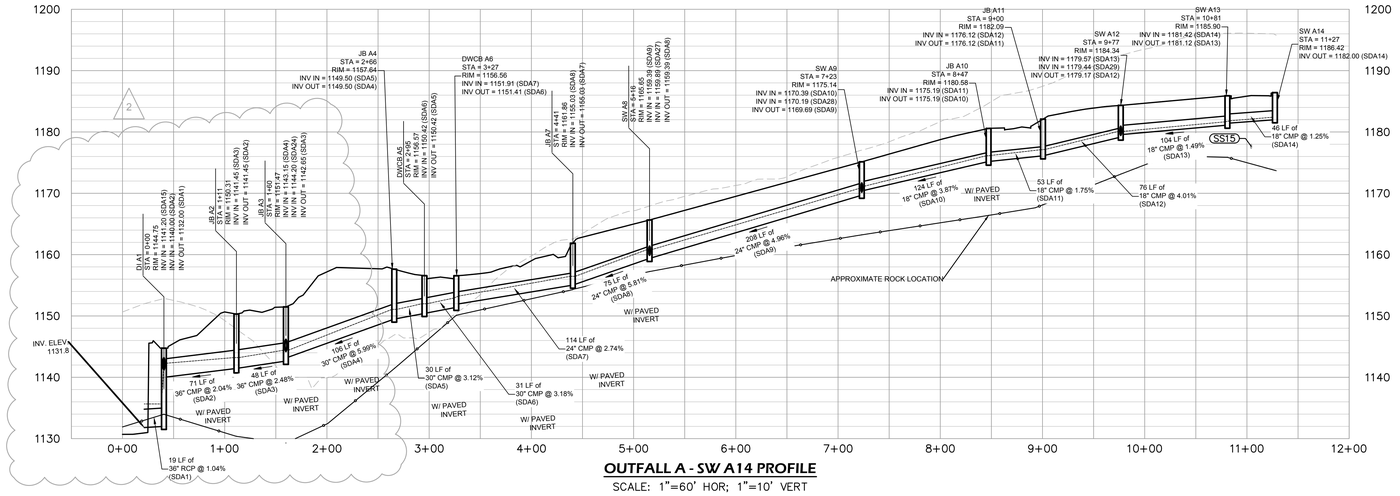
RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	5/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

Oct. 26, 2017 DATE
R17-199 PROJ. NUMBER
FILE NAME
FILE NUMBER

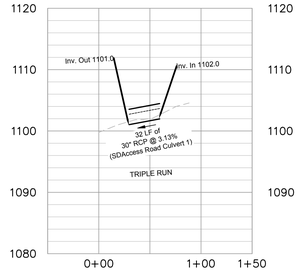
C5.12

PLOT DATE: 8/28/2018 10:43 AM
FILE PATH: E:\PROJECTS\2017\17190 LD-ACM SATILLA GRAVEL SPRINGS\DGN\SINGLE FAMILY RESIDENTIAL - TASK 1\17190_C090_EROSION DETAILS AND NOTES.DWG - 2018-08-28 - LONNIE HIGGINS



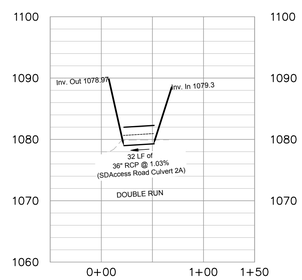
OUTFALL A - SW A14 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



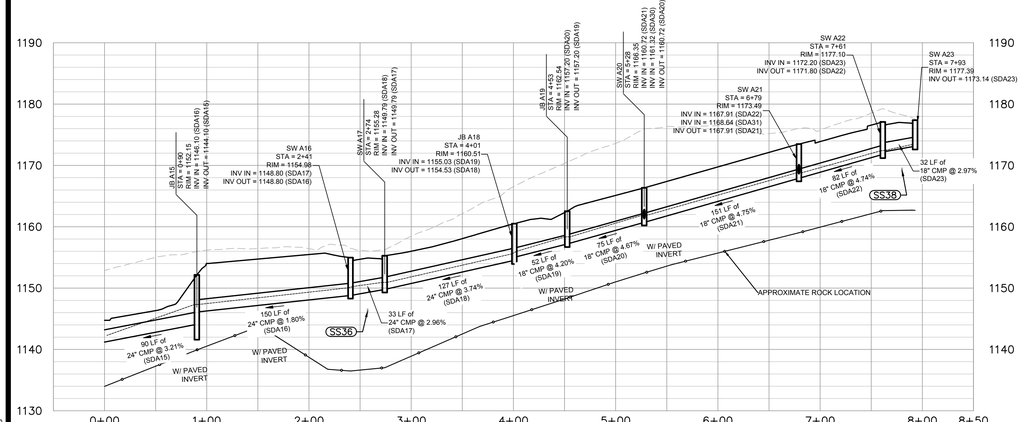
ACCESS ROAD CULVERT 1 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



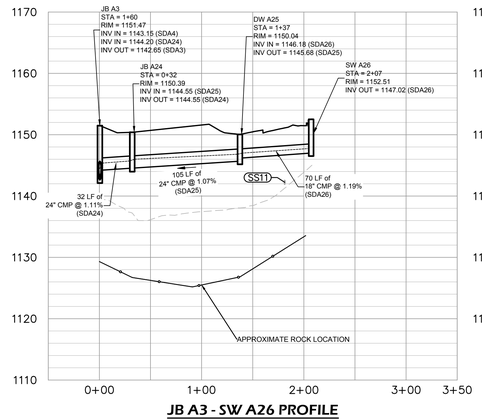
ACCESS ROAD CULVERT 2A PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



JB A1 - SW A23 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



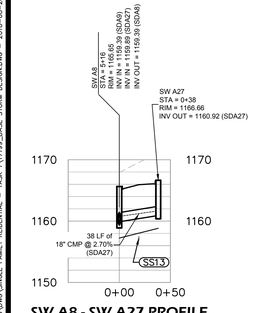
JB A3 - SW A26 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

3

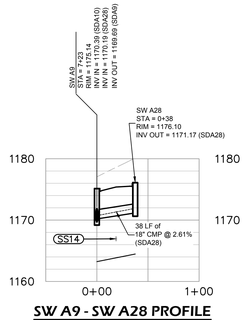
STORM PIPE NOTES:

1. HDPE PIPE, WHERE APPLICABLE, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
2. ALL ALUMINUM-COATED TYPE 2 STEEL PIP OR ALUMINUM ALLOY PIPE, WHERE APPLICABLE, WHICH WILL CARRY A LIVE STREAM, SHALL HAVE PAVED INVERTS IN ACCORDANCE WITH AASHTO M-190, TYPE C, EXCEPT THAT THE PIPE NEED NOT BE FULLY COATED. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
3. ALL RCP PIPE JOINTS, IF APPLICABLE, SHALL BE BELL & SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE MANUFACTURED IN ACCORDANCE WITH 1030-D, GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
4. ALL CMP SHALL BE ALUMINIZED TYPE 2 STEEL, 14GA MIN. AND SHALL MEET ASTM 1760, A929, AASHTO M36, M274.
5. ALL SWM UTILITIES TO BE INSPECTED BY GWINNETT COUNTY DWR.
6. ALL STORM SEWER PIPES AND CULVERTS SHALL BE INSTALLED PER GWINNETT COUNTY STANDARDS AND REGULATIONS.
7. ALL PIPES AND CULVERTS TO BE BEDDED PER COUNTY STANDARDS.
8. ALL MATERIAL CERTIFICATIONS AND COMPACTIONS TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED TO GCDWR MONTHLY.
9. ALL RESISTIVITY TESTS, pH TESTS, AND ANY OTHER TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED IF REQUESTED BY GCDWR.
10. COMPACTION TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT GEOTECHNICAL FIRM LIST AT THE CONTRACTOR/DEVELOPER'S EXPENSE. THE CONTRACTOR MUST MAINTAIN A GEOTECHNICAL ENGINEER ON-SITE DURING ALL STORM SEWER PIPE INSTALLATION TO ENSURE PROPER COMPACTION AND BACKFILL.
11. THE FREQUENCY OF TESTING SHALL BE MINIMUM OF ONE TEST PER 500 CUBIC YARDS OF MATERIAL PLACED, OR ONE TEST PER SECTION OF PIPE FROM STRUCTURE TO STRUCTURE.
12. EACH COMPACTION TEST WILL INCLUDE TESTING OF EACH 8-INCH LIFT TO FINAL GRADE. COPIES OF COMPACTION TESTS SHALL BE MADE AVAILABLE TO GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES PRIOR TO APPROVAL OF AS-BUILT DRAWINGS.



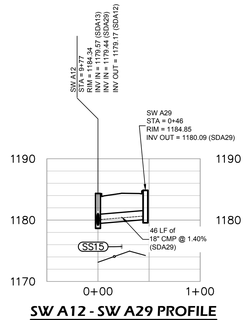
SW A8 - SW A27 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



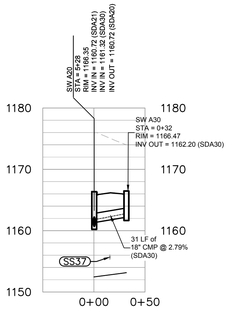
SW A9 - SW A28 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



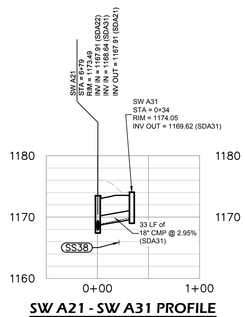
SW A12 - SW A29 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW A20 - SW A30 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW A21 - SW A31 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE
- 25-YEAR HGL

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL IN WHOLE OR IN PART BY COPYRIGHT LAWS OF PRECISION PLANNING, INC. SALES OR OTHER TRANSFER OF THESE PRINTS IS NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER NOR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT INTENDED FOR WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

STORM PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
5/15/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

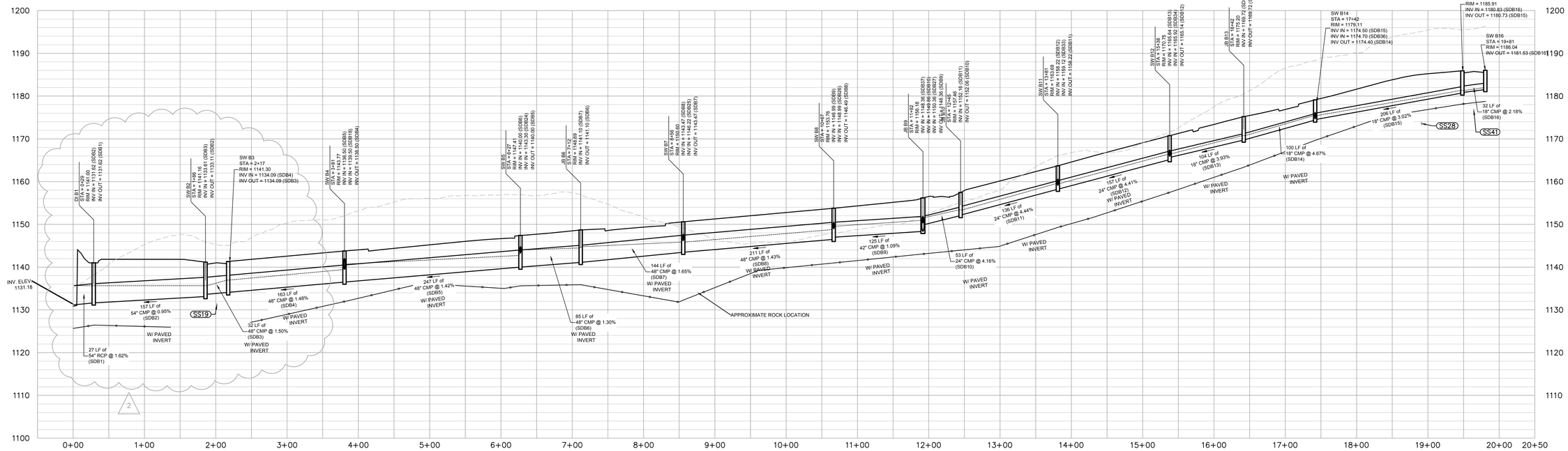
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

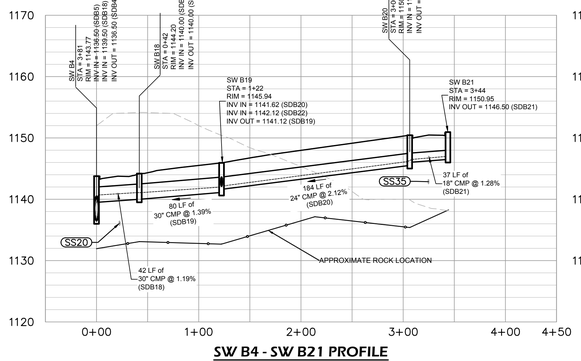
C6.1

PLOT DATE: 6/28/2018 10:44 AM FILE PATH: E:\PROJECTS\2017\17199-LD-JCH SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_BASE STORM DESIGN.DWG - 2018-06-28 - LONNIE HIGGINS



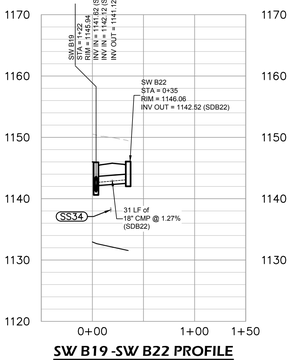
OUTFALL B - SW 16 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



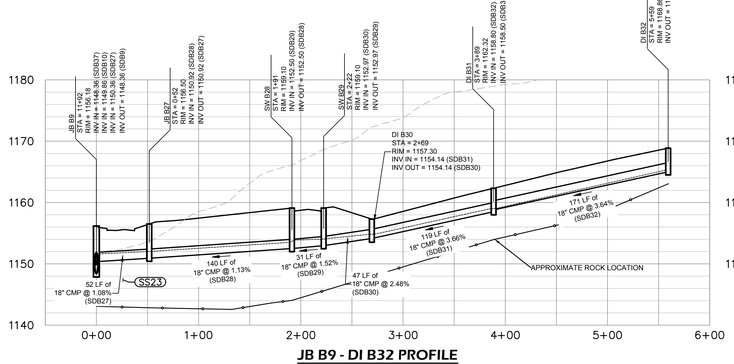
SW B4 - SW B21 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



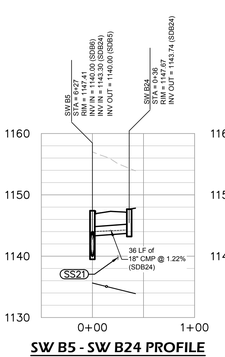
SW B19 -SW B22 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



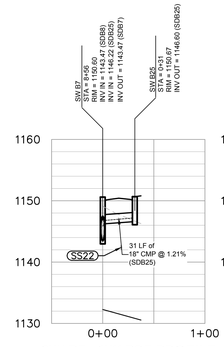
JB B9 - DI B32 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



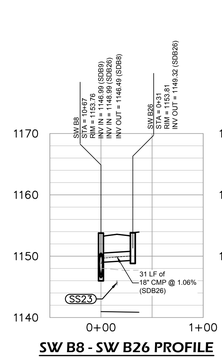
SW B5 - SW B24 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



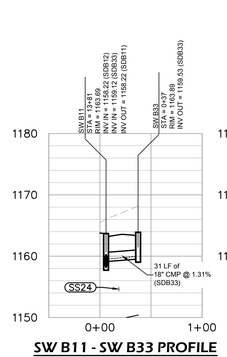
SW B7 - SW B25 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



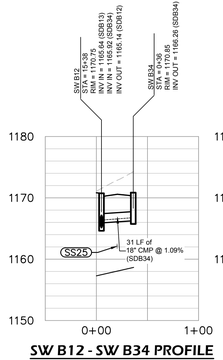
SW B8 - SW B26 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



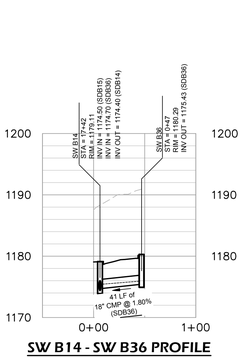
SW B11 - SW B33 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW B12 - SW B34 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW B14 - SW B36 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

3

STORM PIPE NOTES:

1. HDPE PIPE, WHERE APPLICABLE, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
2. ALL ALUMINUM-COATED TYPE 2 STEEL PIP OR ALUMINUM ALLOY PIPE, WHERE APPLICABLE, WHICH WILL CARRY A LIVE STREAM, SHALL HAVE PAVED INVERTS IN ACCORDANCE WITH AASHTO M-190, TYPE C, EXCEPT THAT THE PIPE NEED NOT BE FULLY COATED. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
3. ALL RCP PIPE JOINTS, IF APPLICABLE, SHALL BE BELL & SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE MANUFACTURED IN ACCORDANCE WITH 1030-D, GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
4. ALL CMP SHALL BE ALUMINIZED TYPE 2 STEEL, 14GA MIN. AND SHALL MEET ASTM 1760, A929, AASHTO M36, M274.
5. ALL SWM UTILITIES TO BE INSPECTED BY GWINNETT COUNTY DWR.
6. ALL STORM SEWER PIPES AND CULVERTS SHALL BE INSTALLED PER GWINNETT COUNTY STANDARDS AND REGULATIONS.
7. ALL PIPES AND CULVERTS TO BE BEDDED PER COUNTY STANDARDS.
8. ALL MATERIAL CERTIFICATIONS AND COMPACTIONS TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED TO GCDWR MONTHLY.
9. ALL RESISTIVITY TESTS, pH TESTS, AND ANY OTHER TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED IF REQUESTED BY GCDWR.
10. COMPACTION TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT GEOTECHNICAL FIRM LIST AT THE CONTRACTOR/DEVELOPER'S EXPENSE. THE CONTRACTOR MUST MAINTAIN A GEOTECHNICAL ENGINEER ON-SITE DURING ALL STORM SEWER PIPE INSTALLATION TO ENSURE PROPER COMPACTION AND BACKFILL.
11. THE FREQUENCY OF TESTING SHALL BE MINIMUM OF ONE TEST PER 500 CUBIC YARDS OF MATERIAL PLACED, OR ONE TEST PER SECTION OF PIPE FROM STRUCTURE TO STRUCTURE.
12. EACH COMPACTION TEST WILL INCLUDE TESTING OF EACH 8-INCH LIFT TO FINAL GRADE. COPIES OF COMPACTION TESTS SHALL BE MADE AVAILABLE TO GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES PRIOR TO APPROVAL OF AS-BUILT DRAWINGS.

LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE
- 25-YEAR HGL

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND FIRM ITS ARE PROTECTIONAL BY INTOCLE 17 OF THE UNITED STATES COPYRIGHT LAW OF PRECISION PLANNING, INC. UNLESS OTHERWISE AGREED TO IN WRITING, THEY ARE NOT TO BE REPRODUCED OR CONVEYED IN ANY FORM OR MEDIUM WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

STORM PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	5/15/18
3	REVISED STORM BEDDING DETAIL/NOTES, REVISED LOCATION AND GRADING OF AMENITY AREA	06/19/18

OCT. 26, 2017
DATE

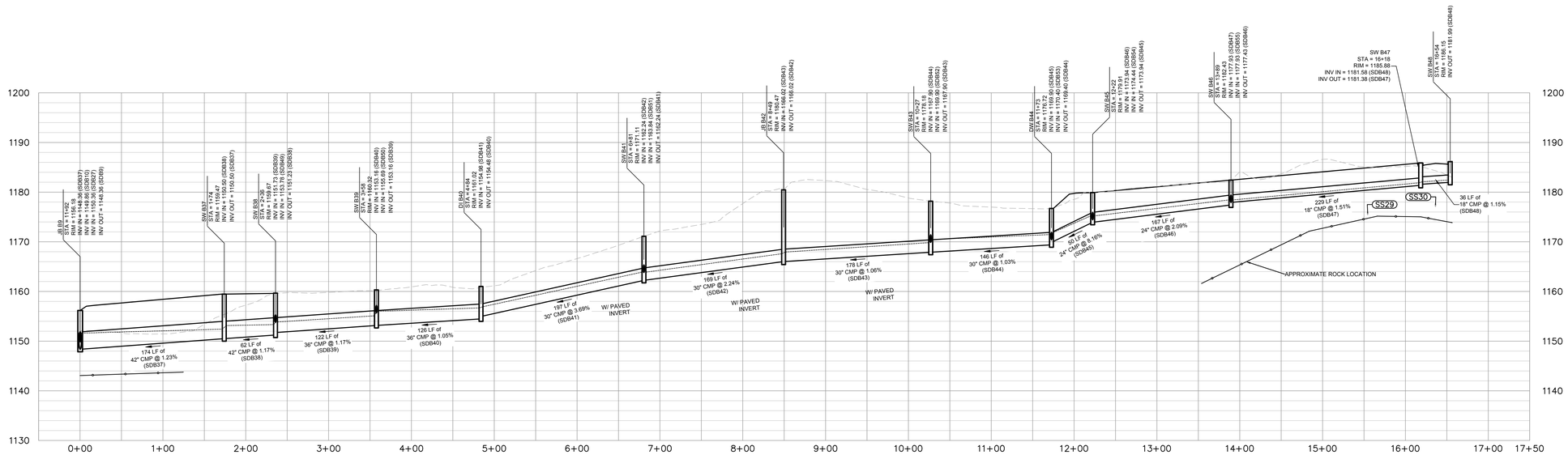
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

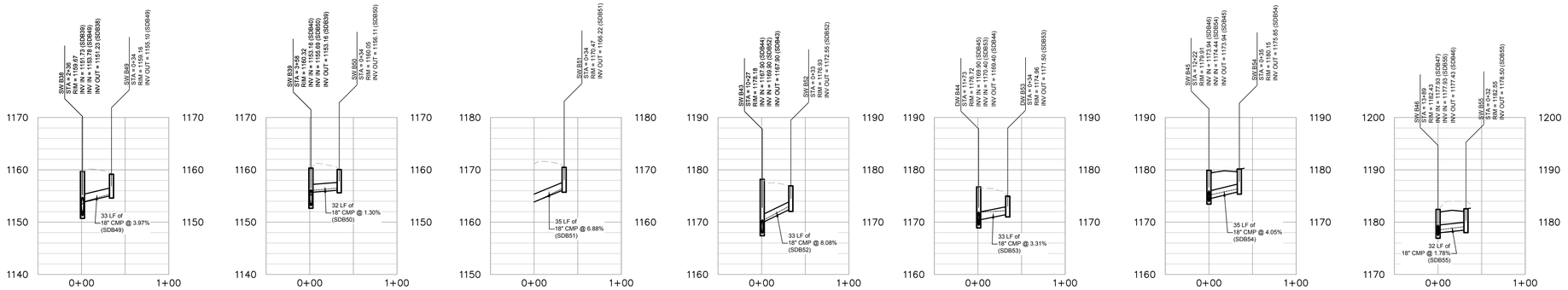
C6.2

PLOT DATE: 6/26/2018 10:44 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_BASE STORM DESIGN.DWG — 2018-06-26 — LONNIE HIGGINS



JB B9 - SW B48 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW B38 -SW B49 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

SW B39 -SW B50 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

SW B41 -SW B51 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

SW B43 -SW B52 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

SW B44 -SW B53 PROFILE

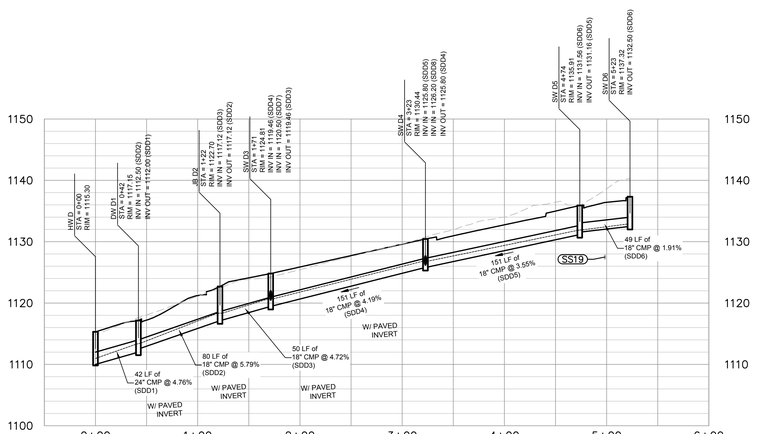
SCALE: 1"=60' HOR; 1"=10' VERT

SW B46 -SW B54 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

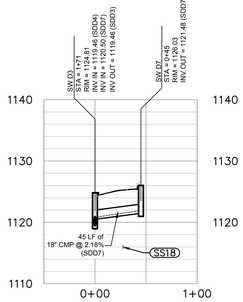
SW B47 -SW B55 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



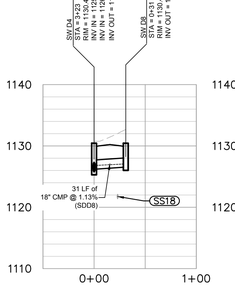
HW D - SW D6 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW D3 - SW D7 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SW D4 - SW D8 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE
- 25-YEAR HGL

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

3

STORM PIPE NOTES:

1. HDPE PIPE, WHERE APPLICABLE, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE S & D. CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
2. ALL ALUMINUM-COATED TYPE 2 STEEL PIP OR ALUMINUM ALLOY PIPE, WHERE APPLICABLE, WHICH WILL CARRY A LIVE STREAM, SHALL HAVE PAVED INVERTS IN ACCORDANCE WITH AASHTO M-190, TYPE C, EXCEPT THAT THE PIPE NEED NOT BE FULLY COATED. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
3. ALL RCP PIPE JOINTS, IF APPLICABLE, SHALL BE BELL & SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE MANUFACTURED IN ACCORDANCE WITH 1030-D, GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
4. ALL CMP SHALL BE ALUMINIZED TYPE 2 STEEL, 14GA MIN. AND SHALL MEET ASTM 1760, A929, AASHTO M36, M274.
5. ALL SWM UTILITIES TO BE INSPECTED BY GWINNETT COUNTY DWR.
6. ALL STORM SEWER PIPES AND CULVERTS SHALL BE INSTALLED PER GWINNETT COUNTY STANDARDS AND REGULATIONS.
7. ALL PIPES AND CULVERTS TO BE BEDDED PER COUNTY STANDARDS.
8. ALL MATERIAL CERTIFICATIONS AND COMPACTIONS TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED TO GCDWR MONTHLY.
9. ALL RESISTIVITY TESTS, pH TESTS, AND ANY OTHER TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED IF REQUESTED BY GCDWR.
10. COMPACTION TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT GEOTECHNICAL FIRM LIST AT THE CONTRACTOR/DEVELOPER'S EXPENSE. THE CONTRACTOR MUST MAINTAIN A GEOTECHNICAL ENGINEER ON-SITE DURING ALL STORM SEWER PIPE INSTALLATION TO ENSURE PROPER COMPACTION AND BACKFILL.
11. THE FREQUENCY OF TESTING SHALL BE MINIMUM OF ONE TEST PER 500 CUBIC YARDS OF MATERIAL PLACED, OR ONE TEST PER SECTION OF PIPE FROM STRUCTURE TO STRUCTURE.
12. EACH COMPACTION TEST WILL INCLUDE TESTING OF EACH 8-INCH LIFT TO FINAL GRADE. COPIES OF COMPACTION TESTS SHALL BE MADE AVAILABLE TO GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES PRIOR TO APPROVAL OF AS-BUILT DRAWINGS.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY INVOKE PROVISIONS OF THE COPYRIGHT LAWS OF PRECISION PLANNING, INC. UNLESS OTHERWISE AGREED TO IN WRITING, THEY ARE NOT TO BE REPRODUCED OR CONVEYED TO ANY OTHER PERSON OR ORGANIZATION FOR ANY OTHER PROJECTS OTHER THAN THE ONE SHOWN HEREON AND NOT TO BE USED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

STORM PROFILES

DESIGN: LGW | DRAWN: LGW | CHECKED: ES

SHEET TITLE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

RELEASE

OCT. 26, 2017
DATE

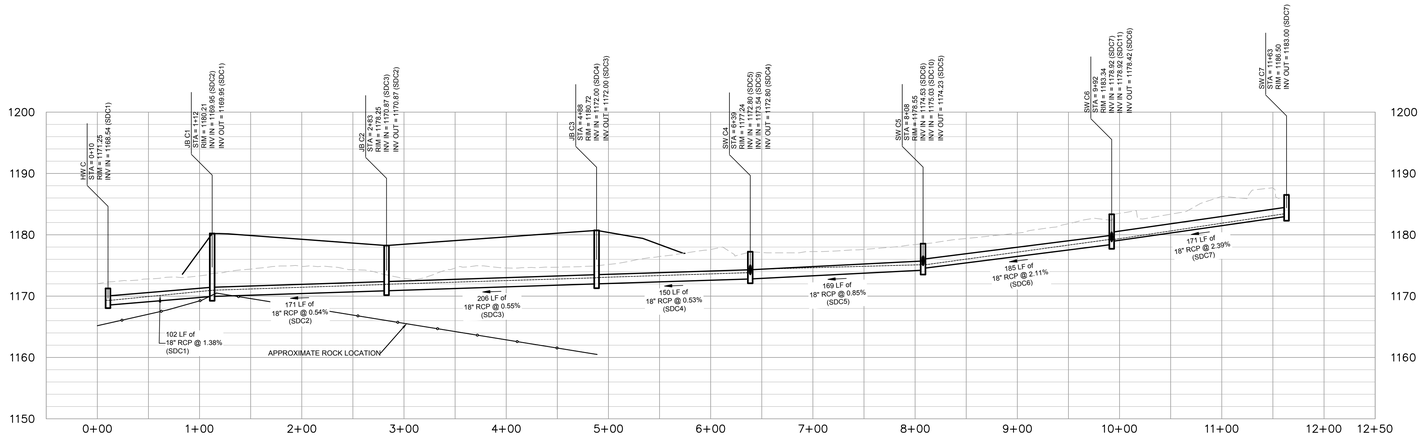
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C6.3

PLOT DATE: 6/28/2018 10:44 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_BASE STORM RESOLVING - 2018-06-28 - LONIE HIGGINS



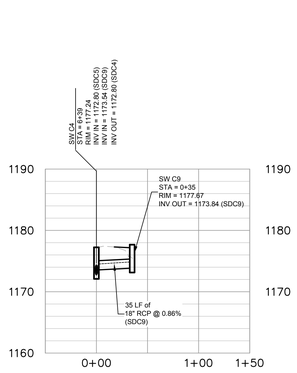
HW C - SW C7 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

3

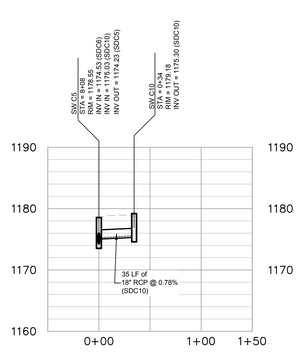
STORM PIPE NOTES:

1. HDPE PIPE, WHERE APPLICABLE, SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 AND AASHTO MP7, TYPE 'S & D.' CONNECTIONS SHALL USE A RUBBER GASKET, WHICH CONFORMS TO ASTM F-477. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM RECOMMENDED PRACTICE D-2321, AASHTO SECTION 30, OR WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
2. ALL ALUMINUM-COATED TYPE 2 STEEL PIP OR ALUMINUM ALLOY PIPE, WHERE APPLICABLE, WHICH WILL CARRY A LIVE STREAM, SHALL HAVE PAVED INVERTS IN ACCORDANCE WITH AASHTO M-190, TYPE C, EXCEPT THAT THE PIPE NEED NOT BE FULLY COATED. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
3. ALL RCP PIPE JOINTS, IF APPLICABLE, SHALL BE BELL & SPIGOT TYPES WITH A RUBBER GASKET CONFORMING TO ASTM C-76. CLASS OF PIPE AND WALL THICKNESS SHALL BE MANUFACTURED IN ACCORDANCE WITH 1030-D, GEORGIA DOT SPECIFICATION, TABLE NO. 1. INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 550 OF THE GEORGIA DOT STANDARD SPECIFICATIONS, CONSTRUCTION OF ROADS AND BRIDGES.
4. ALL CMP SHALL BE ALUMINIZED TYPE 2 STEEL, 14GA MIN. AND SHALL MEET ASTM 1760, A929, AASHTO M36, M274.
5. ALL SWM UTILITIES TO BE INSPECTED BY GWINNETT COUNTY DWR.
6. ALL STORM SEWER PIPES AND CULVERTS SHALL BE INSTALLED PER GWINNETT COUNTY STANDARDS AND REGULATIONS.
7. ALL PIPES AND CULVERTS TO BE BEDDED PER COUNTY STANDARDS.
8. ALL MATERIAL CERTIFICATIONS AND COMPACTIONS TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED TO GCDWR MONTHLY.
9. ALL RESISTIVITY TESTS, pH TESTS, AND ANY OTHER TEST SPECIFIED IN THE SSFISS SHALL BE PROVIDED IF REQUESTED BY GCDWR.
10. COMPACTION TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT GEOTECHNICAL FIRM LIST AT THE CONTRACTOR/DEVELOPER'S EXPENSE. THE CONTRACTOR MUST MAINTAIN A GEOTECHNICAL ENGINEER ON-SITE DURING ALL STORM SEWER PIPE INSTALLATION TO ENSURE PROPER COMPACTION AND BACKFILL.
11. THE FREQUENCY OF TESTING SHALL BE MINIMUM OF ONE TEST PER 500 CUBIC YARDS OF MATERIAL PLACED, OR ONE TEST PER SECTION OF PIPE FROM STRUCTURE TO STRUCTURE.
12. EACH COMPACTION TEST WILL INCLUDE TESTING OF EACH 8-INCH LIFT TO FINAL GRADE. COPIES OF COMPACTION TESTS SHALL BE MADE AVAILABLE TO GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES PRIOR TO APPROVAL OF AS-BUILT DRAWINGS.



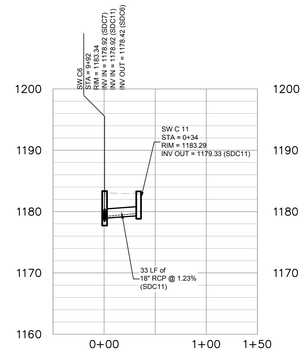
SW C4 - SW C9 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



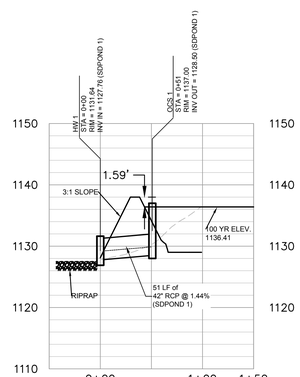
SW C5 - SW C10 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



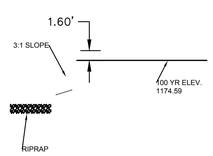
SW C6 - SW C11 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



OCS POND 1 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE
- 25-YEAR HGL

HORIZONTAL GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY COPYRIGHT LAWS AND ARE THE PROPERTY OF PRECISION PLANNING, INC. UNLESS EXPRESSLY AUTHORIZED, THEY SHALL NOT BE REPRODUCED OR CONVEYED IN ANY FORM OR MANNER WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THOSE SPECIFICALLY INTENDED HEREIN WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

STORM PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	5/15/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

RELEASE

OCT. 26, 2017
DATE

R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

C6.4

PLOT DATE: 9/28/2018 10:44 AM FILE PATH: E:\PROJECTS\2017\17199-JJO-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - 7450\17199_BASE STORM SEWSHLDWG - 2018-08-28 - LONNIE HIGGINS

25 YEAR PIPE CHART

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Material
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	A1	36	19.3	1.04	0	0.5	12.8	6.35	41.58	35.14	8.89	66.25	0.013	JB A1	RCP
2	A2	36	70.915	2.04	0	0.5	12.5	6.41	29.85	25.62	6.27	47.96	0.024	JB A2	CMP
3	A3	36	48.425	2.48	0	0.5	12.3	6.44	29.85	25.77	6.89	56.87	0.024	JB A3	CMP
4	A4	30	106.003	5.99	0	0.5	11.9	6.52	21.59	18.9	7.62	54.37	0.024	JB A4	CMP
5	A5	30	29.51	3.12	0.42	0.5	11.8	6.54	21.59	18.97	6.61	39.22	0.024	DWCB A5	CMP
6	A6	30	31.172	3.18	1.08	0.5	11.6	6.57	20.03	17.66	6.28	39.59	0.024	DWCB A6	CMP
7	A7	24	113.997	2.74	0	0.5	11.3	6.64	16	14.28	6.88	20.27	0.024	JB A7	CMP
8	A8	24	75.055	5.81	0.8	0.5	11	6.69	16	14.38	6.6	29.53	0.024	SW A8	CMP
9	A9	24	207.621	4.96	0.21	0.5	9.9	6.93	9.81	9.01	4.74	27.29	0.024	SW A9	CMP
10	A10	18	124.063	3.87	0	0.5	9.3	7.07	5.78	5.34	5.71	11.19	0.024	JB A10	CMP
11	A11	18	53.172	1.75	0	0.5	9	7.14	5.78	5.39	4.7	7.52	0.024	JB A11	CMP
12	A12	18	76.088	4.01	0.46	0.5	8.6	7.23	5.78	5.46	4.73	11.39	0.024	SW A12	CMP
13	A13	18	104.351	1.49	0.22	0.5	6.4	7.84	1.9	1.8	3.35	6.93	0.024	SW A13	CMP
14	A14	18	46.442	1.25	0.24	0.5	5	8.27	0.99	0.99	2.58	6.36	0.024	SW A14	CMP
15	A29	18	46.454	1.4	0.59	0.5	8	7.39	2.18	2.18	3.27	6.73	0.024	SW A29	CMP
16	A15	24	90.329	3.21	0	0.5	11.9	6.51	11.73	9.97	6.22	28.53	0.024	JB A15	CMP
17	A16	24	150.273	1.8	0.35	0.5	11.2	6.65	11.73	10.17	5.68	16.42	0.024	SW A16	CMP
18	A17	24	33.5	2.96	0.35	0.5	11.1	6.68	10.28	9.05	4.7	21.06	0.024	SW A17	CMP
19	A18	24	126.813	3.74	0	0.5	10.3	6.84	8.83	8.07	4.98	23.69	0.024	JB A18	CMP
20	A19	18	51.708	4.2	0	0.5	10.1	6.88	8.83	8.12	6.66	11.65	0.024	JB A19	CMP
21	A20	18	75.308	4.67	0.44	0.5	9.9	6.93	8.83	8.18	6.08	12.3	0.024	SW A20	CMP
22	A21	18	151.351	4.75	0.68	0.5	9	7.13	5.25	4.96	4.24	12.4	0.024	SW A21	CMP
23	A22	18	82.038	4.74	0.45	0.5	8	7.39	2.32	2.25	2.93	12.39	0.024	SW A22	CMP
24	A23	18	31.602	2.97	0.16	0.5	5	8.27	0.66	0.66	2.89	9.81	0.024	SW A23	CMP
25	A28	18	37.505	2.61	0.88	0.5	8	7.39	3.15	3.25	4.34	9.2	0.024	SW A28	CMP
26	A31	18	33.269	2.95	0.1	0.5	5	8.27	0.41	0.41	2.52	9.76	0.024	SW A31	CMP
27	A30	18	31.489	2.79	0.53	0.5	8	7.39	1.96	1.96	3.44	9.51	0.024	SW A30	CMP
28	A27	18	38.117	2.7	0.9	0.5	8	7.39	3.28	3.33	3.48	9.35	0.024	SW A27	CMP
29	A24	24	31.623	1.11	0	0.5	9.3	7.07	8.27	7.77	4.36	12.89	0.024	JB A24	CMP
30	A25	24	105.354	1.07	1.34	0.5	8.6	7.23	8.27	7.95	3.95	12.69	0.024	DW A25	CMP
31	A26	18	69.648	1.19	0.86	0.5	8	7.39	3.2	3.18	3.32	6.21	0.024	SW A26	CMP

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Materials
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	B1	54	27.39	1.62	0	0.5	22.6	4.99	82.05	58.24	5.16	228.15	0.013	JB B1	RCP
2	B2	54	156.68	0.95	0.51	0.5	22.1	5.04	82.05	58.84	5.16	112.18	0.024	SW B2	CMP
3	B3	48	31.816	1.5	0.63	0.5	22	5.05	80.17	57.66	6.38	139.32	0.024	SW B3	CMP
4	B4	48	163.128	1.48	1.4	0.5	21.6	5.1	78.43	56.91	6.24	94.57	0.024	SW B4	CMP
5	B5	48	246.738	1.42	1.15	0.5	20.8	5.19	63.62	46.91	5.64	92.67	0.024	SW B5	CMP
6	B6	48	84.551	1.3	0	0.5	20.5	5.22	58.78	43.56	5.09	88.75	0.024	JB B6	CMP
7	B7	48	143.815	1.65	0.74	0.5	20	5.28	58.78	44.06	6.44	99.89	0.024	SW B7	CMP
8	B8	48	210.966	1.43	1.18	0.5	19.2	5.38	54.43	41.41	7.43	93.1	0.024	SW B8	CMP
9	B9	42	125.18	1.09	0	0.5	18.8	5.44	48.73	36.83	6.65	57.01	0.024	JB B9	CMP
10	B37	42	173.959	1.23	0.13	0.5	17.8	5.56	29.41	21.86	4.54	60.44	0.024	SW B37	CMP
11	B38	42	61.856	1.18	0.31	0.5	17.5	5.61	29.1	21.75	4.63	59.2	0.024	SW B38	CMP
12	B39	36	121.784	1.17	0.42	0.5	17	5.68	28.03	21.09	5.94	39.15	0.024	SW B39	CMP
13	B40	36	126.302	1.05	1.14	0.5	16.4	5.76	25.57	19.56	4.43	36.93	0.024	DI B40	CMP
14	B41	30	196.639	3.69	0.52	0.5	15.6	5.87	21.35	16.6	6.17	42.69	0.024	SW B41	CMP
15	B42	30	168.668	2.24	0	0.5	14.9	5.99	19.19	15.18	6.12	33.26	0.024	JB B42	CMP
16	B43	30	177.582	1.06	0.26	0.5	14.1	6.11	19.19	15.49	5.22	22.86	0.024	SW B43	CMP
17	B44	30	146.005	1.03	0.77	0.5	13.4	6.23	17.08	14.21	4.12	22.52	0.024	DW B44	CMP
18	B45	24	49.531	8.16	0.75	0.5	13.2	6.27	11.58	9.88	4.87	34.99	0.024	SW B45	CMP
19	B46	24	166.953	2.09	0.8	0.5	12	6.5	7.11	6.3	4.2	17.71	0.024	SW B46	CMP
20	B47	18	229.041	1.51	0.11	0.5	8	7.39	1.69	1.55	3.25	6.98	0.024	SW B47	CMP
21	B48	18	35.614	1.15	0.31	0.5	5	8.27	1.28	1.28	2.63	6.1	0.024	SW B48	CMP
22	B10	24	52.831	4.16	0	0.5	13.4	6.24	14.19	13.63	5.65	25	0.024	JB B10	CMP
23	B11	24	136.418	4.44	0.53	0.5	12.9	6.33	14.19	13.83	6.55	25.82	0.024	SW B11	CMP
24	B12	24	156.794	4.41	1.1	0.5	12.2	6.45	12.41	11.13	5.7	25.74	0.024	SW B12	CMP
25	B13	18	103.871	3.93	0	0.5	11.8	6.54	6.82	6.05	6.03	11.27	0.024	JB B13	CMP
26	B14	18	100.161	4.67	0.75	0.5	11.3	6.62	6.82	6.13	5.39	12.3	0.024	SW B14	CMP
27	B15	18	206.499	3.02	0.31	0.5	8.8	7.19	2.36	2.3	2.92	9.88	0.024	SW B15	CMP
28	B16	18	32.141	2.18	0.33	0.5	8	7.39	1.22	1.22	2.79	8.39	0.024	SW B16	CMP
29	B55	18	32.014	1.78	0.72	0.5	8	7.39	2.66	2.66	3.89	7.59	0.024	SW B55	CMP
30	B36	18	40.664	1.8	0.46	0.5	8	7.39	1.7	1.7	2.73	7.62	0.024	SW B36	CMP
31	B54	18	34.855	4.05	0.46	0.5	8	7.39	1.7	1.7	2.71	11.44	0.024	SW B54	CMP
32	B53	18	33.227	3.31	0.4	0.5	5	8.27	2.65	2.65	2.78	10.35	0.024	DW B53	CMP
33	B52	18	32.809	8.08	0.25	0.5	5	8.27	1.03	1.03	2.97	16.17	0.024	SW B52	CMP
34	B34	18	31.086	1.09	0.5	0.5	8	7.39	1.85	1.85	2.97	5.95	0.024	SW B34	CMP
35	B51	18	34.316	6.94	0.06	0.5	5	8.27	0.25	0.25	2.59	14.98	0.024	SW B51	CMP
36	B33	18	31.34	1.31	0.39	0.5	8	7.39	1.44	1.44	2.95	6.51	0.024	SW B33	CMP
37	B27	18	51.746	1.08	0	0.5	16.9	5.69	5.13	3.75	3.59	5.92	0.024	JB B27	CMP
38	B28	18	139.57	1.13	0.13	0.5	16.1	5.81	5.13	3.83	3.79	6.05	0.024	SW B28	CMP
39	B29	18	31	1.52	0.37	0.5	15.9	5.83	4.59	3.47	3.02	7	0.024	SW B29	CMP
40	B30	18	47.124	2.48	0.3	0.5	15.5	5.9	3.22	2.42	3.15	8.96	0.024	DI B30	CMP
41	B31	18	119.128	3.66	0.38	0.5	13.7	6.19	1.98	1.61	3.04	10.88	0.024	DI B31	CMP
42	B32	18	170.776	3.64	0.14	0.5	5	8.27	0.58	0.58	2.89	10.85	0.024	DI B32	CMP
43	B50	18	32.459	1.29	0.22	0.5	5	8.27	0.91	0.91	2.58	6.47	0.024	SW B50	CMP
44	B49	18	32.623	4.05	0.08	0.5	5	8.27	0.33	0.33	2.52	11.44	0.024	SW B49	CMP
45	B26	18	31.155	1.06	1.11	0.5	12	6.5	2.88	2.88	3.3	5.85	0.024	SW B26	CMP
46	B25	18	31.367	1.21	0.7	0.5	8	7.39	2.59	2.59	3.37	6.26	0.024	SW B25	CMP
47	B18	30	41.863	1.43	0.81	0.5	11.6	6.58	11.89	10.75	3.49	26.59	0.024	SW B18	CMP
48	B19	30	80.429	2.88	0.57	0.5	10.9	6.72	9.09	8.27	3.27	37.73	0.024	SW B19	CMP
49	B20	24	184.074	2.12	0.68	0.5	8.6	7.23	4.29	4.19	3.4	17.83	0.024	SW B20	CMP
50	B21	18	37.394	1.28	0.48	0.5	8	7.39	1.77	1.77	3.12	6.44	0.024	SW B21	CMP
51	B24	18	35.991	1.22	0.6	0.5	8	7.39	2.22	2.22	3.23	6.29	0.024	SW B24	CMP
52	B22	18	31.415	1.27	0.73	0.5	8	7.39	2.7	2.7	3.47	6.42	0.024	SW B22	CMP

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Material
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	C1	18	112.378	1.25	0	0.5	19.6	5.33	7.11	5.04	6.23	11.76	0.013	JB C1	RCP
2	C2	18	170.541	0.54	0	0.5	18.9	5.42	7.11	5.12	4.95	7.71	0.013	JB C2	RCP
3	C3	18	205.504	0.55	0	0.5	18	5.53	7.11	5.23	4.92	7.79	0.013	JB C3	RCP
4	C4	18	150.309	0.53	0.07	0.5	17.4	5.61	7.11	5.31	4.9	7.66	0.013	SW C4	RCP
5	C5	18	169.046	0.85	0.06	0.5	16.6	5.73	6.06	4.69	4.28	9.66	0.013	SW C5	RCP
6	C6	18	181.565	2.14	0.6	0.5	15.6	5.89	5.14	4.17	5.91	15.37	0.013	SW C6	RCP
7	C7	18	173.962	2.35	0.37	0.5	12	6.5	1.44	1.44	3.72	16.08	0.013	SW C7	RCP
8	C11	18	35.018	1.17	0.14	0.5	5	8.27	1.04	1.04	3	11.36	0.013	SW C11	RCP
9	C10	18	34.549	0.78	0.07	0.5	5	8.27	0.52	0.52	2.64	9.28	0.013	SW C10	RCP
10	C9	18	34.95	0.86	0.07	0.5	5	8.27	0.52	0.52	2.68	9.73	0.013	SW C9	RCP

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Material
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	D1	24	41.98	4.76	0.71	0.5	8.4	7.3	14.52	12.81	7.5	26.74	0.024	DW D1	CMP
2	D2	18	79.813	5.79	0	0.5	8.2	7.35	11.58	10.29	7.91	13.69	0.024	JB D2	CMP
3	D3	18	49.624	4.72	0.55	0.5	8	7.38	11.58	10.33	7.14	12.35	0.024	SW D3	CMP
4	D4	18	151.348	4.19	0.61	0.5	7.5	7.53	7.98	7.27	5.35	11.64	0.024	SW D4	CMP
5	D5	18	150.987	3.55	0.6	0.5	6.2	7.88	3.64	3.47	3.46	10.72	0.024	SW D5	CMP
6	D6	18	49.093	1.91	0.28	0.5	5	8.27	1.16	1.16	3.11	7.87	0.024	SW D6	CMP
7	D8	18	31	1.13	0.44	0.5	5	8.27	1.82	1.82	2.69	6.04	0.024	SW D8	CMP
8	D7	18	44.97	2.18	0.32	0.5	5	8.27	1.32	1.32	3.31	8.4	0.024	SW D7	CMP

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Material
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	E1	24	53.14	7.83	0	0.5	10.3	6.84	4.81	4.76	8.43	68.56	0.012	JB E1	RCP
2	E2	18	50.059	10.01	0.87	0.5	10	6.91	4.81	4.81	9.43	35.99	0.012	DW E2	RCP

LineNo.	LineID	LineSize	LineLength	LineSlope	DrainageArea	C2	Tc	iSys	FlowRate	Known Flow Rate	TotalRunoff	VelAve	CapacityFull	n-valuePipe	InletID	Material
		(in)	(ft)	(%)	(ac)	(C)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(ft/s)	(cfs)			
1	POND 1	42	55.87	1.32						56.6		19.4		0.013	OCS 1	RCP
2	POND 2	24	20.51	5						12.66		8.12		0.013	OCS 2	RCP

UTILITY DISCLAIMER

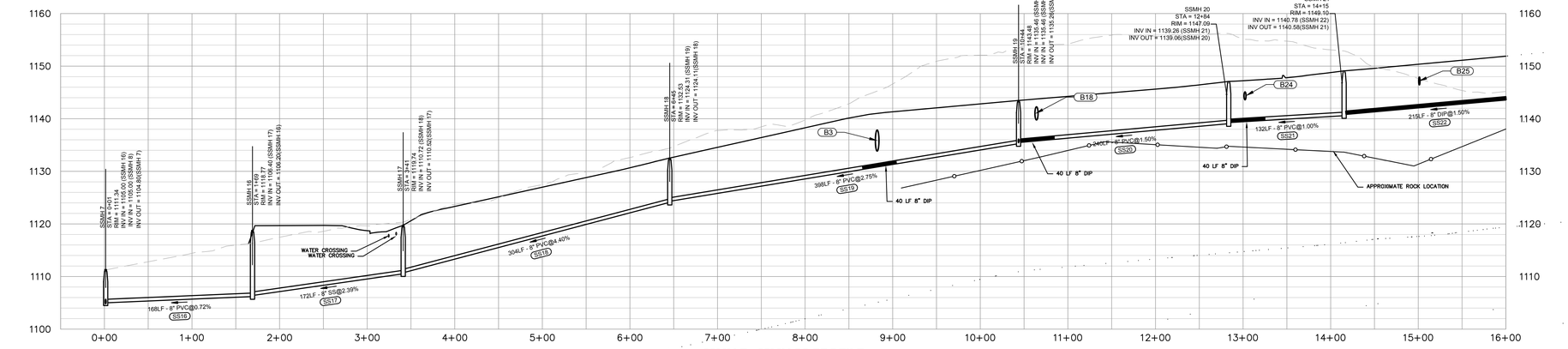
EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTOR EXPENSE.

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

10 YEAR GUTTER SPREAD

LineNo.	InletID	DrainageArea	InletTime	iInlet	RunoffCoeff	QCaptured	CurbLength	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	InletDepth		GutterDepth	GutterSpread
		(ac)	(min)	(in/hr)	(C)	(cfs)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(ft)	(ft)	(ft)	(ft)
1	JB A1	0	0	0	0	....	....	....	....	....	....	....		....	....
2	JB A2	0	0	0	0.5	....	....	....	....	....	....	....		....	....
3	JB A3	0	0	0	0.5	....	....	....	....	....	....	....		....	....
4	JB A4	0	0	0	0.5	....	....	....	....	....	....	....		....	....
5	DWCB A5	0.42	8	6.48	0.5	1.36	14	Sag	2	0.05	0.02	0.43		0.1	2.1
6	DWCB A6	1.08	8	6.48	0.5	3.5	14	Sag	2	0.05	0.02	0.52		0.19	6.5
7	JB A7	0	0	0	0.5	....	....	....	....	....	....	....		....	....
8	SW A8	0.8	8	6.48	0.5	2.59	12	0.04	2	0.05	0.02	0.53		0.19	6.7
9	SW A9	0.21	5	7.3	0.5	0.77	12	0.04	2	0.05	0.02	0.46		0.13	3.6
10	JB A10	0	0	0	0.5	....	....	....	....	....	....	....		....	....
11	JB A11	0	0	0	0.5	....	....	....	....	....	....	....		....	....
12	SW A12	0.46	8	6.48	0.5	1.49	12	0.04	2	0.05	0.02	0.5		0.16	5.1
13	SW A13	0.22	5	7.3	0.5	0.8	12	0.04	2	0.05	0.02	0.47		0.13	3.7
14	SW A14	0.24	5	7.3	0.5	0.88	12	0.04	2	0.05	0.02	0.47		0.14	3.9
15	SW A29	0.59	8	6.48	0.5	1.91	12	0.04	2	0.05	0.02	0.51		0.18	5.8
16	JB A15	0	0	0	0.5	....	....	....	....	....	....	....		....	....
17	SW A16	0.35	5	7.3	0.5	1.28	12	0.04	2	0.05	0.02	0.49		0.16	4.8
18	SW A17	0.35	5	7.3	0.5	1.28	12	0.04	2	0.05	0.02	0.49		0.16	4.8
19	JB A18	0	0	0	0.5	....	....	....	....	....	....	....		....	....
20	JB A19	0	0	0	0.5	....	....	....	....	....	....	....		....	....
21	SW A20	0.44	8	6.48	0.5	1.42	12	0.04	2	0.05	0.02	0.49		0.16	5.0
22	SW A21	0.68	8	6.48	0.5	2.2	12	0.04	2	0.05	0.02	0.52		0.18	6.2
23	SW A22	0.45	8	6.48	0.5	1.46	12	0.04	2	0.05	0.02	0.49		0.16	5.1
24	SW A23	0.16	5	7.3	0.5	0.58	12	0.04	2	0.05	0.02	0.45		0.12	3.0
25	SW A28	0.88	8	6.48	0.5	2.82	12	0.04	2	0.05	0.02	0.53		0.2	7.0
26	SW A31	0.1	5	7.3	0.5	0.36	12	0.04	2	0.05	0.02	0.43		0.1	2.0
27	SW A30	0.53	8	6.48	0.5	1.72	12	0.04	2	0.05	0.02	0.5		0.17	5.5
28	SW A27	0.9	8	6.48	0.5	2.9	12	0.04	2	0.05	0.02	0.53		0.2	7.1
29	JB A24	0	0	0	0.5	....	....	....	....	....	....	....		....	....
30	DW A25	1.34	8	6.48	0.5	4.36	14	Sag	2	0.05	0.02	0.55		0.22	8.0
31	SW A26	0.86	8	6.48	0.5	2.8	12	0.04	2	0.05	0.02	0.53		0.2	7.0

LineNo.	InletID	DrainageArea	InletTime	iInlet	RunoffCoeff	QCaptured	CurbLength	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	InletDepth		GutterDepth	GutterSpread
		(ac)	(min)	(in/hr)	(C)	(cfs)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(ft)	(ft)	(ft)	(ft)
1	JB B1	0	0	0	0	....	....	....	....	....	....	....		....	....
2	SW B2	0.51	8	6.48	0.5	1.65	12	0.015	2	0.05	0.02	0.53		0.2	6.8
3	SW B3	0.63	10	6.04	0.4	1.52	12	0.015	2	0.05	0.02	0.52		0.19	6.6
4	SW B4	1.4	15	5.18	0.35	2.54	12	0.015	2	0.05	0.02	0.56		0.22	8.0
5	SW B5	1.15	12	5.66	0.35	2.28	12	0.015	2	0.05	0.02	0.55		0.22	7.9
6	JB B6	0	0	0	0	....	....	....	....	....	....	....		....	....
7	SW B7	0.74	15	5.18	0.4	1.53	12	0.015	2	0.05	0.02	0.53		0.19	6.6
8	SW B8	1.18	15	5.18	0.4	2.45	12	0.015	2	0.05	0.02	0.56		0.22	8.0
9	JB B9	0	0	0	0	....	....	....	....	....	....	....		....	....
10	SW B37	0.13	15	5.18	0.4	0.27	12	0.015	2	0.05	0.02	0.44		0.11	2.4
11	SW B38	0.31	15	5.18	0.4	0.64	12	0.015	2	0.05	0.02	0.48		0.15	4.3
12	SW B39	0.42	8	6.48	0.5	1.36	12	0.015	2	0.05	0.02	0.52		0.18	6.2
13	DI B40	1.14	8	6.48	0.5	3.69	10.5	Sag	....	0.02	0.02	0.24		0.24	12.0
14	SW B41	0.52	8	6.48	0.5	1.68	12	0.015	2	0.05	0.02	0.53		0.2	6.9
15	JB B42	0	0	0	0.5	....	....	....	....	....	....	....		....	....
16	SW B43	0.26	5	7.3	0.5	0.95	12	0.015	2	0.05	0.02	0.5		0.17	5.3
17	DW B44	0.77	8	6.48	0.5	2.49	14	Sag	2	0.05	0.02	0.49		0.15	4.6
18	SW B45	0.75	8	6.48	0.5	2.43	12	0.015	2	0.05	0.02	0.55		0.22	8.0
19	SW B46	0.8	10	6.04	0.5	2.41	12	0.015	2	0.05	0.02	0.55		0.22	8.0
20	SW B47	0.11	8	6.48	0.5	0.36	12	0.015	2	0.05	0.02	0.45		0.12	3.0
21	SW B48	0.31	5	7.3	0.5	1.13	12	0.015	2	0.05	0.02	0.51		0.17	5.7
22	JB B10	0	8	0	0	....	....	....	....	....	....	....		....	....
23	SW B11	0.53	0	0	0.5	0.17	12	0.04	2	0.05	0.02	0.41		0.08	1.5
24	SW B12	1.1	8	6.48	0.5	3.39	12	0.04	2	0.05	0.02	0.55		0.21	7.7
25	JB B13	0	0	0	0	....	....	....	....	....	....	....		....	....
26	SW B14	0.75	8	6.48	0.5	2.43	12	0.04	2	0.05	0.02	0.52		0.19	6.5
27	SW B15	0.31	8	6.48	0.5	1	12	0.04	2	0.05	0.02	0.48		0.14	4.2
28	SW B16	0.33	8	6.48	0.5	1.07	12	0.04	2	0.05	0.02	0.48		0.15	4.3
29	SW B55	0.72	8	6.48	0.5	2.33	12	0.015	2	0.05	0.02	0.55		0.22	7.9
30	SW B36	0.46	8	6.48	0.5	1.49	12	0.015	2	0.05	0.02	0.52		0.19	6.5
31	SW B54	0.46	8	6.48	0.5	1.49	12	0.015	2	0.05	0.02	0.52		0.19	6.5
32	DW B53	0.4	5	7.3	0.



SSMH 7 - SSMH 33 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

LEGEND:

- PROPOSED GRADE
- EXISTING GRADE
- ROCK SURFACE

HORIZONTAL GRAPHIC SCALE

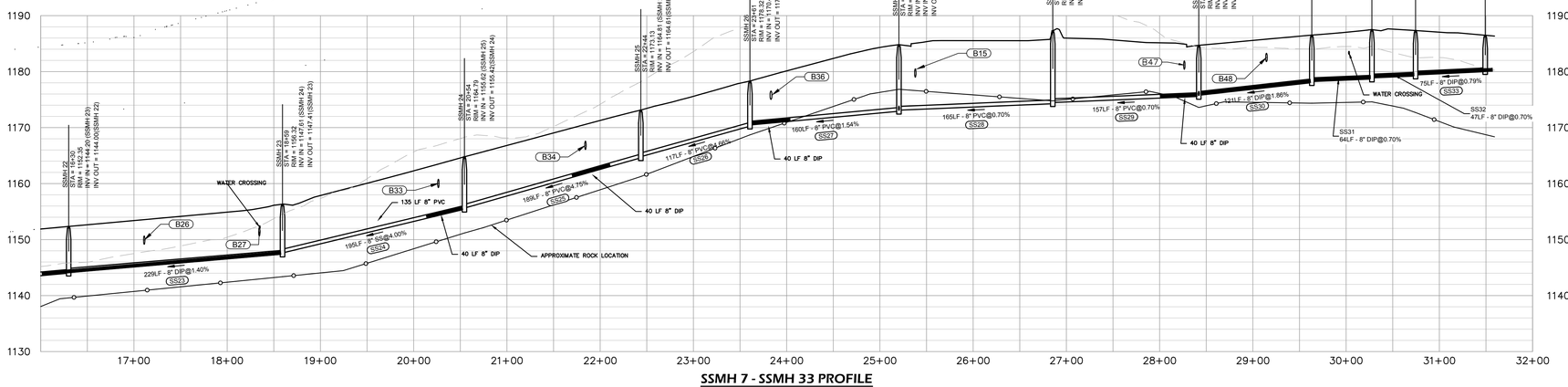
60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE

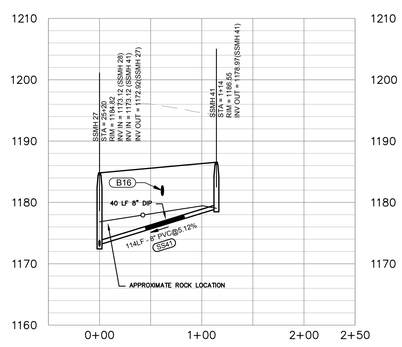
10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



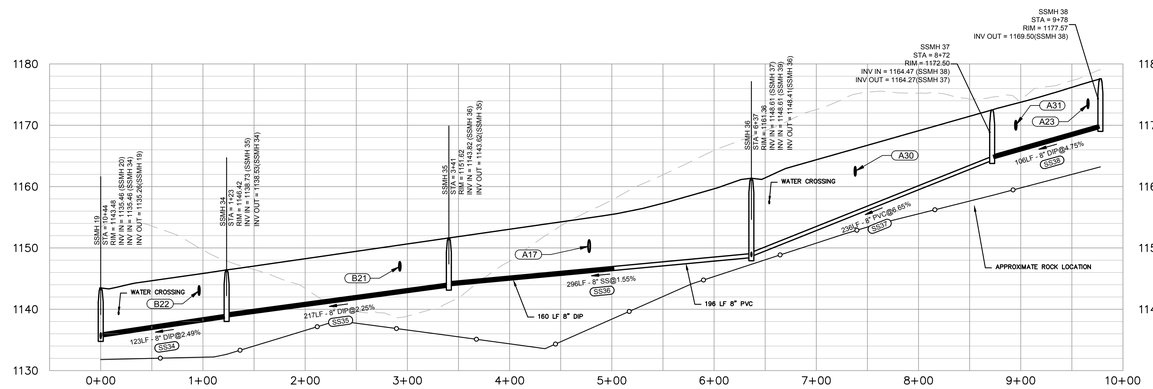
SSMH 7 - SSMH 33 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



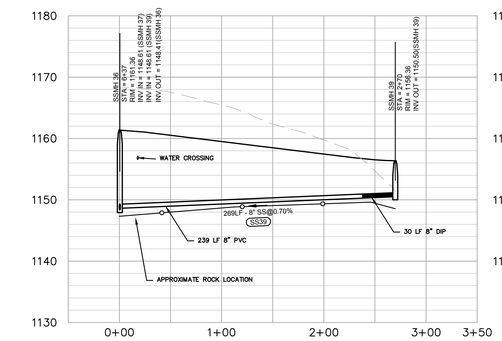
SSMH 27 - SSMH 41 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



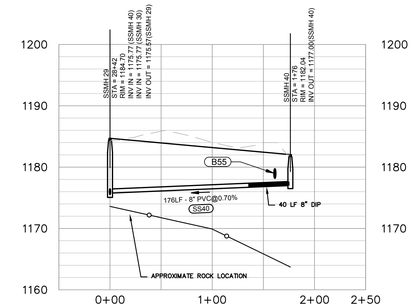
SSMH 19 - SSMH 38 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SSMH 36 - SSMH 39 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SSMH 29 - SSMH 40 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PLANS ARE PROTECTIONAL IN WHOLE FROM USE BY ANY PERSON OR ENTITY OF PRECISION PLANNING, INC. SALES OR TRANSFER OF THESE PLANS DOES NOT BE REPRODUCED OR CONVEYED IN ANY FORM OR MEDIUM WITHOUT PRIOR FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

SANITARY SEWER PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	3/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.	06/19/18

OCT. 26, 2017
DATE

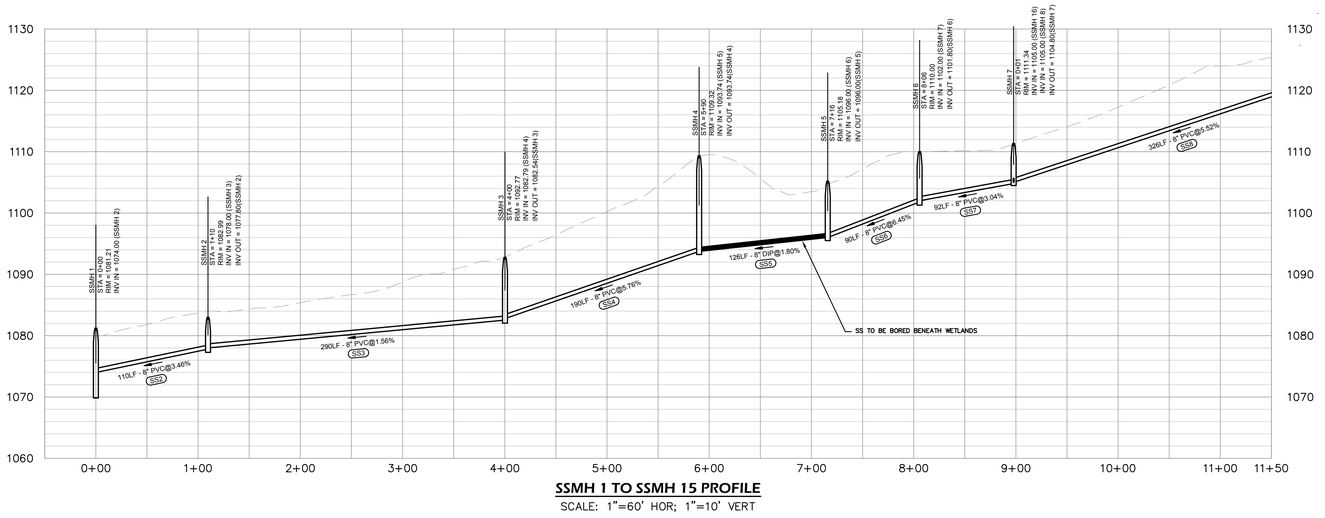
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

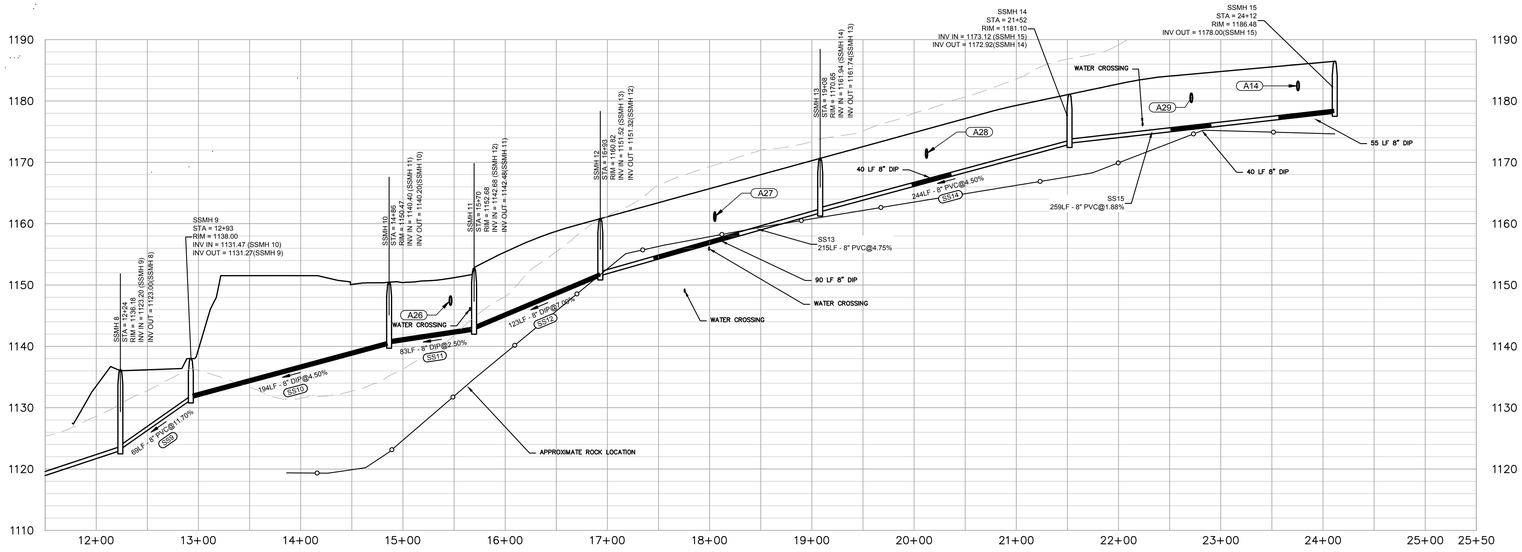
C6.6

PLOT DATE: 8/28/2018 10:45 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\CIVIL\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_CSD_UTILITIES SITE PLAN.DWG – 2018-08-28 – LONNIE HIGGINS



SSMH 1 TO SSMH 15 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT



SSMH 1 TO SSMH 15 PROFILE

SCALE: 1"=60' HOR; 1"=10' VERT

Department of Water Resources

684 Winder Highway • Lawrenceville, GA 30045-5012
678.376.6700
www.gwinnettcounty.com

gwinnettcounty

December 14, 2017

James L Rhoden III
The Macallan Group
1642 Powers Ferry Road, SE #250
Marietta, GA 30067

RE: Sewer Availability for Proposed Development Gravel Springs Pump Station & Force Main, Parcel ID District 7, Land Lot 143 Parcel 010.

Dear Mr. Rhoden:

This letter supersedes the earlier letter dated October 19, 2017 issued to the Macallan Group due to revised discharge location. This letter conditionally confirms that at present time Gwinnett County DWR can serve the referenced development for sanitary sewer if the developer/owner can provide approval letters from Gwinnett County Department of Transportation and Georgia Power on the sewer force main alignment. The existing system has adequate capacity at this time to serve the proposed development on the above parcel with a pump station. This confirmation is based on your anticipated peak flow of 136.81 GPM from the development and pump station with a peak flow of 227.5 GPM. This requested capacity is valid for 12-months from the date of this letter.

Capacity is relegated on a first-come-first-serve basis. The County is currently making every effort feasible to insure that there is sufficient sewer capacity to serve its developmental needs. However, sewer capacity and its limitations are an issue in every basin of the County. There is no such thing as a basin within Gwinnett County with unlimited capacity. Therefore, every proposed project is reviewed and considered for its impact on the individual basins, as well as its overall system impact. Capacity is relegated to a specific project only upon issuance of a Development Permit, or a Building Permit by the agency having such jurisdiction.

At present time there are no sewer moratoriums within that basin in Gwinnett County. However, regulatory or court-imposed restrictions, unanticipated new development, or delays in intermediate or plant construction could result in a moratorium, which may limit development in a specific or countywide basin.

Please let me know if you have any questions.

Sincerely,
GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES

Lisa M. Willis, PE
Division Director, Asset Management, Water Resources, Engineering and Technical Services
678.376.4214

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

CONCEPTUAL SEWER NOTES:

1. ALL SANITARY SEWER LINE SHALL BE 8 INCHES IN DIAMETER

LEGEND:

PROPOSED GRADE
EXISTING GRADE
ROCK SURFACE

HORIZONTAL GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

VERTICAL GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL BY ARTICLE 1, SECTION 8 OF THE COPYRIGHT LAWS OF PRECISION PLANNING, INC. UNLESS OTHERWISE AGREED TO IN WRITING, THEY ARE NOT TO BE REPRODUCED OR CONVEYED TO ANY OTHER PARTY IN ANY FORM OR MANNER WHATSOEVER WITHOUT THE EXPRESS PERMISSION FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

PROJECT

SANITARY SEWER PROFILES

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

RELEASE

OCT. 26, 2017
DATE

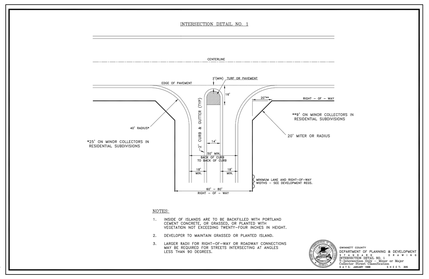
R17-199
PROJ. NUMBER

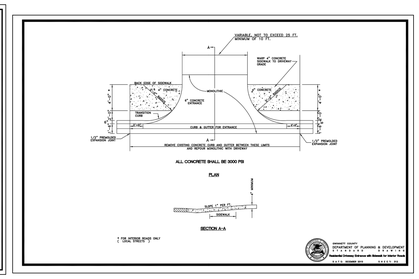
FILE NAME

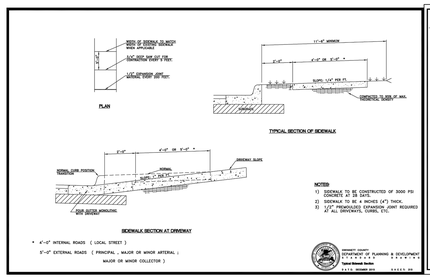
FILE NUMBER

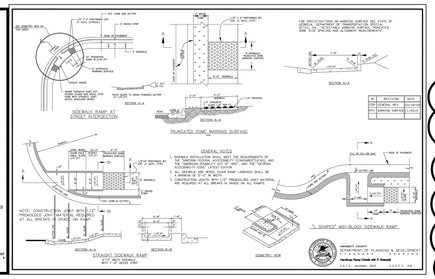
C6.7

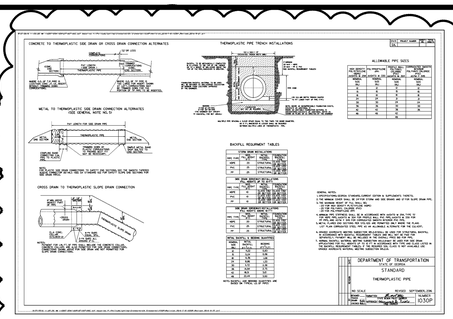
PLOT DATE: 6/28/2018 10:43 AM FILE PATH: E:\PROJECTS\2017\17199-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_C50_UTILITIES SITE PLAN.DWG - 2018-06-28 - LONNIE HIGGINS

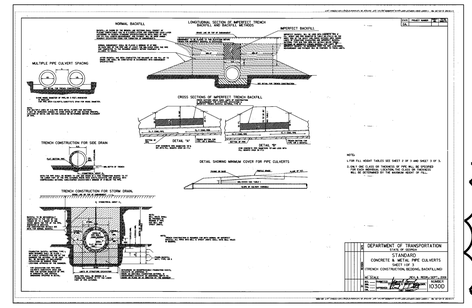


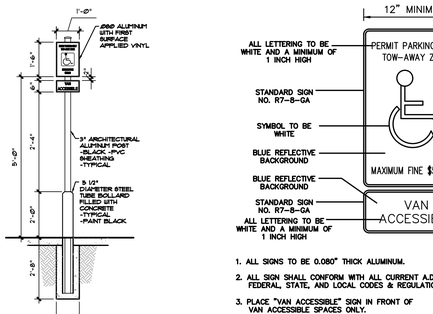




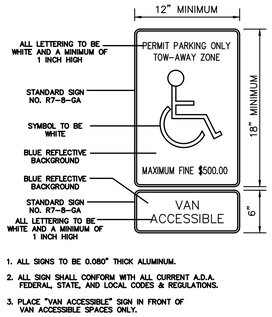








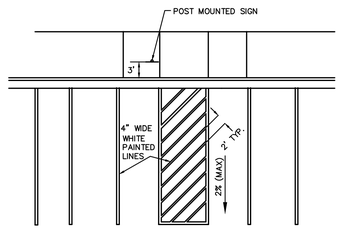
HANDICAP PARKING SIGN PLACEMENT DETAIL



1. ALL SIGNS TO BE 0.080" THICK ALUMINUM.
2. ALL SIGN SHALL CONFORM WITH ALL CURRENT A.D.A. FEDERAL, STATE, AND LOCAL CODES & REGULATIONS.
3. PLACE "VAN ACCESSIBLE" SIGN IN FRONT OF VAN ACCESSIBLE SPACES ONLY.

HANDICAP SIGN DETAIL

NOTE: WHERE TURNDOWN SIDEWALK FORM CURB, SIGNS SHALL BE PLACED BEHIND SIDEWALK; WHERE A GRASSED STRIP IS PROVIDED BETWEEN CURB AND SIDEWALK, SIGN SHALL BE PLACED BEHIND CURB AS SHOWN.



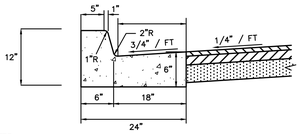
HANDICAP PARKING
N.T.S.

"Handicapped parking place" means any area on public or private property which has been designated as reserved for use of handicapped persons as follows:

(A) By a blue metal reflective sign which is at least 12 inches in width and 18 inches in length and is erected at such height or in such a manner that it will not be obscured by a vehicle parked in the space and bearing the following words: "Permit Parking Only", "Tow-Away Zone" and "Maximum Fine $500.00. The warnings required in this subparagraph shall be printed in white letters not less than one inch in height on three separate lines and centered on the sign. The sign shall also bear the international symbol for accessibility centered between the second and third warnings. The sign required by this subparagraph shall be the official authorized sign for handicapped parking place designation in the state.

(B) Where the parking place is designated before January 1, 1988, by a sign of signs bearing the words "Tow-Away Zone" and "Handicapped Parking Only" or the words "Tow-Away Zone" and the universal symbol of accessibility, that designation shall be deemed to meet the requirements of subparagraph (A) of this paragraph until such time as the sign of signs are replaced for other reasons, at which time any new sign erected shall comply fully with the requirements of subparagraph (A) of this paragraph, or

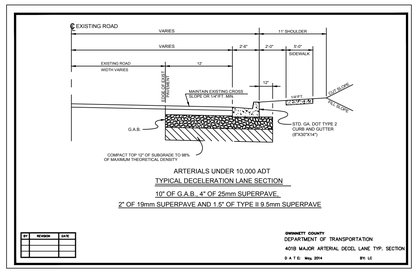
(C) Where the parking place is on private property, is constructed solely from concrete, was used by the public or finished prior to January 1, 1987, and which is designated by having imprinted and maintained in reflective paint upon such place the words "Tow-Away Zone and "Handicapped Parking Only" or the words "Tow-Away Zone" and the universal symbol of accessibility, (A) of this paragraph until such time as that concrete lot is renovated, repaired, or remodeled , at which time a sign shall be erected which shall comply with the requirements of subparagraph (A) of this paragraph.



NOTES:
1: EXPANSION JOINTS REQUIRED AT ALL STRUCTURES, CURB RETURNS AND PLACED EVERY MAXIMUM 50' O.C.
2: CONCRETE STRENGTH 3000 p.s.i.

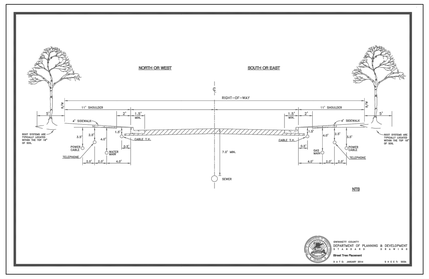
24" CURB AND GUTTER
N.T.S.

COMPACTION TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT GEOTECHNICAL FIRM LIST AT THE CONTRACTOR/DEVELOPER'S EXPENSE. THE CONTRACTOR MUST MAINTAIN A GEOTECHNICAL ENGINEER ON-SITE DURING ALL STORM SEWER PIPE INSTALLATION TO ENSURE PROPER COMPACTION AND BACKFILL. THE FREQUENCY OF TESTING SHALL BE MINIMUM OF ONE TEST PER 500 CUBIC YARDS OF MATERIAL PLACED, OR ONE TEST PER SECTION OF PIPE FROM STRUCTURE TO STRUCTURE. EACH COMPACTION TEST WILL INCLUDE TESTING OF EACH 8-INCH LIFT TO FINAL GRADE. COPIES OF COMPACTION TESTS SHALL BE MADE AVAILABLE TO GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES PRIOR TO APPROVAL OF AS-BUILT DRAWINGS.



ARTERIALS UNDER 10,000 ADT
TYPICAL DECELERATION LANE SECTION
10" OF G.A.B., 4" OF 25mm SUPERPAVE,
2" OF 19mm SUPERPAVE AND 1.5" OF TYPE II 9.5mm SUPERPAVE

GWINNETT COUNTY DEPARTMENT OF TRANSPORTATION
4018 MAJOR ARTERIAL DECEL LANE TYP. SECTION
D A T E: May, 2014 BY: LE


NORTH OR WEST
SOUTH OR EAST
RIGHT-OF-WAY
11' SHOULDER
4' SIDEWALK
2'
4.5'
4.5'
2'
4'
4'
4.5'
4.5'
2'
4'
4'
4.5'
4.5'
2'
4'
4

THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY
ALL BUFFERS AND TREE SAVE AREAS ARE TO BE CLEARLY IDENTIFIED WITH PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

VICKY WILSON
DB 13074, PG 75
ZONING C2

CX.2b MATCHLINE CX.2a

TREE SAVE AREA

COMMON AREA C
267196 Sq.Ft

STORMWATER MANAGEMENT EXTENDED DRY-DETENTION POND 2

2 (TWO) TENNIS COURTS
APPROXIMATE POND LIMITS

POOL

CLUBHOUSE

APPROXIMATE WETLANDS PER UNITED CONSULTING, DATED APRIL 11, 2017

ZONED RA200

N/F
ACM SATILLA LN V, LLC
DB 53949, PG 784
ZONING RA200

8' NATURAL SURFACE TRAIL

TREE SAVE AREA

TREE SAMPLE AREA 'A'

ZONING R-SR
ZONING OI

FLUME

50' LANDSCAPE BUFFER

GRAVEL SPRINGS ROAD
A.K.A. S.R. 324
GWINNETT COUNTY
PUBLIC R/W VARIES
DB 24982, PG 198 (ITEM #12)

BLOCK 'A'
BLOCK 'B'
BLOCK 'C'
BLOCK 'D'

COMMON AREA D
13234 Sq.Ft

COMMON AREA B
17335 Sq.Ft

COMMON AREA A
8842 Sq.Ft

CLAPTON DRIVE 50' R/W

HENDRIX ROAD 50' R/W

PRESLEY LANE 50' R/W

SILT FENCE
TYPE - SENSITIVE
SINGLE ROW

HC RAMP (TYP.)

EQUIPMENT / WORKER PARKING

N/F
SU-TZU HUANG
DB 18794, PG 41
ZONING RA 200

N/F
GARY D. BROWN &
CECIL BREEDLOVE
DB 27411, PG 105
ZONING C2

N/F
JERRY BROWN &
BARBARA BROWN
DB 1207, PG 344
ZONING C2

N/F
RONALD CROPPER,
WILLAIM C. CROPPER
NANCY EVANS &
CATHY CROPPER
DB 53633, PG 351
ZONING RA 200

BROWN ROAD
PUBLIC 60' R/W
---- PG168 (ITEM #11)

BROWN ROAD
60' R/W
60' R/WDB 2795, PG 168 (ITEM #11)

10' NO ACCESS EASEMENT, TO HAVE EXISTING VEGETATION (TYP.)

12' NO ACCESS EASEMENT

TREE LEGEND

- QUERCUS SHUMARDII
  SHUMARD OAK
  60/225=26.9%
- ULMUS PARVIFOLIA 'EMER II'
  ALLEE ELM
  52/225=24.9%
- ZELKOVA SERRATA
  JAPANESE ZELKOVA
  65/225=30.7%
- LIRIODENDRON TULIPIFERA
  TULIP POPLAR
  35/225=15.6%

TDU'S REQUIRED FOR SITE

SITE AREA =	72.59 AC
TDU REQUIREMENTS =	16 UNITS/AC
TDU REQ'D FOR SITE =	1161.4 UNITS

SAMPLE AREA INVENTORY

R17-199 Gravel Springs Rd 2500 SF Sample Area

29.59 TREE SAVE ACRES

Caliper	TREE SPECIES 'A'	TREE SPECIES 'B'	TREE SAMPLE AREA 'A'	TREE SAMPLE AREA 'B'	TDU Credit	Total 'A'	Total 'B'
2"	PINE	HD	24	50	0.5	12	25
4"	HD	N/A	10	0	0.90	9	0
5"	PINE	N/A	33	0	1.05	34.65	0
6"	N/A	HD	0	12	1.35	0	16.2
10"	N/A	HD	0	5	1.95	0	9.75
15"	N/A	HD	0	2	3.60	0	7.2
21"	N/A	HD	0	2	7.20	0	14.4
				SAMPLE AREA TDU'S		55.65	72.55
				TOTAL TDU's OF EX. TREES =		33048.4	

STREET TREES TO BE PROVIDED

REQ'DS = 1 PER 50 lf OF STREET ON BOTH SIDE

QUANITY	% OF TOTAL	BOTANICAL NAME	COMMON NAME	SIZE (in)	SPACING	UNIT/TREE	UNITS
60	28.3%	QUERUS SHUMARDII	SHUMARD OAK	3"	NONE	0.5	30
52	24.5%	ULMUS PARVIFOLIA	ALLEE ELM	3"	NONE	0.5	26
65	30.7%	ZEKOVA SERRATA	JAPANESE ZELKOVA	3"	NONE	0.5	32.5
35	16.5%	LIRIODENDRON TULIPIFERA	TULIP POPLAR	3"	NONE	0.5	17.5
212						**TOTAL UNITS FOR LOTS TREES =**	**106**

LOT TREES TO BE PROVIDED

No. OF LOTS = 150

QUANITY	BOTANICAL NAME	COMMON NAME	SIZE (in)	SPACING	UNIT/TREE	UNITS
75	QUERUS SHUMARDII	SHUMARD OAK	2"	NONE	0.5	37.5
75	ULMUS PARVIFOLIA	ALLEE ELM	2"	NONE	0.5	37.5
75	ZEKOVA SERRATA	JAPANESE ZELKOVA	2"	NONE	0.5	37.5
75	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2"	NONE	0.5	37.5
					TOTAL UNITS FOR LOTS TREES =	**150**

TOTAL TDUs PROVIDED FOR PROJECT

TREE SAVE AREA TDU'S	33048.4
LOT TREES TDU's PROVIDED =	150
SAVED SPECIMEN TREES TDU's =	106
STREET TREE TDU's =	112.5

TOTAL UNITS PROVIDED = **33417** TDU's

TDUs PROVIDED > TDUs REQUIRED

SPECIMEN TREES TO BE SAVED

I.D.	SPECIES	DBH (IN)	UNITS	TOTAL
1	WATER OAK	31	20.8	20.8
2	PINE	36	28.4	28.4
3	POPLAR	28	17.2	17.2
4	TUP. POPLAR	28	17.2	17.2
5	WHITE OAK	32	22.4	22.4
			TOTAL UNITS TO BE SAVED =	**106**

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

TREE CANOPY CALCULATIONS

QUANITY	BOTANICAL NAME	COMMON NAME	CANOPY AREA (SF)	TOTAL CANOPY AREA (SF)
135	QUERUS SHUMARDII	SHUMARD OAK	2,826	381,510
133	ULMUS PARVIFOLIA	ALLEE ELM	1,590	211,470
140	ZELKOVA SERRATA	JAPANESE ZELKOVA	1,963	274,820
110	LIRIODENDRON TULIPIFERA	TULIP POPLAR	1,256	138,160
20	ILEX 'NELLIE R. STEVENS	NELLIE R. STEVENS HOLLY	79	1,580
10	LAGERSTROEMIA INDICA	TUSCAORA CRAPE MYRTLE	254	2,543
8	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM MAGNOLIA	113	904
5	QUERCUS NUTTALLI	NUTTALL OAK	1,256	6,280
			TOTAL	1,017,267
		TOTAL SITE ACREAGE		3,162,020
		PERCENTAGE OF TOTAL SITE COVERED BY CANOPY	1,017,267 DIVIDED BY 3,162,020	32%

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO MEET THE MINIMUM LOCAL JURISDICTION REQUIREMENTS.
2. THESE PLANS ARE NOT TO BE CONSTRUED AS FINAL COMPLETE LANDSCAPE DOCUMENTS
3. DEVIATION FROM THE PERMITTED PLANS SHALL BE SUBMITTED BY THE LANDSCAPE CONTRACTOR TO THE LOCAL JURISDICTION FOR CODE COMPLIANCE APPROVAL.
4. DECIDUOUS TREES SHALL BE AT LEAST 2 INCHES IN DIAMETER AND EVERGREEN TREES SHALL BE AT LEAST 6 FEET IN HEIGHT AT TIME OF PLANTING.
5. ALL AREAS NOT COVERED BY BUILDING, PAVING, OR LANDSCAPING SHALL BE GRASSED. SEE EROSION CONTROL FOR TYPES OF GRASSING AND PLANTING DATES.
6. MULCH ALL PLANTING BEDS AT 3" MINIMUM DEPTH W/ PINE STRAW OR PINE MULCH.
7. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN ANY DETENTION FACILITY CONSTRUCTED ON THEIR PROPERTY AND TO ENSURE THE FACILITY IS FREE OF OBSTRUCTION, SILT, OR DEBRIS.
8. ALL BUFFER AND TREE SAVE AREAS ARE TO BE CLEARLY IDENTIFIED WITH PROTECTIVE TREE FENCING ADJOINING ALL ZONING BUFFERS AND TREE SAVE AREAS. FENCING SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
9. THINNING IS ALLOWED AND MAY INCLUDE MANUAL REMOVAL OF NON-SPECIMEN TREES WITHIN THE CRITICAL ROOT ZONE OR DRIPLINE OF THE SPECIMEN TREE IN THE LANDSCAPE INSTALLATION PHASE OF DEVELOPMENT ONLY. THINNING INCLUDES MANUAL REMOVAL (NO MOTORIZED/WHEELED OR TRACK VEHICLES ALLOWED WITHIN CRITICAL ROOT ZONE OF THE SPECIMEN TREE).
10. A COMMERCIAL APPLICATOR LICENSE AND A PESTICIDE CONTRACTOR LICENSE ARE REQUIRED BY THE CONTRACTOR IF THE USE OF HERBICIDES ARE NECESSARY FOR NOXIOUS PLANT MATERIAL REMOVAL.
11. NON-VEGEATIVE MATERIAL TO BE REMOVED MANUALLY.
12. THINNING AND CLEARING OF ANY VEGETATIVE MATERIAL IN THE CRITICAL ROOT ZONE SHALL BE DONE IN THE LANDSCAPE INSTALLATION PHASE OF DEVELOPMENT.
13. TREE SAVE SIGNS SHALL BE EVERY 20 FEET OR A MINIMUM OF 4 SIGNS PER SPECIMEN TREE.
14. TREES SHALL BE IN PLACE AND PLANTED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY
15. STREETLIGHT SPACING SHALL BE REDUCED FROM THE CURRENT STANDARD OF ABOUT 150 FEET BETWEEN STREET LIGHTS TO ABOUT 100 FEET.
16. STREET TREES SHALL BE SPACED AT ABOUT 35-40 FEET CENTERS AND LOCATED A MINIMUM OF 30 FEET FROM INTERSECTING STREETS AND A MINIMUM OF ABOUT 40 FEET FROM STREET LIGHTS.
17. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.

GENERAL PLANTING NOTES

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
2. ALL PLANTS MUST BE CONTAINER-GROWN OR BALLED AND BURLAPPED AS SPECIFIED.
3. ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNER BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN.
6. ALL PLANTS AND PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT TO THE LANDSCAPE CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS PRIOR TO PRICING THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZATION, ETC.) OF PLANTING AREAS AND LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
11. THE OWNER AGREES TO PERFORM ALL LANDSCAPE MAINTENANCE (INCLUDING WATERING) THROUGHOUT THE ONE YEAR GUARANTEE PERIOD UNLESS OTHERWISE DETERMINED.
12. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
13. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL SPECIFICATIONS.
14. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
15. STREET TREES SHALL BE 3" IN DIAMETER AT TIME OF PLANTING. TREES SHALL BE PLANTED OUTSIDE OF THE RIGHT-OF-WAY, WITHIN 5 FEET FROM THE RIGHT-OF-WAYAT A QUANTITY OF 1 TREE PER 50 LINEAR FEET OF STREET (BOTH SIDES OF THE STREET)
16. STREET TREES TO BE A MINIMUM 3" CALIPER AT THE TIME OF PLANTING
17. LOT TREES SHALL BE AT-LEAST 2 INCH CALIBER AT THE THE TIME OF PLANTING AND OF A SPECIES LISTED IN THE TREE SPECIES LIST OF THE APPENDIX, SECTION 4.0 OF THE UDO.

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTED BY ARTICLE 1, SECTION 8 OF THE U.S. CONSTITUTION. ANY USE OF PRECISION PLANNING, INC. SALES AND ARCHITECTURAL WORKS COPYRIGHTS WITHOUT THE EXPRESS WRITTEN CONSENT OF PRECISION PLANNING, INC. IS PROHIBITED. THESE PLANS ARE NOT TO BE REPRODUCED OR CONVEYED TO ANY OTHER PERSON OR ENTITY, OR USED FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED, EXCEPT BY AGREEMENT IN WRITING WITHOUT ANTI-CIRCUMVENTION RIGHTS FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

TREE PROTECTION AND REPLACEMENT PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE
RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND OPENING OF AMENITY AREA.

DATE OCT. 26, 2017
PROJ. NUMBER R17-199
FILE NAME
FILE NUMBER

L1.1

PLOT DATE: 8/28/2018 10:46 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199-L100_TREE PROTECTION AND TREE REPLACEMENT PLAN.DWG

THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY
ALL BUFFERS AND TREE SAVE AREAS ARE TO BE CLEARLY IDENTIFIED WITH PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

CX.2a MATCHLINE

CX.2 MATCHLINE
CX.1

N/F
CARTER WILSON
DB 14888, PG 247
ZONING C2

FORCEMAIN EASEMENT
FOR EXACT LOCATION
SEE CDP2018-00002

PUMP STATION
DESIGNED AND PERMITTED
UNDER SEPARATE CONTRACT
SEE CDP2018-00002

8' NATURAL SURFACE WALKING TRAIL

TREE SAVE AREA

TREE SAMPLE AREA 'B'

APPROXIMATE WETLANDS PER UNITED CONSULTING, DATED APRIL 11, 2017

RETAINING WALL DESIGN BY OTHERS

8' NATURAL SURFACE WALKING TRAIL

APPROXIMATE POND LIMITS

STORMWATER MANAGEMENT EXTENDED DRY-DETENTION POND 1

HENDRIX ROAD 50' R/W

PRESLEY LANE 50' R/W

CLAPTON DRIVE 50' R/W

ALLMAN ROAD 50' R/W

BROWN ROAD
PUBLIC 60' R/W
DB 2795, PG 188 (ITEM 1)

BLOCK 'F'
BLOCK 'E'
BLOCK 'D'

COMMON AREA 1
749855 Sq.Ft

COMMON AREA 2
5469 Sq.Ft

SILT FENCE TYPE - SENSITIVE SINGLE ROW

10' NO ACCESS EASEMENT TO HAVE EXISTING VEGETATION (TYP.)

50' BUFFER

25' BL

20' DE

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

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

NOTE:
1. TREES SHALL BE IN PLACE AND PLANTED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY
2. LOT TREES SHALL BE AT LEAST 2 INCH CALIPER AT TIME OF PLANTING AND OF A SPECIES LISTED IN THE TREE SPECIES LIST OF THE APPENDIX, SECTION 4.0 OF THE UDO. (NO MORE THAN 33% OF ANY GENUS FOR THE OVERALL SITE)

TREE LEGEND

- QUERCUS SHUMARDII SHUMARD OAK 60/225=28.9%
- ULMUS PARVIFOLIA 'EMER II' ALLEE ELM 52/225=24.9%
- ZELKOVA SERRATA JAPANESE ZELKOVA 65/225=30.7%
- ACER BURGERIANUM TRIDENT MAPLE 35/225=15.6%

"TREE SAVE STAY OUT"
"NO ENTRADA"
"SALVE UN ARBOL"
TREE PROTECTION FENCE SIGN

ORANGE PLASTIC FENCING
TREE FENCE = LIMITS OF DISTURBANCE
TF
TREE FENCE LOCATION FOLLOWS LIMITS OF DISTURBANCE

NOTE:
1) ALTERNATIVE TREE FENCING IS WOOD RAIL FENCING.
2) EROSION CONTROL FENCING LOCATED ALONG TREE SAVE--LAND DISTURBANCE INTERFACE BACKED BY WIRE MESH IN CRITICAL EROSION AREAS.

TREE PROTECTION FENCE

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PORTIONS THEREOF PRODUCED BY, OR ON BEHALF OF PRECISION PLANNING, INC. SALES REPRESENTATIVES OR EMPLOYEES, SHALL NOT BE REPRODUCED OR CONVEYED TO ANY PERSON OR ENTITY NOT EMPLOYED BY OR FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM AUTHORIZED REPRESENTATIVES OF PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
TREE PROTECTION AND REPLACEMENT PLAN

DESIGN LGW | DRAWN LGW | CHECKED ES

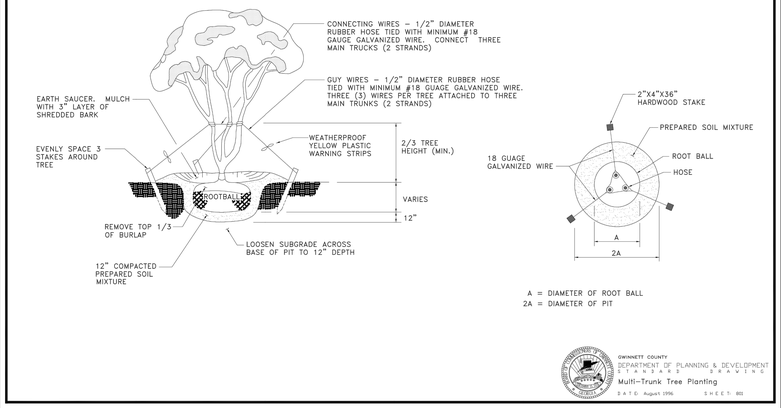
RELEASE

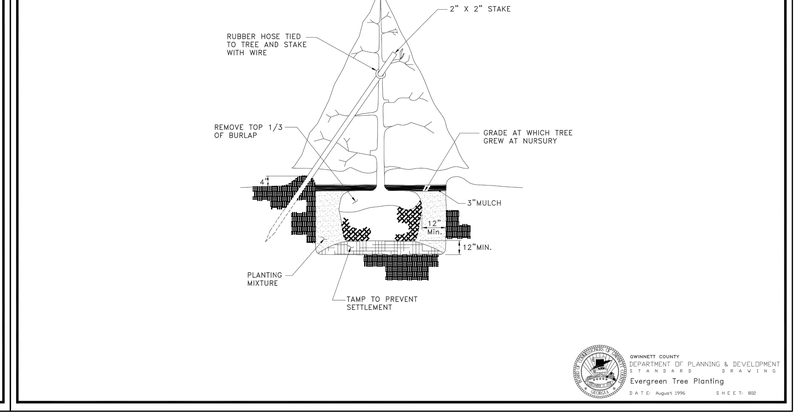
NO	DESCRIPTION	DATE
0	SUBMITTED FOR PERMITTING	10/31/17
1	ISSUED FOR CONSTRUCTION	3/6/18
2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP	5/13/18
3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA	06/19/18

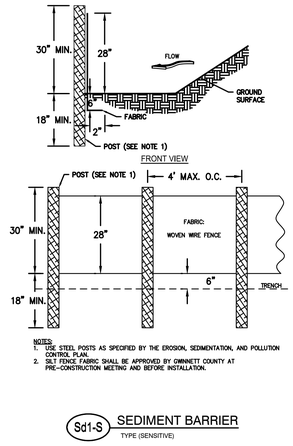
DATE OCT. 26, 2017
PROJ. NUMBER R17-199
FILE NAME
FILE NUMBER

L1.2

PLOT DATE: 6/20/2018 10:48 AM - FILE PATH: E:\PROJECTS\2017\R17-199 - MORGAN FALLS\GRAVEL SPRINGS\CONSTRUCTION\CONSTRUCTION FAMILY RESIDENTIAL - TREE\L1.2 TREE PROTECTION AND TREE REPLACEMENT PLAN.DWG - 2018-06-20 - LONGE WOODS







Sd1-S SEDIMENT BARRIER
TYPE (SENSITIVE)

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND FOR SETTLEMENT PURPOSES, IN WHOLE OR IN PART, ARE THE PROPERTY OF PRECISION PLANNING, INC. (PPI) AND ARE COPYRIGHTED WORKS. THEY MAY NOT BE REPRODUCED OR CONVEYED IN ANY MANNER WHATSOEVER OR USED FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

TREE PROTECTION AND TREE REPLACEMENT DETAILS

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

SHEET TITLE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA.

RELEASE

OCT. 26, 2017
DATE

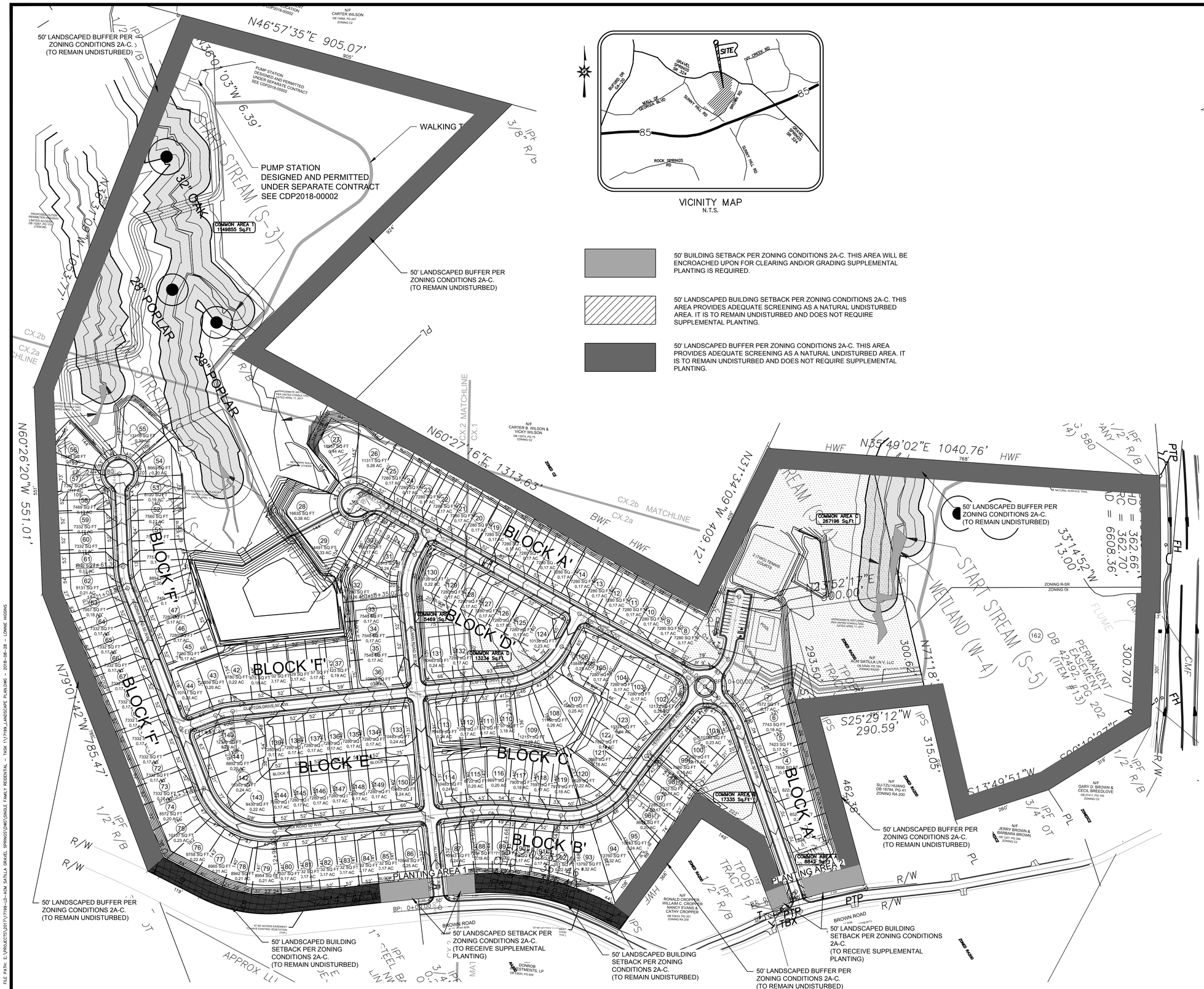
R17-199
PROJ. NUMBER

FILE NAME

FILE NUMBER

L1.3

PLOT DATE: 6/20/2018 10:46 AM FILE PATH: C:\USERS\CTSYLVESTER\DOCUMENTS\PPI-DC-FOM KAITLYN GRAVES_SPRINGS\WORKSPACE FAMILY RESIDENTIAL - TASK LAYERS\L1.03_TREE PROTECTION AND TREE REPLACEMENT PLANTING - 2018-06-20.DWG LOGIN: KGRAVES



© 2018 PRECISION PLANNING, INC. ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL BY ARCHITECTURAL COPYRIGHT PROTECTIONS. IN ANCILLARY OF PRECISION PLANNING, INC. SALES AND/OR OTHER PURPOSES ARE STRICTLY PROHIBITED. THESE PLANS SHALL NOT BE REPRODUCED OR CONVEYED IN ANY FORM OR MEDIUM WITHOUT THE EXPRESS WRITTEN PERMISSION OF PRECISION PLANNING, INC. FOR ANY OTHER PROJECTS OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED WITHOUT WRITTEN AUTHORIZATION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT

MORGAN FALLS SUBDIVISION

GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE

SUPPLEMENT BUFFER PLANTING PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND GRADING OF AMENITY AREA

OCT. 26, 2017
DATE

R17.199
PROJ. NUMBER

FILE NAME

FILE NUMBER

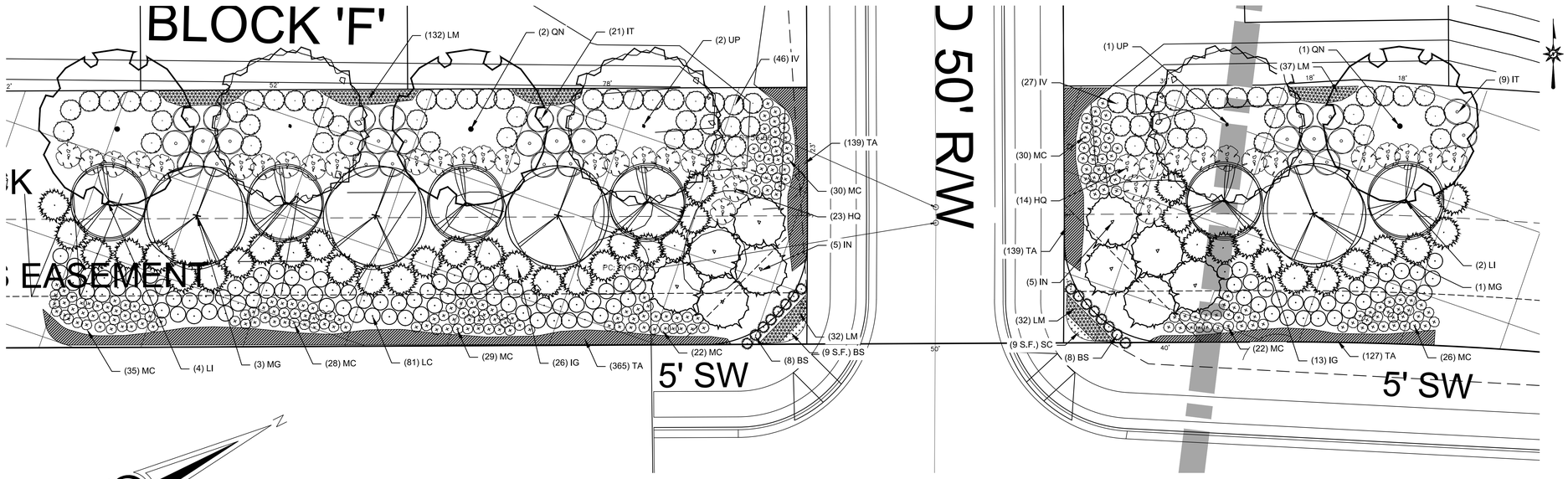
L1.4

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

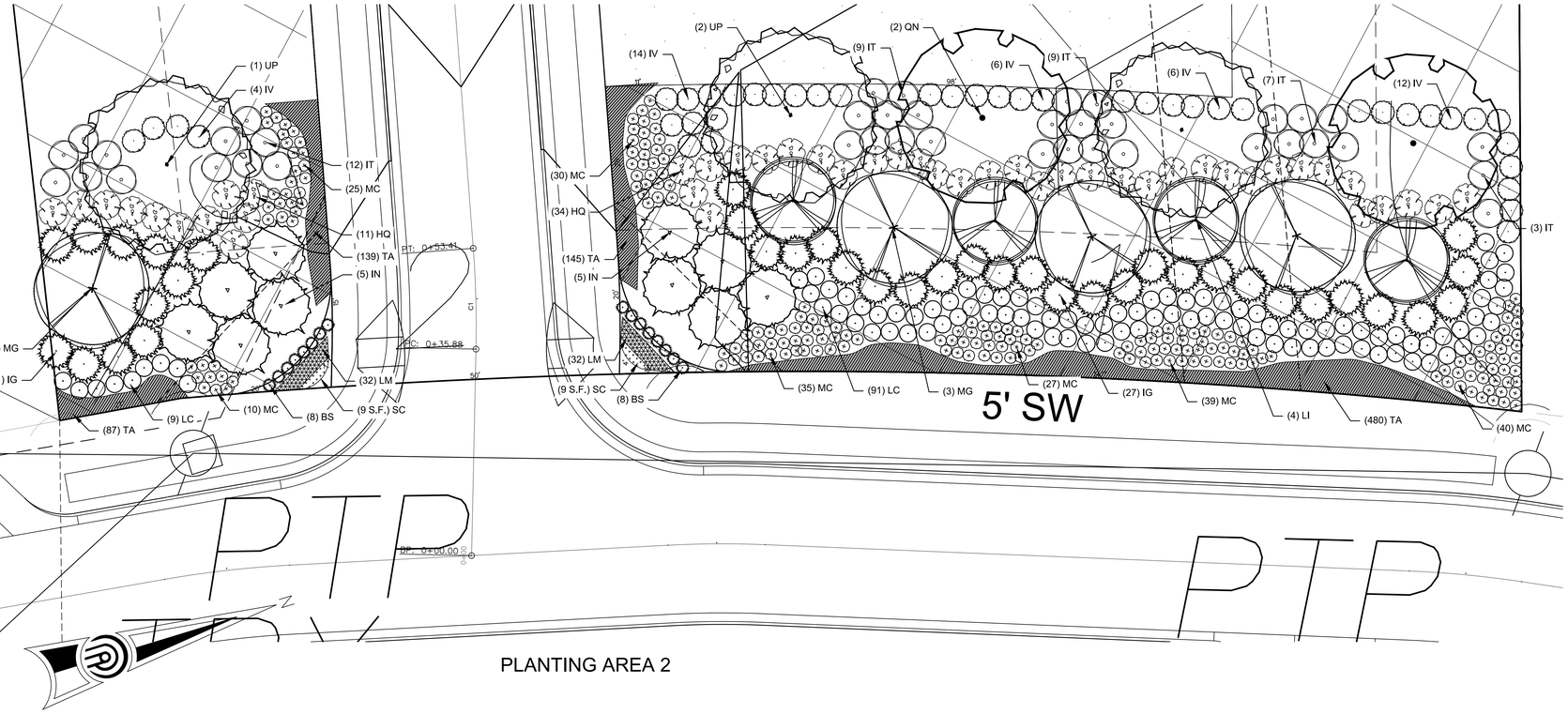
OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

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

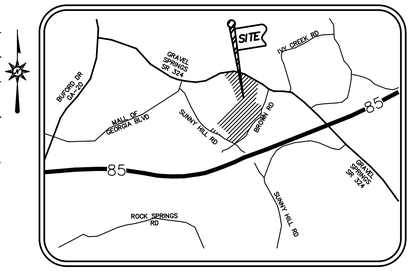
PLOT DATE: 8/28/2018 10:46 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK \17199_LANDCARE PLAN.DWG – 2018–08–28 – LONNIE HIGGINS



PLANTING AREA 1



PLANTING AREA 2



VICINITY MAP
N.T.S.

NUTTALL OAK

ALLEE ELM

LITTLE GEM MAGNOLIA

TUSCARORA CRAPE MYRTLE

NELLIE R. STEVENS HOLLY

INKBERRY

HENRY'S GARNET SWEETSPIRE

ALICE OAKLEAF HYDRANGEA

DWARF YAUPON

RUBY LOROPETALUM

WINTERGREEN BOXWOOD

PINK MUHLY GRASS

BIG BLUE LIRIOPE

VARIEGATED LIRIOPE

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE : 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PRODUCTIONS OF PRECISION PLANNING, INC. AND ARE THE PROPERTY OF PRECISION PLANNING, INC. SALES OR OTHER DISPOSITION OF THESE PLANS IS NOT BE REPRODUCED OR CONVEYED IN ANY FORM OR MANNER WHATSOEVER NOR FOR ANY OTHER PROJECTS OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LAND LOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
SUPPLEMENT BUFFER PLANTING PLAN

DESIGN	DRAWN	CHECKED
LGW	LGW	ES

RELEASE

NO	DATE	DESCRIPTION
0	10/31/17	SUBMITTED FOR PERMITTING
1	3/6/18	ISSUED FOR CONSTRUCTION
2	3/13/18	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
3	06/19/18	REVISED STORM BEDDING DETAIL/NOTES, REVISED LOCATION AND GRADING OF AMENITY AREA

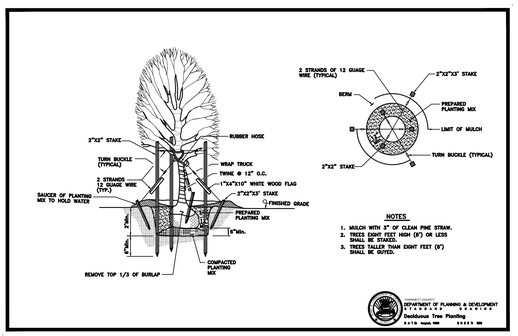
DATE: OCT. 26, 2017
PROJ. NUMBER: R17-199
FILE NAME:
FILE NUMBER:

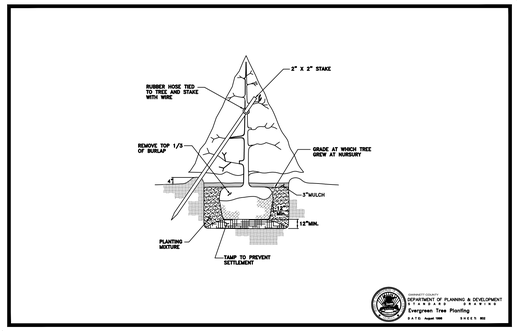
L1.5

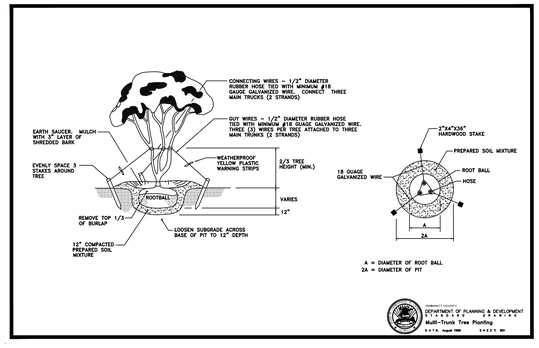
PLOT DATE: 6/20/2018 10:47 AM FILE PATH: E:\PROJECTS\2017\1799-LD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\1799_LANDSCAPE PLANS.DWG - 2018-06-28 - LONNIE HIGGINS

PLANT SCHEDULE

QTY	ABR.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	Notes
TREES						
20	IN	ILEX 'NELLIE R. SETEVENS	NELLIE R. STEVENS HOLLY	6'-8" HT	AS SHOWN	MULTI-STEM, THREE CENTRAL LEADERS TO 5' HT, WELL SHAPED, SYMMETRICAL CROWN
10	LI	LAGERSTROEMIA INDICA 'TUSCARORA'	TUSCARORA CRAPE MYRTLE			
8	MG	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM MAGNOLIA	6'-8'' HT	AS SHOWN	STRAIGHT CENTRAL LEADER TO MINIMUM 6' HT, WELL SPACED BRANCHES, SYMMETRICAL CROWN
5	QN	QUERCUS NUTTALLI	NUTTALL OAK	2" CAL	AS SHOWN	STRAIGHT CENTRAL LEADER TO MINIMUM 6' HT, WELL SPACED BRANCHES, SYMMETRICAL CROWN
6	UP	ULMUS PARVIFOLIA 'ALLEE'	NUTTALL OAK	2" CAL	AS SHOWN	STRAIGHT CENTRAL LEADER TO MINIMUM 6' HT, WELL SPACED BRANCHES, SYMMETRICAL CROWN
SHRUBS						
34	BS	BUXUS SINICA VAR.INSULARIS 'WINTERGREEN'	WINTERGREEN KOREAN BOXWOOD	3 GAL	2' O.C.	FULL POT, WELL SHAPED
83	HQ	HYDRANGEA QUERCIFOLIA 'ALICE'	ALICE OAKLEAF HYDRANGEA	3 GAL	5' O.C.	FULL POT, WELL SHAPED
77	IG	ILEX GLABRA	INKBERRY	3 GAL	6' O.C.	FULL POT, WELL SHAPED
115	IV	ILEX VOMITORIA 'NANA'	SCHILLING'S DWARF YAUPON	3 GAL	3'-6" O.C.	FULL POT, WELL SHAPED
70	IT	ITEA VIRGINICA 'HENRY'S GARNET	HENRY'S GARNET SWEETSPIRE	3 GAL	5' O.C.	FULL POT, WELL SHAPED
281	LC	LOROPETALUM CHINENSE VAR. RUBRUM 'RUBY'	RUBY CHINESE FRINGE FLOWER	3 GAL	3.5' O.C.	FULL POT, WELL SHAPED
428	MC	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL	2' O.C.	FULL POT, WELL SHAPED
GROUNDCOVER						
297	LM	LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LIRIOPE	1 GAL	1' O.C.	FULL POT, WELL SHAPED
1621	TA	TRACHELOSPERMUM ASIATICUM	ASIATIC JASMINE	1 GAL	1' O.C.	FULL POT, WELL SHAPED
TURF, MULCH, AND ETC.						
590 BALES		PINE STRAW			3" THICK	
36 SF		SEASONAL COLOR		4" POT	1' O.C.	







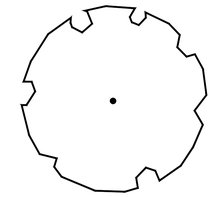
GENERAL PLANTING NOTES

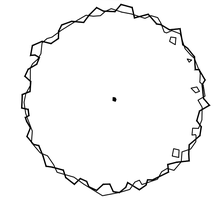
1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
2. ALL PLANTS MUST BE CONTAINER-GROWN OR BALLED AND BURLAPPED AS SPECIFIED.
3. ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNER BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN.
6. ALL PLANTS AND PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT TO THE LANDSCAPE CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS PRIOR TO PRICING THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZATION, ETC.) OF PLANTING AREAS AND LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
11. THE OWNER AGREES TO PERFORM ALL LANDSCAPE MAINTENANCE (INCLUDING WATERING) THROUGHOUT THE ONE YEAR GUARANTEE PERIOD UNLESS OTHERWISE DETERMINED.
12. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
13. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE, MEETING ALL SPECIFICATIONS.
14. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENTATIVE GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.

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

ENGINEER:
PRECISION PLANNING INC.
400 PIKE BOULEVARD
LAWRENCEVILLE, GEORGIA 30046
CONTACT: ERIC SIMPSON
PHONE: (770) 338-8000
827es@ppi.us

OWNER/DEVELOPER
ACM SATILLA LN V, LLC
1720 PEACHTREE STREET NW, SUITE 405
ATLANTA, GA
CONTACT: MR. PAXTON GRIFFIN
PHONE: 404.260.0701
PGRIFFIN@SATILLACAPITAL.COM


NUTTALL OAK


ALLEE ELM

LITTLE GEM MAGNOLIA

TUSCARORA CRAPE MYRTLE

NELLIE R. STEVENS HOLLY

INKBERRY

HENRY'S GARNET SWEETSPIRE

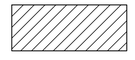
ALICE OAKLEAF HYDRANGEA

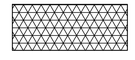
DWARF YAUPON

RUBY LOROPETALUM

WINTERGREEN BOXWOOD

PINK MUHLY GRASS


BIG BLUE LIRIOPE


VARIEGATED LIRIOPE

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

© 2018
PRECISION PLANNING, INC.
ALL RIGHTS RESERVED

THESE CONSTRUCTION DOCUMENTS AND PRINTS ARE PROTECTIONAL BY FEDERAL COPYRIGHT LAWS AND ARE THE PROPERTY OF PRECISION PLANNING, INC. SALES OR OTHER DISPOSITION BY THE ORIGINAL PURCHASER IS PROHIBITED. THEY SHALL NOT BE REPRODUCED OR CONVEYED TO ANY PERSON OR ENTITY OTHER THAN THE ORIGINAL PURCHASER OR BE USED FOR ANY OTHER PROJECTS OTHER THAN THE ONE SPECIFICALLY INDICATED HEREIN WITHOUT WRITTEN PERMISSION FROM PRECISION PLANNING, INC.

STAMP

PRECISION Planning Inc.
planners • engineers • architects • surveyors
400 Pike Boulevard, Lawrenceville, Ga 30046
770.338.8000 • www.ppi.us

PROJECT
MORGAN FALLS SUBDIVISION
GRAVEL SPRINGS - BROWN ROAD
143rd LANDLOT - 7th DISTRICT - PARCEL 010
GWINNETT COUNTY, GA

SHEET TITLE
SUPPLEMENT BUFFER PLANTING PLAN DETAILS

DESIGN LGW | DRAWN LGW | CHECKED ES

RELEASE

DATE	NO	DESCRIPTION
10/31/17	0	SUBMITTED FOR PERMITTING
3/6/18	1	ISSUED FOR CONSTRUCTION
3/13/18	2	REVISED PER GC STORM COMMENTS AFTER ISSUANCE OF LDP
06/19/18	3	REVISED STORM BEDDING DETAIL/NOTES. REVISED LOCATION AND SPACING OF AMENITY AREA

OCT. 26, 2017
DATE
R17-199
PROJ. NUMBER
FILE NAME
FILE NUMBER

L1.6

PLOT DATE: 8/28/2018 10:47 AM FILE PATH: E:\PROJECTS\2017\17199-JD-ACM SATILLA GRAVEL SPRINGS\DWG\SINGLE FAMILY RESIDENTIAL - TASK 1\17199_LANDSCAPE PLAN.DWG - 2018-08-28 - LONNIE HIGGINS