

APPENDIX C
NEWTON COUNTY WATER AND SEWERAGE AUTHORITY
SANITARY SEWER SYSTEM CONSTRUCTION GENERAL NOTES

- All sanitary sewer system construction must follow the current Newton County Water and Sewerage Authority sanitary sewer system specifications.
- For D.I.P sewer lines, the minimum wall thickness for 4"-12" diameter pipe shall be Pressure Class 350; minimum wall thickness for 14"-20" diameter pipe shall be Pressure Class 250; minimum wall thickness for 24" diameter pipe shall be Pressure Class 200; minimum wall thickness for pipe larger than 24" in diameter shall be Pressure Class 150. Wall thicknesses greater than the minimums called for above may be required due to greater depths or varying bedding requirements. Class C bedding is the minimum allowed.
- All Polyvinyl Chloride (PVC) sewers 6"-15" in diameter shall meet the requirements for minimum wall thickness as specified under SDR 35 ASTM D3034, latest revision. PVC sewers that are 18" in diameter shall have a minimum wall thickness as specified under T-1 in ASTM F679, latest revision. PVC sewers with more than 12 feet of cover may require wall thicknesses greater than SDR 35 or T-1. PVC is not allowed for sewers greater than 18" in diameter or more than 14 feet of cover.
- Ductile Iron Pipe is required for sanitary sewer lines:
 - Over and under all storm sewers
 - Crossing water mains
 - Under all stream crossings and all asphalt or concrete paving
 - With less than 4' of cover or over 14' of cover
 - With 10% or greater slope
 - Inside casings
 - At all other locations specified by the Authority
- Information regarding underground utilities on these plans is not guaranteed as to accuracy or completeness. Prior to beginning work, the Contractor shall request a field location through the utilities protection center and any utility owners thought to have facilities in the area. The Contractor shall promptly compare these field-marked locations with the project plans and then notify the designer of any anticipated problems or need for design changes. It is the Contractor's responsibility to excavate or cause the utility owner to excavate for the purpose of determining exact elevations or locations at utility crossings and other critical locations well in advance of the work under this contract. Damage to existing utilities resulting from the Contractor's negligence shall be repaired at the Contractor's expense.
- All sewer service laterals shall have a minimum diameter of 6".
- The Developer shall obtain a permit from the Authority and notify the sewer system inspector 48 hours before beginning construction.
- This project is located in land lots _____ district of Newton County, Georgia.
- The existing land use is:
- The Developer is (Name, Address, Telephone):
- 24-hour local contact for erosion and sediment control is (name and 24 hour telephone number).
- This project construction area is _____ acres.
- This project consists of (Description of Work):
- Adjacent areas include:

- 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 and 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.
- All erosion and sediment control measures will be checked daily and any deficiencies noted will be corrected by the end of the day.
- This property (is/ is not) located within a 100 year flood plain as shown on F.I.R.M. Community Panel Number _____, dated _____.
- All fill slopes will have silt fence at the toe of the slopes.
- A 25 to 35 foot undisturbed vegetative buffer adjacent to all running streams and creeks will be left and maintained.
- Clearing will be kept to an absolute minimum. Vegetation and mulch will be applied to applicable areas immediately after grading is complete. Land disturbing will be scheduled to limit exposure of bare soils to erosive elements.
- Construction activities will be performed in compliance with all applicable laws and regulations.
- All marketable timber will be salvaged. Top soil will be salvaged, stock piled and spread on areas to be vegetated. Trees outside of the clearing line will be protected from damage by appropriate markings. Supplemental vegetation will be established.
- Cleanout of sediment control structures will be accomplished in accordance with the sediment disposal accomplished by spreading on site. Sediment barriers will remain in place until sediment contributing areas are stabilized.
- Contractor is responsible for staking the alignment of the proposed pipeline prior to pipe installation. If a conflict should arise the contractor shall notify the designer at that time.
- All excavated dirt shall be placed on the high side of the trench away from any creeks.
- Any fill dirt over the pipe shall be graded to prevent ponding.
- The construction easement represents the limits of clearing for the complete job. The contractor shall not clear beyond this limit.
- There shall be no change in preconstruction contours (excess material must be removed to an upland disposal area).
- Bank stabilization (rip-rap) shall only be placed where necessary for erosion prevention. No rip-rap shall be placed in excess of the minimum needed for erosion protection.
- No rip-rap shall be placed in any wetland area or in any location or manner so as to impair surface water flow into or out of any wetland area.
- This project is allowed construction within wetland areas under the Nationwide Permit, Corps of Engineers Regulations, dated November 13, 1986, part 330.5, Section 1, 2 and 13. Part 330.6 shall also be followed, to the maximum extent practicable, in order to minimize the adverse effects of these discharges on the aquatic environment. Failure to comply with these practices may be cause for the District Engineer to recommend or the Division Engineer to take discretionary authority to regulate the activity on an individual or regional basis pursuant to part 330.8 of the Nationwide Permit, Corps of Engineers Regulations.
- Discharges of dredged or fill materials into the creek shall be avoided or minimized through the use of other practical alternatives.
- Discharges of fill in spawning areas during spawning seasons shall be avoided.

- Discharges of fill shall not restrict or impede the movement of aquatic species indigenous to the waters or the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound water).
 - Discharges of fill in wetland areas shall be avoided.
 - Heavy equipment in wetland areas shall be avoided.
 - Discharging fill into breeding areas for migratory waterfowl shall be avoided.
 - All temporary fills shall be removed in their entirety.
- D. Detail Drawings - Special detail drawings made to a scale to clearly show the nature of the design shall be furnished for show the following particulars:
- All stream crossings and storm drain outlets with elevations of the stream bed of normal and extreme high and low water levels.
 - Details of all special sewer joints and cross sections.
 - Details of special sewer appurtenances such as manholes, service connections, elevated sewers, piers, pipe bedding, special highway crossings, railroad crossings, etc.
- The approved sanitary sewer plan shall not be changed except by written approval of the Authority.
 - As-built Drawings:
 - As-built drawings will be the same format as the original construction plans.
 - Road names and lot numbers (if applicable) shall be on plans.
 - "As-Builts" or "Record Drawings" is to be stamped in large clear print on each sheet of the plans.
 - Sheet size is to be 22"x34" or 24"x36". Also include one electronic copy in .dwg format.
 - Manhole invert and rim elevations.
 - When a phase of a subdivision is completed, a location sketch of each subdivision with said phase outlined shall appear on plans.
 - Stationing for all manholes, underground structures, casings, changes in pipe materials and stub-outs.
 - Field measured distances between manholes.
 - Actual azimuths and grades of all sewer lines between manholes.
 - Contour lines are not required.
 - Lateral wye locations must show distance from the downstream manhole. Ends of lateral lines must show the distance from the downstream manhole and offset distance from the main line. Approximate depth of end of lateral should be shown.
 - Show all permanent easements.
 - Maximum error of as built measurements shall be:
 - Manhole Inverts: Measured to 0.01' with maximum vertical error of 0.15 feet per 100 feet of horizontal traverse.
 - Manhole rims: Measured to 0.10' with maximum vertical error of .5 feet per 1000 feet of horizontal traverse.
 - Horizontal locations: Measured to nearest 1.0' with allowable error of 1.0' per 1000 feet of horizontal traverse.

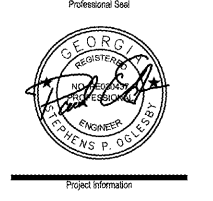
APPENDIX C
NEWTON COUNTY WATER AND SEWERAGE AUTHORITY
WATER SYSTEM CONSTRUCTION GENERAL NOTES

- All water system construction must follow the current Newton County Water and Sewerage Authority sanitary sewer system specifications.
- All water mains shall be ductile iron pipe.
- Ductile Iron Pipe (D.I.P.) is required for water mains: Ductile iron pipe shall conform to AWWA C151 and shall be Class 50 or 51 unless shown otherwise. All pipe shall be furnished in minimum lengths of 18 feet. Pipe and fittings shall be cement lined in accordance with AWWA C104. Fittings shall be ductile iron including glands and shall conform to AWWA C110 or AWWA C153 with minimum rated working pressure of 250 psi. Pipe and fittings shall be furnished with a bituminous outside coating. Joints shall be push-on type for pipe and standard mechanical or flanged joint for fittings. Push-on and mechanical joints shall conform to AWWA C111. Restrained joints shall be equal to America "LOK-FAST", "FLEX-RING" or "LOK-RING" or U.S. Pipe "TR FLEX" or "LOK_TYTE". Restrained joint pipe (RJP) on piers shall have bolted joints and shall be specifically designed for clear spans of at least 36 feet.
- All line valves shall be marked by concrete valve markers.
- A concrete valve marker is to be placed directly above the plug on all dead-end water mains.
- Information regarding underground utilities on these plans is not guaranteed as to accuracy or completeness. Prior to beginning work, the Contractor shall request a field location through the utilities protection center and any utility owners thought to have facilities in the area. The Contractor shall promptly compare these field-marked locations with the project plans and then notify the Designer of any anticipated problems or need for design changes. It is the Contractor's responsibility to excavate or cause the utility owner to excavate for the purpose of determining exact elevations or locations at utility crossings and other critical locations well in advance of the work under this contract. Damage to existing utilities resulting from the Contractor's negligence shall be repaired at the Contractor's expense.
- All service lines under pavement shall be encased in PVC casing with a minimum diameter of 1 1/2", extending a minimum of 3 feet beyond the pavement on each side of the trench.
- Concrete blocking shall be placed at all bends and tees.
- The developer shall obtain a permit from the NWSA and notify the water system inspector 48 hours before beginning construction.
- The developer shall install water services to and include meter boxes and curb stops. Meters will be set by the Authority after the building permit is issued.
- Water Mains shall be installed with a minimum of 48" of cover (Section 206.02.1).
- Locator wire shall be placed in the trench with the PVC water main before backfilling trench.
- Flow Test Information:
 Size of pipe: _____ inches
 Test pressure: _____ psi at _____ ft.
 Record flow: _____ GPM with _____ psi residual pressure
 Maximum available flow: _____ m.s.f (to be determined by developer)
 Flow available: _____ GPM with 20 psi residual pressure
 Size of water main at point of connection to project: _____ inches
 Date of Flow Test: _____

- The approved water plan shall not be changed except by written approval of the Authority.
- As-Built Drawings:
 - As-Built drawings will be the same format as the original construction plans.
 - Road names and lot numbers (if applicable) shall be on plans.
 - "Record Drawings" is to be stamped in large clear print on plans.
 - Sheet size shall be 22"x34" or 24"x36".
 - Mains including size and type of meter shall be shown.
 - Service and meter locations shall be shown.
 - Fire hydrants, gate valves and air release valves shall be shown and tied down with distances from permanent objects adjacent to water system.
 - Plan of fire meters or detector meters shall be shown if applicable.



georgia civil
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE
LAND SURVEYING
311 N. Main St., Unit C, Suite 101
P.O. Box 898 | Madison, GA 30650
P: 706.342.1104 | F: 706.342.1105
www.georgiacivil.com



Project Information

GINN CDR&J
0025-041, 0025-042, PORTION OF 0025-042B
ACCESS ROAD - FAIRVIEW ROAD INTERSECTION
COVINGTON, GA
NEWTON COUNTY
CG-GENERAL COMMERCIAL (NEWTON COUNTY)

DRAWING DATE:	2/15/2019
DRAWN BY:	SPO
CHECKED BY:	SPO
REVISIONS	
DATE:	DESCRIPTION:

© Copyright 2016 georgia civil, inc.
This document and its reproduction are the property of Georgia Civil, Inc. and may not be reproduced, published, or used in whole or in part without the written consent of Georgia Civil, Inc.

SITE WORK
DETAILS

Sheet Number
C-11.7