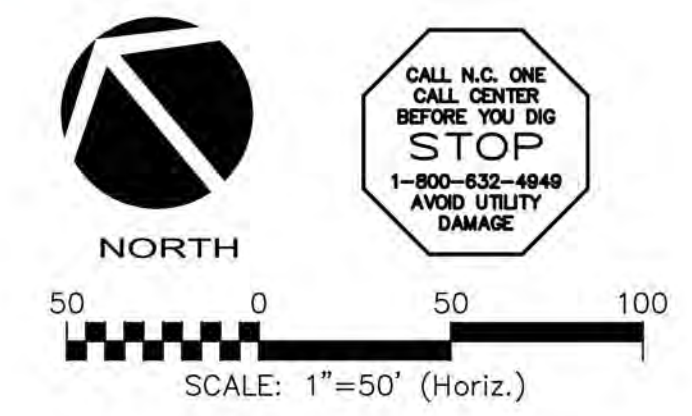


- UTILITY NOTES:**
- ALL SANITARY SEWER CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH CURRENT NCDENR & CHATHAM COUNTY STANDARDS, SPECIFICATIONS & DETAILS.
 - ALL WATER MAIN CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH CURRENT CHATHAM COUNTY STANDARDS, SPECIFICATIONS & DETAILS.
 - ALL PERMITS RELATING TO THIS PROJECT MUST BE OBTAINED PRIOR TO CONSTRUCTION.
 - ALL WATER MAINS SHALL HAVE A MIN. OF 3'-6" OF COVER AS MEASURED FROM FINISHED GRADE TO TOP OF PIPE AT THE LOCATION WHERE INSTALLED.
 - WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION, IN WHICH CASE:
 - THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER; OR
 - THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 - WHERE A WATER MAIN CROSSES OVER A SANITARY SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN 18-INCH VERTICAL SEPARATION - IN WHICH CASE BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
 - WHERE A WATER MAIN CROSSES UNDER A SANITARY SEWER, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING. SEE NCAC 15A, 18C, SECTION .0906.
 - CONTRACTOR SHALL USE A MIN. 20' SECTION DIP CLASS 350 CENTERED UNDER STORMWATER PIPE WHERE 18" MIN. VERTICAL CLEARANCE CANNOT BE MET BETWEEN STORMWATER AND WATER.
 - TRACER WIRE AND TRACER WIRE TEST STATIONS ARE TO BE INSTALLED ON ALL WATER MAINS. TRACER WIRE TEST STATIONS ARE TO BE LOCATED AT ALL FIRE HYDRANTS WITHIN A 3 FOOT RADIUS OF THE HYDRANT AND PREFERABLY TO THE REAR OF THE HYDRANT.
 - WATER SERVICES SHALL BE EXTENDED FROM THE MAIN TO A METER BOX LOCATED WITHIN THE RIGHT OF WAY. THE METER SHALL BE PLACED AT THE EDGE OF THE SERVICED LOT'S RIGHT OF WAY LINE OR EASEMENT. SERVICE LINE SHALL BE RUN ON A TRUE LINE FROM THE WATER MAIN TO THE METER BOX, AND WHERE POSSIBLE, SERVICE LINE SHALL BE PERPENDICULAR TO THE MAIN LINE. NO WATER BOXES OR VAULTS SHALL BE PLACED IN STREETS, SIDEWALKS, PARKING AREAS, OR DRIVEWAYS.
 - MANHOLES SHALL BE SPACED A MAXIMUM DISTANCE OF 400 FEET APART.
 - MANHOLES SHALL BE INSTALLED AT EACH DEFLECTION OF LINE AND/OR GRADE WITH A MINIMUM DROP OF 0.2 FEET. MANHOLES FOR SEWERS GREATER THAN 21 INCHES IN DIAMETER SHALL BE 5 FOOT MANHOLES. MANHOLES FOR SEWERS 12 FEET OR DEEPER SHALL BE MINIMUM 5 FOOT DIAMETER. MANHOLE TOPS SHALL BE SET FLUSH WITH PAVEMENT WHERE INSTALLED IN A STREET.
 - SERVICE CONNECTIONS FOR THE SANITARY SEWER LINES SHALL BE PERPENDICULAR FROM THE MAIN LINE TO THE EDGE OF THE SERVICED LOT'S RIGHT OF WAY LINE OR EASEMENT WITH A MINIMUM GRADE OF 1/4" INCH/FOOT FOR 4 INCH AND .6 FOOT/100 FOOT FOR 6 INCH. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE THE FINISHED GRADE. WHERE A SERVICE LINE IS CONNECTED TO A MANHOLE, THE LINE SHALL TERMINATE AT THE EDGE OF THE INVERT IN THE MANHOLE. NO CLEANOUTS SHALL BE PLACED IN STREETS, SIDEWALKS, PARKING AREAS, OR DRIVEWAYS.
 - ALL SANITARY SEWER LINES ARE 8" PVC SDR 35 UNLESS OTHERWISE NOTED AND ALL WATER MAIN LINES ARE 6" DI CLASS 350 UNLESS OTHERWISE NOTED. ALL SANITARY SEWER SERVICES ARE 4" SCHEDULE 40 PVC AND ALL WATER MAIN SERVICES ARE 1".
 - MINIMUM COVER OF 5 FEET IN TRAFFIC AREAS TO BE PROVIDED FOR ALL COLLECTOR LINES 4 INCHES AND LARGER. IF LESS THAN 5 FEET, DUCTILE IRON PIPE SHALL BE REQUIRED.
 - USE WATERTIGHT RIMS FOR SANITARY SEWER MANHOLES LOCATED IN PAVED ALLEYS.
 - SANITARY SEWER WITHIN PRIVATE EASEMENTS TO BE OWNED, OPERATED AND MAINTAINED BY HOME OWNERS ASSOCIATION OR AGENT THEREOF.
 - WATER MAINS WILL BE 3.5' OFF CURB AND GUTTER UNLESS SHOWN OTHERWISE.
 - ALL WATER MAINS WITHIN PUBLIC EASEMENTS AND PUBLIC RIGHT-OF-WAY TO BE OWNED, OPERATED AND MAINTAINED BY CHATHAM COUNTY, AND WILL BE CONTAINED WITHIN 20' WIDE PUBLIC WATER LINE EASEMENT (MINIMUM) CENTERED ON THE PROPOSED WATER MAIN.
 - CONTRACTOR TO COORDINATE WITH CHATHAM COUNTY PUBLIC WORKS FOR ALL IRRIGATION SLEEVE SIZING.
 - LOTS 1310-1313 SHALL BE CONSIDERED AN ALTERNATE FROM THE BASE CONSTRUCTION DRAWINGS.

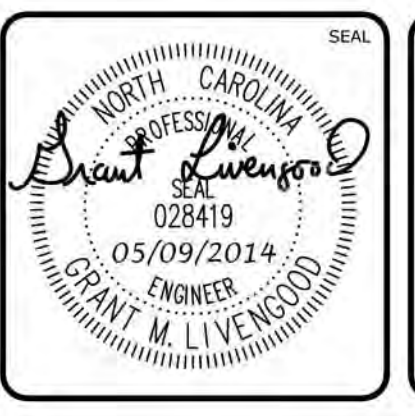
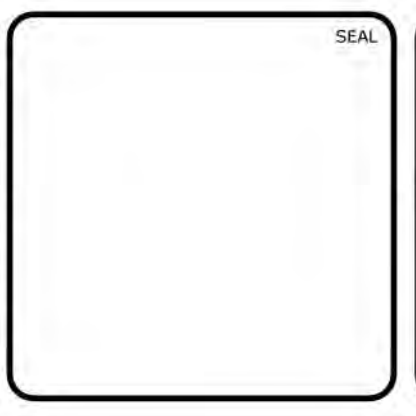
LEGEND

SS	SANITARY SEWER LINE
W	WATER MAIN
FM	SANITARY SEWER FORCE MAIN (DESIGNED BY OTHERS)
SS	EXISTING SANITARY SEWER LINE
W	EXISTING SS FORCE MAIN
W	EXISTING WATER MAIN
OE	EXISTING OVERHEAD ELECTRIC
ELEC	EXISTING UNDERGROUND ELECTRIC
TWC	EXISTING TIME WARNER CABLE LINE
AT&T	EXISTING AT&T LINE
⊙	SANITARY SEWER MANHOLE
⊙	SANITARY SEWER CLEANOUT
⊙	WATER METER
⊙	FIRE HYDRANT ASSEMBLY (FHA)
—	ROADWAY CENTERLINE
---	ROW
---	LOT LINE
---	CHATHAM COUNTY STREAM BUFFER
---	10' NO BUILD ZONE BUFFER
---	4' H.O.A. EASEMENT
---	4' PRIVATE UTILITY EASEMENT
---	EXISTING WETLANDS

UTILITIES PLAN REVIEW
 Review is for general conformance with Chatham County Specifications, NCDOT, NCDENR and Material standards. This review does not exempt plans from other review requirements.
 Approved with Modifications
 Revised and Resubmitted
 Disapproved
 CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION
 P.O. Box 918, P.O. Building #312
 Date: 7/2/14 by [Signature]



REV. NO.	DESCRIPTIONS	DATE
B	UPDATED PER REVISED SEGMENTATION	2014.05.09
A	ISSUED FOR CONSTRUCTION	2013.10.31



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BRIAR CHAPEL™
 by
Newland COMMUNITIES

**BRIAR CHAPEL
 PHASE 9 - SECTION 1
 CHATHAM COUNTY, NORTH CAROLINA**

UTILITY PLAN

DATE: SEPTEMBER 3, 2013	SCALE: HORIZONTAL: 1" = 50'	MFC FILE NUMBER: C2.X
MCE PROJ. # 02735-0096	VERTICAL: N/A	DRAWING NUMBER: C2.1
DRAWN: GCA		
DESIGNED: GCA		
CHECKED: CHS		
PROJ. MGR.: CHS		
STATUS: ISSUED FOR CONSTRUCTION	REVISION: B	