

Exhibit I.1

UTILITY NOTES

SANITARY SEWER:

BACKWATER VALVES SHALL BE PROVIDED FOR ALL BUILDINGS WITH FINAL FLOOR ELEVATIONS LESS THAN 1'-0" ABOVE MANHOLE.

MINIMUM GROUND COVER OF 3'-0" TO BE PROVIDED FOR ALL SANITARY SEWER COLLECTION LINES 4" AND LARGER IN NONTRAFFIC AREAS. IF MINIMUM COVER IS NOT PROVIDED, APPROVED FERROUS PIPE SHALL BE USED.

MINIMUM COVER OF 5'-0" IN TRAFFIC AREAS TO BE PROVIDED FOR ALL COLLECTION LINES 4" AND LARGER. IF LESS THAN 5'-0", DUCTILE IRON PIPE SHALL BE REQUIRED IN CLASS 1 BEDDING (MINIMUM COVER SHALL BE NO LESS THAN 3'-0").

MINIMUM SLOPE FOR 4" SANITARY SEWER COLLECTION LINES SHALL BE NO LESS THAN 1.0% WITH CLEANOUTS EVERY 75 LINEAL FEET.

MINIMUM SLOPE FOR 6" SANITARY SEWER COLLECTION LINES SHALL BE NO LESS THAN 1.0% WITH CLEANOUTS EVERY 100 LINEAL FEET.

MAINTAIN 24" VERTICAL SEPARATION FROM STORM SEWER OR FERROUS PIPE SHALL BE USED FOR SANITARY SEWER. ALSO MAINTAIN 10 FEET HORIZONTAL SEPARATION OR 18" VERTICAL SEPARATION FROM WATER MAINS OR APPROVED FERROUS PIPE SHALL BE USED FOR SANITARY SEWER AND WATER.

WATER:

WATER MAIN TO BE INSTALLED AT A DEPTH WITH A MINIMUM COVER OF 36", WITH 18" VERTICAL CLEARANCE MINIMUM FROM OTHER UNDERGROUND UTILITIES AND 10 FEET HORIZONTAL CLEARANCE FROM ALL OTHER UTILITIES.

PRESSURE REDUCING VALVES SHALL BE PROVIDED IF PRESSURE IS IN EXCESS OF 80 PSI.

GENERAL:

ALL WATER AND SEWER MAINS WITHIN PUBLIC EASEMENTS AND RIGHTS-OF-WAY TO BE OWNED, OPERATED, AND MAINTAINED BY THE PUBLIC AUTHORITY.

ALL CONSTRUCTION TO BE OF THE LOCAL AUTHORITY STANDARDS.

ALL UNDERGROUND UTILITIES ARE APPROXIMATELY LOCATED. ACTUAL LOCATION AND DEPTH TO BE CONFIRMED IN FIELD PRIOR TO CONSTRUCTION.

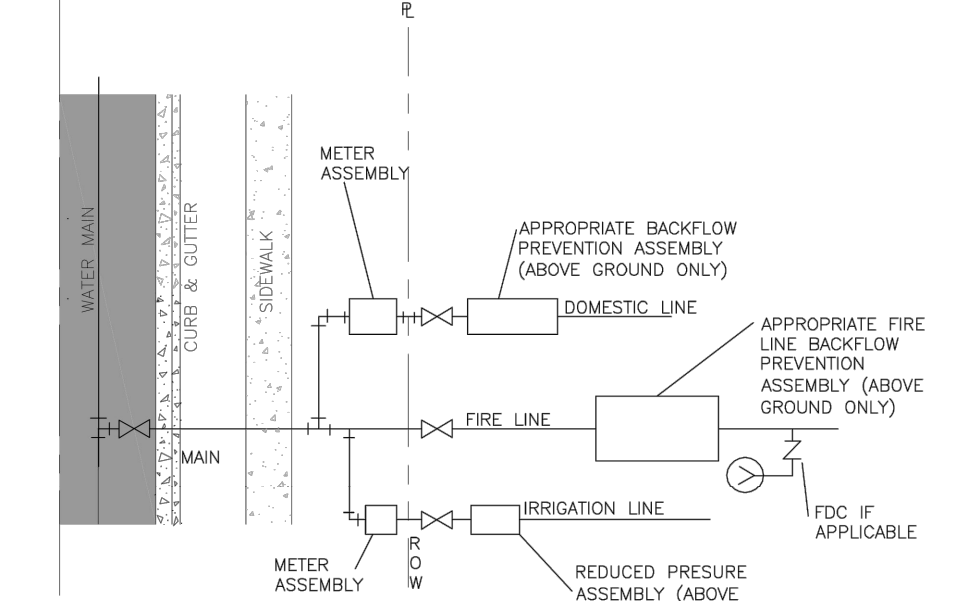
STORM SEWER (RCP) SHALL BE CONSTRUCTED TO THE FOLLOWING CLASSES:
COVER LESS THAN 10 FEET - CLASS C OR D BEDDING, CLASS III WALLS
COVER 10 FEET TO 15 FEET - CLASS B BEDDING, CLASS III WALLS
COVER GREATER THAN 15 FEET - CLASS B BEDDING, CLASS IV WALLS

BEFORE STARTING ANY CONSTRUCTION OF IMPROVEMENTS WITHIN ANY CITY OR NCDOT STREET OR HIGHWAY RIGHT-OF-WAY, THE FOLLOWING PROCEDURES SHOULD BE UNDERTAKEN: CITY RIGHT-OF-WAY - CONTACT LOCAL AUTHORITIES TRAFFIC ENGINEERING DEPT. FOR INFORMATION ON DETOURS, OPEN CUTTING OF STREETS OR FOR ANY CONSTRUCTION WITHIN RIGHT-OF-WAY. NCDOT RIGHT-OF-WAY - CONTACT PROJECT ENGINEERS AND OBTAIN ALL PERMITS AND ENCROACHMENTS (CROSS-CHECK PLANS WITH SPECIAL PROVISIONS, KEEP COPIES ON CONSTRUCTION SITE.

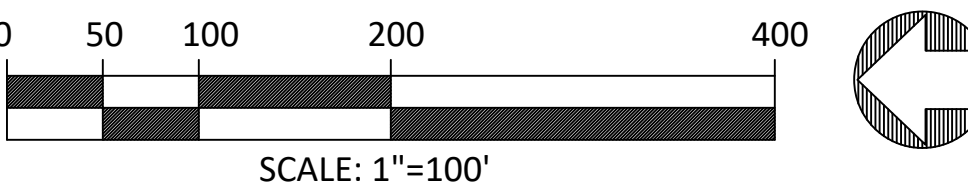


RESIDENTIAL SINGLE-FAMILY HOMES:	45
TOWNHOMES:	28
TOTAL:	73
SETBACKS: 10' FRONT & REAR, 5' SIDES	64 UNITS
15' SPACING BETWEEN BUILDINGS FOR TOWNHOMES	
CONGREGANT CARE FACILITY	140,000 SF
PARKING PROVIDED:	100
DAYCARE	10,000 SF
PARKING PROVIDED:	37
	55

13,300 SF COMMUNITY CENTER/OFFICE	
PARKING PROVIDED: 15 SPACES	
ACCESSIBLE SPACES PROVIDED: 3	
ACCESSIBLE SPACES PROVIDED: 2	
RESIDENTIAL SINGLE-FAMILY HOMES: 47	
DETACHED TOWNHOMES: 34	
(DETACHED: 8 (64 UNITS TOTAL))	
TOTAL: 81 UNITS	
SETBACKS: 10' FRONT & REAR, 5' SIDES	
15' SPACING BETWEEN BUILDINGS FOR (DETACHED) TOWNHOMES	



1. SERVICE TAPS FOR 2" AND SMALLER DOMESTIC SERVICES MAY BE BY CORPORATION COCKS. LARGER SERVICES WILL REQUIRE A TEE AND GATE VALVE OR TAPPING SLEEVE AND VALVE ASSEMBLY, SEE DETAIL 8, AND 90° BEND.
2. DOMESTIC SERVICE TAPS SHALL BE ALLOWED ONLY ON 6" OR LARGER FIRE LINES BEFORE THE BACKFLOW ASSEMBLY.
3. ONE DOMESTIC TAP PER FIRE LINE ON STREET SIDE OF BACKFLOW.
4. FIRE LINE SHALL HAVE A FIRE HYDRANT OR BLOW OFF ASSEMBLY AT ITS END TO FACILITATE FLUSHING WHEN NEEDED.
5. IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.
6. THE BACKFLOW SHALL BE INSTALLED NO MORE THAN 10' FROM THE METER IN A VISIBLE LOCATION.
7. DOMESTIC/IRRIGATION BACKFLOW RISER/STANDPIPE SHALL BE OF COPPER OR BRASS.
8. A SERVICE VALVE IS REQUIRED AFTER THE METER BUT BEFORE THE BACKFLOW ASSEMBLY FOR MAINTENANCE AND REPLACEMENT PURPOSES.
9. THE INSTALLATION MUST ALSO MEET ALL CODE REQUIREMENTS PER THE NC PLUMBING CODE.



DETAIL	24	FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC	CHATHAM COUNTY PUBLIC UTILITIES & WATER DIVISION P.O. BOX 910 PITTSBORO, NC 27312 964 EAST STREET, SUITE 205 PITTSBORO, NC 27312 (919) 852-8270 (BUS) (919) 852-4282 (FAX)	
REVISION	DATE			
JULY 3, 2015				



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HERNDON FARMS
WILLIAMS TOWNSHIP
CHATHAM COUNTY
NORTH CAROLINA

DRAWN BY	CHECKED BY
KAH	TDS
DATE	6/16/2021

REVISIONS	
1	8/6/2021

SHEET TITLE

OVERALL SITE -
PRELIMINARY WATER
AND SEWER PLAN

SHEET NUMBER

WS1
1 OF 1

1. CHATHAM COUNTY REVIEW COMMENTS