

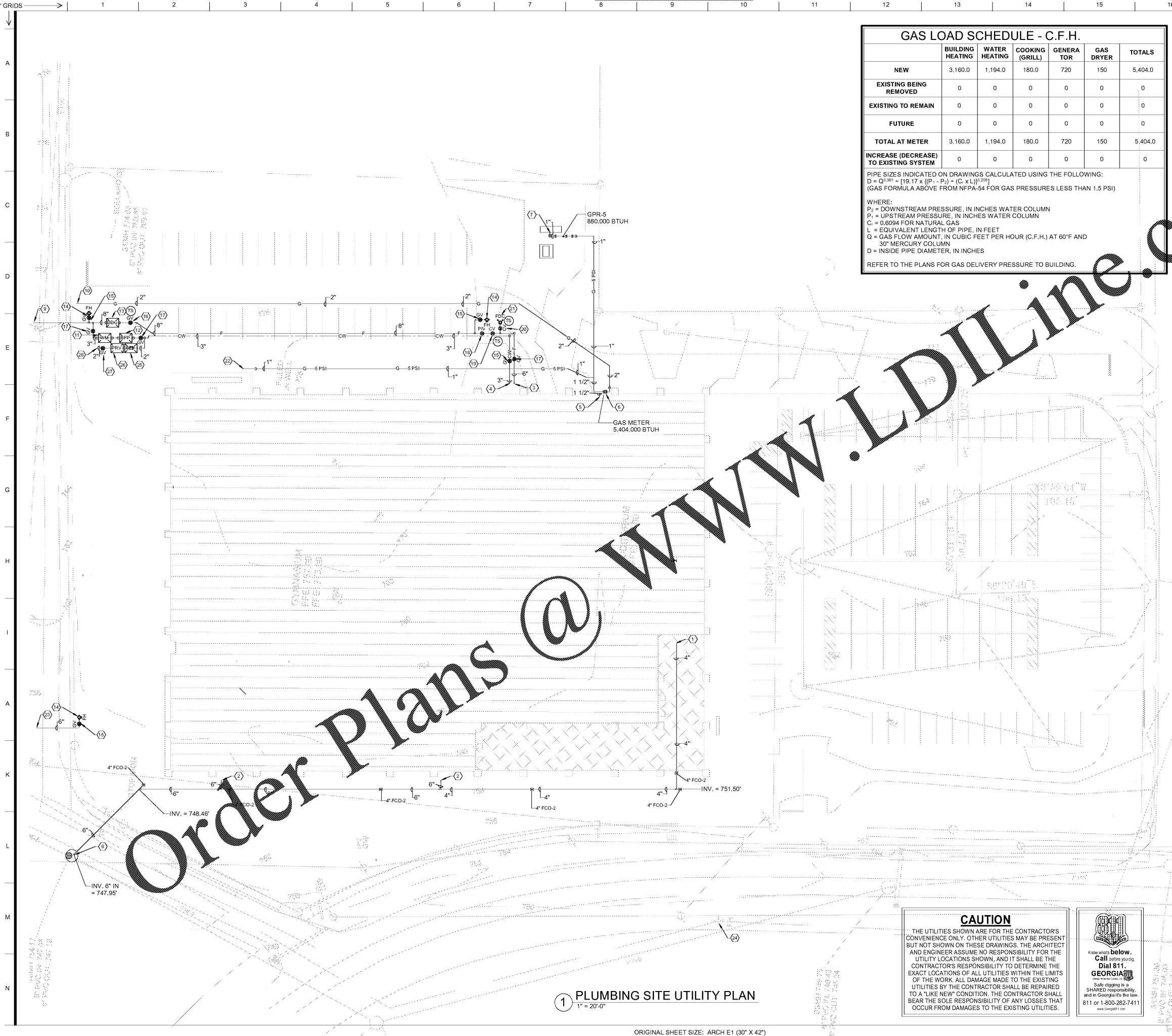
GAS LOAD SCHEDULE - C.F.H.

	BUILDING HEATING	WATER HEATING	COOKING (GRILL)	GENERATOR	GAS DRYER	TOTALS
NEW	3,160.0	1,194.0	180.0	720	150	5,404.0
EXISTING BEING REMOVED	0	0	0	0	0	0
EXISTING TO REMAIN	0	0	0	0	0	0
FUTURE	0	0	0	0	0	0
TOTAL AT METER	3,160.0	1,194.0	180.0	720	150	5,404.0
INCREASE (DECREASE) TO EXISTING SYSTEM	0	0	0	0	0	0

PIPE SIZES INDICATED ON DRAWINGS CALCULATED USING THE FOLLOWING:
 $D = Q^{0.381} \times [19.17 \times (P_1 - P_2) + (C \times L)^{0.25}]^{0.25}$
 (GAS FORMULA ABOVE FROM NFPA-54 FOR GAS PRESSURES LESS THAN 1.5 PSI)
 WHERE:
 P₁ = DOWNSTREAM PRESSURE, IN INCHES WATER COLUMN
 P₂ = UPSTREAM PRESSURE, IN INCHES WATER COLUMN
 C = 0.6094 FOR NATURAL GAS
 L = EQUIVALENT LENGTH OF PIPE, IN FEET
 Q = GAS FLOW AMOUNT, IN CUBIC FEET PER HOUR (C.F.H.) AT 60°F AND 30" MERCURY COLUMN
 D = INSIDE PIPE DIAMETER, IN INCHES
 REFER TO THE PLANS FOR GAS DELIVERY PRESSURE TO BUILDING.

SPECIFIC PLUMBING PLAN NOTES ...

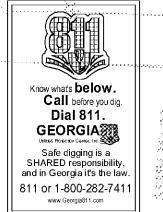
- 1 4" SANITARY SEWER LINE - RE: 1/P103 FOR CONTINUATION.
- 2 6" SANITARY SEWER LINE - RE: 1/P103 FOR CONTINUATION.
- 3 6" FIRE LINE TO SPRINKLER RISERS - RE: DWG. 1/P104 FOR CONTINUATION.
- 4 3" DOMESTIC WATER LINE - RE: DWG. 1/P104 FOR CONTINUATION.
- 5 2" MED. PRESSURE (5PSI) GAS LINE-RE: 1/P105 FOR CONTINUATION.
- 6 PROPOSED LOCATION OF GAS METER ASSEMBLY - COORDINATE WITH LOCAL GAS COMPANY. ENTIRE METER ASSEMBLY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL GAS COMPANY. METER SHALL SUPPLY 5 PSI GAS PRESSURE TO BUILDING GAS PIPING SYSTEM. PRESSURE SHALL BE REDUCED TO 7" W.C. BY GAS PRESSURE REGULATORS PRIOR TO ENTERING THE BUILDING AND CONNECTION TO ANY PIECE OF EQUIPMENT. RE: DETAIL 1/U503. ESTIMATED LOADS AS FOLLOWS:
 BUILDING HEATING LOADS: 3,160,000 BTUH
 DOMESTIC WATER HEATING LOADS: 1,194,000 BTUH
 GAS GENERATOR LOADS: 720,000 BTUH
 COOKING (GRILLS) 180,000 BTUH
 DRYER 150,000 BTUH
 TOTAL ESTIMATED LOADS: 5,254,000 BTUH
- 7 CONNECT NEW 2" W.P. (7" WC) GAS LINE TO GAS GENERATOR - RE: ELECTRICAL DRAWINGS.
- 8 CONNECT NEW 2" SAN. LINE TO EXISTING SANITARY MANHOLE - FIELD VERIFY EXACT LOCATION. (6" IN) = 747.95'
- 9 CONNECT NEW 8" WATER LINE TO EXISTING WATER MAIN. FIELD DETERMINE EXACT SIZE AND LOCATION AND SIZE OF EXISTING. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. RE: DETAIL 4/U501.
- 10 CONNECT NEW 2" GAS LINE TO EXISTING GAS MAIN - FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING GAS MAIN.
- 11 3" DOMESTIC WATER METER ASSEMBLY - RE: DETAIL ON DWG. U502. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. EXTEND 4" DRAIN FROM METER VAULT TO NEAREST STORM DRAINAGE DITCH - PROVIDE WITH J.R. SMITH #7070 TERMINAL VALVE OR EQUAL BY WATTS, ZURN, JOSAM, MIFAB, OR WADE.
- 12 3" DOMESTIC WATER BACKFLOW PREVENTER - RE: DETAIL ON DWG. U502. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. EXTEND 4" DRAIN FROM METER VAULT TO NEAREST STORM DRAINAGE DITCH - PROVIDE WITH J.R. SMITH #7070 TERMINAL VALVE OR EQUAL BY WATTS, ZURN, JOSAM, MIFAB, OR WADE.
- 13 8" DOUBLE DETECTOR CHECK VALVE ASSEMBLY - RE: DETAIL ON DWG. U502. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. EXTEND 8" DRAIN FROM METER VAULT TO NEAREST STORM DRAINAGE DITCH - PROVIDE WITH J.R. SMITH #7070 TERMINAL VALVE OR EQUAL BY WATTS, ZURN, JOSAM, MIFAB, OR WADE.
- 14 FIRE HYDRANT ASSEMBLY - RE: DETAILS ON DWG. U502. PROVIDE ALL ITEMS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- 15 6" GATE VALVE IN CAST IRON VALVE BOX - RE: DETAIL ON DWG. U502.
- 16 8" GATE VALVE IN CAST IRON VALVE BOX - RE: DETAIL ON DWG. U502.
- 17 3" GATE VALVE IN CAST IRON VALVE BOX - RE: DETAIL ON DWG. U502.
- 18 6" POST INDICATOR VALVE WITH TAMPER SWITCH - RE: SPEC'S. - INTERLOCK TAMPER SWITCH WITH BUILDING FIRE ALARM SYSTEM (TROUBLE SIGNAL ONLY).
- 19 6" LISTED SWING CHECK VALVE IN CAST IRON VALVE BOX - RE: DETAILS ON DWG. UP2 FOR SIMILAR INSTALLATION.
- 20 4" U.L. LISTED SWING CHECK VALVE IN CAST IRON VALVE BOX - RE: DETAILS ON DWG. UP2 FOR SIMILAR INSTALLATION.
- 21 2 1/2" X 2 1/2" X 4" FIRE DEPARTMENT SIAMESE CONNECTION WITH CAPS AND CHAINS. PROVIDE ALL ITEMS NECESSARY TO PREVENT FREEZING - RE: DETAIL ON DWG. ON DWG. U502.
- 22 1" MED. PRESSURE (5PSI) GAS LINE TO EXTERIOR PREP AND COOKING AREA - RE: 1/P102 FOR CONTINUATION.
- 23 CONNECT NEW 6" FIRE LINE TO EXISTING WATER MAIN. FIELD DETERMINE EXACT LOCATION AND SIZE OF EXISTING. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. RE: DETAIL 4/U501.
- 24 EXISTING FIRE HYDRANT ASSEMBLY - FIELD VERIFY EXACT LOCATION.
- 25 2" DOMESTIC WATER BACKFLOW PREVENTER (FOR IRRIGATION LINE) - RE: DETAIL ON DWG. U502. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION. EXTEND 4" DRAIN FROM METER VAULT TO NEAREST STORM DRAINAGE DITCH - PROVIDE WITH J.R. SMITH #7070 TERMINAL VALVE OR EQUAL BY WATTS, ZURN, JOSAM, MIFAB, OR WADE.
- 26 2" PRESSURE REDUCING VALVE (FOR IRRIGATION LINE) - RE: DETAIL ON DWG. U502. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION.
- 27 2" GATE VALVE IN CAST IRON VALVE BOX - RE: DETAIL ON DWG. U502.
- 28 CAP 2" IRRIGATION LINE. FOR FUTURE CONNECTION.



Order Plans @

1 PLUMBING SITE UTILITY PLAN
 1" = 20'-0"

CAUTION
 THE UTILITIES SHOWN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. OTHER UTILITIES MAY BE PRESENT BUT NOT SHOWN ON THESE DRAWINGS. THE ARCHITECT AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN, AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED TO A "LIKE NEW" CONDITION. THE CONTRACTOR SHALL BEAR THE SOLE RESPONSIBILITY OF ANY LOSSES THAT OCCUR FROM DAMAGES TO THE EXISTING UTILITIES.



SA&E PROJECT NUMBER	01-615-056
BID PACKAGE	BP-1
ISSUED FOR CONSTRUCTION	10/15/2019
Southern AE	REVISIONS
7951 Triton Circle Austell, Ga 30168 (770) 519-7777	R # Doc # Date
architects & engineers	

FACILITY CODE NUMBER: 674-0110
GYMNASIUM/AUDITORIUM FOR:
HEARD COUNTY SCHOOLS
 545 MAIN STREET, FRANKLIN, GA 30217
HEARD COUNTY SCHOOL SYSTEM
 FRANKLIN, GEORGIA

PLUMBING SITE UTILITY PLAN

DRAWING NUMBER **U101**