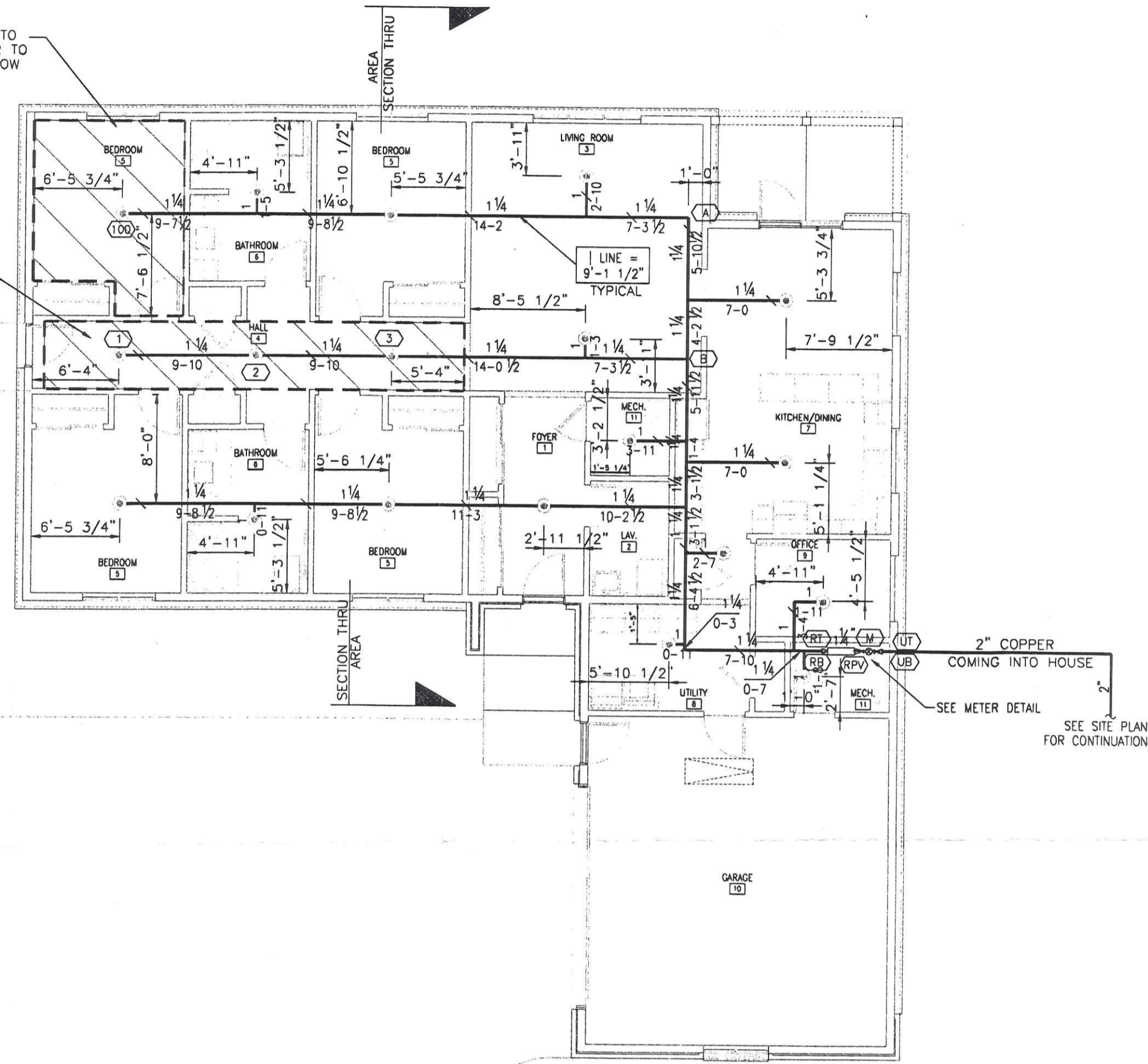
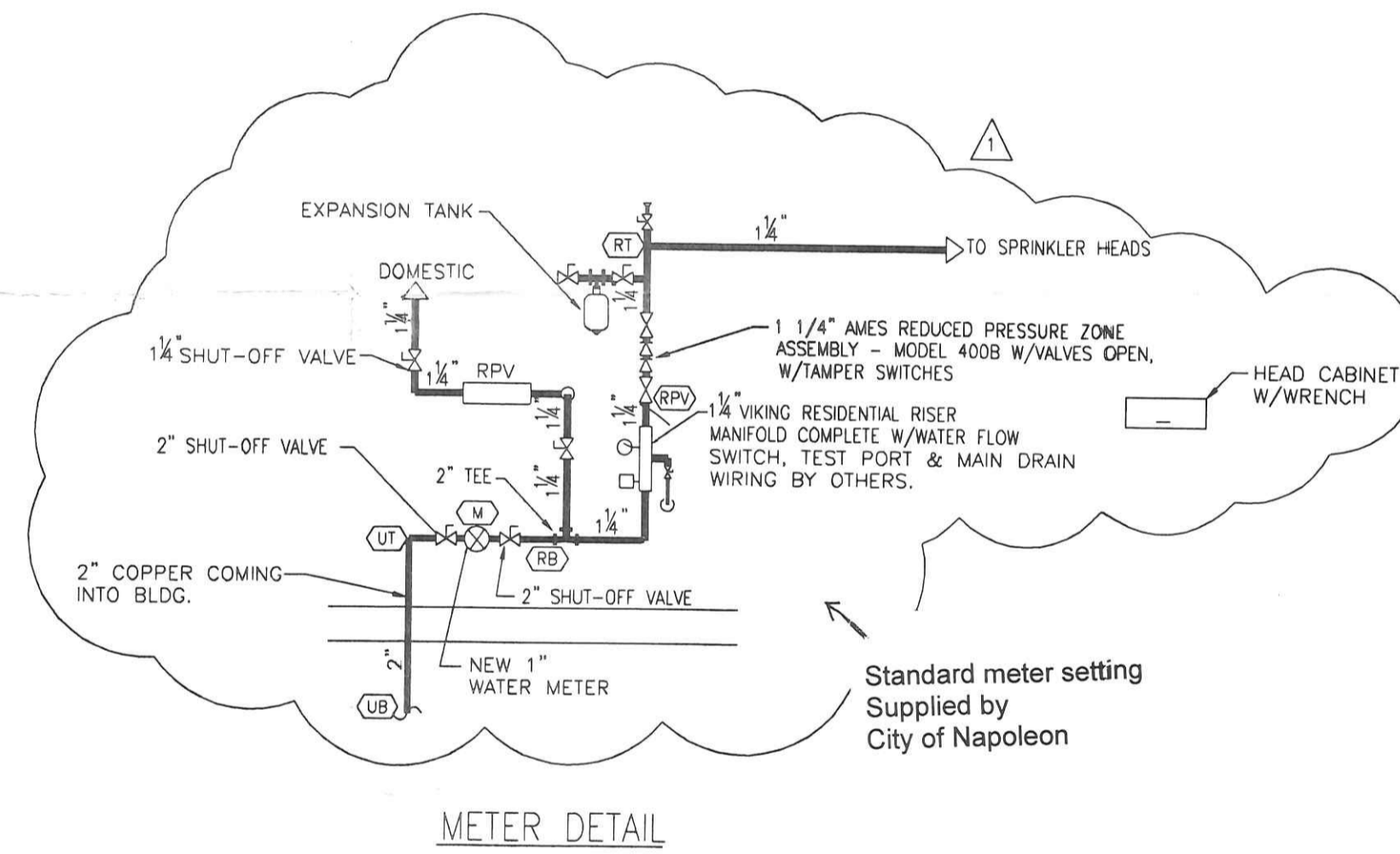
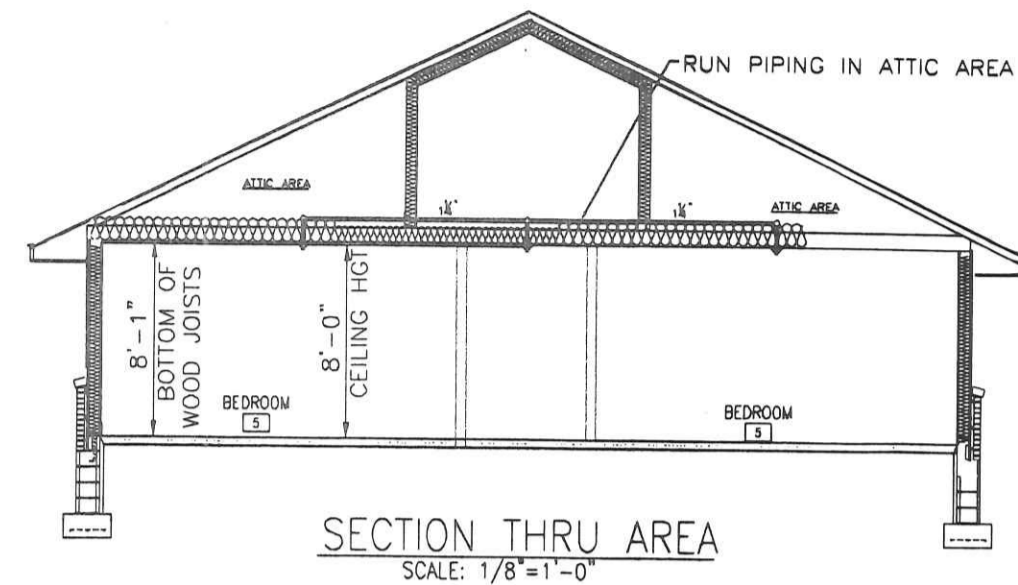


AREA #1
 OUTLINE AREA IS HYDRAULICALLY CALCULATED TO PRODUCE A MIN. DISCHARGE OF .05 GPM/FT² TO THE DESIGN SPRINKLER HEAD, WITH A MIN. FLOW OF 18 GPM. (147 SQ. FT.)

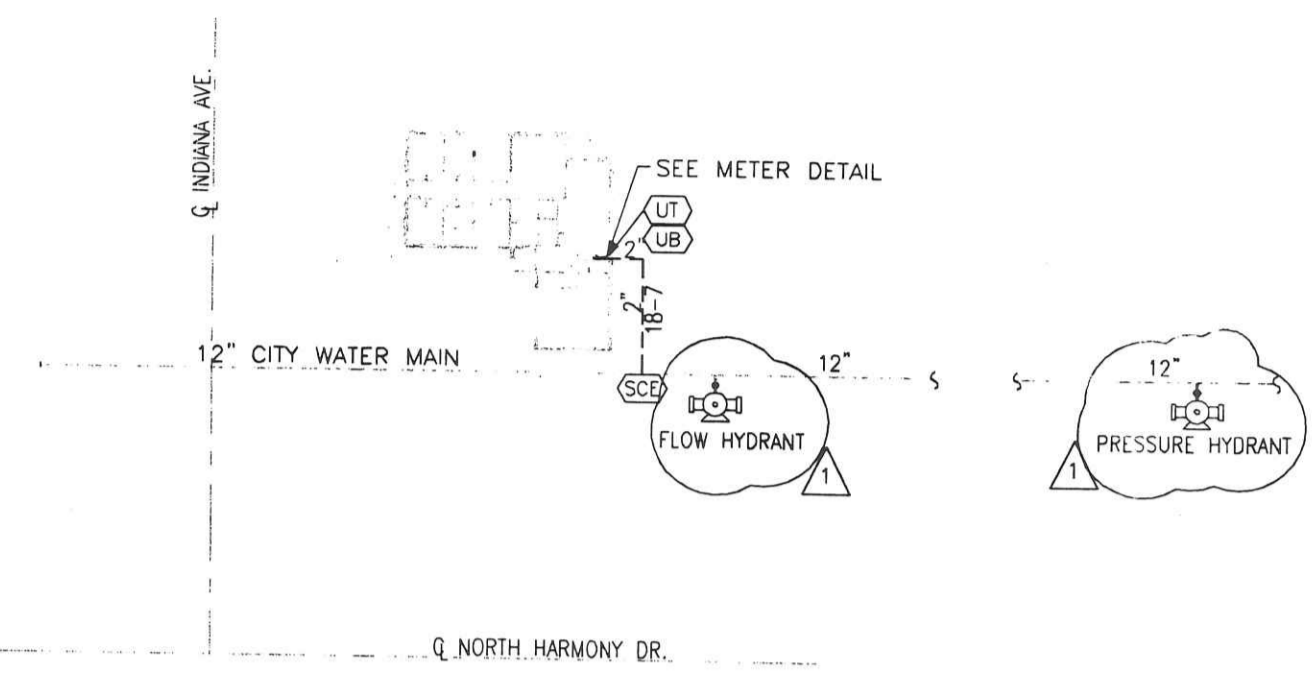
AREA #2
 OUTLINE AREA IS HYDRAULICALLY CALCULATED TO PRODUCE A MIN. DISCHARGE OF .05 GPM/FT² TO THE DESIGN SPRINKLER HEADS, WITH A MIN. FLOW OF 13 GPM PER DESIGN SPRINKLER HEAD. (159 SQ. FT.)



FIRST FLOOR PLAN VIEW
 SCALE: 1/8"=1'-0"

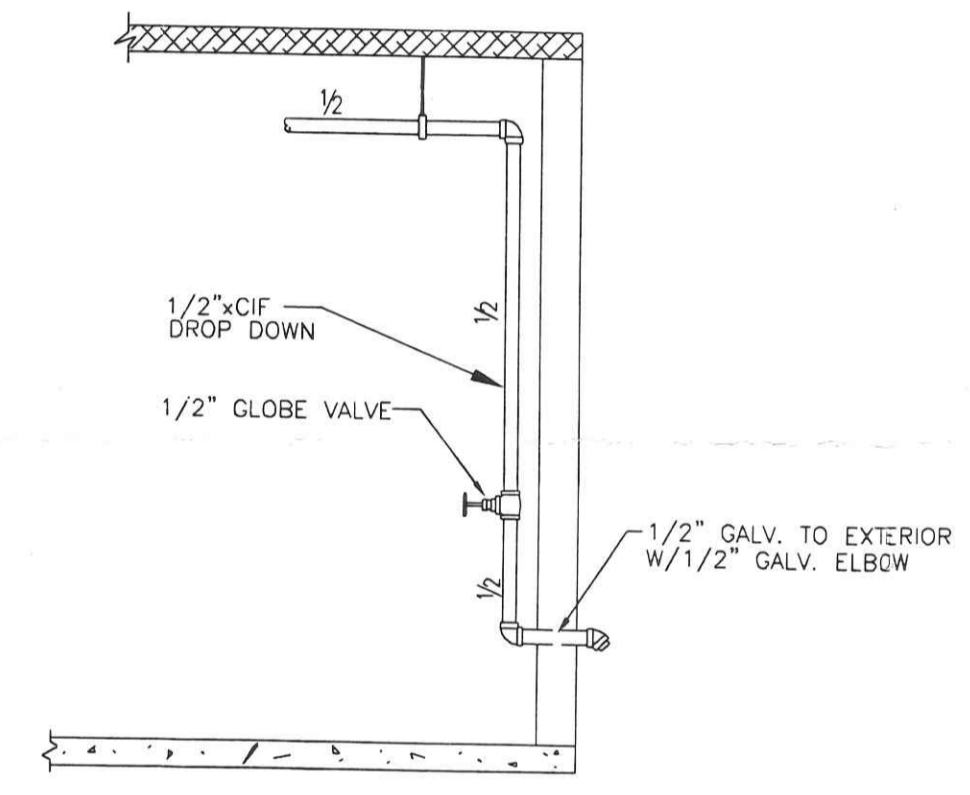


METER DETAIL



SITE PLAN
 SCALE: 1"=30'-0"

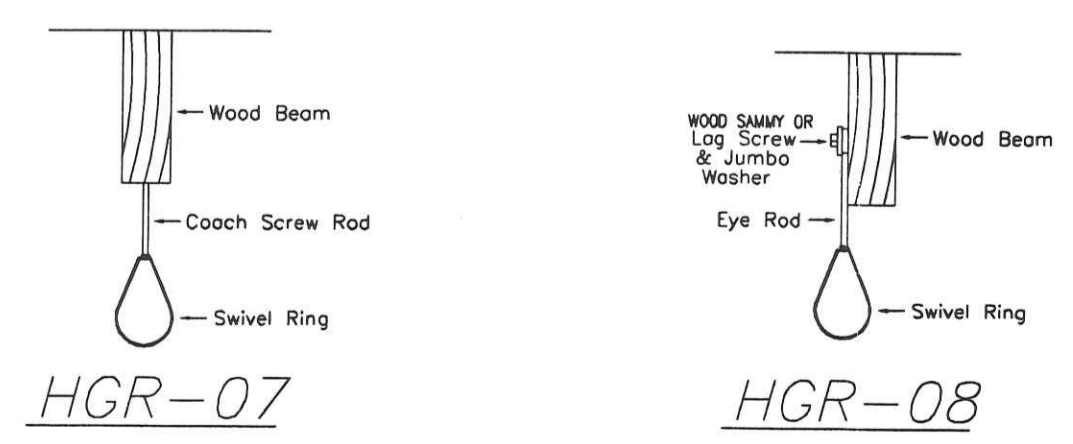
WATER FLOW DATA
 STATIC: 60 PSI
 RESIDUAL: 40 PSI
 FLOW: 1040 GPM
 COEFFICIENT=9
 DATE OF TEST: 12/15/2009
 TIME OF TEST: 9:00 AM
 TEST BY: MARINE FIRE SALES & SERVICE
 RAY TRANE



WET SYSTEM TEST CONNECTION

GENERAL NOTES:

- SPRINKLER SYSTEM IS DESIGNED PER NFPA-D & OHIO BUILDING CODE. FOR AN ANTI-FREEZE SYSTEM (APPROX. 10 GALLONS CAPACITY OF SYSTEM).
 THE SYSTEM IS HYDRAULICALLY DESIGNED TO PROVIDE AT LEAST THE FLOW REQUIRED TO PRODUCE A MIN. DISCHARGE DENSITY OF .05 GPM/FT² TO THE DESIGN SPRINKLERS, WITH THE SYSTEM DISCHARGING NOT LESS THAN 13 GPM PER SPRINKLER SIMULTANEOUSLY TO ALL OF THE DESIGN SPRINKLERS.
 (PURE GLYCERINE ANTI-FREEZE IS USED IN THIS SYSTEM.)
 - ALL PIPING TO BE BLAZEMASTER CPVC PIPING W/BLAZEMASTER CPVC FITTINGS.
 - ALL PIPE CUTS ARE SHOWN TO NEAREST 1/2" INCREMENT (FABRICATION SHOP TOLERANCES).
 - ✓ INDICATES TYPICAL HANGER PLACEMENT, HANGER ROD PER NFPA #13. 3/8" ROD ON 1" THRU 4".
 - ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH NFPA STANDARDS.
 - ALL NEW OVERHEAD PIPING TO BE HYDROSTATICALLY TESTED FOR LEAKAGE AT A NORMAL SYSTEM OPERATING PRESSURE.
 - ALL MATERIALS TO BE UL LISTED AND FACTORY MUTUAL APPROVED FOR FIRE PROTECTION SERVICE.
 - (T) INDICATES HYDRAULIC REFERENCE POINT USED IN HYDRAULIC CALCULATIONS.
- 12/15/2009 - REVISED DWG. TO SHOW EXPANSION TANK DOWNSTREAM FROM RPV. TYPE OF ANTI-FREEZE USED & NEW FLOW TEST INFORMATION.



Plans Prepared/Reviewed By
 Diana M. Schaefer, CEI
 Automatic Sprinkler System Layout
 Technician NCEET # 105828
 Ohio Designer #A323
Diana M. Schaefer

SPRINKLER SCHEDULE & LEGEND					HYDRAULIC DESIGN DATA	
SYMBOL	SPRINKLER DESCRIPTION	ORIFICE	TEMP.	FINISH	CANOPY	QUANTITY
*	VIKING RES. SSP-OR	1/2"	155°	CHR.	S.R.	19
	MODEL M-4-SIN#VK430	K=4.3				
6 HEAD CAB'T & WRENCH(ES) PROVIDED TOTAL COUNT THIS SHEET = 19						

Hazard Class.	13-D
System Area	AREA #1
System Type	13-D - WET
Water Supply - Static	60 PSI
- Resid.	40 PSI
- Flow	1040 GPM
Firepump	GPM@ PSI
Calculated Density	.05 GPM/ft ²
Remote Area Size	147
Coverage Per Head	144
Demand	118.0 GPM@ 37.2 PSI
Denotes Reference Points	

NORTH ↑

FULLFILLING HOUSING INC.
 890 NO. HARMONY DR. NAPOLEON, OH.

FIRE PROECTION

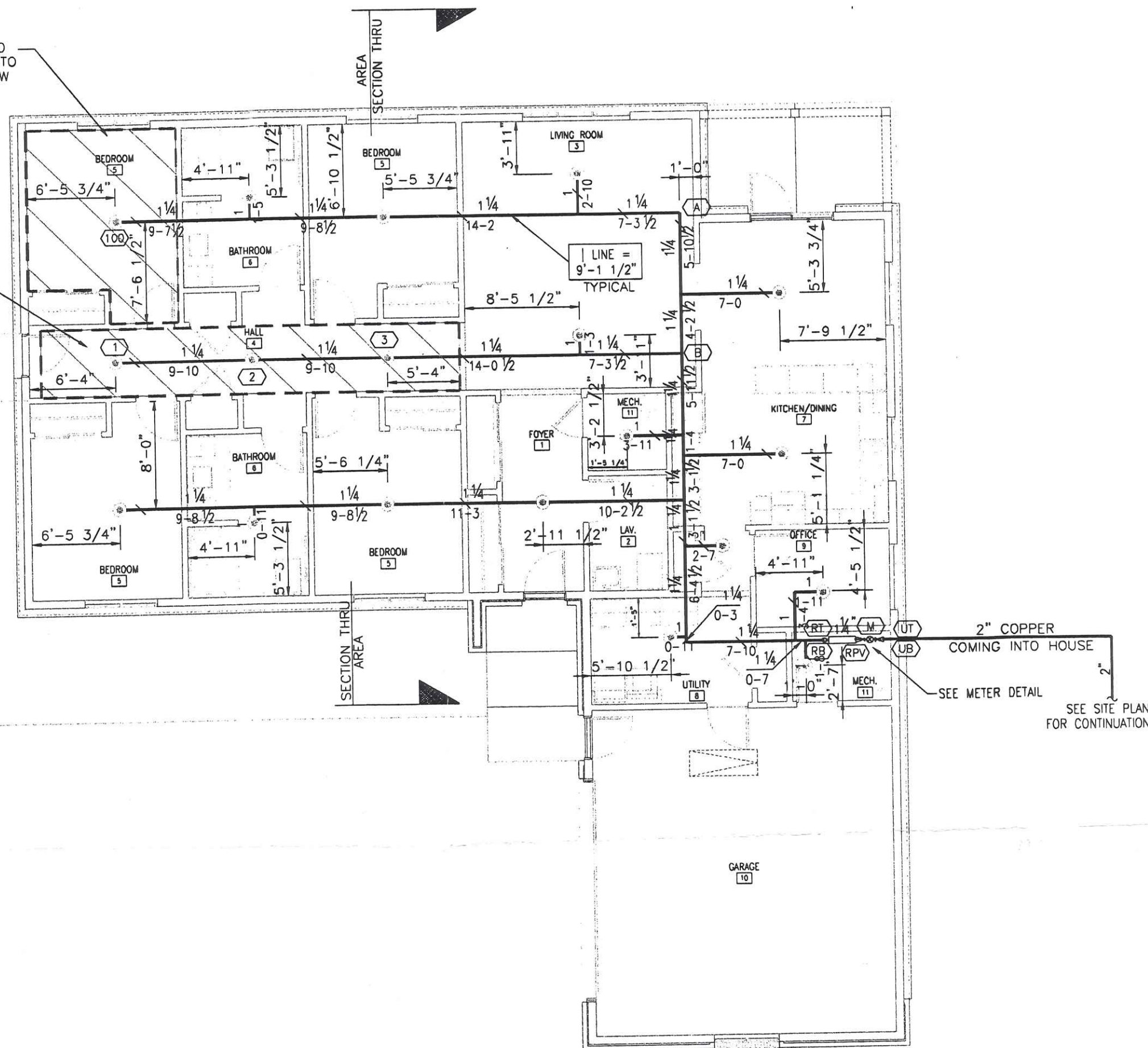
MARINE FIRE SALES & SERVICE
 2236 SMEAD TOLEDO, OHIO 43612
 255-2100

PERMIT NO. _____
 CONTRACT NO. _____
 APPROVAL AHJ
 C.O.T. DMS
 SCALE 1/8"=1'-0"
 DATE 5/27/09
 REVISED 12/15/09
 REVISED FP-1

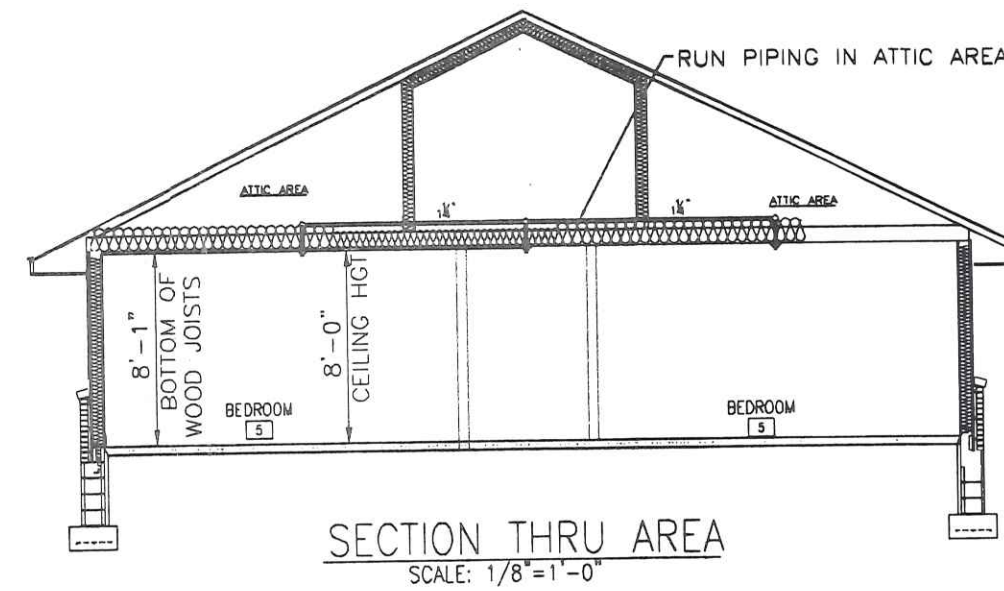
890 N HARMONY

AREA #1
OUTLINE AREA IS HYDRAULICALLY CALCULATED TO PRODUCE A MIN. DISCHARGE OF .05 GPM/FT.2 TO THE DESIGN SPRINKLER HEAD, WITH A MIN. FLOW OF 16 GPM. (147 SQ. FT.)

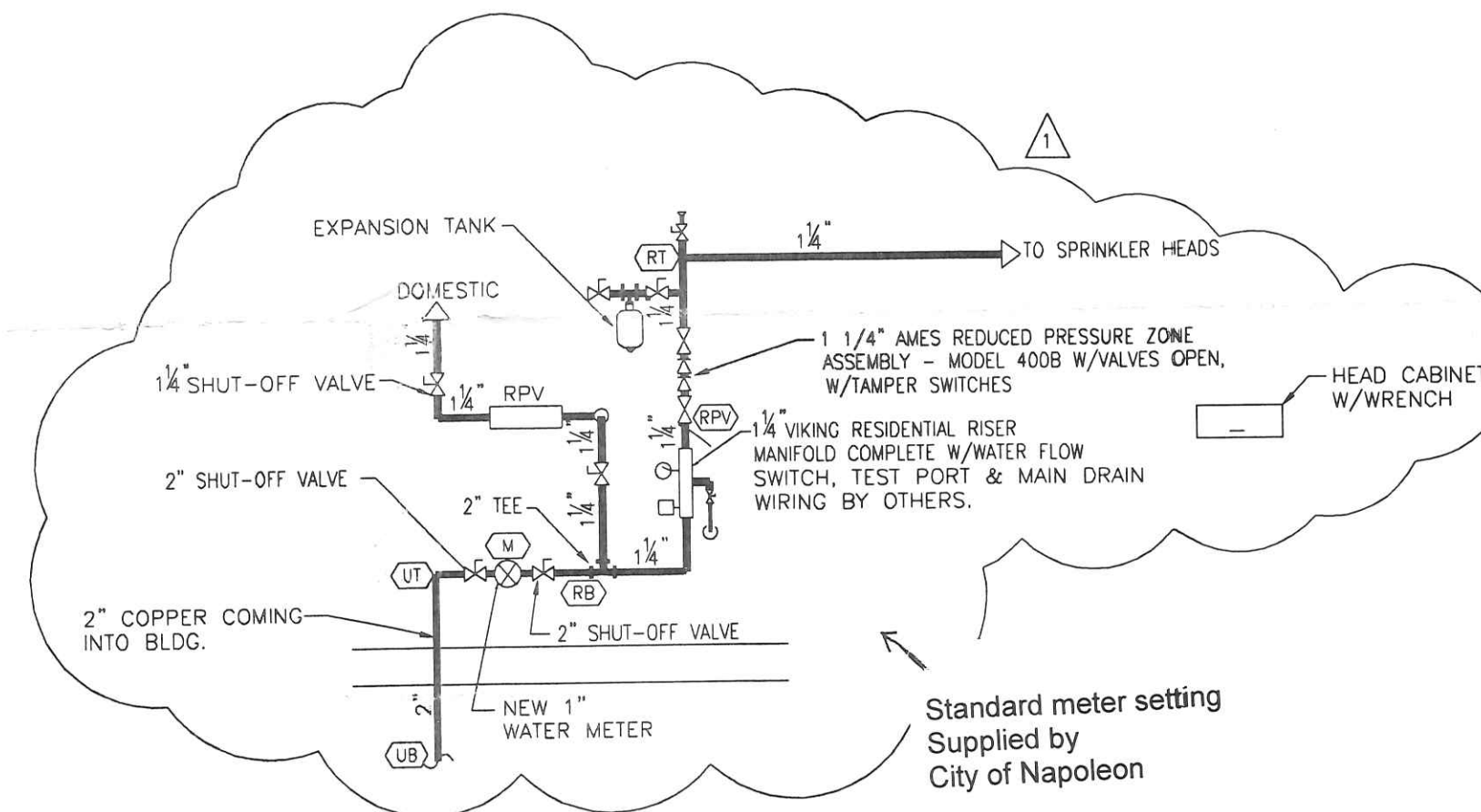
AREA #2
OUTLINE AREA IS HYDRAULICALLY CALCULATED TO PRODUCE A MIN. DISCHARGE OF .05 GPM/FT.2 TO THE DESIGN SPRINKLER HEAD, WITH A MIN. FLOW OF 13 GPM PER DESIGN SPRINKLER HEAD. (159 SQ. FT.)



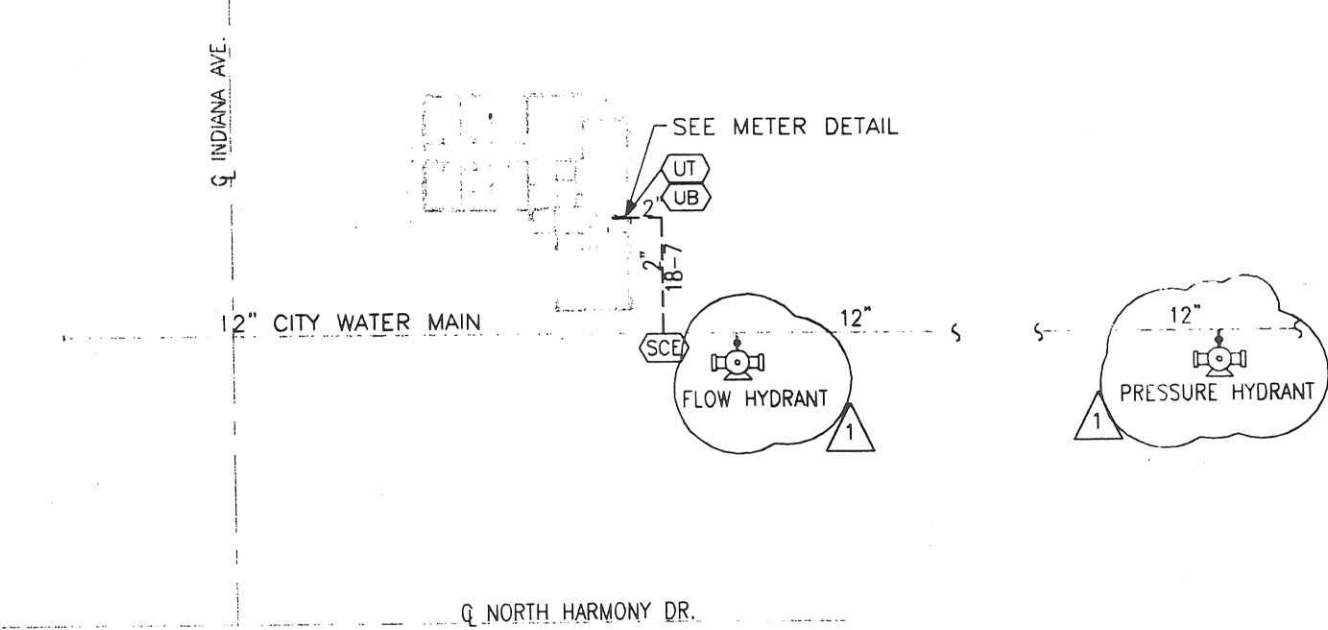
FIRST FLOOR PLAN VIEW
SCALE: 1/8"=1'-0"



SECTION THRU AREA
SCALE: 1/8"=1'-0"



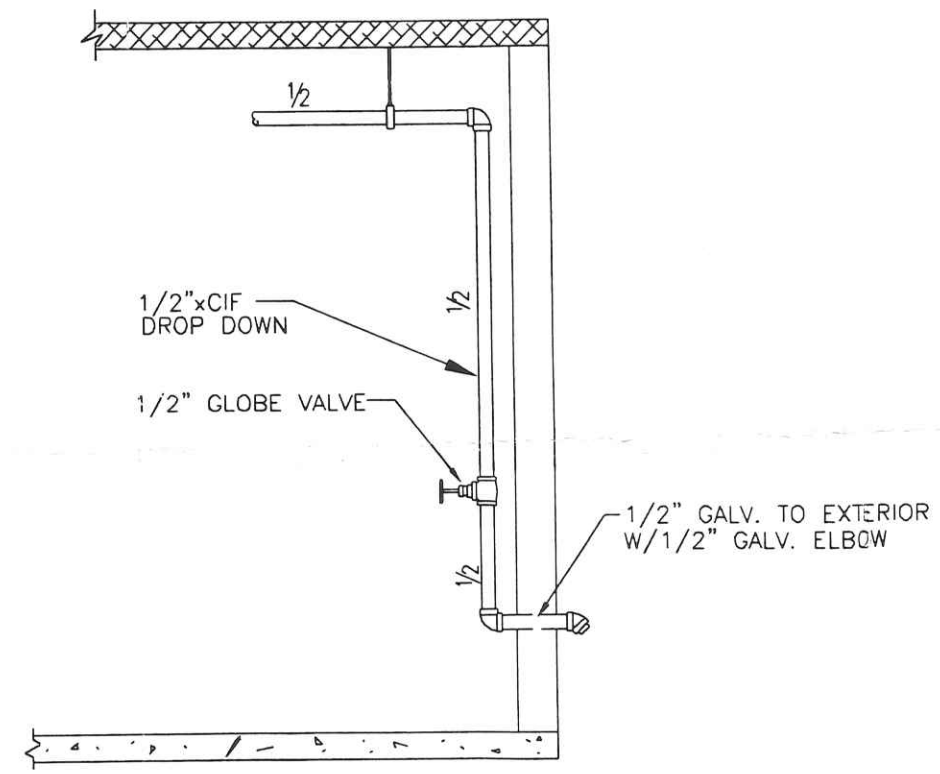
METER DETAIL



SITE PLAN
SCALE: 1"=30'-0"

WATER FLOW DATA

STATIC: 60 PSI
RESIDUAL: 40 PSI
FLOW: 1040 GPM
COEFFICIENT=.9
DATE OF TEST: 12/15/2009
TIME OF TEST: 8:00 AM
TEST BY: MARINE FIRE SALES & SERVICE
RAY TRANE

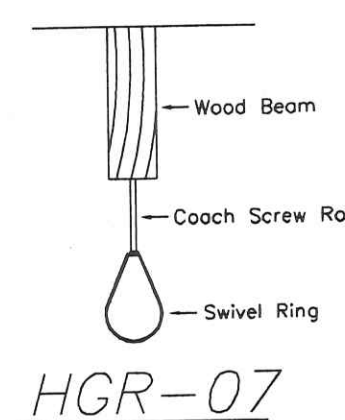


WET SYSTEM TEST CONNECTION

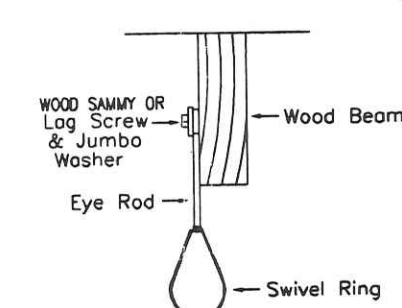
GENERAL NOTES:

- SPRINKLER SYSTEM IS DESIGNED PER NFPA-D & OHIO BUILDING CODE. FOR AN ANTI-FREEZE SYSTEM (APPROX. 10 GALLONS CAPACITY OF SYSTEM). THE SYSTEM IS HYDRAULICALLY DESIGNED TO PROVIDE AT LEAST THE FLOW REQUIRED TO PRODUCE A MIN. DISCHARGE DENSITY OF .05 GPM/FT.2 TO THE DESIGN SPRINKLERS, WITH THE SYSTEM DISCHARGING NOT LESS THAN 13 GPM PER SPRINKLER SIMULTANEOUSLY TO ALL OF THE DESIGN SPRINKLERS.
PURE GLYCERINE ANTI-FREEZE IS USED IN THIS SYSTEM.
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- ALL PIPE CUTS ARE SHOWN TO NEAREST 1/2" INCREMENT (FABRICATION SHOP TOLERANCES).
- ✓ INDICATES TYPICAL HANGER PLACEMENT, HANGER ROD PER NFPA #13. 3/8" ROD ON 1" THRU 4".
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- ALL NEW OVERHEAD PIPING TO BE HYDROSTATICALLY TESTED FOR LEAKAGE AT A NORMAL SYSTEM OPERATING PRESSURE.
- ALL MATERIALS TO BE UL LISTED AND FACTORY MUTUAL APPROVED FOR FIRE PROTECTION SERVICE.
- Ⓜ INDICATES HYDRAULIC REFERENCE POINT USED IN HYDRAULIC CALCULATIONS.

12/15/2009 - REVISED DWG. TO SHOW EXPANSION TANK DOWNSTREAM FROM RPV. TYPE OF ANTI-FREEZE USED & NEW FLOW TEST INFORMATION.



HGR-07



HGR-08

Plans Prepared/Reviewed By
Diana M. Schaefer, CET
Automatic Sprinkler System Layout
Technician NCEIT # 105828
Ohio Designer #A323
Diana M. Schaefer

SPRINKLER SCHEDULE & LEGEND						
SYMBOL	SPRINKLER DESCRIPTION	ORIFICE	TEMP.	FINISH	CANOPY	QUANTITY
Ⓜ	VIKING RES. SSP-OR MODEL M-4-SIN#VK430	1/2"	155°	CHR.	S.R.	19
6 HEAD CABT & WRENCH(ES) PROVIDED						TOTAL COUNT THIS SHEET = 19

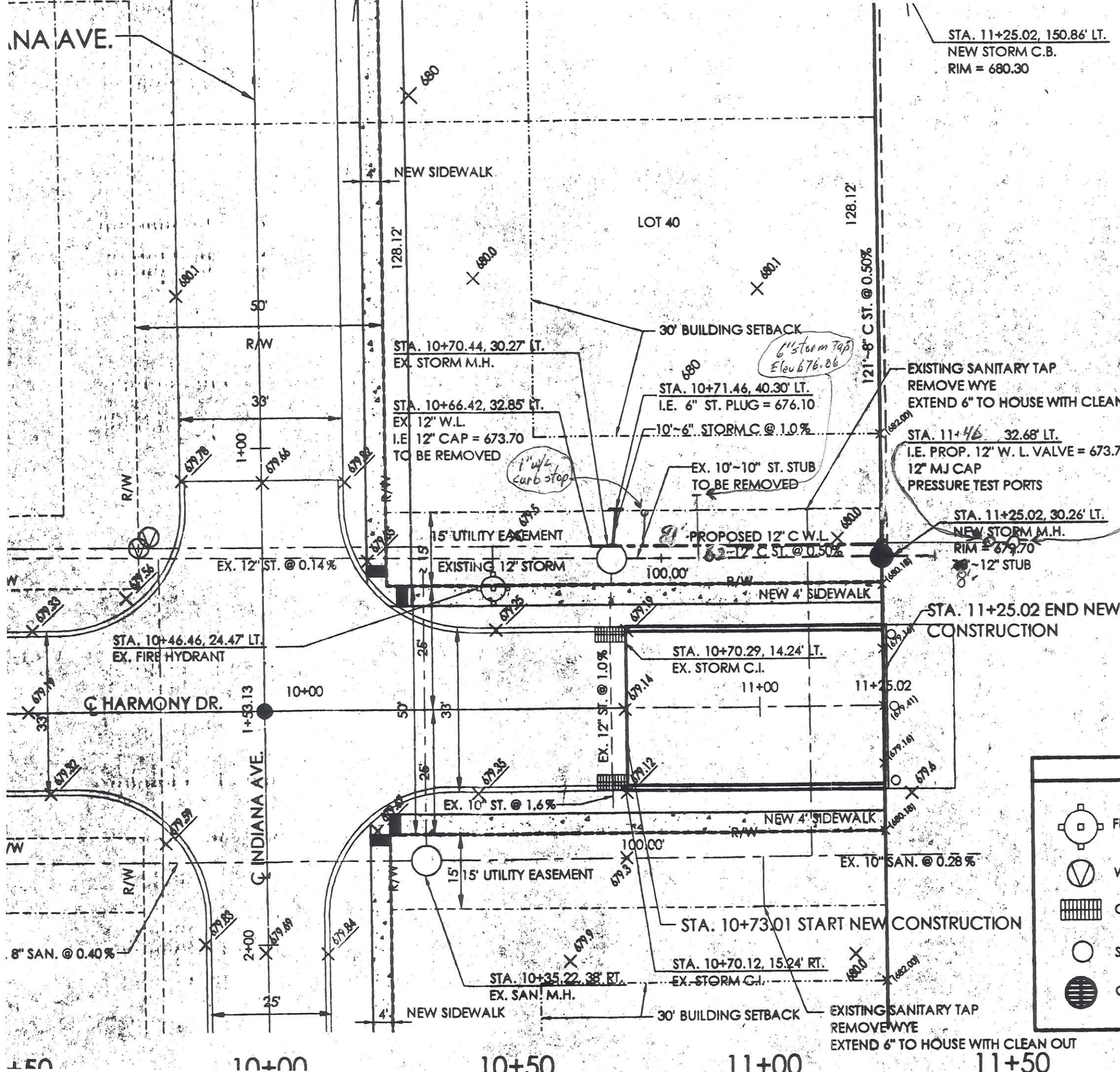
HYDRAULIC DESIGN DATA	
Hazard Class.	1.3-D
System Area	AREA #1
System Type	1.3-D -WET
Water Supply - Static	60 PSI
- Resid.	40 PSI
- Flow	1040 GPM
Firepump	GPM@ PSI
Calculated Density	.05 GPM/ft ²
Remote Area Size	147
Coverage Per Head	144
Demand	118.0 GPM@ 37.2 PSI

NORTH ↑

PERMIT NO. _____
CONTRACT NO. _____
APPROVAL AHJ _____
C.D.T. DMS _____
SCALE 1/8"=1'-0"
DATE 5/27/09
REVISED 12/15/09
FP-1

FULLFILLING HOUSING INC.
890 NO. HARMONY DR. NAPOLEON, OH.
FIRE PROECTION

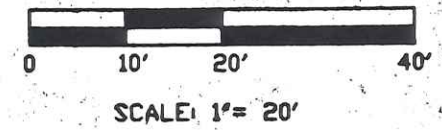
MARINE FIRE SALES & SERVICE
2236 SMEAD TOLEDO, OHIO 43612
255-2100



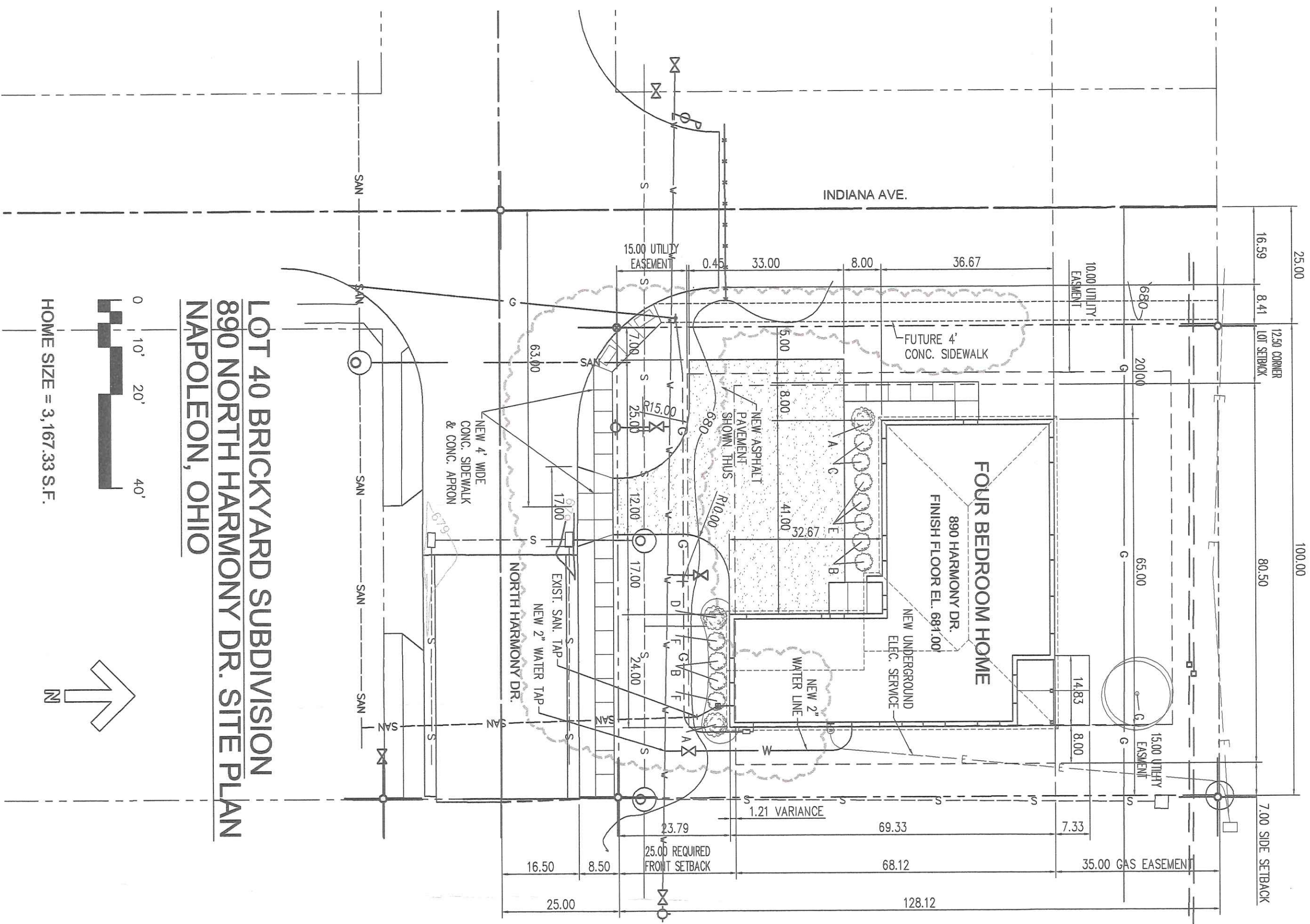
STA. 11+25.02, 150.86' LT.
NEW STORM C.B.
RIM = 680.30

NOTE:
CONTRACTOR TO VERIFY EXISTING UTILITY SIZE AND LOCATION BEFORE CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

NOTE:
CONTRACTOR TO SEE WATER AND SEWER RULES AND REGULATIONS BEFORE INSTALLING SERVICE CONNECTIONS.



LEGEND	
	Fire Hydrant
	Water Valve
	Curb Inlet
	Storm and Sanitary Man Hole
	Catch Basin Square
	Storm Sewer
	R/W
	Sanitary Sewer
	Utility Easement
	Water Line



LOT 40 BRICKYARD SUBDIVISION
890 NORTH HARMONY DR. SITE PLAN
NAPOLEON, OHIO

