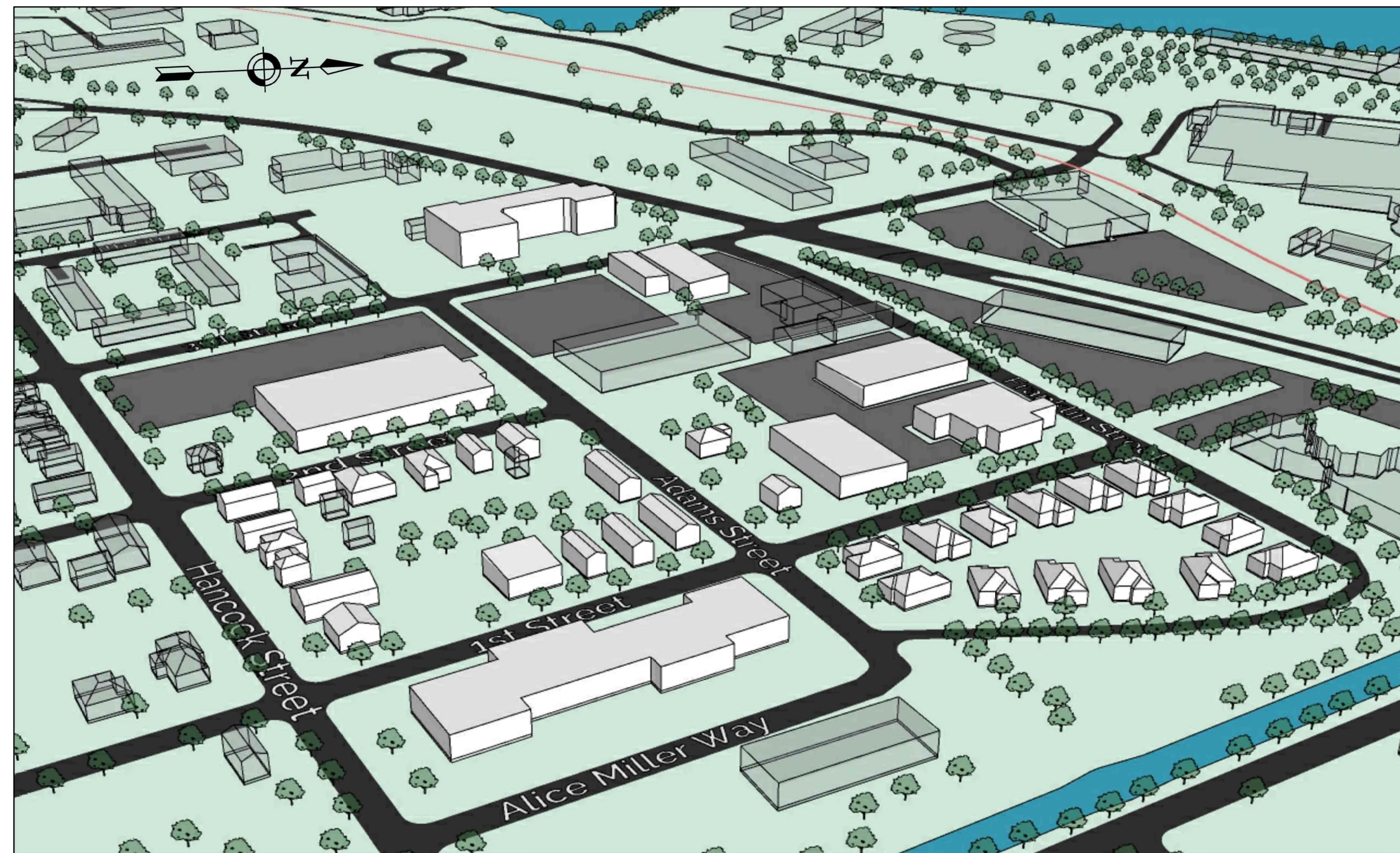


# ITHACA UTILITY THERMAL ENERGY NETWORK

ITHACA, NY 14850



DRAWING INDEX:

GENERAL

G001 COVER SHEET

CIVIL

C100 SCHEMATIC SITE PLAN  
C201 SCHEMATIC SITE PLAN  
C202 SCHEMATIC SITE PLAN  
C203 SCHEMATIC SITE PLAN

RENEWABLE ENERGY

W101 UTEN LOOP LAYOUT  
W102 WELLFIELD LAYOUT  
W501 DETAILS & SCHEDULES

NEW YORK STATE ELECTRIC & GAS

18 LINK DRIVE

BINGHAMTON, NY 13904

PROJECT NO: 2224266

DECEMBER 2023





NOT FOR CONSTRUCTION

It is a violation of New York Education Law Article 145 Sec.7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter an item in any way. If an item bearing the seal of an architect, engineer, or land surveyor is altered; the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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**NEW YORK STATE  
ELECTRIC & GAS**

18 LINK DRIVE  
BINGHAMTON, NY 14604



**ITHACA UTILITY THERMAL  
ENERGY NETWORK**  
ITHACA, NY

NO.	DATE	DESCRIPTION

PROJECT NUMBER: 2224266

DRAWN BY:

REVIEWED BY:

ISSUED FOR: REVIEW

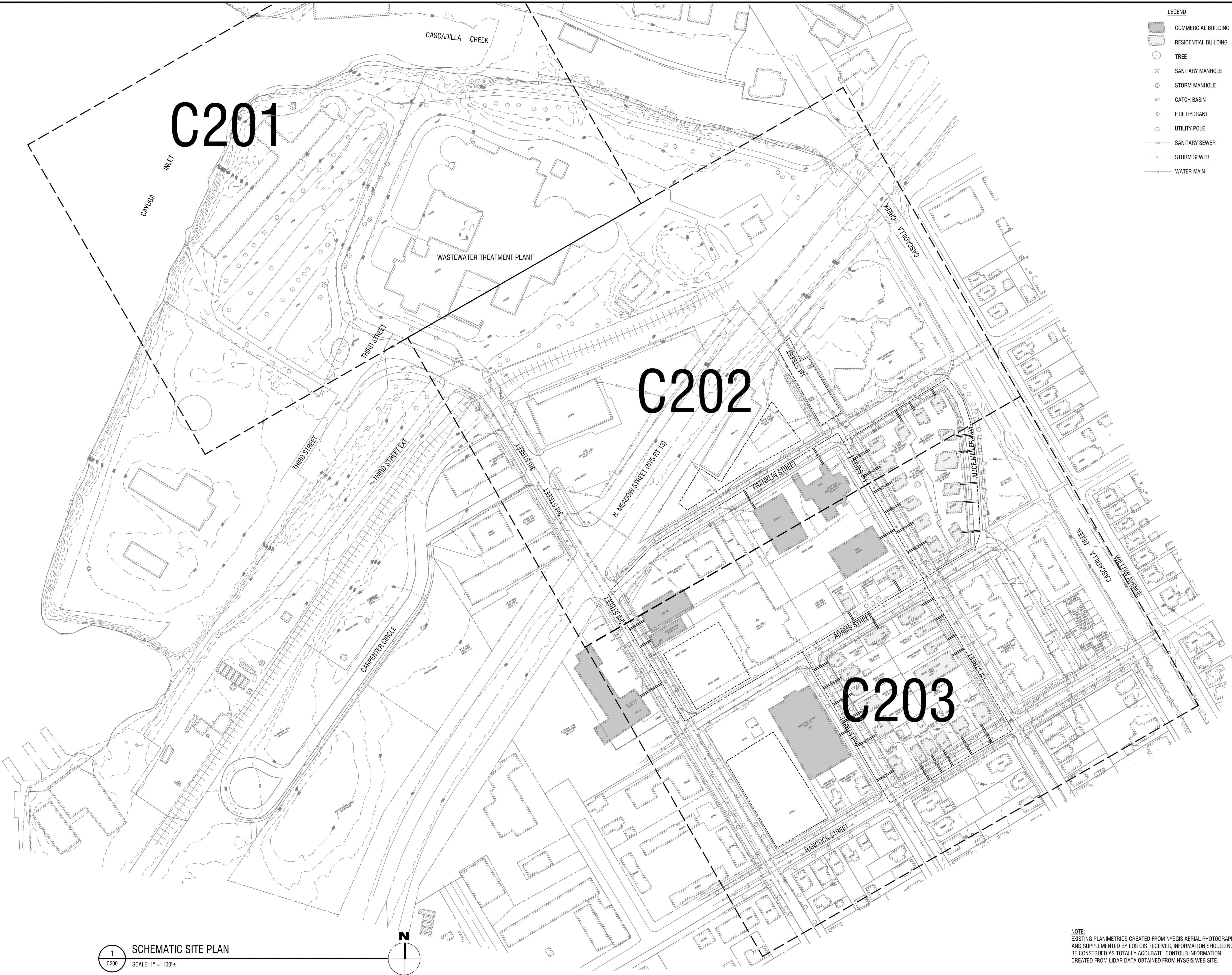
DATE: JANUARY 2022

DRAWING NAME:

**SCHEMATIC SITE PLAN**

DRAWING NUMBER:

**C200**



- LEGEND**
- COMMERCIAL BUILDING
  - ▨ RESIDENTIAL BUILDING
  - TREE
  - ⊙ SANITARY MANHOLE
  - ⊙ STORM MANHOLE
  - ▢ CATCH BASIN
  - △ FIRE HYDRANT
  - UTILITY POLE
  - SANITARY SEWER
  - STORM SEWER
  - WATER MAIN

1 SCHEMATIC SITE PLAN  
SCALE: 1" = 100'



NOTE:  
EXISTING PLANIMETRICS CREATED FROM NYSGIS AERIAL PHOTOGRAPHY  
AND SUPPLEMENTED BY EDS GIS RECEIVER. INFORMATION SHOULD NOT  
BE CONSTRUED AS TOTALLY ACCURATE. CONTOUR INFORMATION  
CREATED FROM LIDAR DATA OBTAINED FROM NYSGIS WEB SITE.

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 Site\AutoCAD\Constructs\C200\masc.dwg



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18 LINK DRIVE  
BINGHAMTON, NY 14604



**ITHACA UTILITY THERMAL  
ENERGY NETWORK**  
ITHACA, NY

NO.	DATE	DESCRIPTION

PROJECT NUMBER: 2224266

DRAWN BY:

REVIEWED BY:

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

DRAWING NAME:

**SCHEMATIC SITE PLAN**

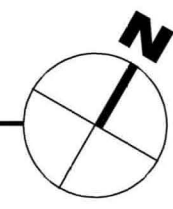
DRAWING NUMBER:

**C201**



- LEGEND**
- COMMERCIAL BUILDING
  - RESIDENTIAL BUILDING
  - TREE
  - SANITARY MANHOLE
  - STORM MANHOLE
  - CATCH BASIN
  - FIRE HYDRANT
  - UTILITY POLE
  - SANITARY SEWER
  - STORM SEWER
  - WATER MAIN
  - ATL- AMBIENT TEMPERATURE LOOP
  - SC- SERVICE CONNECTION

**1** SCHEMATIC SITE PLAN  
SCALE: 1" = 40' ±



**NOTE:**  
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18 LINK DRIVE  
BINGHAMTON, NY 14604



**ITHACA UTILITY THERMAL  
ENERGY NETWORK**  
ITHACA, NY

NO.	DATE	DESCRIPTION
Revisions		

PROJECT NUMBER: 2224266

DRAWN BY:

REVIEWED BY:

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

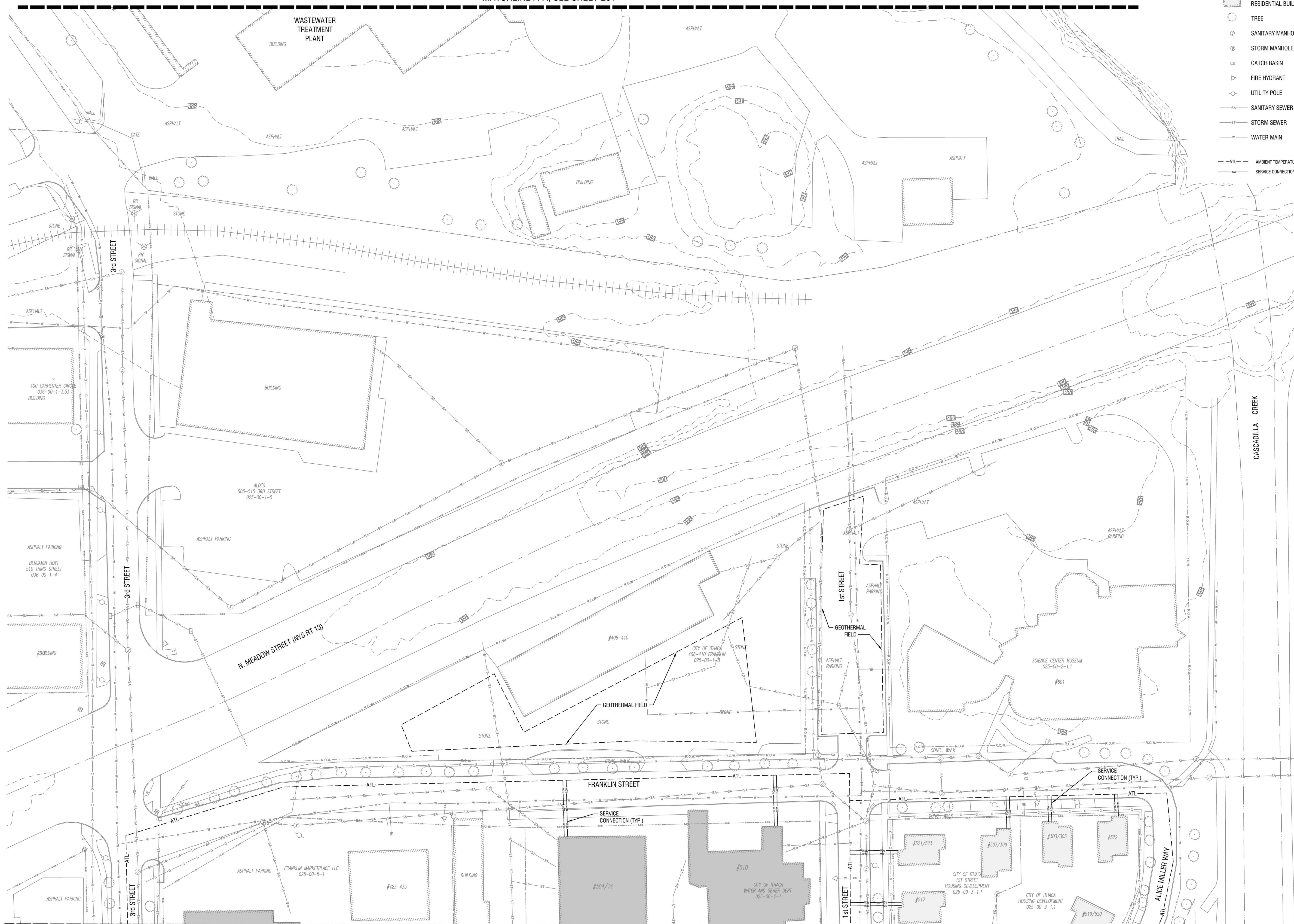
DRAWING NAME:

**SCHEMATIC SITE PLAN**

DRAWING NUMBER:

**C202**

MATCHLINE A-A, SEE SHEET 201



1 SCHEMATIC SITE PLAN  
SCALE: 1" = 40'±

MATCHLINE B-B, SEE SHEET 203

NOTE:  
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18 LINK DRIVE  
BINGHAMTON, NY 14604



**ITHACA UTILITY THERMAL  
ENERGY NETWORK**  
ITHACA, NY

NO.	DATE	DESCRIPTION

PROJECT NUMBER: 2224266

DRAWN BY:

REVIEWED BY:

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

DRAWING NAME:

**SCHEMATIC SITE PLAN**

DRAWING NUMBER:

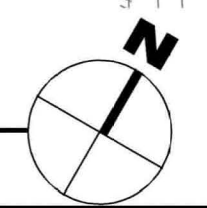
**C203**

MATCHLINE B-B, SEE SHEET 202



- LEGEND**
- COMMERCIAL BUILDING
  - RESIDENTIAL BUILDING
  - TREE
  - SANITARY MANHOLE
  - STORM MANHOLE
  - CATCH BASIN
  - FIRE HYDRANT
  - UTILITY POLE
  - SANITARY SEWER
  - STORM SEWER
  - WATER MAIN
  - ATL- AMBIENT TEMPERATURE LOOP
  - SERVICE CONNECTION

**1** SCHEMATIC SITE PLAN  
C203 SCALE: 1" = 40'



NOTE:  
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18 LINK DRIVE  
BINGHAMTON, NY 14604



**ITHACA UTILITY THERMAL  
ENERGY NETWORK**  
ITHACA, NY

NO.	DATE	DESCRIPTION
Revisions		

PROJECT NUMBER: 2224266

DRAWN BY: AAC

REVIEWED BY: AJS

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

DRAWING NAME:

**UTEN LOOP LAYOUT**

DRAWING NUMBER:

**W101**

**LEGEND:**

- MAIN LINE
- - - SERVICE CONNECTIONS
- ☐ PUMPS/ ENERGY CENTER
- - - BYPASS LINES
- ⊙ SUPPLY WELL & CONNECTIONS
- ⊙ DISCHARGE WELL & CONNECTIONS

**GENERAL NOTES:**

- A. LOOP LOCATION AND POINTS OF CONNECTION ARE SUBJECT TO CHANGE BASED ON FURTHER INVESTIGATION OF EXISTING CONDITIONS AND CO-LOCATION OF EXISTING UNDERGROUND INFRASTRUCTURE.
- B. LOCATION OF PUMPS ARE SUBJECT TO CHANGE. PUMPS NOT DRAWN TO SCALE.
- C. REFER TO W502 FOR BUILDING CONNECTION DETAILS.



1 PRELIMINARY UTEN LOOP LAYOUT  
W101 SCALE: 1" = 60'



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**ITHACA UTILITY THERMAL  
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ITHACA, NY

NO.	DATE	DESCRIPTION
Revisions		

PROJECT NUMBER: 2224266

DRAWN BY: AAC

REVIEWED BY: AJS

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

DRAWING NAME:

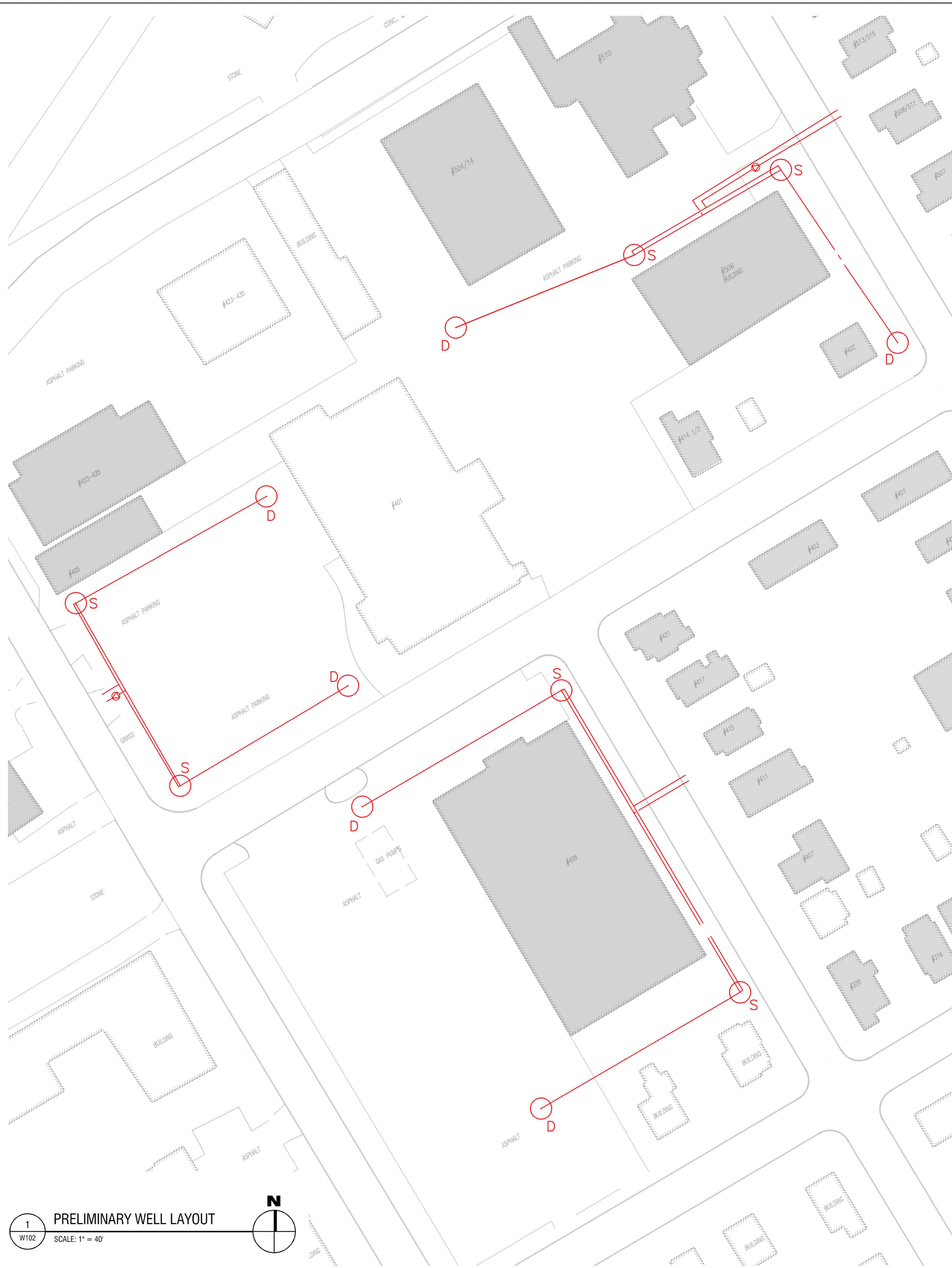
**WELL LAYOUT**

DRAWING NUMBER:

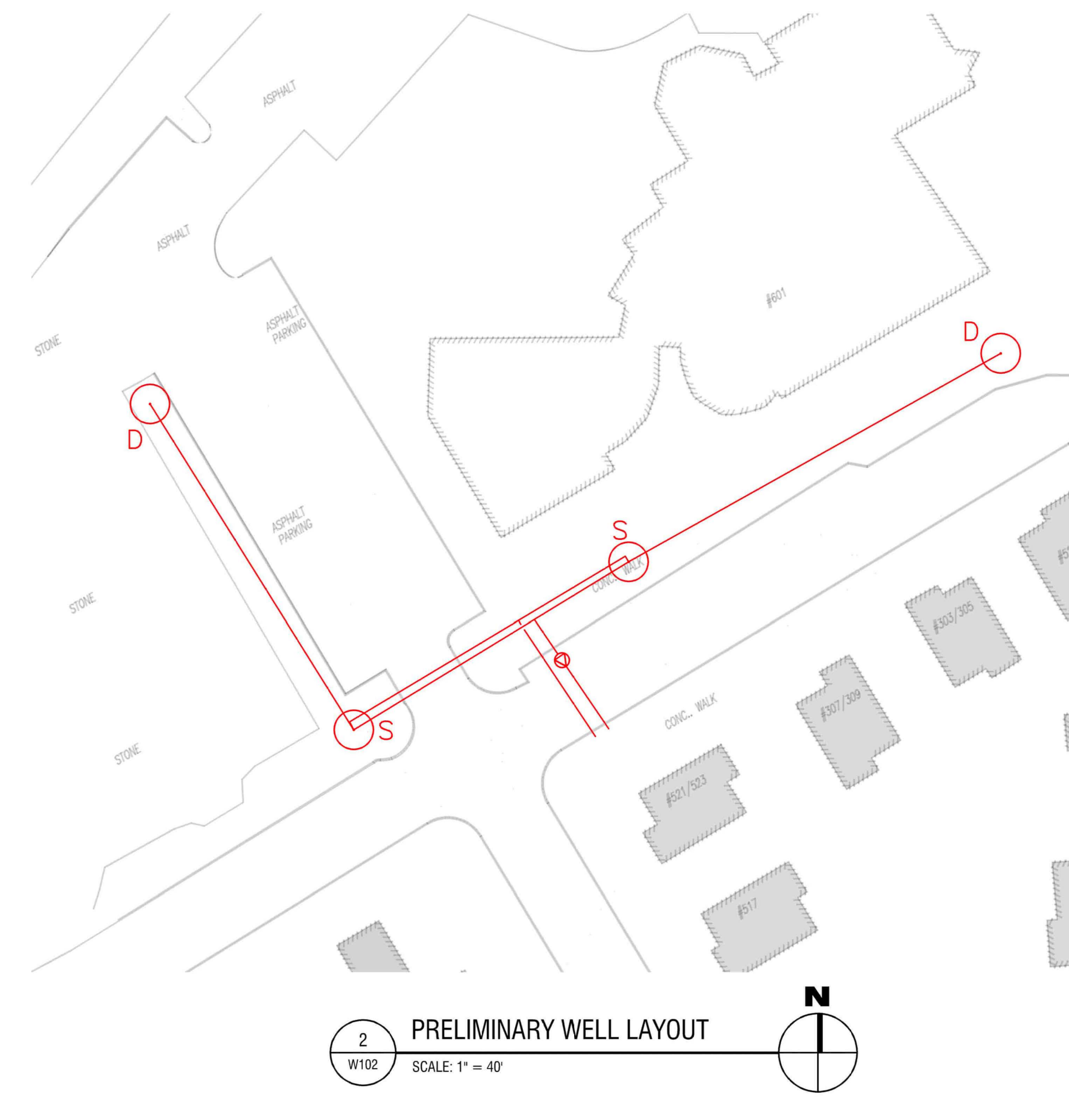
**W102**

- LEGEND:**
- SERVICE CONNECTIONS
  - ⊕ PUMP
  - S ⊕ SUPPLY WELL
  - D ⊕ DISCHARGE WELL

- NOTES:**
- A. TYPICAL SUPPLY AND DISCHARGE WELL DEPTH OF 140 FEET.
  - B. MINIMUM SPACING BETWEEN WELLS OF 100 FT.



1 PRELIMINARY WELL LAYOUT  
W102 SCALE: 1" = 40'



2 PRELIMINARY WELL LAYOUT  
W102 SCALE: 1" = 40'





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ITHACA, NY

NO.	DATE	DESCRIPTION

PROJECT NUMBER: 2224266

DRAWN BY: AAC

REVIEWED BY: AJS

ISSUED FOR: REVIEW

DATE: DECEMBER 2023

DRAWING NAME:

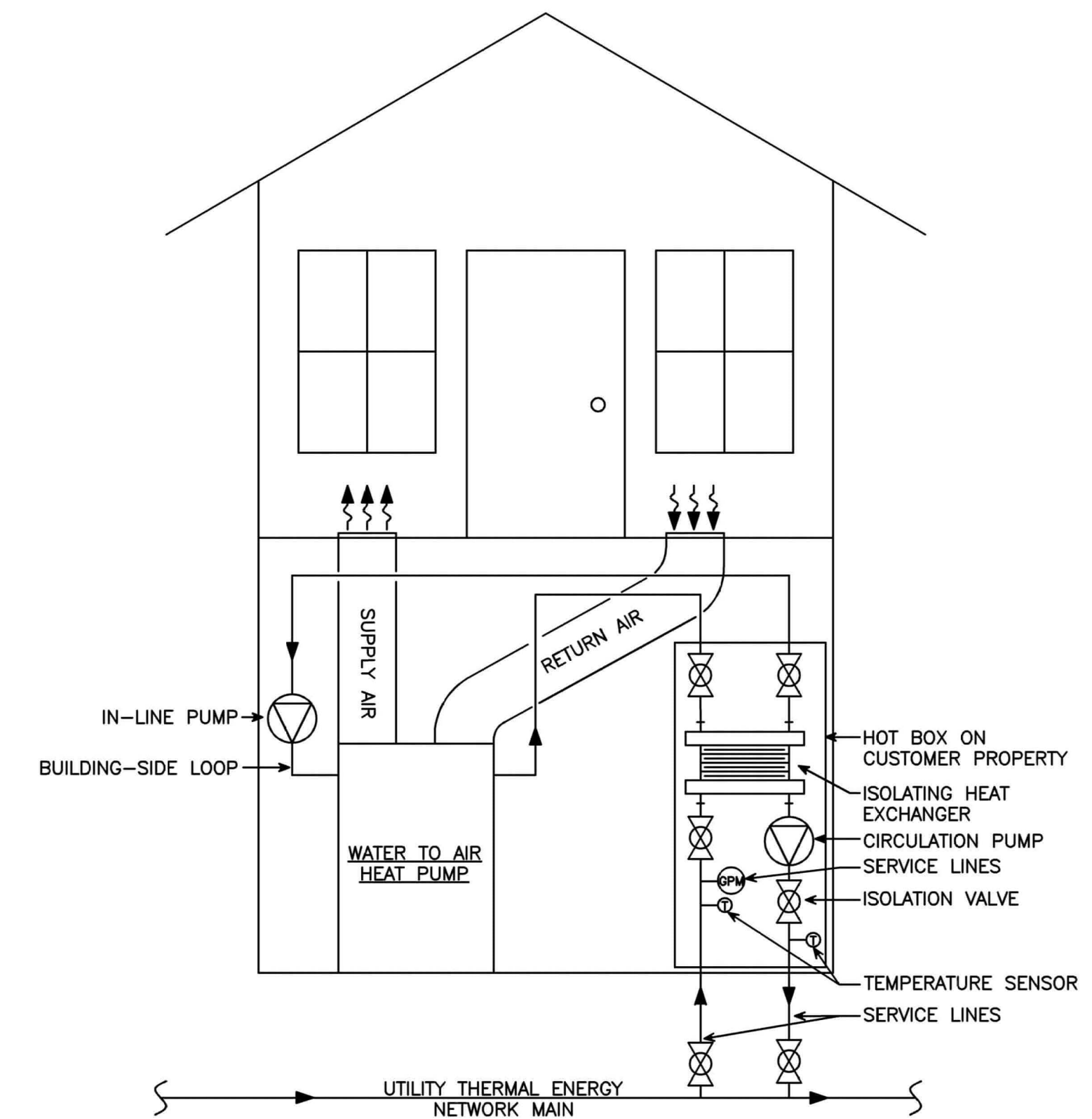
**DETAILS & SCHEDULES**

DRAWING NUMBER:

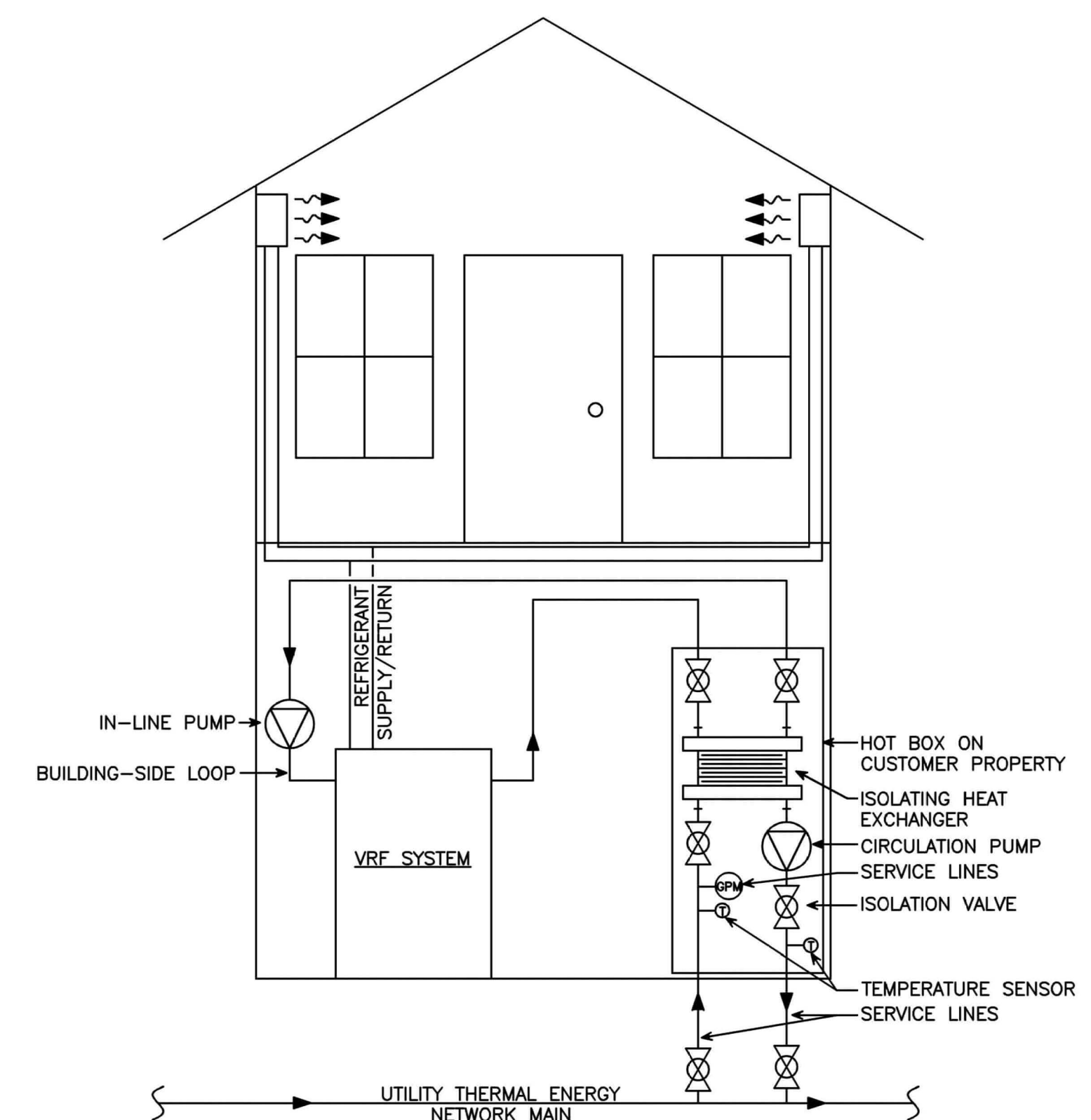
**W501**

ADDRESS	SQUARE FEET	CLASSIFICATION	PEAK COOLING LOAD (MBH)	PEAK SPACE HEATING LOAD (MBH)	TOTAL ANNUAL COOLING LOAD (MMBTU)	TOTAL ANNUAL SPACE HEATING LOAD (MMBTU)	PEAK REFRIGERATION LOAD (TONS)	TOTAL ANNUAL REFRIGERATION LOAD (MMBTU)	TOTAL ANNUAL DHW LOAD (MMBTU)
421 2ND ST.	1,380	Residential	34.9	33.7	2.1	73.0	0.0	0.0	3.4
417 2ND ST.	1,138	Residential	28.8	27.8	1.7	60.2	0.0	0.0	2.8
415 2ND ST.	1,068	Residential	27.0	26.1	1.6	56.5	0.0	0.0	2.6
411 2ND ST.	1,791	Residential	45.4	43.7	2.7	94.7	0.0	0.0	4.4
407 2ND ST.	1,774	Residential	44.9	43.3	2.7	93.8	0.0	0.0	4.3
320 HANCOCK ST.	1,968	Residential	49.8	48.0	3.0	104.1	0.0	0.0	4.8
316 HANCOCK ST.	1,232	Residential	31.2	30.1	1.9	65.2	0.0	0.0	3.0
312 HANCOCK ST.	1,784	Residential	45.2	43.5	2.7	94.3	0.0	0.0	4.3
310 HANCOCK ST.	1,208	Residential	30.6	29.5	1.8	63.9	0.0	0.0	2.9
304-06 HANCOCK ST.	1,920	Residential	48.6	46.9	2.9	101.5	0.0	0.0	4.7
302 HANCOCK ST.	2,110	Residential	53.4	30.4	3.2	65.9	0.0	0.0	14.0
412 1ST ST.	5,096	Residential	129.1	124.4	7.7	269.5	0.0	0.0	12.4
416 1ST ST.	1,552	Residential	39.3	37.9	2.4	82.1	0.0	0.0	3.8
420 1ST ST.	1,480	Residential	37.5	36.1	2.2	78.3	0.0	0.0	3.6
401 ADAMS ST.	2,520	Residential	63.8	61.5	3.8	133.3	0.0	0.0	6.1
403 ADAMS ST.	2,520	Residential	63.8	61.5	3.8	133.3	0.0	0.0	6.1
414 1/2 ADAMS ST.	1,480	Residential	37.5	36.1	2.2	78.3	0.0	0.0	3.6
402 ADAMS ST.	1,152	Residential	29.2	28.1	1.7	60.9	0.0	0.0	2.8
308/310 ADAMS ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
304/306 ADAMS ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
504/506 ALICE MILLER WAY	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
510 ALICE MILLER WAY	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
512/514/516 ALICE MILLER WAY	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
519/520 ALICE MILLER WAY	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
301 FRANKLIN ST/ 522 ALICE MILLER WAY	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
303/305 FRANKLIN ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
307/309 FRANKLIN ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
521/523 1ST ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
517 1ST ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
513/515 1ST ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
508/509/511 1ST ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
507 1ST ST	2,268	Residential	57.4	55.4	3.4	119.9	0.0	0.0	5.5
301 3RD ST.	4,705	Office	194.3	268.4	125.2	551.3	0.0	0.0	4.7
301 3RD ST.	3,300	Office	136.3	188.3	87.8	386.7	0.0	0.0	3.3
301 3RD ST.	3,427	Quick Service Restaura	274.1	234.8	384.2	226.7	5.1	413.9	105.6
301 3RD ST.	2,580	Office	106.5	147.2	68.7	302.3	0.0	0.0	2.6
301 3RD ST.	2,150	Quick Service Restaura	172.0	147.3	241.0	142.2	3.2	259.7	66.2
301 3RD ST.	2,820	Retail	202.0	200.0	92.2	195.1	0.0	0.0	0.0
405 3RD ST.	2,494	Office	103.0	142.3	66.4	292.2	0.0	0.0	2.5
402 3RD ST.	12,821	Office	529.4	731.4	341.2	1,502.2	0.0	0.0	12.8
506 1ST ST.	8,866	Office	366.1	505.8	236.0	1,038.8	0.0	0.0	8.9
510 1ST ST	8,392	Office	346.5	478.7	223.4	983.3	0.0	0.0	8.4
504-14 1ST ST.	10,298	Warehouse	33.0	272.2	13.0	198.5	0.0	0.0	0.0
423 FRANKLIN ST.	4,448	Warehouse	14.2	117.6	5.6	85.7	0.0	0.0	0.0
			4,257.8	5,351.2					

1  
W501 LIST OF BUILDINGS



2  
W501 TYPICAL HEAT PUMP CONNECTION  
NOT TO SCALE



3  
W501 TYPICAL VRF CONNECTION  
NOT TO SCALE