

Kinsley Energy Systems
14 Connecticut South Drive
East Granby, CT 06026

Griffin Hospital
130 Division St.
Derby, CT 06418

Attn: Patrick Charmel

CC: Alexander Balko, Nancy Marini, Jessica Gunn, Andrew Moon

RE: Planning & Zoning Submittal

Dear Mr. Charmel,

Kinsley Energy Systems (KES) submits the following documentation in support of the City of Derby Planning & Zoning Commission approval process.

- General Arrangement
- Street View Renderings
- Example Images of Similar Project
- Acoustic Impact Reference

The purpose of the Project is to provide economic value, energy resiliency, and environmental benefit to Griffin Health Hospital, located at 130 Division St, Derby, CT. A 999kW natural gas-powered combined heat and power generator (CHP) will provide a baseload of onsite electrical generation and utilize heat recovery systems to supplement the facilities domestic heating needs. This system will provide for 70-80% of the Hospital's base electrical needs independent of utility grid power. In doing so, Griffin Health Hospital significantly increases the reliability of patient care by ensuring quality of life functions can operate in full capacity regardless of impacts to utility service fluctuations. This CHP systems achieve a 95% energy efficiency and Griffin Health Hospital will participate in Utility programs to reduce the cost of natural gas consumption used for the onsite generation. The Project provides Griffin Hospital with a 41.1% annual cost reduction, resulting in a payback period of 2 years. Additionally, the CHP system will provide an 18.4% emissions savings annually. This distributed generation project also benefits the utility and electrical grid resiliency within the City of Derby by reducing the load on the grid during peak usage.

KES is ready to assist and clarify where needed to ensure the planned design is communicated effectively. Please don't hesitate to reach out for any questions at (959) 236-7790 or jrheume@kinsleyenergy.com.

Sincerely,



Jonathan Rheume
Project Manager, Kinsley Energy Systems

GRIFFIN HOSPITAL DERBY, CONNECTICUT



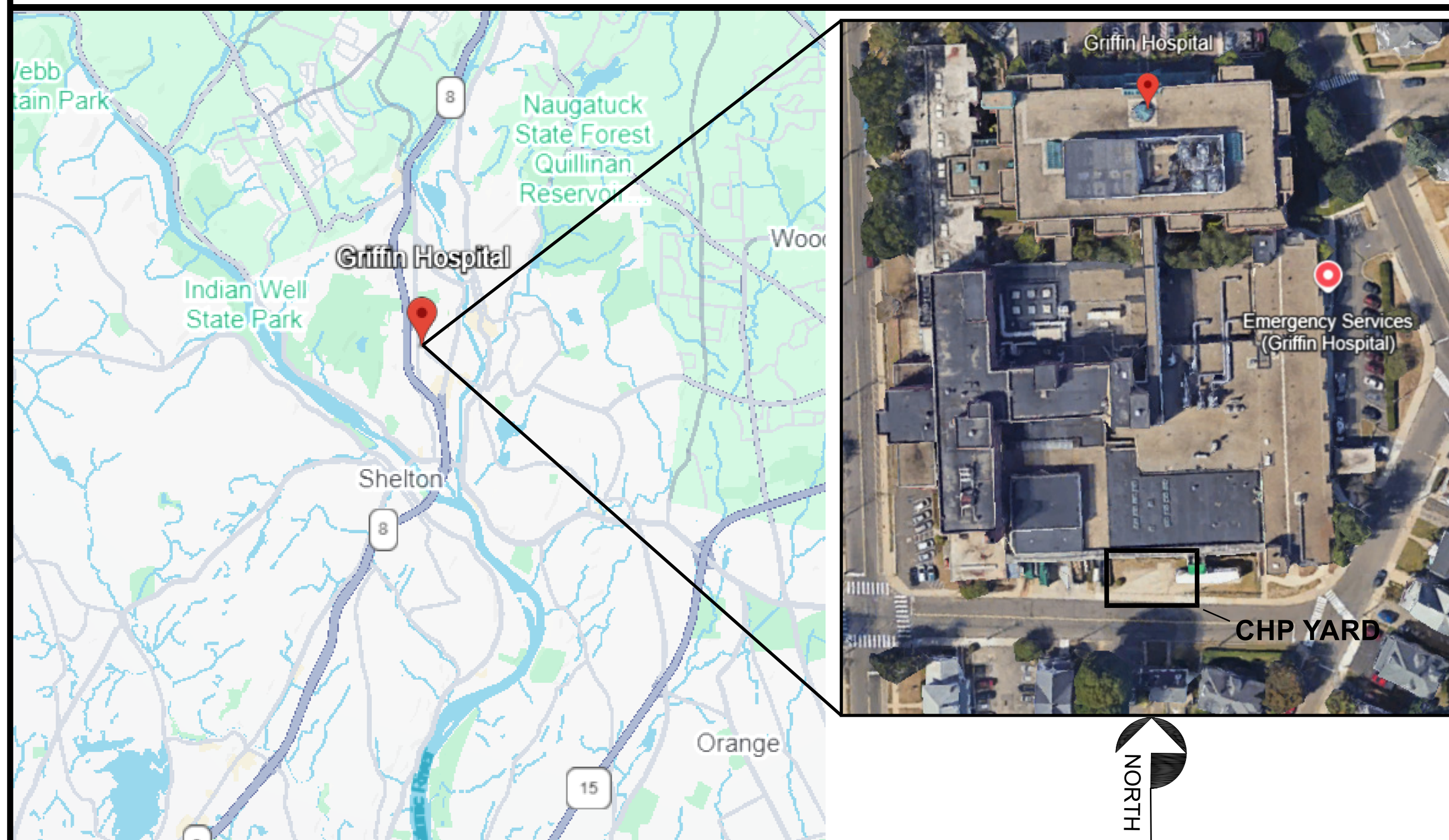
CHP INSTALLATION

SITE: GRIFFIN HOSPITAL
130 DIVISION ST
DERBY, CT 06418

ENGINEER: INNOVATIVE CONSTRUCTION & DESIGN SOLUTIONS, LLC
10 WHITE WOOD LANE
NORTH BRANFORD, CT 06471
(203) 453-8596

PROJECT CONTACT: KINSLEY - PROJECT MANAGER
JONATHAN RHEAUME
JRHEAUME@KINSLEYENERGY.COM
(959) 236 7790

PROJECT SITE MAP



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E4.0	ELECTRICAL SPECIFICATIONS

REFERENCE DOCUMENTS

TIGHE&BOND POWERUP	GRIFFIN HOSPITAL- CIVIL SHEETS TECHNICAL SPECIFICATION-PUPGEN_2V20- NG_60HZ
UI COMPANY AS100-BSMT POWERUP	EXISTING ONE-LINE DIAGRAM BASEMENT OF EAST WING DRAWING PID

DESIGN CODES

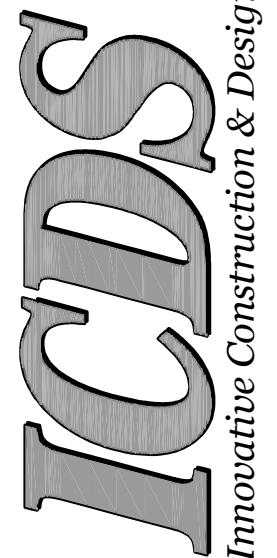
2022 CONNECTICUT STATE BUILDING CODE
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL PLUMBING CODE
2015 NATIONAL FUEL GAS CODE (NFPA 54)

GRIFFIN HOSPITAL
130 DIVISION ST, DERBY, CT

COVER SHEET

Project No.:	Drawn By:
Date:	Design By:
Scale:	Check By:
Drawing No.:	

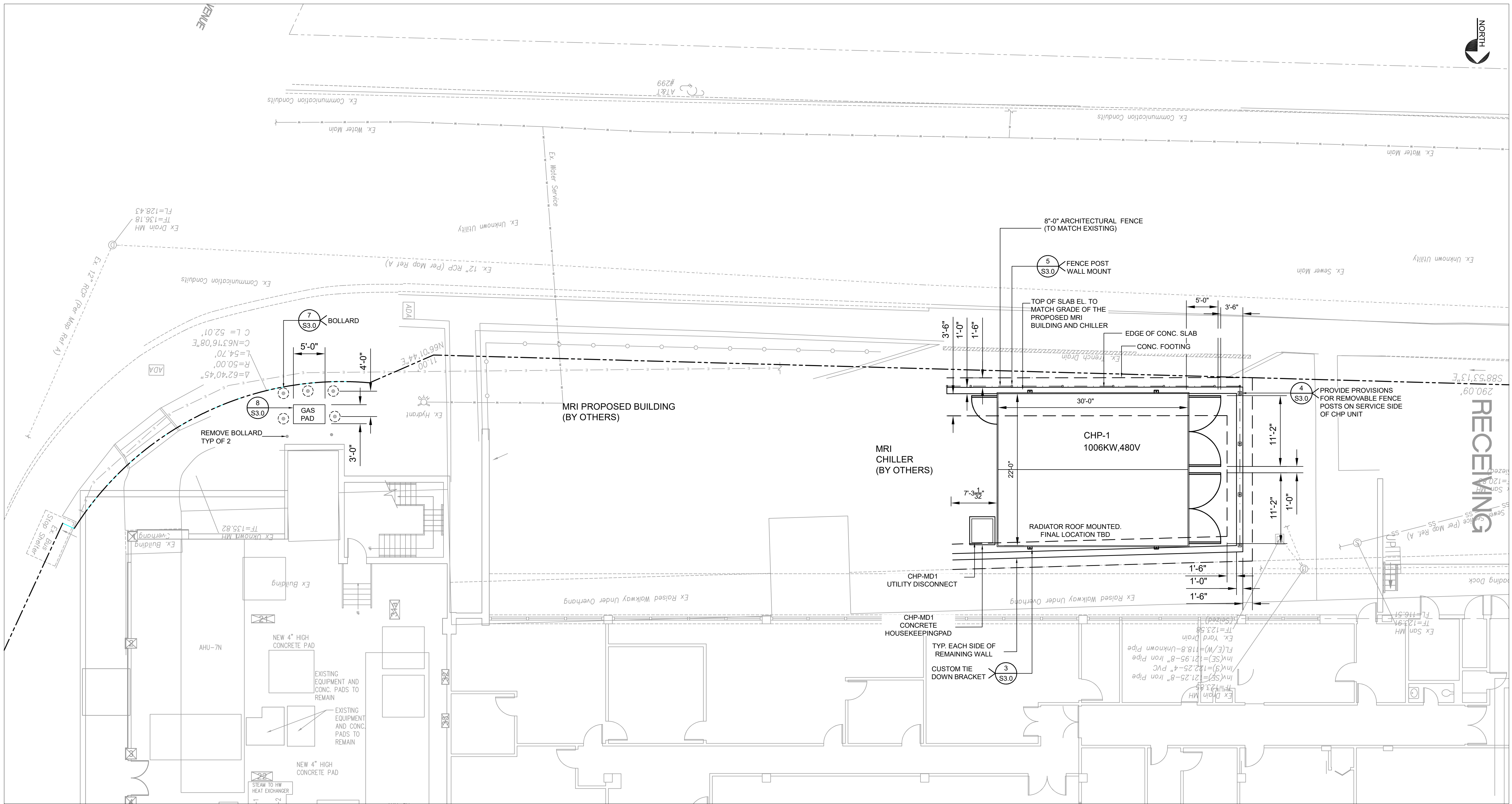
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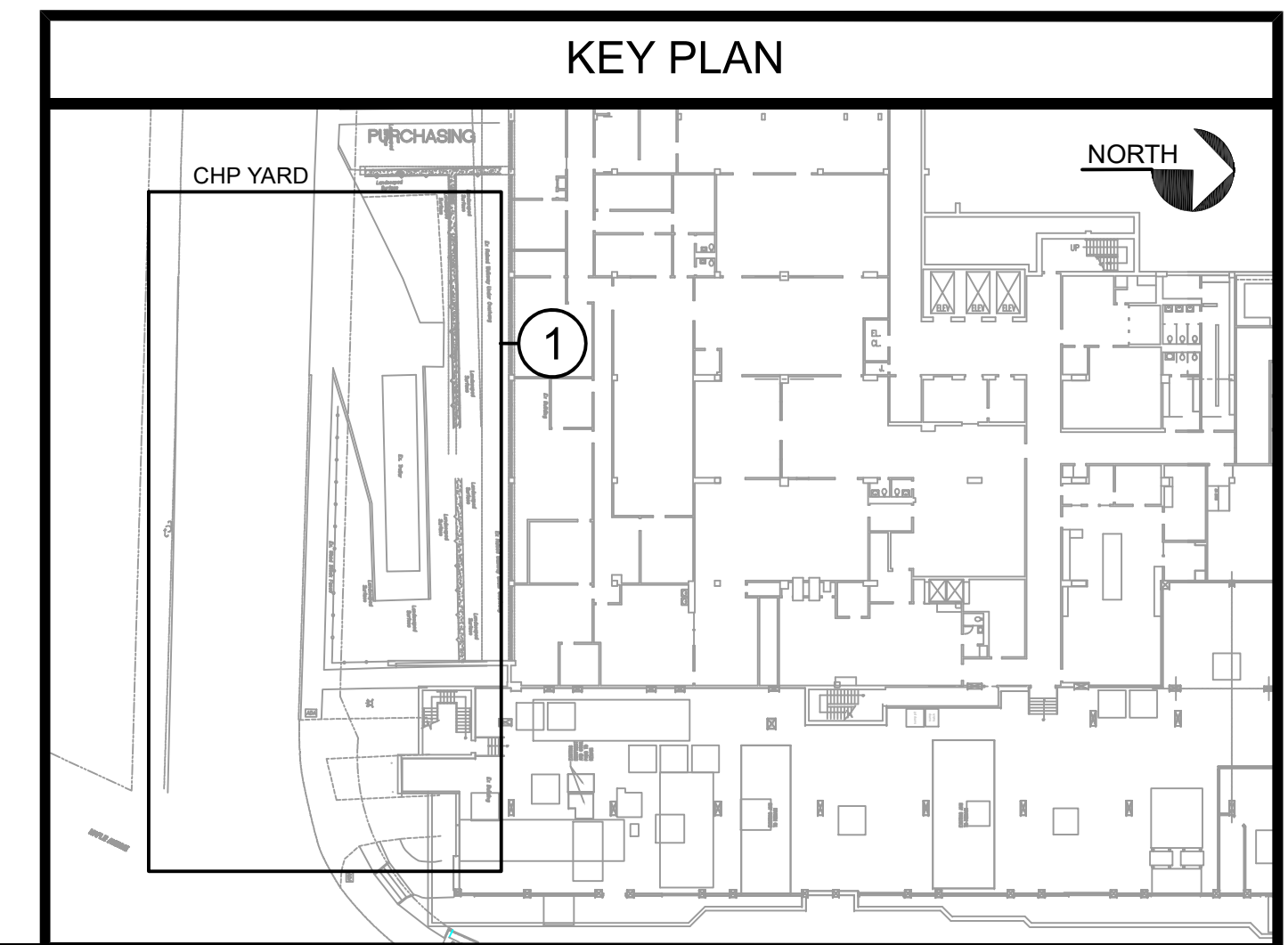
10 White Wood Lane
N. Branford, CT 06471
Phone: (203) 453-8596
Email: info@icdsllc.com

NOT FOR CONSTRUCTION

Rev.	Date	Description
B	05/30/2025	60% DESIGN DEVELOPMENT
A	03/07/2025	PRELIMINARY ISSUE



1 GENERAL ARRANGEMENT CHP YARD
Scale: 1/8" = 1'-0"



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C	07/21/2025	100% DESIGN DEVELOPMENT
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Innovative Construction & Design Solutions, LLC

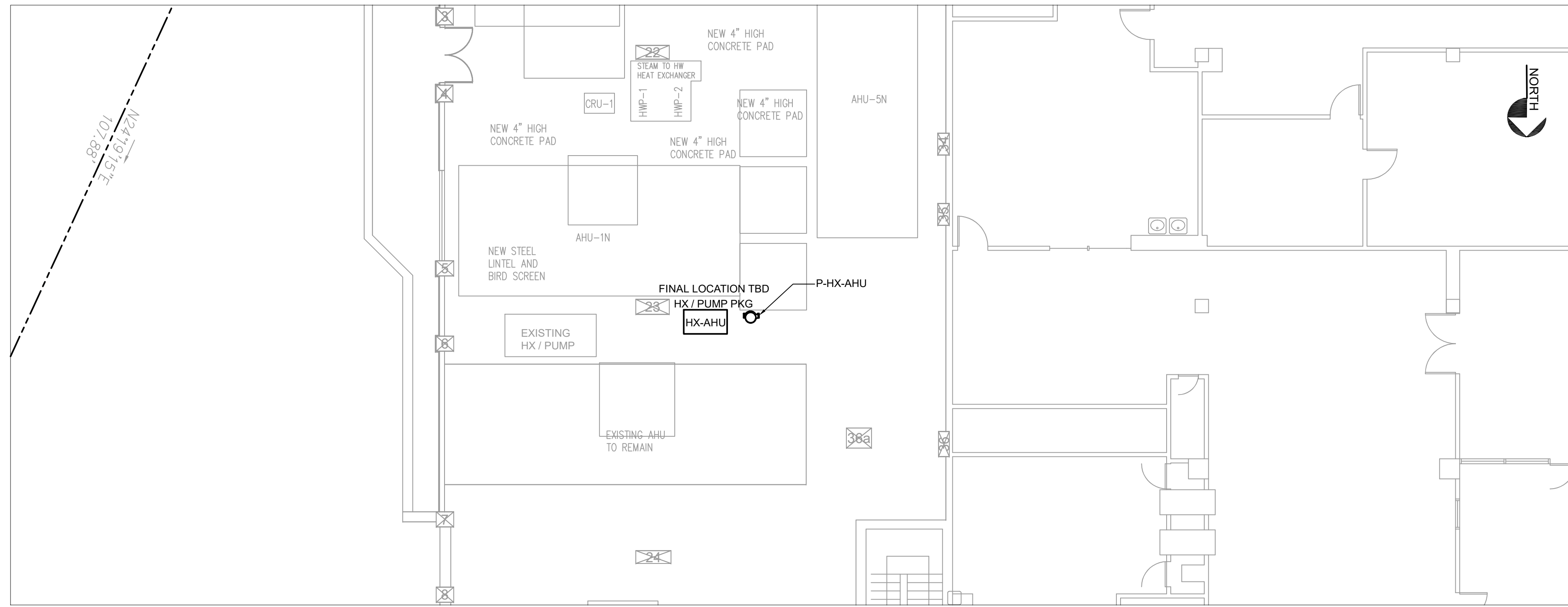
GRIFFIN HOSPITAL
130 DIVISION ST, DERBY, CT

GENERAL ARRANGEMENT CHP YARD

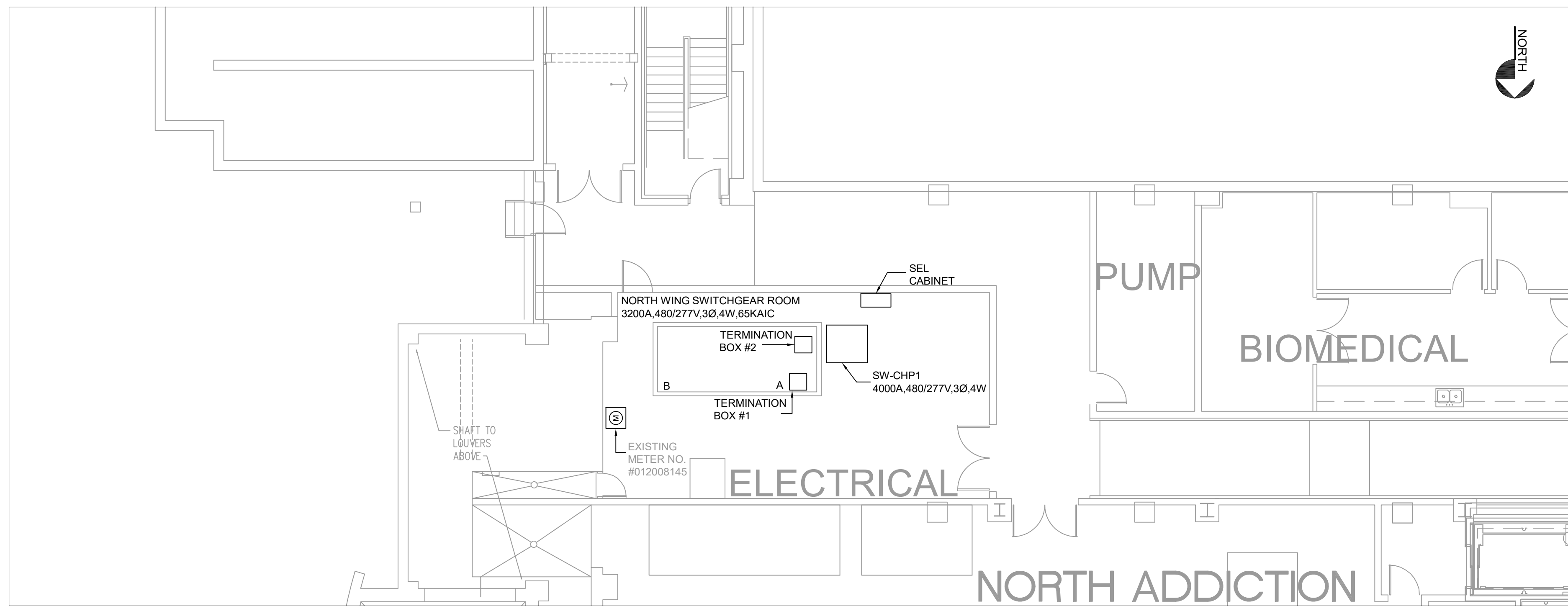
Project No.:	Drawn By: BC
Date: 03/07/2025	Design By: DSF
Scale: AS NOTED	Check By: DSF

Drawing No.:
GA1.0

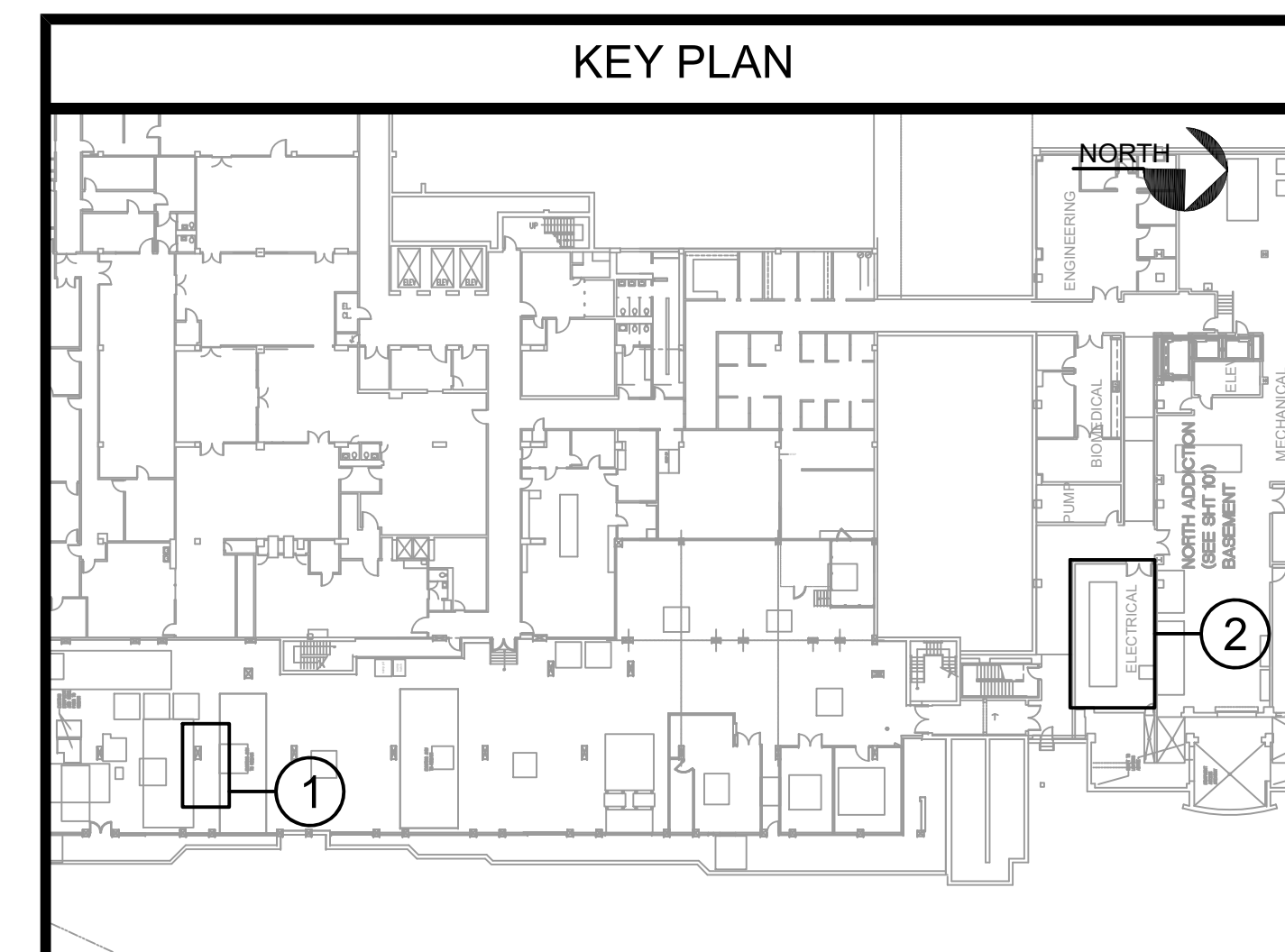
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1 GENERAL ARRANGEMENT MECHANICAL PARTIAL PLAN
Scale: 1/8" = 1'-0"



2 GENERAL ARRANGEMENT ELECTRICAL PARTIAL PLAN
Scale: 1/8" = 1'-0"



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ICDS
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GRIFFIN HOSPITAL
130 DIVISION ST, DERBY, CT
GENERAL ARRANGEMENT
PARTIAL L PLAN

Project No.:	Drawn By: BC
Date: 03/07/2025	Design By: BC
Scale: AS NOTED	Check By: DSF

Drawing No.:
GA1.1

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Proposed Griffin Hospital CHP



Exterior Finish Schedule

1	MTL. PRIVACY FENCING SYSTEM W/ INFILL SLATS BY FENCE TRAC OR EQUAL - (4" SQ. POSTS X 11 GA. W/ BOT./ TOP & POST MOUNT TRAC) - MTL. COMPONENTS TO BE STD. 'DARK BRONZE' FINISH - INFILL SLAT TO BE PVC ULTRA-TECH 'TROPICAL TEAK'
2	3 SIDED SCREEN FOR ROOF TOP MECH. UNIT - W/ POSTS & COMPOSITE WOOD SLATS 'PERUVIAN TEAK' BY TECHWOOD OR EQUAL - FASTENED TO FRAMING AT 24" OC
3	DUCT WORK FINISHED WITH KRYLON HIGH HEAT METALLIC BROWN

Note: The architectural fencing (1) and roof screening (2) are selected to match the model and finish of that utilized on the newly constructed MRI building annex adjacent to the CHP installation.

Street View



New Canaan YMCA



Noise Considerations

The Combined Heat and Power (CHP) generator will be emplaced in a sound dampened container. The table coolers and selective catalytic reducer (SCR) mounted to the roof of the container have been selected to meet City requirements for noise pollution. The table below relates the rated sound levels of the equipment to every-day activities.

@ 10ft	Outer building face	Comparable to:
CHP Engine	65 dB	Conversation
Exhaust & Ventilation	75 dB	Vacuum Cleaner

@ 45ft	Nearest property line	Comparable to:
CHP Engine	43.5 dB	Urban Residence
Exhaust & Ventilation	53.5 dB	Bathroom Fan

@ 130ft	Bus stop	Comparable to:
CHP Engine	32 dB	Whisper
Exhaust & Ventilation	42 dB	Urban Residence