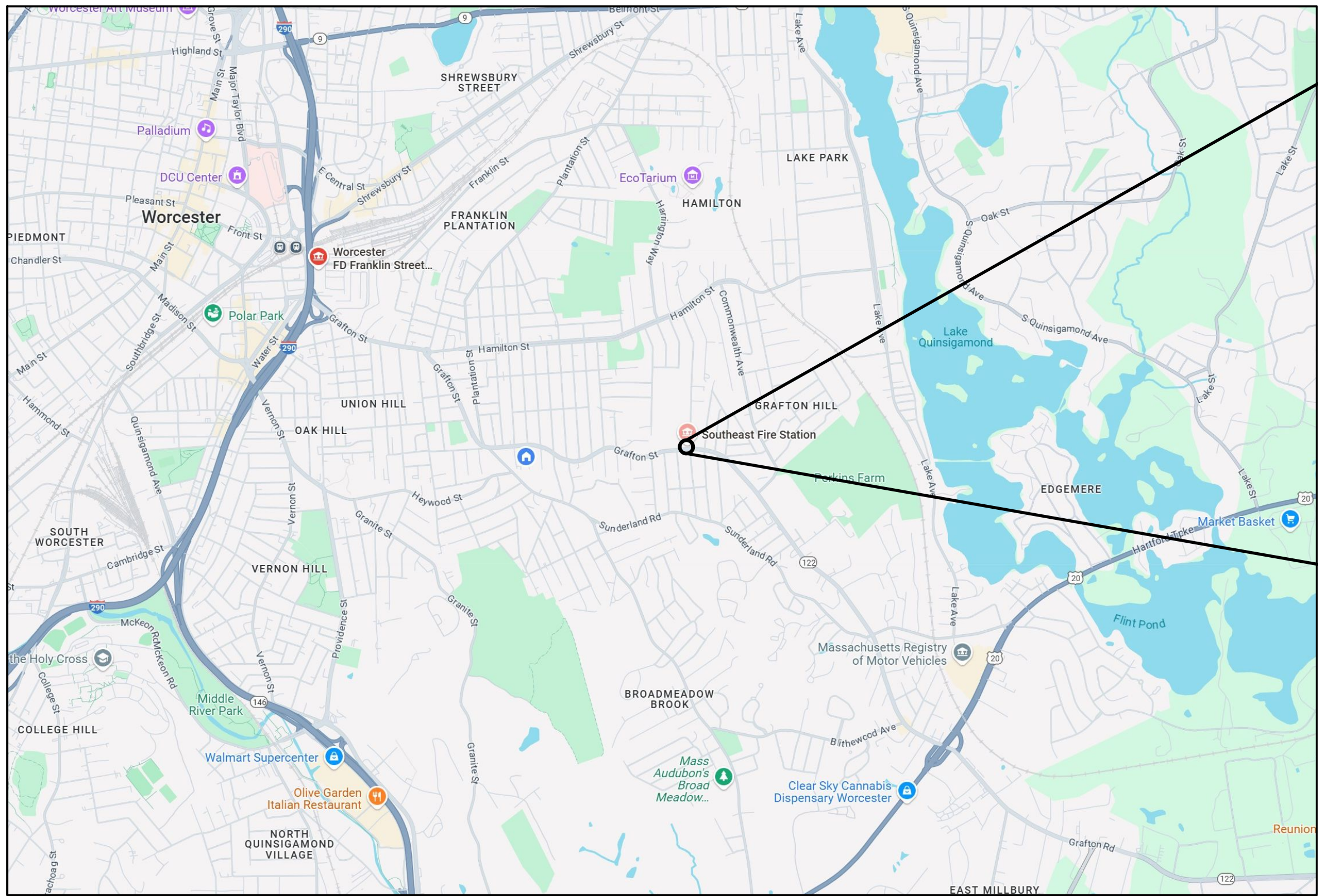


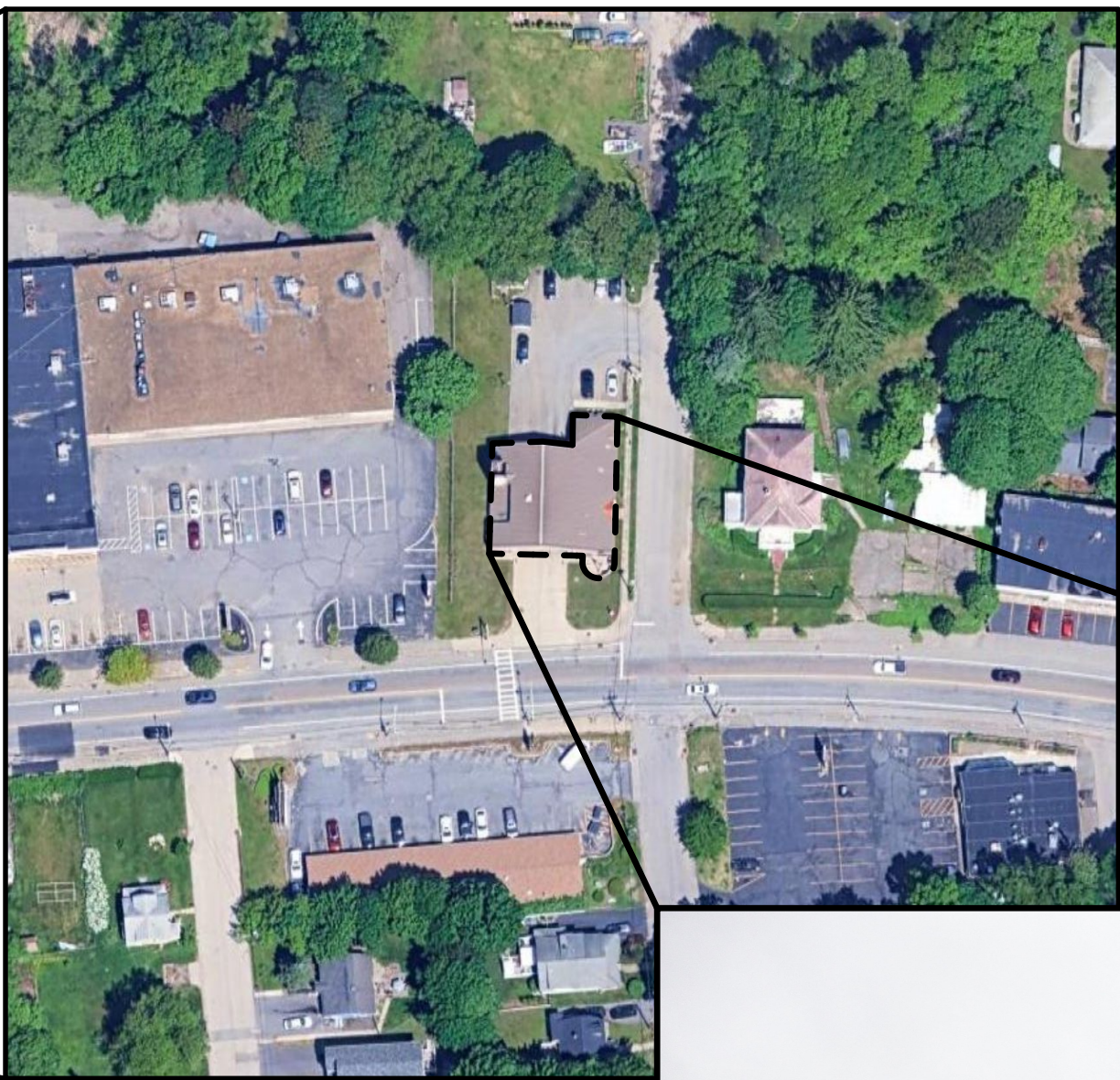
# SOUTHEAST FIRE STATION BATHROOM RENOVATION

FOR THE  
CITY OF WORCESTER  
FIRE DEPARTMENT  
141 GROVE STREET  
WORCESTER, MA 01605

BID SET  
AUGUST 2025



PROJECT LOCATION : 745 GRAFTON ST. WORCESTER, MA 01604



## LIST OF DRAWINGS

- T1 - COVER SHEET
- ARCHITECTURAL  
A1 - DEMO WORK AND NEW ELECTRICAL WORK  
A2 - NEW WORK
- PLUMBING  
P1 - FIRST FLOOR DEMOLITION AND PROPOSED PLUMBING PLANS
- MECHANICAL  
M1 - FIRST FLOOR DEMOLITION AND PROPOSED HEATING & VENTILATION PLANS
- ELECTRICAL  
E1 - ELECTRICAL LEGEND AND DETAIL  
E2 - ELECTRICAL NOTES  
E3 - DEMOLITION AND PROPOSED CEILING AND FLOOR PLANS

DRAWING TITLE

COVER SHEET

JOB NUMBER: 1842.00  
JOB TITLE

BATHROOM RENOVATIONS  
GRAFTON ST FIRE STATION  
CITY OF WORCESTER

CONSULTANT

ARCHITECT

**NAULT ARCHITECTS, INC.**  
71 HOPE AVENUE  
WORCESTER, MA 01603  
ADMIN@NAULTARCHITECTS.COM

DRAWING NO.

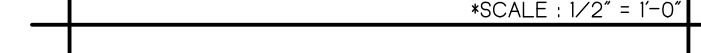
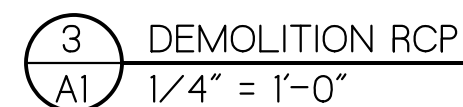
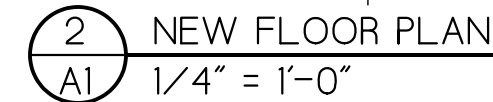
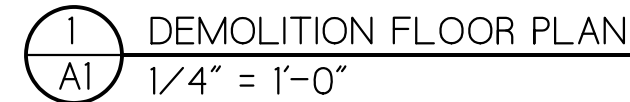
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SCALE AS NOTED  
DATE AUGUST 2025

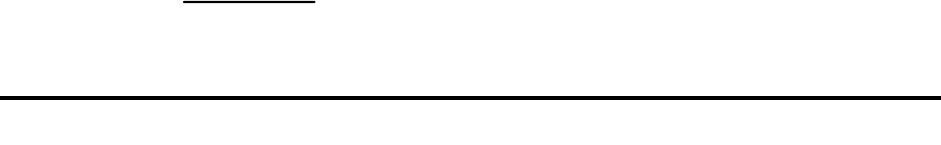
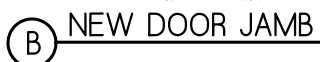
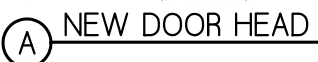
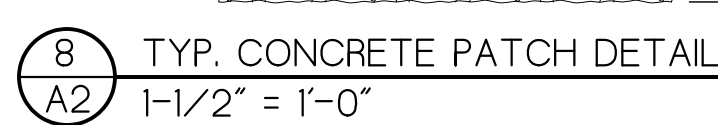
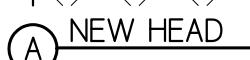
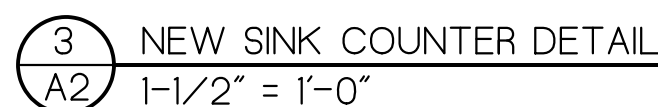
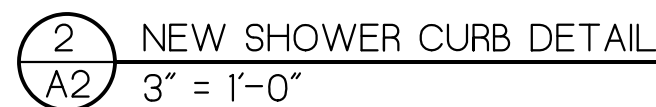
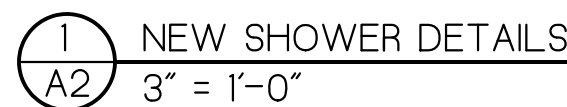
ARCHITECT:

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EMAIL: ADMIN@NAULTARCHITECTS.COM





AUGUST 2025

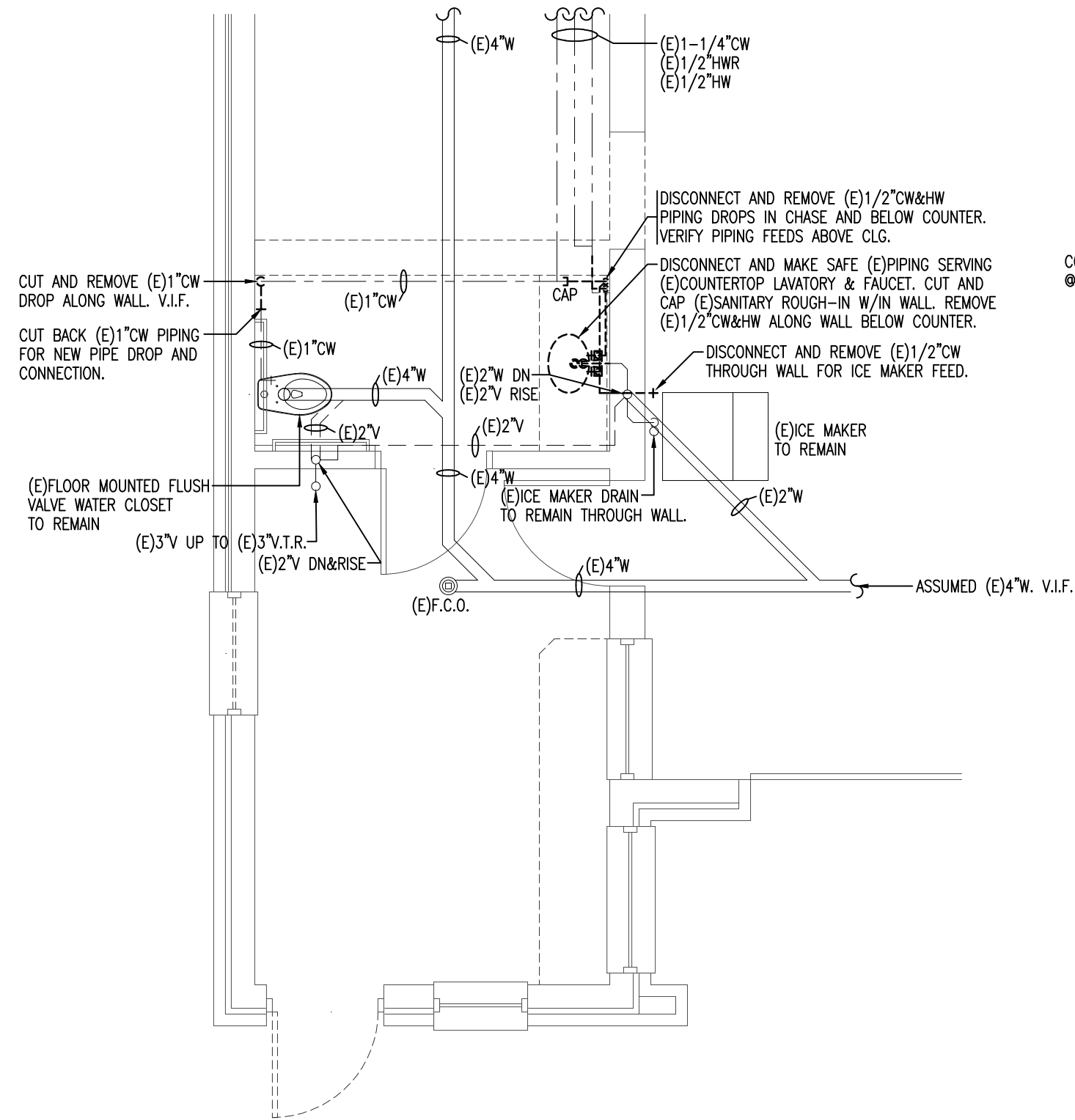


KEY PLAN  
SCALE: 1 : 40

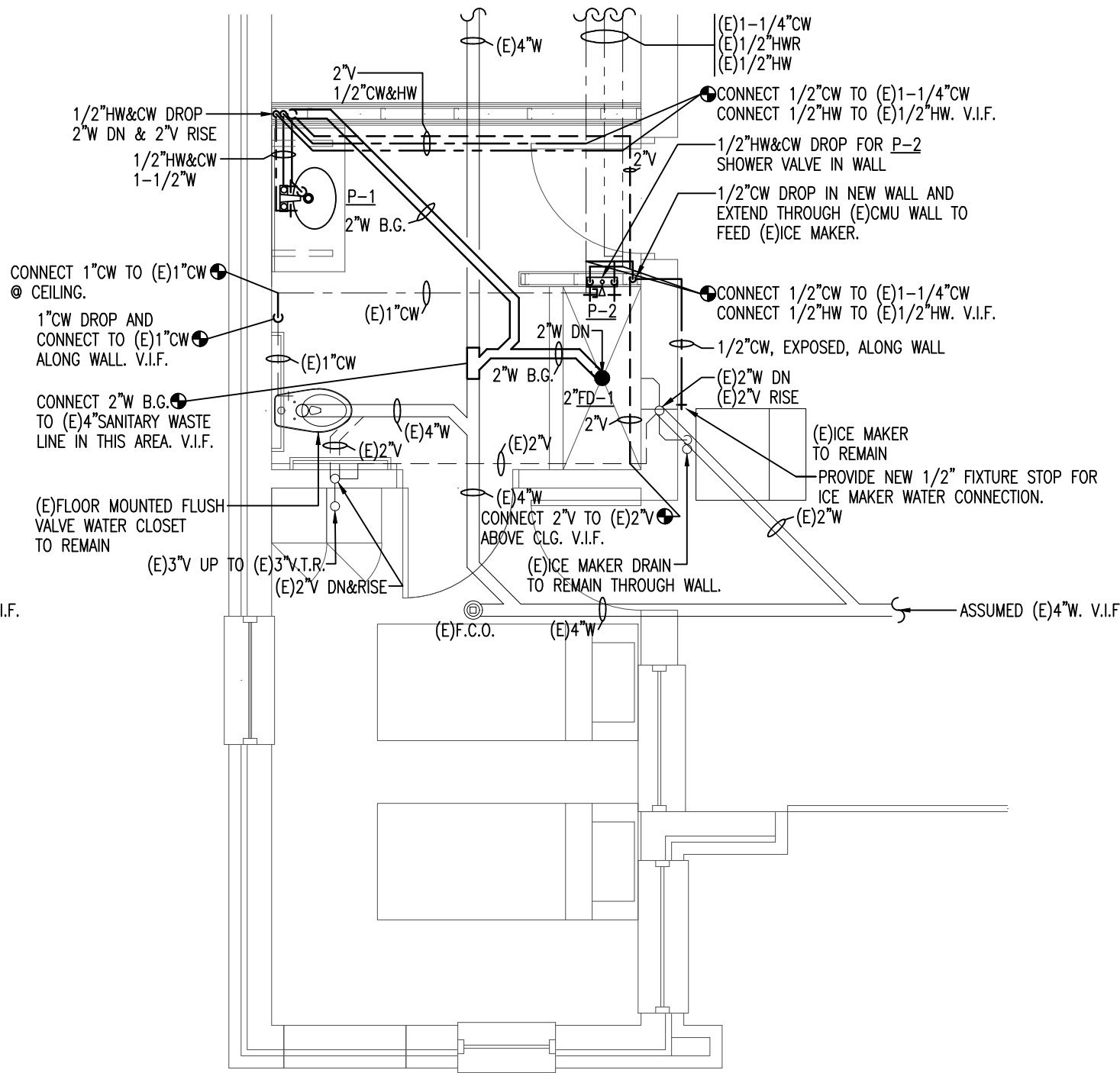


CONSULTANT

	DRAWING NO.  <b>A2</b>
	DATE  <b>AUGUST 2025</b>
SCALE  <b>AS NOTED</b>	



PARTIAL FIRST FLOOR PLUMBING DEMOLITON PLAN  
SCALE: 1/4" = 1'-0"



PARTIAL FIRST FLOOR PROPOSED PLUMBING PLAN  
SCALE: 1/4" = 1'-0"

- KEY
- EXISTING PIPING AND/OR FIXTURES TO BE REMOVED
  - EXISTING BELOW GRADE WASTE PIPING (ASSUMED)
  - EXISTING BELOW GRADE VENT PIPING (ASSUMED)
  - EXISTING WASTE PIPING (W)
  - EXISTING VENT PIPING (V)
  - EXISTING COLD WATER PIPING (CW)
  - EXISTING HOT WATER PIPING (HW)
  - EXISTING HOT WATER RECIRCULATION PIPING (HWR)
  - BELOW GRADE WASTE PIPING (W)
  - WASTE PIPING (W)
  - VENT PIPING (V)
  - COLD WATER PIPING (CW)
  - 110°F HOT WATER PIPING (HW)
  - PIPE DROP
  - PIPE RISE
  - B.G. BELOW GRADE
  - V.I.F. VERIFY IN FIELD
  - F.C.O. FLOOR CLEANOUT
  - FD FLOOR DRAIN
  - (E) EXISTING
  - P-# PLUMBING FIXTURE CALLOUT
  - CONNECT NEW TO EXISTING
  - FIXTURE STOP

PLUMBING NOTES:

- CONTRACTOR RESPONSIBLE FOR PROVIDING ALL MATERIAL, LABOR, SUPERVISION AND TRANSPORTATION REQUIRED TO COMPLETE THE WORK DESCRIBED ON THESE DRAWINGS AND IN THE SPECIFICATIONS UNLESS NOTED OTHERWISE.
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND LOCATION IN THE FIELD.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- ALL PIPING TO BE INSTALLED PER LOCAL, STATE, AND FEDERAL CODES.
- CONTRACTOR IS RESPONSIBLE FOR ALL OFFSETS AND MODIFICATIONS AS REQUIRED TO CLEAR BUILDING STRUCTURES.
- ALL PIPING TO BE PRESSURE TESTED BEFORE INSULATION. LEAVE VALVES OPEN, READY FOR OPERATION.
- INSULATE ALL COLD AND HOT LINES INSTALLED WITH 1/2" FIBERGLASS OR CLOSED CELL INSULATION.
- REPAIR OF ANY DAMAGE TO THE NEW CONSTRUCTION DURING THE EXECUTION OF THIS WORK SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- ALL EXPOSED PIPING/FITTINGS TO BE CHROME PLATED COPPER/BRASS.
- ALL WATER SUPPLY PIPING TO BE RIGID TYPE L COPPER UNLESS STATED OTHERWISE.
- ALL WASTE AND VENT PIPING TO BE CAST IRON OR DWV COPPER AS ALLOWED BY THE MA PLUMBING CODE.
- PIPING RUNS ARE SHOWN AS REPRESENTATIVE OF REQUIRED SIZES. ROUTING MAY BE CHANGED BY CONTRACTOR AS NECESSITATED BY STRUCTURAL CONSIDERATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATION OF PLUMBING FIXTURES.
- ALL DOMESTIC AND WASTE PIPING IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE TO PROVIDE COMPLETE AND WORKING FIXTURES.

PLUMBING FIXTURE SCHEDULE

KEY	P-1	P-2
FIXTURE	COUNTERTOP LAVATORY (HANDICAP)	SHOWER VALVE
P P N G  C O N N E C T I O N S	TRAP	1-1/2"
	WASTE	1-1/2"
	VENT	1-1/4"
	CWS	3/8"
	HWS	3/8"
MOUNTING HEIGHT FL. TO RIM	34" OR PER ARCH./MAAB	10"
MATERIAL	VITREOUS CHINA	
FITTINGS	SIMMONS SCOT METERING LAVATORY FAUCET #SLC-6000	SIMMONS DIA #3503-1521-V-CYL-9-TRM HAND SHOWER TRIM SIMMONS TEMPTROL SHOWER VALVE BODY MODEL #26102DDY
	OFFSET GRID DRAIN	FD-1 FLOOR DRAIN IN TILE FLOOR
MANUF.	AMERICAN STANDARD	
	AQUALYN DROP-IN 0476.028	

- NOTES:
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
  - ALL DIMENSIONS ARE AS IS UNLESS NOTED OTHERWISE ON DRAWINGS.
  - VERIFY ALL MOUNTING HEIGHTS WITH ARCHITECTURAL PLANS AND ALL APPLICABLE CODES BEFORE INSTALLATION.
  - PROVIDE WHEELCHAIR LAVATORY STRAINERS ON ALL HANDICAP LAVATORIES. INSTALL PVC COATED INSULATION ON ALL PIPING BELOW HANDICAP LAVATORIES UNLESS PIPING IS ENCLOSED.
  - PIPE INSULATION UNDER FIXTURE P-1 SHALL BE TRUEBRO LAV GUARD MODEL #103

DRAWING TITLE

FIRST FLOOR  
DEMOLITION AND PROPOSED  
PLUMBING PLANS

JOB NUMBER: 1842.00  
JOB TITLE

BATHROOM RENOVATIONS  
GRAFTON ST FIRE STATION  
CITY OF WORCESTER

CONSULTANT

**SEAMAN**  
ENGINEERING CORPORATION  
ARCHITECT

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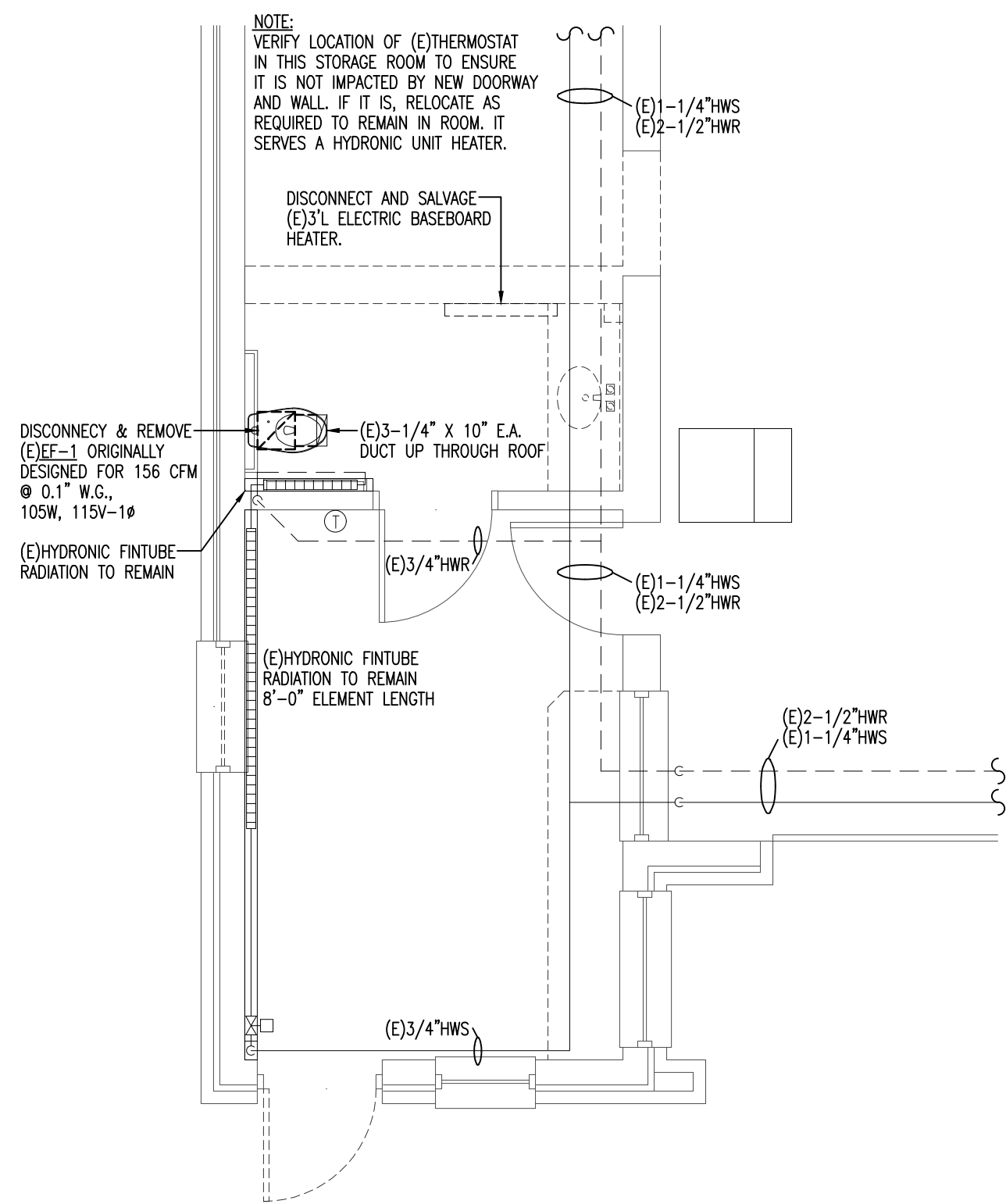
TEL: (508) 754-4134  
FAX: (508) 754-4661

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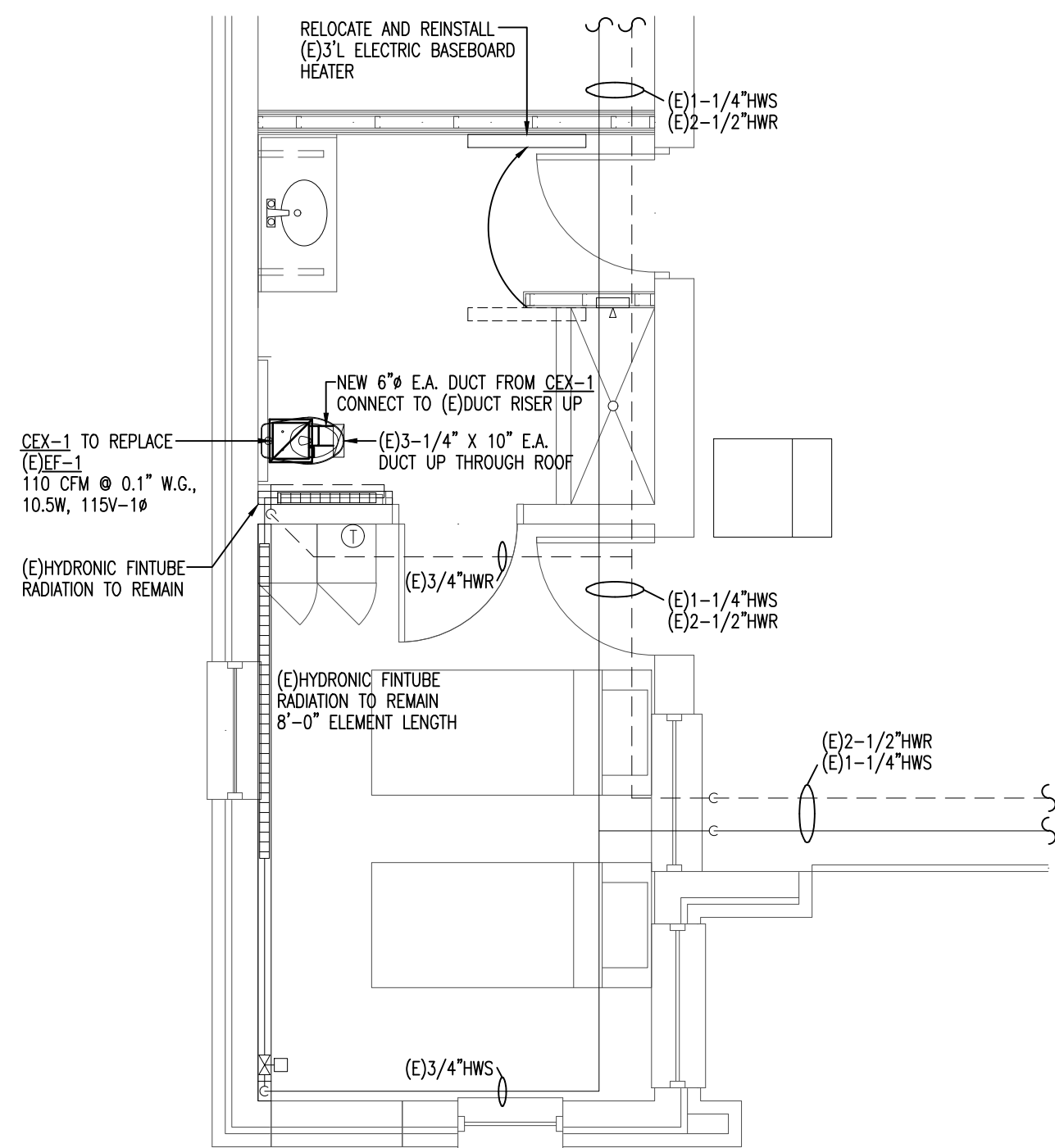
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SCALE  
1/4"=1'-0"

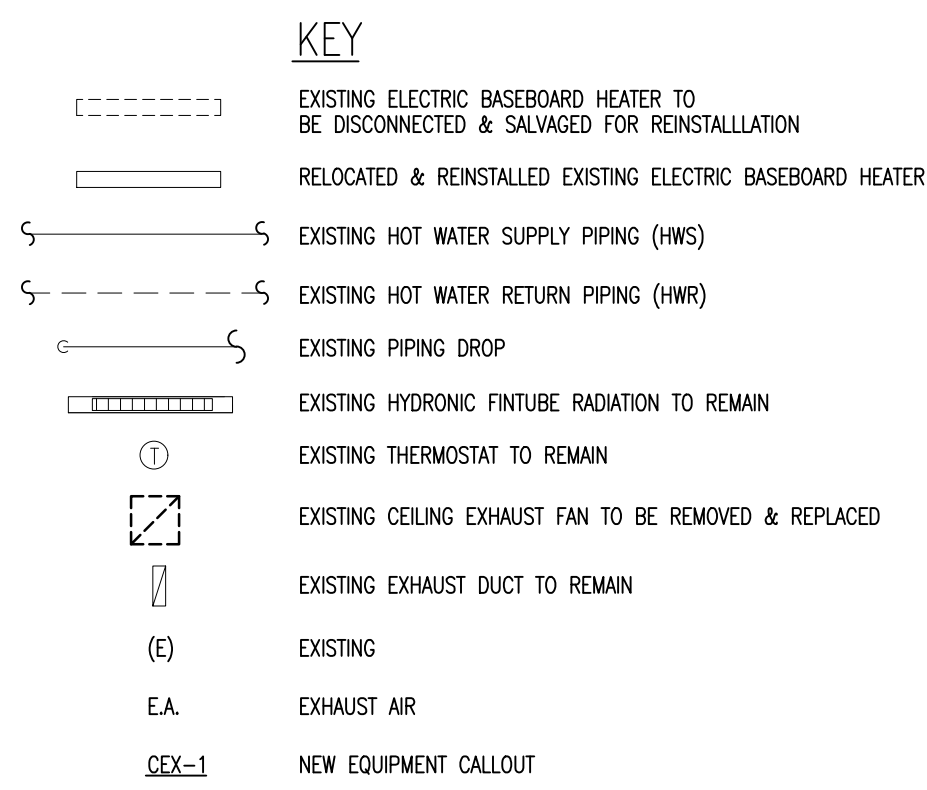
DATE  
JULY 2025



PARTIAL FIRST FLOOR HEATING & VENTILATION DEMOLITON PLAN  
SCALE: 1/4" = 1'-0"



PARTIAL FIRST FLOOR PROPOSED HEATING & VENTILATION PLAN  
SCALE: 1/4" = 1'-0"



CEILING EXHAUST FAN WITH LIGHT SCHEDULE		
F A N S	UNIT NUMBER	CEX-1
	SERVICE	BATHROOM
	MANUFACTURER	PANASONIC
	MODEL #	FV-0511VKS2
	C.F.M. (VARIABLE)	110
	STATIC PRESS. (IN WG)	0.1"
	FAN RPM	958
	ENERGY EFF. (CFM/WATT)	10.5
M O T O R & S T A R T E R	NOISE (SONES)	0.4
	DUCT CONNECTION SIZE	4"Ø
	TYPE	DIRECT
	WATTS	10.5
	R.P.M	958
	VOLTAGE/PHASE	120V - 1Ø
	AMPERAGE	0.11
	TYPE	INTEGRAL
T E R	NEMA SIZE	—
	CONTROL	GRILLE MOTION/ HUMIDITY SENSOR
	AUX. CONTACTS	—
		① ② ③ ④

- ① NUTONE, BROAN, GREENHECK OR APPROVED EQUAL  
WITH BUILT-IN SENSORS, TIMERS AND CONTROLS.  
SMARTACTION MOTION SENSOR, MODEL #FV-MSK1  
CONDENSATION SENSOR, MODEL #FV-CSVK1  
LED LIGHT IN GRILLE
- ② DUAL MOTION & HUMIDITY SENSORS W/ VARIABLE FUNCTIONALITY:  
MOTION ON/ MOTION OFF  
MOTION ON/ HUMIDITY OFF  
HUMIDITY ON/ HUMIDITY OFF
- ③ ADJUSTABLE DELAY TIMER FROM 30 SEC. TO 60 MIN.  
VARIABLE HUMIDITY CONTROLS FROM 30 - 80% RH
- ④ PROVIDE VIBRATION ISOLATOR HANGERS & DISCONNECT SWITCH

DRAWING TITLE

FIRST FLOOR  
DEMOLITION AND PROPOSED  
HEATING & VENTILATION PLANS

JOB NUMBER: 1842.00  
JOB TITLE

BATHROOM RENOVATIONS  
GRAFTON ST FIRE STATION  
CITY OF WORCESTER

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DRAWING NO.

H1

SCALE  
1/4"=1'-0"

DATE  
JULY 2025





FIRE ALARM NOTES

1. ALL WORK SHALL BE INSTALLED IN FULL ACCORDANCE WITH LOCAL, STATE & FEDERAL CODES, STATE AND LOCAL AUTHORITIES IRRESPECTIVE OF THE FIRE ALARM DEVICES SHOWN ON THE DRAWINGS. FILE ALL PLANS, OBTAIN ALL PERMITS, PAY ALL FEES, SCHEDULE ALL INSPECTIONS, MAKE ALL TESTS AND OBTAIN ALL APPROVALS REQUIRED. THE FIRE ALARM WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ADOPTED EDITIONS OF NFPA-72, NATIONAL ELECTRIC CODE AND LOCAL AUTHORITIES HAVING JURISDICTION. ALL COMPONENTS SHALL BE UL LISTED.
2. THE ELECTRICAL SUBCONTRACTOR SHALL USE THE FIRE ALARM RISER PROVIDED BY THE MANUFACTURER.
3. THE ELECTRICAL SUBCONTRACTOR SHALL DETERMINE DEVICE COUNTS FROM THE FIRE ALARM DRAWINGS.
4. ALL VISUAL DEVICES SHALL BE SYNCHRONIZED AS PER NFPA 72.
5. ALL EQUIPMENT AND DEVICES LOCATED IN THE SHOWER ROOM, COLD ROOM, ICE RINK, GARAGES, BUILDING EXTERIOR AND SIMILAR AREAS SHALL BE OF WEATHER PROOF TYPE.
6. CIRCUIT BREAKER FOR FIRE ALARM CONTROL UNIT SHALL HAVE RED MARKING WITH A CIRCUIT BREAKER LOCK LISTED FOR USE WITH THE CIRCUIT BREAKER.
7. THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
8. THE ROOM CONTAINING THE FIRE ALARM CONTROL UNIT MUST BE PROVIDED WITH A SIGN IDENTIFYING THE FIRE PROTECTION EQUIPMENT AND EQUIPMENT LOCATION.

MEP COORDINATION

1. ALL ELECTRICALLY POWERED HVAC EQUIPMENT TO BE PROVIDED WITH LOCAL DISCONNECT SWITCHES. THE SWITCHES SHALL BE PROVIDED BY THE ELECTRICAL SUBCONTRACTOR UNLESS NOTED OTHERWISE.
2. LINE VOLTAGE THERMOSTATS SHALL BE SUPPLIED BY THE MECHANICAL CONTRACTOR, INSTALLED AND WIRED BY THE ELECTRICAL SUBCONTRACTOR.
3. THE ELECTRICAL SUBCONTRACTOR SHALL COORDINATE THE EXACT LOCATIONS OF THE HVAC SYSTEM DEVICES AND EQUIPMENT IN THE FIELD PRIOR TO ROUGH-IN.
4. PROVIDE MEP/FP COORDINATION DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION OF WORK.
5. COORDINATE THE EXACT LOCATION OF ALL ELECTRICAL DEVICES WITH THE ARCHITECT PRIOR TO ROUGH-IN.
6. ALL EQUIPMENT, DEVICES AND INSTALLATION MATERIALS LOCATED IN THE SHOWER ROOM, COLD ROOM, ICE RINK, GARAGES, BUILDING EXTERIOR AND SIMILAR AREAS SHALL BE OF WEATHER PROOF TYPE.

BRANCH CIRCUITS SCHEDULE

120V OR 277V - 1Ø, 2W CIRCUITS	
CIRCUIT BREAKER	CONDUCTOR
20A-1P	2-12 AWG & 1-12 AWG EGC IN 3/4"C
30A-1P	2-10 AWG & 1-10 AWG EGC IN 3/4"C
40A-1P	2-8 AWG & 1-10 AWG EGC IN 3/4"C
50A-1P	2-6 AWG & 1-10 AWG EGC IN 3/4"C
60A-1P	2-4 AWG & 1-10 AWG EGC IN 1"C
208V OR 480V - 1Ø, 2W CIRCUITS	
20A-2P	2-12 AWG & 1-12 AWG EGC IN 3/4"C
30A-2P	2-10 AWG & 1-10 AWG EGC IN 3/4"C
40A-2P	2-8 AWG & 1-10 AWG EGC IN 3/4"C
50A-2P	2-6 AWG & 1-10 AWG EGC IN 3/4"C
60A-2P	2-4 AWG & 1-10 AWG EGC IN 1"C
208/120V OR 480/277V - 1Ø, 3W CIRCUITS	
20A-2P	3-12 AWG & 1-12 AWG EGC IN 3/4"C
30A-2P	3-10 AWG & 1-10 AWG EGC IN 3/4"C
40A-2P	3-8 AWG & 1-10 AWG EGC IN 3/4"C
50A-2P	3-6 AWG & 1-10 AWG EGC IN 1"C
60A-2P	3-4 AWG & 1-10 AWG EGC IN 1"C
208V OR 480V - 3Ø, 3W CIRCUITS	
20A-3P	3-12 AWG & 1-12 AWG EGC IN 3/4"C
30A-3P	3-10 AWG & 1-10 AWG EGC IN 3/4"C
40A-3P	3-8 AWG & 1-10 AWG EGC IN 3/4"C
50A-3P	3-6 AWG & 1-10 AWG EGC IN 1"C
60A-3P	3-4 AWG & 1-10 AWG EGC IN 1"C
208V OR 480V - 3Ø, 4W CIRCUITS	
20A-3P	4-12 AWG & 1-12 AWG EGC IN 3/4"C
30A-3P	4-10 AWG & 1-10 AWG EGC IN 3/4"C
40A-3P	4-8 AWG & 1-10 AWG EGC IN 3/4"C
50A-3P	4-6 AWG & 1-10 AWG EGC IN 1"C
60A-3P	4-4 AWG & 1-10 AWG EGC IN 1"C

NOTES:

1. TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE.
2. UPGRADE WIRE SIZE ACCORDING TO VOLTAGE DROP CHART.
3. UPGRADE FEEDER SIZES NOT INCLUDED IN VOLTAGE DROP CHART TO REQUIREMENTS IN ACCORDANCE WITH THE NEC.

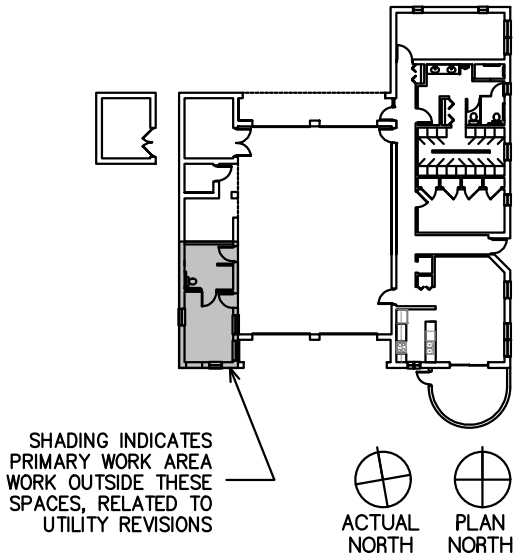
VOLTAGE DROP CHART

120V CKTS. / MAX. LENGTH			
LOAD UP TO	CONDUCTOR SIZE #12	CONDUCTOR SIZE #10	CONDUCTOR SIZE #8
800 VA	155 FT	245 FT	390 FT
1000 VA	125 FT	195 FT	310 FT
1200 VA	105 FT	165 FT	260 FT
1400 VA	90 FT	140 FT	220 FT
1600 VA	80 FT	125 FT	195 FT
1800 VA	70 FT	110 FT	175 FT
277V CKTS. / MAX. LENGTH			
2000 VA	330 FT	525 FT	830 FT
2500 VA	265 FT	420 FT	665 FT
3000 VA	220 FT	350 FT	555 FT
3500 VA	190 FT	300 FT	475 FT
4000 VA	165 FT	260 FT	415 FT

BRANCH CIRCUIT WIRING

1. WIRING SHOWN ON DRAWINGS IS FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
2. NEW WIRING AND CONDUIT SHALL BE REQUIRED BETWEEN ALL OUTLETS INDICATED WITH CIRCUIT NUMBERS AND PANEL DESIGNATIONS.
3. ALL SWITCH CONTROLS SHALL BE PROVIDED WITH NEW WIRING AND CONDUIT AS REQUIRED.
4. ALTHOUGH ALL BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SHOWN, IT IS THE INTENT OF THESE DRAWINGS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.
5. ALL 120V SINGLE PHASE CIRCUITS SHALL HAVE DEDICATED NEUTRALS. NO SHARED NEUTRALS WILL BE ALLOWED.

KEY PLAN  
SCALE: 1 : 40



DRAWING TITLE

ELECTRICAL NOTES

JOB NUMBER: 1842.00  
JOB TITLE

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GRAFTON ST FIRE STATION  
CITY OF WORCESTER

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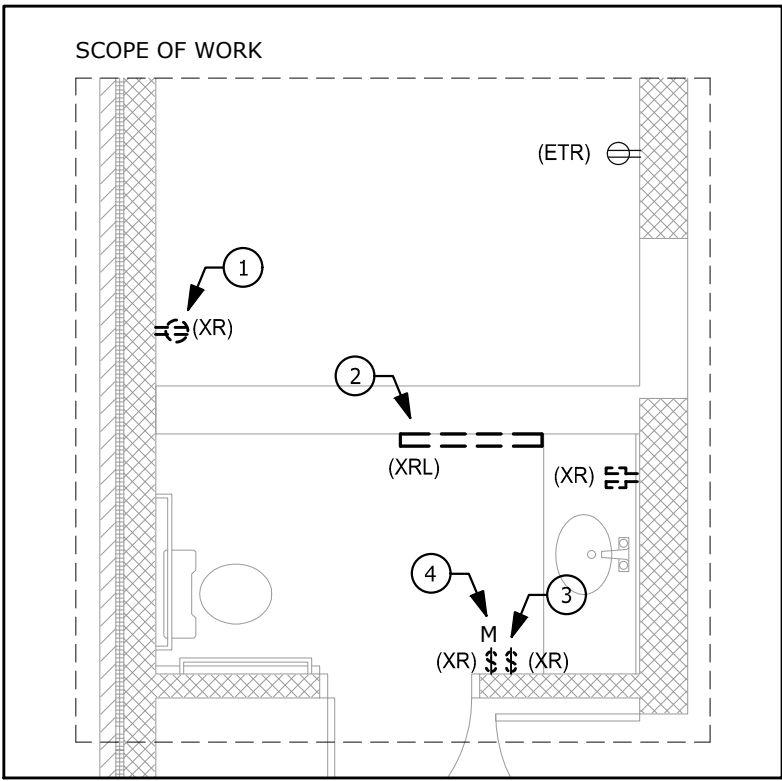
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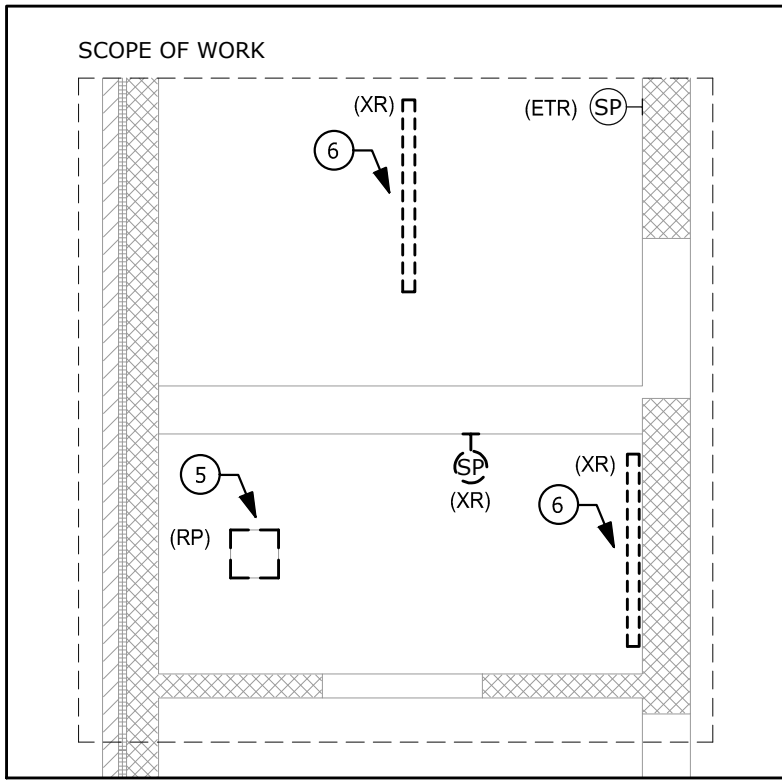
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DATE  
JULY 2025

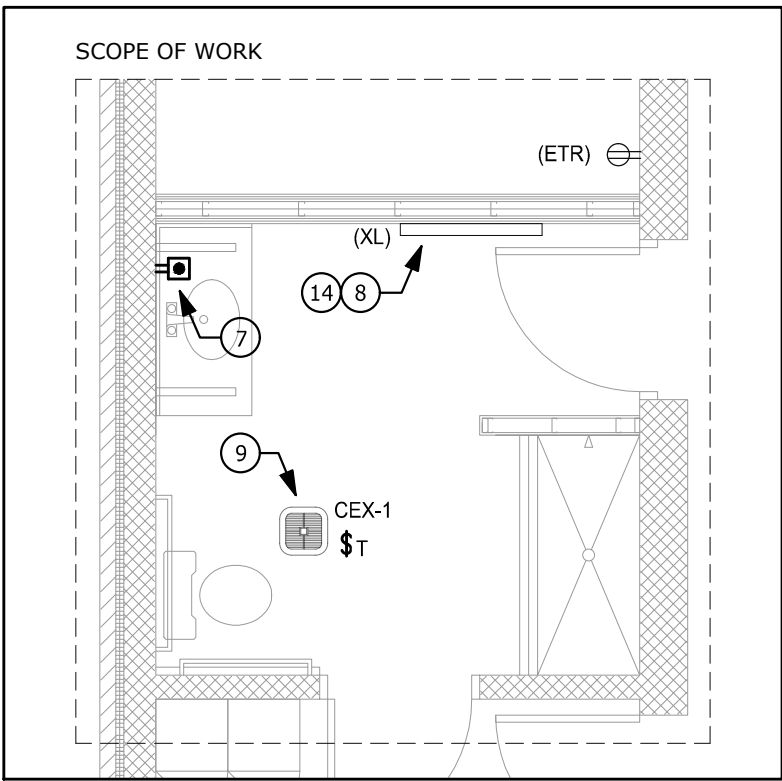




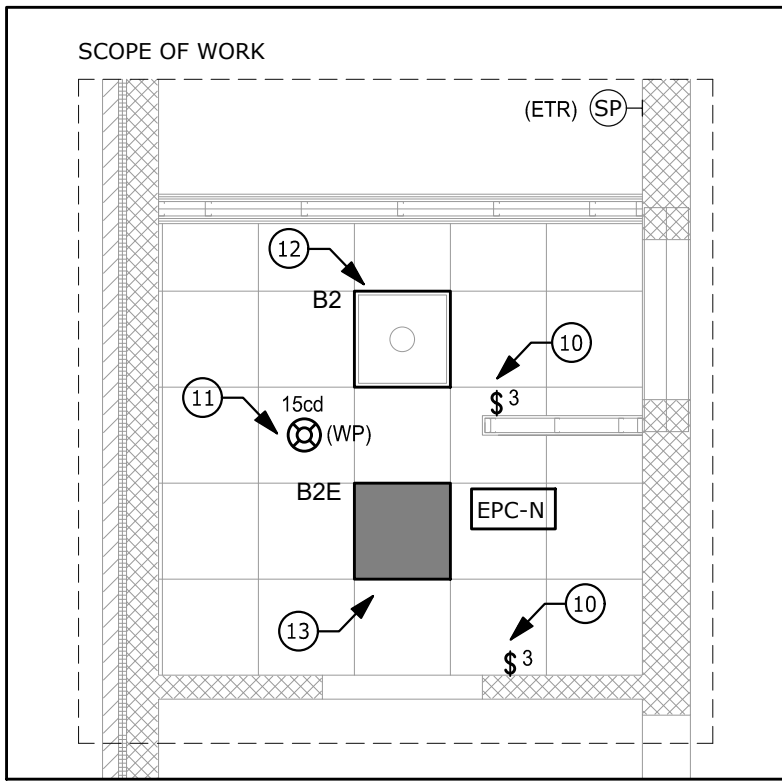
1 DEMOLITION FLOOR PLAN  
1/4" = 1'-0"



2 DEMOLITION CEILING PLAN  
1/4" = 1'-0"



3 NEW POWER PLAN  
1/4" = 1'-0"



4 NEW LIGHTING AND FIRE ALARM PLAN  
1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE

TAG	MANUF.	MODEL	DESCRIPTION
B2	METALUX	22CGTX-20-L835	2X2 LED FLAT PANEL
B2E	METALUX	22CGTX-20-L835	2X2 LED FLAT PANEL

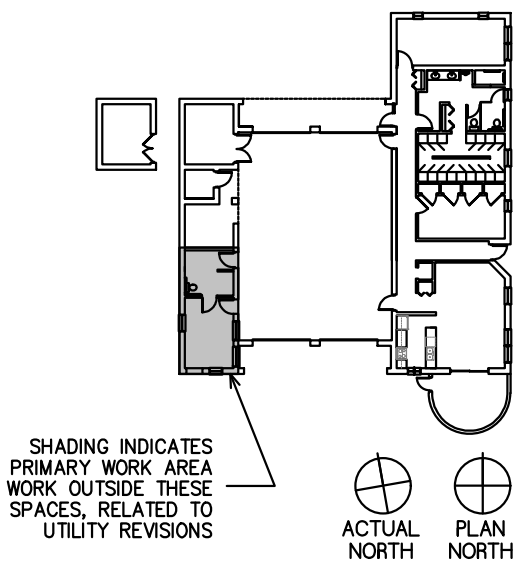
ELECTRICAL EQUIPMENT SCHEDULE

TAG	DESCRIPTION	FLA	MCA	MOCP	VOLTAGE	POLES	TAG
CEX-1	EXHAUST FAN	0.11	0.14 A	20 A	120 V	1	CEX-1

KEYED NOTES FOR E3

- 1 MAKE SAFE, DISCONNECT, AND REMOVE EXISTING RECEPTACLE. PROTECT AND MAINTAIN EXISTING CIRCUIT FOR FUTURE CONNECTION.
- 2 MAKE SAFE AND DISCONNECT TO FACILITATE THE REMOVAL OF EXISTING ELECTRIC BASEBOARD. PROTECT AND MAINTAIN EXISTING CIRCUIT FOR RECONNECTION. MECHANICAL CONTRACTOR TO REMOVE AND SALVAGE UNIT.
- 3 MAKE SAFE, DISCONNECT, AND REMOVE EXISTING LIGHT SWITCH.
- 4 MAKE SAFE, DISCONNECT, AND REMOVE EXISTING MOTION SENSOR SWITCH.
- 5 MAKE SAFE AND DISCONNECT TO FACILITATE THE REMOVAL OF EXISTING CEILING EXHAUST FAN. PROTECT AND MAINTAIN EXISTING CIRCUIT FOR FUTURE CONNECTION. MECHANICAL CONTRACTOR TO REMOVE UNIT.
- 6 MAKE SAFE, DISCONNECT, AND REMOVE EXISTING LIGHTING FIXTURES. PROTECT AND MAINTAIN EXISTING CIRCUIT FOR FUTURE CONNECTION.
- 7 FURNISH AND INSTALL NEW GFCI RECEPTACLE. NEW GFCI RECEPTACLE TO BE CONNECTED TO EXISTING CIRCUIT. EXTEND WIRING AS REQUIRED.
- 8 REINSTALL EXISTING ELECTRIC BASEBOARD. CONNECT TO EXISTING CIRCUITRY. EXTEND WIRING AND CONDUIT AS REQUIRED.
- 9 CONNECT NEW CEILING EXHAUST FAN TO EXISTING CIRCUITRY. EXTEND WIRING AND CONDUIT AS REQUIRED.
- 10 FURNISH AND INSTALL NEW LIGHT SWITCH. NEW LIGHT SWITCH TO BE CONNECTED TO NEW LIGHT FIXTURES.
- 11 CONNECT NEW SIGNALING DEVICE TO EXISTING SIGNALING CIRCUIT IN THE AREA.
- 12 CONNECT NEW LIGHT FIXTURE TO EXISTING NORMAL LIGHTING CIRCUIT IN THE AREA.
- 13 CONNECT NEW LIGHT FIXTURE TO EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS IN THE AREA VIA EPC-N.
- 14 VERIFY THAT THE RELOCATED BASEBOARD IS GFCI PROTECTED. IF NOT, PROVIDE A GFCI CIRCUIT BREAKER IN THE EXISTING PANEL TO PROTECT THE CIRCUIT PER MEC 210.8(B)(7).

KEY PLAN  
SCALE: 1 : 40



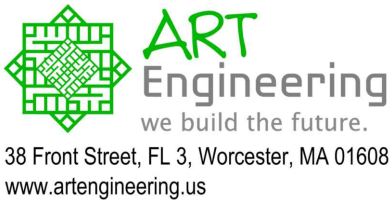
DRAWING TITLE

DEMOLITION AND PROPOSED  
CEILING AND FLOOR PLANS

JOB NUMBER: 1842.00  
JOB TITLE

BATHROOM RENOVATIONS  
GRAFTON ST FIRE STATION  
CITY OF WORCESTER

CONSULTANT



ARCHITECT



DRAWING NO.

E3

SCALE  
1/4" = 1'-0"

DATE  
JULY 2025