

# CANTEEN FREEZER SLAB REPAIR AND WALK-IN REPLACEMENT

SYRACUSE VAMC, NCO 2, BUILDING 1, ROOM CL06, SYRACUSE, NY 13210  
 CONTRACT NO: VA242-17-C-0162  
 PROJECT NO: 528A7-17-720

## PROJECT DATA

<u>OCCUPANCY TYPE</u> OCCUPANCY GROUP V	<u>SEISMIC REGION</u> SEISMIC REGION C
<u>SQUARE FOOTAGES</u> EXISTING FREEZER FOOTPRINT: 226 SQFT PROPOSED FREEZER FOOTPRINT: 325 SQFT CONSTRUCTION AREA FOOTPRINT: 845 SQFT PROPOSED SLABS FOOTPRINT: 352 SQFT PROPOSED WALLS FOOTPRINT: 42 SQFT	

## DRAWING INDEX

SHEET NUMBER	DRAWING TITLE
T101	TITLE PAGE
G101	NOTES
AD101	DEMOLITION PLAN
A101	ARCHITECTURAL PLAN
A501	DOOR SCHEDULE AND DETAILS
S101	STRUCTURAL PLAN
S501	STRUCTURAL DETAILS
S502	STRUCTURAL SECTION VIEWS
M101	MECHANICAL DUCTWORK PLAN
M102	PROPOSED MECHANICAL REFRIGERATION PLAN
M601	MECHANICAL SCHEDULES, NOTES, AND DETAILS
ED101	ELECTRICAL DEMOLITION PLAN
E101	PROPOSED ELECTRICAL PLAN
FP101	FIRE PROTECTION PLAN

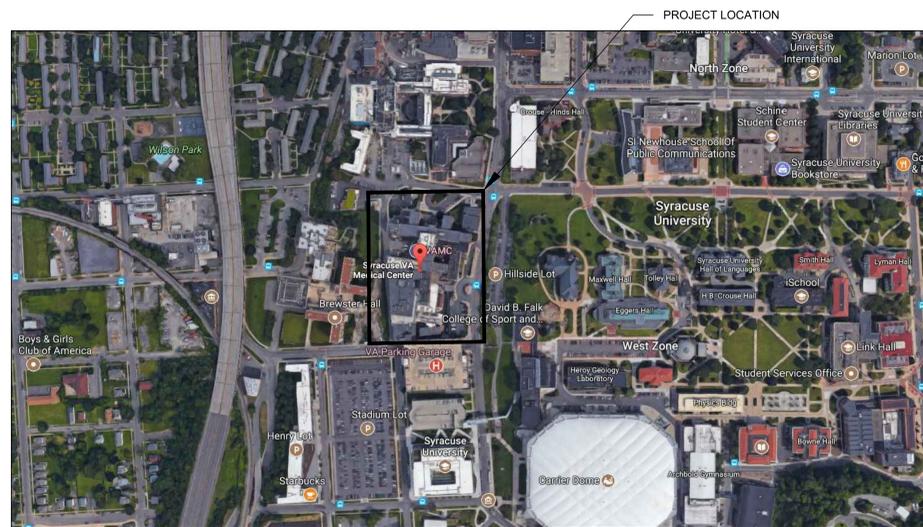
## APPLICABLE CODES

APPLICABLE CODES  
 IBC 2015 (NYS)  
 NFPA70 - NATIONAL ELECTRIC CODE (2017)  
 NFPA 101 - LIFE SAFETY (2018)  
 PG-18-10 - VA DESIGN MANUALS

## SPECIAL INSPECTIONS

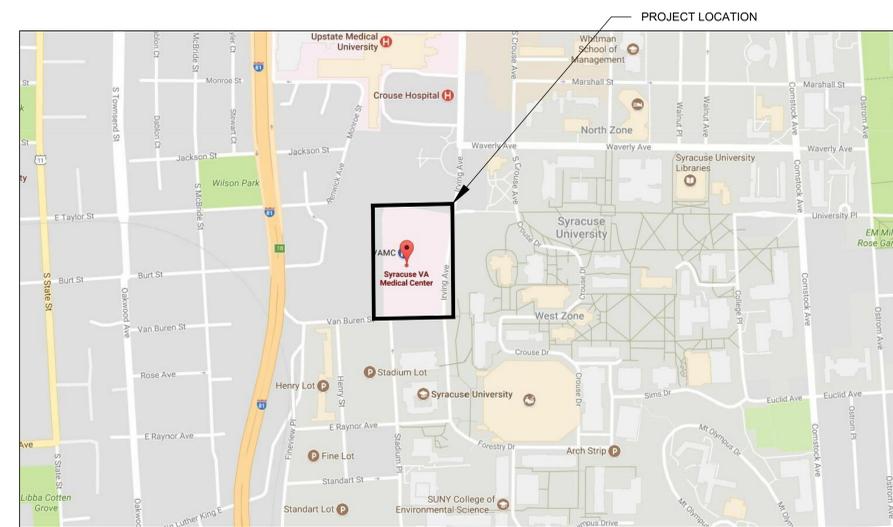
SPECIAL INSPECTIONS  
 CONCRETE FORMING ACI 318: 26.10.1 (b)  
 REINFORCING STEEL IBC 1908.4  
 C.I.P. ANCHORS ACI 318: 17.8.2

## AERIAL MAP



AERIAL: NTS

## VICINITY MAP



VICINITY: NTS

Revisions:	Date:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title <b>TITLE PAGE</b>	Phase 100% SUBMISSION	Project Title CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	Project Number 528A7-17-720
			ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334		Approved: Project Director		Location SYRACUSE VAMC, RM CL06	Building Number 1
							Issue Date 4-27-18	Checked JWE
							Drawn MPL	Drawing Number T101



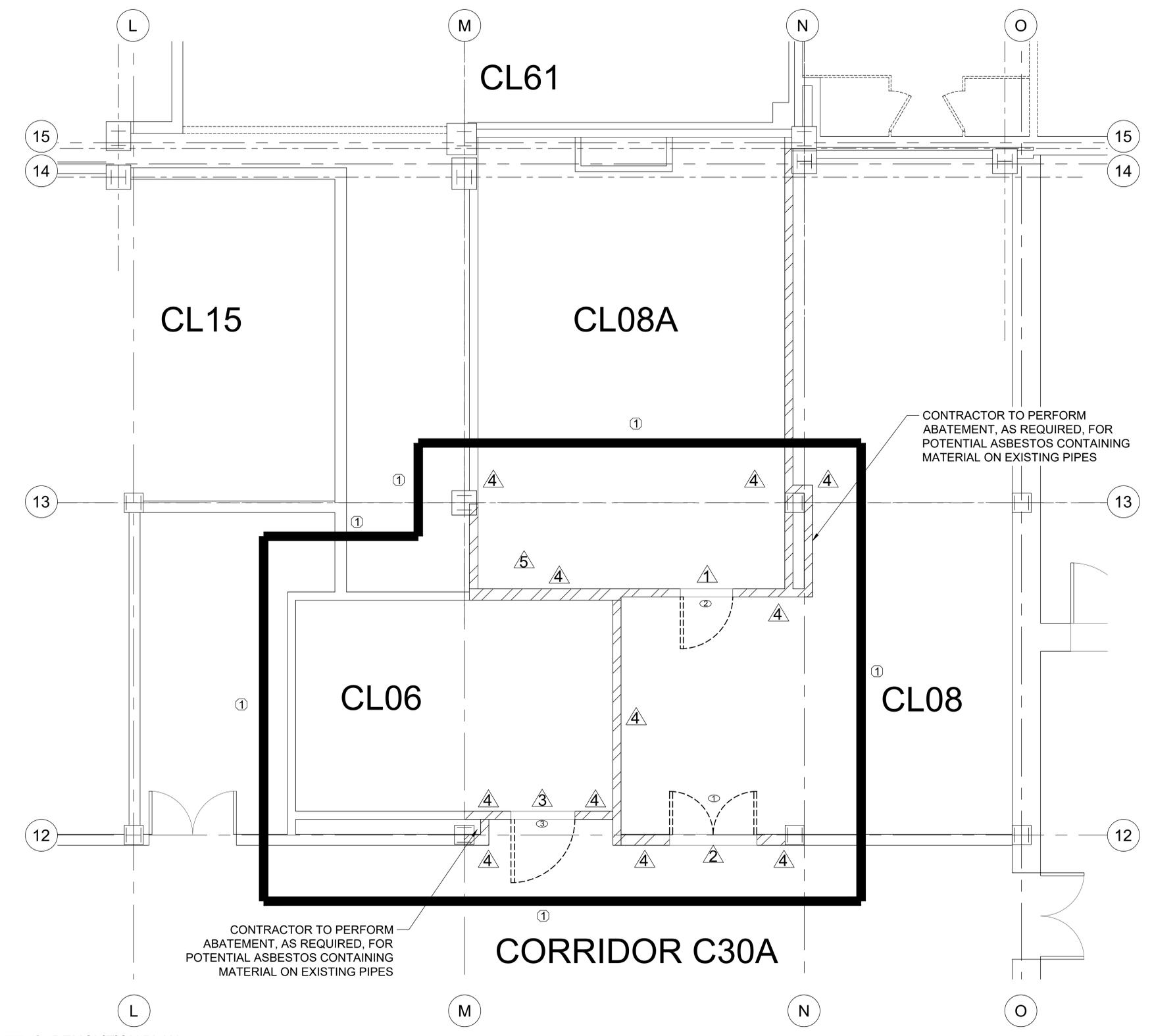
- NOTES:**
1. PLAN VIEW IS DRAWN BASED OFF OF AS-BUILT DRAWINGS FROM ORIGINAL DATE OF CONSTRUCTION.
  2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. IF THERE ARE ANY DEVIATIONS FROM THE DIMENSIONS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.
  3. SEE SHEET A501 FOR EXISTING DOOR SCHEDULE.
  4. CONTRACTOR TO ENSURE CONTINUED ACCESS IS AVAILABLE TO CLO8A THROUGH CLO8 FOR VA STAFF FOR THE ENTIRE DURATION OF THE PROJECT. CONTRACTOR TO SEQUENCE WORK TO ENSURE ACCESS TO CLO8A AT ALL TIMES THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS TO ENSURE THAT THERE IS AT LEAST 8 FEET OF SPACE FROM THE EXTERIOR WALL TO THE CONSTRUCTION WALL IN CLO8; ANY DEVIATION OF THIS IS TO BE REVIEWED WITH THE COR PRIOR TO THE CONSTRUCTION OF THE 2 HOUR FIRE BARRIER.
  5. THE CONTRACTOR IS TO ENSURE THAT THERE IS AT LEAST A 36" PATH OF EGRESS IN CORR 30A FOR EGRESS TRAFFIC; ANY DEVIATION OF THIS IS TO BE REVIEWED BY THE COR PRIOR TO INSTALLATION OF 2 HOUR FIRE BARRIER WALL.

**DEMOLITION NOTES**

- ① EXISTING DOOR TO AND FRAME TO BE DEMOLISHED.
- ② EXISTING DOOR AND CARD READER TO BE REMOVED AND RELOCATED/REPLACED WITH NEW DOOR AND FRAME. DOOR TO MATCH EXISTING COMPOSITION AND COLOR PALETTE. CONTRACTOR TO REUSE EXISTING CARD READER FOR PROPOSED DOOR. CONTRACTOR TO INFILL WALLS WHERE EXISTING DOOR IS LOCATED WITH EXISTING WALL COMPOSITION UNLESS OTHERWISE NOTED ON DRAWINGS.
- ③ EXISTING DOOR AND FRAME TO BE REMOVED. CONTRACTOR TO PROVIDE TEMPORARY SHORING BEFORE INFILLING WALLS WHERE DOOR IS LOCATED WITH EXISTING WALL COMPOSITION UNLESS OTHERWISE NOTED ON DRAWINGS.
- ④ EXISTING WALL TO BE REMOVED AND REPLACED. CONTRACTOR TO PROVIDE TEMPORARY SHORING TO BE IMPLEMENTED DURING TRANSITIONAL PERIOD FOR PROPOSED SLAB.
- ⑤ CONTRACTOR TO REMOVE AND RELOCATE EXISTING AIR CONDITIONING UNIT AND ASSOCIATED PIPING.

**SYMBOL LEGEND**

2-HOUR CONSTRUCTION BARRIER	—
COLUMN LINES	- - -
WALLS TO BE DEMOLISHED	▨
DOOR TO BE REMOVED	⌈ ⌋
DOOR TAGS (SEE A501 FOR DOOR SCHEDULE)	①
WALL TAGS (SEE B7/A101)	①



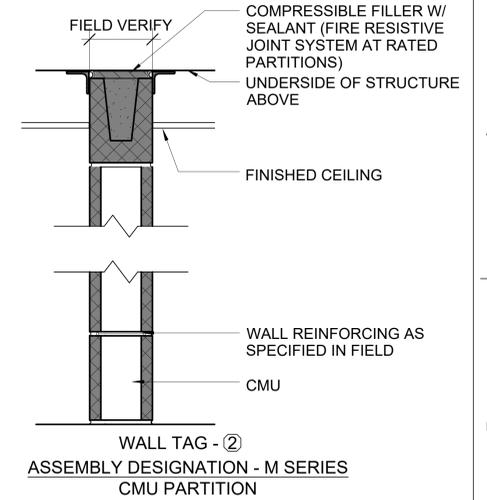
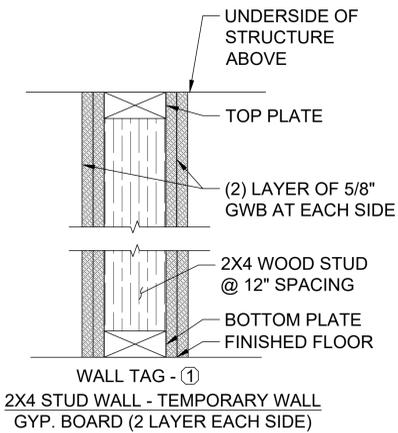
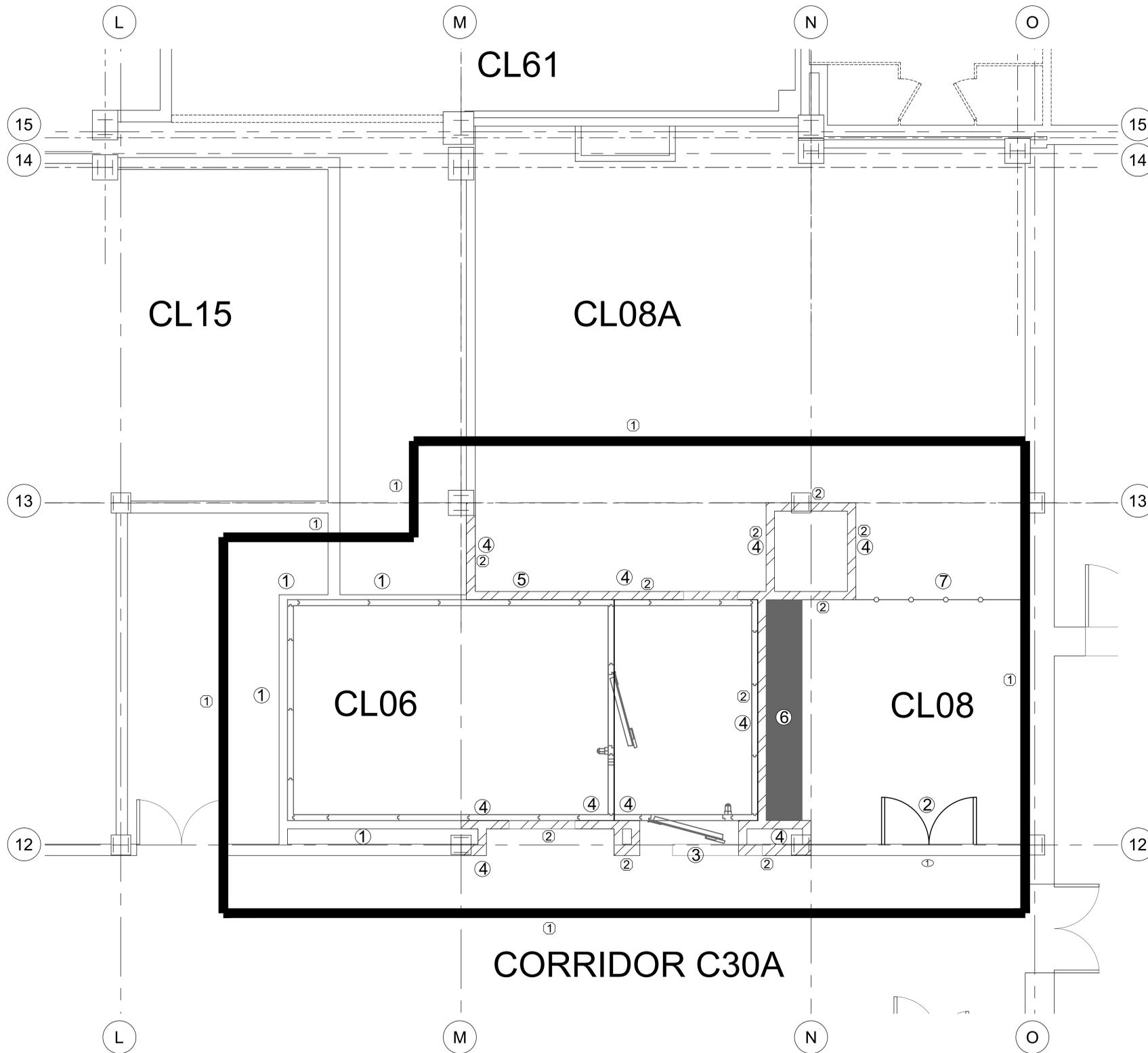
**F1 DEMOLITION PLAN**  
SCALE: 3/8" = 1'-0"

Revisions:	Date:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title	Phase	Project Title	Project Number
			ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334		<b>DEMOLITION PLAN</b>	100% SUBMISSION	CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720
					Approved: Project Director		Location	Building Number
							SYRACUSE VAMC, RM CL06	1
							Issue Date	Checked
							4-27-18	JWE
							Drawn	Drawing Number
							MPL	AD101

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- NOTES:
1. PLAN VIEW IS DRAWN BASED OFF OF AS-BUILT DRAWINGS FROM ORIGINAL DATE OF CONSTRUCTION.
  2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. IF THERE ANY DEVIATION FROM THE DIMENSIONS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.
  3. SEE SHEET A501 FOR PROPOSED DOOR SCHEDULE AND DETAILS.



**B7** PARTITION ASSEMBLY DESIGNATION DETAILS (TYP.) - 2 HR FIRE RATED  
SCALE: NTS

- KEYED NOTES
1. CONTRACTOR TO PATCH WALL WHERE REQUIRED.
  2. PROPOSED NEW DOOR AND FRAME TO MATCH EXISTING COMPOSITION AND COLOR PALETTE. CONTRACTOR TO REUSE EXISTING CARD READER FOR PROPOSED DOOR LOCATION. SEE DOOR SCHEDULE FOR ADDITIONAL DETAILS.
  3. CONTRACTOR TO PROVIDE OPENING FOR PROPOSED COOLER DOOR.
  4. PROPOSED WALL COMPOSITION TO MATCH EXISTING COMPOSITION OF MASONRY WALLS OR APPROVED EQUIVALENT. CONTRACTOR TO REMOVE TEMPORARY SHORING IMPLEMENTED DURING TRANSITIONAL PERIOD UPON COMPLETION OF FABRICATED WALLS.
  5. CONTRACTOR TO RELOCATE EXISTING AIR CONDITIONING UNIT AND ASSOCIATED PIPING.
  6. CONTRACTOR TO INSTALL 24" SOLID SURFACE MATERIAL COUNTER AND MOUNT AT STANDING HEIGHT (42" AFF).
  7. CONTRACTOR TO MODIFY INTERIOR FENCING FOR ROOM CL08 TO MATCH EXISTING.

SYMBOL LEGEND

2-HOUR CONSTRUCTION BARRIER	
COLUMN LINES	
PROPOSED WALLS	
PROPOSED INTERIOR FENCING	
PROPOSED SOLID SURFACE MATERIAL COUNTER	
PROPOSED NEW DOOR	
DOOR TAGS (SEE A501 FOR DOOR SCHEDULE)	
WALL TAGS (SEE B7/A101)	

**F1** PROPOSED FLOOR PLAN  
SCALE: 3/8" = 1'-0"

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD
ENGINEER
WATSON ENGINEERING, PC
1112 STATE ROUTE 434
OWEGO, NY 13827
0: 607-223-4334

STAMP



Drawing Title	ARCHITECTURAL PLAN
Approved: Project Director	

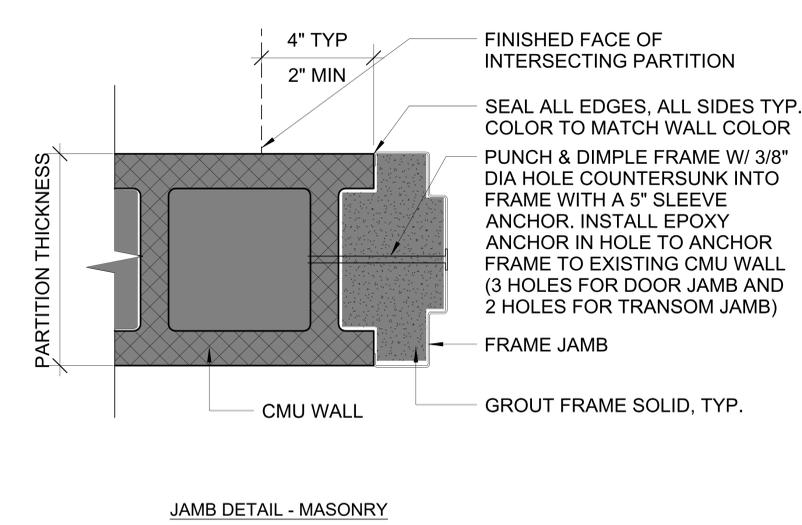
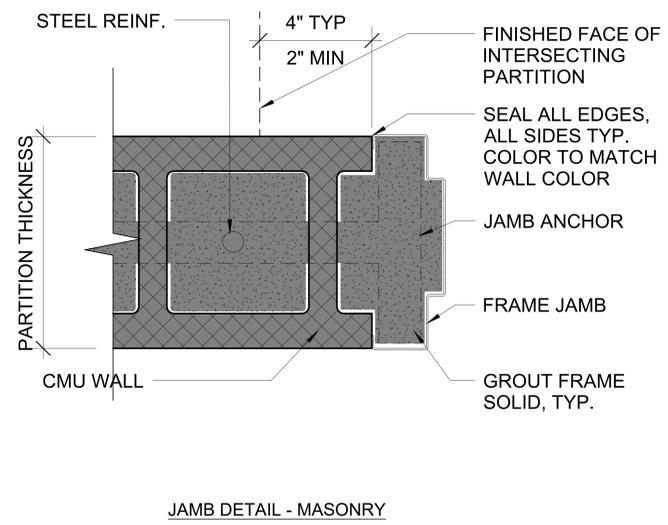
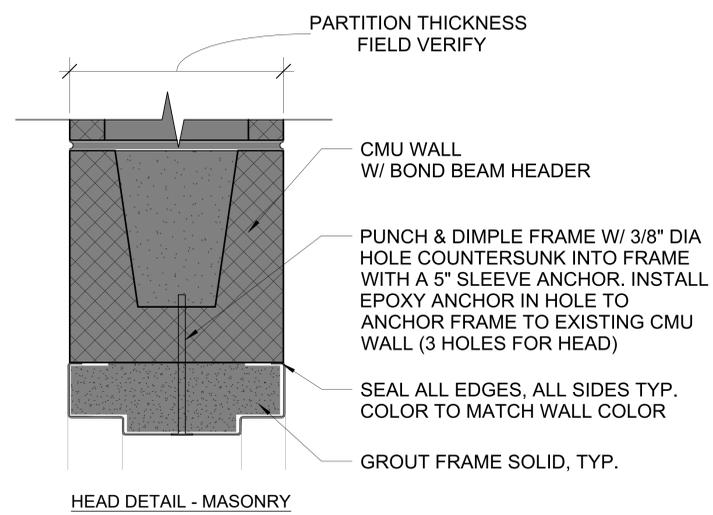
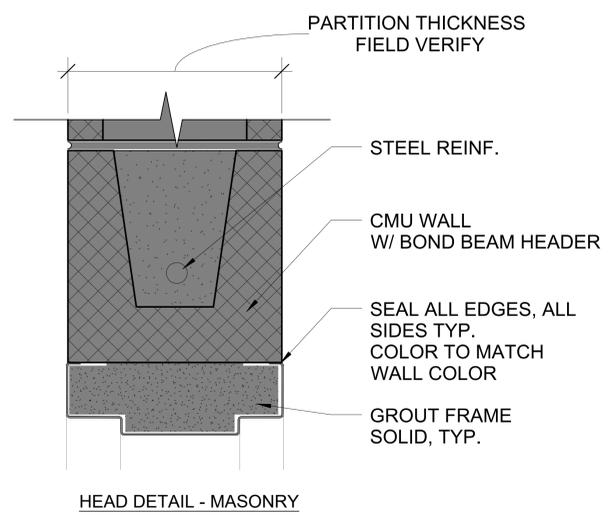
Phase	100% SUBMISSION
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Project Title	CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT
Location	SYRACUSE VAMC, RM CL06
Issue Date	4-27-18
Checked	JWE
Drawn	MPL

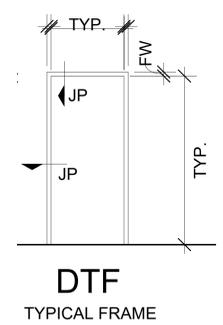
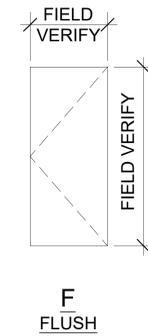
Project Number	528A7-17-720
Building Number	1
Drawing Number	A101

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NOTES:  
 1. PLAN VIEW IS DRAWN BASED OFF OF AS-BUILT DRAWINGS FROM ORIGINAL DATE OF CONSTRUCTION.  
 2. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. IF THERE ANY DEVIATION FROM THE DIMENSIONS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.



**F1** FRAMING INSTALLATION DETAILS (TYP.)  
 SCALE: NTS



**C7** DOOR TYPES (TYP.)  
 SCALE: NTS

**C9** FRAME TYPES - DOORS (TYP.)  
 SCALE: NTS

DOOR NO	SIZE		DOORS			FRAMES					GLASS	HDWE GROUP	REMARKS	
	WIDTH	HEIGHT	TYPE	MATERIAL	THICKNESS	TYPE	MATERIAL	HEAD DTL	JAMB DTL	SILL DTL				LABEL
BASEMENT FLOOR														
CL06	3' - 6"	7' - 0"	VIF	VIF	1-3/4"	VIF	VIF	-	-	-	-	③	VIF	-
CL08	4' - 4 1/2"	7' - 0"	VIF	VIF	VIF	VIF	VIF	-	-	-	-	①	VIF	-
CL08A	7' - 0"	7' - 0"	VIF	VIF	VIF	VIF	VIF	-	-	-	-	②	VIF	-

DOOR SCHEDULE LEGEND	
HM	HOLLOW METAL
VIF	CONTRACTOR TO VERIFY IN FIELD
DOOR HARDWARE REMARKS	
1. ALL PROPOSED DOORS TO BE YALE 8800 SERIES OR APPROVED EQUIVALENT.	
DOOR SCHEDULE REMARKS	
1. DOOR IS TO BE EQUIPPED WITH CARD READER ACCESS	
2. PROVIDE AUTOMATIC OPERATORS	
3. PUSH PLATE OPERATOR	
4. DOOR SHALL COMPLY WITH NFPA 101, SECTION 18.2.2.2.6.	
5. CONTRACTOR SHALL MATCH EXISTING DOOR, FRAME AND HARDWARE AS CLOSELY AS POSSIBLE.	

**E7** EXISTING DOOR SCHEDULE  
 SCALE: NTS

DOOR NO	SIZE		DOORS			FRAMES					GLASS	HDWE GROUP	REMARKS	
	WIDTH	HEIGHT	TYPE	MATERIAL	THICKNESS	TYPE	MATERIAL	HEAD DTL	JAMB DTL	SILL DTL				LABEL
BASEMENT FLOOR														
CL08	4' - 4 1/2"	7' - 0"	VLT	HM	1-3/4"	VIF	HM	D1/A501	D1/A501	-	-	①	1	1, 5

**F7** PROPOSED DOOR SCHEDULE  
 SCALE: NTS

Revisions:	Date:

CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP
	ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334	

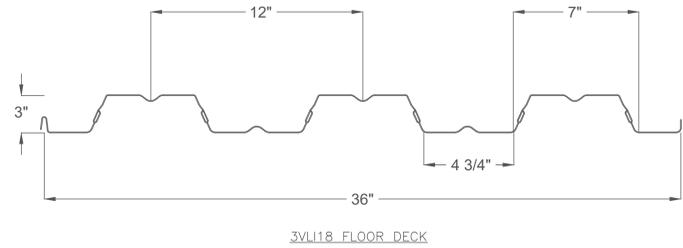

Drawing Title	Phase
<b>DOOR SCHEDULE AND DETAILS</b>	100% SUBMISSION
Approved: Project Director	

Project Title	Project Number	
CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720	
Building Number	1	
Location	Drawing Number	
SYRACUSE VAMC, RM CL06	A501	
Issue Date	Checked	Drawn
4-27-18	JWE	MPL



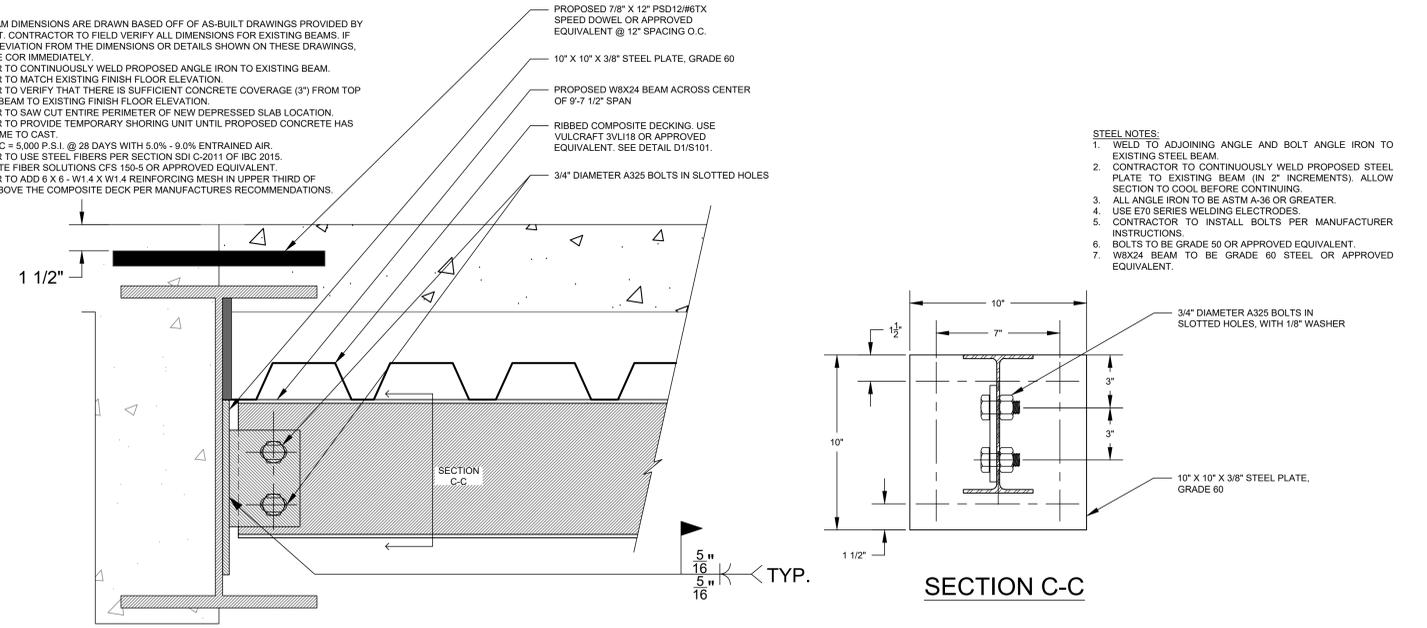
- NOTES:**
- EXISTING BEAM DIMENSIONS ARE DRAWN BASED OFF OF AS-BUILT DRAWINGS PROVIDED BY GOVERNMENT. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS FOR EXISTING BEAMS. IF THERE ANY DEVIATION FROM THE DIMENSIONS OR DETAILS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.
  - CONCRETE FC = 5,000 P.S.I. @ 28 DAYS WITH 5.0% - 9.0% ENTRAINED AIR.
  - ALL PROPOSED CONCRETE SHALL BE CURED FOR A MINIMUM OF 28 DAYS.
  - ALL STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
  - ALL STEEL REINFORCEMENT SHALL HAVE A 3" COVER UNLESS NOTED OTHERWISE.
  - ALL STEEL REINFORCEMENT SHALL BE WIRE TIED.
  - CONCRETE PROPERTIES SHALL MEET THE FOLLOWING REQUIREMENTS.
    - STRENGTH: AS NOTED ON DRAWINGS.
    - MAX W/C = .45.
    - AIR = 5% ± 1%.
    - SLUMP: 4" ± 1".
  - DETAILS OF REINFORCING NOT SHOWN IN THESE PLANS SHALL BE DONE IN ACCORDANCE WITH ACI 318 AND ACI 318.
  - CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING SLAB REBAR AND ENSURE PROPER DOWELING CONNECTION BETWEEN EXISTING AND PROPOSED CONCRETE SLABS.

- STEEL NOTES:**
- WELD TO ADJOINING ANGLE AND BOLT ANGLE IRON TO EXISTING STEEL BEAM.
  - CONTRACTOR TO CONTINUOUSLY WELD PROPOSED STEEL PLATE TO EXISTING BEAM (IN 2" INCREMENTS). ALLOW SECTION TO COOL BEFORE CONTINUING.
  - ALL ANGLE IRON TO BE ASTM A-36 OR GREATER.
  - USE E70 SERIES WELDING ELECTRODES.
  - CONTRACTOR TO INSTALL BOLTS PER MANUFACTURER INSTRUCTIONS.
  - BOLTS TO BE GRADE 60 OR APPROVED EQUIVALENT.
  - W8X24 BEAM TO BE GRADE 60 STRUCTURAL STEEL OR APPROVED EQUIVALENT.



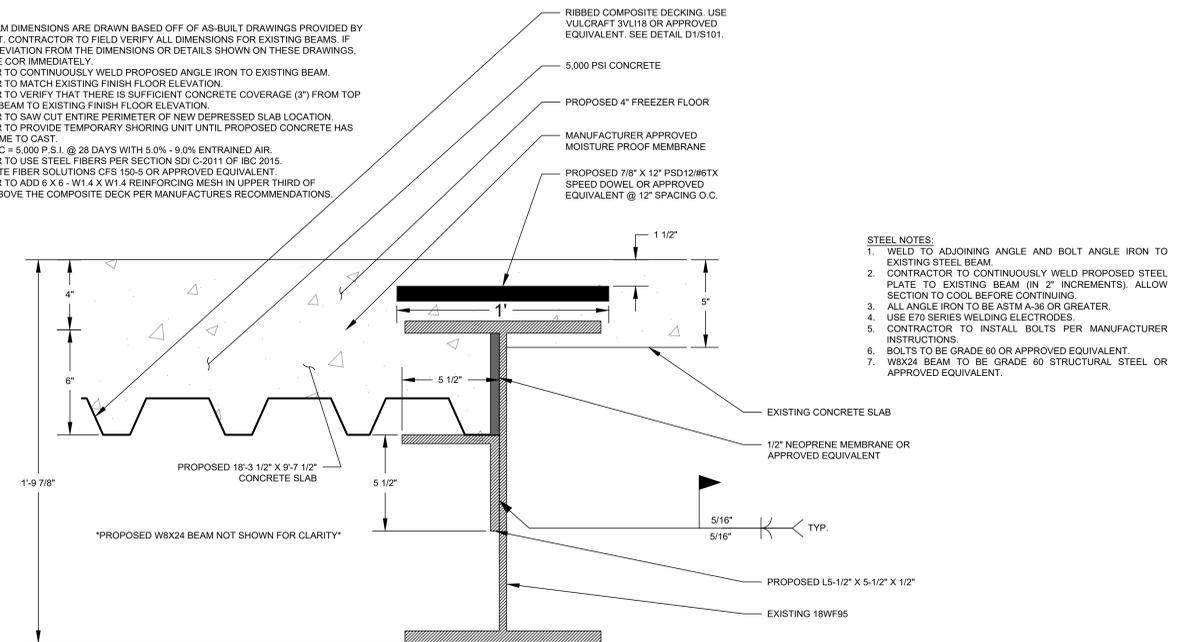
**D1** TYPICAL DECK DETAILS  
SCALE: NTS

- NOTES:**
- EXISTING BEAM DIMENSIONS ARE DRAWN BASED OFF OF AS-BUILT DRAWINGS PROVIDED BY GOVERNMENT. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS FOR EXISTING BEAMS. IF THERE ANY DEVIATION FROM THE DIMENSIONS OR DETAILS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.
  - CONTRACTOR TO CONTINUOUSLY WELD PROPOSED ANGLE IRON TO EXISTING BEAM.
  - CONTRACTOR TO MATCH EXISTING FINISH FLOOR ELEVATION.
  - CONTRACTOR TO VERIFY THAT THERE IS SUFFICIENT CONCRETE COVERAGE (3") FROM TOP OF EXISTING BEAM TO EXISTING FINISH FLOOR ELEVATION.
  - CONTRACTOR TO SAW CUT ENTIRE PERIMETER OF NEW DEPRESSED SLAB LOCATION. CONTRACTOR TO PROVIDE TEMPORARY SHORING UNIT UNTIL PROPOSED CONCRETE HAS ADEQUATE TIME TO CAST.
  - CONCRETE FC = 5,000 P.S.I. @ 28 DAYS WITH 5.0% - 9.0% ENTRAINED AIR.
  - CONTRACTOR TO USE STEEL FIBERS PER SECTION SDI C-2011 OF IBC 2015.
  - USE CONCRETE FIBER SOLUTIONS CFS 150-5 OR APPROVED EQUIVALENT.
  - CONTRACTOR TO ADD 6 X 6 - W1.4 X W1.4 REINFORCING MESH IN UPPER THIRD OF CONCRETE ABOVE THE COMPOSITE DECK PER MANUFACTURER'S RECOMMENDATIONS.

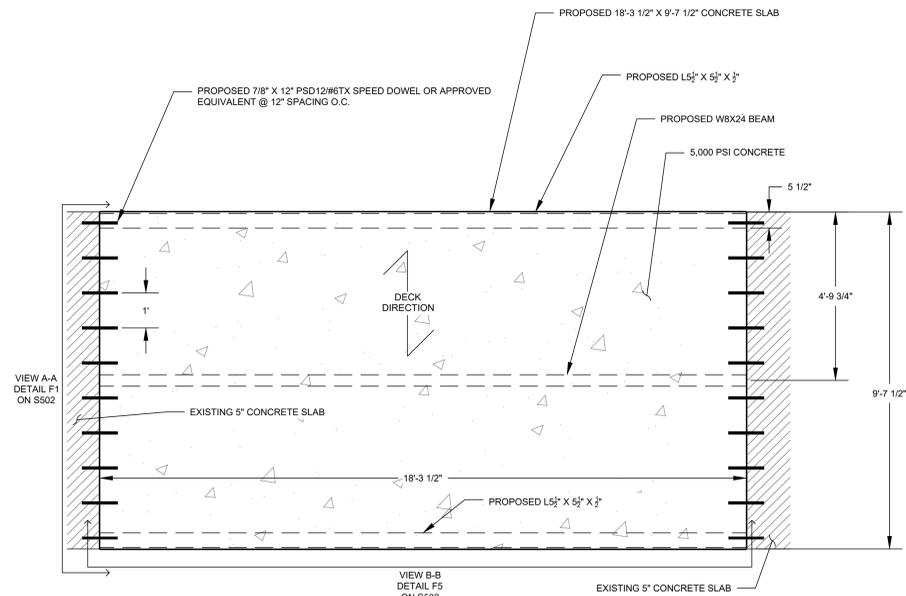


**C5** PROPOSED NEW W8X24 BEAM CONNECTION TO EXISTING BEAM (TYP.)  
SCALE: 3' = 1'-0"

- NOTES:**
- EXISTING BEAM DIMENSIONS ARE DRAWN BASED OFF OF AS-BUILT DRAWINGS PROVIDED BY GOVERNMENT. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS FOR EXISTING BEAMS. IF THERE ANY DEVIATION FROM THE DIMENSIONS OR DETAILS SHOWN ON THESE DRAWINGS, CONTACT THE COR IMMEDIATELY.
  - CONTRACTOR TO CONTINUOUSLY WELD PROPOSED ANGLE IRON TO EXISTING BEAM.
  - CONTRACTOR TO MATCH EXISTING FINISH FLOOR ELEVATION.
  - CONTRACTOR TO VERIFY THAT THERE IS SUFFICIENT CONCRETE COVERAGE (3") FROM TOP OF EXISTING BEAM TO EXISTING FINISH FLOOR ELEVATION.
  - CONTRACTOR TO SAW CUT ENTIRE PERIMETER OF NEW DEPRESSED SLAB LOCATION. CONTRACTOR TO PROVIDE TEMPORARY SHORING UNIT UNTIL PROPOSED CONCRETE HAS ADEQUATE TIME TO CAST.
  - CONCRETE FC = 5,000 P.S.I. @ 28 DAYS WITH 5.0% - 9.0% ENTRAINED AIR.
  - CONTRACTOR TO USE STEEL FIBERS PER SECTION SDI C-2011 OF IBC 2015.
  - USE CONCRETE FIBER SOLUTIONS CFS 150-5 OR APPROVED EQUIVALENT.
  - CONTRACTOR TO ADD 6 X 6 - W1.4 X W1.4 REINFORCING MESH IN UPPER THIRD OF CONCRETE ABOVE THE COMPOSITE DECK PER MANUFACTURER'S RECOMMENDATIONS.



**F5** DECK ANGLE IRON SUPPORT CONNECTION DETAIL (TYP.)  
SCALE: NTS



**F1** PLAN VIEW OF PROPOSED NEW SLAB (TYP.)  
SCALE: 1/2" = 1'-0"

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD	STAMP
ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334	

VA	U.S. Department of Veterans Affairs
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Drawing Title	Phase
STRUCTURAL DETAILS	100% SUBMISSION
Approved: Project Director	

Project Title	Project Number
CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720
Location	Building Number
SYRACUSE VAMC, RM C106	1
Issue Date	Checked
4-27-18	JWE
Drawn	MPL

Drawing Number	
S501	

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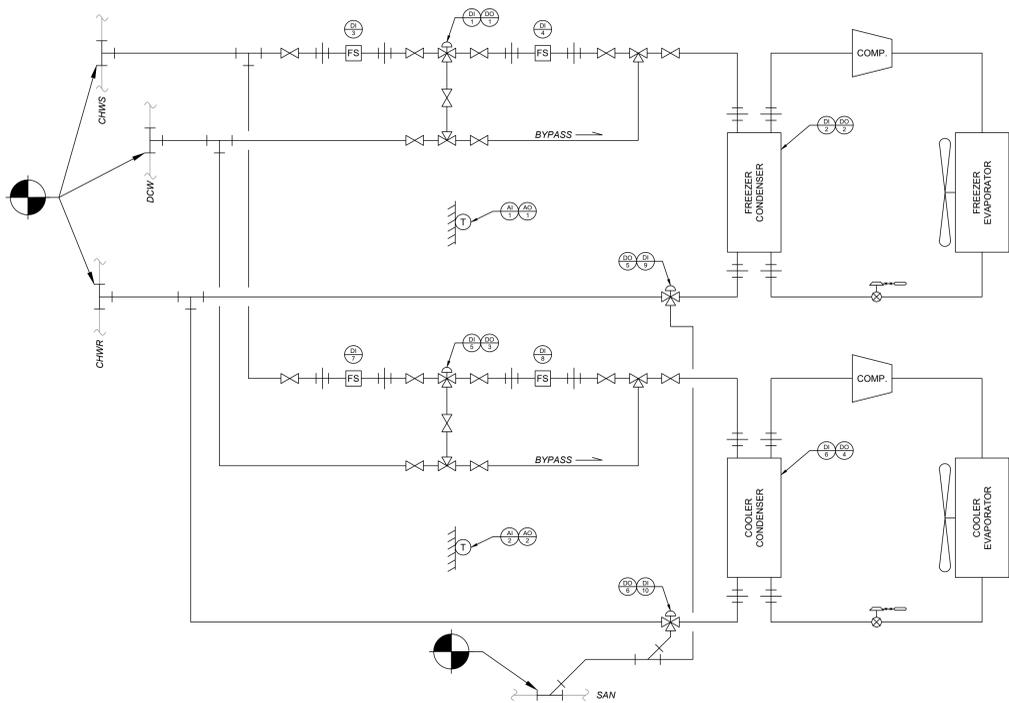




WATER COOLED CONDENSING UNIT SCHEDULE															
UNIT	CLASSIFICATION	SPACE DESIGN		SYSTEM DESIGN			EVAPORATOR BASIS OF DESIGN					ELECTRICAL			
		DESIGN TEMPERATURE (°F)	DAILY TOTAL (BTU/DAY)	CAPACITY (BTUH)	RUN TIME (HRS/DAY)	REFRIGERANT	NUMBER OF EVAPORATORS	UPPER SUCTION TEMP (°F)	UPPER SUCTION CAPACITY (BTUH)	LOWER SUCTION TEMP (°F)	LOWER SUCTION CAPACITY (BTUH)	SUCTION TEMPERATURE (°F)	VOLTAGE VOLTS	PHASE	FREQ. Hz
COOLER	REFRIGERATED VESTIBULE	35	104490	5805	18	R404A	1	30	6480	20	5270	24	208	3	60
FREEZER	MIXED VEGETABLES	-12	524700	29150	18	R404A	1	-10	36440	-20	27930	-15	208	3	60

**NOTES:**

1. SPACE CLASSIFICATIONS ARE BASED ON ASHRAE HANDBOOK
2. SEE DETAILED CALCULATIONS FOR SPACE AND SYSTEM DESIGN RESULTS
3. CONTRACTOR SHALL PROVIDE CALCULATIONS FROM MANUFACTURER TO SUPPORT FINAL EQUIPMENT SELECTION



DDC POINTS LIST			
POINT TYPE	POINT #	DESCRIPTION	ALARM TO BAS
AI	1	FREEZER TEMPERATURE	YES
	2	COOLER TEMPERATURE	YES
AO	1	FREEZER TEMPERATURE SETPOINT	
	2	COOLER TEMPERATURE SETPOINT	
DI	1	THREE-WAY VALVE POSITION	
	2	EVAPORATOR STATUS	
	3	FLOW DETECTION SENSOR	YES
	4	FLOW DETECTION SENSOR	YES
	5	THREE-WAY VALVE POSITION	
	6	EVAPORATOR STATUS	
DO	1	VALVE OPEN/CLOSE	
	2	EVAPORATOR ON/OFF	
	3	VALVE OPEN/CLOSE	
	4	EVAPORATOR ON/OFF	
	5	VALVE OPEN/CLOSE	
	6	VALVE OPEN/CLOSE	

- NOTES:**
1. ALARMS ON FLOW DETECTION SENSORS SHALL SEND AN ALERT SIGNAL TO THE BAS SYSTEM IF THERE IS AN UNEXPECTED LACK OF FLOW THROUGH THE SENSOR.
  2. ALL VALVES SHALL EITHER BE FULLY OPEN OR FULLY CLOSED.
  3. THREE-WAY CONTROL VALVES SHALL FAIL "OPEN" TO ALLOW THE FLOW OF DOMESTIC WATER AS AN EMERGENCY SOURCE OF WATER.
  4. IF THE TEMPERATURE RISES TO 5°F (ADJUSTABLE) ABOVE THE SETPOINT TEMPERATURE FOR EITHER SPACE, AN ALARM SHALL BE SENT TO THE BAS SYSTEM.

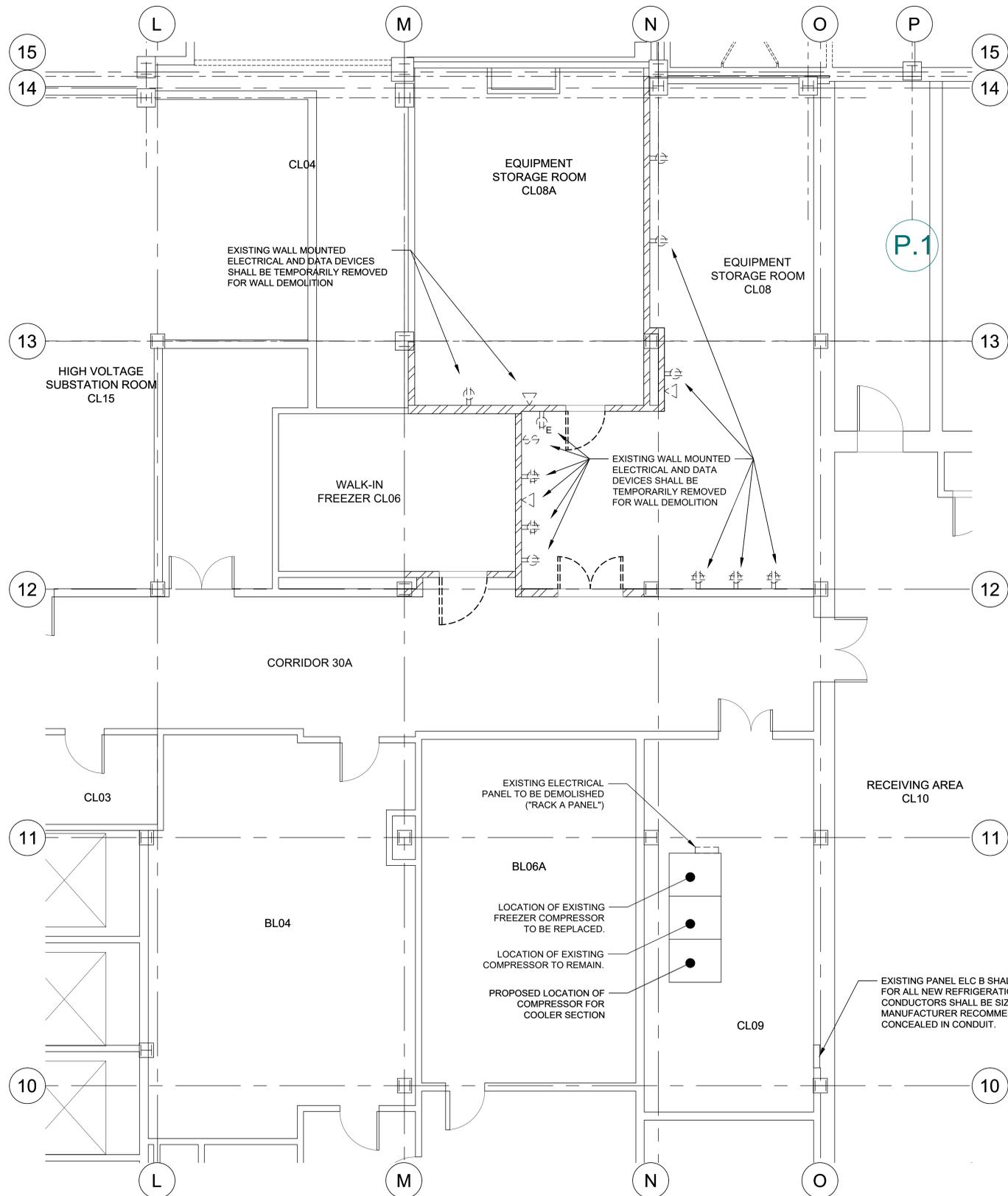
**REFRIGERATION SYSTEM SEQUENCE OF OPERATIONS**

- NORMAL OPERATION**
1. DURING NORMAL OPERATION, THE THREE-WAY CONTROL VALVE SHALL BE IN THE "OPEN" POSITION TO ALLOW FLOW OF CHILLED WATER, THE THREE-WAY MANUAL VALVE SHALL BE SET TO THE "OPEN" POSITION TO ALLOW FLOW OF DOMESTIC WATER TO THE THREE-WAY CONTROL VALVE, IF REQUIRED, AND ALL MANUAL SERVICE ISOLATION VALVES SHALL BE SET TO THE "OPEN" POSITION.
  2. UPON A RISE IN THE SPACE TEMPERATURE OF THE WALK-IN FREEZER OR COOLER TO 2°F ABOVE THE SETPOINT TEMPERATURE (ADJUSTABLE), AS DETECTED BY THE WALL-MOUNTED THERMOSTAT LOCATED WITHIN EACH REFRIGERATED SPACE, THE EVAPORATOR, CONDENSER, AND COMPRESSOR SHALL POWER "ON" SIMULTANEOUSLY, AND CHILLED WATER SHALL FLOW THRU THE CONDENSER.
  3. UPON A DROP IN THE SPACE TEMPERATURE OF THE WALK-IN FREEZER OR COOLER TO 2°F BELOW THE SETPOINT TEMPERATURE (ADJUSTABLE), AS DETECTED BY THE WALL-MOUNTED THERMOSTAT LOCATED WITHIN EACH SPACE, THE EVAPORATOR, CONDENSER, AND COMPRESSOR SHALL POWER "OFF" SIMULTANEOUSLY.
  4. IF THE FLOW DETECTION SENSOR UPSTREAM OF THE THREE-WAY CONTROL VALVE IN EITHER SYSTEM DETECTS AN UNEXPECTED LACK OF FLOW, THE AFFECTED SYSTEM SHALL FOLLOW THE SEQUENCE OF OPERATION FOR "EMERGENCY OPERATION," AS OUTLINED BELOW.
- EMERGENCY OPERATION**
1. UPON A DETECTION OF "NO FLOW" THROUGH THE FLOW DETECTION SENSOR UPSTREAM OF THE THREE-WAY CONTROL VALVE FOR EITHER SYSTEM, AN ALARM SHALL ALERT THE BAS SYSTEM AND THE THREE-WAY CONTROL VALVE FOR THE AFFECTED SYSTEM SHALL ACTUATE TO A POSITION TO ALLOW THE SYSTEM TO BE TEMPORARILY FED BY THE DOMESTIC COLD WATER SYSTEM INSTEAD OF THE CHILLED WATER SYSTEM. THE THREE-WAY DRAIN VALVE SHALL SIMULTANEOUSLY ACTUATE TO A POSITION TO ALLOW THE SYSTEM RETURN WATER TO BE DIRECTED TO THE BUILDING SANITARY SYSTEM.
    - 1.1. ONCE FLOW HAS BEEN RESTORED THROUGH THE FLOW DETECTION SENSOR UPSTREAM OF THE THREE-WAY CONTROL VALVE, THE THREE-WAY CONTROL VALVE SHALL ACTUATE BACK TO THE NORMAL OPERATING POSITION, THE ALARM TO THE BAS SHALL TURN OFF, AND THE SYSTEM SHALL FOLLOW THE SEQUENCE OF OPERATION FOR "NORMAL OPERATION," AS OUTLINED ABOVE.
  2. UPON A DETECTION OF "NO FLOW" THROUGH THE FLOW DETECTION SENSOR DOWNSTREAM OF THE THREE-WAY CONTROL VALVE FOR EITHER SYSTEM, AN ALARM SHALL ALERT THE BAS SYSTEM, THE EVAPORATOR, CONDENSER, AND COMPRESSOR SHALL POWER "OFF," AND THE TWO-WAY CONTROL VALVE UPSTREAM OF THE EVAPORATOR SHALL ACTUATE TO THE "CLOSED" POSITION.
    - 2.1. UPON A DETECTION OF "FLOW" THROUGH THE FLOW DETECTION SENSOR DOWNSTREAM OF THE THREE-WAY CONTROL VALVE, THE EVAPORATOR, CONDENSER, AND COMPRESSOR SHALL POWER "ON," AND THE TWO-WAY CONTROL VALVE UPSTREAM OF THE EVAPORATOR SHALL ACTUATE TO THE "OPEN" POSITION.
    - 2.2. ONCE FLOW HAS BEEN RESTORED THROUGH THE FLOW DETECTION SENSOR DOWNSTREAM OF THE THREE-WAY CONTROL VALVE, REFER BACK TO SECTION 1.1 OF THE "EMERGENCY OPERATION" SEQUENCE OF OPERATION ABOVE TO BRING THE SYSTEM(S) BACK TO NORMAL OPERATING CONDITIONS.
- MAINTENANCE OPERATION**
1. DURING ROUTINE MAINTENANCE OF ANY COMPONENT OF EITHER REFRIGERATION SYSTEM, THE TWO MANUAL THREE-WAY VALVES ON THE ASSOCIATED SYSTEM SHALL BE TURNED TO ALLOW DOMESTIC COLD WATER TO FLOW FREELY TO THE EVAPORATOR, AND ANY MANUAL SHUT-OFF VALVES SHALL BE TURNED TO THE "CLOSED" POSITION, AS REQUIRED, TO ISOLATE THE COMPONENT REQUIRING MAINTENANCE.
  2. UPON COMPLETION OF MAINTENANCE TO ANY COMPONENT OF THE REFRIGERATION SYSTEM, THE TWO MANUAL THREE-WAY VALVES ON THE ASSOCIATED SYSTEM(S) SHALL BE RETURNED TO THEIR NORMAL OPERATING POSITIONS TO ALLOW CHILLED WATER TO FLOW FREELY TO THE EVAPORATOR, AND ANY MANUAL SHUT-OFF VALVES THAT WERE TURNED TO THE "CLOSED" POSITION TO ISOLATE A COMPONENT SHALL BE RETURNED TO THE "OPEN" POSITION.

SYMBOLS LEGEND			
CHWS	CHILLED WATER SUPPLY		FLOW DETECTION SENSOR
CHWR	CHILLED WATER RETURN		THREE-WAY CONTROL VALVE
DCW	DOMESTIC COLD WATER		MANUAL GATE VALVE
	MANUAL THREE-WAY VALVE		THERMOSTATIC EXPANSION VALVE
	UNION		THERMOSTAT

**F1 CONTROL SYSTEM SCHEMATIC, POINTS LIST, AND SEQUENCE OF OPERATION**  
SCALE: NTS

CONSULTANT  ARCHITECT/ENGINEER OF RECORD ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334	STAMP  U.S. Department of Veterans Affairs	Drawing Title <b>MECHANICAL SCHEDULES, NOTES, AND DETAILS</b>	Phase <b>100% SUBMISSION</b>	Project Title CANTEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	Project Number <b>528A7-17-720</b>
		Approved: Project Director	Location SYRACUSE VAMC, RM CL06	Issue Date 4-27-18	Checked JWE
Revisions: _____ Date: _____				Drawing Number <b>M601</b>	



**ELECTRICAL DEMOLITION NOTES:**

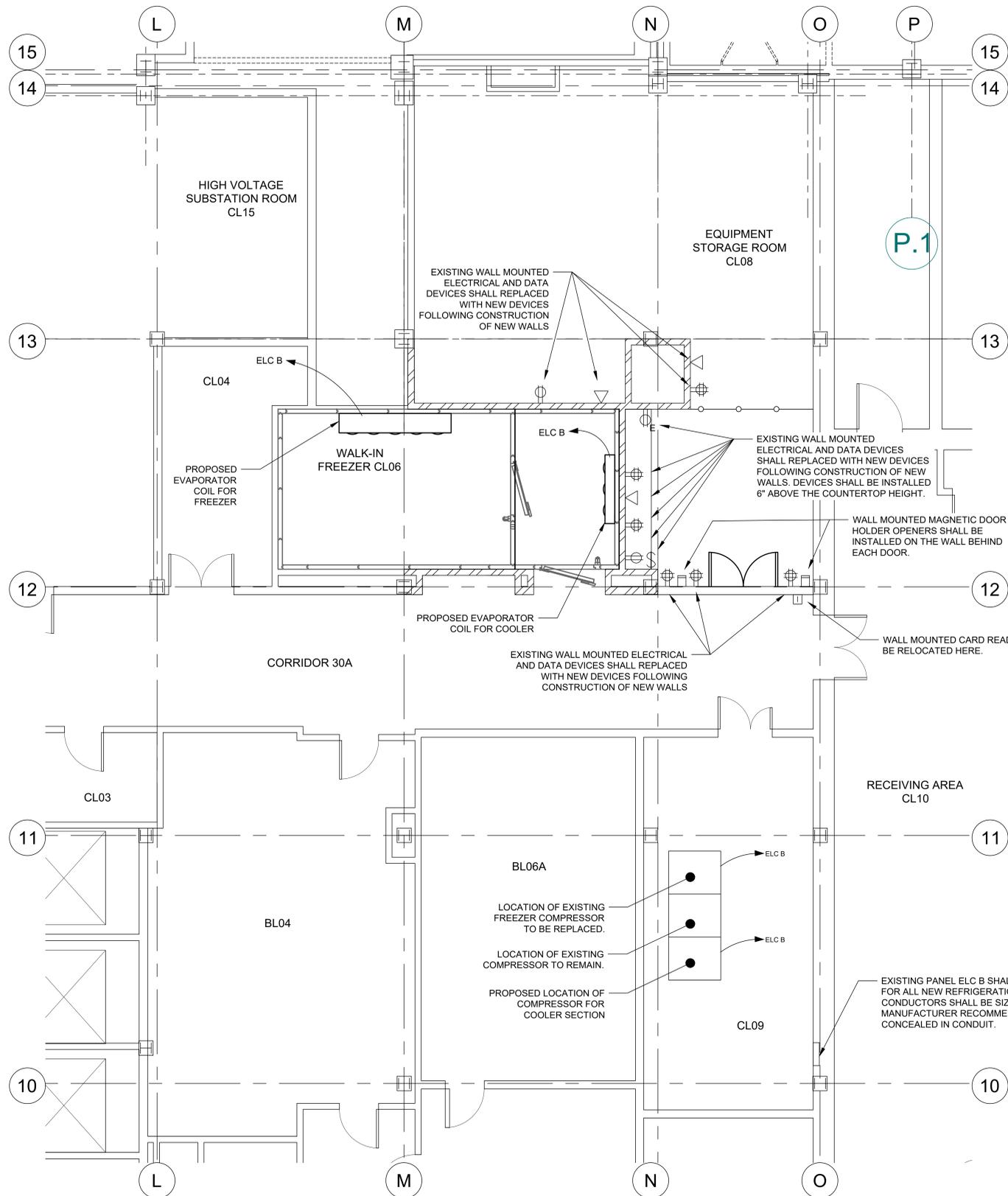
1. ALL AREAS OF THE BUILDING AFFECTED BY ELECTRICAL DEMOLITION WORK SHALL BE PATCHED AND REPAIRED TO MATCH ADJACENT FINAL FINISHES. THE REPAIR WORK SHALL BE DONE TO THE OWNER'S SATISFACTION.
2. DEMOLITION WORK SHALL INCLUDE REMOVAL OF EXISTING BUILDING CONSTRUCTION TO EXTENT REQUIRED TO PERFORM NEW CONSTRUCTION ACTIVITIES INDICATED.
3. REMOVE ALL EXISTING ELECTRICAL SYSTEM COMPONENTS, MATERIALS, APPARATUS, AND APPLIANCES WITHIN THE DESIGNATED PROJECT AREA, UNLESS OTHERWISE NOTED. COORDINATE WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACT DOCUMENTS FOR ADDITIONAL SCOPE OF WORK FOR SYSTEMS TO BE REMOVED OR RETAINED TO EXTENT REQUIRED TO PERFORM NEW CONSTRUCTION ACTIVITIES INDICATED. REMOVAL SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL ASSOCIATED ATTACHMENT/MOUNTING ELEMENTS, ENCLOSURES, SWITCHES, AND UTILITY FEEDS. PATCH BUILDING FINISHES WHERE ELECTRICAL ITEMS ARE REMOVED AND ADJACENT EXISTING FINISH IS TO REMAIN.
4. THE DEMOLITION PROCEDURES SHALL PROVIDE FOR SAFE CONDUCT OF THE WORK, PROTECTION OF PERSONNEL, CAREFUL REMOVAL AND OTHER DISPOSITION OF MATERIALS SPECIFIED TO BE SALVAGED, PROTECTION OF PROPERTY TO REMAIN UNDISTURBED, COORDINATION WITH OTHER WORK IN PROGRESS, AND TIMELY DISCONNECTION OF UTILITY SERVICES. EXISTING WORK SHALL BE CUT, DRILLED, ALTERED, REMOVED, OR TEMPORARILY REMOVED AND REPLACED FOR PERFORMANCE OF WORK UNDER THE CONTRACT. WORK REPLACED SHALL MATCH SIMILAR EXISTING WORK. STRUCTURAL MEMBERS OF CONCRETE OR STRUCTURAL STEEL SHALL NOT BE CUT OR ALTERED, EXCEPT AS SHOWN, WITHOUT AUTHORIZATION OF THE ENGINEER. WORK REMAINING IN PLACE DAMAGED OR DEFACED DURING THIS CONTRACT SHALL BE RESTORED TO THE CONDITION AT TIME OF AWARD OF CONTRACT. CUT, ALTER, REMOVE, OR TEMPORARILY REMOVE AND REPLACE EXISTING WORK FOR INSTALLATION OF ELECTRICAL WORK.
- 5.

**F2 ELECTRICAL DEMOLITION FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

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Revisions:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title	Phase	Project Title	Project Number
	Date:	ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334		<b>ELECTRICAL DEMOLITION PLAN</b>	100% SUBMISSION	CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720
				Approved: Project Director		Location	Building Number
						SYRACUSE VAMC, RM CL06	1
						Issue Date	Checked
						4-27-18	JWE
						Drawn	MPL
							ED101

A  
B  
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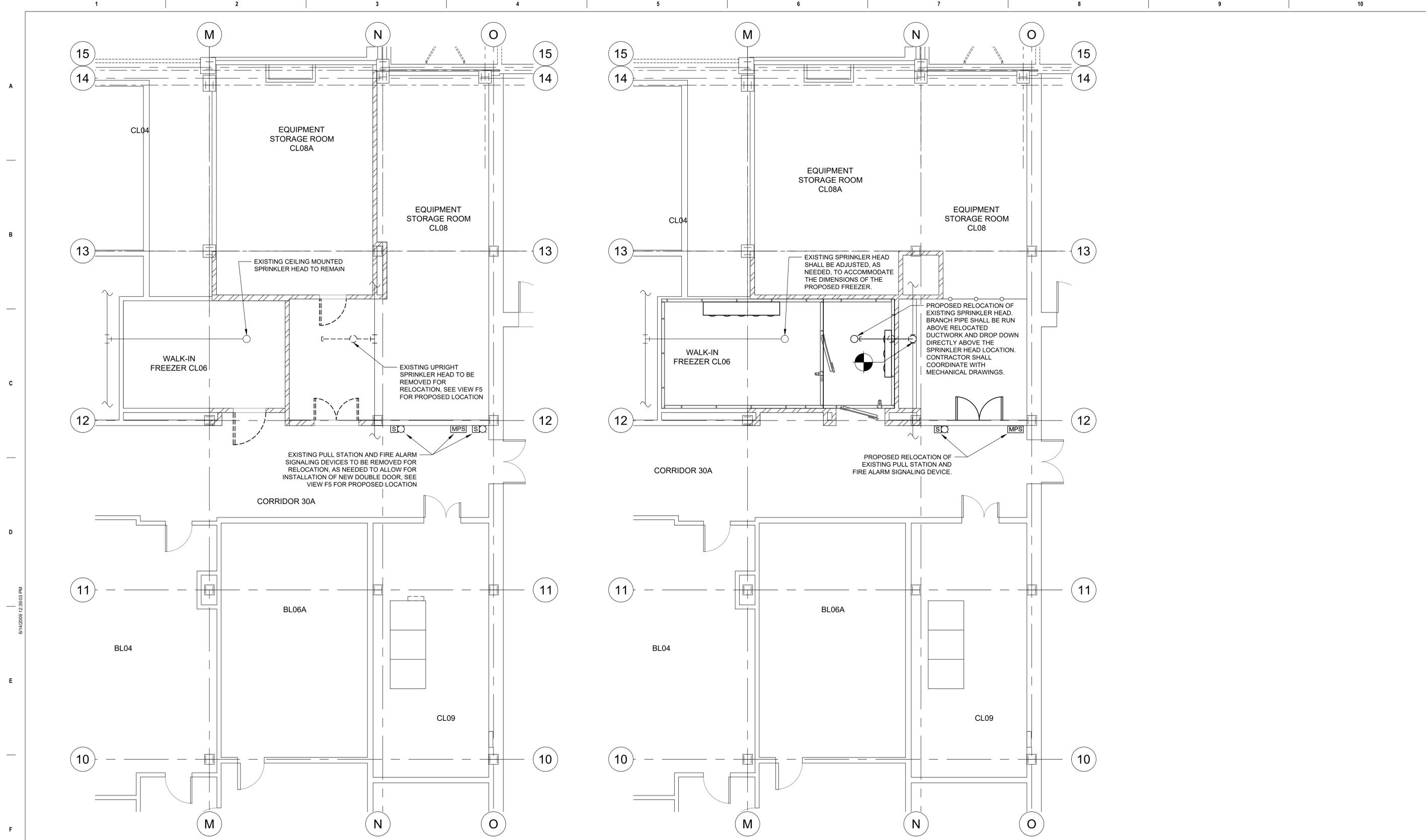


- GENERAL ELECTRICAL NOTES:**
1. ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL, STATE, AND LOCAL CODES.
  2. ALL WIRING SHALL BE INSTALLED IN RACEWAYS; ALL CONDUITS SHALL BE CONCEALED WITHIN WALLS CEILINGS OR FLOORS.
  3. ALL DEVICES, EQUIPMENT, FIXTURES ETC., MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR.
  4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING REQUIRED FOR THE PROPER INSTALLATION, SUPPORT, OR ANCHORAGE OF ELECTRICAL EQUIPMENT. E.C. SHALL LAYOUT CAREFULLY IN ADVANCE WHERE CUTTING, CHANNELING OR DRILLING IS NECESSARY FOR THE PROPER COMPLETION OF ELECTRICAL WORK.
  5. LIGHTING DESIGN AND LIGHT FIXTURES SHALL BE PROVIDED AND INSTALLED BY THE FREEZER/ COOLER MANUFACTURER.

**F2** PROPOSED ELECTRICAL FLOOR PLAN  
SCALE: 1/4" = 1'-0"

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Revisions:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title	Phase	Project Title	Project Number
	Date:	ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334		<b>ELECTRICAL PLAN</b>	100% SUBMISSION	CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720
				Approved: Project Director		Location SYRACUSE VAMC, RM CL06	Building Number 1
						Issue Date 4-27-18	Checked JWE
						Drawn MPL	Drawing Number E101



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**F2** SPRINKLER DEMOLITION FLOOR PLAN  
SCALE: 1/4" = 1'-0"

**F5** PROPOSED SPRINKLER FLOOR PLAN  
SCALE: 1/4" = 1'-0"

Revisions:  Date:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Drawing Title	Phase	Project Title	Project Number
		ENGINEER WATSON ENGINEERING, PC 1112 STATE ROUTE 434 OWEGO, NY 13827 0: 607-223-4334		<b>FIRE PROTECTION PLAN</b>	100% SUBMISSION	CANTEEN FREEZER SLAB REPAIR AND WALK-IN FREEZER REPLACEMENT	528A7-17-720
				Approved: Project Director		Location	Building Number
						SYRACUSE VAMC, RM CL06	1
						Issue Date	Checked
						4-27-18	JWE
						Drawn	MPL
							Drawing Number
							FP101