REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
FARGO VA HEALTH CARE SYSTEM
2101 ELM ST N
FARGO, ND 58102
VA PROJECT NUMBER: 437-23-110

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N PLAN NORTH

SHEET LIST

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CONSTRUCTION DOCUMENTS

Revisions:	Date

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Drawing Title: COVER SHEET

Approved: Project Director: CHAD HOLMAN

Project Title: REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP

Location: 2101 ELM STREET FARGO, ND 58102

Date: 3/27/24 | Checked: RD | Drawn: BM/PM

Project Number: 437-23-110

Building Number: 1,9,46

Drawing Number: G0.00

Dwg. 1 of 13

Office of Construction and Facilities Management

VA FORM 08-6231

2/27/2024 8:24:19 AM

INFECTION CONTROL RISK ASSESSMENT

STEP ONE: CATEGORY C

USING THE FOLLOWING TABLE, IDENTIFY THE TYPE OF CONSTRUCTION PROJECT ACTIVITY (TYPE A-D)

CATEGORY A	**INSPECTION AND/OR FACILITY UPKEEP GENERALLY DEFINED AS FOLLOWS:** • WORK CAN BE COMPLETED IN A SINGLE SHIFT, NOT TO EXCEED 10 HOURS. • PATIENTS AND/OR EMPLOYEES MAY BE IN THE AREA DEPENDING ON THE ACTIVITY. • WORK THAT DOES NOT CREATE DUST OR DEBRIS. • REMOVAL OF CEILING TILE OR ACCESS TO MECHANICAL OR ELECTRICAL CHASE FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET WITH LIMITED EXPOSURE TIME (NOT TO EXCEED AN HOUR FOR EACH TILE) WITHIN THE SHIFT. • MINOR INTERIOR UPDATES (E.G., REPLACING FLOOR OR CEILING TILES, CARPENTRY WORK TO INCLUDE HANGING SIGNAGE, AND PAINTING WITHOUT SANDING) THAT DO NOT CREATE DUST OR DEBRIS. • LIMITED BUILDING SYSTEM MAINTENANCE SUCH AS PLUMBING ON POTABLE SYSTEMS LIMITED TO FAUCET REPLACEMENT ETC. AND ELECTRICAL WORK SUCH AS REPLACEMENT OF BULBS, RECEPTACLES, OR SWITCHES.
CATEGORY B	**GENERAL MAINTENANCE AND REPAIR WORK GENERALLY DEFINED AS FOLLOWS:** • PROLONGED INSPECTION AND WORK THAT MAY TAKE LONGER THAN A SINGLE SHIFT BUT NOT EXCEEDING A WEEK. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • WORK THAT CREATES MINIMAL DUST AND DEBRIS. • INTERIOR FINISH OR SURFACE REPAIRS, UPDATES, OR MODIFICATIONS SUCH AS REPAIR OF FIREWALLS AND BARRIERS, AND NEW FLOORING THAT PRODUCES MINIMAL DUST AND DEBRIS. CONTROLLED SANDING ACTIVITIES (E.G., WET OR DRY SANDING) THAT PRODUCE MINIMAL DUST AND DEBRIS. • PLUMBING WORK SUCH AS INSTALLATION OR REPLACEMENT OF A SINGLE FIXTURE OR PIPING FOR A SINGLE FIXTURE. ANY WORK ON SANITARY PLUMBING INCLUDING SNAKING OF DRAINS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CABLING/WIRING/CONDUIT FOR A SINGLE DEVICE, INSTALLATION OF NEW DEVICE SUCH AS A LIGHT FIXTURE THAT PRODUCES MINIMAL DUST AND DEBRIS. • AIR HANDLER AND/OR FAN SHUTDOWN/STARTUP AND HVAC WORK SUCH AS REPLACEMENT OF A SINGLE DIFFUSER, SINGLE TERMINAL UNIT OR A SINGLE DEVICE THAT PRODUCES MINIMAL DUST AND DEBRIS.
CATEGORY C	**SMALL-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:** • WORK REQUIRING LONGER THAN A SINGLE WEEK TO COMPLETE BUT NOT EXCEEDING 6 MONTHS. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • DEMOLITION/REMOVAL OF PREEXISTING FLOOR COVERING, CASEWORK, LAY-IN CEILING, OR OTHER ARCHITECTURAL ELEMENTS. • DEMOLITION/REMOVAL OF MORE THAN 32 FT2 OF DRYWALL/FRAMING, HARD CEILINGS, AND DOORS/FRAMING AND MINIMAL INFRASTRUCTURE SUCH AS ELECTRICAL CIRCUITS AND BRANCH PIPING. • INSTALLATION OF NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL/PLASTER AND ASSOCIATED WORK. • PLUMBING WORK SUCH AS THE INSTALLATION OF NEW SINKS, SHOWERS AND TOILETS AND ASSOCIATED PLUMBING. • SHUT DOWN OF SECTIONS OF POTABLE WATER SYSTEMS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA, THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC. • MODIFICATION OF EXISTING FIRE ALARM AND SUPPRESSION SYSTEMS. • MECHANICAL WORK SUCH AS THE INSTALLATION OF DUCTWORK, DIFFUSERS, AND TERMINAL UNITS FOR AN AREA.

CATEGORY D	**LARGE-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:**
	• WORK EXCEEDING 6 MONTHS IN DURATION.
	• PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED.
	• LARGE-SCALE DEMOLITION OF BUILDING COMPONENTS AND INFRASTRUCTURE INCLUDING REMOVAL OF MULTIPLE DOORS, WALLS, FRAMING, CEILINGS, FLOORING, PIPING, ELECTRICAL AND HVAC.
	• THE INSTALLATION BUILDING COMPONENTS SUCH AS NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL AND ASSOCIATED PLASTER WORK.
	• PLUMBING WORK SUCH AS THE INSTALLATION OF:
	  • NEW MEDICAL GAS SYSTEMS,
	  • STEAM/HEATING HOT WATER, CONDENSATE SYSTEMS,
	  • MULTIPLE SINKS, SHOWERS AND TOILETS INCLUDING ASSOCIATED PLUMBING.
	• SHUTDOWN OF POTABLE WATER, STEAM/HEATING HOT WATER, CONDENSATE, AND MEDICAL GAS SYSTEMS.
	• ELECTRICAL WORK SUCH AS INSTALLATION OF ELECTRICAL FEEDERS, DISTRIBUTION PANELS, CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA, THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC.
	• INSTALLATION OF FIRE ALARM AND SUPPRESSION SYSTEMS.
	• ELECTRICAL SHUTDOWN OF MULTIPLE PANELS.
	• MECHANICAL WORK SUCH AS THE INSTALLATION OF AIR HANDLING EQUIPMENT, ASSOCIATED DUCTWORK, DIFFUSERS, HEAT EXCHANGERS, TERMINAL UNITS AND CONTROLS.

STEP TWO: HIGHEST RISK

USING THE FOLLOWING TABLE, *IDENTIFY* THE PATIENT RISK GROUPS THAT WILL BE AFFECTED. IF MORE THAN ONE RISK GROUP WILL BE AFFECTED, SELECT THE HIGHER RISK GROUP

LOW RISK	MEDIUM RISK	HIGH RISK	HIGHEST RISK
• OFFICE AREA	• CARDIOLOGY • ECHOCARDIOGRAPHY • ENDOSCOPE • NUCLEAR MEDICINE • PHYSICAL THERAPY • RADIOLOGY / MRI • RESPIRATORY THERAPY	• CCU • EMERGENCY ROOM • LABOR AND DELIVERY • LABORATORIES (SPECIMEN) • MEDICAL UNITS • NEWBORN NURSERY • OUTPATIENT SURGERY • PEDIATRICS • PHARMACY • POST ANESTHESIA CARE UNIT • SURGICAL UNITS	• ANY AREA CARING FOR IMMUNE COMPROMISED PATIENTS • BURN UNITS • CARDIAC CATH LAB • CENTRAL STERILE SUPPLY • INTENSIVE CARE UNIT • NEGATIVE PRESSURE ISOLATION ROOMS • ONCOLOGY • OPERATING ROOMS INCLUDING C SECTION ROOMS

STEP THREE:

MATCH THE PATIENT RISK GROUP (LOW, MEDIUM, HIGH, HIGHEST) WITH THE PLANNED ...

CONSTRUCTION PROJECT TYPE (A, B, C, D) ON THE FOLLOWING MATRIX. TO FIND THE ...

CLASS OF PRECAUTIONS (I, II, III OR IV) OR LEVEL OF INFECTION CONTROL ACTIVITIES REQUIRED.

CLASS I - IV OR COLOR-CODED PRECAUTIONS ARE DELINEATED ON THE FOLLOWING PAGE.

IC MATRIX - CLASS OF PRECAUTIONS: CONSTRUCTION PROJECT BY PATIENT RISK

	ACTIVITY CATEGORY			
PATIENT RISK CATEDORY	TYPE A	TYPE B	TYPE C	TYPE D
LOW RISK GROUP	I	II	II	III
MEDIUM RISK GROUP	I	II	III	IV
HIGH RISK GROUP	I	II	IV	IV
HIGHEST RISK GROUP	II	III	IV	IV

NOTE: INFECTION CONTROL APPROVAL WILL BE REQUIRED WHEN THE CONSTRUCTION ACTIVITY AND RISK LEVEL INDICATE THAT **CLASS III** OR **CLASS IV** CONTROL PROCEDURES ARE NECESSARY.

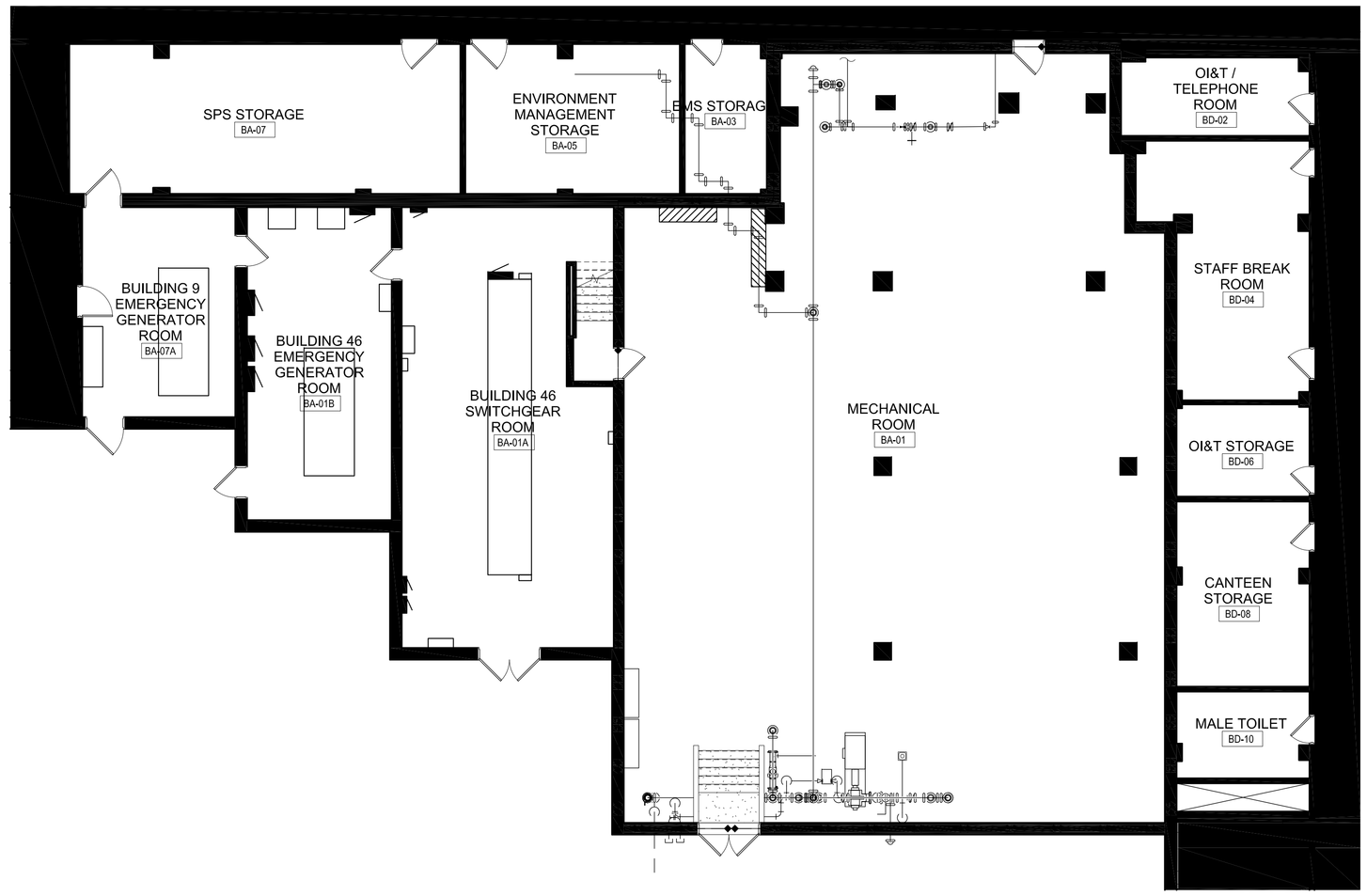
STEP THREE: CLASS II

DESCRIPTION OF REQUIRED INFECTION CONTROL PRECAUTIONS BY CLASS

	DURING CONSTRUCTION PROJECT	UPON COMPLETION OF PROJECT
CLASS I	1. EXECUTE WORK BY METHODS TO MINIMIZE RAISING DUST FROM CONSTRUCTION OPERATIONS 2. IMMEDIATELY REPLACE A CEILING TILE DISPLACED FOR VISUAL INSPECTION	1. CLEAN WORK AREA UPON COMPLETION OF TASK.
CLASS II	1. PROVIDE ACTIVE MEANS TO PREVENT AIRBORNE DUST FROM DISPERSING INTO ATMOSPHERE 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING. 3. SEAL UNUSED DOORS WITH DUCT TAPE. 4. BLOCK OFF AND SEAL AIR VENTS. 5. PLACE DUST MAT AT ENTRANCE AND EXIT OF WORK AREA. 6. REMOVE OR ISOLATE HVAC SYSTEM IN AREAS WHERE WORK IS BEING PERFORMED.	1. WIPE WORK SURFACES WITH CLEANER / DISINFECTANT. 2. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 3. WET MOP AND / OR VACUUM WITH HEPA VACUUM BEFORE LEAVING WORK AREA. 4. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS III	1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 5. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID.	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT. 2. REMOVE BARRIER MATERIALS CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 4. WET MOP AREA WITH CLEANER / DISINFECTANT. 5. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS IV	1. ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES. 5. CONSTRUCT ANTEROOM AND REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN BE VACUUMED USING A HEPA VACUUM CLEANER BEFORE LEAVING WORK SITE OR THEY CAN WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE). 6. ALL PERSONNEL ENTERING THE WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK AREA. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE).	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPT. 2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN COVERED CONTAINERS. 4. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID. 5. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 6. WET MOP AREA WITH CLEANER / DISINFECTANT. 7. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED

INFECTION CONTROL NOTES - CLASS II CONSTRUCTION:

LEVEL I	1. PERFORM WORK ACTIVITY IN A MANNER THAT DOES NOT CREATE DUST OR INTERRUPT PATIENT CARE. 2. IMMEDIATELY REPLACE ANY CEILING TILE, CLOSE ACCESS PANELS, ETC., UPON COMPLETION OF WORK. 3. ANY MATERIALS AND EQUIPMENT BEING BROUGHT INTO THE FACILITY MUST BE FREE OF CONTAMINANTS AND LOOSE MATERIAL.
LEVEL II	**ALL CONTROL MEASURES IN LEVEL I AND THE FOLLOWING:** 1. PROVIDE ACTIVE MEANS TO CONTROL AIRBORNE DUST FROM DISPERSING INTO OCCUPIED AREAS AND/OR WATER MIST SURFACE TO CONTROL DUST (E.G., MOBILE DUST CONTAINMENT CART OR SOME OTHER SYSTEM). 2. ENSURE WORKER CLOTHING IS CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA. 3. REMOVE OR ISOLATE AIR DIFFUSERS (SUPPLY AND RETURN) TO PROTECT THE HVAC SYSTEM FROM DUST AND REDUCE AIR TURBULENCE. REBALANCE SYSTEM TO ADDRESS DIFFUSER ISOLATION. 4. WHEN THE WORK INVOLVES OR IMPACTS POTABLE WATER SYSTEMS INCLUDING STAGNATION DUE TO REDUCED USAGE, THE PIPING SHALL BE FLUSHED TWICE A WEEK OR ISOLATED FROM THE MAIN SYSTEM 5. SEAL DOORS, TO PREVENT DUST MIGRATION. 6. CONTAIN ALL TRASH AND DEBRIS IN THE WORK AREA. PERFORM DAILY CLEANING AND DISPOSAL OF TRASH (COVERED) FROM WORK AREA USING AN IDENTIFIED EXIT ROUTE. 7. ANY EQUIPMENT, TOOLS, OR MATERIALS REMOVED FROM THE WORK AREA MUST BE IN SEALED CONTAINERS AND/OR CLEANED OF DUST AND DEBRIS PRIOR TO REMOVAL FROM THE AREA. 8. NONPOROUS/SMOOTH AND CLEANABLE CONTAINERS (WITH A HARD LID) MUST BE USED TO TRANSPORT TRASH AND DEBRIS FROM THE CONSTRUCTION AREAS. THESE CONTAINERS MUST BE DAMP-WIPED CLEANED AND FREE OF VISIBLE DUST/DEBRIS BEFORE LEAVING THE CONTAINED WORK AREA. 9. INSTALL A STICKY (DUST COLLECTION) MAT AT ENTRANCE OF CONTAINED WORK AREA BASED ON FACILITY POLICY. STICKY MATS MUST BE CHANGED ROUTINELY AND WHEN VISIBLY SOILED. 10. MAINTAIN CLEAN SURROUNDINGS WHEN AREA IS NOT CONTAINED BY DAMP MOPPING OR HEPA VACUUMING SURFACES AT LEAST DAILY.
LEVEL III	**ALL CONTROL MEASURES IN LEVELS I AND II AND THE FOLLOWING:** 1. ENSURE AVAILABILITY OF EQUIPMENT FOR CLEANING HANDS 2. CONSTRUCT AND COMPLETE CRITICAL BARRIERS MEETING NFPA 241 REQUIREMENTS. BARRIERS MUST EXTEND TO THE CEILING OR IF CEILING TILE IS REMOVED, TO THE DECK ABOVE. 3. ALL BARRIER CONSTRUCTION ACTIVITIES MUST BE COMPLETED IN A MANNER THAT PREVENTS DUST RELEASE. 4. BARRIERS MUST BE HARD BARRIERS UNLESS TEMPORARY TO INSTALL FINAL BARRIER. BARRIER WALLS SHALL BE INSPECTED AND APPROVED PRIOR TO THE START OF DEMOLITION OR CONSTRUCTION. (IF VA STAFF CANNOT INSPECT PRIOR TO 4:30PM, THEN THE CHECK WILL BE THE NEXT BUSINESS DAY.) 5. SEAL ALL PENETRATIONS IN CONTAINMENT BARRIERS, INCLUDING FLOORS AND CEILING, USING APPROVED MATERIALS (UL SCHEDULE FIRESTOP IF APPLICABLE FOR BARRIER TYPE). 6. MAINTAIN .01 INCHES /WATER GAUGE NEGATIVE PRESSURIZATION OF THE ENTIRE WORKSPACE BY USE OF HEPA EXHAUST AIR SYSTEMS DIRECTED OUTDOORS (UNLESS A WORK SPECIFIC WAIVER IS APPROVED BY VHA 'S OFFICE OF HEALTHCARE ENGINEERING); THIS MUST BE MAINTAINED CONTINUOUSLY 24/7 FOR THE DURATION OF THE PROJECT. EXHAUST DISCHARGED DIRECTLY TO THE OUTDOORS THAT IS 25 FEET OR GREATER FROM ENTRANCES, AIR INTAKES AND WINDOWS IS NOT REQUIRED TO BE HEPA-FILTERED. EXHAUSTING DISCHARGED AIR INTO SHARED OR RECIRCULATING HVAC SYSTEMS, OR OTHER SHARED EXHAUST SYSTEMS (E.G., BATHROOM EXHAUST) IS PROHIBITED. 7. INSTALL A DIFFERENTIAL PRESSURE SENSING DEVICE (E.G., MAGNEHELIC, MANOMETER, OR DIGITAL MONITORING) ON EXTERIOR OF WORK CONTAINMENT TO CONTINUALLY MONITOR AND DOCUMENT NEGATIVE PRESSURIZATION. THE "BALL IN THE WALL" OR SIMILAR APPARATUS ARE NOT ACCEPTABLE.
LEVEL IV	**ALL CONTROL MEASURES IN LEVELS I, II AND III AND THE FOLLOWING:** 1. CONTAINMENT MUST INCLUDE AN ANTEROOM TO ENSURE PRESSURE CONTROL, ANTEROOM MUST BE LARGE ENOUGH FOR EQUIPMENT STAGING, CART CLEANING, WORKERS ' PPE AND CLEANING. 2. WORKER CLOTHING AND/OR PPE MUST BE REMOVED OR CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA ANTEROOM. HEPA VACUUMING OF CLOTHING OR USE OF COVER SUITS IS ACCEPTABLE. 3. WORKERS MUST WEAR SHOE COVERS OR HAVE A METHOD TO CLEAN SHOES IN ANTEROOM SHOE COVERS MUST BE REMOVED PRIOR TO EXITING THE ANTEROOM TO THE OCCUPIED SPACE (NON-WORK AREA). DAMAGED SHOE COVERS MUST BE CHANGED IMMEDIATELY.



1 FLOOR PLAN - LEVEL 0

1/8" = 1'-0"

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30X40. CONTRACTOR SHALL NOT SCALE DRAWINGS BUT SHALL REQUEST THE DESIRED DIMENSIONS FROM THE ARCHITECT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
3. EXISTING WALL SHADED FOR CLARITY.
4. EXISTING CEILING HEIGHTS ON THIS SHEET ARE 8'-6" ABOVE FINISH FLOOR, TYPICAL UNLESS NOTED OTHERWISE.

FIRE BARRIER SYMBOLS

- 1-HOUR FIRE BARRIER
- SMOKE PARTITION
- 2-HOUR FIRE BARRIER
- 2-HOUR SMOKE BARRIER

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

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4F Project Number: 16.2330.L04

Drawing Title	FLOOR PLAN
Approved: Project Director	FARGO VAHCS
Project Title	REPLACE SELECTED SPRINKLER MAINS AND FIRE PUMP
Location	2101 ELM STREET FARGO, MD 58102
Date	3/27/2024
Checked	JS
Drawn	JE
Project Number	437-23-110
Building Number	1
Drawing Number	A1.00
Dwg. 2 of 13	

Office of Construction and Facilities Management

VA FORM 08-6231

2/22/2024 4:39:56 PM

INFECTION CONTROL RISK ASSESSMENT

STEP ONE: CATEGORY C

USING THE FOLLOWING TABLE, IDENTIFY THE TYPE OF CONSTRUCTION PROJECT ACTIVITY (TYPE A-D)

CATEGORY A	**INSPECTION AND/OR FACILITY UPKEEP GENERALLY DEFINED AS FOLLOWS:** • WORK CAN BE COMPLETED IN A SINGLE SHIFT. NOT TO EXCEED 10 HOURS. • PATIENTS AND/OR EMPLOYEES MAY BE IN THE AREA DEPENDING ON THE ACTIVITY. • WORK THAT DOES NOT CREATE DUST OR DEBRIS. • REMOVAL OF CEILING TILE OR ACCESS TO MECHANICAL OR ELECTRICAL CHASE FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET WITH LIMITED EXPOSURE TIME (NOT TO EXCEED AN HOUR FOR EACH TILE) WITHIN THE SHIFT. • MINOR INTERIOR UPDATES (E.G., REPLACING FLOOR OR CEILING TILES, CARPENTRY WORK TO INCLUDE HANGING SIGNAGE, AND PAINTING WITHOUT SANDING) THAT DO NOT CREATE DUST OR DEBRIS. • LIMITED BUILDING SYSTEM MAINTENANCE SUCH AS PLUMBING ON POTABLE SYSTEMS LIMITED TO FAUCET REPLACEMENT ETC. AND ELECTRICAL WORK SUCH AS REPLACEMENT OF BULBS, RECEPTACLES, OR SWITCHES.
CATEGORY B	**GENERAL MAINTENANCE AND REPAIR WORK GENERALLY DEFINED AS FOLLOWS:** • PROLONGED INSPECTION AND WORK THAT MAY TAKE LONGER THAN A SINGLE SHIFT BUT NOT EXCEEDING A WEEK. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • WORK THAT CREATES MINIMAL DUST AND DEBRIS. • INTERIOR FINISH OR SURFACE REPAIRS, UPDATES, OR MODIFICATIONS SUCH AS REPAIR OF FIREWALLS AND BARRIERS, AND NEW FLOORING THAT PRODUCES MINIMAL DUST AND DEBRIS. CONTROLLED SANDING ACTIVITIES (E.G., WET OR DRY SANDING) THAT PRODUCE MINIMAL DUST AND DEBRIS. • PLUMBING WORK SUCH AS INSTALLATION OR REPLACEMENT OF A SINGLE FIXTURE OR PIPING FOR A SINGLE FIXTURE. ANY WORK ON SANITARY PLUMBING INCLUDING SNAKING OF DRAINS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CABLING/WIRING/CONDUIT FOR A SINGLE DEVICE, INSTALLATION OF NEW DEVICE SUCH AS A LIGHT FIXTURE THAT PRODUCES MINIMAL DUST AND DEBRIS. • AIR HANDLER AND/OR FAN SHUTDOWN/STARTUP AND HVAC WORK SUCH AS REPLACEMENT OF A SINGLE DIFFUSER, SINGLE TERMINAL UNIT OR A SINGLE DEVICE THAT PRODUCES MINIMAL DUST AND DEBRIS.
CATEGORY C	**SMALL-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:** • WORK REQUIRING LONGER THAN A SINGLE WEEK TO COMPLETE BUT NOT EXCEEDING 6 MONTHS. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • DEMOLITION/REMOVAL OF PREEXISTING FLOOR COVERING, CASEWORK, LAY-IN CEILING, OR OTHER ARCHITECTURAL ELEMENTS. • DEMOLITION/REMOVAL OF MORE THAN 32 FT2 OF DRYWALL/FRAMING, HARD CEILINGS, AND DOORS/FRAMING AND MINIMAL INFRASTRUCTURE SUCH AS ELECTRICAL CIRCUITS AND BRANCH PIPING. • INSTALLATION OF NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL/PLASTER AND ASSOCIATED WORK. • PLUMBING WORK SUCH AS THE INSTALLATION OF NEW SINKS, SHOWERS AND TOILETS AND ASSOCIATED PLUMBING. • SHUT DOWN OF SECTIONS OF POTABLE WATER SYSTEMS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA, THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC. • MODIFICATION OF EXISTING FIRE ALARM AND SUPPRESSION SYSTEMS. • MECHANICAL WORK SUCH AS THE INSTALLATION OF DUCTWORK, DIFFUSERS, AND TERMINAL UNITS FOR AN AREA.

CATEGORY D	**LARGE-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:**
	• WORK EXCEEDING 6 MONTHS IN DURATION.
	• PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED.
	• LARGE-SCALE DEMOLITION OF BUILDING COMPONENTS AND INFRASTRUCTURE INCLUDING REMOVAL OF MULTIPLE DOORS, WALLS, FRAMING, CEILINGS, FLOORING, PIPING, ELECTRICAL AND HVAC.
	• THE INSTALLATION BUILDING COMPONENTS SUCH AS NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL AND ASSOCIATED PLASTER WORK.
	• PLUMBING WORK SUCH AS THE INSTALLATION OF:
	  • NEW MEDICAL GAS SYSTEMS,
	  • STEAM/HEATING HOT WATER, CONDENSATE SYSTEMS,
	  • MULTIPLE SINKS. SHOWERS AND TOILETS INCLUDING ASSOCIATED PLUMBING.
	• SHUTDOWN OF POTABLE WATER, STEAM/HEATING HOT WATER, CONDENSATE, AND MEDICAL GAS SYSTEMS.
	• ELECTRICAL WORK SUCH AS INSTALLATION OF ELECTRICAL FEEDERS, DISTRIBUTION PANELS, CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA. THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC.
	• INSTALLATION OF FIRE ALARM AND SUPPRESSION SYSTEMS.
	• ELECTRICAL SHUTDOWN OF MULTIPLE PANELS.
	• MECHANICAL WORK SUCH AS THE INSTALLATION OF AIR HANDLING EQUIPMENT, ASSOCIATED DUCTWORK, DIFFUSERS, HEAT EXCHANGERS, TERMINAL UNITS AND CONTROLS.

STEP TWO: HIGHEST RISK

USING THE FOLLOWING TABLE, *IDENTIFY* THE PATIENT RISK GROUPS THAT WILL BE AFFECTED. IF MORE THAN ONE RISK GROUP WILL BE AFFECTED, SELECT THE HIGHER RISK GROUP

LOW RISK	MEDIUM RISK	HIGH RISK	HIGHEST RISK
• OFFICE AREA	• CARDIOLOGY • ECHOCARDIOGRAPHY • ENDOSCOPE • NUCLEAR MEDICINE • PHYSICAL THERAPY • RADIOLOGY / MRI • RESPIRATORY THERAPY	• CCU • EMERGENCY ROOM • LABOR AND DELIVERY • LABORATORIES (SPECIMEN) • MEDICAL UNITS • NEWBORN NURSERY • OUTPATIENT SURGERY • PEDIATRICS • PHARMACY • POST ANESTHESIA CARE UNIT • SURGICAL UNITS	• ANY AREA CARING FOR IMMUNE COMPROMISED PATIENTS • BURN UNITS • CARDIAC CATH LAB • CENTRAL STERILE SUPPLY • INTENSIVE CARE UNIT • NEGATIVE PRESSURE ISOLATION ROOMS • ONCOLOGY • OPERATING ROOMS INCLUDING C SECTION ROOMS

STEP THREE:

MATCH THE PATIENT RISK GROUP (LOW, MEDIUM, HIGH, HIGHEST) WITH THE PLANNED ...

CONSTRUCTION PROJECT TYPE (A, B, C, D) ON THE FOLLOWING MATRIX, TO FIND THE ...

CLASS OF PRECAUTIONS (I, II, III OR IV) OR LEVEL OF INFECTION CONTROL ACTIVITIES REQUIRED.

CLASS I - IV OR COLOR-CODED PRECAUTIONS ARE DELINEATED ON THE FOLLOWING PAGE.

IC MATRIX - CLASS OF PRECAUTIONS: CONSTRUCTION PROJECT BY PATIENT RISK

	ACTIVITY CATEGORY			
PATIENT RISK CATEDORY	TYPE A	TYPE B	TYPE C	TYPE D
LOW RISK GROUP	I	II	II	III
MEDIUM RISK GROUP	I	II	III	IV
HIGH RISK GROUP	I	II	IV	IV
HIGHEST RISK GROUP	II	III	IV	IV

NOTE: INFECTION CONTROL APPROVAL WILL BE REQUIRED WHEN THE CONSTRUCTION ACTIVITY AND RISK LEVEL INDICATE THAT **CLASS III** OR **CLASS IV** CONTROL PROCEDURES ARE NECESSARY.

STEP THREE: CLASS IV

DESCRIPTION OF REQUIRED INFECTION CONTROL PRECAUTIONS BY CLASS

	DURING CONSTRUCTION PROJECT	UPON COMPLETION OF PROJECT
CLASS I	1. EXECUTE WORK BY METHODS TO MINIMIZE RAISING DUST FROM CONSTRUCTION OPERATIONS 2. IMMEDIATELY REPLACE A CEILING TILE DISPLACED FOR VISUAL INSPECTION	1. CLEAN WORK AREA UPON COMPLETION OF TASK.
CLASS II	1. PROVIDE ACTIVE MEANS TO PREVENT AIRBORNE DUST FROM DISPERSING INTO ATMOSPHERE 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING. 3. SEAL UNUSED DOORS WITH DUCT TAPE. 4. BLOCK OFF AND SEAL AIR VENTS. 5. PLACE DUST MAT AT ENTRANCE AND EXIT OF WORK AREA. 6. REMOVE OR ISOLATE HVAC SYSTEM IN AREAS WHERE WORK IS BEING PERFORMED.	1. WIPE WORK SURFACES WITH CLEANER / DISINFECTANT. 2. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 3. WET MOP AND / OR VACUUM WITH HEPA VACUUM BEFORE LEAVING WORK AREA. 4. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS III	1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 5. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID.	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT. 2. REMOVE BARRIER MATERIALS CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 4. WET MOP AREA WITH CLEANER / DISINFECTANT. 5. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS IV	1. ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES. 5. CONSTRUCT ANTEROOM AND REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN BE VACUUMED USING A HEPA VACUUM CLEANER BEFORE LEAVING WORK SITE OR THEY CAN WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE). 6. ALL PERSONNEL ENTERING THE WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK AREA. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE).	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPT. 2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN COVERED CONTAINERS. 4. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID. 5. VACUUM WORK AREA WITH I-HEPA FILTERED VACUUMS. 6. WET MOP AREA WITH CLEANER / DISINFECTANT. 7. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED

INFECTION CONTROL NOTES - CLASS IV CONSTRUCTION:

LEVEL I	1. PERFORM WORK ACTIVITY IN A MANNER THAT DOES NOT CREATE DUST OR INTERRUPT PATIENT CARE. 2. IMMEDIATELY REPLACE ANY CEILING TILE, CLOSE ACCESS PANELS, ETC., UPON COMPLETION OF WORK. 3. ANY MATERIALS AND EQUIPMENT BEING BROUGHT INTO THE FACILITY MUST BE FREE OF CONTAMINANTS AND LOOSE MATERIAL.
LEVEL II	**ALL CONTROL MEASURES IN LEVEL I AND THE FOLLOWING:** 1. PROVIDE ACTIVE MEANS TO CONTROL AIRBORNE DUST FROM DISPERSING INTO OCCUPIED AREAS AND/OR WATER MIST SURFACE TO CONTROL DUST (E.G., MOBILE DUST CONTAINMENT CART OR SOME OTHER SYSTEM). 2. ENSURE WORKER CLOTHING IS CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA. 3. REMOVE OR ISOLATE AIR DIFFUSERS (SUPPLY AND RETURN) TO PROTECT THE HVAC SYSTEM FROM DUST AND REDUCE AIR TURBULENCE. REBALANCE SYSTEM TO ADDRESS DIFFUSER ISOLATION. 4. WHEN THE WORK INVOLVES OR IMPACTS POTABLE WATER SYSTEMS INCLUDING STAGNATION DUE TO REDUCED USAGE, THE PIPING SHALL BE FLUSHED TWICE A WEEK OR ISOLATED FROM THE MAIN SYSTEM 5. SEAL DOORS, TO PREVENT DUST MIGRATION. 6. CONTAIN ALL TRASH AND DEBRIS IN THE WORK AREA. PERFORM DAILY CLEANING AND DISPOSAL OF TRASH (COVERED) FROM WORK AREA USING AN IDENTIFIED EXIT ROUTE. 7. ANY EQUIPMENT, TOOLS, OR MATERIALS REMOVED FROM THE WORK AREA MUST BE IN SEALED CONTAINERS AND/OR CLEANED OF DUST AND DEBRIS PRIOR TO REMOVAL FROM THE AREA. 8. NONPOROUS/SMOOTH AND CLEANABLE CONTAINERS (WITH A HARD LID) MUST BE USED TO TRANSPORT TRASH AND DEBRIS FROM THE CONSTRUCTION AREAS. THESE CONTAINERS MUST BE DAMP-WIPED CLEANED AND FREE OF VISIBLE DUST/DEBRIS BEFORE LEAVING THE CONTAINED WORK AREA. 9. INSTALL A STICKY (DUST COLLECTION) MAT AT ENTRANCE OF CONTAINED WORK AREA BASED ON FACILITY POLICY. STICKY MATS MUST BE CHANGED ROUTINELY AND WHEN VISIBLY SOILED. 10. MAINTAIN CLEAN SURROUNDINGS WHEN AREA IS NOT CONTAINED BY DAMP MOPPING OR HEPA VACUUMING SURFACES AT LEAST DAILY.
LEVEL III	**ALL CONTROL MEASURES IN LEVELS I AND II AND THE FOLLOWING:** 1. ENSURE AVAILABILITY OF EQUIPMENT FOR CLEANING HANDS 2. CONSTRUCT AND COMPLETE CRITICAL BARRIERS MEETING NFPA 241 REQUIREMENTS. BARRIERS MUST EXTEND TO THE CEILING OR IF CEILING TILE IS REMOVED, TO THE DECK ABOVE. 3. ALL BARRIER CONSTRUCTION ACTIVITIES MUST BE COMPLETED IN A MANNER THAT PREVENTS DUST RELEASE. 4. BARRIERS MUST BE HARD BARRIERS UNLESS TEMPORARY TO INSTALL FINAL BARRIER. BARRIER WALLS SHALL BE INSPECTED AND APPROVED PRIOR TO THE START OF DEMOLITION OR CONSTRUCTION. (IF VA STAFF CANNOT INSPECT PRIOR TO 4:30PM, THEN THE CHECK WILL BE THE NEXT BUSINESS DAY.) 5. SEAL ALL PENETRATIONS IN CONTAINMENT BARRIERS, INCLUDING FLOORS AND CEILING, USING APPROVED MATERIALS (UL SCHEDULE FIRESTOP IF APPLICABLE FOR BARRIER TYPE). 6. MAINTAIN .01 INCHES /WATER GAUGE NEGATIVE PRESSURIZATION OF THE ENTIRE WORKSPACE BY USE OF HEPA EXHAUST AIR SYSTEMS DIRECTED OUTDOORS (UNLESS A WORK SPECIFIC WAIVER IS APPROVED BY VHA 'S OFFICE OF HEALTHCARE ENGINEERING); THIS MUST BE MAINTAINED CONTINUOUSLY 24/7 FOR THE DURATION OF THE PROJECT. EXHAUST DISCHARGED DIRECTLY TO THE OUTDOORS THAT IS 25 FEET OR GREATER FROM ENTRANCES, AIR INTAKES AND WINDOWS IS NOT REQUIRED TO BE HEPA-FILTERED. EXHAUSTING DISCHARGED AIR INTO SHARED OR RECIRCULATING HVAC SYSTEMS, OR OTHER SHARED EXHAUST SYSTEMS (E.G., BATHROOM EXHAUST) IS PROHIBITED. 7. INSTALL A DIFFERENTIAL PRESSURE SENSING DEVICE (E.G., MAGNEHELIC, MANOMETER, OR DIGITAL MONITORING) ON EXTERIOR OF WORK CONTAINMENT TO CONTINUALLY MONITOR AND DOCUMENT NEGATIVE PRESSURIZATION. THE "BALL IN THE WALL" OR SIMILAR APPARATUS ARE NOT ACCEPTABLE.
LEVEL IV	**ALL CONTROL MEASURES IN LEVELS I, II AND III AND THE FOLLOWING:** 1. CONTAINMENT MUST INCLUDE AN ANTEROOM TO ENSURE PRESSURE CONTROL, ANTEROOM MUST BE LARGE ENOUGH FOR EQUIPMENT STAGING, CART CLEANING, WORKERS ' PPE AND CLEANING. 2. WORKER CLOTHING AND/OR PPE MUST BE REMOVED OR CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA ANTEROOM. HEPA VACUUMING OF CLOTHING OR USE OF COVER SUITS IS ACCEPTABLE. 3. WORKERS MUST WEAR SHOE COVERS OR HAVE A METHOD TO CLEAN SHOES IN ANTEROOM SHOE COVERS MUST BE REMOVED PRIOR TO EXITING THE ANTEROOM TO THE OCCUPIED SPACE (NON-WORK AREA). DAMAGED SHOE COVERS MUST BE CHANGED IMMEDIATELY.

KEYNOTES:

09-02	CAREFULLY REMOVE EXISTING ACOUSTICAL CEILING TILE SURROUNDING SPRINKLER HEADS IDENTIFIED FOR REPLACEMENT IN THE SPRINKLER DRAWINGS. ONCE THE SPRINKLER HEAD REPLACEMENT IS COMPLETE, PROVIDE NEW ACOUSTICAL CEILING TILE MATCHING EXISTING. CUT NEW TILE TO FIT NEW SPRINKLER HEAD AND INSTALL TO MATCH.

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30X40. CONTRACTOR SHALL NOT SCALE DRAWINGS BUT SHALL REQUEST THE DESIRED DIMENSIONS FROM THE ARCHITECT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
3. EXISTING WALL SHADED FOR CLARITY.
4. EXISTING CEILING HEIGHTS ON THIS SHEET ARE 8'-6" ABOVE FINISH FLOOR, TYPICAL UNLESS NOTED OTHERWISE.

1 REFLECTED CEILING PLAN - LEVEL 1

1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

ARCHITECT

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4F Project Number: 16.2330.L04

Drawing Title	REFLECTED CEILING PLAN
Approved: Project Director	FARGO VAHCS
Project Title	REPLACE SELECTED SPRINKLER MAINS AND FIRE PUMP
Location	2101 ELM STREET FARGO, MD 58102
Date	3/27/2024
Checked	JS
Drawn	JE
Project Number	437-23-110
Building Number	1
Drawing Number	A1.20
Dwg. 3 of 13	

Office of Construction and Facilities Management

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2/22/2024 4:41:59 PM

INFECTION CONTROL RISK ASSESSMENT

STEP ONE: CATEGORY C

USING THE FOLLOWING TABLE, IDENTIFY THE TYPE OF CONSTRUCTION PROJECT ACTIVITY (TYPE A-D)

CATEGORY A	**INSPECTION AND/OR FACILITY UPKEEP GENERALLY DEFINED AS FOLLOWS:** • WORK CAN BE COMPLETED IN A SINGLE SHIFT. NOT TO EXCEED 10 HOURS. • PATIENTS AND/OR EMPLOYEES MAY BE IN THE AREA DEPENDING ON THE ACTIVITY. • WORK THAT DOES NOT CREATE DUST OR DEBRIS. • REMOVAL OF CEILING TILE OR ACCESS TO MECHANICAL OR ELECTRICAL CHASE FOR VISUAL INSPECTION LIMITED TO 1 TILE PER 50 SQUARE FEET WITH LIMITED EXPOSURE TIME (NOT TO EXCEED AN HOUR FOR EACH TILE) WITHIN THE SHIFT. • MINOR INTERIOR UPDATES (E.G., REPLACING FLOOR OR CEILING TILES, CARPENTRY WORK TO INCLUDE HANGING SIGNAGE, AND PAINTING WITHOUT SANDING) THAT DO NOT CREATE DUST OR DEBRIS. • LIMITED BUILDING SYSTEM MAINTENANCE SUCH AS PLUMBING ON POTABLE SYSTEMS LIMITED TO FAUCET REPLACEMENT ETC. AND ELECTRICAL WORK SUCH AS REPLACEMENT OF BULBS, RECEPTACLES, OR SWITCHES.
CATEGORY B	**GENERAL MAINTENANCE AND REPAIR WORK GENERALLY DEFINED AS FOLLOWS:** • PROLONGED INSPECTION AND WORK THAT MAY TAKE LONGER THAN A SINGLE SHIFT BUT NOT EXCEEDING A WEEK. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • WORK THAT CREATES MINIMAL DUST AND DEBRIS. • INTERIOR FINISH OR SURFACE REPAIRS, UPDATES, OR MODIFICATIONS SUCH AS REPAIR OF FIREWALLS AND BARRIERS, AND NEW FLOORING THAT PRODUCES MINIMAL DUST AND DEBRIS. CONTROLLED SANDING ACTIVITIES (E.G., WET OR DRY SANDING) THAT PRODUCE MINIMAL DUST AND DEBRIS. • PLUMBING WORK SUCH AS INSTALLATION OR REPLACEMENT OF A SINGLE FIXTURE OR PIPING FOR A SINGLE FIXTURE. ANY WORK ON SANITARY PLUMBING INCLUDING SNAKING OF DRAINS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CABLING/WIRING/CONDUIT FOR A SINGLE DEVICE, INSTALLATION OF NEW DEVICE SUCH AS A LIGHT FIXTURE THAT PRODUCES MINIMAL DUST AND DEBRIS. • AIR HANDLER AND/OR FAN SHUTDOWN/STARTUP AND HVAC WORK SUCH AS REPLACEMENT OF A SINGLE DIFFUSER, SINGLE TERMINAL UNIT OR A SINGLE DEVICE THAT PRODUCES MINIMAL DUST AND DEBRIS.
CATEGORY C	**SMALL-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:** • WORK REQUIRING LONGER THAN A SINGLE WEEK TO COMPLETE BUT NOT EXCEEDING 6 MONTHS. • PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED. • DEMOLITION/REMOVAL OF PREEXISTING FLOOR COVERING, CASEWORK, LAY-IN CEILING, OR OTHER ARCHITECTURAL ELEMENTS. • DEMOLITION/REMOVAL OF MORE THAN 32 FT2 OF DRYWALL/FRAMING, HARD CEILINGS, AND DOORS/FRAMING AND MINIMAL INFRASTRUCTURE SUCH AS ELECTRICAL CIRCUITS AND BRANCH PIPING. • INSTALLATION OF NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL/PLASTER AND ASSOCIATED WORK. • PLUMBING WORK SUCH AS THE INSTALLATION OF NEW SINKS, SHOWERS AND TOILETS AND ASSOCIATED PLUMBING. • SHUT DOWN OF SECTIONS OF POTABLE WATER SYSTEMS. • ELECTRICAL WORK SUCH AS INSTALLATION OF CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA, THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC. • MODIFICATION OF EXISTING FIRE ALARM AND SUPPRESSION SYSTEMS. • MECHANICAL WORK SUCH AS THE INSTALLATION OF DUCTWORK, DIFFUSERS, AND TERMINAL UNITS FOR AN AREA.

CATEGORY D	**LARGE-SCALE CONSTRUCTION, RENOVATION, OR MAINTENANCE GENERALLY DEFINED AS FOLLOWS:**
	• WORK EXCEEDING 6 MONTHS IN DURATION.
	• PATIENTS AND EMPLOYEES ARE NOT TO BE IN THE AREA UNTIL ACTIVITY IS COMPLETED.
	• LARGE-SCALE DEMOLITION OF BUILDING COMPONENTS AND INFRASTRUCTURE INCLUDING REMOVAL OF MULTIPLE DOORS, WALLS, FRAMING, CEILINGS, FLOORING, PIPING, ELECTRICAL AND HVAC.
	• THE INSTALLATION BUILDING COMPONENTS SUCH AS NEW WALLS, CEILINGS AND DOORS INCLUDING FRAMING, DRYWALL AND ASSOCIATED PLASTER WORK.
	• PLUMBING WORK SUCH AS THE INSTALLATION OF:
	  • NEW MEDICAL GAS SYSTEMS,
	  • STEAM/HEATING HOT WATER, CONDENSATE SYSTEMS,
	  • MULTIPLE SINKS. SHOWERS AND TOILETS INCLUDING ASSOCIATED PLUMBING.
	• SHUTDOWN OF POTABLE WATER, STEAM/HEATING HOT WATER, CONDENSATE, AND MEDICAL GAS SYSTEMS.
	• ELECTRICAL WORK SUCH AS INSTALLATION OF ELECTRICAL FEEDERS, DISTRIBUTION PANELS, CONDUIT AND WIRE FOR LIGHTING, RECEPTACLES AND SWITCHES FOR AN AREA, THE INSTALLATION OF CONDUIT AND WIRE FOR NEW DEVICES SUCH AS TERMINAL UNITS, FANS ETC.
	• INSTALLATION OF FIRE ALARM AND SUPPRESSION SYSTEMS.
	• ELECTRICAL SHUTDOWN OF MULTIPLE PANELS.
	• MECHANICAL WORK SUCH AS THE INSTALLATION OF AIR HANDLING EQUIPMENT, ASSOCIATED DUCTWORK, DIFFUSERS, HEAT EXCHANGERS, TERMINAL UNITS AND CONTROLS.

STEP TWO: HIGHEST RISK

USING THE FOLLOWING TABLE, *IDENTIFY* THE PATIENT RISK GROUPS THAT WILL BE AFFECTED. IF MORE THAN ONE RISK GROUP WILL BE AFFECTED, SELECT THE HIGHER RISK GROUP

LOW RISK	MEDIUM RISK	HIGH RISK	HIGHEST RISK
• OFFICE AREA	• CARDIOLOGY • ECHOCARDIOGRAPHY • ENDOSCOPE • NUCLEAR MEDICINE • PHYSICAL THERAPY • RADIOLOGY / MRI • RESPIRATORY THERAPY	• CCU • EMERGENCY ROOM • LABOR AND DELIVERY • LABORATORIES (SPECIMEN) • MEDICAL UNITS • NEWBORN NURSERY • OUTPATIENT SURGERY • PEDIATRICS • PHARMACY • POST ANESTHESIA CARE UNIT • SURGICAL UNITS	• ANY AREA CARING FOR IMMUNE COMPROMISED PATIENTS • BURN UNITS • CARDIAC CATH LAB • CENTRAL STERILE SUPPLY • INTENSIVE CARE UNIT • NEGATIVE PRESSURE ISOLATION ROOMS • ONCOLOGY • OPERATING ROOMS INCLUDING C SECTION ROOMS

STEP THREE:

MATCH THE PATIENT RISK GROUP (LOW, MEDIUM, HIGH, HIGHEST) WITH THE PLANNED ...

CONSTRUCTION PROJECT TYPE (A, B, C, D) ON THE FOLLOWING MATRIX, TO FIND THE ...

CLASS OF PRECAUTIONS (I, II, III OR IV) OR LEVEL OF INFECTION CONTROL ACTIVITIES REQUIRED.

CLASS I - IV OR COLOR-CODED PRECAUTIONS ARE DELINEATED ON THE FOLLOWING PAGE.

IC MATRIX - CLASS OF PRECAUTIONS: CONSTRUCTION PROJECT BY PATIENT RISK

	ACTIVITY CATEGORY			
PATIENT RISK CATEDORY	TYPE A	TYPE B	TYPE C	TYPE D
LOW RISK GROUP	I	II	II	III
MEDIUM RISK GROUP	I	II	III	IV
HIGH RISK GROUP	I	II	IV	IV
HIGHEST RISK GROUP	II	III	IV	IV

NOTE: INFECTION CONTROL APPROVAL WILL BE REQUIRED WHEN THE CONSTRUCTION ACTIVITY AND RISK LEVEL INDICATE THAT **CLASS III** OR **CLASS IV** CONTROL PROCEDURES ARE NECESSARY.

STEP THREE: CLASS IV

DESCRIPTION OF REQUIRED INFECTION CONTROL PRECAUTIONS BY CLASS

	DURING CONSTRUCTION PROJECT	UPON COMPLETION OF PROJECT
CLASS I	1. EXECUTE WORK BY METHODS TO MINIMIZE RAISING DUST FROM CONSTRUCTION OPERATIONS 2. IMMEDIATELY REPLACE A CEILING TILE DISPLACED FOR VISUAL INSPECTION	1. CLEAN WORK AREA UPON COMPLETION OF TASK.
CLASS II	1. PROVIDE ACTIVE MEANS TO PREVENT AIRBORNE DUST FROM DISPERSING INTO ATMOSPHERE 2. WATER MIST WORK SURFACE TO CONTROL DUST WHILE CUTTING. 3. SEAL UNUSED DOORS WITH DUCT TAPE. 4. BLOCK OFF AND SEAL AIR VENTS. 5. PLACE DUST MAT AT ENTRANCE AND EXIT OF WORK AREA. 6. REMOVE OR ISOLATE HVAC SYSTEM IN AREAS WHERE WORK IS BEING PERFORMED.	1. WIPE WORK SURFACES WITH CLEANER / DISINFECTANT. 2. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 3. WET MOP AND / OR VACUUM WITH HEPA VACUUM BEFORE LEAVING WORK AREA. 4. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS III	1. REMOVE OR ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. CONTAIN CONSTRUCTION WASTE BEFORE TRANSPORT IN TIGHTLY COVERED CONTAINERS. 5. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID.	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPARTMENT. 2. REMOVE BARRIER MATERIALS CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. VACUUM WORK AREA WITH HEPA FILTERED VACUUMS. 4. WET MOP AREA WITH CLEANER / DISINFECTANT. 5. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED
CLASS IV	1. ISOLATE HVAC SYSTEM IN AREA WHERE WORK IS BEING DONE TO PREVENT CONTAMINATION OF DUCT SYSTEM. 2. COMPLETE ALL CRITICAL BARRIERS I.E. SHEETROCK, PLASTIC, TO SEAL AREA FROM NON WORK AREA OR IMPLEMENT CONTROL CUBE METHOD (CART WITH PLASTIC COVERING AND SEALED CONNECTION TO WORK SITE WITH HEPA VACUUM FOR VACUUMING PRIOR TO EXIT) BEFORE CONSTRUCTION BEGINS. 3. MAINTAIN NEGATIVE AIR PRESSURE WITHIN WORK SITE UTILIZING HEPA EQUIPPED AIR FILTRATION UNITS. 4. SEAL HOLES, PIPES, CONDUITS, AND PUNCTURES. 5. CONSTRUCT ANTEROOM AND REQUIRE ALL PERSONNEL TO PASS THROUGH THIS ROOM SO THEY CAN BE VACUUMED USING A HEPA VACUUM CLEANER BEFORE LEAVING WORK SITE OR THEY CAN WEAR CLOTH OR PAPER COVERALLS THAT ARE REMOVED EACH TIME THEY LEAVE THE WORK SITE. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE). 6. ALL PERSONNEL ENTERING THE WORK SITE ARE REQUIRED TO WEAR SHOE COVERS. SHOE COVERS MUST BE CHANGED EACH TIME THE WORKER EXITS THE WORK AREA. (VA DOES NOT PROVIDE ANY ITEMS MENTIONED ABOVE).	1. DO NOT REMOVE BARRIERS FROM WORK AREA UNTIL COMPLETED PROJECT IS INSPECTED BY THE OWNER'S SAFETY DEPARTMENT AND INFECTION PREVENTION AND CONTROL DEPARTMENT AND THOROUGHLY CLEANED BY THE OWNER'S ENVIRONMENTAL SERVICES DEPT. 2. REMOVE BARRIER MATERIAL CAREFULLY TO MINIMIZE SPREADING OF DIRT AND DEBRIS ASSOCIATED WITH CONSTRUCTION. 3. CONTAIN CONSTRUCTION WASTE BEFOCTED TRANSPORT IN COVERED CONTAINERS. 4. COVER TRANSPORT RECEPTACLES OR CARTS. TAPE COVERING UNLESS SOLID LID. 5. VACUUM WORK AREA WITH I-HEPA FILTERED VACUUMS. 6. WET MOP AREA WITH CLEANER / DISINFECTANT. 7. UPON COMPLETION, RESTORE HVAC SYSTEM WHERE WORK WAS PERFORMED

INFECTION CONTROL NOTES - CLASS IV CONSTRUCTION:

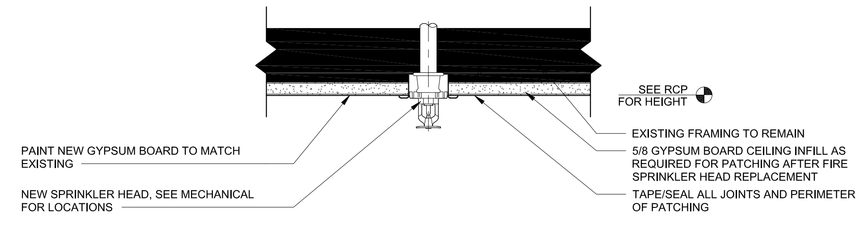
LEVEL I	1. PERFORM WORK ACTIVITY IN A MANNER THAT DOES NOT CREATE DUST OR INTERRUPT PATIENT CARE. 2. IMMEDIATELY REPLACE ANY CEILING TILE, CLOSE ACCESS PANELS, ETC., UPON COMPLETION OF WORK. 3. ANY MATERIALS AND EQUIPMENT BEING BROUGHT INTO THE FACILITY MUST BE FREE OF CONTAMINANTS AND LOOSE MATERIAL.
LEVEL II	**ALL CONTROL MEASURES IN LEVEL I AND THE FOLLOWING:** 1. PROVIDE ACTIVE MEANS TO CONTROL AIRBORNE DUST FROM DISPERSING INTO OCCUPIED AREAS AND/OR WATER MIST SURFACE TO CONTROL DUST (E.G., MOBILE DUST CONTAINMENT CART OR SOME OTHER SYSTEM). 2. ENSURE WORKER CLOTHING IS CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA. 3. REMOVE OR ISOLATE AIR DIFFUSERS (SUPPLY AND RETURN) TO PROTECT THE HVAC SYSTEM FROM DUST AND REDUCE AIR TURBULENCE. REBALANCE SYSTEM TO ADDRESS DIFFUSER ISOLATION. 4. WHEN THE WORK INVOLVES OR IMPACTS POTABLE WATER SYSTEMS INCLUDING STAGNATION DUE TO REDUCED USAGE, THE PIPING SHALL BE FLUSHED TWICE A WEEK OR ISOLATED FROM THE MAIN SYSTEM 5. SEAL DOORS, TO PREVENT DUST MIGRATION. 6. CONTAIN ALL TRASH AND DEBRIS IN THE WORK AREA. PERFORM DAILY CLEANING AND DISPOSAL OF TRASH (COVERED) FROM WORK AREA USING AN IDENTIFIED EXIT ROUTE. 7. ANY EQUIPMENT, TOOLS, OR MATERIALS REMOVED FROM THE WORK AREA MUST BE IN SEALED CONTAINERS AND/OR CLEANED OF DUST AND DEBRIS PRIOR TO REMOVAL FROM THE AREA. 8. NONPOROUS/SMOOTH AND CLEANABLE CONTAINERS (WITH A HARD LID) MUST BE USED TO TRANSPORT TRASH AND DEBRIS FROM THE CONSTRUCTION AREAS. THESE CONTAINERS MUST BE DAMP-WIPED CLEANED AND FREE OF VISIBLE DUST/DEBRIS BEFORE LEAVING THE CONTAINED WORK AREA. 9. INSTALL A STICKY (DUST COLLECTION) MAT AT ENTRANCE OF CONTAINED WORK AREA BASED ON FACILITY POLICY. STICKY MATS MUST BE CHANGED ROUTINELY AND WHEN VISIBLY SOILED. 10. MAINTAIN CLEAN SURROUNDINGS WHEN AREA IS NOT CONTAINED BY DAMP MOPPING OR HEPA VACUUMING SURFACES AT LEAST DAILY.
LEVEL III	**ALL CONTROL MEASURES IN LEVELS I AND II AND THE FOLLOWING:** 1. ENSURE AVAILABILITY OF EQUIPMENT FOR CLEANING HANDS 2. CONSTRUCT AND COMPLETE CRITICAL BARRIERS MEETING NFPA 241 REQUIREMENTS. BARRIERS MUST EXTEND TO THE CEILING OR IF CEILING TILE IS REMOVED, TO THE DECK ABOVE. 3. ALL BARRIER CONSTRUCTION ACTIVITIES MUST BE COMPLETED IN A MANNER THAT PREVENTS DUST RELEASE. 4. BARRIERS MUST BE HARD BARRIERS UNLESS TEMPORARY TO INSTALL FINAL BARRIER. BARRIER WALLS SHALL BE INSPECTED AND APPROVED PRIOR TO THE START OF DEMOLITION OR CONSTRUCTION. (IF VA STAFF CANNOT INSPECT PRIOR TO 4:30PM, THEN THE CHECK WILL BE THE NEXT BUSINESS DAY.) 5. SEAL ALL PENETRATIONS IN CONTAINMENT BARRIERS, INCLUDING FLOORS AND CEILING, USING APPROVED MATERIALS (UL SCHEDULE FIRESTOP IF APPLICABLE FOR BARRIER TYPE). 6. MAINTAIN .01 INCHES /WATER GAUGE NEGATIVE PRESSURIZATION OF THE ENTIRE WORKSPACE BY USE OF HEPA EXHAUST AIR SYSTEMS DIRECTED OUTDOORS (UNLESS A WORK SPECIFIC WAIVER IS APPROVED BY VHA 'S OFFICE OF HEALTHCARE ENGINEERING); THIS MUST BE MAINTAINED CONTINUOUSLY 24/7 FOR THE DURATION OF THE PROJECT. EXHAUST DISCHARGED DIRECTLY TO THE OUTDOORS THAT IS 25 FEET OR GREATER FROM ENTRANCES, AIR INTAKES AND WINDOWS IS NOT REQUIRED TO BE HEPA-FILTERED. EXHAUSTING DISCHARGED AIR INTO SHARED OR RECIRCULATING HVAC SYSTEMS, OR OTHER SHARED EXHAUST SYSTEMS (E.G., BATHROOM EXHAUST) IS PROHIBITED. 7. INSTALL A DIFFERENTIAL PRESSURE SENSING DEVICE (E.G., MAGNEHELIC, MANOMETER, OR DIGITAL MONITORING) ON EXTERIOR OF WORK CONTAINMENT TO CONTINUALLY MONITOR AND DOCUMENT NEGATIVE PRESSURIZATION. THE "BALL IN THE WALL" OR SIMILAR APPARATUS ARE NOT ACCEPTABLE.
LEVEL IV	**ALL CONTROL MEASURES IN LEVELS I, II AND III AND THE FOLLOWING:** 1. CONTAINMENT MUST INCLUDE AN ANTEROOM TO ENSURE PRESSURE CONTROL, ANTEROOM MUST BE LARGE ENOUGH FOR EQUIPMENT STAGING, CART CLEANING, WORKERS ' PPE AND CLEANING. 2. WORKER CLOTHING AND/OR PPE MUST BE REMOVED OR CLEAN AND FREE OF VISIBLE DUST BEFORE LEAVING THE WORK AREA ANTEROOM. HEPA VACUUMING OF CLOTHING OR USE OF COVER SUITS IS ACCEPTABLE. 3. WORKERS MUST WEAR SHOE COVERS OR HAVE A METHOD TO CLEAN SHOES IN ANTEROOM SHOE COVERS MUST BE REMOVED PRIOR TO EXITING THE ANTEROOM TO THE OCCUPIED SPACE (NON-WORK AREA). DAMAGED SHOE COVERS MUST BE CHANGED IMMEDIATELY.

PHASE LEGEND

PHASE 1

PHASE 2

PHASE 3



1 SUSPENDED GYP. DETAIL

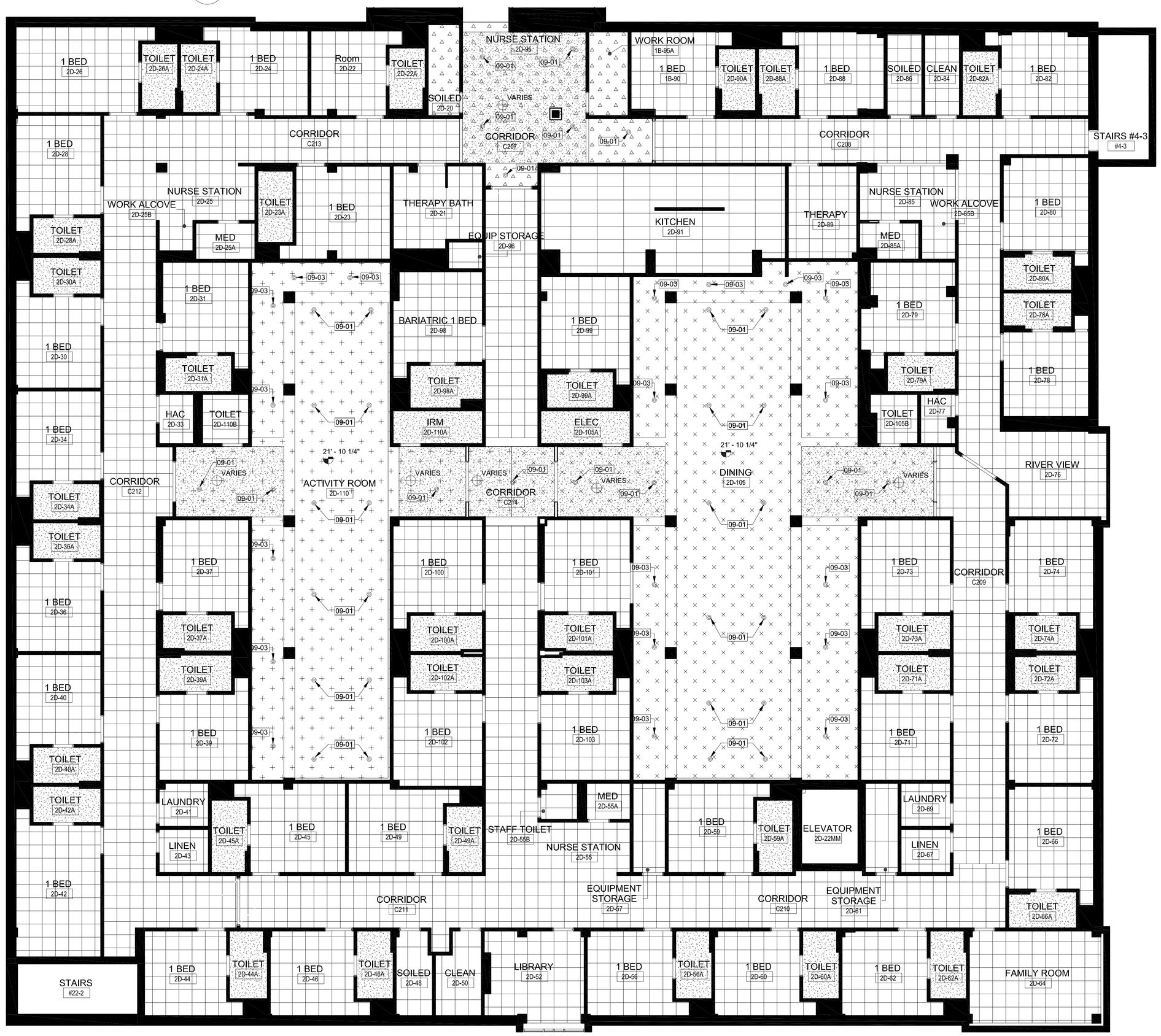
3" = 1'-0"

KEYNOTES:

09-01	SEE DETAIL 2/A1.21 FOR PATCHING OF EXISTING GYP BD SOFFIT/CEILING. PROVIDE GYP BD INFILL, FOLLOW BY TAPE/TEXTURE/PAINT TO MATCH EXISTING CONDITION.
09-03	CAREFULLY REMOVE EXISTING 12"X12" SURFACE/DIRECT MOUNTED ACOUSTICAL CEILING TILE SURROUNDING SPRINKLER HEADS IDENTIFIED FOR REPLACEMENT IN THE SPRINKLER DRAWINGS. ONCE THE SPRINKLER HEAD REPLACEMENT IS COMPLETE, PROVIDE NEW DIRECT MOUNT CEILING TILE MATCHING EXISTING. CUT NEW TILE TO FIT NEW SPRINKLER HEAD AND REINSTALL INTO DIRECT MOUNTED SYSTEM.

GENERAL NOTES:

1. SHEET SIZE FOR PROPER SCALE IS 30X40. CONTRACTOR SHALL NOT SCALE DRAWINGS BUT SHALL REQUEST THE DESIRED DIMENSIONS FROM THE ARCHITECT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VISIT THE PROJECT AND VERIFY EXISTING CONDITIONS/DIMENSIONS AND PROPOSED CONDITIONS. COORDINATE DEMOLITION BETWEEN ALL TRADES. NOTIFY A/E IMMEDIATELY OF ANY CONFLICTS OR DISCREPANCIES.
3. EXISTING WALL SHADED FOR CLARITY.
4. EXISTING CEILING HEIGHTS ON THIS SHEET ARE 8'-6" ABOVE FINISH FLOOR, TYPICAL UNLESS NOTED OTHERWISE.



2 REFLECTED CEILING PLAN - LEVEL 2

1/8" = 1'-0"

CONSTRUCTION DOCUMENTS

Revisions: Date

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4F Project Number: 16.2330.L04

Drawing Title: REFLECTED CEILING PLAN

Approved: Project Director: FARGO VAHCS

Project Title: REPLACE SELECTED SPRINKLER MAINS AND FIRE PUMP

Location: 2101 ELM STREET FARGO, MD 58102

Date: 3/27/2024 | Checked: JS | Drawn: JE

Project Number: 437-23-110

Building Number: 1

Drawing Number: A1.21

Dwg. 4 of 13

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VA FORM 08-6231

FIRE PROTECTION SYMBOLS

- 3-WAY CONTROL VALVE
- 2-WAY CONTROL VALVE
- CHECK VALVE
- FLOW METER
- AQUASTAT
- GATE VALVE
- GATE VALVE - MANUAL
- GATE VALVE - ON/OFF
- GATE VALVE - MODULATING
- THERMOSTATIC MIXING VALVE
- BALANCING VALVE
- FLOW CONTROL VALVE
- PRESSURE REDUCING VALVE
- REDUCED PRESSURE ZONE VALVE
- PRESSURE RELIEF VALVE
- SOLENOID VALVE
- PRESSURE GAUGE
- THERMOMETER
- PUMP
- STEAM TRAP
- STRAINER
- CONCENTRIC REDUCER
- PIPE UNION
- PIPE ELBOW
- PIPE DOWN
- PIPE UP
- PIPE TEE DOWN
- BALL VALVE
- PLUG VALVE
- B-VALVE
- GLOBE VALVE
- GLOBE VALVE -MANUAL
- GLOBE VALVE - ON/OFF
- GLOBE VALVE - MODULATING
- BUTTERFLY VALVE
- BUTTERFLY VALVE - MANUAL
- BUTTERFLY VALVE - ON/OFF
- BUTTERFLY VALVE - MODULATING
- VERTICAL HEAT EXCHANGER
- TEMPERATURE SENSOR
- DRINKING FOUNTAIN
- or TRIPLE DUTY VALVE
- VACUUM BREAKER
- TEST PLUG
- FLEXIBLE PIPE CONNECTION
- HAMMER ARRESTOR
- PRESSURE REGULATOR
- MANUAL AIR VENT
- POINT OF CONNECTION
- POINT OF DISCONNECTION
- TO BE DEMOLISHED
- PLUMBING PLAN NOTE
- TEE
- CONCEALED SPRINKLER HEAD

ABBREVIATIONS:

AC	ALTERNATING CURRENT
ADJ.	ADJUSTABLE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
CALC	CALCULATED
CC	CHILLED WATER COOLING COIL - AHU
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
C/L	CENTERLINE
CO	CLEANOUT
COEF	COEFFICIENT
COMLINK	COMMUNICATION LINK
COND	CONDENSATION
CONFIG	CONFIGURED
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CNTRL.	CONTROL
CP	CONDENSATE PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CR	CONDENSATE RETURN
CV	CONTROL VALVE
CV	FLOW COEFFICIENT
DAMP.	DAMPER
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB
DC	DIRECT CURRENT
DCW	DOMESTIC COLD WATER
DEG	DEGREES
DHR	DOMESTIC HOT WATER RETURN
DHW	DOMESTIC HOT WATER
DIFF.	DIFFERENTIAL
DIST	DISTRUBUTION
DS	DOWNSPOUT
DSP	DEHUMIDIFICATION SET POINT
DWV	DRAIN, WASTE AND VENT
(E)	EXISTING
EA	EXHAUST AIR
ECC	ENERGY CONTROL CENTER
ELECT.	ELECTRICAL
ELEV	ELEVATION
ENT	ENTERING
ERC	ENERGY RECOVERY COIL - AHU
ES	END SWITCH
EWC	ELECTRIC WATER COOLER
F	FAHRENHEIT
FD	FLOOR DRAIN
FS	FLOOR SINK
FILT.	FILTER
FPM	FEET PER MINUTE
FT	FEET
GAL	GALLONS
GALV	GALVANIZED
G.C.	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GT	GLYCOL TANK
H	HEIGHT
H	HUMIDIFIER - AHU
HP	HORSEPOWER
HPS	HIGH PRESSURE STEAM
HR	HOUR
HRCR	HEAT RECOVERY RETURN
HRCS	HEAT RECOVERY SUPPLY
HRP	HEAT RECOVERY PUMP
HSP	HUMIDIFICATION SET POINT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HX	HEAT EXCHANGER
Hz	HERTZ
IBC	INTERNATIONAL BUILDING CODE
IECC	INTERNAIONAL ENERGY CONSERVATION CODE
IFB	INTEGRAL FACE AND BYPASS
IMC	INTERNATIONAL MECHANICAL CODE
I/O	INPUT/OUTPUT
IPC	INTERNATIONAL PLUMBING CODE
ICVAMC	IOWA CITY VETERANS AFFAIRS MEDICAL CENTER
K.O.	COMMANDING OFFICER
L	LENGTH
LA	LABORATORY EQUIPMENT COMPRESSED AIR
LBS	POUNDS
LPS	LOW PRESSURE STEAM
LWA	SOUND POWER LEVEL
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MIN	MINUTE
mm	MILLIMETER
MPS	MEDIUM PRESSURE STEAM
MT	MOISTURE (HUMIDITY) TRANSMITTER
MV	MANUAL VENT
N.C.	NORMALLY CLOSED
NC	NOISE CRITERIA LEVEL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GAS
N.O.	NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
ORD	OVERFLOW ROOF DRAIN
OSA	OUTSIDE AIR
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
Pa	PASCAL
PC	PUMPED CONDENSATE
PC	PREHEAT STEAM COIL - AHU
PD	PRESSURE DROP
PDS	PRESSURE DIFFERENTIAL SENSOR
PH	PHASE
PI	PROPORTIONAL INTEGRAL
PID	PROPORTIONAL INTEGRAL DERIVATIVE
PRESS.	PRESSURE
PSH	HIGH PRESSURE SWITCH
PSIG	POUNDS PER SQUARE INCH - GAUGE
PSL	LOW PRESSURE SWITCH
QUANT.	QUANTITY
R	RADIUS
R	RETURN
RA	RETURN AIR
RC	REHEAT STEAM COIL - AHU
RD	ROOF DRAIN
RE	RESIDENT ENGINEER
REQ'D	REQUIRED
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
S	SUPPLY
SA	SUPPLY AIR
SAN	SANITARY
SCW	SOFT COLD WATER
SD	SMOKE DAMPER
SF	FAN SECTION - AHU
SF	SQUARE FEET
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS ASSOCIATION
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
SST	START/STOP
SUH	STEAM UNIT HEATER
SV	STEAM VALVE
SV	STEAM VENT
T	THERMOSTAT
TEMP.	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TT	TEMPERATURE SENSOR/TRANSMITTER
TYP	TYPICAL
UH	UNIT HEATER
V	VENT
V	VOLTS
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VSMC	VARIABLE SPEED MOTOR CONTROLLER
VTR	VENT THROUGH ROOF
W	WIDTH
W/	WITH
WB	WET BULB
WG	INCHES OF WATER
ZAT	ZONE AIR TEMPERATURE
ZC	VALVE OR DAMPER CONTROLLER

GENERAL FIRE PROTECTION NOTES:

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE FOLLOWING:

- INTERNATIONAL BUILDING CODE (IBC)
- INTERNATIONAL MECHANICAL CODE (IMC)
- INTERNATIONAL PLUMBING CODE (IPC)
- INTERNATIONAL FUEL GAS CODE (IFGC)
- NFPA 101 LIFE SAFETY CODE
- NFPA 13 STANDARD INSTALLATION OF SPRINKLER SYSTEMS
- NFPA 20 STANDARD INSTALLATION OF STATIONARY FIRE PUMPS
- ANY AUTHORITY HAVING JURISDICTION.
- VA FIRE PROTECTION DESIGN MANUAL (v. 11-01-2023).

THIS IS A FEDERAL PROJECT, AS SUCH ALL VA DESIGN GUIDES AND CODE REQUIREMENTS ARE REQUIRED.

ALL EQUIPMENT, MATERIALS, AND ARTICLES INCORPORATED IN THE WORK SHALL BE NEW AND OF COMPARABLE QUALITY AS SPECIFIED. ALL WORKMANSHIP SHALL BE FIRST-CLASS AND SHALL BE PERFORMED BY MECHANICS SKILLED AND REGULARLY EMPLOYED IN THEIR RESPECTIVE TRADES.

ALL WORK SHALL BE COORDINATED WITH ALL AFFECTED TRADES PRIOR TO STARTING WORK. REWORK REQUIRED DUE TO COORDINATION ISSUES SHALL BE DONE BY THE INSTALLATION CONTRACTOR WITHOUT INCREASED COST TO THE OWNER.

THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE. ALTHOUGH EVERY ATTEMPT HAS BEEN MADE TO INDICATE THE EXACT ROUTING AND LOCATION OF PROPOSED SYSTEMS, NOT ALL OFFSETS, REQUIRED FITTINGS AND/OR CONDITIONS CAN BE SHOWN. THE CONTRACTOR SHALL COORDINATE WORK AND MAKE REQUIRED CHANGES TO THE ROUTING IN ORDER TO AVOID CONFLICTS WITHOUT ANY INCREASED COST TO THE OWNER.

SYSTEMS DESIGNATED TO BE PROVIDED AND INSTALLED WITHIN THESE CONTRACT DOCUMENTS ARE INTENDED TO BE COMPLETE AND OPERATIONAL. PROVIDE EVERYTHING ESSENTIAL FOR THE COMPLETION OF THE WORK TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION, INCLUDING ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS, BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

FIRE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER MAINTENANCE CLEARANCES ARE MAINTAINED. COORDINATION WILL BE REQUIRED WITH THE EXISTING MECHANICAL PIPING, HVAC, AND ELECTRICAL SYSTEMS.

ALL FIRE SPRINKLER PIPING 2" DIAMETER AND SMALLER IS INTENDED TO BE SCHEDULE 40 BLACK STEEL PIPE AS SPECIFIED. ALL FIRE SPRINKLER PIPING 2-1/2" DIAMETER AND LAGER IS INTENDED TO BE SCHEDULE 10 BLACK STEEL PIPE AS SPECIFIED.

FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. THIS IS A FULL BUILDING SPRINKLER PUMP REPLACEMENT PROJECT AND A/E ANTICIPATES SHUTDOWN OF BUILDING FOR A SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP, AND FOR A SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

CONSTRUCTION DOCUMENTS

Revisions: | Date

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Drawing Title	FIRE PROTECTION GENERAL NOTES SYMBOLS AND ABBREVIATIONS
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	BM/PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP0.00
Dwg.	5 of 13

Office of Construction and Facilities Management

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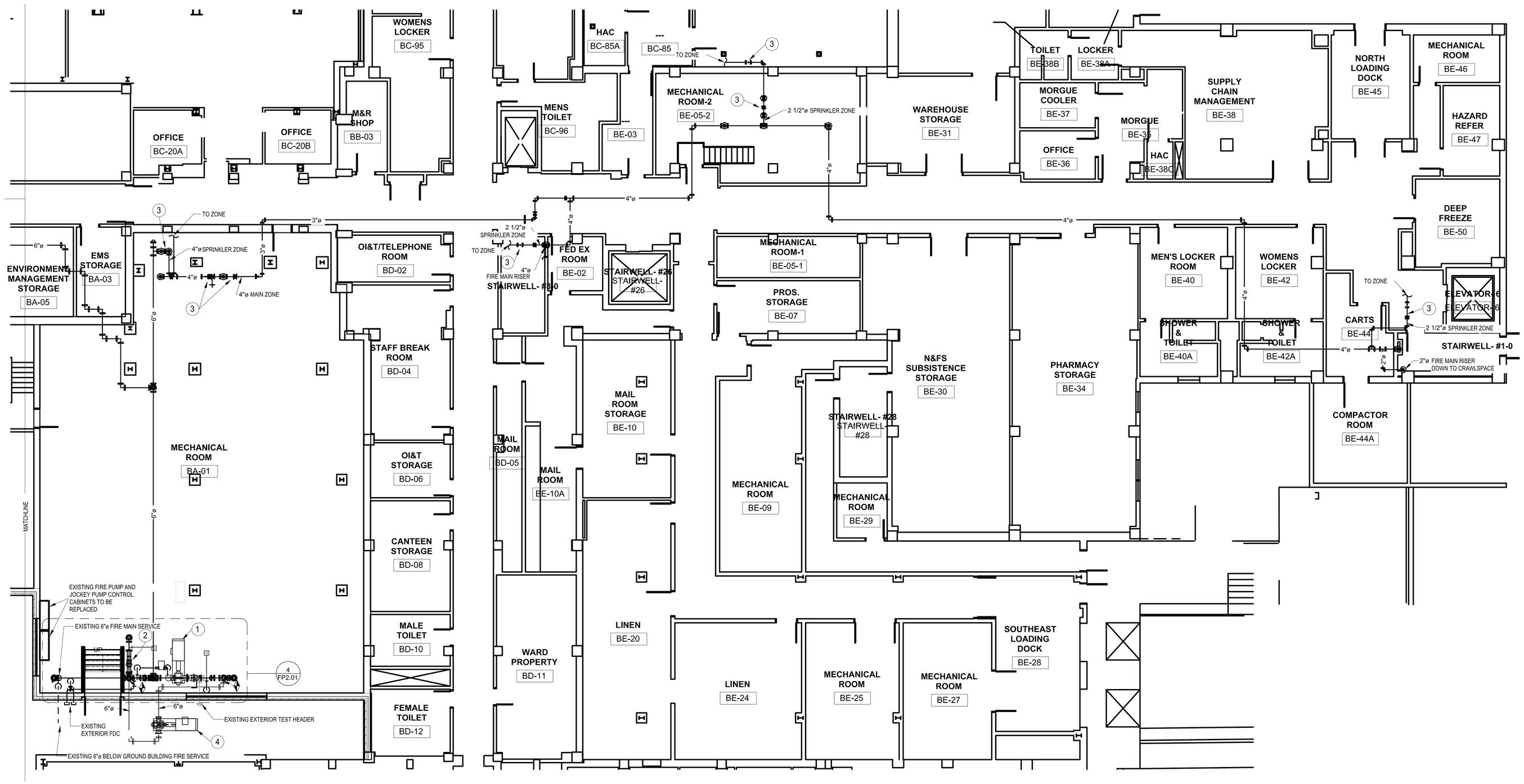


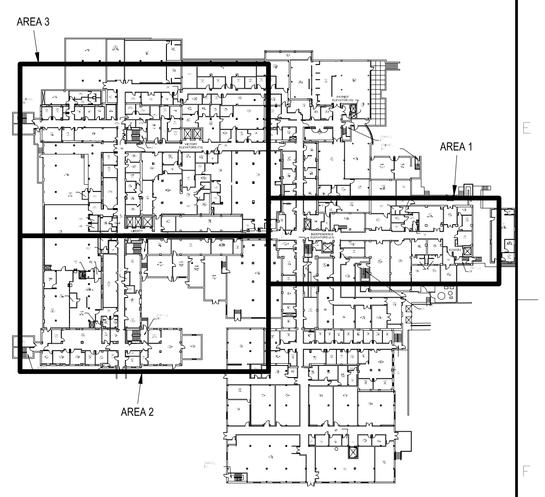
1 LEVEL 0 FP - AREA 1
1/8" = 1'-0"

GENERAL NOTES

- EXISTING FIRE SPRINKLER PIPNG, FITTING AND ACCESSORIES SHOWN IN GREY LINES ARE SHOWN FOR REFERENCE AND ARE TO REMAIN.
- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. A/E ANTICIPATES A FIRE SPRINKLER SHUTDOWN OF THE BUILDING FOR THE SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP. ANOTHER BUILDING FIRE SPINKLER SHUTDOWN IS ANTICIPATED FOR THE SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING FIRE PUMP AND JOCKEY PUMP WITH NEW FIRE PUMP, AND JOCKEY PUMP.
2. INSTALL NEW 6"ø ZURN 375 RPZ BACKFLOW PREVENTER, OR EQUAL, BACKFLOW PREVENTER, PIPE FULL SIZE DRAIN TO EXISTING FLOOR SINK.
3. REPLACE EXISTING ZONE ASSEMBLY INCLUDING ZONE ISOLATION VALVE, TAMPER SWITCH, FLOW SWITCH AND PRESSURE GAUGE. RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE ZONE SHUTDOWN WITH VA COR PRIOR TO CONSTRUCTION. CONTRACTOR TO PROVIDE FIRE WATCH IF ZONE SHUTDOWN IS LONGER THAN 4 HOURS.
4. CONTRACTOR TO PROVIDE WEATHERPROOF TEMPORARY FIRE PUMP SKID, WITH ALL COMPONENTS INCLUDED IN THE NEW FIRE PUMP SYSTEM, AND PIPE TO EXISTING FIRE SPRINKLER PIPING PRIOR TO THE EXISTING FIRE PUMP BEING DEMOLISHED FOR REPLACEMENT. CONNECT TEMPORARY FIRE PUMP SKID TO THE EXISTING FIRE ALARM SYSTEM. CONTRACTOR TO COORDINATE SHUTDOWNS TO CONNECT TEMPORARY FIRE PUMP SKID TO EXISTING FIRE SPRINKLER SYSTEM AND TO DISCONNECT THE TEMPORARY PUMP AND SWITCH OVER THE NEW FIRE PUMP. TEMPORARY FIRE PUMP AND PIPING TO BE REMOVED AFTER THE NEW FIRE PUMP IS INSTALLED AND OPERATIONAL.



N
KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

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Drawing Title	BASEMENT FIRE PROTECTION PLAN - AREA 1
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	BM/PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP1.01
Dwg.	6 of 13

Office of Construction and Facilities Management

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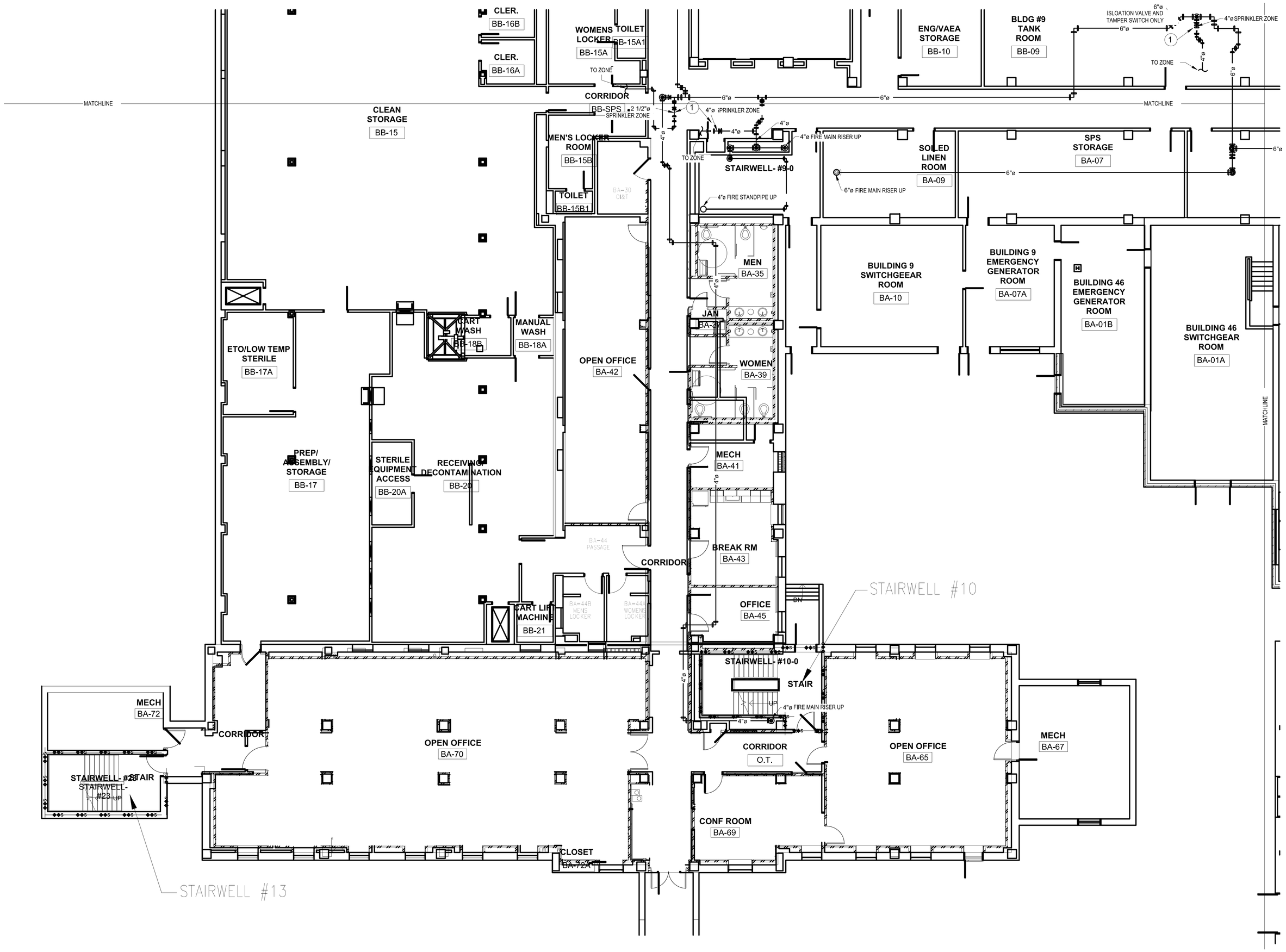


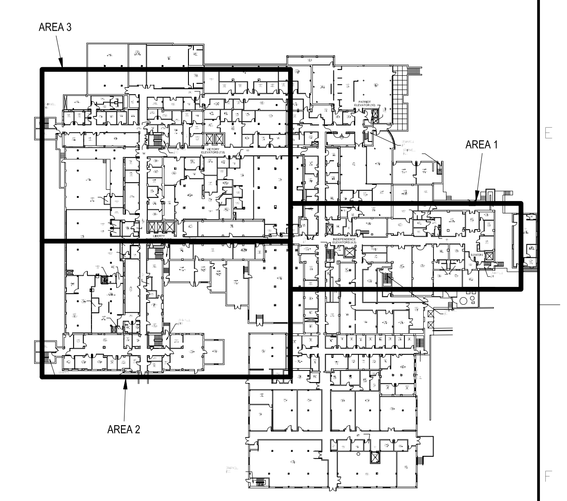
1 LEVEL 0 FP - AREA 2
1/8" = 1'-0"

GENERAL NOTES

- EXISTING FIRE SPRINKLER PIPNG, FITTING AND ACCESSORIES SHOWN IN GREY LINES ARE SHOWN FOR REFERENCE AND ARE TO REMAIN.
- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. A/E ANTICIPATES A FIRE SPRINKLER SHUTDOWN OF THE BUILDING FOR THE SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP. ANOTHER BUILDING FIRE SPINKLER SHUTDOWN IS ANTICIPATED FOR THE SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING ZONE ASSEMBLY INCLUDING ZONE ISOLATION VALVE, TAMPER SWITCH, FLOW SWITCH AND PRESSURE GAUGE. RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE ZONE SHUTDOWN WITH VA COR PRIOR TO CONSTRUCTION. CONTRACTOR TO PROVIDE FIRE WATCH IF ZONE SHUTDOWN IS LONGER THAN 4 HOURS.



N KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

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Drawing Title	BASEMENT FIRE PROTECTION PLAN - AREA 2
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	BM/PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP1.02
Dwg.	7 of 13

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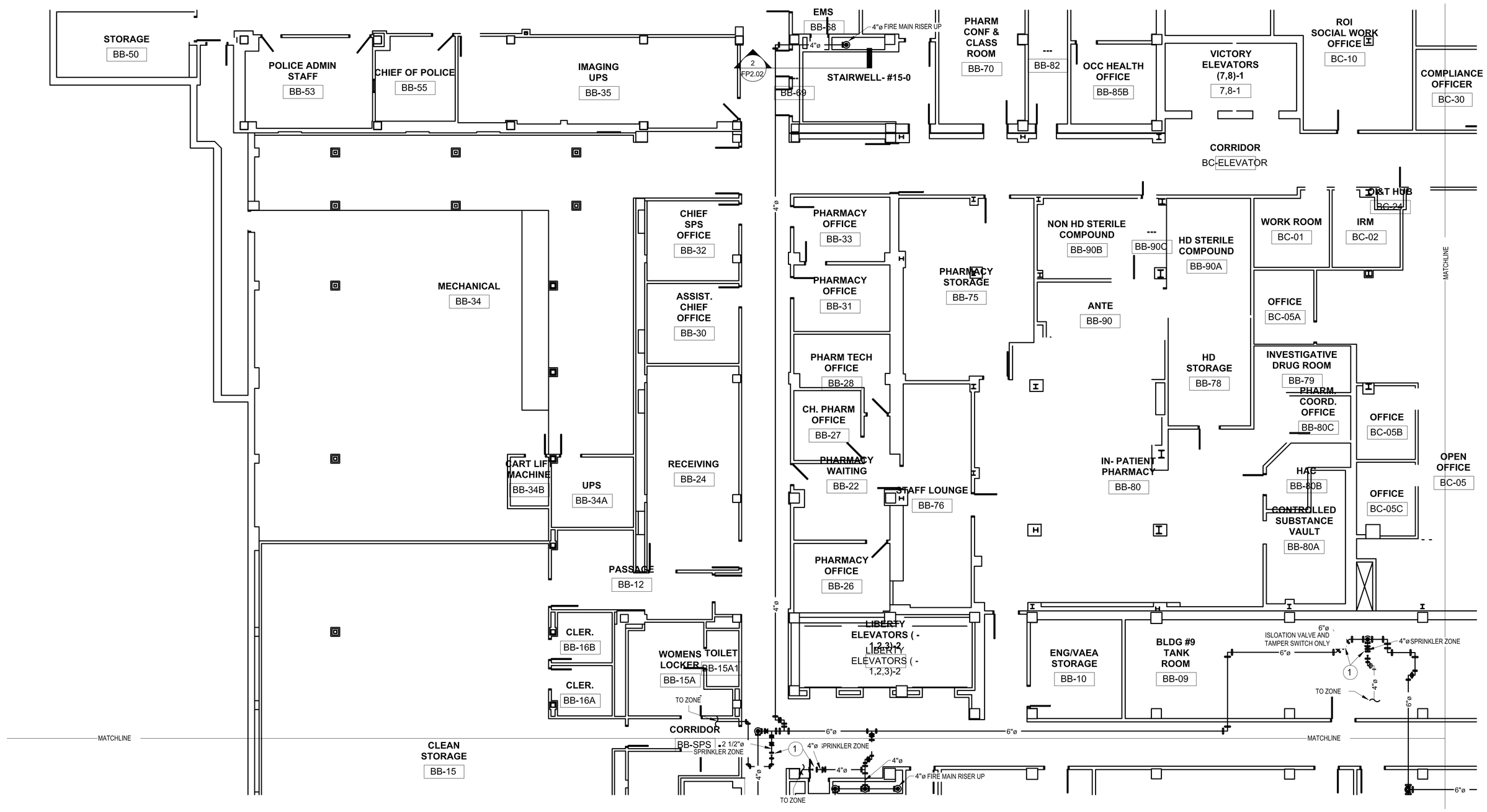


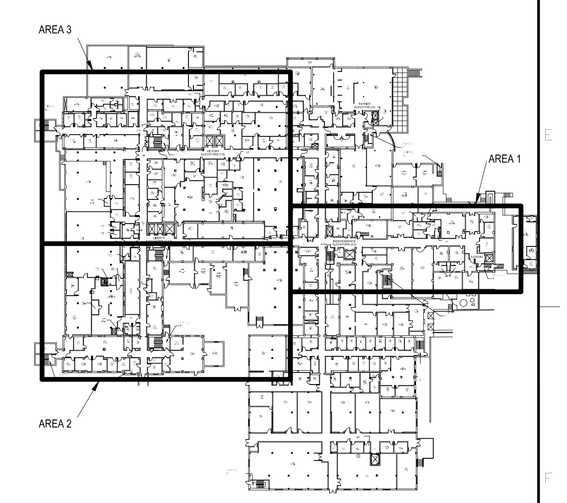
1 LEVEL 0 FP - AREA 3
1/8" = 1'-0"

GENERAL NOTES

- EXISTING FIRE SPRINKLER PIPNG, FITTING AND ACCESSORIES SHOWN IN GREY LINES ARE SHOWN FOR REFERENCE AND ARE TO REMAIN.
- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. A/E ANTICIPATES A FIRE SPRINKLER SHUTDOWN OF THE BUILDING FOR THE SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP. ANOTHER BUILDING FIRE SPINKLER SHUTDOWN IS ANTICIPATED FOR THE SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING ZONE ASSEMBLY INCLUDING ZONE ISOLATION VALVE, TAMPER SWITCH, FLOW SWITCH AND PRESSURE GAUGE. RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE ZONE SHUTDOWN WITH VA COR PRIOR TO CONSTRUCTION. CONTRACTOR TO PROVIDE FIRE WATCH IF ZONE SHUTDOWN IS LONGER THAN 4 HOURS.



N
KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

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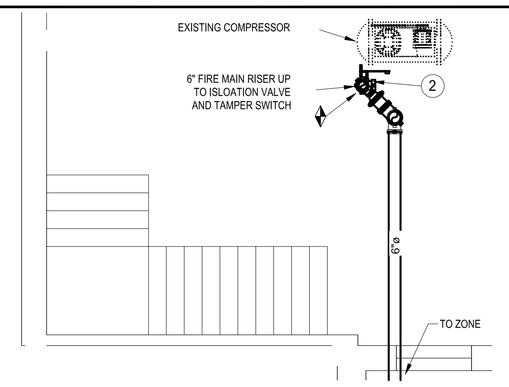
Drawing Title	BASEMENT FIRE PROTECTION PLAN - AREA 3
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	BM/PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP1.03
Dwg.	8 of 13

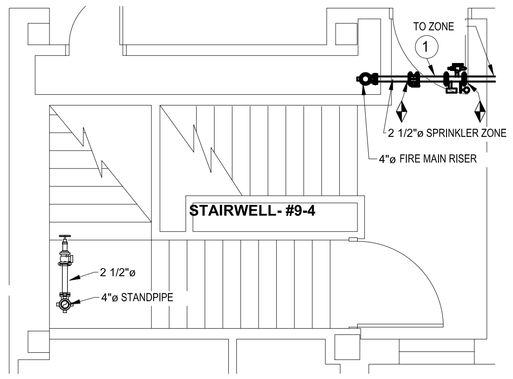
Office of Construction and Facilities Management

VA FORM 08-6231

2/27/2024 8:23:33 AM



18 LEVEL 5 FP STAIRWELL 9
1/4" = 1'-0"



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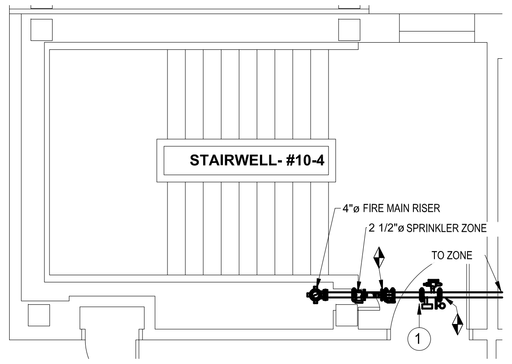

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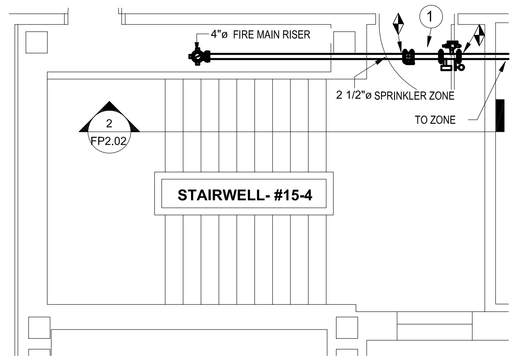

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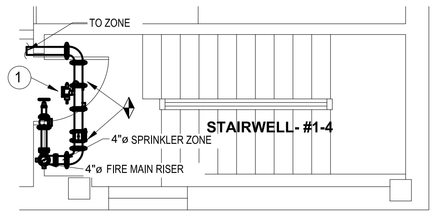

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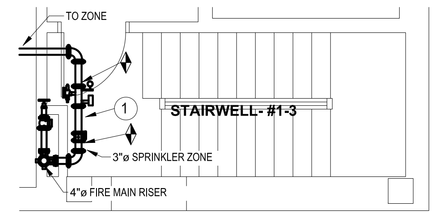

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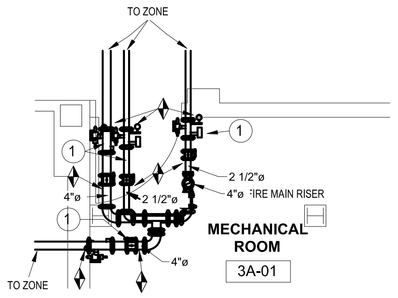

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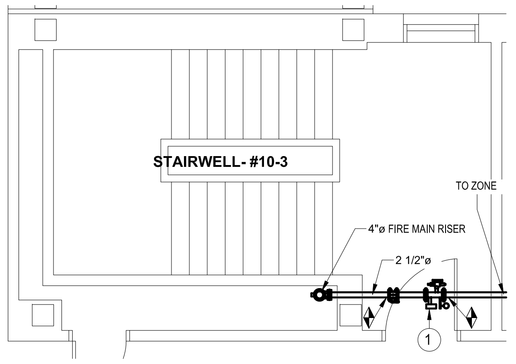

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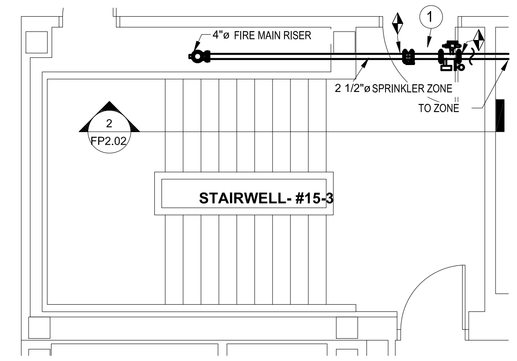

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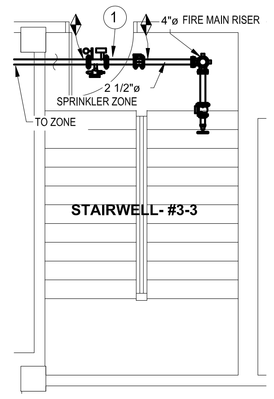

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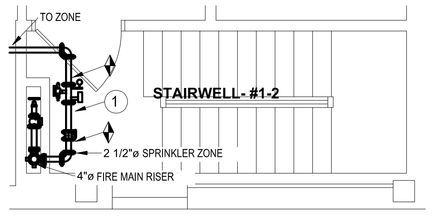

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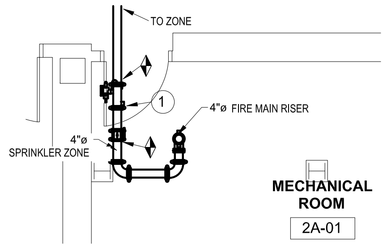

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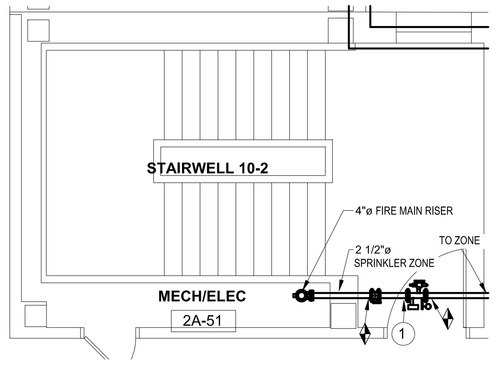
1/4" = 1'-0"



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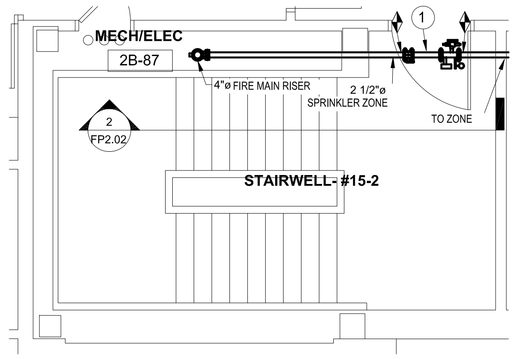

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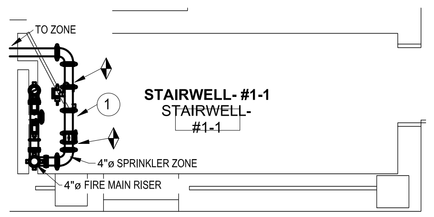
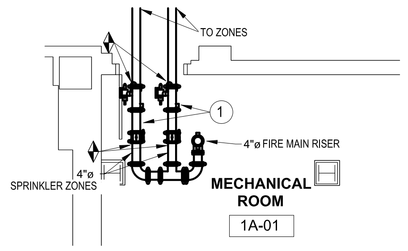
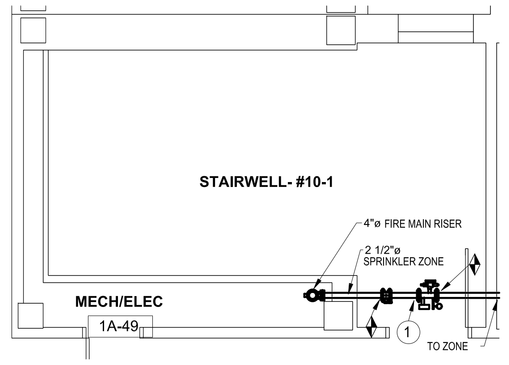
1/4" = 1'-0"



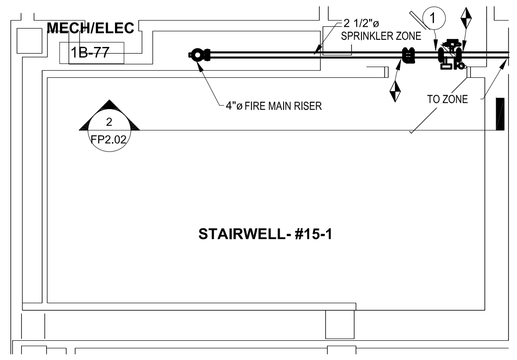
1 LEVEL 1 FP STAIRWELL 1
1/4" = 1'-0"



2 LEVEL 1 FP MECH ROOM 1A-01
1/4" = 1'-0"



3 LEVEL 1 FP STAIRWELL 10
1/4" = 1'-0"



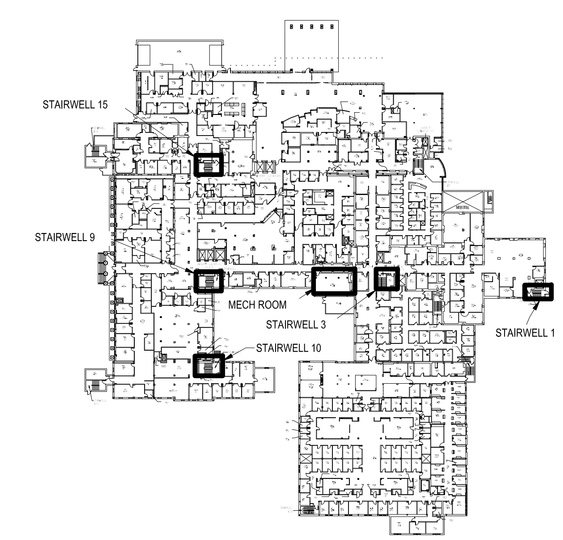
4 LEVEL 1 FP STAIRWELL 15
1/4" = 1'-0"

GENERAL NOTES

- EXISTING FIRE SPRINKLER PIPNG, FITTING AND ACCESSORIES SHOWN IN GREY LINES ARE SHOWN FOR REFERENCE AND ARE TO REMAIN.
- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. A/E ANTICIPATES A FIRE SPRINKLER SHUTDOWN OF THE BUILDING FOR THE SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP. ANOTHER BUILDING FIRE SPINKLER SHUTDOWN IS ANTICIPATED FOR THE SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING ZONE ASSEMBLY INCLUDING ZONE ISOLATION VALVE, TAMPER SWITCH, FLOW SWITCH AND PRESSURE GAUGE. RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE ZONE SHUTDOWN WITH VA COR PRIOR TO CONSTRUCTION. CONTRACTOR TO PROVIDE FIRE WATCH IF ZONE SHUTDOWN IS LONGER THAN 4 HOURS.
2. REPLACE EXISTING 6" DRY ZONE ASSEMBLY INCLUDING ZONE TAMPER SWITCH, CHECK VALVE AND PRESSURE GAUGE. RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE ZONE SHUTDOWN WITH VA COR PRIOR TO CONSTRUCTION. CONTRACTOR TO PROVIDE FIRE WATCH IF ZONE SHUTDOWN IS LONGER THAN 4 HOURS. EXISTING PENTHOUSE DRY SPRINKLER SYSTEM



N
KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

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Drawing Title: STAIRWELL RISER FIRE PROTECTION PLAN	Project Title: REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP		Project Number: 437-23-110
Approved: Project Director: CHAD HOLMAN	Location: 2101 ELM STREET FARGO, ND 58102		Building Number: 1,9,46
	Date: 3/27/24	Checked: RD	Drawing Number: FP1.11
		Drawn: BM/PM	Dwg. 9 of 13

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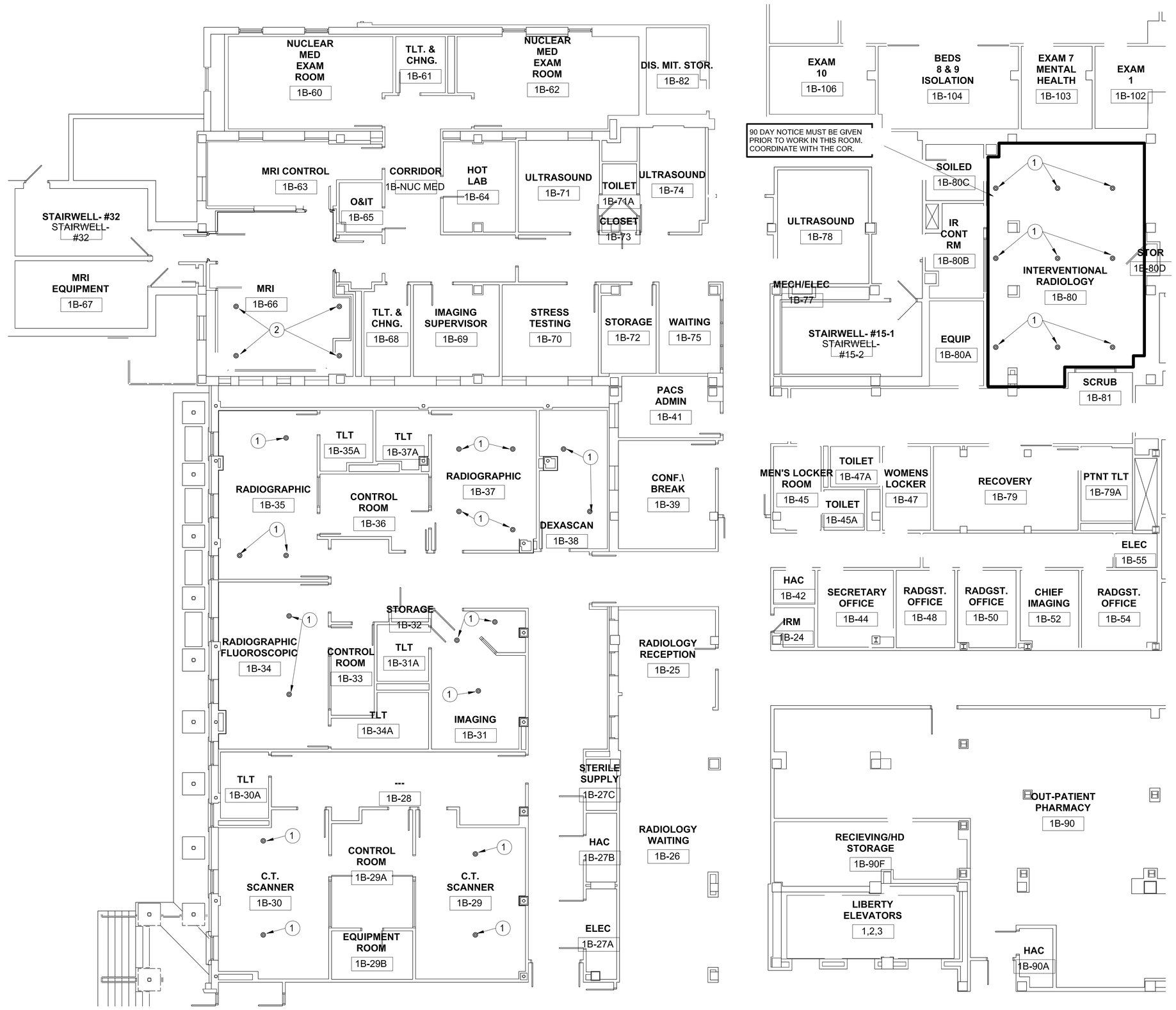


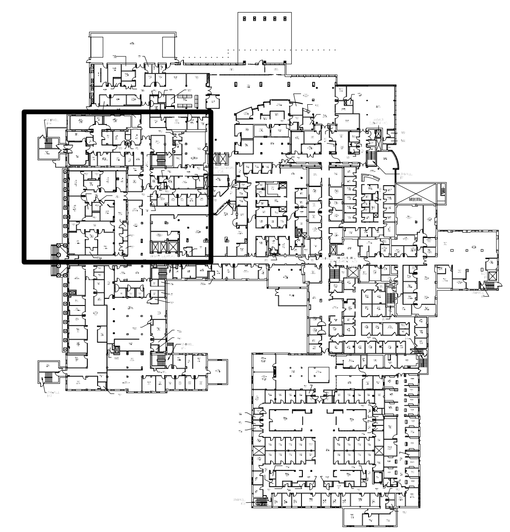
1 LEVEL 1 FP SPRINKLER HEADS
1/8" = 1'-0"

GENERAL NOTES

- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. THIS IS A FULL BUILDING SPRINKLER PUMP REPLACEMENT PROJECT AND A/E ANTICIPATES SHUTDOWN OF BUILDING FOR A SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP, AND FOR A SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING CONCEALED FIRE SPRINKLER HEADS SHOWN IN DARK WITH QUICK RESPONSE PENDENT FIRE SPRINKLER HEADS IN THE SAME LOCATION. THERE ARE OTHER EXISTING QUICK RESPONSE PENDENT FIRE SPRINKLER HEADS THAT ARE NOT SHOWN IN THE DRAWINGS THAT ARE TO REMAIN.
2. EXISTING CONCEALED SPRINKLER HEADS IN MRI 1B-66 ARE ACCEPTABLE PER VA FIRE PROTECTION DESIGN MANUAL (V. 11/01/23), SECTION 6.1, PARAGRAPH K, EXCEPTION #5. EXISTING SPRINKLER HEADS TO REMAIN.



N KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

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Drawing Title: FIRST FLOOR SPRINKLERS PLAN	Project Title: REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP		Project Number: 437-23-110
Approved: Project Director: CHAD HOLMAN	Location: 2101 ELM STREET FARGO, ND 58102		Building Number: 1,9,46
	Date: 3/27/24	Checked: RD	Drawing Number: FP1.12
		Drawn: BM/PM	Dwg. 10 of 13

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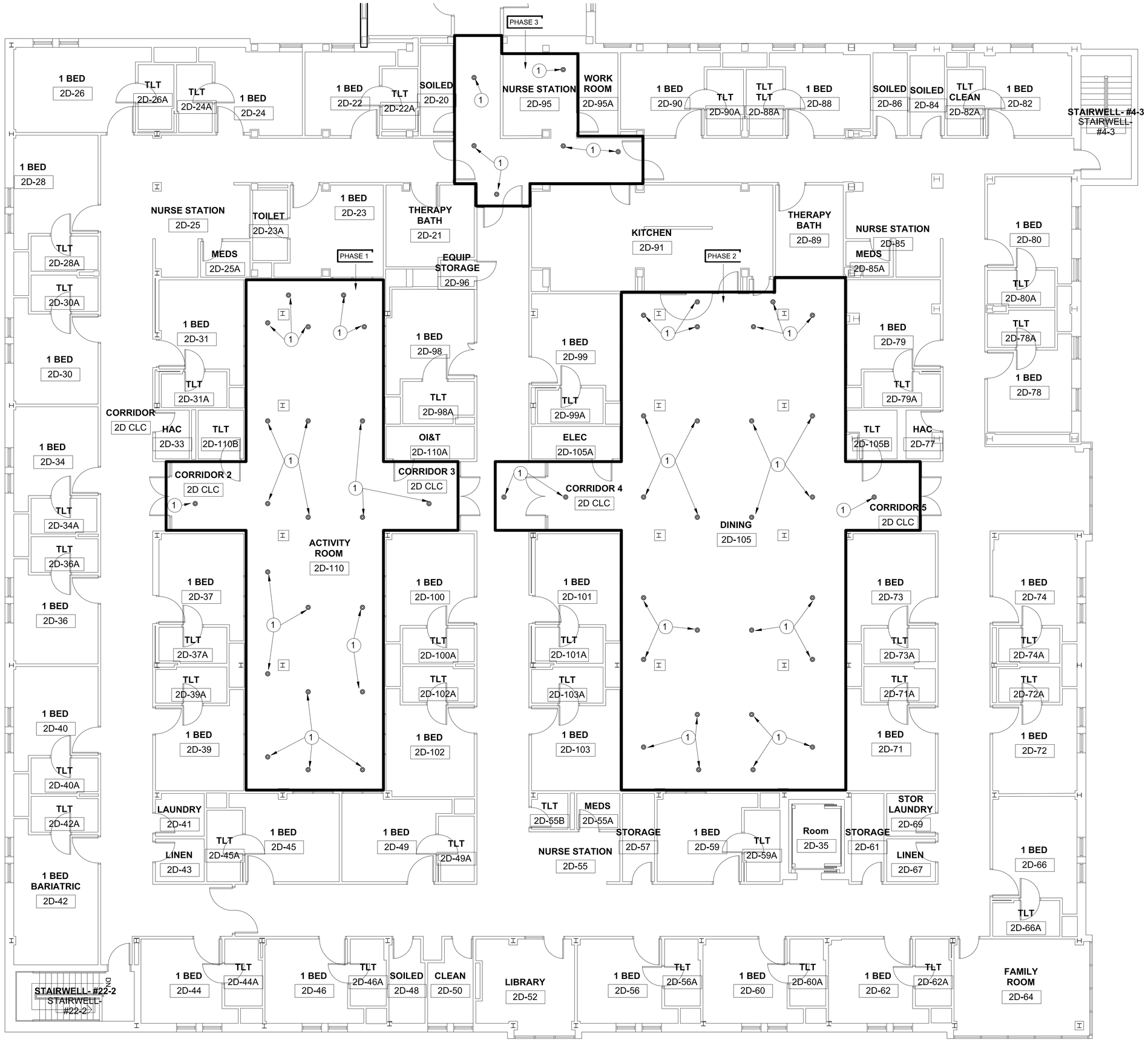
2/27/2024 8:24:26 AM



1 LEVEL 2 FP SPRINKLERS HEADS
1/8" = 1'-0"

GENERAL PHASING NOTES

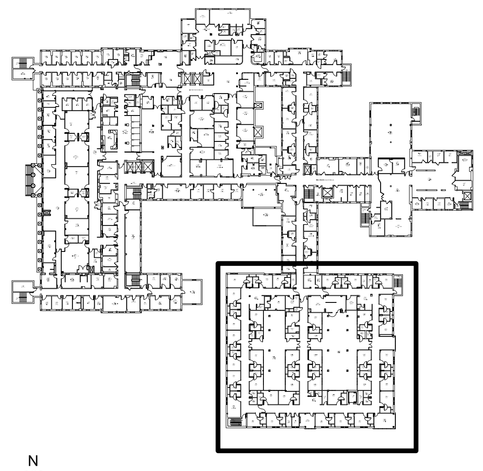
- FIRE SPRINKLER HEAD REPLACEMENT ON THE SECOND FLOOR IS TO TAKE PLACE IN 3 PHASES.
- PHASE 1: REPLACE EXISTING CONCEALED SPRINKLER HEADS IN ACTIVITY ROOM 2D-110.
- PHASE 2: REPLACE EXISTING CONCEALED SPRINKLER HEADS IN DINING ROOM 2D-105.
- PHASE 3: REPLACE EXISTING CONCEALED SPRINKLER HEADS IN NURSE STATION 2D-95 AND CORRIDOR C207. COORDINATE TEMPORARY CLC ACCESS WITH THE COR DURING THIS PHASE.
- REFER TO A1.21 FOR ADDITIONAL PHASING NOTES AND CONTAINMENT REQUIREMENTS.

GENERAL NOTES

- FIRE WATCH TO BE PROVIDED BY THE CONTRACTOR ANYTIME FIRE SPRINKLER SYSTEM IS DOWN FOR MORE THAN 4 HOURS DURING CONSTRUCTION. THIS IS A FULL BUILDING SPRINKLER PUMP REPLACEMENT PROJECT AND A/E ANTICIPATES SHUTDOWN OF BUILDING FOR A SWITCHOVER TO THE TEMPORARY FIRE PUMP PRIOR TO DEMOLITION OF THE EXISTING FIRE PUMP, AND FOR A SWITCHOVER TO THE NEW FIRE SPRINKLER PUMP.

KEYED NOTES

1. REPLACE EXISTING CONCEALED FIRE SPRINKLER HEADS SHOWN IN DARK WITH QUICK RESPONSE PENDENT FIRE SPRINKLER HEADS IN THE SAME LOCATION. THERE ARE OTHER EXISTING QUICK RESPONSE PENDENT FIRE SPRINKLER HEADS THAT ARE NOT SHOWN IN THE DRAWINGS THAT ARE TO REMAIN.



N KEY PLAN

CONSTRUCTION DOCUMENTS

Revisions:	Date

CONSULTANTS:

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Drawing Title	SECOND FLOOR SPRINKLERS PLAN
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	BM/PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP1.21
Dwg.	11 of 13

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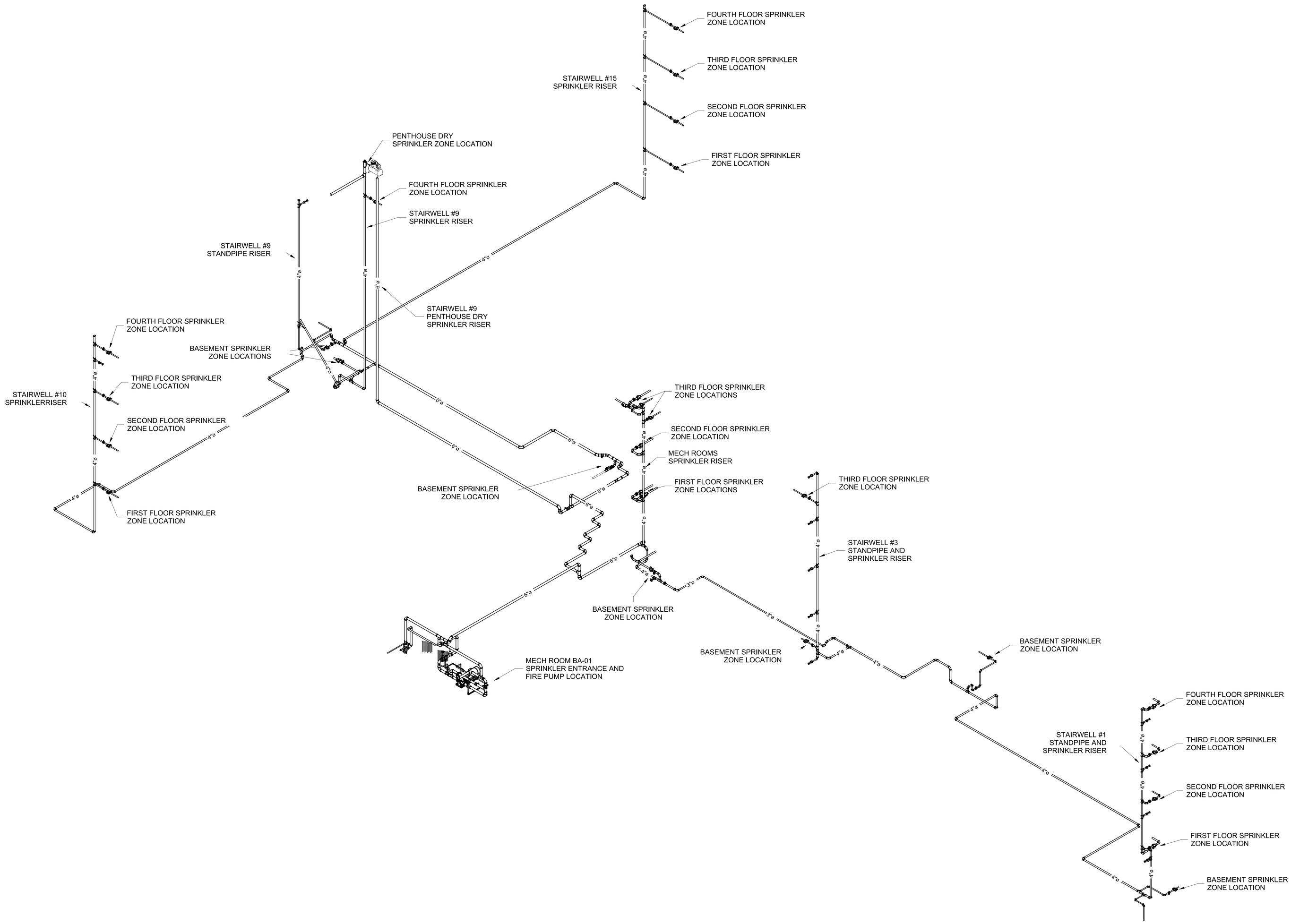
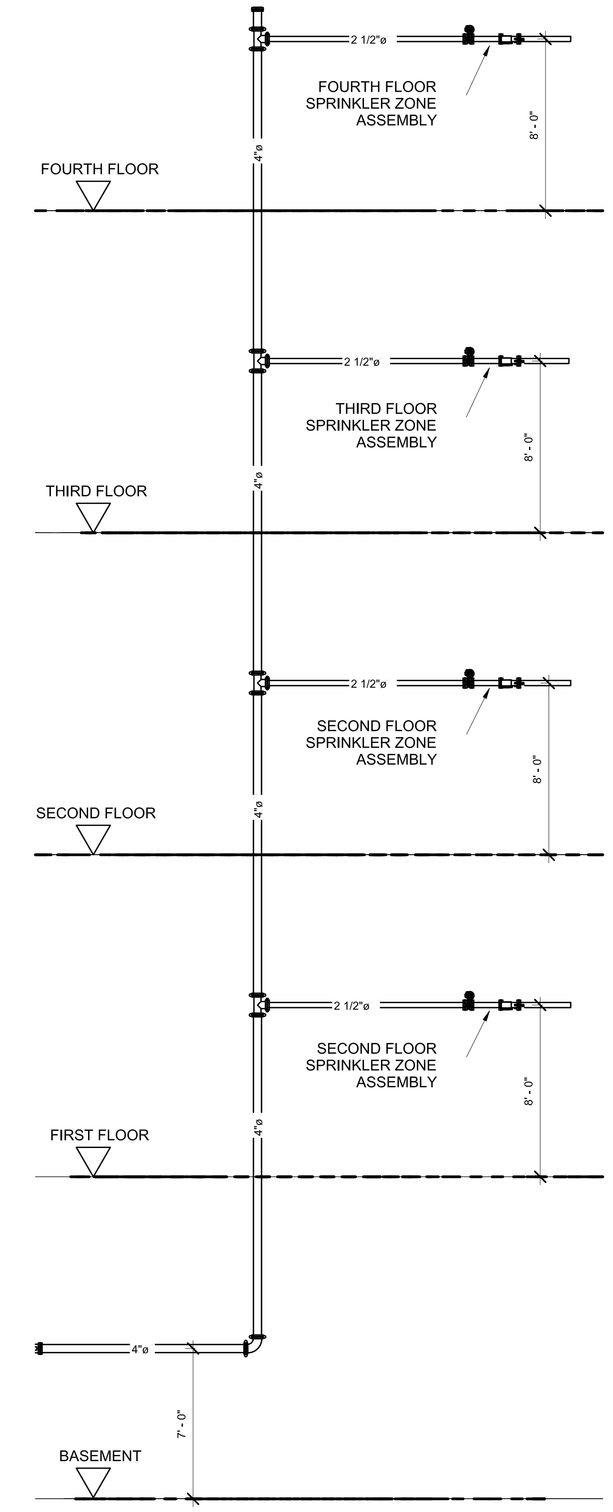
2/27/2024 8:34:29 AM



1 FIRE SPRINKLER BUILDING RISER ISO DIAGRAM



2 STAIRWELL #15 SECTION VIEW
1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

Revisions:	Date

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FOURFRONT DESIGN INC.

Drawing Title	FIRE SPRINKLER BUILDING RISER ISO DIAGRAM AND STAIRWELL 15 SECTION VIEW
Approved: Project Director	CHAD HOLMAN
Project Title	REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP
Location	2101 ELM STREET FARGO, ND 58102
Date	3/27/24
Checked	RD
Drawn	PM
Project Number	437-23-110
Building Number	1,9,46
Drawing Number	FP2.02
Dwg.	12 of 13

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BASIC ELECTRICAL REQUIREMENTS

FURNISH ALL LABOR AND MATERIALS AND PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE AND OPERATING ELECTRICAL SYSTEMS SUBJECT TO THE CONDITIONS OF THE CONTRACT. PROVIDE SATISFACTORY OPERATION OF ALL EQUIPMENT AND CONTROLS TO THE ARCHITECT/ENGINEER UPON REQUEST.

ALL MATERIALS SHALL BE NEW, SUBSTITUTIONS SHALL BE APPROVED BY OWNER AND/OR ENGINEER.

VISIT THE PREMISES BEFORE SUBMITTING BID AS NO CHANGE ORDERS WILL BE ALLOWED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.

COORDINATE AND ORDER THE PROGRESS OF WORK TO CONFORM TO THE PROJECT SCHEDULE AND THE PROGRESS OF THE WORK OF THE OTHER TRADES.

ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE, IT IS NOT POSSIBLE TO INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. VERIFY ALL SPACE REQUIREMENTS, COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.

PERFORM WORK IN ACCORDANCE WITH GOOD COMMERCIAL PRACTICE. THE GOOD APPEARANCE OF THE FINISHED WORK SHALL BE OF EQUAL IMPORTANCE WITH ITS ELECTRICAL EFFICIENCY AND INTENT. THE OWNER MAY REJECT WORK IF WORKMANSHIP AND APPEARANCE ARE NOT SATISFACTORY.

INSTALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AND ORDINANCES. COMPLY WITH REQUIREMENTS OF THE UTILITY COMPANIES. IN THE CASE OF DIFFERENCES BETWEEN THESE REQUIREMENTS AND ORDINANCES, THE MOST STRINGENT SHALL GOVERN. CALL FOR INSPECTIONS REQUIRED BY LOCAL BUILDING INSPECTION AUTHORITY.

PLANS AND SPECIFICATIONS GO HAND IN HAND. WHAT IS REQUIRED IN ONE IS REQUIRED IN BOTH. WHERE CONFLICTS BETWEEN SPECIFICATIONS AND PLANS EXIST, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

BACKGROUND FLOOR PLANS USED FOR ELECTRICAL DRAWINGS MAY SHOW DIFFERENT THAN THE FINAL ARCHITECTURAL LAYOUT. REFER TO ARCHITECTURAL DRAWINGS FOR ACTUAL DIMENSIONS AND LAYOUT PLACEMENTS FOR SPACE CONDITIONS.

ELECTRICAL DETAILS MAY OR MAY NOT BE DIRECTLY REFERENCED. ALL DETAILS SHOWN ARE TO BE USED FOR BASIS OF INSTALLATION IN ALL CASES, IN COORDINATED EFFORT WITH MANUFACTURERS INSTALLATION RECOMMENDATIONS.

ELECTRICAL SHEETS ARE NOT INTENDED TO SPECIFICALLY BE TRADE SPECIFIC TO ELECTRICAL INSTALLATION WORK. ALL MECHANICAL AND ELECTRICAL TRADES ARE RESPONSIBLE FOR FAMILIARIZING THEMSELVES AND INCLUDING A COMPLETE PACKAGE WITHIN THEIR OFFER FOR A COMPLETE SYSTEM.

AT COMPLETION OF WORK, DELIVER COMPLETED PROJECT RECORD DOCUMENTS MARKED WITH FIELD CHANGES TO OWNER.

PROVIDE A WRITTEN WARRANTY TO THE OWNER COVERING THE ENTIRE ELECTRICAL WORK TO BE FREE FROM DEFECTIVE MATERIALS, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF 1 YEAR AFTER DATE OF ACCEPTANCE.

CLEAN EXPOSED SURFACES OF LIGHT FIXTURES, SWITCHGEAR, AND OTHER EXPOSED ITEMS OF GREASE, DIRT OR OTHER FOREIGN MATERIAL. REMOVE RUBBISH AND DEBRIS RESULTING FROM THE OPERATIONS AND LEAVE EQUIPMENT SPACES CLEAN AND READY FOR USE.

MAINTAIN ALL CEILING, FLOOR AND WALL FIRE AND SMOKE PROTECTION RATINGS. SEAL ALL CONDUIT AND ENCLOSURE PENETRATIONS TO COMPLY WITH UL ASSEMBLY AND BUILDING CODE REQUIREMENTS. ALL SEALANTS AND CONSTRUCTIONS SHALL BE APPROVED BY OWNER PRIOR TO APPLICATION. ALL OPENINGS SHALL BE SEALED DAILY.

CONTRACT DRAWINGS FOR ELECTRICAL WORK ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, CONDUITS, AND APPROXIMATE SIZES AND LOCATIONS OF EQUIPMENT AND OUTLETS. MECHANICAL/ELECTRICAL TRADES SHALL FOLLOW THESE DRAWINGS IN LAYING OUT THEIR WORK. CONSULT GENERAL CONSTRUCTION DRAWINGS TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THEIR WORK, AND SHALL VERIFY SPACES IN WHICH THEIR WORK WILL BE INSTALLED. COORDINATE WORK WITH OTHER TRADES AND AS PROJECT CONDITIONS REASONABLY REQUIRE WITHOUT EXTRA COSTS TO OWNER.

ELECTRICAL SPECIFIC:
RACEWAYS SHALL BE LEFT WITH 30% FREE SPACE FOR FUTURE NEEDS.

SHARING OF NEUTRALS BETWEEN PHASES SHALL NOT BE ALLOWED.

SEPARATE GROUNDING CONDUCTORS SHALL BE PROVIDED IN ALL RACEWAYS.

CONDUCTORS SHALL BE COPPER. COLOR CODING SHALL BE NEC APPROVED AND AT MINIMUM SHALL BE AS FOLLOWS:
120/208 VOLT-BLACK, RED, BLUE FOR PHASE CONDUCTORS, WHITE FOR NEUTRAL CONDUCTORS. 277/480 VOLT-BROWN, ORANGE, YELLOW FOR PHASE CONDUCTORS, GRAY FOR NEUTRAL CONDUCTORS. GROUND CONDUCTORS SHALL BE GREEN.

ELECTRICAL SYSTEMS SHALL COMPLY WITH 2020 NATIONAL ELECTRICAL CODE AND BE INSTALLED BY LICENSED CONTRACTORS. LIGHTING SHALL COMPLY WITH THE 2021 IECC.

UTILITIES:
LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE EXACT LOCATIONS IN THE FIELD (NOT ALL UTILITIES ARE SHOWN).

REGULATORY AND CODE REQUIREMENTS:
APPLY FOR AND PAY FOR ALL PERMITS, FEES, LICENSES AND INSPECTIONS. ALL WORK IS SUBJECT TO APPROVAL BY THE CODE OFFICIAL AND ENGINEER. ALL CORRECTIONS SHALL BE MADE WITHOUT EXTRA COSTS TO OWNER.

ELECTRICAL LEGEND (FLOORPLAN)

SYMBOL	DESCRIPTION
	ITEMS SHOWN IN GRAY ARE EXISTING TO REMAIN
	DASHED ITEMS ARE INSTALLED BELOW REFERENCED PLAN
	DEMOLITION PLANS: SOLID DARK ITEMS ARE TO BE REMOVED OR MODIFIED.
	NEW PLANS: SOLID DARK ITEMS ARE TO BE ADDED OR MODIFIED.
	MOTOR, SINGLE-PHASE
	MOTOR, THREE-PHASE
T	TRANSFORMER
	WYE CONNECTION
	DUCT, CELL FLOOR HEADER
T T	DUCT, TROLLEY
	DUCT, UNDERFLOOR JUNCTION BOX
	EARTH GROUND
J	JUNCTION BOX
C C	LADDER CABLE TRAY
	BRANCH CIRCUIT HOMERUN. LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN: NOT SHOWN
PB	PULL BOX
W W	WIREWAY
—RC	RIGID CONDUIT LINE = RC
—DB	DIRECT BURIAL CABLE = DB
—P	POWER DUCT = P
—AV	AUDIO VISUAL LINE = AV
—CATV	CABLE TELEVISION LINE = CATV
—CCTV	CLOSED CIRCUIT TELEVISION LINE = CCTV
—FO	FIBEROPTICS LINE = FO
—COM	COMMUNICATIONS LINE = COM
—I	INTERCOM LINE = I
—NC	NURSE CALL LINE = NC
S	SUBSTATION
HVS	HI VOLTAGE SWITCH ON CONCRETE PAD
LVS	LOW VOLTAGE SWITCH ON CONCRETE PAD
P T	DUAL POWER AND TELECOMMUNICATIONS MANHOLE
B B	BUSWAY
DP	DISTRIBUTION PANEL
LP	LIGHTING PANEL
	PANELBOARD CABINET, FLUSH MOUNTED
	PANELBOARD CABINET, SURFACE MOUNTED
C	RECEPTACLE, CLOCK HANGER
	RECEPTACLE, DUPLEX
	RECEPTACLE, DUPLEX ON EMERGENCY POWER
	RECEPTACLE, GFCI DUPLEX
	RECEPTACLE, QUADRAPLEX
A	RECEPTACLE, SPECIAL PURPOSE 120V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 5-20R.
B	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R.
C	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 5-30R.
D	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R.
E	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R.
F	RECEPTACLE, SPECIAL PURPOSE 208V, 30A, 3 PHASE, 3-POLE 4W, NEMA 15-30R.
G	RECEPTACLE, SPECIAL PURPOSE 208V, 50A, 3 PHASE, 3 POLE, 4W, NEMA 15-50R.
H	RECEPTACLE, SPECIAL PURPOSE 208V, 60A, 3 PHASE, 3 POLE, 4W, NEMA 15-60R.
J	RECEPTACLE, SPECIAL PURPOSE 208V, 20A, 3 PHASE, 3 POLE, 4W, NEMA 15-20R.

SYMBOL	DESCRIPTION
	RECEPTACLE, SWITCHED DUPLEX
	DROP CORD, SINGLE CONVENIENCE OUTLET, 3-WIRE, GROUNDING TYPE, 20A, W/#12 CONDUCTORS IN FLEXIBLE CORD (CENTER LINE OF OUTLET: 6'-6" [1981mm] AFF, MINIMUM).
	ELECTRICAL STRIP MOLD (OUTLETS ON 2'-0" [610mm] CENTERS OR AS DESIGNATED ON DRAWINGS), MTD 3'-6" [1067mm] AFF OR AS INDICATED.
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC-TIME OVERCURRENT RELAY
67	AC-DIRECTIONAL OVERCURRENT RELAY
86	LOCKING OUT RELAY
	DISCONNECT SWITCH, FUSED
	DISCONNECT SWITCH, UNFUSED
	STARTER, COMBINATION WITH DISCONNECT SWITCH
	STARTER OR MOTOR CONTROLLER
VFD	VARIABLE FREQUENCY DRIVE
TC	TIME CLOCK
	RECTIFIER, CATHODIC PROTECTION SANITARY
	CAMERA
	360 CAMERA
	CARD ACCESS READER; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE B-BARCODE M-MAG STRIP F-ELEVATOR FLOOR CALL P-PROXIMITY H-ELEVATOR HALL CALL S-SMART CARD T-TOKEN
	ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE D-DEADBOLT H-HYBRID L-LATCH SET M-MAGNETIC S-STRIKE
	INTERCOM; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE M-MASTER S-SUBSTATION
	DURESS/PANIC ALARM PUSH BUTTON
	ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET
$	SWITCH, SPST
$2	SWITCH, DPST
$3	SWITCH, THREE WAY
$3D	SWITCH, THREE WAY DIMMER
$3OS	SWITCH, THREE WAY OCCUPANCY SENSOR
$4	SWITCH, FOUR WAY
$D	SWITCH, DIMMER
$DOOR	SWITCH, DOOR JAMB
$4OS	SWITCH, FOUR WAY OCCUPANCY SENSOR
$F	SWITCH, FUSED
$K	SWITCH, KEY OPERATED
$L	SWITCH, LOCK
$LM	SWITCH, LOW VOLTAGE MASTER
$M	SWITCH, MANUAL MOTOR STARTING
$MC	SWITCH, MOMENTARY CONTACT
$MP	SWITCH, MOTOR SNAP WITH PILOT LIGHT (THERMAL TYPE)
$OS	SWITCH, OCCUPANCY SENSOR
$OSD	SWITCH, OCCUPANCY SENSOR DIMMER
$P	SWITCH, WITH PILOT LIGHT
$PB	SWITCH, PUSH BUTTON
$PH	SWITCH, PHOTOCELL
$RC	SWITCH, REMOTE CONTROL
$WP	SWITCH, WEATHER PROOF
$X	SWITCH, EXPLOSION PROOF
	TELECOMMUNICATIONS MANHOLE
	COMMUNICATIONS FLOOR RECEPTACLE
	COMMUNICATIONS WALL RECEPTACLE
	COMMUNICATIONS CEILING RECEPTACLE
M	TELEVISION FLOOR RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
M	TELEVISION WALL RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
M	TELEVISION CEILING RECEPTACLE C =CAMERA (CCTV SYSTEM) M =MONITOR (CATV SYSTEM), AV= AUDIO VISUAL (CONFERENCE ROOM CONNECTION RECEPTACLES)
	PAGING SPEAKER, CEILING MOUNTED
	PAGING SPEAKER, WALL MOUNTED
NCS	NURSE'S CALL MASTER STATION
NCT	NURSE CALL TERMINAL CABINET.

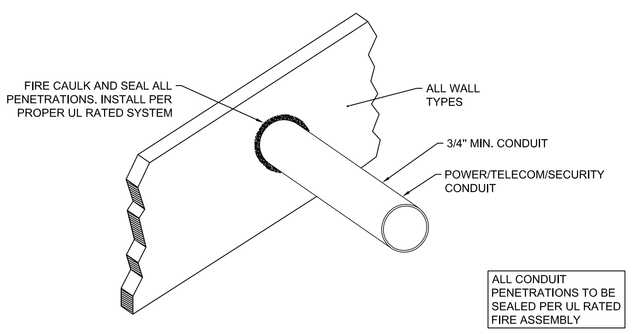
SYMBOL	DESCRIPTION
N D	NURSE CALL STATION. D = DUTY STATION. MTD 5' AFF E = MTD 6' AFF FOR SHOWER LOCATION MTD 4'-6" AFF FOR TUB LOCATION MTD 3' AFF FOR TOILET LOCATION P = PSYCHIATRIC CORRIDOR STATION WITH KEY SWITCH S = AUDIO VISUAL STAFF STATION MTD 5' AFF U = UTILITY CALL STATION, MTD 5' AFF
D	NURSE CALL STATION. D = CORRIDOR DOME LIGHT MTD 6" ABOVE DOOR I = AUXILIARY INTERSECTIONAL DOME LIGHT
	TELECOMMUNICATIONS TERMINAL CABINET
TB	TELECOMMUNICATIONS BACKBOARD (WALL MTD)
EH	ELECTRIC POWER HINGE
DC	DOOR CONTACT
MD	MOTION INTRUSION DETECTOR
SSTV	SECURITY SURVEILLANCE TELEVISION
C	CAMERA
C	360 CAMERA
M T	CARD ACCESS READER; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE B-BARCODE M-MAG STRIP F-ELEVATOR FLOOR CALL P-PROXIMITY H-ELEVATOR HALL CALL S-SMART CARD T-TOKEN
M T	ELECTRONIC LOCK; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE D-DEADBOLT H-HYBRID L-LATCH SET M-MAGNETIC S-STRIKE
M T	INTERCOM; LETTER INDICATES AS FOLLOWS: M=MOUNT C-CEILING D-DESK F-FLUSH H-HIDDEN M-MULLION P-PEDESTAL R-RACK S-SURFACE W-WALL T=TECHNOLOGY/TYPE M-MASTER S-SUBSTATION
	DURESS/PANIC ALARM PUSH BUTTON
	ELECTROMAGNETIC TYPE DOOR HOLDER OUTLET

ELECTRICAL LEGEND (DETAILS)

SYMBOL	DESCRIPTION
	DELTA CONNECTION
	MOTOR, SINGLE-PHASE
	MOTOR, THREE-PHASE
	TRANSFORMER
	WYE CONNECTION
	EARTH GROUND
J	JUNCTION BOX
PB	PULL BOX
	PRESSURE SWITCH-CLOSE ON INCREASE
	PRESSURE SWITCH-OPEN ON INCREASE
	SWITCH, MULTIPOSITION
	SWITCH, NORMALLY CLOSED FLOAT
	SWITCH, NORMALLY CLOSED FOOT OPERATED
	SWITCH, NORMALLY CLOSED LIMIT
	SWITCH, NORMALLY CLOSED TEMPERATURE ACTIVATED
	SWITCH, NORMALLY CLOSED TIME DELAY
	SWITCH, NORMALLY OPEN FLOAT
	SWITCH, NORMALLY OPEN LIMIT
	SWITCH, NORMALLY OPEN TEMPERATURE ACTIVATED
	SWITCH, NORMALLY OPEN TIME DELAY
	SWITCH, SINGLE BREAK
	NORMALLY CLOSED RELAY CONTACT
	NORMALLY OPEN RELAY CONTACT
	FUSE WITH RATING
	MOLDED CASE CIRCUIT BREAKER
	LOW-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
C.C.B	HIGH-VOLTAGE OIL CIRCUIT BREAKER
	HIGH-VOLTAGE DRAWOUT AIR CIRCUIT BREAKER
	SWITCH AND FUSE UNIT
	FUSED DRAWOUT POTENTIAL TRANSFORMER
50	INSTANTANEOUS OVERCURRENT RELAY
51	AC-TIME OVERCURRENT RELAY
67	AC-DIRECTIONAL OVERCURRENT RELAY
86	LOCKING OUT RELAY
	DISCONNECT SWITCH, FUSED
	DISCONNECT SWITCH, UNFUSED
	FUSIBLE LINK
	STARTER, COMBINATION WITH DISCONNECT SWITCH
	STARTER OR MOTOR CONTROLLER
TC	TIME CLOCK
G	GENERATOR, POWER
	BATTERY
	CAPACITOR
	POTHEAD
	STRESS CONE
	LIGHTNING ARRESTOR
	RECTIFIER, CATHODIC PROTECTION SANITARY
M	METER
A	AMMETER
V	VOLTMETER
W	WATTMETER
WH	WATT-HOUR METER

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE	ELEC	ELECTRIC OR ELECTRICAL	MW	MEGAWATT MICROWAVE
1P	SINGLE POLE	ELEV	ELEVATOR		
2/C	TWO-CONDUCTOR	EMCP	EMERGENCY MONITORING CONTROL PANEL	NA	NOT APPLICABLE
3/C	THREE-CONDUCTOR			NEC	NATIONAL ELECTRICAL CODE
3PH	THREE-PHASE	EMER	EMERGENCY	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
4/C	FOUR-CONDUCTOR	EMI	ELECTROMAGNETIC INTERFERENCE		
4W	FOUR-WIRE	EMT	ELECTRICAL METALLIC TUBING	NEUT OR N	NEUTRAL
		ENCL	ENCLOSURE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
AAP	ALARM ANNUNCIATOR PANEL	EPO	EMERGENCY POWER OFF		
AC	ALTERNATING CURRENT OR ARMORED CABLE	EPRF	EXPLOSION PROOF	NIC	NOT IN CONTRACT
		ESMT	EASEMENT	NL	NIGHT LIGHT
ACC	ACCESSIBLE	EWC	ELECTRIC WATER COOLER	NO	NORMALLY OPEN
ADO	AUTOMATIC DOOR OPENER	EWH	ELECTRIC WATER HEATER	NS	NO SCALE
AFC	ABOVE FINISHED COUNTER, AUTOMATIC FREQUENCY CONTROL, OR AVAILABLE FAULT CURRENT	EXIST	EXISTING	NTS	NOT TO SCALE
		FA	FIRE ALARM	OC	ON CENTER
AFF	ABOVE FINISHED FLOOR	FAAP	FIRE ALARM ANNUNCIATOR PANEL	OD	OUTSIDE DIAMETER
AFG	ABOVE FINISHED GRADE	FABL	FIRE ALARM BELL	OF	OWNER FURNISHED
AH	AMPERE HOUR	FABX	FIRE ALARM BOX	OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
AHJ	AUTHORITY HAVING JURISDICTION	FACP	FIRE ALARM CONTROL PANEL		
AIC	AMPERE INTERRUPTING CAPACITY	FC	FOOTCANDLE	OF/OI	OWNER FURNISHED/OWNER INSTALLED
AMP	AMPERE	FIXT	FIXTURE	OL	OVERLOAD
ASC	AMPS SHORT CIRCUIT	FLA	FULL LOAD AMPS	OS	OCCUPANCY SENSOR
AT	AMPERE TRIP	FLEX	FLEXIBLE METALLIC CONDUIT		
ATS	AUTOMATIC TRANSFER SWITCH	FLT	FLOODLIGHT	P	POLE
AUTO	AUTOMATIC	FLUOR	FLUORESCENT	PA	PUBLIC ADDRESS
AV	AUDIO VISUAL	FLUOR FIX	FLUORESCENT FIXTURE	PB	PANELBOARD, PULL BOX, OR PUSHBUTTON
		FOUTT	TELEPHONE FLOOR OUTLET		
BAS	BUILDING AUTOMATION SYSTEM	FP	FIRE PROTECTION	PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
BFF	BELOW FINISH FLOOR	FT	FEET OR FOOT	PCB	POLYCHLORINATED BIPHENYL
BLDG	BUILDING	FU SW	FUSED SWITCH	PEC	PHOTOELECTRIC CELL
BPIP	BOILER PLANT INSTRUMENTATION PANEL	FVNR	FULL VOLTAGE NON-REVERSING	PED	PEDESTAL
BRKR	BREAKER	FVR	FULL VOLTAGE REVERSING	PEND	PENDANT
BYP	BYPASS			PF	POWER FACTOR
		G OR GND	GROUND	PH	PHASE
C	CONDUIT	GEN	GENERATOR	PNL	PANEL
CAB	CABINET	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	POD	POWER OPERATED DAMPER
CALC	CALCULATE	GTB	GROUND TERMINAL BOX	PT	POTENTIAL TRANSFORMER
CAP	CAPACITY			PTRV	POWER TYPE ROOF VENTILATION
CAT	CATALOG	HID	HIGH INTENSITY DISCHARGE	PVC	POLYVINYL CHLORIDE (PLASTIC)
CATV	COMMUNITY ANTENNA TELEVISION	HOA	HAND-OFF-AUTOMATIC	PWR	POWER
CCR	CONTROL CONTACTOR	HP	HORSEPOWER		
CCTV	CLOSED CIRCUIT TELEVISION	HT	HEIGHT	RCP	REFLECTED CEILING PLAN
cd	CANDELA	HZ	HERTZ	REC	RECESSED
CD	CONSTRUCTION DOCUMENTS			RECPT	RECEPTACLE
CF	CONTRACTOR FURNISHED	IESNA	ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA	RGS	RIGID GALVANIZED STEEL
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	IMC	INTERMEDIATE METAL CONDUIT	RM	ROOM
		INCAND	INCANDESCENT	RMS	ROOT MEAN SQUARE
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED	IR	INFRARED	REQD	REQUIRED
		IWH	INSTANTANEOUS WATER HEATER		
CHW	CHILLED WATER			SCC	SHORT CIRCUIT CAPACITY
CHWP	CHILLED WATER PUMP	J-BOX	JUNCTION BOX	SES	SERVICE ENTRANCE SECTION
CKT	CIRCUIT			SD	SMOKE DETECTOR
CKT BRKR	CIRCUIT BREAKER			SF	SQUARE FOOT (FEET)
CLF	CURRENT LIMITING FUSE	kV	KILOVOLT	SHT	SHEET
CLG	CEILING	kVA	KILOVOLT AMPERE	SI	INTERNATIONAL SYSTEM OF UNITS
CMU	CONCRETE MASONRY UNIT	kVAR	KILOVOLT AMPERE PER HOUR	SPEC	SPECIFICATION
COAX	COAX CABLE	kVAR	KILOVOLT AMPERE REACTIVE	SPST	SINGLE POLE, SINGLE THROW
COMM	COMMUNICATION	kW	KILOWATT	SPDT	SINGLE POLE, DOUBLE THROW
CONC	CONCRETE	kWH	KILOWATT HOUR	SURF	SURFACE
CONT	CONTINUE	kWHM	KILOWATT HOUR METER	SW	SWITCH
CONTR	CONTRACTOR			SWBD	SWITCHBOARD
COORD	COORDINATE	LED	LIGHT EMITTING DIODE	SWGR	SWITCHGEAR
CPT	CONTROL POWER TRANSFORMER	LF	LINEAR FEET (FOOT)		
CRI	COLOR RENDERING INDEX	LM	LUMEN	TC	TIME CLOCK
CT	CURRENT TRANSFORMER	LP	LIGHT POLE	TEL	TELEPHONE
CTV	CABLE TELEVISION	LPS	LOW PRESSURE SODIUM	TP	TWISTED PAIR
CU	COPPER	LRA	LOCKED ROTOR AMPS	TPS	TWISTED PAIR SHIELDED
CU FT	CUBIC FEET	LTCP	LOCAL TEMPERATURE CONTROL PANEL	TTB	TELEPHONE TERMINAL BOARD
CUR	CURRENT	LT	LIGHT	TV	TELEVISION
		LTG	LIGHTING	TYP	TYPICAL
DAS	DISTRIBUTED ANTENNA SYSTEM	LTG PNL	LIGHTING PANEL		
DB	DECIBEL	LTNG	LIGHTNING	UFD	UNDERFLOOR DUCT
DC	DIRECT CURRENT	LV	LOW VOLTAGE	UGND	UNDERGROUND
DCP	DIMMER CONTROL PANEL			UL	UNDERWRITERS LABORATORY
DEG C	DEGREES CELSIUS	MATV	MASTER ANTENNA TELEVISION SYSTEM	UON	UNLESS OTHERWISE NOTED
DEG F	DEGREES FAHRENHEIT	MAX	MAXIMUM	UPS	UNINTERRUPTIBLE POWER SUPPLY
DEMO	DEMOLITION	MC	METAL-CLAD	UTIL	UTILITY
DIAG	DIAGRAM	MCA	MINIMUM CIRCUIT AMPS		
DISC	DISCONNECT	MCB	MAIN CIRCUIT BREAKER	V	VOLT
DISTR	DISTRIBUTION	MCC	MOTOR CONTROL CENTER	VA	VOLT AMPERE
DISTR PNL	DISTRIBUTION PANEL	MDP	MAIN DISTRIBUTION PANEL	VAR	VOLT AMPERE REACTIVE
DMR SW	DIMMER SWITCH	MECH	MECHANICAL	VFD	VARIABLE FREQUENCY DRIVE
DN	DOWN	MG	MOTOR GENERATOR	VOLT	VOLTAGE
DPDT	DOUBLE POLE, DOUBLE THROW	MH	MANHOLE	VS	VACANCY SENSOR
DPST	DOUBLE POLE, SINGLE THROW	MIN	MINIMUM		
DRSW	DOOR SWITCH	MOCP	MAXIMUM OVERCURRENT PROTECTION	W	WATT
DS	DISCONNECT SWITCH	MLO	MAIN LUGS ONLY	WH	WATER HEATER
DWG	DRAWING	MT	MOUNT	WP	WEATHERPROOF
		MTD	MOUNTED		
EC	EMPTY CONDUIT	MTG	MOUNTING	XFER	TRANSFER
EG	EQUIPMENT GROUND	MTS	MANUAL TRANSFER SWITCH	XFMR	TRANSFORMER
EL	ELEVATION	MVA	MEGAVOLT-AMPERE		



1 / E0.01 RATED WALL CONDUIT AND SLEEVE PENETRATIONS
SCALE: NTS

CONSTRUCTION DOCUMENTS

Revisions: Date

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Drawing Title: ELECTRICAL LEGENDS & ABBREVIATIONS, DETAIL

Approved: Project Director

Project Title: REPLACE SELECTED SPRINKLER MAINS & FIRE PUMP

Location: FARGO, ND

Date: 3/27/2024 | Checked: RD | Drawn: KR

Project Number: 437-23-110

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Dwg. 13 of 13

Office of Construction and Facilities Management

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