

**PROJECT SPRINKLER NOTES**

- NOT USED.
- THESE WORK PLANS TO BE CONSIDERED AS DIAGRAMMATIC AND REFLECT A GENERAL ORDER OF MAGNITUDE. FINAL DESIGN, HYDRAULIC CALCULATIONS AND ALL ELEMENTS NECESSARY FOR A COMPLETE SYSTEM ARE THE RESPONSIBILITY OF THE PROJECT SPRINKLER CONTRACTOR. ALL WORK SHALL CONFORM TO THE NATIONAL FIRE CODES (NFC), NFPA 13, NFPA 101, THE VA FIRE PROTECTION DESIGN MANUAL, AND ADDITIONAL REFERENCED CODES AND STANDARDS.
- SPRINKLER CONTRACTOR TO VERIFY LOCATION, SIZE AND PRESSURES OF SPRINKLER SERVICE PRIOR TO COMMENCING SPRINKLER SYSTEM INSTALLATION.
- SPRINKLER MAIN PIPE SIZE AND ARRANGEMENT ARE APPROXIMATE. SPRINKLER CONTRACTOR SHALL PERFORM FLOW AND PRESSURE TESTS AND DETERMINE REQUIRED PIPE AND TRIM SIZES BY HYDRAULIC CALCULATIONS AS NOTED IN THE SPECIFICATION DESIGN CRITERIA AND IN ACCORDANCE WITH NFPA 13.
- SPRINKLER CONTRACTOR SHALL LOCATE SPRINKLER SYSTEM PIPING AS HIGH AS POSSIBLE AND SLOPE BRANCH PIPING BACK TO MAIN OR AUXILIARY DRAIN. BRANCH PIPING DROPS TO SPRINKLERS SHALL AVOID CONFLICTS WITH EXISTING CONDITIONS, WASTE PIPING, DUCTWORK, HVAC EQUIPMENT, LIGHTS, ACCESSORIES, ELECTRICAL EQUIPMENT AND OTHER PIPING AND SHALL CONFORM TO DESIGN CRITERIA.
- IN GENERAL ALL GENERAL PURPOSE ROOMS, OFFICE AND PUBLIC AREAS ARE TO BE LIGHT HAZARD CLASSIFICATION. MECHANICAL ROOMS, JANITOR'S STORAGE CLOSETS AND STORAGE AREAS SHALL BE CLASSIFIED AS ORDINARY HAZARD GROUP.
- WHERE LAY-IN TILE CEILING ARE PROVIDED, SPRINKLER LAYOUT SHALL BE SUCH THAT THE INSTALLATION OF SPRINKLERS SHALL BE ALIGNED IN EACH DIRECTION, AND SPRINKLERS SHALL BE CENTERED IN THE CEILING TILES, UNLESS NOTED OTHERWISE.
- HVAC, LIGHTING AND PITCHED PIPING SYSTEM INSTALLATIONS SHALL TAKE PRECEDENCE OVER SPRINKLER PIPE AND DEVICE, ROUTING AND LOCATIONS. SPRINKLERS SHALL NOT BE LOCATED BELOW HVAC VAV BOXES DUE TO MAINTENANCE ACCESS REQUIREMENTS.
- SPRINKLERS SHALL BE LOCATED IN SUCH A MANNER AS TO PROVIDE COMPLETE COVERAGE, BOTH ABOVE AND BELOW OPEN CEILING AND BULKHEADS. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL CEILING INFORMATION, INCLUDING TYPES AND ELEVATIONS. SPRINKLERS ARE ONLY PERMITTED TO BE OMITTED IN CONCEALED SPACES IN ACCORDANCE WITH NFPA 13.
- PROVIDE ADDITIONAL SPRINKLERS UNDER ALL OBSTRUCTIONS EXCEEDING 48" ACROSS OR CUMULATIVE OF 48" ACROSS (I.E. DUCTWORK, SOUND ATTENUATION TREATMENT, CEILING TREATMENTS AND ETC.).
- SPRINKLER PIPING ROUTED THROUGH FINISHED AREAS WITH CEILING SHALL BE CONCEALED ABOVE CEILING OR IN FURRED-CUT WALL (I.E. GENERAL SPRINKLER PIPING, INSPECTOR'S TEST, DRAINS, AND ETC.). SPRINKLER PIPING SHALL BE PAINTED TO MATCH SURROUNDING SURFACES IN FINISHED EXPOSED AREAS, COORDINATE WITH GENERAL CONTRACTOR AS NECESSARY.
- SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WALL/FLOOR/CEILING CUTTING AND PATCHING REQUIRED FOR THIS TRADE WORK. FINAL FINISH SHALL BE BY GENERAL CONTRACTOR. NOTE: SEE ARCHITECTURAL DRAWINGS FOR ALL RATED ASSEMBLY LOCATIONS. ALL RATED PENETRATIONS SHALL BE FIRESTOPPED TO ORIGINAL OR NEWLY SPECIFIED ASSEMBLY RATING.
- SPRINKLER PIPES AND MISCELLANEOUS PENETRATIONS THROUGH ACOUSTIC RATED PARTITIONS AND SMOKE/FIRE BARRIERS (INCL. WALLS AND CEILING) SHALL BE FIRESTOPPED AND HAVE ACOUSTIC SEALANT ALL AROUND (MEETING THE REQUIREMENTS OF THE ORIGINAL ASSEMBLY RATING) TO MAINTAIN THE INTEGRITY OF THAT BARRIER. PROVIDE ESCUTCHEON PLATES AT EACH SIDE OF PENETRATION IN FINISHED AREAS. SEE ARCHITECTURAL DRAWINGS FOR ALL RATED ASSEMBLY LOCATIONS.
- ALL PIPING, VALVES AND APPURTENANCES SHALL BE INSTALLED SUCH AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOORWAYS, PASSAGEWAYS, OR ACCESS TO VARIOUS EQUIPMENT, ETC.
- SPRINKLER CONTRACTOR SHALL COORDINATE ALL ASPECTS OF WORK WITH OTHER TRADES PRIOR TO CONSTRUCTION/INSTALLATION.
- SPRINKLER SYSTEMS SHALL BE PROVIDED WITH ALL NECESSARY SUPPORTS, REINFORCEMENT, WALL BRACKETS, AIR GAP FITTING AND APPURTENANCES.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY INTERFACE WIRING AND MONITORING MODULES REQUIRED BETWEEN THE SUPERVISORY SWITCHES, FLOW SWITCHES, ALARM DEVICES, STROBES AND THE FIRE ALARM PANEL. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL INTERFACE TERMINALS AS PART OF THE FIRE ALARM SYSTEM AS REQUIRED TO PROVIDE THE SPECIFIED NOTIFICATION. SPRINKLER CONTRACTOR SHALL COORDINATE REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR AND THE FIRE ALARM PROVIDER PRIOR TO PURCHASE OF SPRINKLER SYSTEM ALARM DEVICES.
- SPRINKLER PIPING SHALL BE ROUTED AS HIGH AS POSSIBLE, WHERE CONFLICTS WITH OTHER TRADES ARE ENCOUNTERED DUE TO PIPE ROUTING BEING OTHER THAN AS HIGH AS POSSIBLE, SPRINKLER PIPE RELOCATION SHALL BE AT THE EXPENSE OF THE SPRINKLER CONTRACTOR. SUSPEND PIPING FROM STRUCTURAL FRAMING MEMBERS AND STRUCTURAL WALLS ONLY.
- SPRINKLER DROPS SHALL BE OF A LENGTH WHICH WILL ALLOW FIELD TRIMMING, AS NECESSARY TO ACCOMMODATE FIELD ADJUSTMENT OF CEILING AS CONDITIONS DICTATE.
- WHEN THE SMALL ROOM RULE OR WHERE REMOTE AREA REDUCTION WITH QUICK RESPONSE SPRINKLERS IS UTILIZED (PER THE ACCEPTANCE OF THE AHJ), THE CONTRACTOR SHALL PROVIDE CLEAR NOTATION OF APPLICATION ON THE SUBMITTED CONTRACTOR WORKING DRAWINGS.
- IN VISUALLY EXPOSED FINISHED AREAS, PROVIDE CHROME PLATED ESCUTCHEONS ON EACH SIDE OF WALL & FLOOR PIPE PENETRATIONS. FINISH EXCEPTION - ESCUTCHEONS SHALL BE BLACK IN AREAS WITH A BLACK FINISH AND WHITE IN AREAS WITH WHITE FINISH, ETC. SEE SPECIFICATIONS FOR OTHER SPECIALTY AREAS.
- GENERAL CONTRACTOR SHALL PAINT ALL VISUALLY EXPOSED SPRINKLER PIPING, HANGERS AND APPURTENANCES TO MATCH THE EXPOSED STRUCTURE, UPPER DECK AND WALLS WHERE SPRINKLER SYSTEM IS ROUTED IN THESE AREAS. SPRINKLER CONTRACTOR SHALL PROTECT ALL SPRINKLERS AND DEVICES FROM PAINT AND POSSIBLE DAMAGE, COORDINATE WITH GENERAL CONTRACTOR.
- INSTALL SPRINKLER WIRE GUARDS IN MECHANICAL ROOMS AND STORAGE ROOM AND MISCELLANEOUS AREAS WHERE PENDENT AND UPRIGHT SPRINKLERS ARE SUBJECT TO DAMAGE.
- PROTECT OWNER FIXTURES AND PROPERTY FROM DISCOLORED WATER ORIGINATING FROM SYSTEM FLOW TESTS, WHERE OWNER FIXTURES AND PROPERTY IS ADVERSELY AFFECTED BY FLOW TEST, CONTRACTOR SHALL CLEAN/RETURN PROPERTY TO ORIGINAL CONDITION.
- WHEN A CONFLICT BETWEEN PLANS, SPECIFICATIONS AND/OR NOTES OCCURS, THE ENGINEER SHALL DECIDE WHICH GOVERNS. GENERALLY, THE MORE RESTRICTIVE, MORE SPECIFIC, OR STRICTER PROVISION SHALL GOVERN. IF ANY DISCREPANCIES ARE DISCOVERED ON THE PLANS OR BETWEEN THE PLANS, NOTES AND THE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN CLARIFICATION OF THE INTENT FROM THE ENGINEER PRIOR TO CONSTRUCTION OR INSTALLATION OF PROPOSED IMPROVEMENTS.
- NOT USED.
- SPRINKLER CONTRACTOR SHALL MAKE ALL NECESSARY PLAN SUBMITTALS TO THE VETERANS AFFAIRS AND THE ARCHITECT/ENGINEER.
- SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION IN REGARDS TO THE WET PIPE FIRE PROTECTION SYSTEMS.
- SPRINKLER CONTRACTOR SHALL CONFIRM THAT A DRAIN PIPE IS PROVIDED FOR THE SECTION OF THE SPRINKLER SYSTEM MODIFIED UNDER THIS CONTRACT. DRAIN PIPE MINIMUM SIZE IS 2 INCHES AND SHALL COMPLY WITH THE VA FIRE PROTECTION DESIGN MANUAL, AND NFPA 13. DRAIN PIPE SHALL TERMINATE AT THE BUILDING EXTERIOR OR SHALL BE CONNECTED TO THE EXISTING MAIN DRAIN FOR THE EXISTING SYSTEM. CONTRACTOR SHALL PROVIDE NEW DRAIN PIPING IF REQUIRED.
- SPRINKLER CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA 13. LEGEND AND SYMBOLS IN COMPLIANCE WITH NFPA 170 SHALL BE USED.
- SEISMIC BRACING (EARTHQUAKE PROTECTION) IS NOT REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH VA FIRE PROTECTION DESIGN MANUAL, PARAGRAPH 6.1.1 AND VA SEISMIC DESIGN REQUIREMENTS H-18-B.

**APPLICABLE CODES AND STANDARDS**

- VA FIRE PROTECTION DESIGN MANUAL - U.S. DEPARTMENT OF VETERANS AFFAIRS, SEVENTH EDITION (DECEMBER 2015)
- NFC - NATIONAL FIRE CODES, PUBLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (2016 EDITION)
- NFPA 25 - STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS (2017 EDITION)
- NFPA 101 - LIFE SAFETY CODE (2015 EDITION)
- NFPA 170 - STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS (2015 EDITION)

NOTE 1: FOR DESIGN FEATURES THAT ARE ADDRESSED BY BOTH THE IBC AS WELL AS BY NFPA 101 OR THE NFC, THE DOCUMENT REFERENCED BY NFPA 101 OR THE NFC SHALL BE USED EXCLUSIVELY.

NOTE 2: FIRE PROTECTION FEATURES NOT ADDRESSED BY THE NFC OR OTHERWISE ADDRESSED IN THE VA FIRE PROTECTION DESIGN MANUAL SHALL BE DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

**FIRE PROTECTION COVERAGE SCHEDULE**

PLAN MARK	OCCUPANCY HAZARD	GROUP	AREA (SQ FT)	AREA (SQ M)	DENSITY (GPM/SQ FT)	DENSITY (LPM/SQ M)	NOTES
A	LIGHT HAZARD	-	225	20.9	1/1500	38/139	1.2
B	ORDINARY HAZARD	GROUP 1	130	12.1	15/1500	57/139	1.2
C	ORDINARY HAZARD	GROUP 2	130	12.1	2/1500	57/139	1.2

LEGEND:  
 SQ FT - SQUARE FEET  
 SQ M - SQUARE METERS  
 GPM - GALLONS PER MINUTE  
 LPM - LITERS PER MINUTE

NOTES:  
 1. PROVIDE QUICK RESPONSE FACTORY MUTUAL (FM) APPROVED SPRINKLERS, EXCEPT AS NOTED IN SPECIFICATIONS.  
 2. CONCEALED SPRINKLERS ARE PROHIBITED EXCEPT AS IDENTIFIED ON THE DRAWINGS FOR THE DISHWASHING AREA.

CONTRACTOR TO KEEP FIRE RATINGS IN TACT AT ALL TIMES DURING CONSTRUCTION BY PROVIDING ONE OF THE FOLLOWING SAFETY OPTIONS:

- ONE - LEAVE THE EXISTING SPRINKLER SYSTEM OPERATIONAL IN THE RENOVATED AREA AND PROVIDE UPRIGHT SPRINKLER HEADS ON THE EXISTING PIPE TO PROVIDE COVERAGE IN THE AREA OF WORK PER NFPA 13 DURING CONSTRUCTION. THIS WILL LIKELY INVOLVE MOVING SPRINKLERS TO WITHIN 12 INCHES OF THE DECK ABOVE. AFTER THE NEW SPRINKLER PIPING IS INSTALLED, TESTED, AND APPROVED, THE SPRINKLERS AT THE DECK LEVEL AND THE EXISTING PIPING SHALL BE REMOVED.
- TWO - CONTRACTOR MAY SHUTDOWN THE EXISTING SPRINKLER SYSTEM IN THE AREA OF WORK PROVIDED THAT THE CONTRACTOR INSTALL A 1-HOUR FIRE-RESISTANCE RATED SEPARATION BETWEEN EVERY OCCUPIED SPACE ADJACENT TO THE CONSTRUCTION AREA. CONTRACTOR SHALL COORDINATE WITH THE VETERANS ADMINISTRATION, THE CONTRACTING OFFICER, AND THE A/E. ALL FIRE-RESISTANCE RATED SEPARATIONS SHALL COMPLY WITH NFPA 101 AND UL LISTINGS.

Date: \_\_\_\_\_  
 Job Name: **Sioux Falls VAMC**  
 Job Number: \_\_\_\_\_  
 Fire Pump Information:  
 Serial # **390422**  
 Manufacturer: **Peerless**  
 Type: **Electric Fire Pump 6AF-13**  
 Pump On (Psi): **1000**  
 Driver Information:  
 Type: **WEG**  
 Driver Power: **Electric**  
 Jockey Pump Information:  
 On (Psi) **102** Off (Psi) **110**

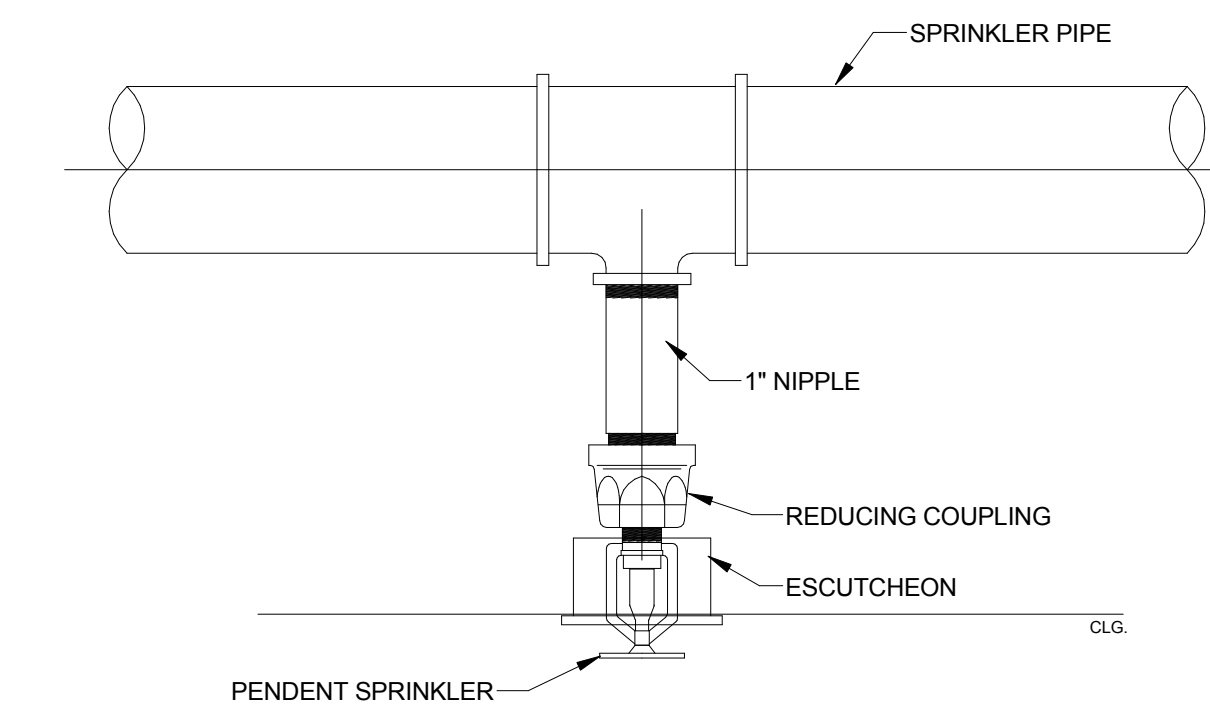
Rating	Flow (gpm)	Pressure (psi)	RPM
1000	1000	100	1765
800	800	80	
600	600	60	
400	400	40	
200	200	20	

Test	Pitot Pressures (psi) per Nozzle												TEST RESULT:	
	1	2	3	4	5	6	7	8	9	10	11	12		
0%	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>Passed</b>
50%	0	0	0	0	0	0	0	0	0	0	0	0	0	
100%	10	10	0	0	0	0	0	0	0	0	0	0	0	
150%	13	13	0	0	0	0	0	0	0	0	0	0	0	

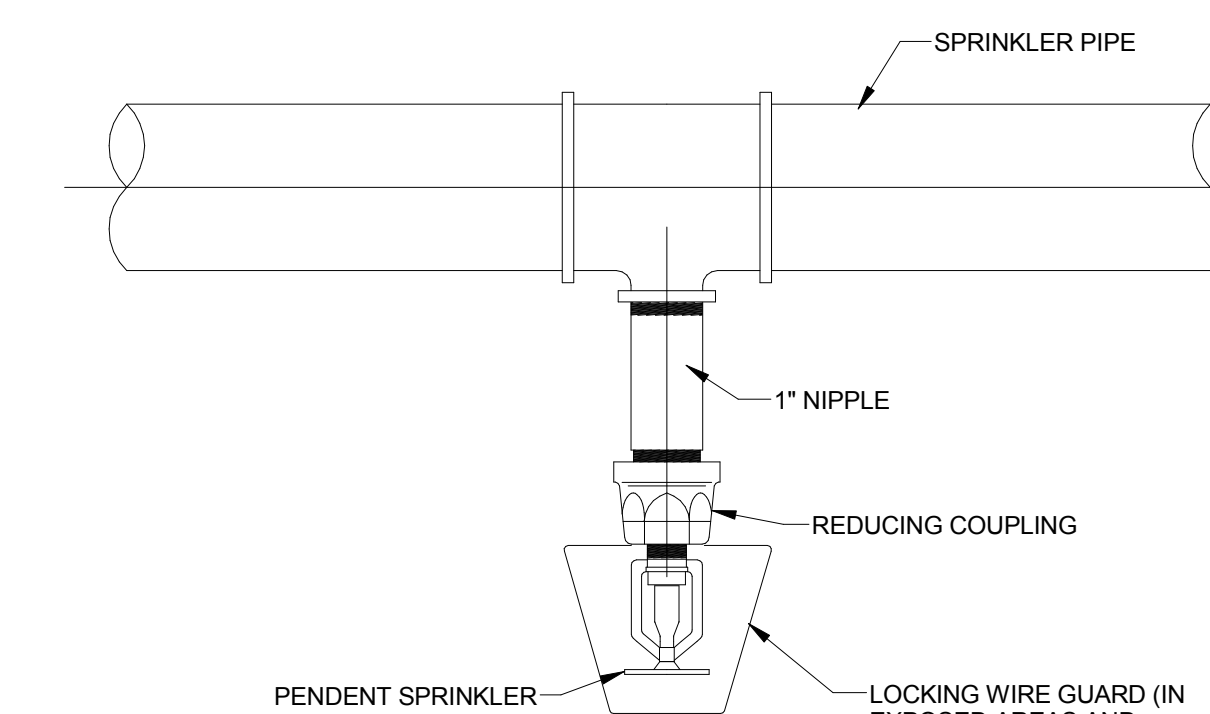
Test	Individual Flows (gpm) per Nozzle												Corr to RPM			
	1	2	3	4	5	6	7	8	9	10	11	12	Flow	Flow	Press	
0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
100%	534	534	0	0	0	0	0	0	0	0	0	0	1,068	1,073	60	
150%	609	609	0	0	0	0	0	0	0	0	0	0	1,218	1,226	61	

API National Service Group | 1100 Old Highway 8 NW | New Brighton, MN 55112 | 888.274.8595 | www.api-nsg.com

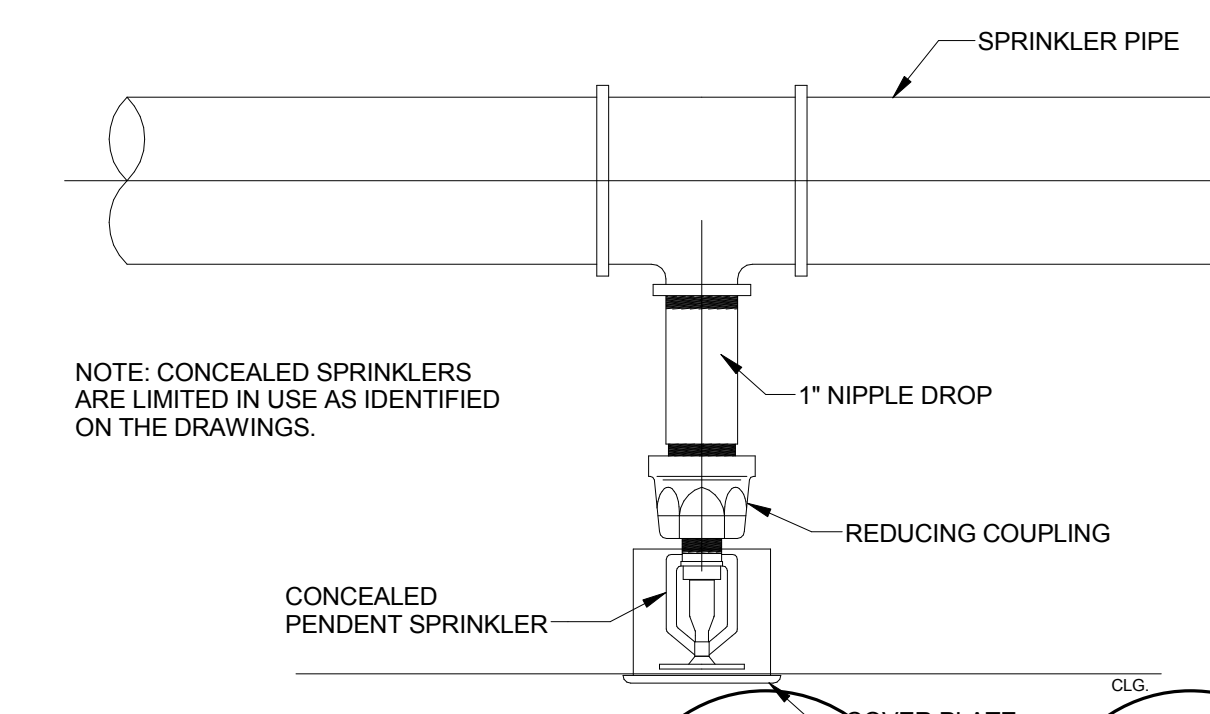
NOTE: THE RESULTS OF THIS FIRE PUMP TEST MAY BE USED FOR BIDDING PURPOSES. CONTRACTOR SHALL CONDUCT WATER SUPPLY FLOW TESTING OF THE FIRE PUMP IN ACCORDANCE WITH NFPA 20, VA FIRE PROTECTION DESIGN MANUAL, AND MANUFACTURER REQUIREMENTS. IF DATA IS AVAILABLE FROM THE FACILITY, THE CONTRACTOR SHALL VERIFY THE LOCATIONS INVOLVED IN THE TESTING AS WELL AS THE QUALITY AND ACCURACY OF THE DATA. CONTRACTOR SHALL USE RESULTS FROM A WATER SUPPLY FLOW TEST IS LESS THAN 12 MONTHS OLD AT THE TIME THE CONTRACTOR DEVELOPS THE HYDRAULIC CALCULATIONS FOR THE SYSTEM.



1 SEMI-RECESSED SPRINKLER DETAIL  
FP001 NO SCALE



2 PENDENT SPRINKLER DETAIL  
FP001 NO SCALE



3 CONCEALED SPRINKLER DETAIL  
FP001 NO SCALE

NOTE: CONCEALED SPRINKLERS ONLY PERMITTED IN DISHWASHING AREA AS INDICATED ON SHEET FP002. CONCEALED SPRINKLERS SHALL NOT BE USED IN ANY OTHER AREAS.

Scale: 1/4" = 1'-0"

Revisions:

Revisions:	Date
1 Addendum 1	3/28/2017

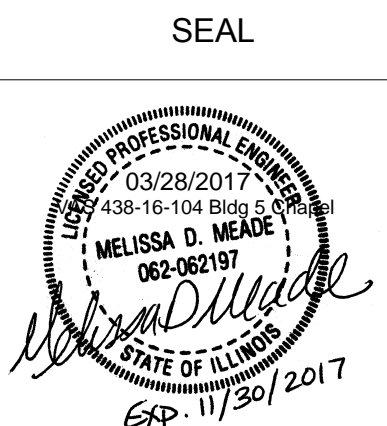
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**Drawing Title**  
**FIRE PROTECTION LEGENDS,  
 NOTES AND DETAILS**

Approved: Project Director  
 Approver

Project Title  
**VA HEALTH CARE SYSTEM**

Location  
**438-16-104 BLDG. 5 CHAPEL  
 SIOUX FALLS, SD 57105**

Project Number  
 438-16-104 2016.052

Drawing Number  
**FP001**

OWNER

Scale: 1/4" = 1'-0"

**FIRE PROTECTION COVERAGE SCHEDULE**

PLAN MARK	OCCUPANCY HAZARD	GROUP	AREA (SQ FT)	AREA (SQ M)	DENSITY (GPM/SQ FT)	DENSITY (LPM/SQ M)	NOTES
A	LIGHT HAZARD	-	225	20.9	1/1500	.38/139	1,2
B	ORDINARY HAZARD	GROUP 1	130	12.1	15/1500	.57/139	1,2
C	ORDINARY HAZARD	GROUP 2	130	12.1	2/1500	.57/139	1,2

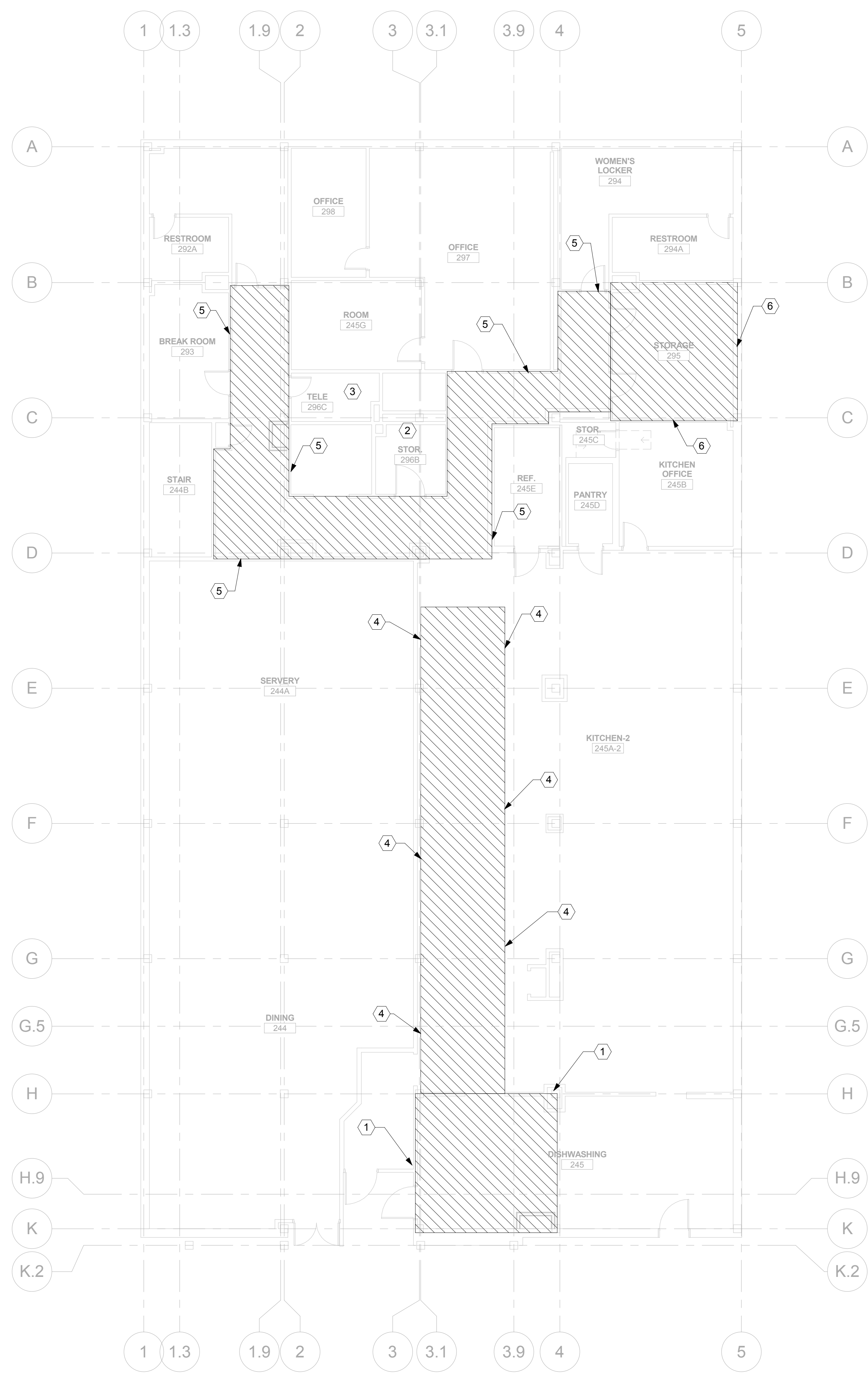
**NOTES:**  
 1. PROVIDE QUICK RESPONSE, FACTORY MUTUAL (FM) APPROVED SPRINKLERS, EXCEPT AS NOTED IN SPECIFICATIONS.  
 2. CONCEALED SPRINKLERS ARE PROHIBITED EXCEPT AS IDENTIFIED ON THE DRAWINGS FOR THE DISHWASHING AREA.

**LEGEND:**  
 SQ FT - SQUARE FEET  
 SQ M - SQUARE METERS  
 GPM - GALLONS PER MINUTE  
 LPM - LITERS PER MINUTE

A - [Pattern]  
 B - [Pattern]  
 C - [Pattern]

**KEYED NOTES**

- DISHWASHING CEILING IS BEING LOWERED 16 INCHES. LOWER EXISTING SPRINKLER SYSTEM AND INSTALL NEW CONCEALED SPRINKLER HEADS IN DISHWASHING AREA TO MATCH MAIN KITCHEN AREA. CONCEALED SPRINKLER HEADS ARE PERMITTED IN THIS AREA ONLY.
- NEW DUCTWORK IS BEING INSTALLED AND CONTRACTOR SHALL RELOCATE THE SPRINKLER HEAD IN THE ROOM TO ALLOW DUCTWORK INSTALLATION. CONTRACTOR SHALL PROVIDE SPRINKLER COVERAGE WITHIN THE ROOM PER NFPA 13 CORRESPONDING WITH THE NEW DUCTWORK CONFIGURATION. COORDINATE WORK WITH MECHANICAL CONTRACTOR. REMOVE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS. EXISTING SPRINKLER HEADS SHALL NOT BE RELOCATED AND SHALL NOT BE RE-INSTALLED.
- THE CEILING IS BEING REMOVED IN ROOM. TURN SPRINKLER HEAD UP AND MOVE HEAD WITHIN 12 INCHES OF THE DECK ABOVE TO PROVIDE PROPER COVERAGE OF THE ROOM. REMOVE EXISTING SPRINKLER HEADS AND PROVIDE NEW SPRINKLER HEADS. EXISTING SPRINKLER HEADS SHALL NOT BE RELOCATED AND SHALL NOT BE RE-INSTALLED.
- KITCHEN CEILING IS BEING PULLED DOWN TO RUN NEW PLUMBING PIPING FOR NEW FIXTURES ON THIRD FLOOR. ADJUST SPRINKLERS AS NEEDED WHEN CEILING IS RE-INSTALLED.
- ADJUST SPRINKLER PIPING AND SPRINKLER HEADS AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW DUCTWORK, STEAM AND CONDENSATE PIPING. COORDINATE WITH MECHANICAL CONTRACTOR.
- ADJUST SPRINKLER PIPING AND SPRINKLER HEADS AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW STEAM PIPING AND RE-INSTALLATION OF EXISTING CEILING GRID. COORDINATE WITH MECHANICAL CONTRACTOR.



CONTRACTOR TO KEEP FIRE RATINGS IN TACT AT ALL TIMES DURING CONSTRUCTION BY PROVIDING ONE OF THE FOLLOWING SAFETY OPTIONS:

ONE - LEAVE THE EXISTING SPRINKLER SYSTEM OPERATIONAL IN THE RENOVATED AREA AND PROVIDE UPRIGHT SPRINKLER HEADS ON THE EXISTING PIPE TO PROVIDE COVERAGE IN THE AREA OF WORK PER NFPA 13 DURING CONSTRUCTION. THIS WILL LIKELY INVOLVE MOVING SPRINKLERS TO WITHIN 12 INCHES OF THE DECK ABOVE. AFTER THE NEW SPRINKLER PIPING IS INSTALLED, TESTED, AND APPROVED, THE SPRINKLERS AT THE DECK LEVEL AND THE EXISTING PIPING SHALL BE REMOVED.

OR

TWO - CONTRACTOR MAY SHUTDOWN THE EXISTING SPRINKLER SYSTEM IN THE AREA OF WORK PROVIDED THAT THE CONTRACTOR INSTALL A 1-HOUR FIRE-RESISTANCE RATED SEPARATION BETWEEN EVERY OCCUPIED SPACE ADJACENT TO THE CONSTRUCTION AREA. CONTRACTOR SHALL COORDINATE WITH THE VETERANS ADMINISTRATION, THE CONTRACTING OFFICER, AND THE A/E. ALL FIRE-RESISTANCE RATED SEPARATIONS SHALL COMPLY WITH NFPA 101 AND UL LISTINGS.

1 SPRINKLER SECOND FLOOR PLAN  
 1/8" = 1'-0"

Scale: As indicated

one eighth inch = one foot  
 one quarter inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 two inches = one foot  
 three inches = one foot  
 four inches = one foot  
 five inches = one foot  
 six inches = one foot  
 seven inches = one foot  
 eight inches = one foot  
 nine inches = one foot  
 ten inches = one foot  
 eleven inches = one foot  
 twelve inches = one foot

1 Addendum 1 3/28/2017

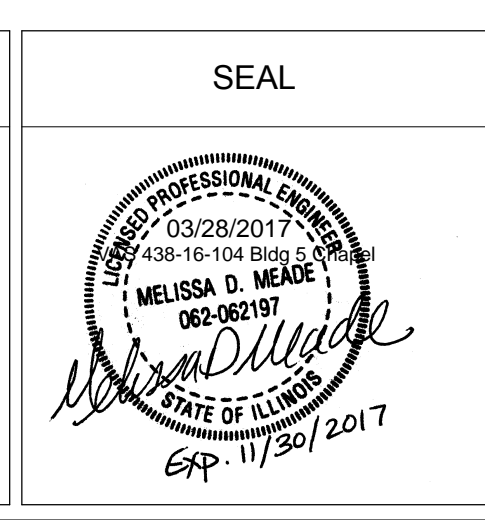
Revisions: Date

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FINAL SUBMITTAL FOR CONSTRUCTION



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Drawing Title  
**SPRINKLER SECOND FLOOR PLAN**

Approved: Project Director  
 Approver

Project Title  
 VA HEALTH CARE SYSTEM

Project Number  
 438-16-104 2016.052

Building Number  
 5

Drawing Number  
**FP102**

Date  
 2017.03.28

Checked  
 MDM

Drawn  
 MFB

OWNER



FIRE PROTECTION COVERAGE SCHEDULE							
PLAN MARK	OCCUPANCY HAZARD	GROUP	AREA (SQ FT)	AREA (SQ M)	DENSITY (GPM/SQ FT)	DENSITY (LPM/SQ M)	NOTES
A	LIGHT HAZARD	-	225	20.9	.1/1500	.38/139	1,2
B	ORDINARY HAZARD	GROUP 1	130	12.1	.15/1500	.57/139	1,2
C	ORDINARY HAZARD	GROUP 2	130	12.1	.2/1500	.57/139	1,2

NOTES:  
 1. PROVIDE QUICK RESPONSE, FACTORY MUTUAL (FM) APPROVED SPRINKLERS, EXACT AS NOTED IN SPECIFICATIONS.  
 2. CONCEALED SPRINKLERS ARE PROHIBITED EXCEPT AS IDENTIFIED ON THE DRAWINGS FOR THE DISHWASHING AREA.

LEGEND:  
 SQ FT - SQUARE FEET  
 SQ M - SQUARE METERS  
 GPM - GALLONS PER MINUTE  
 LPM - LITERS PER MINUTE

A - [Pattern]  
 B - [Pattern]  
 C - [Pattern]

KEYED NOTES	
1	INSTALL NEW SPRINKLERS, PIPING AND APPURTENANCES FROM SPRINKLER MAIN TO THE ROOMS. SPRINKLER PIPING SHALL BE ROUTED ABOVE THE CEILING.
2	EXISTING SPRINKLER MAIN IN CORRIDOR TO REMAIN AND BE RE-USED. SPECIFIC LOCATION OF MAIN TO BE CONFIRMED BY SPRINKLER CONTRACTOR AND SHOWN ON THE SHOP DRAWINGS. SPRINKLER CONTRACTOR SHALL ASSESS THE EXISTING HANGING AND BRACING PROVIDED FOR THE EXISTING MAIN AND SHALL PROVIDE ADDITIONAL SUPPORT IF REQUIRED TO COMPLY WITH NFPA 13. SPRINKLER CONTRACTOR TO VERIFY SYSTEM OPERATION WITH EXISTING HYDRAULIC CALCULATIONS FOR BUILDING.
3	EXISTING SPRINKLERS, PIPING AND APPURTENANCES IN ROOMS OUTSIDE OF THE PROJECT AREA SHALL REMAIN. CONTRACTOR SHALL NOT DISTURB OR DISCONNECT THE EXISTING SPRINKLER SYSTEM IN THE AREA NOT IN CONTRACT.



THE SPRINKLER MAIN LOCATED IN THE CORRIDOR IS REQUIRED TO REMAIN ACTIVE DURING BUSINESS HOURS FOR THE DURATION OF THE CONSTRUCTION PERIOD IN ORDER TO SUPPLY THE SPRINKLERS IN THE RESPIRATORY CARE PORTION OF THE FLOOR (NOTED AS OUT OF CONTRACT ON THE PLAN). THE CONTRACTOR IS PERMITTED TO TAKE THE SPRINKLER MAIN TEMPORARILY OUT OF SERVICE AFTER HOURS TO ALLOW THE REMOVAL OF THE DEMOLISHED SPRINKLER BRANCH PIPING AND FOR RE-CONNECTION OF THE NEW SPRINKLER BRANCH PIPING. CONTRACTOR SHALL PROVIDE A FIRE WATCH DURING THE TIME THE SPRINKLER SYSTEM IS TAKEN OUT OF SERVICE. THE TIMING AND DURATION OF THE SPRINKLER SYSTEM SHUTDOWN SHALL BE COORDINATED WITH AND APPROVED BY THE VA AND AUTHORITY HAVING JURISDICTION.

CONTRACTOR TO KEEP FIRE RATINGS IN TACT AT ALL TIMES DURING CONSTRUCTION BY PROVIDING ONE OF THE FOLLOWING SAFETY OPTIONS:  
 ONE - LEAVE THE EXISTING SPRINKLER SYSTEM OPERATIONAL IN THE RENOVATED AREA AND PROVIDE UPRIGHT SPRINKLER HEADS ON THE EXISTING PIPE TO PROVIDE COVERAGE IN THE AREA OF WORK PER NFPA 13 DURING CONSTRUCTION. THIS WILL LIKELY INVOLVE MOVING SPRINKLERS TO WITHIN 12 INCHES OF THE DECK ABOVE. AFTER THE NEW SPRINKLER PIPING IS INSTALLED, TESTED, AND APPROVED, THE SPRINKLERS AT THE DECK LEVEL AND THE EXISTING PIPING SHALL BE REMOVED.  
 OR  
 TWO - CONTRACTOR MAY SHUTDOWN THE EXISTING SPRINKLER SYSTEM IN THE AREA OF WORK PROVIDED THAT THE CONTRACTOR INSTALL A 1-HOUR FIRE-RESISTANCE RATED SEPARATION BETWEEN EVERY OCCUPIED SPACE ADJACENT TO THE CONSTRUCTION AREA. CONTRACTOR SHALL COORDINATE WITH THE VETERANS ADMINISTRATION, THE CONTRACTING OFFICER, AND THE A/E. ALL FIRE-RESISTANCE RATED SEPARATIONS SHALL COMPLY WITH NFPA 101 AND UL LISTINGS.

three inches = one foot  
 one and one half inches = one foot  
 one inch = one foot  
 three quarters inch = one foot  
 one half inch = one foot  
 one quarter inch = one foot  
 three eighths inch = one foot  
 one eighth inch = one foot

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 VA FORM 08-6231

Revisions:	Date
1 Addendum 1	3/28/2017

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Drawing Title  
**SPRINKLER THIRD FLOOR PLAN**

Approved: Project Director  
 Approver

Project Title  
 VA HEALTH CARE SYSTEM

Project Number  
 438-16-104 2016.052

Building Number  
 5

Drawing Number  
**FP103**

Date  
 2017.03.28

Checked  
 MDM

Drawn  
 MFB

OWNER

Scale: As indicated