

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
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

| FIRE PROTECTION ZONE SCHEDULE | | | |
|-------------------------------|-----------------------------|----------------------------------|---------------------------------|
| ITEMS | DESCRIPTION / LOCATION | APPROXIMATE AREA SERVED (SQ.FT.) | SERVED BY ZONE CONTROL ASSEMBLY |
| 1 | SECOND FLOOR - PHASE 1 - 2B | 8,456 | ZONE 1 |
| 2 | SECOND FLOOR - PHASE 2 - 2 | 4,961 | ZONE 2 |
| | | | |
| | | | |
| | | | |
| | | | |
| NOTES: | | | |

| FIRE PUMP TEST DATA | |
|-----------------------------|---------|
| TEST DATE: JANUARY 27, 2022 | |
| FLOW RATE - 0 GPM: | |
| - DISCHARGE PRESSURE | 108 PSI |
| FLOW RATE - 750 GPM: | |
| - DISCHARGE PRESSURE | 90 PSI |
| FLOW RATE - 1,125 GPM: | |
| - DISCHARGE PRESSURE | 76 PSI |
| | |

| SPRINKLER NOTE |
|--|
| SPRINKLER PLANS AS SHOWN ARE FOR BIDDING PURPOSES ONLY. THE SPRINKLER CONTRACTOR IS TO OBTAIN A CURRENT WATER FLOW TEST AND PROVIDE HYDRAULIC CALCULATIONS FOR SYSTEM PIPE SIZING IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13. THE SPRINKLER CONTRACTOR IS TO SUBMIT SHOP DRAWINGS AND HYDRAULIC CALCULATION, PIPING LAYOUT AND SIZING, SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER. |

SPRINKLER SYSTEMS
HAZARD CLASSIFICATIONS

| | |
|--|---|
| | DENOTES AREA BEING PROTECTED BY AUTOMATIC WET SPRINKLERS. OCCUPANCY CLASSIFICATION.....LIGHT HAZARD DESIGN DENSITY.....0.10 GPM/S.F. REMOTE HYDRAULIC AREA.....1,500 S.F. MAXIMUM SPRINKLER COVERAGE.....225 S.F. OUTSIDE HOSE STREAM.....100 GPM DURATION OF SUPPLY.....30 MINUTES |
| | DENOTES AREA BEING PROTECTED BY AUTOMATIC WET SPRINKLERS. OCCUPANCY CLASSIFICATION.....ORDINARY HAZARD, GROUP 1 DESIGN DENSITY.....0.15 GPM/S.F. REMOTE HYDRAULIC AREA.....1,500 S.F. MAXIMUM SPRINKLER COVERAGE.....130 S.F. OUTSIDE HOSE STREAM.....250 GPM DURATION OF SUPPLY.....60-90 MINUTES |
| | DENOTES AREA BEING PROTECTED BY AUTOMATIC WET SPRINKLERS. OCCUPANCY CLASSIFICATION.....ORDINARY HAZARD, GROUP 2 DESIGN DENSITY.....0.20 GPM/S.F. REMOTE HYDRAULIC AREA.....1,500 S.F. MAXIMUM SPRINKLER COVERAGE.....130 S.F. OUTSIDE HOSE STREAM.....250 GPM DURATION OF SUPPLY.....60-90 MINUTES |

FIRE PROTECTION
GENERAL NOTES

- DESIGN CRITERIA:**
REFER TO THE FOLLOWING PUBLICATIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) FOR THE DESIGN OF THE FIRE PROTECTION SYSTEM ON THIS PROJECT:
- NFPA 13, (2019) - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.
 - NFPA 25, (2019) - STANDARD FOR THE TESTING, INSPECTION, AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS.
- GENERAL NOTES:**
- DESIGN THE SPRINKLER SYSTEM THROUGHOUT PROPOSED SCOPE OF WORK IN ACCORDANCE WITH NFPA 13.
 - IN THE AREA OF WORK, MAINTAIN FIRE SUPPRESSION SYSTEM IN SERVICE AS MUCH AS POSSIBLE EXCEPT WHEN MODIFICATIONS ARE BEING MADE TO THE SYSTEM. DO NOT LEAVE THE SPACE (DURING PERIODS OF NO WORK) WITH THE SPRINKLER SYSTEM IMPAIRED WHILE FIRE DETECTION SYSTEM IS ALSO IMPAIRED.
 - ALL PIPING, VALVE, SPRINKLER HEADS, HANGERS, ETC, SHALL BE UL LISTED AND FM APPROVED.
 - DESIGN SYSTEM SUCH THAT AREA OF WORK IS CLASSIFIED AS LIGHT HAZARD, EXCEPT AS NOTED ON THE FLOOR PLAN.
 - DESIGN SHALL BE PERFORMED BY NICET LEVEL IV DESIGNER OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ARKANSAS AND SHALL BE SIGNED AND SEALED AS APPLICABLE. PROVIDE FIRE PROTECTION SYSTEM DESIGN AND SHOP DRAWINGS, MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - HYDRAULICALLY CALCULATE THE SYSTEM SIZING IN ACCORDANCE WITH NFPA 13. GENERAL CONTRACTOR TO OBTAIN PUMP FLOW TEST RESULTS FROM VA.
 - DESIGN THE SYSTEM USING SPRINKLER HEADS THAT ARE UL LISTED, QUICK RESPONSE TYPE, FM APPROVED, SEMI-RECESSED HEADS IN ALL AREAS, EXCEPT WHERE SPECIFICALLY PROHIBITED IN UNFINISHED AREAS WITHOUT CEILINGS. USE QUICK RESPONSE ROUGH BRASS UPRIGHT HEADS WITH FRANGIBLE GLASS ELEMENT.
 - SPRINKLER HEADS SHALL BE QUICK RESPONSE FLUSH PENDENT TYPE HEADS WITH FUSIBLE LINK ELEMENT IN ALL CEILING APPLICATIONS.
 - ALL UNFINISHED AREAS WITHOUT CEILING SHALL BE EQUIPPED WITH QUICK RESPONSE ROUGH BRASS UPRIGHT HEADS WITH FRANGIBLE GLASS ELEMENT.
 - ALL HEADS SHALL HAVE A K FACTOR OF 5.6 - 5.8. TEMPERATURE RATINGS OF ALL SPRINKLER HEADS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13.
 - FLEXIBLE HEAD PIPING OR PLASTIC PIPING SHALL NOT BE ALLOWED ON THIS PROJECT.
 - COORDINATE PIPE ROUTING WITH DUCT ROUTING, EQUIPMENT LOCATIONS, ELECTRICAL INSTALLATIONS, AND BUILDING STRUCTURAL MEMBERS. AVOID PENETRATING ANY MAIN STRUCTURAL BEAM.
 - HYDRAULIC CALCULATIONS SHALL TAKE INTO ACCOUNT ALL FITTINGS, OFFSETS, HARDWARE, DEVICES, CHARACTERISTICS AND TRIM DETERMINED NECESSARY FOR A COMPLETE SPRINKLER INSTALLATION.
 - MECHANICAL, STORAGE AND ELECTRICAL ROOMS, ETC... SHALL BE CLASSIFIED AS ORDINARY HAZARD GROUP II OCCUPANCY.
 - EACH FLOOR CONTROL VALVE IS INTENDED TO CONTROL THE SPRINKLERS IN AN INDIVIDUAL SMOKE ZONE REFER TO ARCHITECTURAL LIFE SAFETY PLAN FOR SMOKE ZONE LIMITS.
 - CENTER SPRINKLER HEADS IN CEILING TILES IN AREAS WITH LAY-IN TILES AND VISUALLY ALIGN IN AREAS WITH HARD CEILINGS.
 - ELEVATIONS OF SPRINKLER PIPING AND HEADS MUST BE DETERMINED BY PROPOSED CEILING HEIGHTS. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLANS.
 - PROVIDE SEISMIC BRACING FOR ALL PIPING IN ACCORDANCE WITH NFPA 13. PROVIDE SHOP DRAWINGS OF ALL SEISMIC CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ARKANSAS.
 - SPRINKLER HEADS AND ASSOCIATED BRANCH PIPING SHALL BE LOCATED AND SUPPORTED IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13.
 - TEST SPRINKLER SYSTEM, CONTROLS, PIPING, AND MONITORING IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 25.
 - CAGES SHALL BE ADDED TO THE IT ROOMS.
 - INTERRUPTION OF SPRINKLER SERVICE. TO OCCUPIED SPACES SHALL NOT BE ALLOW UNDER NORMAL CIRCUMSTANCES. IF HOWEVER AN INTERRUPTION CAN NOT BE AVOIDED THEN, NOTIFY COR NO FEWER THAN FIVE DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF SPRINKLER SERVICE. DO NOT PROCEED WITH INTERRUPTION OF SERVICE WITHOUT WRITTEN PERMISSION DETAILING AREAS AFFECTED AND PROPOSED TIME OF NORMAL SERVICE ACTIVATION.
 - ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE BEST METHODS AND PRACTICES. ANY MATERIAL WHICH DOES NOT PRESENT AN ORDERLY AND REASONABLY NEAT AND WORKMANLIKE APPEARANCE, SHALL BE REMOVED AND REPLACED WHEN SO DIRECTED BY THE OWNER. THE REMOVAL AND REPLACEMENT OF THIS WORK SHALL BE DONE WHEN DIRECTED IN WRITING BY THE OWNER AT THE CONTRACTOR'S EXPENSE.
 - INCLUDE TEMPORARY COVERAGE AND SUPPLIES AS REQUIRED, DURING DEMOLITION AND CONSTRUCTION SO THAT NO AREA IS LEFT IMPAIRED DURING PERIODS WHERE NO SPRINKLER WORK IS BEING PERFORMED AND ALL OCCUPIED AREAS HAVE SPRINKLER COVERAGE AT ALL TIMES. EXCEPT AS ALLOWED BY THE OWNER, AT NO TIME MAY SPRINKLER SYSTEM AND FIRE ALARM SYSTEMS BE IMPAIRED AT THE SAME TIME. INVERT HEADS TO UPRIGHT HEADS DURING CONSTRUCTION WHERE CEILINGS ARE TEMPORARILY REMOVED.

| FIRE PROTECTION LEGEND | | | |
|---|---|---|---|
| PIPING SYMBOLS | MISC. SYMBOLS | ABBREVIATIONS | NOTES |
| F FIRE PROTECTION SUPPLY PIPING FIRE PROTECTION DEMOLITION PIPING SIAM/SE FIRE DEPARTMENT CONNECTION F.S. WATERFLOW DETECTOR T.S. OS&Y VALVE PLUG BACKFLOW PREVENTER Y-TYPE STRAINER Y-TYPE STRAINER WITH HOSE DRAIN VALVE D FIRE PROTECTION DRAIN PRESSURE GAGE CAP ELBOW, 90° ELBOW, 90° TURNED UP ELBOW, 90° TURNED DOWN ELBOW, 45° TEE TEE, OUTLET TURNED UP TEE, OUTLET TURNED DOWN CONCENTRIC REDUCER ECCENTRIC REDUCER (STRAIGHT INVERT) UNION FLEXIBLE PIPE CONNECTION ELECTRICALLY OPERATED VALVE CHECK VALVE BUTTERFLY VALVE A FIRE PROTECTION COMPRESSED AIR SUPPLY | 0000 ROOM NUMBER POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK POINT BETWEEN EXISTING WORK TO REMAIN AND EXISTING WORK TO BE REMOVED HD HEAT DETECTOR SD SMOKE DETECTOR WET PIPE FIRE PROTECTION VALVE DRY PIPE FIRE PROTECTION VALVE PRE-ACTION FIRE PROTECTION VALVE FIRE DEPT HOSE VALVE W/ICAP WATER MOTOR GONG SPARE SPRINKLER CABINET FAC FIRE ALARM CONTROL PANEL FAA FIRE ALARM ANNUNCIATOR PANEL FAGAP FIRE ALARM GRAPHIC ANNUNCIATOR PANEL | EX. EXIST. FS EXISTING TS FLOW SWITCH FDV TAMPER SWITCH FDC FIRE DEPARTMENT VALVE FVC FIRE DEPARTMENT CONNECTION FHC FIRE VALVE CABINET MIN. FIRE HOSE CABINET TYP. MINIMUM U/G TYPICAL GPM UNDER GROUND CAP GALLONS PER MINUTE P.S. CAPACITY RX PRESSURE SWITCH RX REMOVE EXISTING | 1. SEE SHEET FX501 FOR DETAILS. 2. SOME SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY NOT APPLY. |

| Revisions: | | |
|------------|-------------|------|
| No. | Description | Date |
| | | |
| | | |
| | | |

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GENERAL NOTES & LEGENDS

Project Phase:
BID DOCUMENTS

FULLY SPRINKLERED

Project Title:
**RENOVATE MED SURGE
WARDS**

Location:
VETERANS HEALTHCARE SYSTEM
OF THE OZARKS

Date:
MARCH 24, 2024

Checked:
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Drawn:
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Project Number:
564-17-140

Building Number:
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Drawing Number:
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Sheet
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**Engineering
Service**

**VETERANS HEALTH CARE SYSTEM
OF THE OZARKS**

VA U.S. Department
of Veterans Affairs