## FIRE PROTECTION LEGEND

| | |
|---|---|
| (NAME) | NEW PIPING (BOLD) |
| (NAME) | EXISTING PIPING (LIGHT) |
| F | FIRE PROTECTION WATER MAIN |
| | LOW PRESSURE DROP DOUBLE CHECK BACKFLOW PREVENTER |
| | CHECK VALVE |
| | O.S. & Y. OR OTHER INDICATING VALVE WITH TAMPER SWITCH |
| | FLOW SWITCH |
| | PIPING AND DEVICES TO BE REMOVED |
| | CONNECT NEW TO EXISTING |
| | PIPE CONTINUES |
| | STRAINER |
| W | WET ALARM VALVE |
| D | DRY ALARM VALVE |
| | ALARM CHECK ASSEMBLY (WET & DRY) |
| | CONCEALED PENDENT SPRINKLER |
| | UPRIGHT SPRINKLER |
| | EXISTING PENDENT SPRINKLER |
| | EXISTING UPRIGHT SPRINKLER |
| | SIDEWALL SPRINKLER |
| D | DRY SIDEWALL SPRINKLER ON WET PIPE SYSTEM |
| | UNION |
| | SPRINKLER BAFFLE |

## FIRE PROTECTION ABBREVIATIONS

| | |
|---|---|
| D | DRY SPRINKLER |
| F | FIRE PROTECTION |
| F.D. | FIRE DEPARTMENT |
| FHC | FIRE HOSE CABINET |
| FHV | FIRE HOSE VALVE |
| FHVC | FIRE HOSE VALVE CABINET |
| FP | FIRE PUMP |
| GC | GENERAL CONTRACTOR |
| P.I.V. | POST INDICATOR VALVE |
| SP | STANDPIPE |
| SPKR | SPRINKLER |
| W | WET SPRINKLER |
| W/ | WITH |
| CONN | CONNECT |
| DEPT | DEPARTMENT |

## FIRE PROTECTION TRADE NOTES

FP-1 COORDINATE LOCATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES AND EXISTING CONDITIONS.

FP-2 MAINTAIN MINIMUM REQUIRED WORKING CLEARANCES ADJACENT TO ELECTRICAL EQUIPMENT PER LATEST EDITION OF NATIONAL ELECTRIC CODE.

FP-3 PROVIDE PIPE SLEEVES WHEREVER PIPING PENETRATES ANY WALL, FLOOR, OR CEILING.

FP-4 INSTALL ALL PIPING AND WIRING NEATLY AND SQUARE WITH BUILDING FEATURES.

FP-5 ALL PENETRATIONS THROUGH NEW OR EXISTING WALLS, CEILINGS AND FLOORS SHALL BE EITHER CORE DRILLED OR SAW CUT. CHISELED OR HAMMERED PENETRATIONS ARE NOT ALLOWED.

FP-6 WHERE PIPING PENETRATES A FIRE-RATED WALL, FLOOR, OR CEILING, FIRE STOPPING INSULATION SHALL BE PROVIDED BY THE FIRE PROTECTION CONTRACTOR.

FP-7 THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ACCESS PANELS AS REQUIRED TO ACCESS CONCEALED VALVES, DEVICES EQUIPMENT, ETC.

FP-8 ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE, UNLESS OTHERWISE INDICATED.

## GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, P.C., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, P.C., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, P.C., GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES, OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, 780 CMR MASSACHUSETTS STATE BUILDING CODE, IMC 2006, 248 CMR MASSACHUSETTS FUEL GAS AND PLUMBING CODE, BOCA, UL, SMACNA, OSHA, AND LATEST EDITION OF THE NEC.

G-3 CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. ALL DRAWINGS OF ANY PARTICULAR TRADE SHALL BE USED IN CONJUNCTION WITH DRAWINGS OF ALL OTHER TRADES TO COORDINATE ALL CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED WORK. ANY PROPOSED CHANGES, VARIATIONS, OR SUBSTITUTIONS MUST BE REVIEWED AND ACCEPTED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

G-5 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT AND EXTENT OF THE WORK. THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-6 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS (AS-BUILT OR OTHERWISE) BEFORE COMMENCING FABRICATION, AND/OR ORDERING MATERIALS.

G-7 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-8 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE RENDERED HARMLESS.

## SPRINKLER HEAD SCHEDULE

| SYMBOL | STYLE | MANUFACTURER AND MODEL |
|---|---|---|
| ○ | UPRIGHT/PENDANT | RELIABLE MODEL F1FR QUICK RESPONSE STANDARD UPRIGHT/PENDANT QUICK RESPONSE SPRINKLER HEAD, 155°F TEMPERATURE RATING, 1/2" ORIFICE. |
| ● | CONCEALED | RELIABLE MODEL G4A QUICK RESPONSE CONCEALED AUTOMATIC SPRINKLER, 165°F TEMPERATURE RATING, 1/2" ORIFICE. |
| ▽ | SIDEWALL | RELIABLE MODEL F1FR HORIZONTAL SIDEWALL QUICK RESPONSE SPRINKLER, 155°F TEMPERATURE RATING, 1/2" ORIFICE. |

PROVIDE WET AUTOMATIC SPRINKLER SYSTEM FOR RENOVATED AREAS. SYSTEM SHALL BE BASED ON NFPA 13 COVERAGE REQUIREMENTS ACCORDING TO THE FOLLOWING GENERAL GUIDELINES:

| LOCATION | DENSITY AND AREA |
|---|---|
| 1. ALL BUILDING AREAS, EXCEPT AS NOTED BELOW SHALL BE CONSIDERED LIGHT HAZARD. | 0.10 GPM/SQ. FT. OVER 1500 SQ. FT. |
| 2. MECHANICAL AND STORAGE ROOMS, LAUNDRY, DATA ROOMS & ELECTRICAL ROOMS SHALL BE CONSIDERED ORDINARY HAZARD GROUP I. | 0.15 GPM/SQ. FT. OVER 1500 SQ. FT. |

IN AREAS WHERE SEVERAL DIFFERENT OCCUPANCIES EXIST THE SPRINKLER SYSTEMS SHALL BE DESIGNED TO MEET THE MOST HYDRAULICALLY DEMANDING DENSITY AND AREA REQUIREMENTS. AN ALLOWANCE OF 100 GPM SHALL BE INCORPORATED IN DESIGN FOR HOSE STREAMS.

RENOVATED AREAS SHALL BE MODIFIED AS REQUIRED BY NFPA 13 TO ACCOMMODATE FOR THE DESIGN OF THE NEW ARCHITECTURAL LAYOUT.

CONTRACTOR SHALL INSTALL NEW SPRINKLER HEADS IN ACCORDANCE WITH THE ABOVE DESIGN CRITERIA AND SHALL COORDINATE DESIGN CRITERIA WITH BUILDING OWNER'S INSURANCE COMPANY.

## FIRE PROTECTION DEMOLITION NOTES

D-1 EXCEPT WHERE NOTED OTHERWISE ON THE ARCHITECTURAL AND/OR FIRE PROTECTION PLANS, AND/OR IN THE PROJECT SPECIFICATIONS, EXISTING FIRE PROTECTION SYSTEMS, EQUIPMENT AND APPURTENANCES LOCATED IN THE EXISTING FACILITY ARE TO BE REMOVED AS SHOWN ON THE FIRE PROTECTION DRAWINGS. THE OWNER MAY WISH TO SALVAGE CERTAIN ITEMS; CONSULT OWNER FOR FURTHER INSTRUCTIONS. ITEMS IDENTIFIED TO BE SALVAGED ARE TO BE CAREFULLY DISASSEMBLED AND REMOVED, AND TURNED OVER TO THE OWNER AS DIRECTED.

D-2 WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF FIRE PROTECTION PIPING SYSTEMS, SPRINKLERS, APPURTENANCES, HANGERS, SUPPORTS, ETC. AS SHOWN ON THE FIRE PROTECTION DRAWINGS.

D-3 NO EXISTING FIRE PROTECTION EQUIPMENT, SYSTEMS, OR APPURTENANCES SHALL BE ABANDONED IN PLACE.

D-4 COORDINATE WITH THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR AND ALL OTHER SUB-CONTRACTORS IN ORDER TO DETERMINE OVERALL PROJECT PHASING AND DEMOLITION WORK SEQUENCING. COORDINATE REQUIRED DEMOLITION BY OTHER TRADES RESULTING FROM FIRE PROTECTION SYSTEMS DEMOLITION.

D-5 REFER TO THE ARCHITECT'S DEMOLITION NOTES AND PROJECT SPECIFICATIONS FOR ADDITIONAL DEMOLITION INFORMATION AND REQUIREMENTS.

23 MARCH 2011

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| REV. NO. | DESCRIPTION | BY | APP'D | DATE |
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UNIVERSITY OF MASSACHUSETTS
FACILITIES PLANNING DIVISION

LEWIS HALL & THATCHER HALL
FINISH UPGRADE 2011

FIRE PROTECTION NOTES, LEGEND & ABBREVIATIONS

| | BY | DATE | PROJECT NO. 10-00176501 | CONTRACT NO. UMA 10-01D |
|---|---|---|---|---|
| DRN. | ADG | - | SCALE NO SCALE | SHEET 1 OF - |
| APP'D | SAB | - | | |
| CKD. | | | DRAWING NUMBER LEWIS & THATCHER | FP1.0 |
| APP'D | | | | |


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