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PROFESSIONAL ENGINEER

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Jan 17 2018 2:55 PM
CoSign

## FIRE PROTECTION LEGEND

| | |
|---|---|
| —F— | FIRE PROTECTION PIPING |
| —DP— | DRY PIPE SYSTEM PIPING |
| —STP— | STANDPIPE SYSTEM |
| | PIPE TURNING DOWN |
| | PIPE TURNING UP |
| | PIPE CAP |
| | CONTROL VALVE |
| | CHECK VALVE |
| | OS&Y GATE VALVE |
| | VALVE WITH TAMPER SWITCH |
| FHV | FIRE HOSE VALVE |
| FS | FLOW SWITCH |
| FVC | FIRE VALVE CABINET |
| GPM | GALLONS PER MINUTE |
| ITC | INSPECTOR'S TEST CONNECTION |
| PS | PRESSURE SWITCH |
| PSI | POUNDS PER SQUARE INCH |
| SF | SQUARE FOOT |
| SP | STANDPIPE |
| TS | TAMPER SWITCH |
| WP | WET PIPE |

## FIRE PROTECTION GENERAL NOTES (APARTMENTS)

APPLICABLE CODES: FBC FLORIDA BUILDING CODE (2014) 5TH EDITION
FFPC FLORIDA FIRE PREVENTION CODE (2014) 5TH EDITION
NFPA 13R, 14, 24 & 25. EDITION 2010

1. WET PIPE SPRINKLER SYSTEM DESIGNED PER NFPA 13R, CLASS 1, MANUAL WET STANDPIPE SYSTEM DESIGNED IN ACCORDANCE WITH NFPA 14. 500 GPM/100 PSI 1ST STANDPIPE, 250 GPM/100 PSI EACH ADDITIONAL STANDPIPE. RESIDENTIAL OCCUPANCY (DWELLING UNITS) USING ALL SPRINKLERS IN A COMPARTMENT, UP TO A MAXIMUM OF FOUR SPRINKLERS, THAT REQUIRES THE GREATEST HYDRAULIC DEMAND PER THEIR LISTING TO MEET OR EXCEED THE REQUIREMENTS OF NFPA 13R AND LOCAL AUTHORITIES.
2. ALL FIRE SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13R. RESIDENTIAL SPRINKLERS SHALL BE USED INSIDE THE DWELLING UNITS PER NFPA 13R, ALL OTHER SPRINKLERS SHALL BE OF THE QUICK RESPONSE TYPE.
3. ALL MATERIALS, FABRICATION AND INSTALLATION IS TO BE IN ACCORDANCE WITH NFPA 13R, 2010 EDITION, NFPA 14, AND APPROVED BY THE LOCAL AUTHORITIES.
4. ALL HANGERS & MATERIALS TO BE IN ACCORDANCE WITH NFPA 13R, NFPA 14.
5. FIRE SPRINKLER CONTRACTOR WILL VISIT THE SITE AND VERIFY ALL CONDITIONS BEFORE ANY FABRICATION AND INSTALLATION HAS BEGUN.
6. FIRE SPRINKLER CONTRACTOR WILL COORDINATE WORK WITH OTHER TRADES THAT MAY COME INTO CONFLICT BEFORE ANY INSTALLATION.
7. FIRE SPRINKLER CONTRACTOR TO COORDINATE SPRINKLER LOCATIONS WITH ALL OTHER CEILING AND WALL FIXTURES. SEE ARCHITECTURAL PLANS FOR CEILING FIXTURE LOCATIONS.
8. ALL BRANCH LINES AND CROSS MAINS ON RESIDENTIAL UNIT FLOORS TO BE BLAZEMASTER CPVC (OR APPROVED EQUAL) PER THEIR LISTING AND GALVANIZED STEEL PIPE FOR ANY EXPOSED PIPING INCLUDING THE FIRE SPRINKLER RISER. ALL TRANSITIONS FROM STEEL TO CPVC PIPING WILL BE MADE WITH UL APPROVED FITTINGS.
9. ALL FITTINGS FOR CPVC BRANCH LINES AND CROSS MAINS TO BE BLAZEMASTER CPVC (OR APPROVED EQUAL). ALL FITTINGS FOR THE GALVANIZED STEEL PIPING SHALL BE BLACK CAST IRON OR GROOVED.
10. ALL FIRE SPRINKLER COMPONENTS SHALL BE U.L. APPROVED.
11. UPRIGHT SPRINKLERS TO BE LOCATED BETWEEN 1" AND 12" BELOW ROOF DECK WHERE REQUIRED.
12. SPRINKLER HEAD SPACING IS PER NFPA 13R AND MANUFACTURER'S LISTING.
13. THE CONSTRUCTION MANAGER SHALL PROVIDE, OR HAVE PROVIDED, A SET OF COORDINATION DRAWINGS FOR ALL SYSTEMS AND FEATURES THAT OCCUR ABOVE THE CEILING PLANE. THE COORDINATION DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO, STRUCTURAL MEMBERS, HVAC DUCTWORK, HYDRAULIC PIPING, PLUMBING SUPPLY AND WASTE PIPING, FIRE PROTECTION PIPING, ELECTRICAL POWER CONDUITS AND RACEWAYS, AND ELECTRICAL LOW VOLTAGE CONDUITS AND RACEWAYS. THE COORDINATION DRAWINGS SHALL PROVIDE, APPORTION, AND COORDINATE SPACE FOR ALL SYSTEMS, HORIZONTALLY AND VERTICALLY ABOVE THE CEILING PLANE TO THE STRUCTURAL DECK ABOVE ALLOWING EACH TRADE CONTRACTOR THE SPACE TO PROPERLY EXECUTE HIS PORTION OF THE WORK.
14. THE FOLLOWING AREAS ARE NOT REQUIRED TO HAVE SPRINKLER HEADS PER NFPA 13R:
    A. BATHROOMS NOT EXCEEDING 55 SQ. FT. WITH NONCOMBUSTIBLE WALLS AND CEILINGS.
    B. CLOTHES CLOSETS, LINEN CLOSETS AND PANTRIES NOT EXCEEDING 24 SQ. FT. & 36" FOR THE LEAST WALL DIMENSION.
    C. PORCHES, STAIRS THAT ARE OPEN AND ATTACHED.
    D. ATTICS, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, CRAWL SPACES, FLOOR/CEILING SPACES, ELEVATOR SHAFTS, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES OR STORAGE AND DO NOT CONTAIN FUEL FIRED EQUIPMENT. SPRINKLERS SHALL NOT BE REQUIRED IN CLOSETS ON EXTERIOR BALCONIES, REGARDLESS OF SIZE, AS LONG AS THERE ARE NO DOORS OR UNPROTECTED PENETRATIONS FROM THE CLOSET DIRECTLY INTO THE DWELLING UNIT.
15. ALL GROOVED FITTINGS TO BE "VICTAULIC" FITTINGS OR APPROVED EQUAL.
16. ALL PENETRATIONS THRU 1-HOUR AND 2-HOUR RATED WALLS TO BE PATCHED AS NECESSARY.
17. ALL DIMENSIONS TO BE VERIFIED DURING FIELD CHECK OF SPRINKLER SYSTEM.
18. THE FOLLOWING ARE ACCEPTABLE SPRINKLER HEAD MATERIAL MANUFACTURERS: RELIABLE, TYCO, VICTAULIC, VIKING.
19. FLOW SWITCHES, TAMPER SWITCHES AND ALARM BELL SHALL BE PROVIDED AND INSTALLED BY THE FIRE SPRINKLER CONTRACTOR. SPRINKLER SYSTEMS AND ALL ASSOCIATED FIRE PROTECTION SIGNALS SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY, AUXILIARY, OR REMOTE STATION SYSTEM IN ACCORDANCE WITH NFPA 13R. ALL WIRING TO BE PROVIDED BY ELECTRICAL CONTRACTOR.
20. FIRE PROTECTION SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND MATERIAL DATA SUBMITTALS ARE TO BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
21. THE INTENT, AND EXTENT, OF THIS SYSTEM DESIGN IS AS ILLUSTRATED, BUT IS DIAGRAMMATIC ONLY. IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO ASSEMBLE A SET OF DRAWINGS DEPICTING THE ACTUAL PIPING CONFIGURATION FOR EACH BUILDING IN ITS ENTIRETY PRIOR TO SUBMITTAL TO ENGINEER OF RECORD FOR REVIEW. HYDRAULIC CALCULATIONS ARE PROVIDED TO VERIFY THE ADEQUACY OF THE WATER SUPPLY. THE SPRINKLER CONTRACTOR SHALL PROVIDE A SET OF HYDRAULIC CALCULATIONS FOR EACH BUILDING TYPE USING A FLOW TEST CURRENT TO WITHIN SIX MONTHS.
22. CORROSION PROTECTION FOR ALL UNDERGROUND BOLTED JOINT ACCESSORIES SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION-RETARDING MATERIAL AFTER INSTALLATION IN ACCORDANCE WITH NFPA 13 SECTION 10.3.6.2.
23. THE UNDERGROUND MAIN STARTING AT THE PUBLIC WATER UTILITY POINT OF CONNECTION HAS BEEN DESIGNED TO NFPA 24. INSTALLATION AND TESTING MUST BE IN ACCORDANCE WITH NFPA 24.
24. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES, AND HYDRANT BRANCHES SHALL BE RESTRAINED AGAINST MOVEMENT BY USING THRUST BLOCKS OR RESTRAINED JOINT SYSTEMS IN ACCORDANCE WITH NFPA 24.
25. ALL FIRE SPRINKLER COMPONENTS ARE TO BE RATED FOR THE MAXIMUM SYSTEM WORKING PRESSURE TO WHICH THEY ARE EXPOSED IN ACCORDANCE WITH NFPA 13.
26. THE COMPONENTS OF THE FIRE PROTECTION SYSTEM(S) FURNISHED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE THEREOF, EITHER FOR BENEFICIAL USE OR FINAL ACCEPTANCE, WHICHEVER IS EARLIER, AGAINST DEFECTIVE MATERIALS, DESIGN, AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE ARCHITECT OF FAILURE OF ANY PART OF THE EQUIPMENT DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR PARTS SHALL BE REPLACED PROMPTLY WHICH INCLUDES REMOVING THE DEFECTIVE PART OR PARTS, REPLACING AND INSTALLING THE NEW PART OR PARTS AND AT THE EXPENSE OF THE CONTRACTOR.
27. CPVC PIPING SHALL BE COMPATIBLE WITH ANTI-MICROBIAL COATED BLACK STEEL FIRE SPRINKLER PIPE. TESTING HAS SHOWN THAT CERTAIN ANTI-MICROBIAL COATING PRODUCTS CAN BE COMPATIBLE WITH CPVC PIPING. HOWEVER, THE POTENTIAL FOR COMPATIBILITY PROBLEMS CAN BE PRESENT IN INSTALLATIONS WHERE CPVC MATERIALS ARE HIGHLY STRESSED.
28. SPRINKLER PROTECTION SHALL BE PROVIDED FOR EXTERIOR BALCONIES, DECKS AND GROUND FLOOR PATIOS OF DWELLING UNITS WHERE THE BUILDING IS OF TYPE V CONSTRUCTION, PROVIDED THERE IS A ROOF OR DECK ABOVE. SIDEWALL SPRINKLERS THAT ARE USED TO PROTECT SUCH AREAS SHALL BE PERMITTED TO BE LOCATED SUCH THAT THEIR DEFLECTORS ARE WITHIN 1 INCH TO 6 INCHES BELOW THE STRUCTURAL MEMBERS AND A MAXIMUM DISTANCE OF 14 INCHES BELOW THE DECK OF THE EXTERIOR BALCONIES AND DECKS THAT ARE CONSTRUCTED OF OPEN WOOD JOIST CONSTRUCTION.
29. THE FIRE SPRINKLER CONTRACTOR SHALL PREPARE DETAILED WORKING PLANS IN ACCORDANCE WITH NFPA 13R, NFPA 14 THE FIRE PROTECTION SYSTEM LAYOUT SHALL FOLLOW THE DESIGN GUIDELINES SET FORTH IN THESE FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS.
30. THE FIRE SPRINKLER CONTRACTOR SHALL OBTAIN THE ACCEPTANCE TESTS FROM THE LOCAL AUTHORITY. THE ACCEPTANCE TEST FOR THE OVERHEAD SPRINKLER SYSTEM PIPING SHALL BE IN ACCORDANCE WITH NFPA 13R CHAPTER 10 USING THE MATERIAL AND TEST CERTIFICATE FOR ABOVEGROUND PIPING IN FIGURE 10.1.2. THE ACCEPTANCE TEST FOR THE UNDERGROUND PIPING SHALL BE IN ACCORDANCE WITH NFPA 13 CHAPTER 10, SECTION 10.10 USING THE MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING IN FIGURE 10.10.1.
31. THE POINT OF SERVICE IS INDICATED AT THE SYSTEM SIDE OF THE BACKFLOW PREVENTER. AT THIS POINT, THE SYSTEM IS DEDICATED SOLELY FOR FIRE PROTECTION PURPOSES. NO DOMESTIC WATER SHALL BE TAKEN FROM THE SYSTEM BEYOND THIS POINT FOR OTHER PURPOSES.
32. CLASSIFICATIONS OF HAZARD OCCUPANCIES FOR THE AREAS OF DESIGN SHALL BE AS FOLLOWS: (RESIDENTIAL FLOORS) RESIDENTIAL OCCUPANCY PER NFPA 13R.
33. THE SPRINKLER SYSTEM SHALL BE WET PIPE FOR THE RESIDENTIAL FLOORS, WITH THE REMOTE AREA USING ALL SPRINKLERS WITHIN A COMPARTMENT, UP TO A MAXIMUM OF 4 SPRINKLERS, THAT REQUIRE THE GREATEST HYDRAULIC DEMAND, TO MEET OR EXCEED THE REQUIREMENTS OF NFPA 13R, AND LOCAL AUTHORITIES. SPRINKLERS SHALL HAVE A MINIMUM TEMPERATURE RATING OF 155° AND THE SPACING SHALL BE PER NFPA 13R OR MANUFACTURER'S LISTING.
34. SEE CIVIL UTILITIES PLAN FOR WATER SUPPLY PIPING LOCATIONS.
35. IF THE FLOW TEST BECOMES GREATER THAN SIX (6) MONTHS OLD BY THE TIME OF FIRE SPRINKLER PERMIT SUBMITTAL, A NEW TEST SHALL BE OBTAINED BY THE FIRE SPRINKLER CONTRACTOR.
36. VALVE AND ALARM REQUIREMENTS: ALL CONTROL VALVES ON SPRINKLER RISERS AND FIRE PROTECTION BACKFLOW PREVENTERS SHALL HAVE A TAMPER SWITCH. THE FLOW SWITCH SHALL BE SET TO NOT ALARM WITH MINOR CITY WATER PRESSURE FLUCTUATIONS. HOWEVER, THE FLOW OF ONE SPRINKLER HEAD SHALL PRODUCE AN ALARM CONDITION BY TRIPPING THE FLOW SWITCH. ALL FLOW AND TAMPER SWITCHES SHALL BE CONNECTED TO THE BUILDING FIRE ALARM PANEL. FLOW SWITCHES SHALL ALSO SOUND THE ELECTRIC ALARM BELL ON THE OUTSIDE WALL. FIRE SPRINKLER CONTRACTOR SHALL VERIFY AND TEST PER NFPA 13.
37. THE LOCAL WATER PURVEYOR IS REQUESTED TO ADVISE THE ENGINEER OF RECORD IF CONDITIONS EXIST IN THEIR WATER SUPPLY THAT COULD LEAD TO MIC, SO THAT THE ENGINEER CAN DESIGN CORRECTIVE MEASURES. THERE ARE NO KNOWN MIC CONDITIONS IN THE LOCAL WATER SUPPLY.
38. BACKFLOW PREVENTER AND METERING SPECIFICATIONS SHALL MEET OR EXCEED REQUIREMENTS OF THE LOCAL JURISDICTION.
39. YARD AND INTERIOR FIRE PROTECTION COMPONENTS: PRODUCT DATA SHEETS SHALL BE SUBMITTED BY THE SPRINKLER CONTRACTOR ALONG WITH THEIR SHOP DRAWINGS. ALL FIRE PROTECTION DEVICES AND COMPONENTS SHALL BE UL LISTED AND FM APPROVED.

## FIRE SERVICE PIPE MATERIAL & TESTING NOTES

1. ALL PRIVATE FIRE SERVICE MAINS/LINES LOCATED DOWNSTREAM OF THE POINT OF SERVICE SHALL BE INSTALLED BY A QUALIFIED AND LICENSED CONTRACTOR CLASS I, II, OR V WITH 3' MINIMUM COVER. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE FIRE CODES. CONTRACTOR TO VERIFY REQUIREMENTS BEFORE START OF CONSTRUCTION. COMBINATION MAINS (SHARED DOMESTIC AND FIRE SUPPRESSION SERVICE) UP TO THE DEDICATED FIRE SUPPRESSION SYSTEM POINT OF SERVICE CAN BE INSTALLED BY A LICENSED UNDERGROUND EXCAVATION OR SITE UTILITY CONTRACTOR.
2. POINT OF SERVICE IS TO BE DESIGNATED FOR ALL BUILDINGS EQUIPPED WITH AUTOMATIC SPRINKLER SYSTEM.
3. THE UNDERGROUND MAIN STARTING AT THE PUBLIC WATER UTILITY POINT OF CONNECTION HAS BEEN DESIGNED TO NFPA 24. MATERIALS, INSTALLATION AND TESTING MUST BE IN ACCORDANCE WITH NFPA 24.
4. ALL NEW PRIVATE FIRE SERVICE MAINS/LINES AND HYDRANTS SHALL BE FLUSHED AND HYDROSTATIC TESTED TO 200 PSI FROM THE POINT OF SERVICE AS PER NFPA 24 CHAPTER 9.
5. THE UNDERGROUND MAIN STARTING AT THE POINT OF SERVICE HAS BEEN DESIGNED TO NFPA 24.
6. FIRE SERVICE MAINS/LINES SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE CONFORMING TO AWWA C900 WITH DIMENSION RATIO (DR) OF EIGHTEEN (18) AND A MINIMUM PRESSURE CLASS OF TWO HUNDRED POUNDS PER SQUARE INCH (200 P.S.I.) UNLESS NOTED OTHERWISE.

## F.A.C. 61G15

THE CONTRACTOR'S FIRE PROTECTION ENGINEER, AS THE "DELEGATED ENGINEER" SHALL BE THE "ENGINEER OF "RECORD" FOR THE FIRE PROTECTION SYSTEM AND SHALL PREPARE COMPLETE AND FINAL FIRE PROTECTION DESIGN DOCUMENTS WITH THE HYDRAULIC CALCULATIONS, SIGNED AND SEALED, AS DEFINED BT THE F.A.C. 61G15 AND SHALL SUBMIT REQUIRED DOCUMENTATION TO THE ARCHITECT FOR REVIEW BY THIER "PRIME PROFESSIONAL ENGINEER" CONSULTANT TO REVIEW FOR BASIC DESIGN CRITERIA. UPON APPROVAL THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED DOCUMENTS TO THE AHJ FOR REVIEW AND APPROVAL.

## 61G15-32.004 DESIGN OF WATER BASED FIRE PROTECTION SYSTEMS

1. DESIGN FOR APARTMENT BUILDINGS IS WATER BASED FIRE PROTECTION SYSTEM WHICH INCLUDES A WET AUTOMATIC FIRE SPRINKLER SYSTEM CONSISTING OF FIRE WATER SPRINKLER MAINS, BRANCH LINES, FIRE SPRINKLER HEADS AND HANGER DEVICES CONNECTED TO A DEDICATED FIRE PROTECTION WATER SOURCE.
2. THESE FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS INCLUDE AS A MINIMUM THE FOLLOWING APPLICABLE INFORMATION, UNLESS NOTED OTHERWISE AS NOT APPLICABLE:
   A. THE POINT OF SERVICE (P.O.S) FOR THE FIRE PROTECTION WATER SUPPLY AS DEFINED BY SECTION 633.021(18), F.S. WHERE PIPING IS DEDICATED SOLELY FOR FIRE PROTECTION USE IS SHOWN ON CIVIL PLANS.
   B. APPLICABLE NFPA STANDARD TO BE APPLIED IS NFPA-13R AND NFPA-14, 2010 EDITION.
   C. CLASSIFICATION OF HAZARD OCCUPANCY FOR EACH ROOM OR AREA AS DEFINED IN NFPA-13 IS AS FOLLOWS: LIVING UNITS AND RELATED AREAS ARE LIGHT HAZARD OCCUPANCY.
   D. DESIGN APPROACH IS A WET SYSTEM TYPE. DESIGN DENSITIES ARE 0.10 GPM/SQUARE FOOT OVER THE MOST HYDRAULICALLY DEMANDING AREA OR WITH A MAXIMUM OF 4 HEADS FLOWING FOR LIGHT HAZARD OCCUPANCIES. FIRE SPRINKLER DEVICE TEMPERATURE RATING SHALL BE NOMINAL 165 DEGREES F., ORDINARY TEMPERATURE RATING CLASSIFICATION, UNLESS NOTED OTHERWISE.
   E. CHARACTERISTICS OF EXISTING WATER SUPPLY TO BE USED ARE MAINS SHOWN ON CIVIL SITE UTILITY PLANS.
   F. FIRE HYDRANT FLOW TEST CONDUCTED OFF THE EXISTING PUBLIC WATER SUPPLY IS INTENDED TO BE USED FOR VERIFICATION OF SELECTED FINAL PIPE SIZES.

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| LOCATION: | HWY 192 & SUMMER BAY APTS. |
| STATIC PRESSURE: | 68 PSI |
| RESIDUAL PRESSURE: | 56 PSI |
| FLOW AT TEST: | 1130 |
| DATE: | 07/22/16 @ 8:50 A.M. |
| BY: | WAYNE AUTOMATIC SPRINKLER |

   G. VALVING AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER ARE PROVIDED BY SUPERVISORY VALVE TAMPER SWITCHES INSTALLED ON INTERIOR SHUT-OFF VALVES. WATER FLOW ALARM IS SIGNALED BY WATER FLOW SWITCH SHOWN ON FIRE SPRINKLER RISER DETAIL.
   H. FAMILIARITY WITH CONDITIONS IN THE LOCAL AREA INDICATE WATER SUPPLIES DO NOT RESULT IN MICROBIAL INDUCED CORROSION (MIC). THE FIRE SPRINKLER CONTRACTOR SHALL MAKE REASONABLE EFFORTS TO IDENTIFY WATER SUPPLIES THAT COULD LEAD TO MICROBIAL INDUCED CORROSION (MIC). ADDITIONAL EFFORTS MAY CONSIST OF DISCUSSIONS WITH THE LOCAL WATER PURVEYOR AND/OR FIRE OFFICIAL OR LABORATORY TESTING OF WATER SUPPLIES. WHEN CONDITIONS ARE FOUND THAT MAY RESULT IN MIC CONTAMINATION OF THE FIRE PROTECTION PIPING, CORRECTIVE MEASURES SHALL BE TAKEN.
   I. LOCATION OF CHECK BACKFLOW PREVENTER IS LOCATED IN THE RISER.
   J. QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL EXTERIOR YARD FIRE PROTECTION COMPONENTS SUCH AS FIRE HYDRANT ASSEMBLIES AND THEIR LOCATIONS ARE SHOWN ON CIVIL SITE UTILITY PLANS. QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL INTERIOR FIRE PROTECTION COMPONENTS ARE SHOWN ON FIRE PROTECTION DRAWING SHEET.
   K. FIRE PUMP TO SATISFY SYSTEM PRESSURE FOR APARTMENT BUILDINGS IS NOT ANTICIPATED TO BE REQUIRED.
   L. FIREWATER STORAGE TANK TO SATISFY SYSTEM VOLUME FOR APARTMENT BUILDINGS IS NOT ANTICIPATED TO BE REQUIRED.

## DESIGN HAZARD SCHEDULE

**APARTMENTS UNITS**
THE SPRINKLER SYSTEM SHALL BE 13R WET PIPE FOR THE RESIDENTIAL FLOORS, WITH THE REMOTE AREA USING ALL SPRINKLERS WITHIN A COMPARTMENT, UP TO A MAXIMUM OF 4 SPRINKLERS, THAT REQUIRE THE GREATEST HYDRAULIC DEMAND, TO MEET OR EXCEED THE REQUIREMENTS OF NFPA 13R, 2010 EDITION, AND LOCAL AUTHORITIES. SPRINKLERS SHALL HAVE A MINIMUM TEMPERATURE RATING OF 155° AND THE SPACING SHALL BE PER NFPA 13R.

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|---|---|
| **CLUBHOUSE, OFFICE SPACE** | |
| OCCUPANCY CLASSIFICATION: | LIGHT HAZARD, NFPA 13 |
| SYSTEM TYPE: | WET |
| DESIGN DENSITY: | 0.10 GPM/SQ. FT. |
| HYDRAULIC AREA OF APPLICATION: | MOST REMOTE 1,500 Sq.ft. |
| MAXIMUM HEAD COVERAGE: | 225 sq.ft. |
| TEMPERATURE RATING: | 165 DEGREES FAHRENHEIT U.N.O. |
| HOSE STREAM ALLOWANCE: | 100 GPM |
| DURATION: | 30 MINUTES |
| **STORAGE SPACE, MECHANICAL ROOMS** | |
| OCCUPANCY CLASSIFICATION: | ORDINARY HAZARD GRP-1, NFPA 13 |
| SYSTEM TYPE: | WET |
| DESIGN DENSITY: | 0.15 GPM/SQ. FT. |
| HYDRAULIC AREA OF APPLICATION: | MOST REMOTE 1,500 Sq.ft. |
| MAXIMUM HEAD COVERAGE: | 130 SQ. FT. |
| TEMPERATURE RATING: | 165 DEGREES FAHRENHEIT U.N.O. |
| HOSE STREAM ALLOWANCE: | 250 GPM |
| DURATION: | 60 TO 90 MINUTES |
| **RETAIL SPACE, RETAIL SHELL** | |
| OCCUPANCY CLASSIFICATION: | ORDINARY HAZARD GRP-2, NFPA 13 |
| SYSTEM TYPE: | WET |
| DESIGN DENSITY: | 0.20 GPM/SQ. FT. |
| HYDRAULIC AREA OF APPLICATION: | MOST REMOTE 1,500 Sq.ft. |
| MAXIMUM HEAD COVERAGE: | 130 SQ. FT. |
| TEMPERATURE RATING: | 165 DEGREES FAHRENHEIT U.N.O. |
| HOSE STREAM ALLOWANCE: | 250 GPM |
| DURATION: | 60 TO 90 MINUTES |

PERMIT REVIEW STAMP

### ISSUE HISTORY

| No. | Date | Description |
|---|---|---|
| 1 | 1/18/2018 | ISSUE FOR PERMIT |

### REVISION HISTORY

| No. | Date | Description |
|---|---|---|


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LAKE COUNTY, FL

| | |
|---|---|
| Drawn: | MJR/KCM |
| Checked: | BLS/AJB |
| Approval: | BLS/AJB |
| Date: | 11/10/2017 |
| Project #: | 5389 |

SYMBOL LEGEND & GENERAL NOTES - FIRE PROTECTION

**FP0.01**


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