

FP R22.rvt SOFTWARE: REVIT / MICROBIM FIRE

File Path: C:\Users\Admin\Dropbox\3D FIRE PROJECTS\H2o Fire Protection Inc\CURRENT PROJECTS\ROLT\ROLT

SPRINKLER HEADS CENTER OF TILE: 🖂 YES 🥅 NO

IMPORTANT!!

OWNER IS RESPONSIBLE FOR PROVIDING HEAT ABOVE 40°. ADEQUATE ENOUGH TO PREVENT SPRINKLER PIPE FROM FREEZING.

NOMINAL PIPE SIZE

TYPICAL HANGER DETAILS & SPACING TABLE

□ SCH. 10 □ SCH. 40 DYNAFLOW CPVC PER 2013 ED. NFPA 13 TABLE 9.2.2.1 PIPE LENGTHS SHOWN: PIPE END PREP:

LINES: DYNAFLOW OR EQUAL

🗆 DYNATHREAD 🗀 DYNAFLOW OR EQUA









**PIPE MATERIAL:** 

FIRE PUMP ROOM FACE OF BUILDING 1/2" = 1'-0"





4 STUB-IN FRONT SECTION 1/2" = 1'-0" 0 1'-6" 3'









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13

# Fire Pump Room / Housing per NFPA 20 (BY OTHERS)

- 4.14.1.1.4 Equipment Access. • 4.14.2.1 The location of and access to the fire pump room(s) shall be pre-planned with the fire department. protected by the fire pump.
- lire pump room. 4.14.3 Heat
- 4.14.4 Normal Lighting.
- Artificial light shall be provided in a pump room or pump house. 4.13.5 Emergency Lighting. • 4.14.5.1 Pump rooms shall be provided with emergency lighting.
- having jurisdiction.
- 4.14.5.3 Emergency lights shall not be connected to an engine-starting battery. 4.14.5.4 The emergency lighting shall be capable of maintaining the lighting level for a minimum of 2 hours 4.14.6 Ventilation. • Provision shall be made for ventilation of a pump room or pump house.
- 4.14.7\*Drainage.
- for Safeguarding.



SYMBOL LEGEND:

STANDARD SYMBOLS

- GLOBE UMC RISER

- BUTTERFLY VALVE

- CHECK VALVE

- OS&Y VALVE

BACKFLOW PREVENTER



# 5 FIRE PUMP PERSPECTIVE

# STANDARD SPRINKLER SYMBOLS

- RESIDENTIAL PENDENT - EXTENDED COVERAGE PENDENT
- UPRIGHT
- SEMI-RECESSED PENDENT

- CONCEALED PENDENT - DRY PENDENT
- HORIZONTAL SIDEWALL
- VERTICAL SIDEWALL

### FLOW TEST: STATIC PRESSURE: 68.2 P.S.I RESIDUAL PRESSURE: 45 P.S.I WATER FLOW: 1500 G.P.M. FLOW TEST WITH 10% REDUCTION: STATIC PRESSURE: 61.38 P.S.I RESIDUAL PRESSURE: 60.93 P.S.I

WATER FLOW: 1 ,500 G.P.M. STANDPIPE CALC:

### (THROUGH FDC) REQUIRED PRESSURE: 175 PSI TOTAL. DEMAND: 1,000 GPM A SIGN WILL BE PROVIDED AT FDC THAT READS: "MANUAL WET STANDPIPE 100 PSI TOP OUTLET PRESSURE FDC DEMAND 1,000 GPM AT 158 PS!"

# NOTE : ALL ELECTRICAL WIRING TO BE DONE BY OTHERS. (N.I.C.)





SENSING LINE DETAIL

## JOCKEY PUMP / SENSING LINE NOTES

TFXT

ECK VALVE OR UNION WITH 3/32" HOLE IN CLAPPER
PING
ND FITTINGS
E
E
ECK VALVE OR UNION WITH 3/32" HOLE IN CLAPPER
TH 1/2" PLUG
"H 1/2" PLUG
O JOCKEY PUMP CONTROLLER

• 4.14.2.1.1.1 Fire pump units supplying only local application fire protection systems shall be accessible by a path that is not subject to exposure from a fire in any hazard • 4.14.2.1.2 The portions of the building needed for the access, as required by 4.14.2.1.1, shall have a lire resistance rating not less than the lire resistance rating of the

• 4.13.3.1 An approved or listed source of heat shall be provided for maintaining the temperature of a pump room or pump house, where required, above 40°F (4°C). • 4.13.3.2 The requirements of 11.6.5 shall be followed for higher temperature requirements for internal combustion engines.

• 4.14.5.2 The intensity of illumination in the pump room(s) shall be 3.0 ft-candles (32.3 lux), unless otherwise specified by a requirement recognized by the authority

4.14.7.1 Floors shall be pitched for adequate drainage of escaping water away from critical equipment such as the pump, driver, controller, and so forth.
4.13.7.2 The pump room or pump house shall be provided with a floor drain that will discharge to a frost-free location. 4.14.8 Guards. Couplings and flexible connecting shafts shall be installed with a coupling guard in accordance with Section 7 of ANSI B11.19. Performance Requirements

PROJECT 7 LEVELS ABOVE GRADE 0 LEVELS BELOW GRADE # OF LEVELS: 7 120,838 SF 121,191 SF 87,704 SF 87,561 SF 82,361 SF 82,361 SF 81,633 SF 1ST FLOOR 2ND FLOOR 3RD FLOOR 4TH FLOOR 5TH FLOOR 6TH FLOOR 7TH FLOOR 663,649 SF TOTAL AREA: NFPA 13 2019 EDITION OCCUPANCY: PARKING GARAGE: S-2 OCCUPANCY: RESIDENTIAL: R-2 CONSTRUCTION TYPE: LEVELS 1/2 = 1-A/PT LEVELS 3-7= III-A GRAPHIC REPRESENTATION OF SCALE 5' 10' 18' SCALE: 1/8"= 1'-0

STAMP

### DRAWING INFORMATION SCALE: As indicated

DRAWN BY: Gerald W. Ebeling DATE: 4/27/2023 6:51:37 PM JOB NUMBER: 2315 STATE LICENSE NUMBER:15054 REVISION "DATE" DESCRIPTION 2.) 3.)

4.)

FIRE PUMP PLAN

SHEET

4

of 50