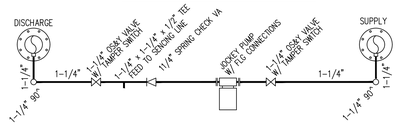
MATERIAL REQUIRED
10 - 1-1/4" BCI SCR 90°
1 - 1-1/4" X 1-1/4" X 1/2" BCI SCR TEE
1 - 1-1/4" SPRING LOADED CHECK VALVE SCR
2 - 1-1/4" OS&Y VALVE SCR
2 - TAMPER SWITCH OS&Y
63 - 1-1/4" BLACK SCH 40 STEEL PIPE



JOCKEY PUMP ARRANGEMENT DETAIL

N.T.S.

INSTALLATION MATERIAL FOR JOCKEY PUMP AND CONTROLLER

(1) - ½"X 20-0 BRASS PIPE
(6) - ½"X 2" BRASS NIPPLES
(1) - ½" BRASS 90 ELL
(2) - ½" BRASS RESTRICTION CHECK
(1) - ¼"X 3" BRASS NIPPLE
(2) - ½"X½"X¼" BRASS TEES
(2) - ½" BRASS PLUGS
(2) - ½" BRONZE GLOBE VALVES
(1) - ¼" BRONZE 3-WAY VALVE
(1) - 300# PRESSURE GAUGE
(1) - ¼" BRASS PLUG
(2) - ¼"X 6" BRASS NIPPLES
(1) - ¼" BRASS UNION
(1) - ½" BRASS TEE
(6) - ½" 90 SWEAT ELLS
(5) - ½"X½" MALE TO FEMALE SWEAT TO THREAD ADAPTORS
(1) - ½" SWEAT COUPLING
(1) - ¼" BRASS 90 ELL

(6) - 3/8" DROP-IN ANCHORS
(8) - 3/8" JUMBO WASHERS
(8) - 3/8" HEX NUTS
(4) - 3/8"X 10" M.S. RODS

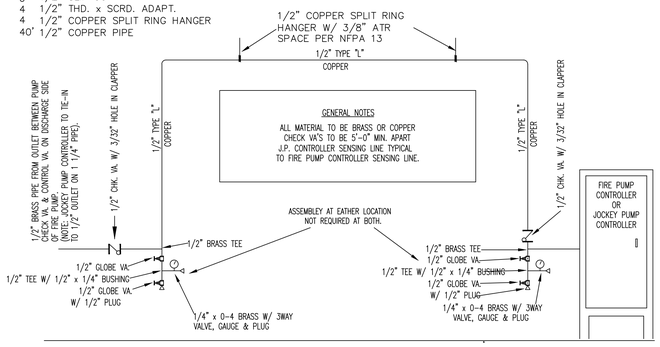
INTERSTITIAL SPACE NOTE:

ENTIRE INTERSTITIAL CAVITY TO BE FILLED
W/ NON-COMBUSTIBLE INSULATION BY G.C.

PER NFPA #13, SECTION 8.15.1.2.7
SPINKLER PROTECTION IS NOT REQUIRED

MATERIAL REQUIRED

2	1/2" GLOBE VALVE SCRD.
2	1/2" SWING CHECK VALVE SCRD.
2	1/4" SCRD. PLUG
2	1/2" SCRD. PLUG
3	1/4" x 1/2" SCRD. BUSHING
8	1/2" x 0-3 TT NIPPLE
4	1/2" SCRD. TEE
3	1/2" SCRD. 90
4	1/2" SLIP 90
6	1/2" THD. x SCRD. ADAPT.
4	1/2" COPPER SPLIT RING HANGER
40'	1/2" COPPER PIPE



FIRE PUMP & JOCKEY PUMP SENSING LINE SCHEMATIC

N.T.S.

HANGER SPACING CHART								
PIPE TYPE	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
BLACK STEEL SCH. 10	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
BLACK STEEL SCH. 40	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
CPVC	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"	10'-0"		

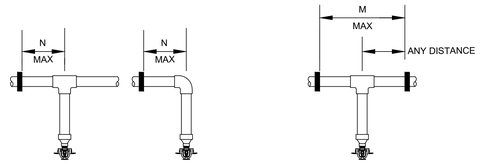
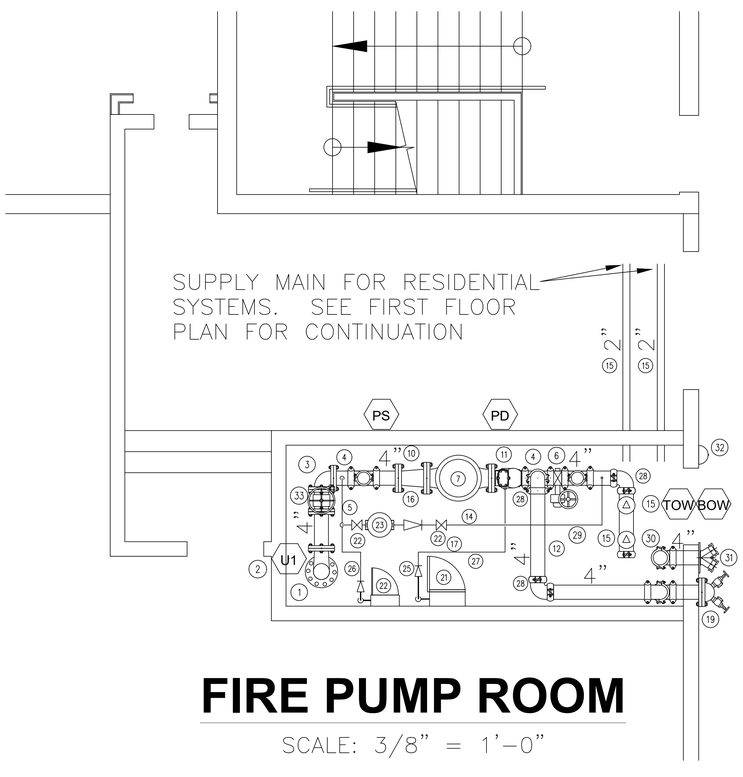


TABLE - R		
ONE POINT RESTRAINT		
NOMINAL PIPE SIZE	"N" LESS THAN 100 PSI	"N" GREATER THAN 100 PSI
3/4"	0'-9"	0'-6"
1"	1'-0"	0'-9"
1 1/4"	1'-4"	1'-0"
1 1/2" - 3"	2'-0"	1'-0"

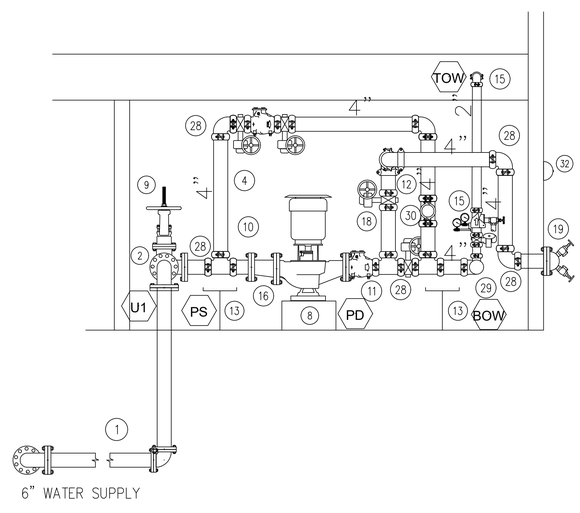
TABLE - S		
TWO POINT RESTRAINT		
NOMINAL PIPE SIZE	"M" LESS THAN 100 PSI	"M" GREATER THAN 100 PSI
3/4"	4'-0"	3'-0"
1"	5'-0"	4'-0"
1 1/4"	6'-0"	5'-0"
1 1/2" - 3"	7'-0"	7'-0"

BRANCH LINES SHALL BE BRACED AT A DISTANCE FROM A TEE OR ELBOW TO PREVENT LIFT OF SPRINKLERS AS SHOWN IN TABLES "R" OR "S".



FIRE PUMP ROOM

SCALE: 3/8" = 1'-0"



FIRE PUMP CROSS SECTION "A"

SCALE: 3/8" = 1'-0"

FIRE PUMP LEGEND

1. 6" SUPPLY FEED FROM CITY WATER
2. 6" x 4" FLANGED 90-DEGREE ELBOW
3. 4" FLANGED 90-DEGREE ELBOW
4. 4" BYPASS LINE PER N.F.P.A. 20
5. 1-1/4" SUPPLY FEED TO JOCKEY PUMP
6. 4" GROOVED BUTTERFLY VALVE W/ TAMPER SWITCH
7. VERTICAL IN LINE ELECTRIC FIRE PUMP 75 PSI @ 400 G.P.M., 30 H.P., 3 PHASE, 60 HERTZ, 208 VOLT, 3500 R.P.M.
8. PUMP PAD (BY OTHERS)
9. 4" FLANGED OS&Y W/ TAMPER SWITCH
10. 4" GROOVED FLANGE
11. 4" GROOVED CHECK VALVE W/ (2) \" TAPS
12. 4" FEED PIPING TO TEST HEADER
13. PIPE STAND ADJUSTABLE
14. 1-1/4" DISCHARGE FEED FROM JOCKEY PUMP
15. 2" WET RISER AND FEED TO BUILDING SPRINKLER SYSTEM
16. 5" X 4" FLANGED ECCENTRIC INCREASER
17. 1/2" FEED TO FIRE PUMP SENSING LINE
18. 4" GROOVED BUTTERFLY VALVE W/ TAMPER SWITCH (NORMALLY CLOSED) TO CONTROL TEST HEADER
19. TEST HEADER W/ (2) - 2\" HOSE VALVES, CAPS & CHAINS
20. FIRE PUMP CONTROLLER
21. JOCKEY PUMP CONTROLLER
22. 1-1/4" SCREWED OS&Y VALVE W/ TAMPER SWITCH
23. JOCKEY PUMP
24. 1-1/4" SCREWED CHECK VALVE
25. 1/2" CHECK VALVE W/ 3/32" HOLE IN CLAPPER IN SENSING LINE
26. JOCKEY PUMP SENSING LINE
27. FIRE PUMP SENSING LINE
28. 4" GROOVED SR 90-DEGREE ELBOW OR TEE AND RIGID COUPLING
29. 4" x 2" GROOVED REDUCING COUPLING
30. 4" TO FIRE DEPARTMENT CONNECTION
31. FIRE DEPARTMENT CONNECTION - CROKER #6410
32. 6" 120-V ELECTRIC BELL w/ WEATHERPROOF BOX
33. 4" FLANGED OS&Y GATE VALVE w/ TAMPER SWITCH

FIRE PUMP NOTES:
- PUMP ROOM TO BE HEATED AND LIGHTED PER NFPA 20
- FLOOR DRAIN TO BE LOCATED IN ROOM BY OTHERS
- FIRE PUMP TO BE INSTALLED AND TESTED PER NFPA 20 2013 EDITION ALL WIRING, ELECTRICAL WORK, FIRE ALARM, TO BE BY OTHERS
- AFTER FIRE PUMP HAS BEEN ALIGNED AND TESTED ENTIRE BASE SHALL BE COMPLETELY FILLED WITH NON-SHRINK GROUT BY OTHERS

NICET Level IV Automatic Sprinkler System Layout Certification #79357
Richard P. Kossler

1444 HOME STREET
Jacksonville, Florida

FIRE PUMP & GENERAL DETAILS

Sunstate Fire Protection
2220 COUNTY RD. 210 WEST
SUITE NO.108-139
JACKSONVILLE, FLORIDA 32259
TEL: 904-723-2207

REVISIONS & APPROVALS			
NO.	DATE	BY	DESCRIPTION
	10/30/18		ISSUE FOR PERMIT
	11/27/18		GENERAL REVISIONS

DWN.	DLWN.	DESCRIPTION
-	-	

AKA: CITY OF JACKSONVILLE	TOTAL NO. OF SYSTEMS: 2	TOTAL SPRINKLERS ON JOB: 1242	WET SYSTEM - PIPE WITH ATT

SCALE: AS NOTED
JOB NUMBER: 698
DATE: 10/30/2018

FP-2
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