

FEEDER AND BRANCH CIRCUIT SCHEDULE									
FEEDER/BRANCH CIRCUIT DESIGNATION	COPPER CONDUCTOR THHN, THWN, & THWN-2		CONDUIT SIZE AND QUANTITY [QUANTITY IS 1, UNLESS NOTED IN ()]						
	PHASE & NEUTRAL	EQUIPMENT GROUND	1P, 1N, 1G, 2P, 1G	2P, 1N, 1G, 3P, 1G	3P, 1N, 1G	3P, 2N, 1G	3P, 3N, 1G	3P, 1N, 2G	
F20	12	12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
F30	10	10	3/4"	3/4"	3/4"	1"	1"	1"	
F40-50	8	10	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"	
F60	6	10	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	
F70-F80	4	8	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"	
F90-F100	3	8	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	1 1/2"	
F110	2	6	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"	
F125	1	6	1 1/2"	2"	2"	2"	2 1/2"	2"	
F150	1/0	6	1 1/2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	
F175	2/0	6	2"	2"	2 1/2"	2 1/2"	3"	2 1/2"	
F200	3/0	6	2"	2 1/2"	2 1/2"	3"	3"	3"	
F225	4/0	4	2"	2 1/2"	3"	3"	3"	3"	
F250	250	4	2 1/2"	3"	3"	3 1/2"	3 1/2"	3-1/2"	
F300	350	4	3"	3"	3 1/2"	3 1/2"	4"	3 1/2"	
F350	2/0	3	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 2 1/2"	
F400	3/0	3	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 2 1/2"	
F450	4/0	2	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"	
F500	250	2	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"	(2) 3 1/2"	(2) 3 1/2"	
F600	350	1	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"	(2) 3 1/2"	(2) 3"	
F800	300	1/0	(3) 2 1/2"	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 3 1/2"	
F900	350	2/0	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 4"	(3) 3 1/2"	
F1000	400	2/0	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 4"	(3) 4"	
F1200	350	3/0	(4) 3"	(4) 3"	(4) 3 1/2"	(4) 3 1/2"	(4) 4"	(4) 4"	
F1600	400	4/0	(5) 3"	(5) 3"	(5) 3 1/2"	(5) 3 1/2"	(5) 4"	(5) 4"	
F2000	400	250	(6) 3"	(6) 3"	(6) 3 1/2"	(6) 3 1/2"	(6) 4"	(6) 4"	
F2500	500	350	(7) 3"	(7) 3 1/2"	(7) 4"	(7) 4"	(7) 4"	(7) 4"	
F3000	500	400	(8) 3"	(8) 3 1/2"	(8) 4"	(8) 4"	(8) 4"	(8) 4"	
F3500	500	500	(10) 3"	(10) 3 1/2"	(10) 4"	(10) 4"	(10) 4"	(10) 4"	

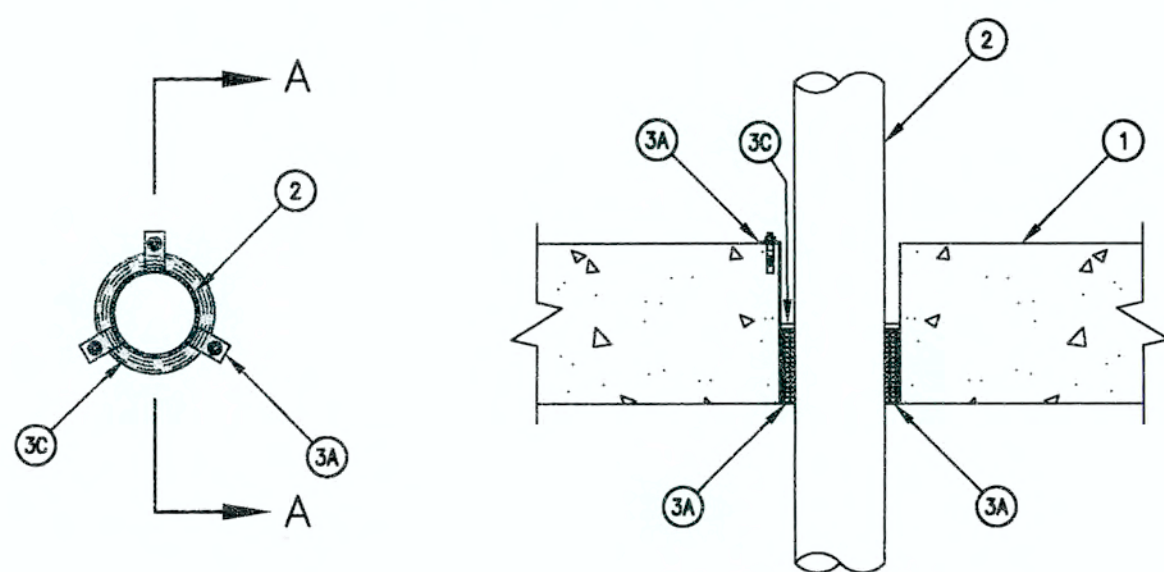
NOTES:
1. DO NOT COMBINE NEUTRAL CONDUCTORS FOR ALL CIRCUITS. USE SEPARATE INDEPENDENT NEUTRAL CONDUCTORS FOR ALL CIRCUITS.

VOLTAGE DROP FOR 1φ, 20A BRANCH CIRCUITS				
FEEDER SIZE TO USE	DISTANCE ALLOWED			
	120V	208V	277V	480V
F20	0 - 45 FEET	0 - 79 FEET	0 - 105 FEET	0 - 182 FEET
F30	45 - 72 FEET	79 - 126 FEET	105 - 168 FEET	182 - 290 FEET
F40-50	72 - 115 FEET	126 - 201 FEET	168 - 267 FEET	290 - 463 FEET
F60	115 - 183 FEET	201 - 318 FEET	267 - 423 FEET	463 - 733 FEET
F70-80	183 - 292 FEET	318 - 506 FEET	423 - 675 FEET	733 - 1169 FEET
F90-100	292 - 367 FEET	506 - 637 FEET	675 - 848 FEET	1169 - 1469 FEET
F110	367 - 464 FEET	637 - 804 FEET	848 - 1071 FEET	1469 - 1856 FEET
F125	464 - 584 FEET	804 - 1013 FEET	1071 - 1349 FEET	1856 - 2338 FEET
F150	584 - 738 FEET	1013 - 1279 FEET	1349 - 1703 FEET	2338 - 2951 FEET

- NOTES:
- 20 A BRANCH CIRCUITS SHALL BE SIZED FOR VOLTAGE DROP. WIRE SIZES ARE NOT INDICATED ON THE DRAWINGS TO COMPENSATE FOR VOLTAGE DROP FOR THESE CIRCUITS. CONTRACTOR SHALL UTILIZE WIRE SIZE SHOWN ABOVE FOR DISTANCES LISTED ABOVE.
 - VOLTAGE DROP WIRE SIZES WILL BE STRICTLY ENFORCED. CONTRACTOR SHALL SUBMIT A LIST OF CIRCUITS THAT WILL EXCEED THE DISTANCES ALLOWED AND INDICATE WIRE SIZE TO BE USED PRIOR TO ANY WIRE BEING INSTALLED.

SYSTEM NO. C-AJ-2002

May 18, 2005
F Rating - 2 Hr
T Ratings - 0 and 2 Hr
L Rating at Ambient - 7 CFM/sq ft
L Rating at 400 F - less than 1 CFM/sq ft (See Item 3C)
W Rating - Class 1 (See Item 3)



SECTION A-A

1. FLOOR OR WALL ASSEMBLY - MIN 2-1/2 IN. (64 MM) THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF CIRCULAR OPENING IS 6-1/2 IN. (165 MM).

SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. NONMETALLIC PIPE OR CONDUIT - NOM 4 IN. (102 MM) DIAM (OR SMALLER) SCHEDULE 40 SOLID CORE OR CELLULAR CORE, POLYVINYL CHLORIDE (PVC) PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS OR RIGID NONMETALLIC CONDUIT++ OR SDR 13.5 CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS. A MAX OF ONE PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. EXCEPT AS NOTED IN ITEM B, THE PIPE OR CONDUIT SHALL BE CENTERED IN THE THROUGH OPENING. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

SEE RIGID NONMETALLIC CONDUIT (DZKT) CATEGORY IN THE UL ELECTRICAL CONSTRUCTION MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS.

3. FIRESTOP SYSTEM - THE HOURLY T RATINGS FOR THE FIRESTOP SYSTEM ARE DEPENDENT UPON THE FIRESTOP ORIENTATION (WALL OR FLOOR), THE SIZE OF THE NONMETALLIC PIPE OR CONDUIT, AND THE FLOOR THICKNESS, AS TABULATED BELOW:

ORIENTATION	NOMINAL PIPE DIAMETER In. (mm)	ANNULAR SPACE In. (mm)	F RATING HR	T RATING HR
F(b)	1/2-2 (13-51 mm)	1/4-1 (6-25 mm)	2	0
F(b)	2-1/2, 3 (64, 76 mm)	1/2-1 (13-25 mm)	2	0
W,F	1/2-2 (13-51 mm)	1/4-1 (6-25 mm)	2	2
W,F	2-1/2, 3 (64, 76 mm)	1/2-1 (13-25 mm)	2	2
W,F	3-1/2, 4 (89, 102 mm)	3/4-1 (19-25 mm)	2	2

(a) W = WALL, F = FLOOR
(b) MIN CONCRETE FLOOR THICKNESS IS 2-1/2 IN. (64 MM).
THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:

A. STEEL SUPPORT CLIPS - NOM 1 IN. (25 MM) WIDE BY NOM 0.019 IN. (0.5 MM) THICK (28 GAUGE) GALV STEEL STRIPS FIELD-FORMED INTO "Z"-SHAPE WITH HEIGHT OF Z-SHAPE EQUAL TO THE FLOOR THICKNESS AND WITH WIDTH OF BOTTOM (AS INSTALLED) LEG OF SUFFICIENT LENGTH TO SPAN ANNULAR SPACE. TOP (AS INSTALLED) LEG OF Z-SHAPE TO BE MIN 2 IN. (51 MM) LONG AND MAY OR MAY NOT BE SECURED TO TOP SURFACE OF FLOOR WITH MASONRY ANCHORS. AS AN ALTERNATE TO THE Z-SHAPE CLIPS, THE GALV STEEL STRIPS MAY BE FORMED INTO "L"-SHAPE WITH HEIGHT EQUAL TO 2 IN. (51 MM) AND WITH BOTTOM (AS INSTALLED) LEG OF SUFFICIENT LENGTH TO SPAN ANNULAR SPACE. CLIPS SECURED TO OUTERMOST WRAP STRIP LAYER WITH STEEL WIRE THE PRIOR TO INSERTION IN THROUGH OPENING. MIN OF THREE STEEL SUPPORT CLIPS TO BE USED, SYMMETRICALLY LOCATED, WITH BOTTOM LEG OF CLIPS FLUSH WITH BOTTOM PLANE OF FLOOR. WHEN ANNULAR SPACE AROUND NOM 1/2 IN. TO 2 IN. (13 MM TO 51 MM) DIAM PIPE IN FLOOR ASSEMBLY IS 1/4 IN. TO 3/8 IN. (6 MM TO 10 MM), STEEL SUPPORT CLIPS ARE NOT REQUIRED.

B. FILL, VOID OR CAVITY MATERIALS* - WRAP STRIP - NOM 1/4 IN. (6 MM) THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2 IN. (51 MM) WIDE STRIPS. NOM 2 IN. (51 MM) WIDE STRIPS TIGHTLY WRAPPED AROUND NONMETALLIC PIPE (FOIL SIDE EXPOSED) TO FILL ANNULAR SPACE AROUND PIPE. A MIN OF ONE LAYER OF WRAP STRIP IS REQUIRED FOR NOM 1/2 IN. TO 2 IN. (13 MM TO 51 MM) DIAM PIPES. A MIN OF TWO LAYERS OF WRAP STRIP IS REQUIRED FOR NOM 2-1/2 IN. AND 3 IN. (64 MM AND 76 MM) DIAM PIPES. A MIN OF THREE LAYERS OF WRAP STRIP IS REQUIRED FOR NOM 3-1/2 IN. AND 4 IN. (89 MM AND 102 MM) DIAM PIPES. EACH LAYER OF WRAP STRIP TO BE INSTALLED WITH BUTTED SEAM WITH BUTTED SEAMS IN SUCCESSIVE LAYERS STAGGERED. WRAP STRIP LAYERS SECURELY BOUND WITH STEEL WIRE OR ALUMINUM FOIL TAPE AND SLID INTO THROUGH OPENING SUCH THAT THE BOTTOM EDGES ARE FLUSH WITH THE BOTTOM PLANE OF THE FLOOR AND ARE RESTING ON THE STEEL SUPPORT CLIP LEGS. WHEN NOM 2 IN. TO 4 IN. (51 MM TO 102 MM) DIAM PVC PIPE IS USED IN MIN 4-1/2 IN. (114 MM) THICK CONCRETE FLOOR, THE PIPE MAY BE INSTALLED ECCENTRICALLY IN THE THROUGH OPENING (MIN ZERO CLEARANCE AT POINT CONTACT LOCATION) PROVIDED THAT (1) THE INSIDE DIAM OF THE THROUGH OPENING IS 1.3 TO 1.5 TIMES LARGER THAN THE OUTSIDE DIAM OF THE PIPE, (2) THE ANNULAR SPACE BETWEEN THE PIPE AND THE SIDES OF THE OPENING AT THE BOTTOM 2 IN. (51 MM) OF THE THROUGH OPENING IS COMPLETELY FILLED WITH WRAP STRIP LAYERS INSTALLED FOLLOWING THE CONTOUR OF THE PIPE AND (3) THE BOTTOM EDGES OF THE WRAP STRIP LAYERS ARE RELIABLY SUPPORTED BY "Z"-SHAPED STEEL SUPPORT CLIPS ANCHORED TO THE TOP SURFACE OF THE CONCRETE FLOOR. IN WALL ASSEMBLIES, THE WRAP STRIP LAYERS ON THE NONMETALLIC PIPE ARE TO BE INSTALLED IN THE SAME MANNER USED FOR FLOOR ASSEMBLIES, BUT SHALL BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF THE WALL WITH THE EXPOSED EDGES OF THE WRAP STRIP LAYERS FLUSH WITH THE WALL SURFACES.

C. FILL, VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - MIN 1/4 IN. (6 MM) DIAM CONTINUOUS BEAD APPLIED TO INSIDE WALLS OF THROUGH OPENING PRIOR TO INSTALLATION OF STEEL SUPPORT CLIPS AND/OR WRAP STRIP. CAULK BEAD TO BE RECESSED 1 IN. (25 MM) FROM THE BOTTOM PLANE OR FLOOR. IN WALL ASSEMBLIES, CAULK BEAD TO BE RECESSED 1 IN. (25 MM) FROM WALL SURFACE ON BOTH SIDES OF WALL. IN FLOOR ASSEMBLIES, A NOM 1/2 IN. (13 MM) THICK COATING OF CAULK IS TO BE APPLIED TO THE TOP EDGES OF THE WRAP STRIP LAYERS AND TO FILL ALL GAPS AT THE WRAP STRIP/ CONCRETE INTERFACE. IN WALL ASSEMBLIES, THE EXPOSED EDGES OF THE WRAP STRIP LAYERS AND ALL GAPS AT THE WRAP STRIP/CONCRETE INTERFACE ON BOTH SIDES OF THE WALL TO BE COATED WITH THIN LAYER OF CAULK.

(NOTE: W RATING APPLIES ONLY WHEN FB-3000 WT SEALANT IS USED. CP 25WB+ NOT SUITABLE FOR USE WITH CPVC PIPES.)

*BEARING THE UL CLASSIFICATION MARKING
++BEARING UL LISTING MARK

1
E2-8.3

CONCRETE WALL OR FLOOR PENETRATION DETAIL

NOT TO SCALE

MOTOR CONTROL CENTER SCHEDULE									
MCC I.D.	MCC	VOLTAGE	208/480	PHASE/WIRE	3φ/4 WIRE	MAIN	400A	IC RATING	VERIFY KAIC
MOUNT	SURFACE	GROUND BUS	YES	LOCATION	PENTHOUSE	REMARKS	----		
TAG	EQUIPMENT SERVED	HP	FLA	PHS	DISCONNECT SWITCH TYPE FUSE/C.B.	STARTER AMP FUSE/TRIP	REMO CAPACITOR KVAR	REMARKS	
-	HW PUMP #1	5	7.6	3	---	---	---	EXISTING - VERIFY ALL INFORMATION	
-	HW PUMP #2	5	7.6	3	---	---	---	EXISTING - VERIFY ALL INFORMATION	
2HDP	PANEL "2HDP"			3	CB	300		EXISTING 300A BREAKER FOR 2ND FL	
OAHU-N	OAHU-N (NORTH OUTSIDE AIR HANDLER)			3	CB	15		INSTALL CB IN AVAILABLE SPACE	
OAHU-S	OAHU-S (SOUTH OUTSIDE AIR HANDLER)			3	CB	15		INSTALL CB IN AVAILABLE SPACE	

MCC LOAD ANALYSIS

EXISTING LOAD -
5HP HOT WATER PUMP - 7.6A @480V 3φ (PER NEC)
5HP HOT WATER PUMP - 7.6A @480V 3φ (PER NEC)
PANEL 2HDP - 164.58A (PER PANELBOARD SCHEDULE FROM 2ND FL REMODEL)

NEW LOAD -
3HP OAHU-N - 4.8A @480V 3φ (PER NEC)
3HP OAHU-S - 4.8A @480V 3φ (PER NEC)

TOTAL LOAD - 189.38A

PANELBOARD SCHEDULE		DESIGNATION: LOCATION: VOLTAGE: PHASE:		GL2A ROOM 223 208Y/120 3 PHASE, 4 WIRE		MAINS: BUS SIZE: PANEL MOUNTING: ALL BREAKERS:		100 A MB 225 AMP SURFACE 10,000 AIC	
CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	POLE	CONNECTED LOAD A B C	BREAKER AMPS	POLE	LOAD CODE
1	Recept - I.T. Rm 217	R	0.80	20	1	1.88	20	1	1.06 L
3	Recept - I.T. Rm 217	R	0.80	20	1	1.61	20	1	0.81 L
5	Recept - I.T. Rm 217	R	0.80	20	1	1.85	20	1	0.85 L
7	Recept - I.T. Rm 217	R	0.80	20	1	1.94	20	1	1.14 L
9	Recept - I.T. Rm 217	R	0.80	20	1	1.92	20	1	1.12 L
11	Recept - I.T. Rm 217	R	0.80	20	1	1.91	20	1	1.11 L
13	Recept - I.T. Rm 217	R	0.80	20	1	1.65	20	1	0.85 L
15	Recept - P.M. Rm 243	R	0.80	20	1	1.30	20	1	0.50 P
17	Recept - P.M. Rm 243	R	0.80	20	1	1.30	20	1	0.50 P
19	Spare			20	1	0.50	20	1	0.50 P
21	Temp. Control Center (PENT.)	P	0.50	20	1	1.00	20	1	0.50 P
23	Spare			20	1	0.50	20	1	0.50 P
25						0.00			
27						0.00			
29						0.00			
31						0.00			
33						0.00			
35						0.00			
37						0.00			
39						0.00			
41						0.00			
TOTAL CONNECTED AMPS:			49.53 AMPS			5.94 5.83 5.35 KVA			
TOTAL CONNECTED LOAD:			17.13 KVA			49.53 48.88 44.82 AMPS			
TOTAL DEMAND AMPS:			37.00 AMPS						
TOTAL DEMAND LOAD:			12.84 KVA						
LOAD CODES:									
L- LIGHTING									
R- RECEPTACLES									
M- MECHANICAL/EQUIPMENT									
C- COMPUTER									
K- KITCHEN									
P- PANELBOARD									

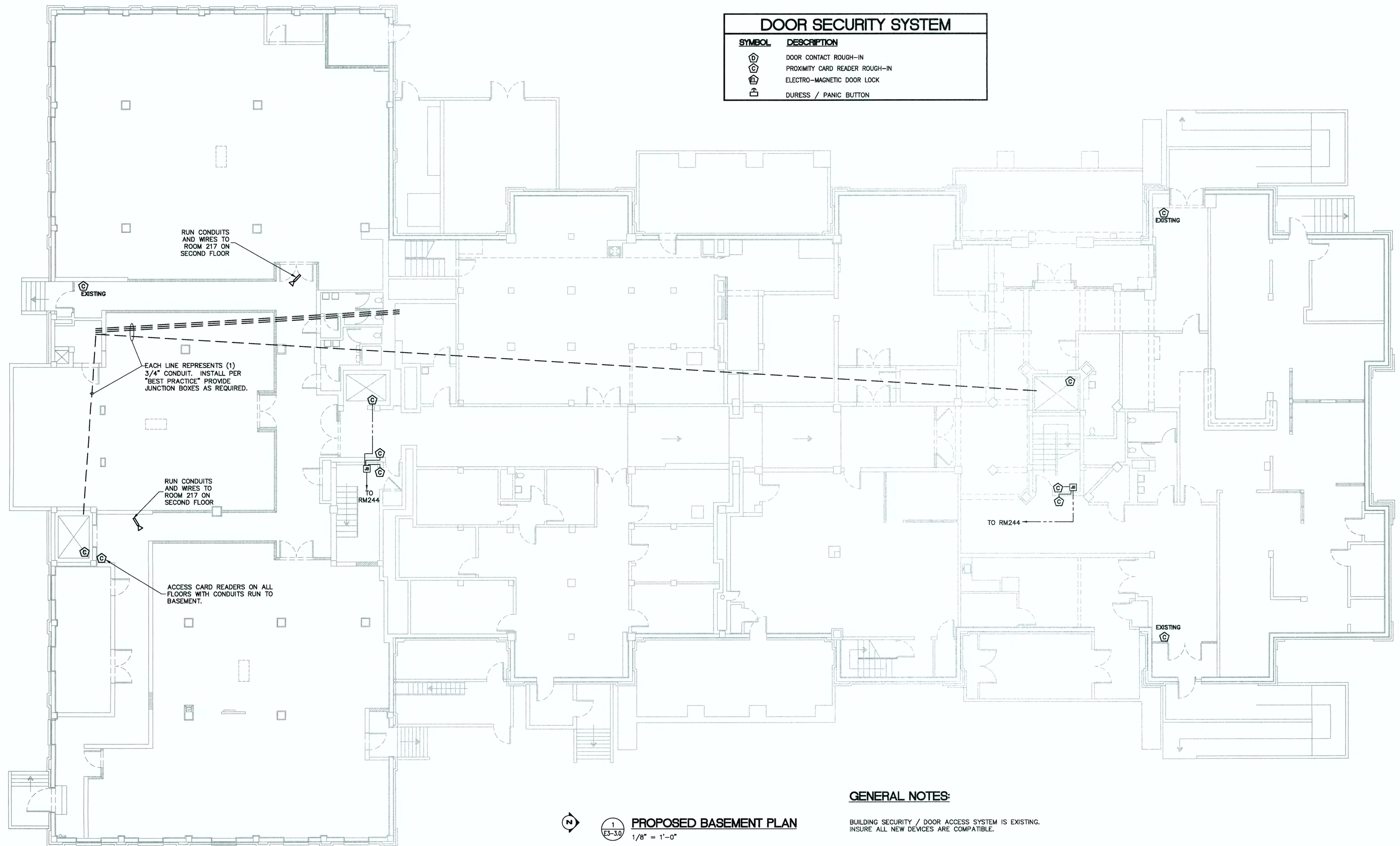
ATP ENGINEERING SOUTH, FL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485

JERRY N. ZOLLER
ARCHITECT / PLANNER
P.A.

PROPOSED SECOND FLOOR INTERIOR OFFICE REMODEL FOR:
MANATEE COUNTY HISTORIC COURTHOUSE
Second Floor & Outside Air Project
11145 MANATEE AVENUE WEST
BRADENTON FLORIDA

JOB NO. 8434 M
DATE JAN 15, 2012
DRAWN CJO
CHECKED JJO
REVISIONS
2 - MARCH 8, 2013

E2-8.3



DOOR SECURITY SYSTEM	
SYMBOL	DESCRIPTION
	DOOR CONTACT ROUGH-IN
	PROXIMITY CARD READER ROUGH-IN
	ELECTRO-MAGNETIC DOOR LOCK
	DURESS / PANIC BUTTON

GENERAL NOTES:

BUILDING SECURITY / DOOR ACCESS SYSTEM IS EXISTING.
INSURE ALL NEW DEVICES ARE COMPATIBLE.



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PROPOSED BASEMENT PLAN

1/8" = 1'-0"



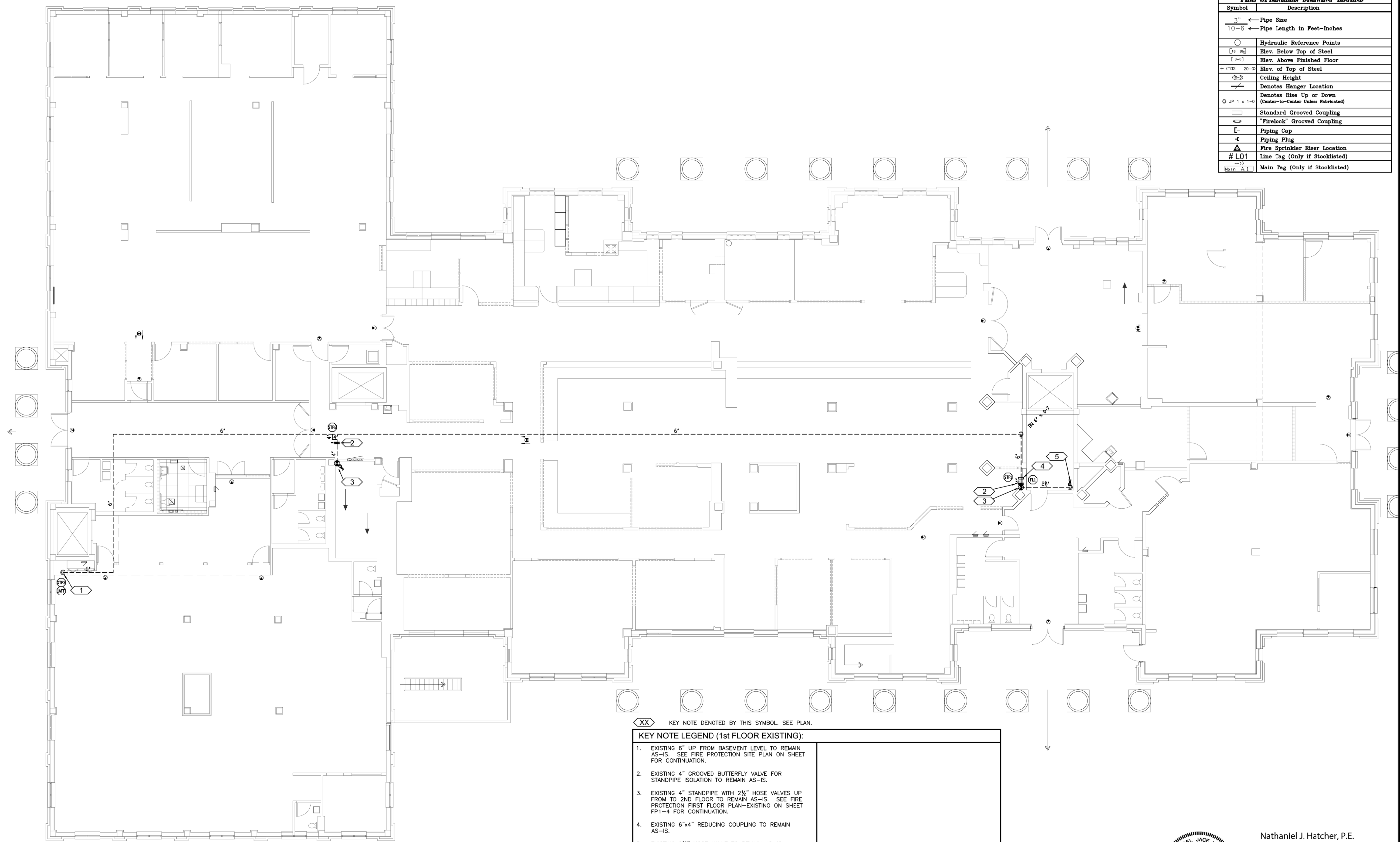
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485

JERRY N. ZOLLER AIA
ARCHITECT / PLANNER P.A.
814 14th STREET W. BRADENTON, FL 34205 TEL: (941) 748-4465

PROPOSED SECOND FLOOR INTERIOR OFFICE REMODEL FOR:
MANATEE COUNTY HISTORIC COURTHOUSE
Second Floor & Outside Air Project
1115 MANATEE AVENUE WEST
BRADENTON FLORIDA

JOB NO. 8434
DATE JAN 5, 2012
DRAWN CHD
CHECKED CHD
REVISIONS
2 - MARCH 8, 2013

E3-3.0



FIRE SPRINKLER DRAWING LEGEND	
Symbol	Description
3"	Pipe Size
10'-6"	Pipe Length in Feet-Inches
○	Hydraulic Reference Points
[18'-0"]	Elev. Below Top of Steel
[8'-0"]	Elev. Above Finished Floor
+ (TDS 20'-0")	Elev. of Top of Steel
⊖	Ceiling Height
—	Denotes Hanger Location
—	Denotes Rise Up or Down (Center-to-Center Unless Fabricated)
○ UP 1 x 1-0	
—	Standard Grooved Coupling
—	"Firelock" Grooved Coupling
—	Piping Cap
—	Piping Plug
△	Fire Sprinkler Riser Location
# L01	Line Tag (Only if Stocklisted)
—	Main Tag (Only if Stocklisted)

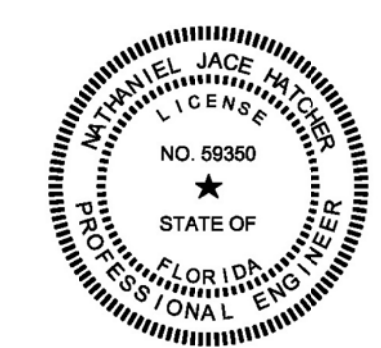
XX KEY NOTE DENOTED BY THIS SYMBOL. SEE PLAN.

KEY NOTE LEGEND (1st FLOOR EXISTING):

- EXISTING 6" UP FROM BASEMENT LEVEL TO REMAIN AS-IS. SEE FIRE PROTECTION SITE PLAN ON SHEET FOR CONTINUATION.
- EXISTING 4" GROOVED BUTTERFLY VALVE FOR STANDPIPE ISOLATION TO REMAIN AS-IS.
- EXISTING 4" STANDPIPE WITH 2 1/2" HOSE VALVES UP FROM TO 2ND FLOOR TO REMAIN AS-IS. SEE FIRE PROTECTION FIRST FLOOR PLAN-EXISTING ON SHEET FP1-4 FOR CONTINUATION.
- EXISTING 6"x4" REDUCING COUPLING TO REMAIN AS-IS.
- EXISTING 2 1/2" HOSE VALVE TO REMAIN AS-IS. TYPICAL THROUGHOUT PROJECT.

FIRE SPRINKLER FIRST FLOOR PLAN — EXISTING

SCALE: 1/4"=1'-0"



Nathaniel J. Hatcher, P.E.
cn=Nathaniel J. Hatcher, P.E.,
o=Hatcher Engineering, Inc.,
ou,
email=njh@hatcherengineeri
ng.com, c=US
2013.03.08 11:14:30 -05'00'

DRAWING PREPARED BY:



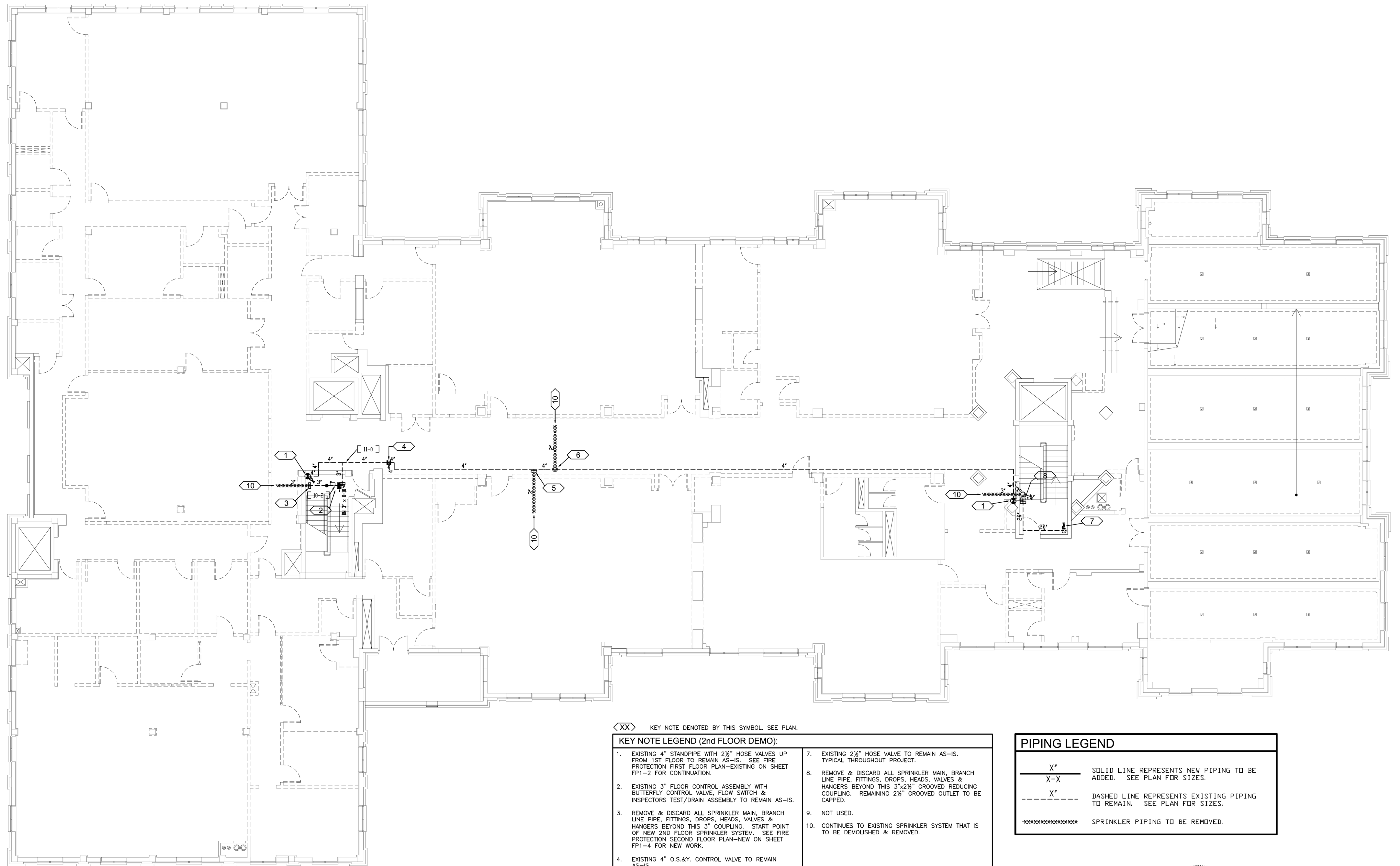
Florida Cert. of Authorization #: 28929
2108 W. Risk Street
Plant City, FL 33563
Tel: (813) 752-6900
Fax: (813) 752-6911
www.hatcherengineering.com
e-mail: INFO@hatcherengineering.com

Plot:
03/08/13
NATHANIEL J. HATCHER #59350
ENGINEER OF RECORD

PROPOSED SECOND FLOOR INTERIOR OFFICE REMODEL FOR:
MANATEE COUNTY HISTORIC COURTHOUSE
Second Floor & Outside Air Project
1115 MANATEE AVENUE WEST
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JERRY N. ZOLLER AIA
ARCHITECT / PLANNER P.A.
914 14th STREET W. BRADENTON, FL 34205 TEL: (941) 748-4465

JOB NO	8434 M
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CHECKED	
REVISIONS	
REV2	03/08/2013



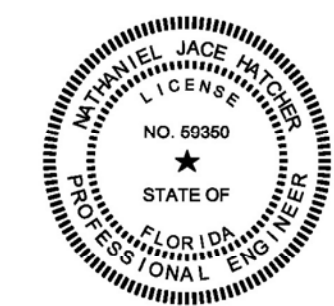
XX KEY NOTE DENOTED BY THIS SYMBOL. SEE PLAN.

KEY NOTE LEGEND (2nd FLOOR DEMO):

- EXISTING 4" STANDPIPE WITH 2 1/2" HOSE VALVES UP FROM 1ST FLOOR TO REMAIN AS-IS. SEE FIRE PROTECTION FIRST FLOOR PLAN-EXISTING ON SHEET FP1-2 FOR CONTINUATION.
- EXISTING 3" FLOOR CONTROL ASSEMBLY WITH BUTTERFLY CONTROL VALVE, FLOW SWITCH & INSPECTORS TEST/DRAIN ASSEMBLY TO REMAIN AS-IS.
- REMOVE & DISCARD ALL SPRINKLER MAIN, BRANCH LINE PIPE, FITTINGS, DROPS, HEADS, VALVES & HANGERS BEYOND THIS 3" COUPLING. START POINT OF NEW 2ND FLOOR SPRINKLER SYSTEM. SEE FIRE PROTECTION SECOND FLOOR PLAN-NEW ON SHEET FP1-4 FOR NEW WORK.
- EXISTING 4" O.S.&Y. CONTROL VALVE TO REMAIN AS-IS.
- REMOVE & DISCARD ALL SPRINKLER MAIN, BRANCH LINE PIPE, FITTINGS, DROPS, HEADS, VALVE & HANGERS BEYOND THIS 3" COUPLING. REMAINING 3" GROOVED OUTLET TO BE CAPPED.
- REMOVE & DISCARD ALL SPRINKLER MAIN, BRANCH LINE PIPE, FITTINGS, DROPS, HEADS, VALVES & HANGERS BEYOND THIS EXISTING 4"x2" MECHANICAL TEE GROOVED OUTLET. REMAINING 2" GROOVED OUTLET TO BE CAPPED.
- EXISTING 2 1/2" HOSE VALVE TO REMAIN AS-IS. TYPICAL THROUGHOUT PROJECT.
- REMOVE & DISCARD ALL SPRINKLER MAIN, BRANCH LINE PIPE, FITTINGS, DROPS, HEADS, VALVES & HANGERS BEYOND THIS 3"x2 1/2" GROOVED REDUCING COUPLING. REMAINING 2 1/2" GROOVED OUTLET TO BE CAPPED.
- NOT USED.
- CONTINUES TO EXISTING SPRINKLER SYSTEM THAT IS TO BE DEMOLISHED & REMOVED.

PIPING LEGEND

- X" SOLID LINE REPRESENTS NEW PIPING TO BE ADDED. SEE PLAN FOR SIZES.
- X-X DASHED LINE REPRESENTS EXISTING PIPING TO REMAIN. SEE PLAN FOR SIZES.
- ***** SPRINKLER PIPING TO BE REMOVED.



Nathaniel J. Hatcher, P.E.
cn=Nathaniel J. Hatcher, P.E.,
o=Hatcher Engineering, Inc., ou,
email=njh@hatcherengineering.
com, c=US
2013.03.08 11:15:06 -05'00'

DRAWING PREPARED BY:

HATCHER ENGINEERING INC.
FIRE PROTECTION ENGINEERING ■ LIFE SAFETY

Florida Cert. of Authorization #: 28929

2108 W. Risk Street
Plant City, FL 33563
Tel: (813) 752-6900
Fax: (813) 752-6911

www.hatcherengineering.com
e-mail: INFO@hatcherengineering.com

2108 W. Risk Street
Plant City, FL 33563
Tel: (813) 752-6900
Fax: (813) 752-6911

PLT:
03/08/13

NATHANIEL J. HATCHER #60360
ENGINEER OF RECORD

FIRE SPRINKLER SECOND FLOOR PLAN — EXISTING/DEMO

SCALE: 1/4"=1'-0"



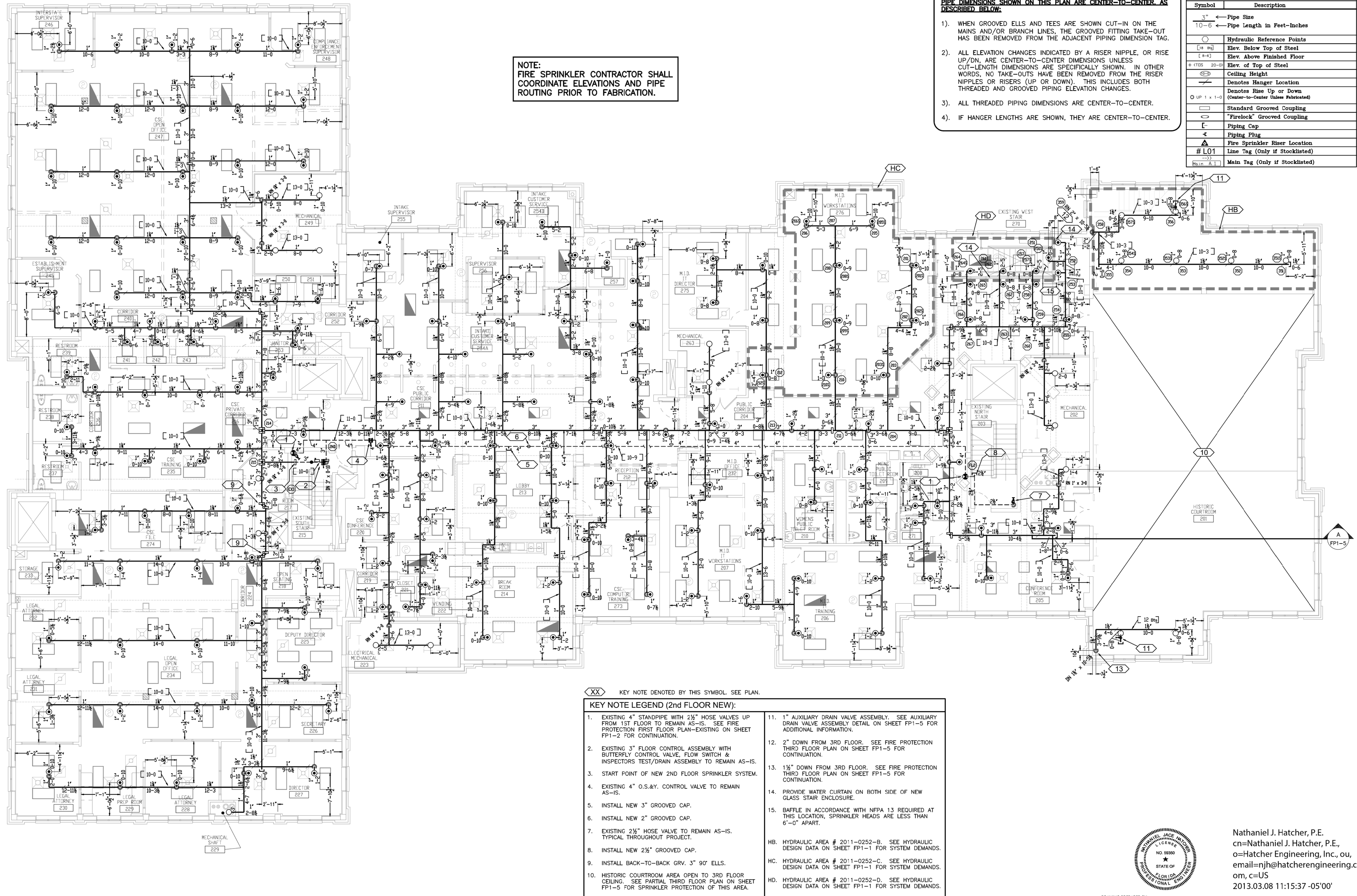
JERRY N. ZOLLER AIA
ARCHITECT / PLANNER P.A.
914 14th STREET W. BRADENTON, FL 34205 TEL: (941) 748-4465

PROPOSED SECOND FLOOR INTERIOR OFFICE REMODEL FOR:
MANATEE COUNTY HISTORIC COURTHOUSE
Second Floor & Outside Air Project
BRADENTON FLORIDA
1115 MANATEE AVENUE WEST

JOB NO 8434 M
DATE JAN 15, 2012
DRAWN
CHECKED
REVISIONS

REV2 03/08/2013

FP1-3



NOTE:
FIRE SPRINKLER CONTRACTOR SHALL
COORDINATE ELEVATIONS AND PIPE
ROUTING PRIOR TO FABRICATION.

- PIPE DIMENSIONS SHOWN ON THIS PLAN ARE CENTER-TO-CENTER, AS DESCRIBED BELOW:**
1. WHEN GROOVED ELLS AND TEES ARE SHOWN CUT-IN ON THE MAINS AND/OR BRANCH LINES, THE GROOVED FITTING TAKE-OUT HAS BEEN REMOVED FROM THE ADJACENT PIPING DIMENSION TAG.
 2. ALL ELEVATION CHANGES INDICATED BY A RISER NIPPLE, OR RISE UP/DN, ARE CENTER-TO-CENTER DIMENSIONS UNLESS CUT-LENGTH DIMENSIONS ARE SPECIFICALLY SHOWN. IN OTHER WORDS, NO TAKE-OUTS HAVE BEEN REMOVED FROM THE RISER NIPPLES OR RISERS (UP OR DOWN). THIS INCLUDES BOTH THREADED AND GROOVED PIPING ELEVATION CHANGES.
 3. ALL THREADED PIPING DIMENSIONS ARE CENTER-TO-CENTER.
 4. IF HANGER LENGTHS ARE SHOWN, THEY ARE CENTER-TO-CENTER.

FIRE SPRINKLER DRAWING LEGEND	
Symbol	Description
3"	Pipe Size
10'-0"	Pipe Length in Feet-Inches
○	Hydraulic Reference Points
16'	Elev. Below Top of Steel
8'-0"	Elev. Above Finished Floor
+ CLOS. 20'-0"	Elev. of Top of Steel
○	Ceiling Height
○	Denotes Hanger Location
○ UP 1 x 1-0	Denotes Rise Up or Down (Center-to-Center Unless Fabricated)
○	Standard Grooved Coupling
○	"Firelock" Grooved Coupling
○	Piping Cap
○	Piping Plug
○	Fire Sprinkler Riser Location
# L01	Line Tag (Only if Stocklisted)
○	Main Tag (Only if Stocklisted)

KEY NOTE DENOTED BY THIS SYMBOL. SEE PLAN.

KEY NOTE LEGEND (2nd FLOOR NEW):

1. EXISTING 4" STANDPIPE WITH 2 1/2" HOSE VALVES UP FROM 1ST FLOOR TO REMAIN AS-IS. SEE FIRE PROTECTION FIRST FLOOR PLAN-EXISTING ON SHEET FP1-2 FOR CONTINUATION.
 2. EXISTING 3" FLOOR CONTROL ASSEMBLY WITH BUTTERFLY CONTROL VALVE, FLOW SWITCH & INSPECTORS TEST/DRAIN ASSEMBLY TO REMAIN AS-IS.
 3. START POINT OF NEW 2ND FLOOR SPRINKLER SYSTEM.
 4. EXISTING 4" O.S.&Y. CONTROL VALVE TO REMAIN AS-IS.
 5. INSTALL NEW 3" GROOVED CAP.
 6. INSTALL NEW 2" GROOVED CAP.
 7. EXISTING 2 1/2" HOSE VALVE TO REMAIN AS-IS. TYPICAL THROUGHOUT PROJECT.
 8. INSTALL NEW 2 1/2" GROOVED CAP.
 9. INSTALL BACK-TO-BACK GRV. 3" 90° ELLS.
 10. HISTORIC COURTROOM AREA OPEN TO 3RD FLOOR CEILING. SEE PARTIAL THIRD FLOOR PLAN ON SHEET FP1-5 FOR SPRINKLER PROTECTION OF THIS AREA.
 11. 1" AUXILIARY DRAIN VALVE ASSEMBLY. SEE AUXILIARY DRAIN VALVE ASSEMBLY DETAIL ON SHEET FP1-5 FOR ADDITIONAL INFORMATION.
 12. 2" DOWN FROM 3RD FLOOR. SEE FIRE PROTECTION THIRD FLOOR PLAN ON SHEET FP1-5 FOR CONTINUATION.
 13. 1 1/2" DOWN FROM 3RD FLOOR. SEE FIRE PROTECTION THIRD FLOOR PLAN ON SHEET FP1-5 FOR CONTINUATION.
 14. PROVIDE WATER CURTAIN ON BOTH SIDE OF NEW GLASS STAIR ENCLOSURE.
 15. BAFFLE IN ACCORDANCE WITH NFPA 13 REQUIRED AT THIS LOCATION, SPRINKLER HEADS ARE LESS THAN 6'-0" APART.
- HB. HYDRAULIC AREA # 2011-0252-B. SEE HYDRAULIC DESIGN DATA ON SHEET FP1-1 FOR SYSTEM DEMANDS.
- HC. HYDRAULIC AREA # 2011-0252-C. SEE HYDRAULIC DESIGN DATA ON SHEET FP1-1 FOR SYSTEM DEMANDS.
- HD. HYDRAULIC AREA # 2011-0252-D. SEE HYDRAULIC DESIGN DATA ON SHEET FP1-1 FOR SYSTEM DEMANDS.

FIRE SPRINKLER SECOND FLOOR PLAN - NEW

SCALE: 1/4"=1'-0"



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2108 W. Park Street
Plant City, FL 33563
Tel: (813) 752-6900
Fax: (813) 752-6911

www.hatcherengineering.com
e-mail: INFO@hatcherengineering.com

PLT: 03/08/13
"NOTED BY: J. HATCHER" #59380
ENGINEER OF RECORD

Nathaniel J. Hatcher, P.E.
cn=Nathaniel J. Hatcher, P.E.,
o=Hatcher Engineering, Inc., ou,
email=njh@hatcherengineering.com, c=US
2013.03.08 11:15:37 -05'00'

PROPOSED SECOND FLOOR INTERIOR OFFICE REMODEL FOR:
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Second Floor & Outside Air Project
BRADENTON, FLORIDA
1115 MANATEE AVENUE WEST

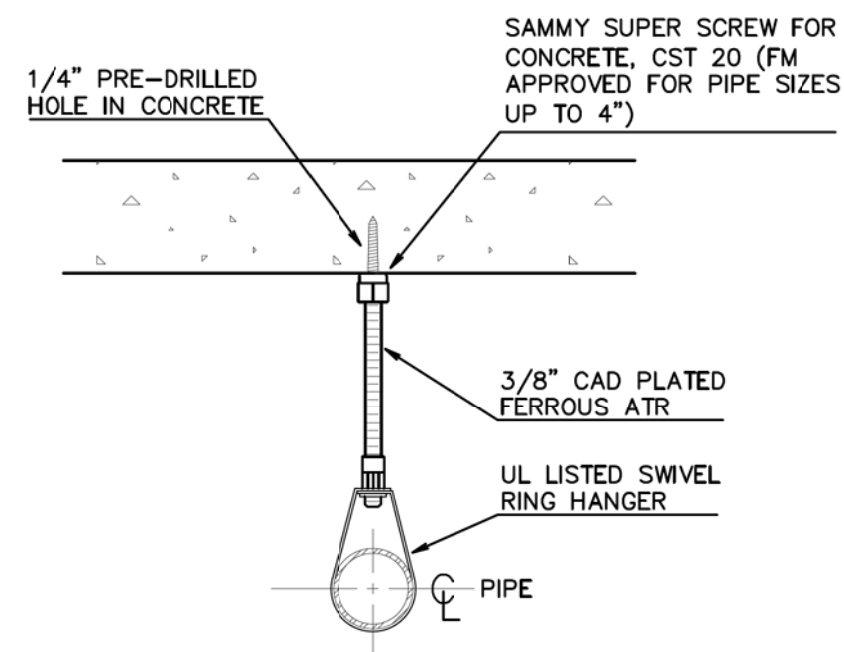
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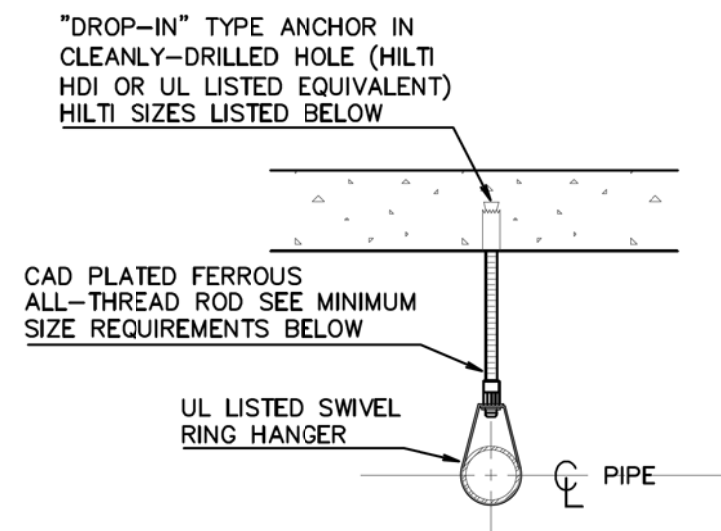
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FP1-4

PIPE SUPPORT
SAMMY SUPER SCREW FOR CONCRETE
W/ RING HANGER
(NOT TO SCALE)



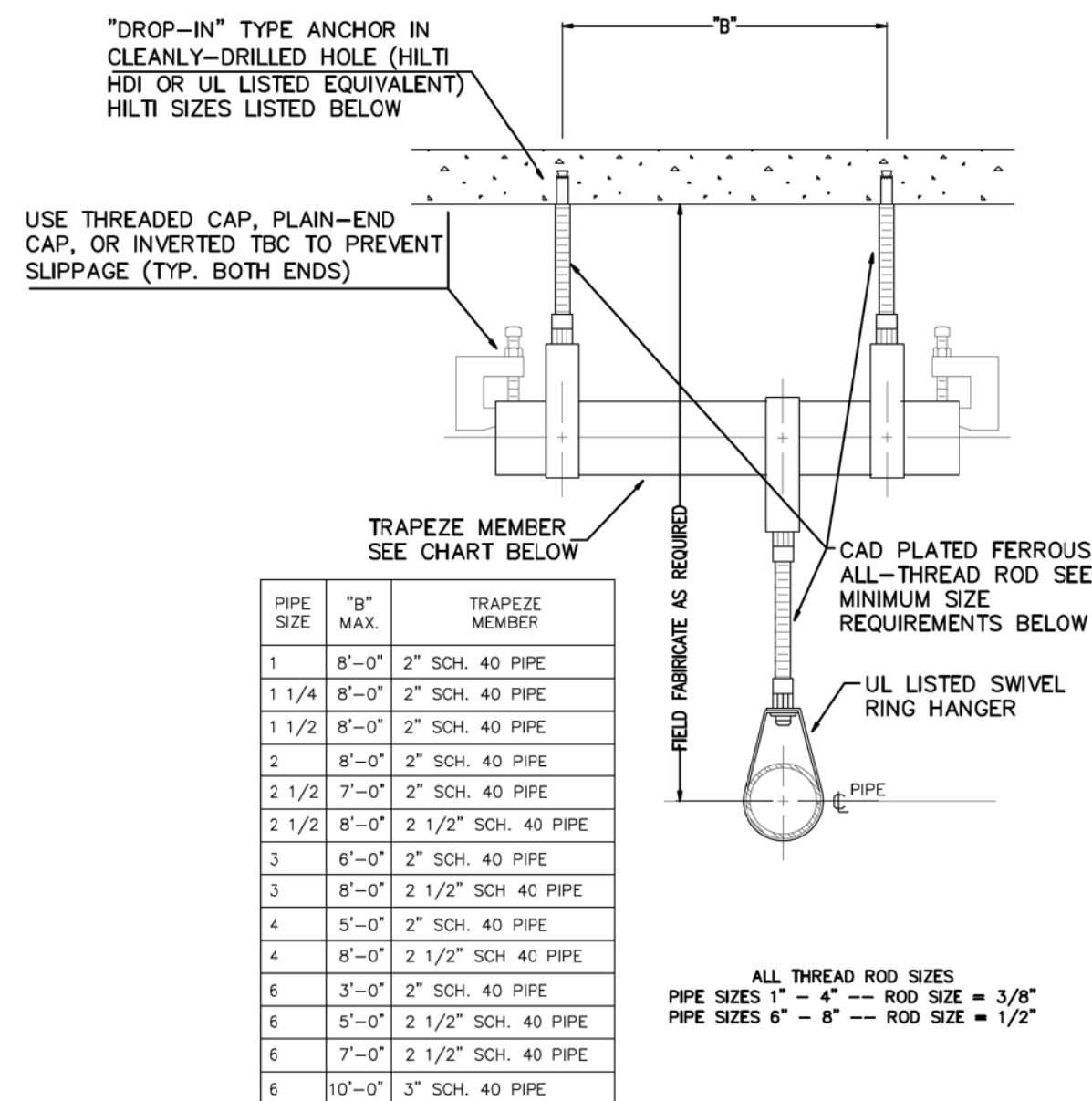
PIPE SUPPORT
DROP-IN ANCHOR W/ RING HANGER
(NOT TO SCALE)



HILTI DROP-IN ANCHOR SIZES
PIPE SIZES 1" - 2" --- HDI SIZE = 3/8"
PIPE SIZES 2 1/2" - 8" --- HDI SIZE = 1/2"

ALL THREAD ROD SIZES
PIPE SIZES 1" - 4" --- ROD SIZE = 3/8"
PIPE SIZES 5" - 8" --- ROD SIZE = 1/2"

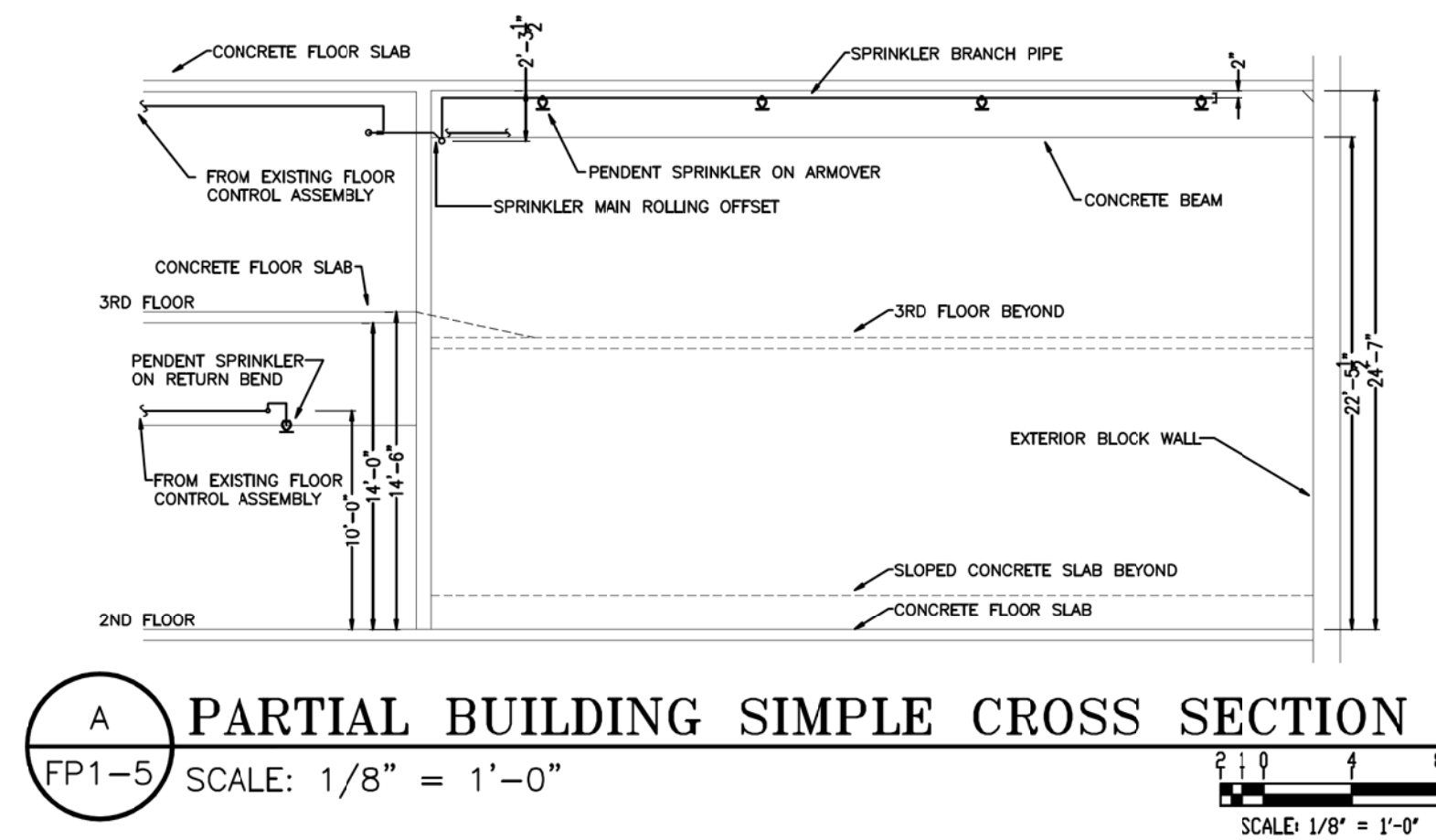
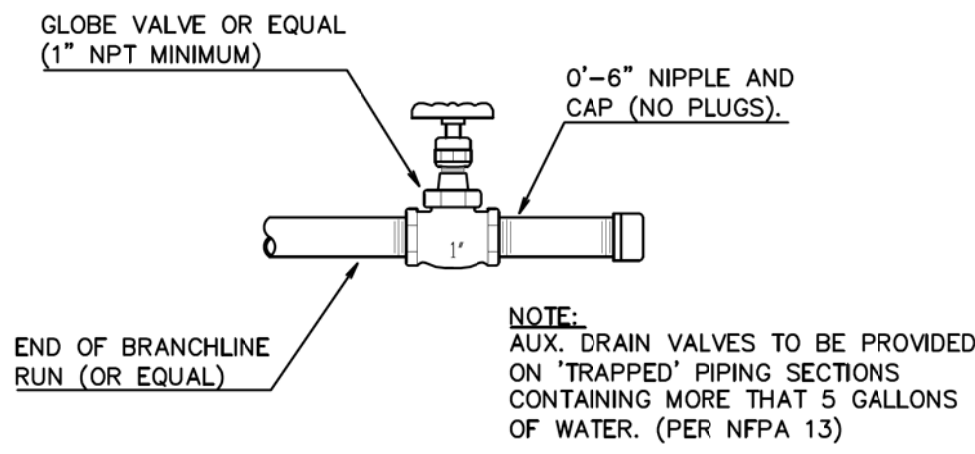
PIPE SUPPORT - TRAPEZE
DROP-IN ANCHOR W/ RING HANGER
(NOT TO SCALE)



PIPE SIZE	"B" MAX.	TRAPEZE MEMBER
1	8'-0"	2" SCH. 40 PIPE
1 1/4	8'-0"	2" SCH. 40 PIPE
1 1/2	8'-0"	2" SCH. 40 PIPE
2	8'-0"	2" SCH. 40 PIPE
2 1/2	7'-0"	2" SCH. 40 PIPE
3	8'-0"	2 1/2" SCH. 40 PIPE
3 1/2	6'-0"	2" SCH. 40 PIPE
4	8'-0"	2 1/2" SCH. 40 PIPE
4 1/2	8'-0"	2 1/2" SCH. 40 PIPE
5	8'-0"	2 1/2" SCH. 40 PIPE
6	3'-0"	2" SCH. 40 PIPE
6 1/2	5'-0"	2 1/2" SCH. 40 PIPE
7	7'-0"	2 1/2" SCH. 40 PIPE
10	10'-0"	3" SCH. 40 PIPE

ALL THREAD ROD SIZES
PIPE SIZES 1" - 4" --- ROD SIZE = 3/8"
PIPE SIZES 6" - 8" --- ROD SIZE = 1/2"

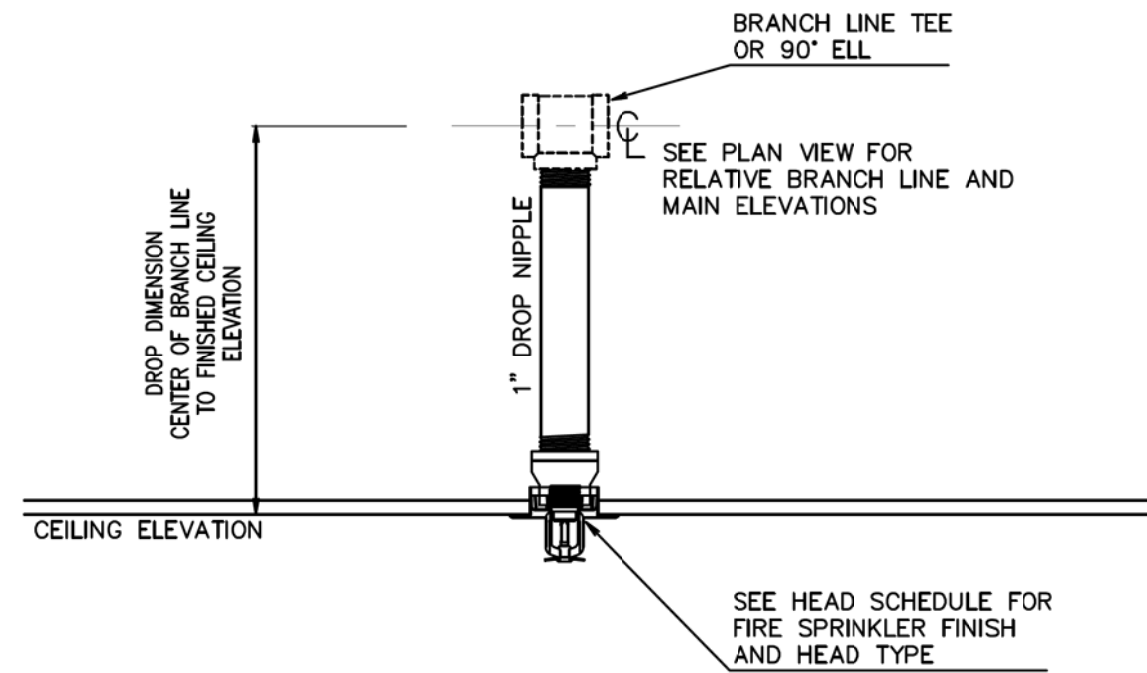
AUXILIARY DRAIN VALVE
(NOT TO SCALE)



- PIPE DIMENSIONS SHOWN ON THIS PLAN ARE CENTER-TO-CENTER, AS DESCRIBED BELOW:
- 1). WHEN GROOVED ELLS AND TEES ARE SHOWN CUT-IN ON THE MAINS AND/OR BRANCH LINES, THE GROOVED FITTING TAKE-OUT HAS BEEN REMOVED FROM THE ADJACENT PIPING DIMENSION TAG.
 - 2). ALL ELEVATION CHANGES INDICATED BY A RISER NIPPLE, OR RISE UP/DN, ARE CENTER-TO-CENTER DIMENSIONS UNLESS CUT-LENGTH DIMENSIONS ARE SPECIFICALLY SHOWN. IN OTHER WORDS, NO TAKE-OUTS HAVE BEEN REMOVED FROM THE RISER NIPPLES OR RISERS (UP OR DOWN). THIS INCLUDES BOTH THREADED AND GROOVED PIPING ELEVATION CHANGES.
 - 3). ALL THREADED PIPING DIMENSIONS ARE CENTER-TO-CENTER.
 - 4). IF HANGER LENGTHS ARE SHOWN, THEY ARE CENTER-TO-CENTER.

FIRE SPRINKLER DRAWING LEGEND	
Symbol	Description
3"	Pipe Size
10'-6"	Pipe Length in Feet-Inches
○	Hydraulic Reference Points
[16 ft]	Elev. Below Top of Steel
[8'-6"]	Elev. Above Finished Floor
+ (TDS 20'-0")	Elev. of Top of Steel
⊖	Ceiling Height
⊙	Denotes Hanger Location
⊙ UP 1 x 1-0	Denotes Rise Up or Down (Center-to-Center Unless Fabricated)
□	Standard Grooved Coupling
⊖	"Firelock" Grooved Coupling
⊖	Piping Cap
⊖	Piping Plug
△	Fire Sprinkler Riser Location
# L01	Line Tag (Only if Stocklisted)
HA	Main Tag (Only if Stocklisted)

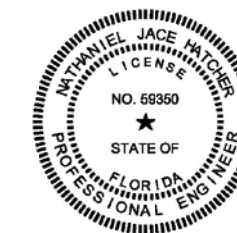
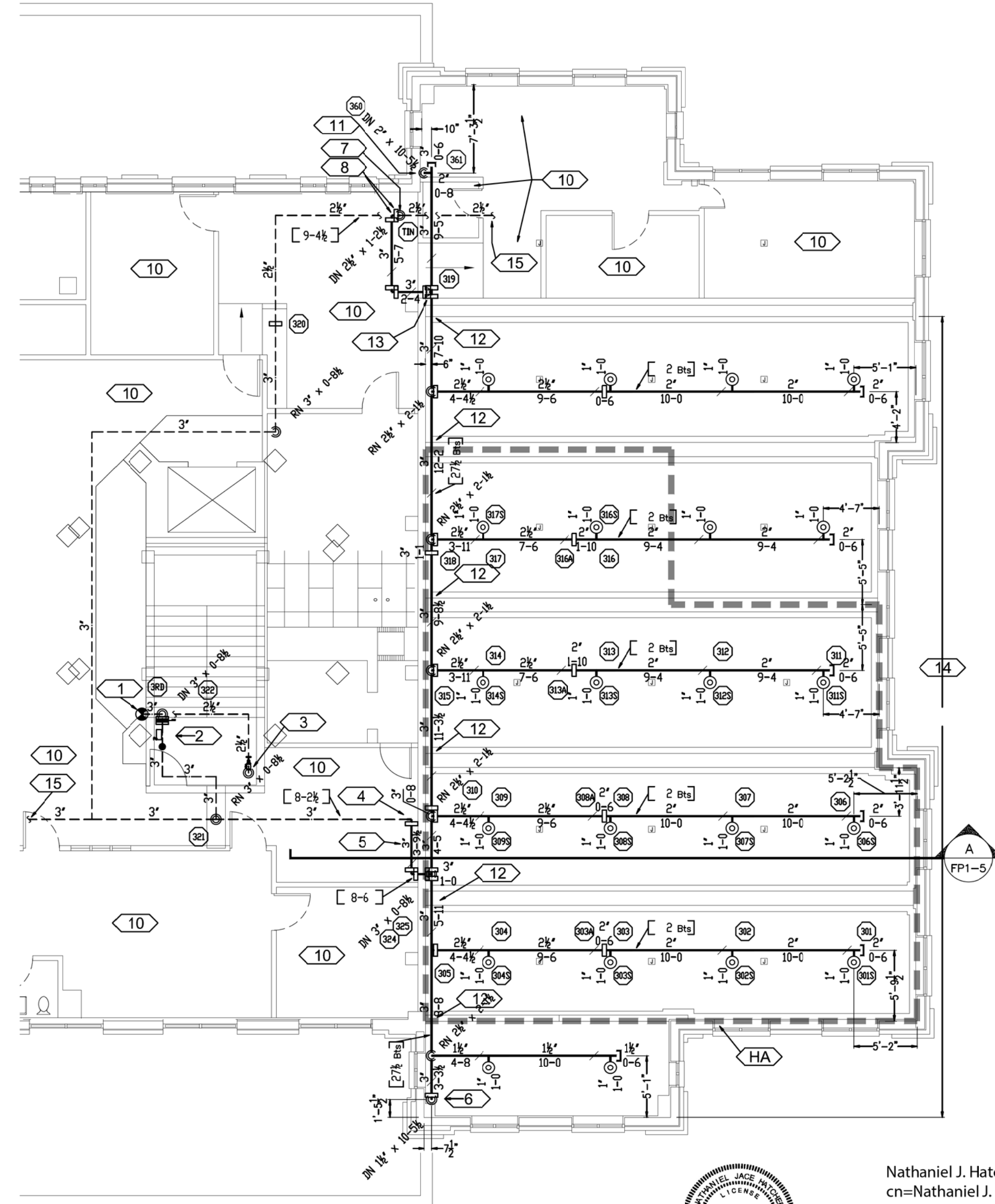
TYPICAL RECESSED PENDENT
(NOT TO SCALE)



XX KEY NOTE DENOTED BY THIS SYMBOL. SEE PLAN.

KEY NOTE LEGEND (3rd FLOOR NEW):

- | | | |
|--|---|--|
| 1. EXISTING 4" STANDPIPE WITH 2 1/2" HOSE VALVES UP FROM 2ND FLOOR TO REMAIN AS-IS. SEE FIRE PROTECTION FIRST FLOOR PLAN-EXISTING ON SHEET FP1-4 FOR CONTINUATION. | 10. THIS IS AN EXISTING OFFICE AREA WITH SPRINKLERS TO REMAIN AS-IS. OFFICE FINISHES SHALL BE PROTECTED FROM DAMAGE DURING INSTALLATION OF NEW SPRINKLER PIPING. | HA. HYDRAULIC AREA # 2011-0252-A. SEE HYDRAULIC DESIGN DATA ON SHEET FOR SYSTEM DEMANDS. |
| 2. EXISTING 3" FLOOR CONTROL ASSEMBLY WITH BUTTERFLY CONTROL VALVE, FLOW SWITCH & INSPECTORS TEST/DRAIN ASSEMBLY TO REMAIN AS-IS. | 11. 2" DOWN TO LOWER LEVEL SPRINKLERS. SEE FIRE PROTECTION SECOND FLOOR PLAN ON SHEET FP1-4 FOR CONTINUATION. | |
| 3. EXISTING 2 1/2" HOSE VALVE TO REMAIN AS-IS. TYPICAL THROUGHOUT PROJECT. | 12. INSTALL NEW 3" GROOVED MAIN TIGHT TO UNDERSIDE OF EXISTING STRUCTURAL BEAMS. MAIN TO BE COVERED BY FUTURE SOFFIT. | |
| 4. REMOVE EXISTING 3" GROOVED CAP. INSTALL NEW 3" GROOVED ELBOW & NEW SPRINKLER PIPING. | 13. NEW 3" GROOVED 45° ELBOW & ROLLED 3" GROOVED BULLHEAD TEE OFFSET DOWN TO NEW ELEVATION TIGHT TO UNDERSIDE OF STRUCTURAL BEAMS. | |
| 5. NEW 3" ROLLING OFFSET MAIN UP TO NEW ELEVATION OF +8'-6" CENTER LINE OF NEW PIPE. | 14. PROVIDE PENDENT HEADS ON 1" ARMOVERS IN HISTORIC COURTROOM. THIS AREA WILL BE MODIFIED IN THE FUTURE WITH RECESSED POCKET CEILINGS & CONCEALED PENDENT SPRINKLERS. 1" OUTLETS ON THE BRANCH LINE WILL BE UTILIZED TO INSTALL THE FUTURE SPRINKLERS. BRANCH LINE PIPING TO BE INSTALLED TIGHT TO UNDERSIDE OF EXISTING COURTROOM CEILINGS. | |
| 6. 1 1/2" DOWN TO LOWER LEVEL SPRINKLERS. SEE FIRE PROTECTION SECOND FLOOR PLAN ON SHEET FP1-4 FOR CONTINUATION. | 15. EXISTING SPRINKLER SYSTEM CONTINUATION TO REMAIN AS-IS. | |
| 7. REMOVE EXISTING 2 1/2" GROOVED ELBOW LOCATED AT THE BOTTOM OF THE EXISTING DROP PIPE. INSTALL NEW 2 1/2" GROOVED TEE FOR NEW SPRINKLER SYSTEM SUPPLY. | | |
| 8. INSTALL NEW 3"x2 1/2" GROOVED REDUCING COUPLING & 3" GROOVED ELBOW. | | |



Nathaniel J. Hatcher, P.E.
cn=Nathaniel J. Hatcher, P.E., o=Hatcher Engineering, Inc., ou,
email=njh@hatcherengineering.com,
c=US
2013.03.08 11:16:05 -05'00'

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Tel: (813) 752-6900
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www.hatcherengineering.com
e-mail: INFO@hatcherengineering.com

PLOT:
03/08/13
"NATHANIEL J. HATCHER" #9890
ENGINEER OF RECORD

FIRE SPRINKLER PARTIAL THIRD FLOOR PLAN - NEW

SCALE: 1/4"=1'-0"

JERRY N. ZOLLER AIA
ARCHITECT / PLANNER P.A.
914 14th STREET W. BRADENTON, FL 34205 TEL: (941) 748-4465

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FP1-5