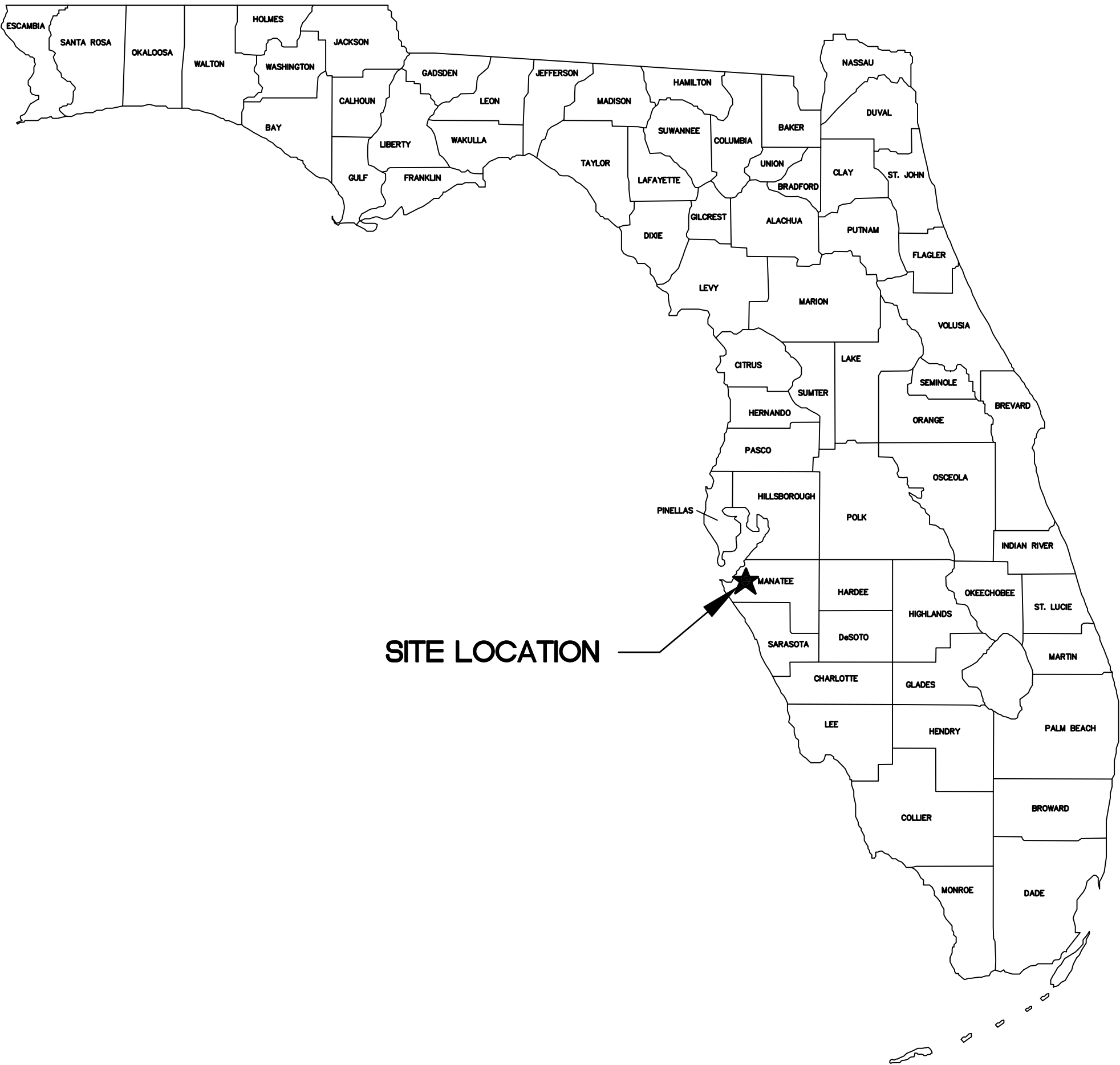


MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT ROOM RENOVATION  
1051 MANATEE AVE. WEST  
BRADENTON, FLORIDA 34205  
IFAS# W1300147 WORK ASSIGNMENT #10



LOCATION MAP  
FLORIDA



SITE MAP

BUILDING FACTORS	
CLASSIFICATION OF BUILDING BY OCCUPANCY:	BUSINESS
CLASSIFICATION OF BUILDING BY CONSTRUCTION TYPE:	II B (UNPROTECTED)
SPRINKLERED:	YES
CODES IN EFFECT and YEAR:	2010 FLORIDA BUILDING CODE EXISTING BUILDING, ALTERATION LEVEL 2 2011 NEC 2010 FLORIDA FIRE PREVENTION CODE
BUILDING HEIGHT & AREA / AREA MODIFICATION (TABLE 503)	
BUILDING HEIGHT (ALLOWABLE / ACTUAL)	NO CHANGE
NUMBER OF STORIES (ALLOWABLE / ACTUAL)	NO CHANGE
MAXIMUM ALLOWABLE FLOOR AREA PER STORY:	NO CHANGE
ACTUAL FLOOR AREA per FLOOR:	NO CHANGE
FLOOR AREA ENTIRE BUILDING:	NO CHANGE
FIRE RESISTANCE RATING OF BUILDING COMPONENTS AND PERCENTAGE OF OPENINGS (TABLES 601 AND 602)	
INTERIOR BEARING WALL RATING REQUIREMENTS:	0 HOUR NO CHANGE
INTERIOR NON-BEARING WALL RATING REQUIREMENTS:	0 HOUR NO CHANGE
FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS):	0 HOUR NO CHANGE
ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS):	0 HOUR NO CHANGE
EXIT ACCESS ENCLOSURES / CORRIDORS (Table 1017.1):	1 HOUR NO CHANGE
EXIT ENCLOSURES / STAIRS:	N/A
DESIGN LOADS AND STRESSES (FBC Table 1607.1)	
ROOF:	LL = 20 PSF

SCOPE OF WORK

Scope of work consists of reconfiguration of interior walls of office spaces and IT Room. Modifications to existing power, lighting, fire protection sprinkler and FM200 systems as depicted in plans.

CODE COMPLIANCE  
INFORMATION EXCERPTED FROM  
OWNER/COUNTY. SUPPLIED RECORD DRAWINGS

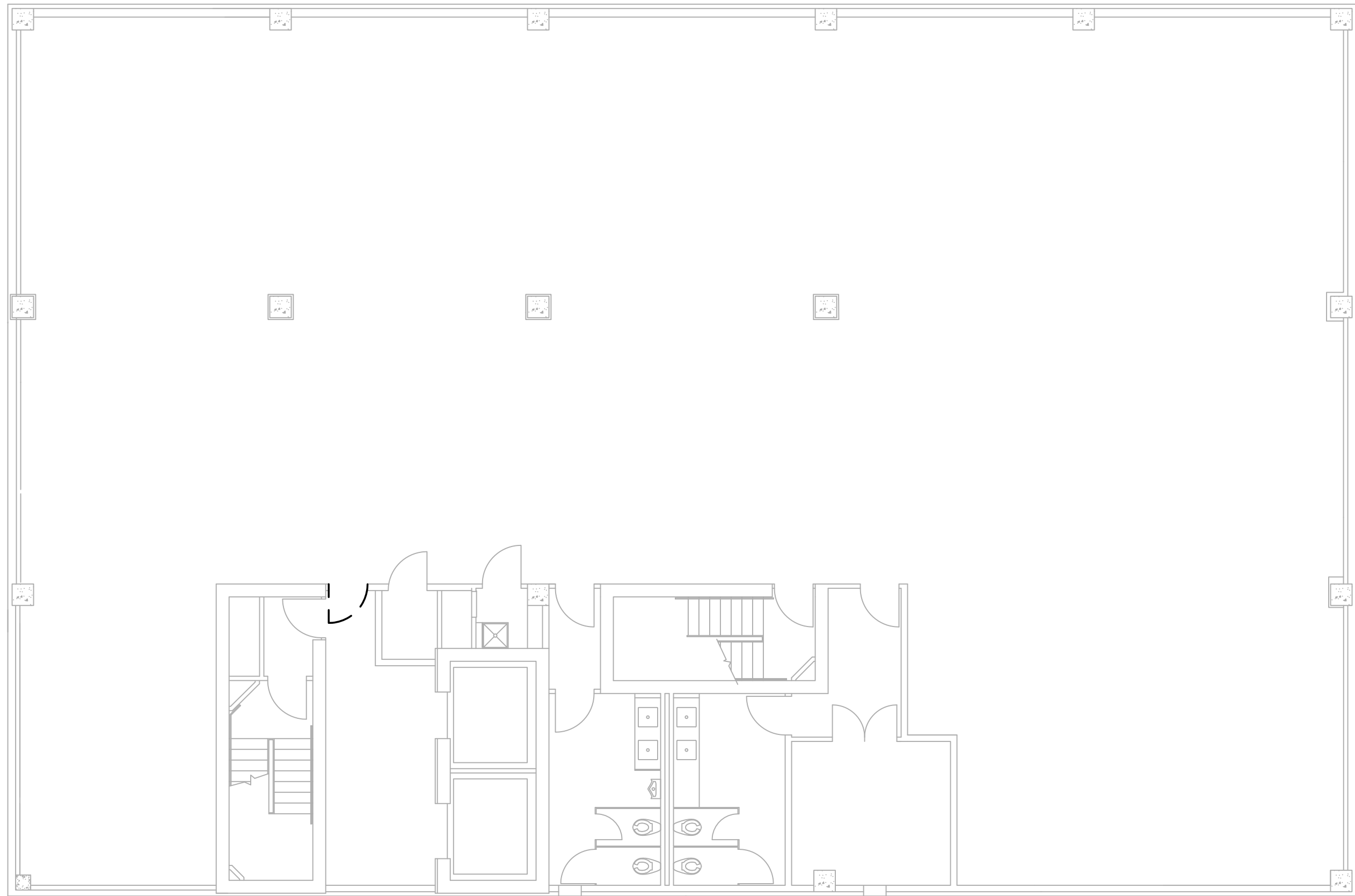
SHEET SCHEDULE	
SHEET	DESCRIPTION
COVER	PROJECT NAME, LOCATION & SITE MAP
L-1	LOGISTICS AND SECURITY PLAN
A-1	ARCHITECTURAL LIFE SAFETY PATH PLAN
A-2	ARCHITECTURAL DIMENSIONAL FLOOR PLAN
A-3	ARCHITECTURAL REFLECTIVE CEILING PLAN
A-4	ARCHITECTURAL DETAILS AND ELEVATIONS
A-5	ARCHITECTURAL ROOF PLAN
S1	FRAMING PLANS AND STRUCTURAL NOTES
E1.0	ELECTRICAL LEGEND, SYMBOLS, GENERAL NOTES
E2.0	ELECTRICAL DEMOLITION PLAN
E3.0	ELECTRICAL POWER AND SYSTEMS PLAN
E3.1	ELECTRICAL ROOF PLAN
E4.0	ELECTRICAL LIGHTING PLAN
E5.0	ELECTRICAL ONE-LINE RISER AND SCHEDULES
E5.1	ELECTRICAL PANELBOARD SCHEDULES
E6.0	ELECTRICAL GENERAL NOTES AND DETAILS
E7.0	ELECTRICAL DETAILS
FP1.0	FIRE PROTECTION LEGEND AND GENERAL NOTES
FP2.0	FIRE PROTECTION DEMOLITION PLAN
FP2.1	FIRE PROTECTION FLOOR PLAN
M1.0	MECHANICAL LEGEND AND GENERAL NOTES
M2.0	MECHANICAL DEMOLITION PLAN
M2.1	MECHANICAL FLOOR PLAN
M2.2	MECHANICAL ROOF PLAN
M3.0	MECHANICAL SCHEDULES
M4.0	MECHANICAL DETAILS
M4.1	MECHANICAL DETAILS
P1.0	PLUMBING LEGEND AND GENERAL NOTES
P2.0	PLUMBING DEMOLITION PLAN
P2.1	PLUMBING FLOOR PLAN
FS1	FIRE SUPPRESSION SYSTEM COVER SHEET
FS2	FIRE SUPPRESSION SYSTEM AGENT PIPING LAYOUT AND VOLUME CALCULATIONS
FS3	FIRE SUPPRESSION SYSTEM AGENT PIPING ISOMETRIC DIAGRAM AND DETAILS
FS4	FIRE SUPPRESSION SYSTEM DEVICE LAYOUT RISER DIAGRAM AND CALCULATIONS
FS5	FIRE SUPPRESSION SYSTEM CONTROL PANEL WIRING DIAGRAM
FS6	FIRE SUPPRESSION SYSTEM MOUNTING DETAILS
FS7	FIRE SUPPRESSION SYSTEM TYPICAL SYSTEM PIPE MOUNTING DETAILS

To the best of the engineer's knowledge, said plans and contract specifications comply with the applicable building codes and the applicable minimum fire safety standards as determined in accordance with Chapters 553 and 633, Florida Statutes.

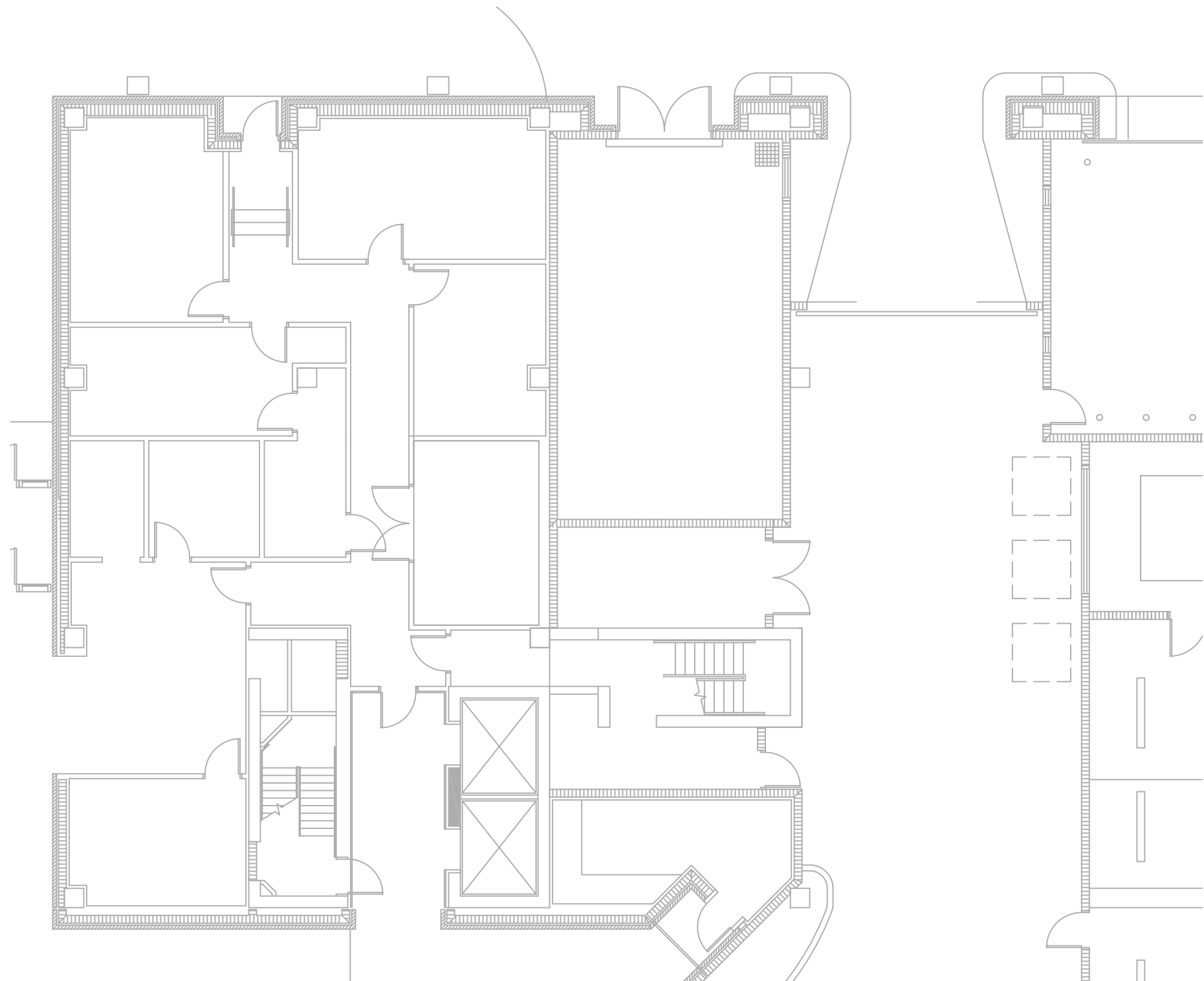
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941-360-2181

SEAL

FL#53458



1  
L-1  
**4TH FLOOR HENSLEY BUILDING**  
NOT TO SCALE



2  
L-1  
**GROUND FLOOR HENSLEY BUILDING**  
NOT TO SCALE

Logistics and Security – Proposed 4th Floor Hensley IT Facility Project – 4th Floor Judicial Center, Manatee County Government, Bradenton, Florida.

- The General Contractor shall present all construction personnel lists including subcontractors to the Security for review and security check. All personnel not accepted by Security shall be replaced with other individuals. The General Contractor shall supply personnel to properly meet the construction requirements. Security background forms in the Contract specifications shall be completed for the project access personnel by the individual and signed by the individual. All forms shall be presented to Security prior to the Notice to Proceed is issued by Purchasing.
- Access to the site shall be through one elevator from the first floor through the sally port to the first floor lobby for the equipment and materials or through the front entrance for personnel. The one elevator shall be designed with signage on the first floor and shall be protected by the General Contractor for use.
- The General Contractor Superintendent and five sub-contractor foremen shall carry badge approval and badges only. Passing of badges is prohibited and if observed the individuals shall be escorted off the site and badges taken. All construction personnel shall be escorted and observed to the work floor (4th Floor of the Judicial Center Hensley Wing). All badged and non-badged personnel shall be listed with the Security and site Property Management group. Badged personnel shall escort the non-badged personnel to work stations and off of the site. Copies of the list of personnel shall be provided to both groups for access at the front entrance and the site Property Management office.
- Access for work to be performed on the garage (1st), 2nd , 3rd, 5th floors, the roof of the Hensley Wing, and the Judicial Electrical room shall be scheduled in advance 5 working days in advance. This work on floors other than the 4th floor shall be escorted and observed by County / Security personnel.
- Scheduled work times shall be set from 8:00 AM to 4:30 PM. Monday through Friday and no work is allowed on County Scheduled Holidays and weekends. Any utility, chilled water, data, fire alarm, power, fire sprinkler outages shall be scheduled with Security and site Property Management personnel 5 working days in advance. Work for outages may be required for night work or late afternoon. In each outage request, the General Contractor shall provide a list of areas that are affected.
- All tools brought to the site shall remain on the 4th floor during working hours or taken off site at the end of the day. No tools are to be left on any other floor. If work is to be performed on the floor, personnel shall be expected to pick up all tools and materials prior to leaving. If a contractor has to remove tools from the floor for use elsewhere or store off site, the contractor shall advise Security and site Property Management in the process of leaving the building.
- Personnel going to lunch, break, or restroom periods shall not be permitted to have tools on them off the 4th floor. Personnel observed with tools in the building while on break / lunch periods in pockets shall be asked to return to the floor with the tools. Restroom access will be available on the floor. The General Contractor shall clean the restroom once each week and at the end of the project. The Contractor shall turn over the restroom at the end of the project in the same condition as it was received.
- All materials shall be either stored until ready for installation at the respective contractor's site or on the floor. All materials shall flow through the elevator to the floor from the first floor to the fourth floor. Access may be through the sally port but only on previously scheduled time frames (5 working days in advance) with Security and site Property Management. The use of crane on site for placement of the rooftop systems shall be scheduled. In the construction schedule, preliminary time frames shall be submitted for truck deliveries to the site. The final dates shall be reviewed and approved by site Property Management and Security. Coordinate all sally port delivery times with Security. The receiving Contractor shall supervise all deliveries. County personnel shall not receive any item.
- All roof work shall require access through the stairway past the fifth floor. The roof access door shall be open only during personnel present. The door shall be closed and secured at the end of each work session or at the end of the day. The roof and openings for installation shall be secured and protected at the end of each day it is open. The General Contractor shall repair any leaks to the satisfaction of the County to original conditions. No tools or materials are allowed to remain on the roof. All new equipment shall be secured and reviewed.
- The waste material dumpster supplied by the Contractor shall be located exterior to the building on a location to be sited by Security and site Property Management. The Contractor shall remove all trash off site daily.
- If individuals access the elevator to the 4th floor that are not to be on site observed by the General Contractor Superintendent. The individual should be asked to leave the floor by the General Contractor Superintendent and they are to advise the Security office of the situation immediately.
- In case of a medical emergency on the floor or in a work area, the Security office, and site Property Management office are to be notified immediately. The Security Office shall contact emergency personnel.
- No lunch breaks or break-periods by construction personnel are to be taken in any other location but on the fourth floor Hensley wing or the exterior of the building. Glass or metal containers are not allowed off of the 4th floor if brought in for use or for lunch.
- The area of work is vacant. County equipment and furniture is stored in the area. The Contractor shall coordinate with the PROJECT REPRESENTATIVE any relocation if needed for the work process. The Contractor is not allowed to move, touch, or handle the any County stored items on the site. Additional protection for the stored items shall be reviewed and coordinated with the PROJECT REPRESENTATIVE.
- No onsite parking is available. The Contractor shall be responsible for their parking. Three to five parking spaces can be accessed from the County if requested in the County parking lot at the US Post Office.

DRAWING TITLE

LOGISTICS AND  
SECURITY PLAN

FILE: MC HENSLEY 4TH FL  
JOB NO.: 2013.35  
DATE : 3/20/2013  
PLOT SIZE: 1:1  
DRAWN BY: MC  
CHECKED BY: JDC  
SHEET No.:

L-1

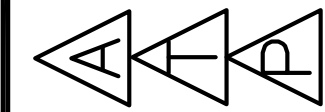
MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

REV.# DESCRIPTION

DATE

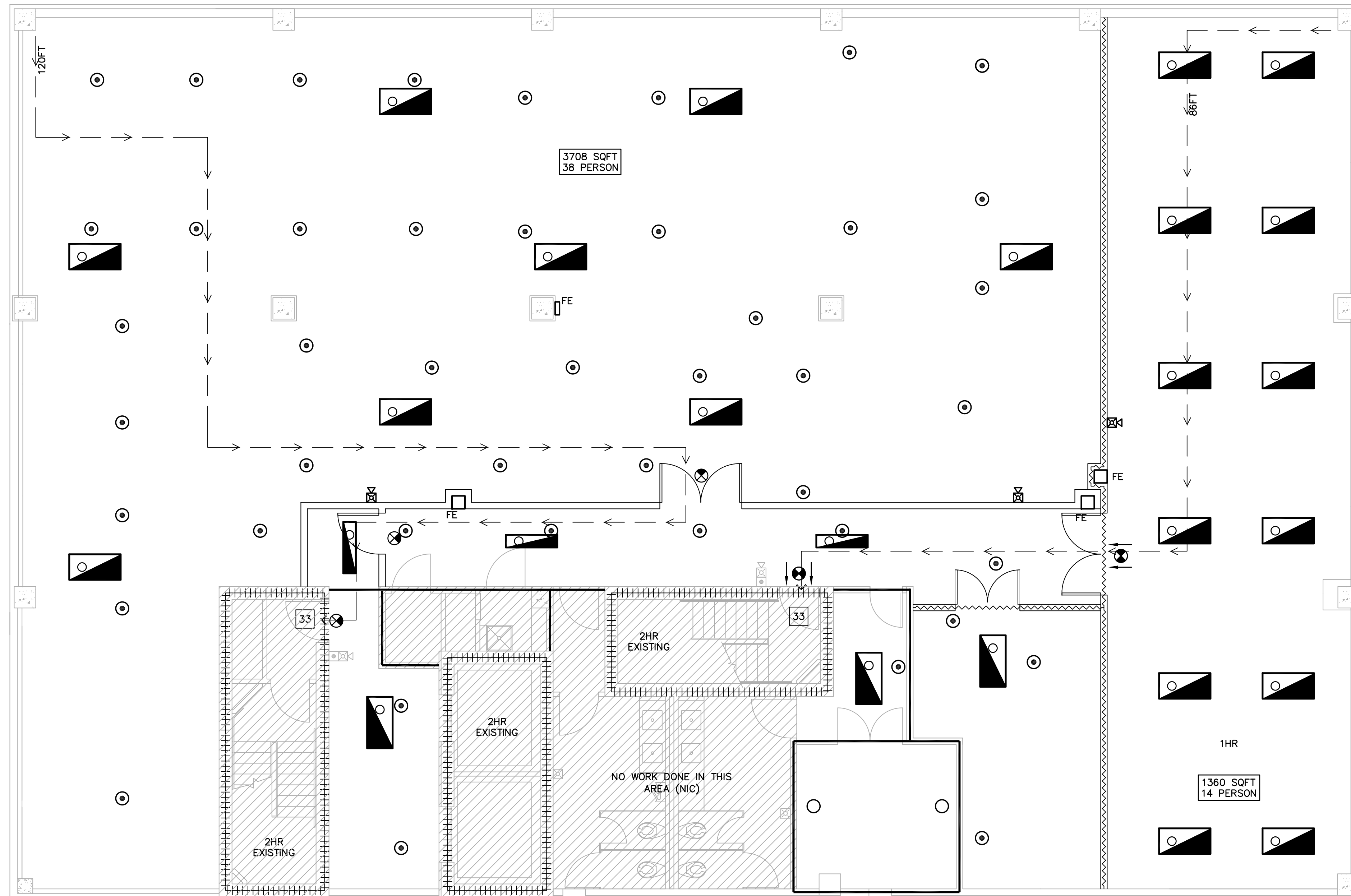
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SARASOTA, FLORIDA  
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FL#5468





**LIFE SAFETY PATH FLOOR PLAN**  
3/16" = 1'-0"

**GENERAL NOTES:**

- ① REFER TO FIRE PROTECTION AND ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.

**LIFE SAFETY PLAN DATA**

GENERAL BUILDING DATA  
OCCUPANCY CLASSIFICATION  
OCCUPANCY LOAD

4TH FLOOR BUILDING AREA  
GROUP "B"  
1 PERSON / 100 SQ FT

= 7,245 SQ FT  
= 73 PERSONS

**MEANS OF EGRESS CALCULATIONS**

EGRESS DOOR CAPACITY  
73 PERSONS  
EXISTING EXIT ACCESS

x 0.2 INCHES PER PERSON  
= 2 DOORS AT 33 INCHES CLEAR EACH

= 14.6 INCHES REQUIRED  
= 66 INCHES PROVIDED

EGRESS STAIRS CAPACITY  
73 PERSONS  
EXISTING STAIR WIDTH

x 0.3 INCHES PER PERSON  
[INFORMATION FROM RECORD DRAWINGS]

= 21.9 INCHES REQUIRED  
= 66 INCHES PROVIDED

EXIT ACCESS CORRIDOR CAPACITY  
MINIMUM CORRIDOR WIDTH  
73 PERSONS  
EXISTING CORRIDOR

x 0.2 INCHES PER PERSON  
[INFORMATION FROM RECORD DRAWINGS]

= 44 INCHES REQUIRED  
= 14.6 INCHES DEMAND  
= 48 INCHES PROVIDED

**TRAVEL DISTANCE**

LONGEST TRAVEL DISTANCE TO EXIT STAIRS  
LONGEST TRAVEL DISTANCE TO EXIT STAIRS

= 120 FT PROVIDED  
= 300 FT ALLOWED

**FIRE EXTINGUISHERS**

LOCATED ON LIFE SAFETY PLAN. ALL FIRE EXTINGUISHERS TO BE UL RATED 4-A : 60-B : C 10 lb

**WALL LEGEND:**

--- FIRE WALL 2-HR RATED-EXISTING  
--- FIRE WALL 1-HR RATED-EXISTING  
--- FIRE WALL 1-HR RATED  
--- NEW WALL  
--- EXISTING WALL

LIFE SAFETY LEGEND			
	EMERGENCY LIGHT FIXTURE ON GENERATOR POWER		STROBE
	EMERGENCY LIGHT FIXTURE ON GENERATOR POWER		HORN STROBE
	SPRINKLER HEAD		SMOKE DETECTOR
	EXIT LIGHT FACES AS REQUIRED		HEAT DETECTOR
	EXIT LIGHT WITH DIRECTION		FIRE EXTINGUISHER
	FIRE ALARM PULL STATION	~~~~~	1-HOUR FIRE RATED WALL
	EXIT WIDTH PROVIDED IN INCHES	-----	1-HOUR FIRE RATED WALL-EXISTING
		+++++	2-HOUR FIRE RATED WALL-EXISTING
		- - - - -	EGRESS PATH

EMERGENCY EXIT AND EGRESS LIGHTS SHALL BE CONNECTED TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING

THE CONTRACTOR IS REQUIRED TO IDENTIFY FIRE RATED WALLS WITH SIGNS OR STENCILING, SUCH IDENTIFICATION SHALL BE ABOVE ANY DECORATIVE CEILING AND IN CONCEALED SPACES. SUGGESTED WORDING: (FIRE AND SMOKE BARRIER PROTECT ALL OPENINGS)

ATP ENGINEERING SOUTH, PL  
SARASOTA, FLORIDA  
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DATE  
09/26/2013

DESCRIPTION  
OWNER/COUNTY REVIEW

REV #

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

ARCHITECTURAL  
LIFE SAFETY PLAN

FILE: MC HENSLEY 4TH FL  
JOB NO.: 2013.35  
DATE : 3/20/2013  
PLOT SIZE: 1:1  
DRAWN BY: CMD/MC  
CHECKED BY: JDC  
SHEET No.:  
A-1

GENERAL NOTES

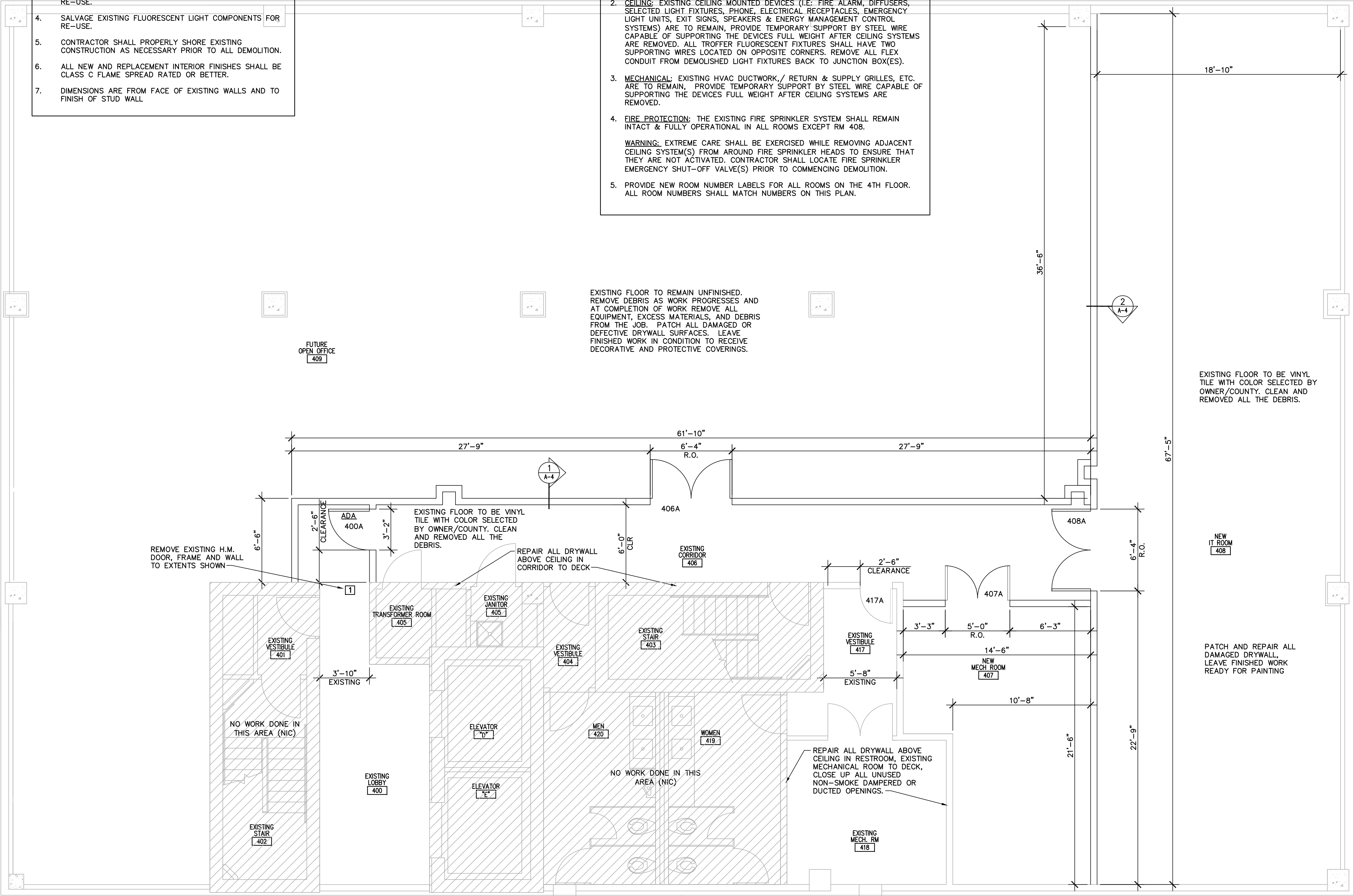
- ALL DEMOLITION SHALL BE PERFORMED IN A SOUND, GOOD WORKMANLIKE FASHION & IN ACCORDANCE WITH ALL CODE REQUIREMENTS.
- OWNER/COUNTY SHALL VERIFY THAT THE BUILDING IS FREE OF ANY ASBESTOS CONTAINING MATERIALS PRIOR TO DEMOLITION. IF ASBESTOS IS FOUND TO BE PRESENT, CONTRACTOR SHALL PROCEED IN STRICT COMPLIANCE WITH PROCEDURES OUT LINED BY THE ASBESTOS ABATEMENT CONSULTANT.
- SALVAGE EXISTING SECURITY SYSTEM COMPONENTS FOR RE-USE.
- SALVAGE EXISTING FLUORESCENT LIGHT COMPONENTS FOR RE-USE.
- CONTRACTOR SHALL PROPERLY SHORE EXISTING CONSTRUCTION AS NECESSARY PRIOR TO ALL DEMOLITION.
- ALL NEW AND REPLACEMENT INTERIOR FINISHES SHALL BE CLASS C FLAME SPREAD RATED OR BETTER.
- DIMENSIONS ARE FROM FACE OF EXISTING WALLS AND TO FINISH OF STUD WALL

DEMOLITION / CONSTRUCTION TAG LEGEND :

- 1 REMOVE DOOR & FRAME

DEMOLITION NOTES :

- AS PART OF THE DEMOLITION PROCESS, ALL AREAS IN WHICH DEMOLITION IS TAKING PLACE IS TO BE ISOLATED FROM THE BUILDING'S AIR CONDITIONING SYSTEM AND THE SPACE IS TO BE ISOLATED AND UNDER NEGATIVE PRESSURE WITH RESPECT TO THE MAIN BUILDING. THE CONTRACTOR SHALL PROVIDE A DEMOLITION PROTOCOL TO THE ARCHITECT FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION. THE AIR CONDITIONING SYSTEM IN THE AREA BEING DEMOLISHED IS TO BE TURNED OFF AND THE DUCT WORK SEALED TO PREVENT ANY DUST OR DEBRIS FROM ENTERING THE SYSTEM.
- ELECTRICAL:** REMOVE / RELOCATE ANY ELECTRICAL / DATA OUTLETS IN ALL WALLS & PARTITIONS TO BE REMOVED, TYPICAL.
  - CEILING:** EXISTING CEILING MOUNTED DEVICES (I.E: FIRE ALARM, DIFFUSERS, SELECTED LIGHT FIXTURES, PHONE, ELECTRICAL RECEPTACLES, EMERGENCY LIGHT UNITS, EXIT SIGNS, SPEAKERS & ENERGY MANAGEMENT CONTROL SYSTEMS) ARE TO REMAIN, PROVIDE TEMPORARY SUPPORT BY STEEL WIRE CAPABLE OF SUPPORTING THE DEVICES FULL WEIGHT AFTER CEILING SYSTEMS ARE REMOVED. ALL TROFFER FLUORESCENT FIXTURES SHALL HAVE TWO SUPPORTING WIRES LOCATED ON OPPOSITE CORNERS. REMOVE ALL FLEX CONDUIT FROM DEMOLISHED LIGHT FIXTURES BACK TO JUNCTION BOX(ES).
  - MECHANICAL:** EXISTING HVAC DUCTWORK, / RETURN & SUPPLY GRILLES, ETC. ARE TO REMAIN, PROVIDE TEMPORARY SUPPORT BY STEEL WIRE CAPABLE OF SUPPORTING THE DEVICES FULL WEIGHT AFTER CEILING SYSTEMS ARE REMOVED.
  - FIRE PROTECTION:** THE EXISTING FIRE SPRINKLER SYSTEM SHALL REMAIN INTACT & FULLY OPERATIONAL IN ALL ROOMS EXCEPT RM 408.
- WARNING:** EXTREME CARE SHALL BE EXERCISED WHILE REMOVING ADJACENT CEILING SYSTEM(S) FROM AROUND FIRE SPRINKLER HEADS TO ENSURE THAT THEY ARE NOT ACTIVATED. CONTRACTOR SHALL LOCATE FIRE SPRINKLER EMERGENCY SHUT-OFF VALVE(S) PRIOR TO COMMENCING DEMOLITION.
- PROVIDE NEW ROOM NUMBER LABELS FOR ALL ROOMS ON THE 4TH FLOOR. ALL ROOM NUMBERS SHALL MATCH NUMBERS ON THIS PLAN.



DRAWING LEGEND:

HATCH INDICATES NO WORK

GENERAL NOTES:

- REFER TO PLANS AND CONTRACT SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. ANY QUESTIONS SHALL BE ANSWERED BY THE ENGINEER AND PROJECT REPRESENTATIVE PRIOR TO START WORK.
- ITEMS IN GRAYSCALE ARE EXISTING AND TO REMAIN. FOR DUCTWORK AND DIFFUSERS THAT ARE "TO REMAIN" PRESERVE EXISTING LOCATION.
- NEW ADA COMPLIANT SIGNAGE TO MATCH EXISTING COUNTY STANDARDS.



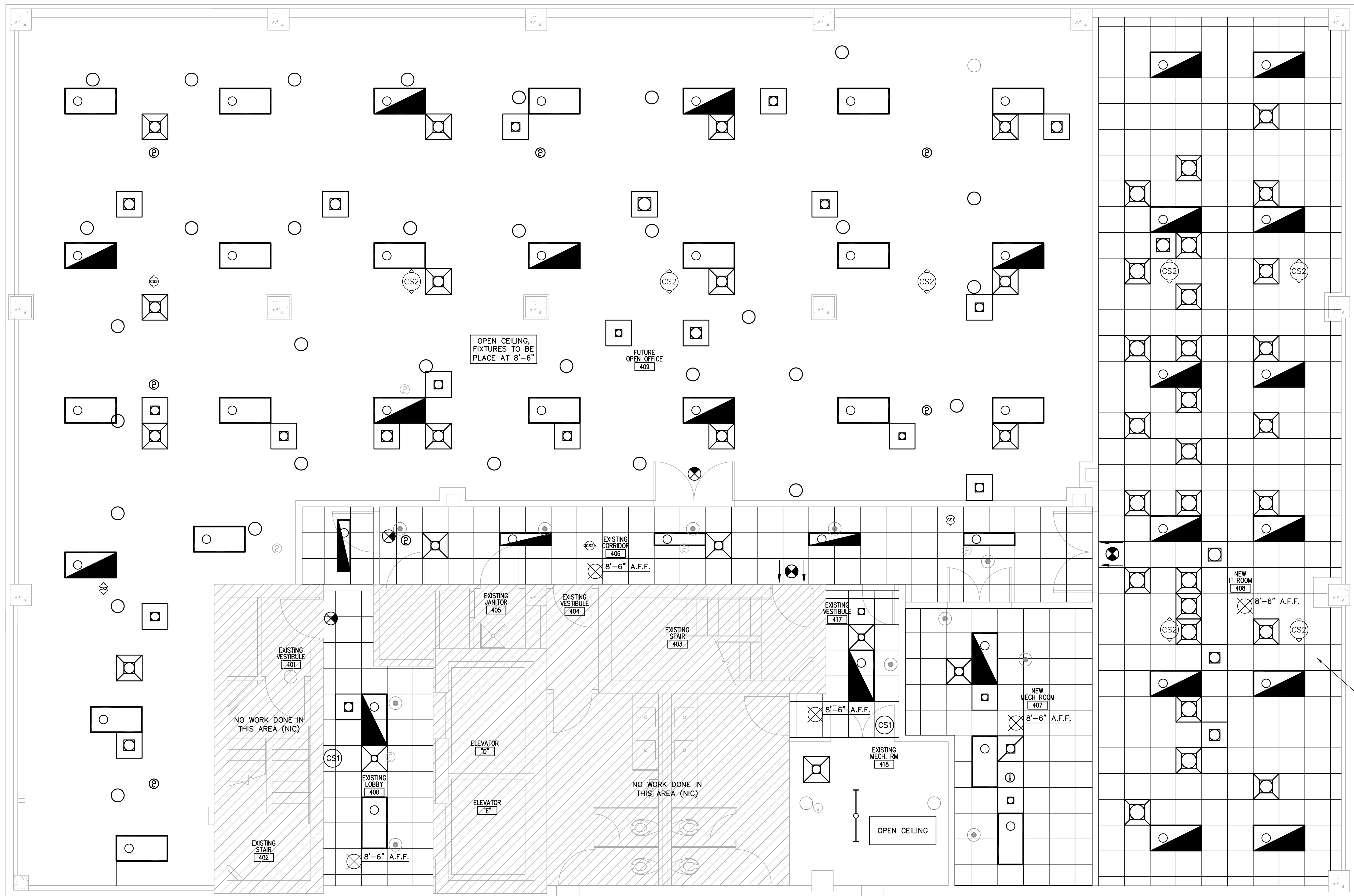
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A-2

PROPOSED FLOOR PLAN

1/4" = 1'-0"

REV #	DESCRIPTION	DATE
	OWNER/COUNTY REVIEW	09/05/2013





REFLECTED CEILING - LEGEND	
	2 x 4 LAY-IN FLUORESCENT LIGHT FIXTURE
	2 x 4 LAY-IN FLUORESCENT LIGHT FIXTURE ON GENERATOR POWER
	1 x 4 LAY-IN FLUORESCENT LIGHT FIXTURE
	1 x 4 LAY-IN FLUORESCENT LIGHT FIXTURE ON GENERATOR POWER
	1 X 4 SUSPENDED FLUORESCENT LIGHT FIXTURE
	LIGHTING OCCUPANCY SENSOR
	SUPPLY DIFFUSER
	RETURN AIR GRILLE
	SMOKE EXHAUST GRILLE
	EMERGENCY EXIT LIGHT W/ BATTERY BACKUP
	HEAT DETECTOR
	SMOKE DETECTOR
	PENDENT SPRINKLER HEAD, NEW OR EXISTING
	UPRIGHT SPRINKLER HEAD, NEW OR EXISTING

PROVIDE 24X24 CEILING ACCESS TILE CASKETED AND FASTENED TO T-BAR



1  
A-3

PROPOSED REFLECTIVE CEILING PLAN

1/4" = 1'-0"

PROVIDE ARMSTRONG CEILING TILE ULTIMA REGULAR #1911 AND PRELUDE XL 15/16 WHITE GRID IN ALL SPACES AT 8'-6" A.F.F.

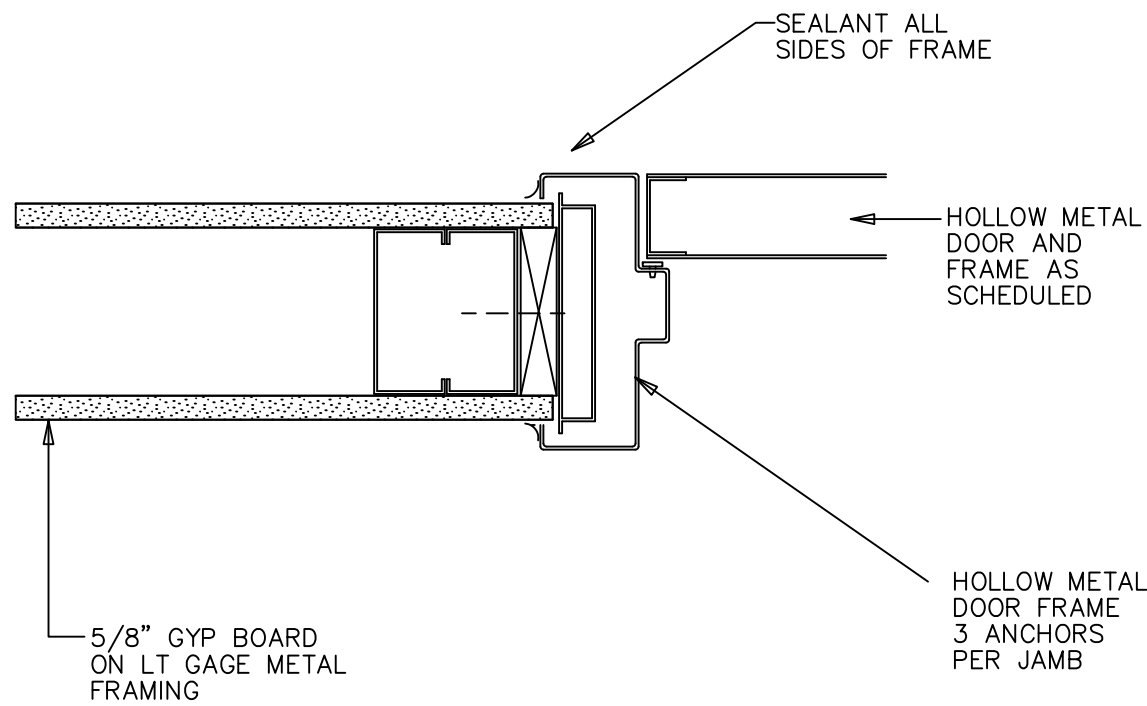
REV #	DESCRIPTION	DATE
01	OWNER/COUNTY REVIEW	09/26/2013

ROOM FINISH SCHEDULE									
MARK	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CLQ HGT.	REMARKS		
		CONCRETE (SEALED)	VCT	VINYL	GYPSUM WALLBOARD-PAINTED	GYP. WALLBOARD PAINTED	ACOUSTICAL SYS.	OPEN TO STRUCTURE	
400	LOBBY	●	●	●		●	8'-6"		
401	VESTIBULE						8'-6"	EXISTING - NO WORK	
402	STAIR						N/A	EXISTING - NO WORK	
403	STAIR						N/A	EXISTING - NO WORK	
404	VESTIBULE							EXISTING - NO WORK	
405	JANITOR							EXISTING - NO WORK	
406	CORRIDOR	●	●	●		●	8'-6"		
407	NEW MECHANICAL ROOM	●		●	●	●	8'-6"		
408	IT ROOM	●		●	●	●	8'-6"	INSTALL CEILING TILE WITH SEISMIC CLIPS. SET CEILING TILE IN FULL BED OF CLEAR SILICONE AT SUSPENSION GRID ALL SIDES. TYPICAL.	
409	OPEN OFFICE	●		●		●			
410	TRANSFORMER ROOM							EXISTING - NO WORK	
417	VESTIBULE					●		EXISTING - REPAIR WALLS AND RE-PAINT	
418	MECHANICAL ROOM					●		EXISTING - REPAIR WALLS AND RE-PAINT	
419	WOMEN'S							EXISTING - NO WORK	
420	MEN'S							EXISTING - NO WORK	

FINISH SCHEDULE NOTES:  
1. MR TYPE GYPSUM BOARD IN WET LOCATIONS.

DOOR SCHEDULE										
MARK	SIZE			LABEL	DOOR		FRAME		HARDWARE GROUP	REMARKS
	W	H	T		MATERIAL	FINISH	MATERIAL	FINISH		
400A	3'-0"	7'-0"	1¾"	20 MIN.	H.M.	PAINTED	H.M.	PAINT	NOTE 3	NOTE 1
406A	6'-0"	7'-0"	1¾"	20 MIN.	H.M.	PAINTED	H.M.	PAINT	NOTE 3	REFER TO CONTRACT SPECIFICATIONS
407A	6'-0"	7'-0"	1¾"	20 MIN.	H.M.	PAINTED	H.M.	PAINT	NOTE 3	REFER TO CONTRACT SPECIFICATIONS
408A	6'-0"	7'-0"	1¾"	20 MIN.	H.M.	PAINTED	H.M.	PAINT	NOTE 3	NOTE 1
417A	3'-0"	7'-0"	1¾"	20 MIN.	H.M.	PAINTED	H.M.	PAINT	NOTE 3	NOTE 1

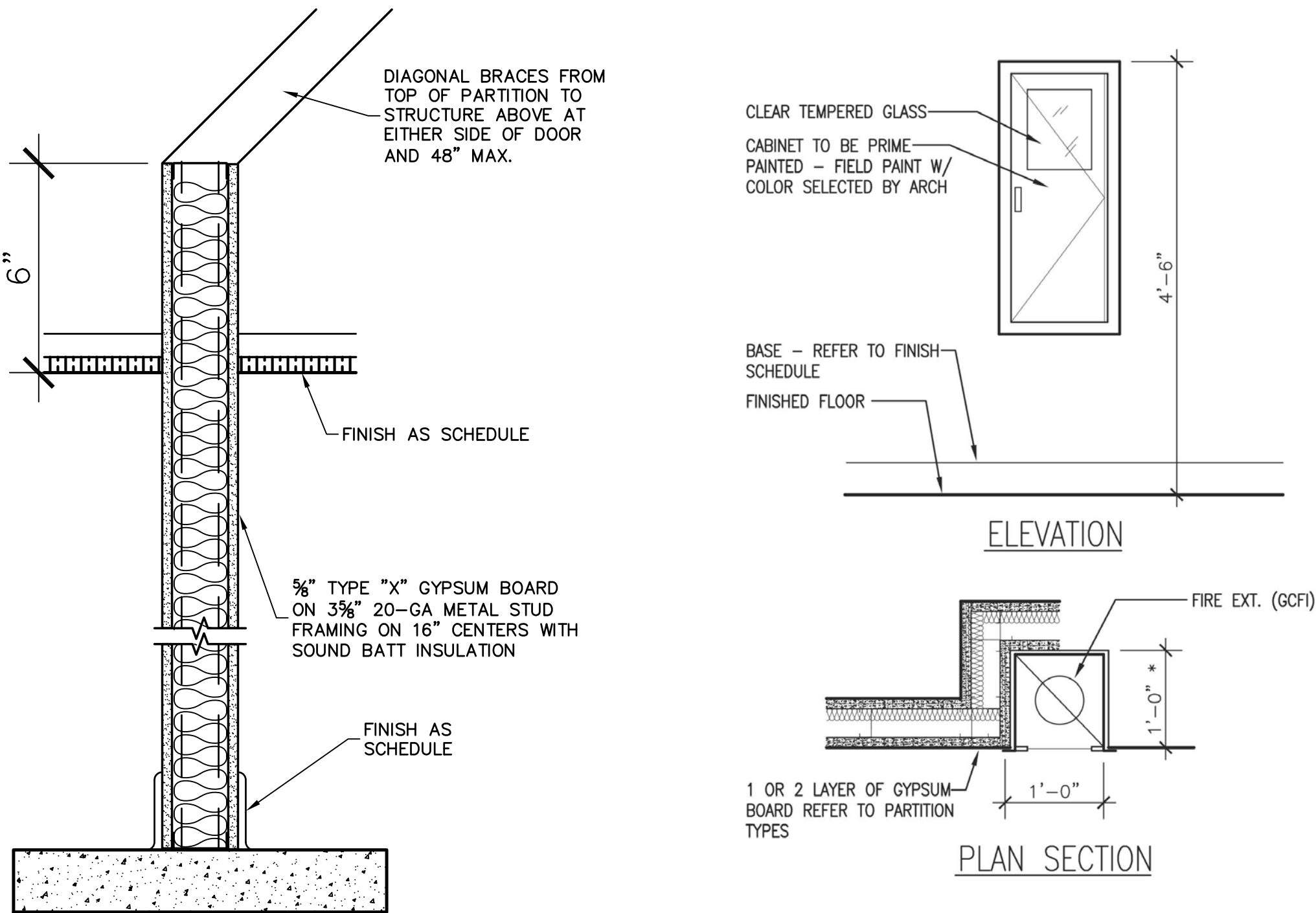
NOTES:  
1. REINFORCE DOOR AND FRAME HEAD FOR MAGNETIC LOCKS.  
2. DOORS 407A AND 408A TO HAVE GASKETS, DOOR BOTTOMS AND THRESHOLD.  
3. RELEGATED DESIGN-CONTRACTOR TO PROVIDE SUBMITTAL FOR APPROVAL HARDWARE SCHEDULE PREPARED BY BHMA CERTIFIED HARDWARE SPECIFIED (SEE SECTION 08711 - TO MATCH EXISTING COUNTY EQUIPMENT ON 3RD AND 5TH FLOORS) NEW HARDWARE TO MATCH COUNTY STANDARDS AND EXISTING HARDWARE LOCATED ELSEWHERE IN BUILDING (SEE SPECIFICATION SECTION 08711 FOR HARDWARE SCHEDULE).  
4. PROVIDE 20MIN DOOR AND FRAME.  
5. COORDINATE LOCATION IN ALLOWANCES FOR DOORS WITH PANIC HARDWARE. (DATA CENTER TO CORRIDOR, AND CORRIDOR TO STAIR WELLS/ELEVATORS.)



3  
A-4  
INTERIOR DOOR JAMB  
3"-1'-0" (HEAD SIMILAR)

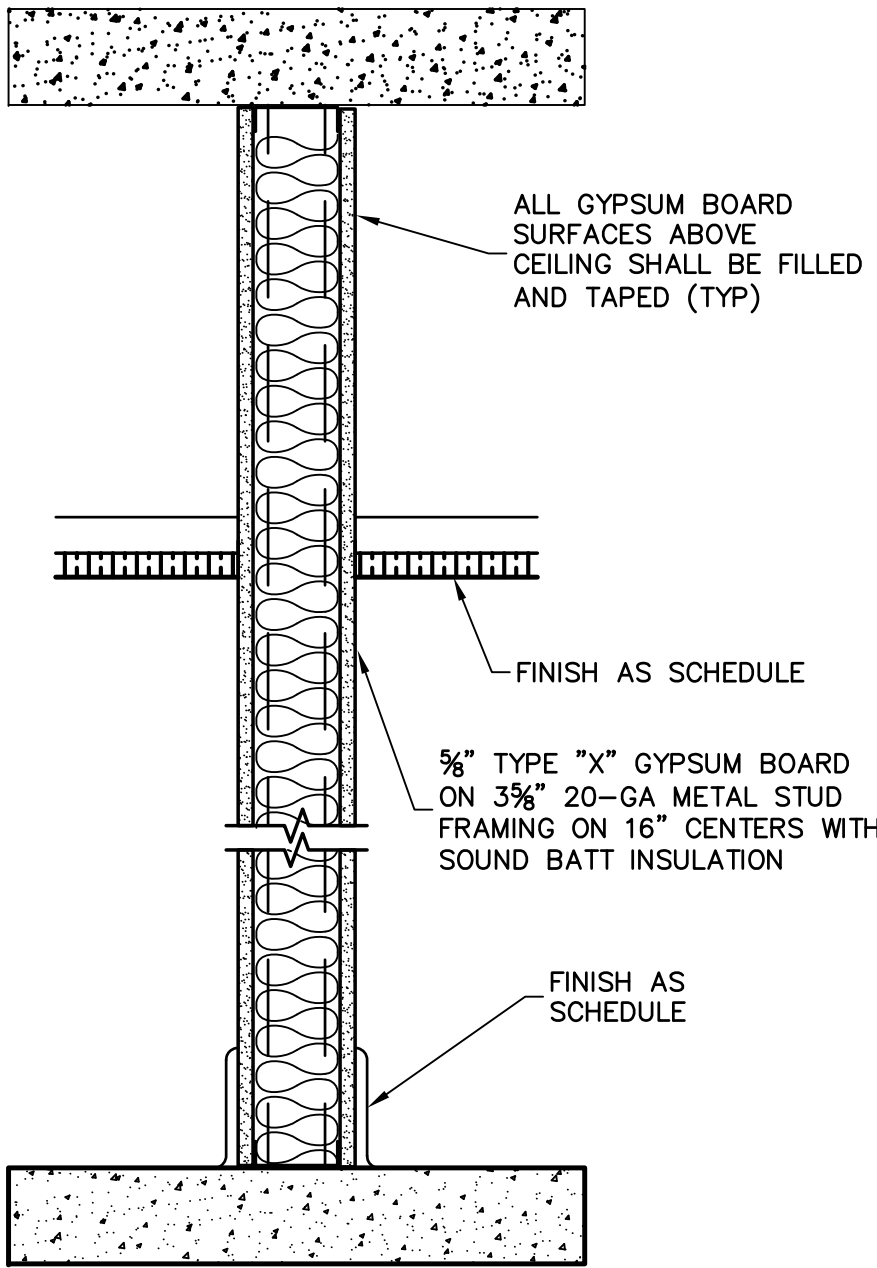
DOOR HARDWARE SCHEDULE						
GROUP No.	HARDWARE					
1	DOOR 408A					
	QYT	ITEM	MODEL No.	FINISH	MFR	NOTES
	6 EA	HINGE	3CB1 4.5 X 4.5	643	IVE	
	1 EA	ELECTRIC STRIKE	6300	613	VON	
	2 EA	SURFACE CLOSER	4041	690	LCN	
	2 EA	KICK PLATE	8400 10"x2" LDW	613	IVE	
	2 EA	WALL STOP	WS407CCV	613	IVE	
	2 SETS	SEALS	188S	BLK	ZER	
	1	WIRING DIAGRAM	BY HARDWARE SUPPLIER		B/O	
	1	CARD READER	BY SECURITY SUPPLIER		B/O	1
2	DOOR 400A					
	QYT	ITEM	MODEL No.	FINISH	MFR	NOTES
	3 EA	HINGE	3CB1 4.5 X 4.5	643	IVE	
	1 EA	ELECTRIC STRIKE	6211 FSE 24VAC	613	VON	
	1 EA	SURFACE CLOSER	4041	690	LCN	
	1 EA	KICK PLATE	8400 10"x2" LDW	613	IVE	
	1 EA	WALL STOP	WS407CCV	613	IVE	
	1 SETS	SEALS	188S	BLK	ZER	
	1	WIRING DIAGRAM	BY HARDWARE SUPPLIER		B/O	
	1	CARD READER	BY SECURITY SUPPLIER		B/O	1
3	DOORS 406A, 407A					
	QYT	ITEM	MODEL No.	FINISH	MFR	NOTES
	6 EA	HINGE	3CB1 4.5 X 4.5	643	IVE	
	1 EA	STOREROOM LOCK	93K7D15D	613	BES	
	1 EA	SURFACE CLOSER	4041	690	LCN	
	2 EA	KICK PLATE	8400 10"x2" LDW	613	IVE	
	2 EA	WALL STOP	WS407CCV	613	IVE	
	2 SETS	SEALS	188S	BLK	ZER	
3	DOOR 417A					
	QYT	ITEM	MODEL No.	FINISH	MFR	NOTES
	3 EA	HINGE	3CB1 4.5 X 4.5	643	IVE	
	1 EA	PUSH PLATE	8200 8"x16"	613	IVE	
	1 EA	PULL PLATE	8303-0 4"x16"	613	IVE	
	1 EA	SURFACE CLOSER	4041	690	LNC	
	1 EA	KICK PLATE	8400 10"x2" LDW	613	IVE	
	1 EA	WALL STOP	WS407CCV	613	IVE	
	3 EA	SILENCER	SR64	GRY	IVE	

NOTES:  
1. CARD READER TO RELEASE ELECTRIC STRIKE.



2  
A-4  
TYPICAL NON-RATED PARTITION  
1 1/2" = 1'-0" COMPLIES WITH UL DESIGN U419

4  
A-4  
FIRE CABINET DETAIL  
NTS



NOTES:  
1. THE CONTRACTOR IS REQUIRED TO IDENTIFY ALL FIRE RATED WALLS WITH SIGNS OR STENCILING, SUCH IDENTIFICATION SHALL BE ABOVE ANY DECORATIVE CEILING AND IN CONCEALED SPACES. SUGGESTED WORDING: "FIRE AND SMOKE BARRIER PROTECT ALL OPENINGS"  
2. PROVIDE FIRE SAFING AND INTUMESCENT CAULK FULL PERIMETER AND ALL GAPS AND PENETRATIONS.

1  
A-4  
TYPICAL RATED PARTITION  
1 1/2" = 1'-0" COMPLIES WITH UL DESIGN U419

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

DATE  
09/26/2013  
10-29-2013

DESCRIPTION  
OWNER/COUNTY REVIEW  
OWNER/COUNTY CHANGES

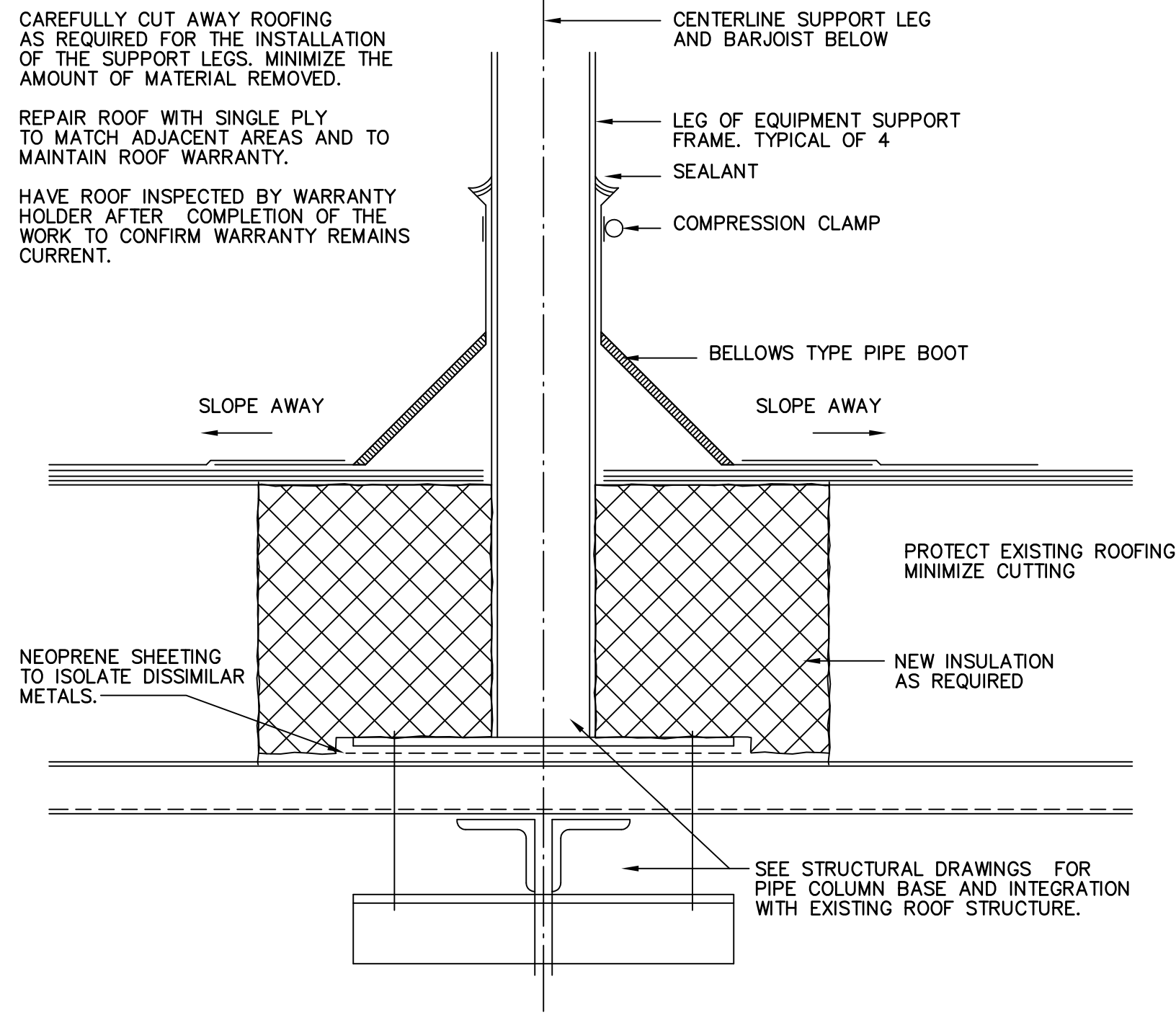
FL#5348

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

ARCHITECTURAL  
DETAILS AND  
ELEVATIONS

FILE: MC HENSLEY 4TH FL  
JOB NO.: 2013.35  
DATE : 3/20/2013  
PLOT SIZE: 1:1  
DRAWN BY: CMD/MC  
CHECKED BY: JDC  
SHEET No.:  
A-4



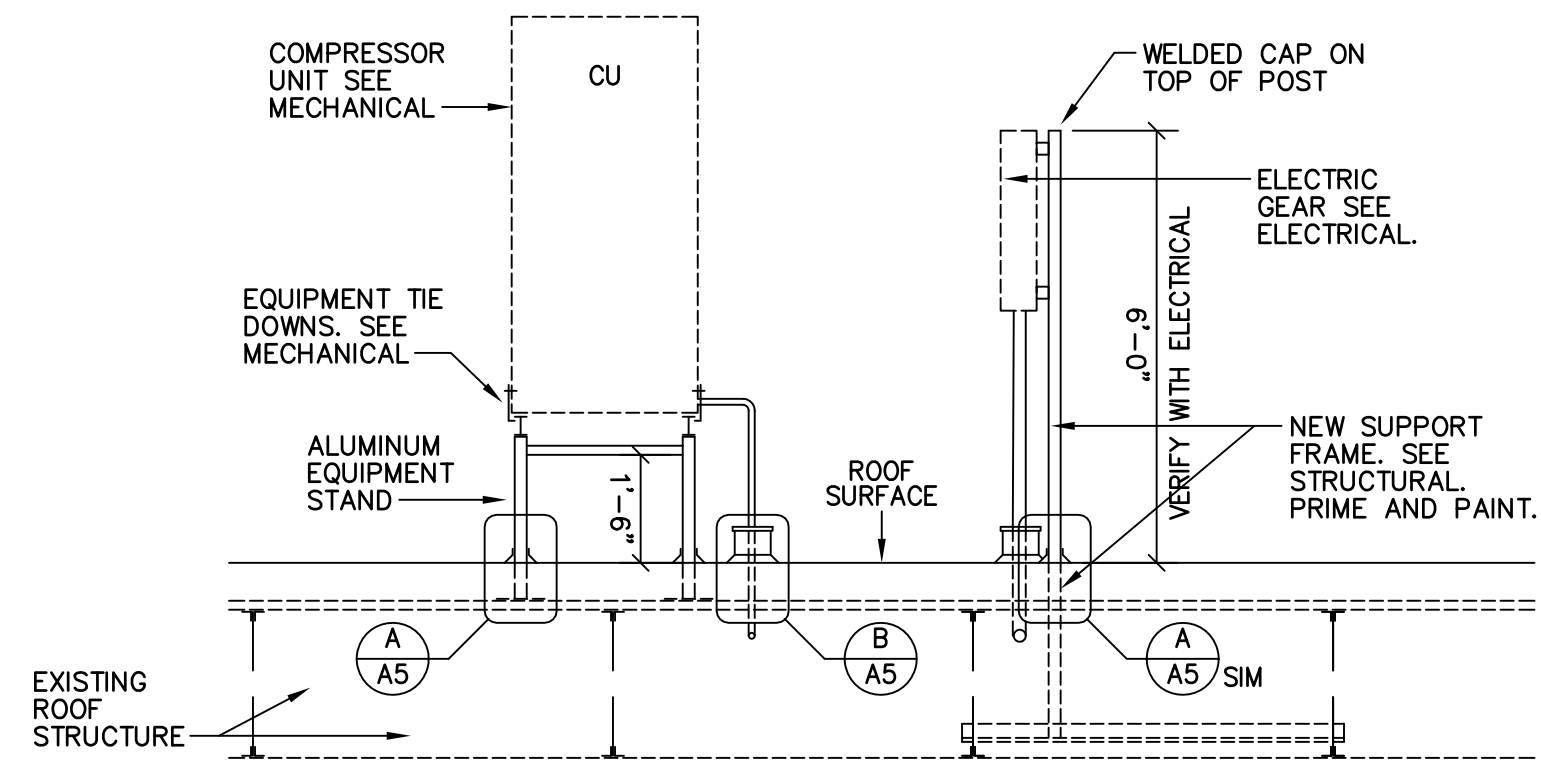


2  
A-5  
EQUIPMENT SUPPORT DETAIL  
NOT TO SCALE

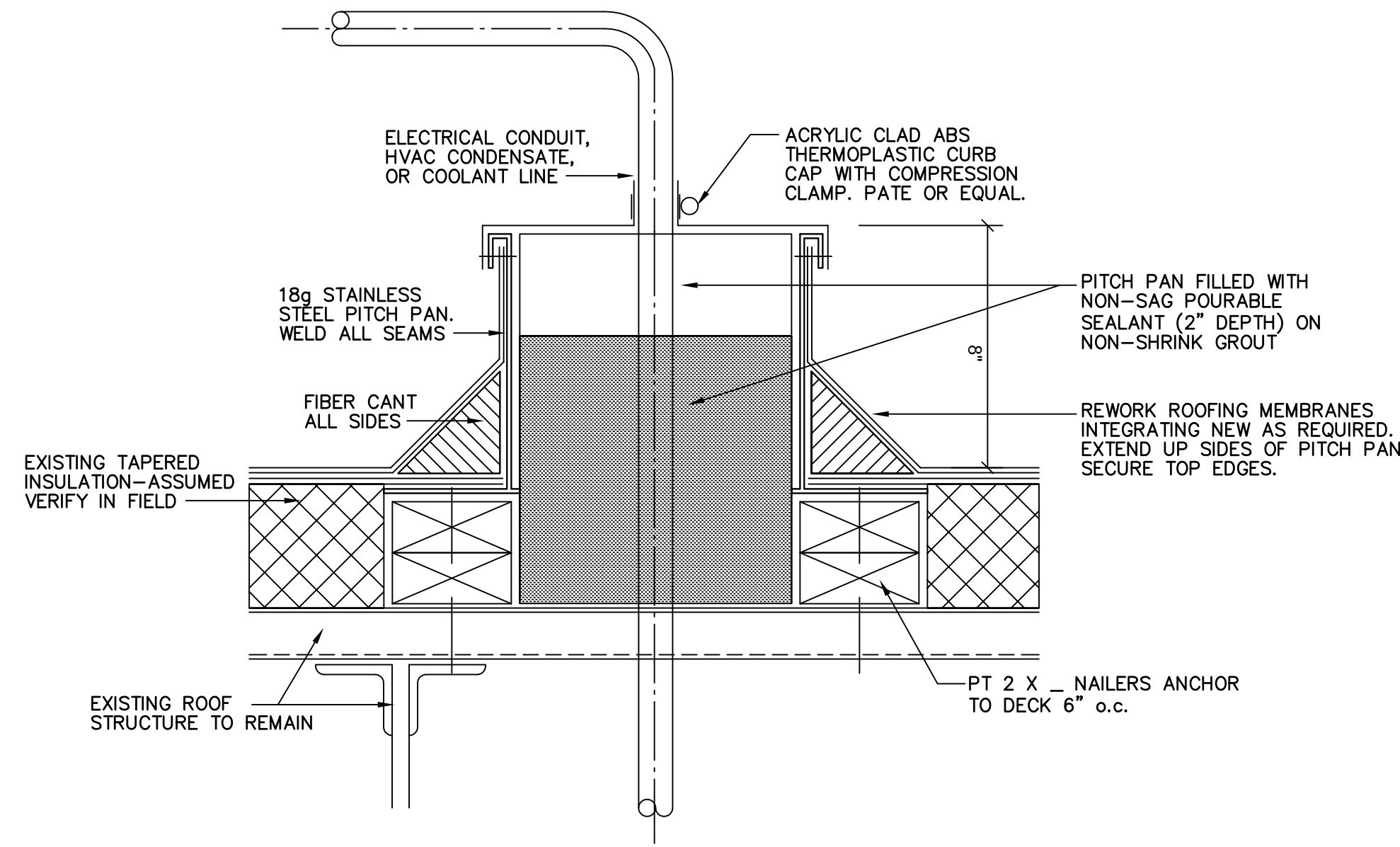
NOTES:

THE BASIS OF DESIGN FOR THE ALUMINUM AIR CONDITIONING EQUIPMENT STAND IS HEAVY DUTY ALUMINUM STAND AS MANUFACTURED BY PRECISION ALUMINUM PRODUCTS, INC. DEERFIELD BEACH, FLORIDA [http://www.acstands.com]

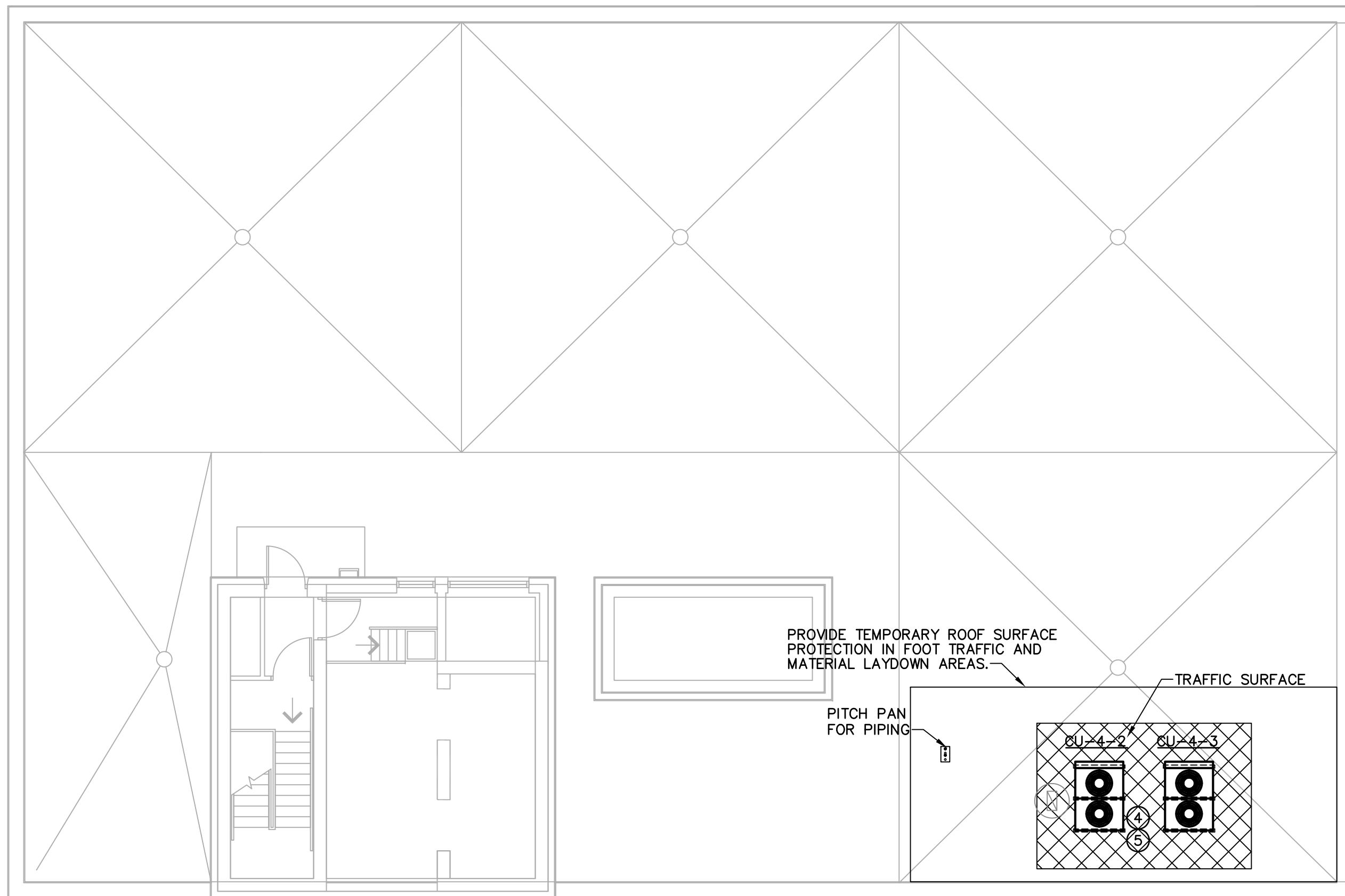
MIAMI DADE PRODUCT APPROVAL FOR HVHZ NOA No. 09-0804.05



3  
A-5  
EQUIPMENT STAND ELEVATION  
NOT TO SCALE



4  
A-5  
PITCH PAN DETAIL  
NOT TO SCALE



N  
1/8"=1'-0"  
PROPOSED ROOF FLOOR

GENERAL NOTES:

- REFER TO PLANS AND CONTRACT SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. ANY QUESTIONS SHALL BE ANSWERED BY THE ENGINEER AND PROJECT REPRESENTATIVE PRIOR TO START WORK.
- ITEMS IN GRAYSCALE ARE EXISTING AND TO REMAIN. FOR DUCTWORK AND DIFFUSERS THAT ARE "TO REMAIN" PRESERVE EXISTING LOCATION.
- SUPPORT AND TIEDOWN CONDENSERS AND PIPING IN ACCORDANCE WITH FLORIDA BUILDING CODE WIND RESTRAINT REQUIREMENTS.
- SEE STRUCTURAL PLAN FOR ROOF STAND SUPPORTS.
- THE EXISTING ROOF IS FIBERTITE WITH A PRODUCT WARRANTY IN EFFECT. CONTACT MANUFACTURER FOR A WARRANTY REVIEW. CONTACT FOR ROOF WORK BRADENTON SUTTER ROOFING (941)377-1000
- REVIEW ALL DETAILS WITH WARRANTY HOLDER. MODIFY TO MATCH MANUFACTURER'S REQUIREMENTS TO MAINTAIN WARRANTY.

ATP ENGINEERING SOUTH, PL	DATE	09/06/2013
SARASOTA, FLORIDA	DESCRIPTION	OWNER/COUNTY REVIEW
ENGR. BUSINESS #8908	REV#	
941-751-6485		
FL#5468		

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

ARCHITECTURAL ROOF PLAN	FILE: MC HENSLEY 4TH FL
	JOB NO.: 2013.35
	DATE : 3/20/2013
	PLOT SIZE: 1:1
	DRAWN BY: CMD/MC
	CHECKED BY: JDC
	SHEET No.: A-5



STRUCTURAL GENERAL NOTES:  
2013091 / NOTES - GENERAL

1. DESIGN:

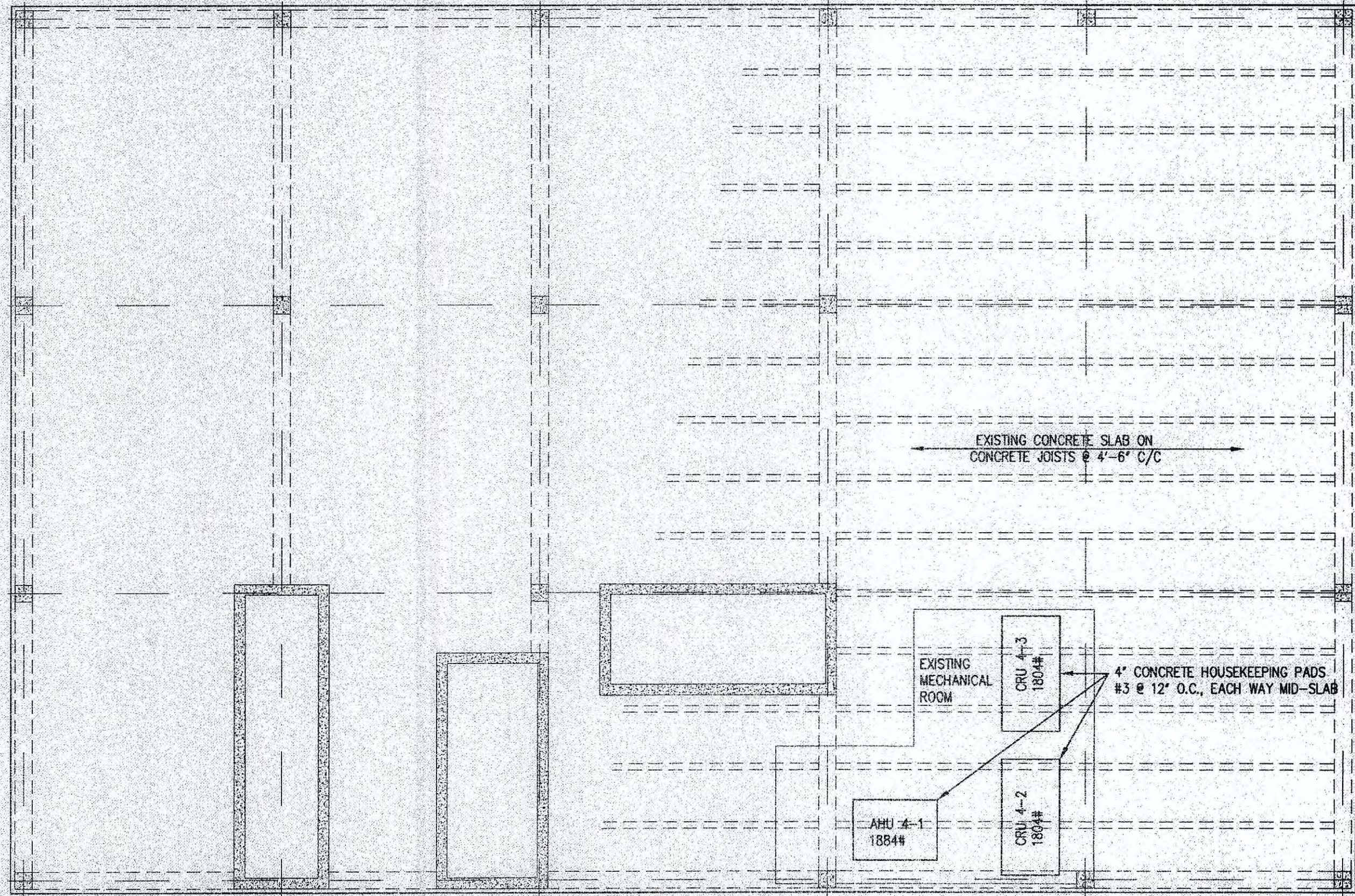
1. THE NEW STRUCTURAL COMPONENTS DESCRIBED ON THESE DRAWINGS HAVE BEEN DESIGNED TO COMPLY WITH THE 2010 FLORIDA BUILDING CODE.
2. THE ADEQUACY OF THE EXISTING STRUCTURE HAS BEEN REVIEWED AND CONFIRMED TO SUPPORT THE NEW CONSTRUCTION IN THE LOCATIONS SHOWN ON THESE PLANS.
3. DESIGN LOADS:  
WIND LOAD CRITERIA FOR NEW ROOFTOP UNITS AND SUPPORT FRAMES:  
PER ASCE 7-10  
BUILDING RISK CATEGORY II  
 $V = 150$  MPH (ULTIMATE 3 SECOND GUST SPEED) /  $HT = 50'$  / EXPOSURE C  
 $DP = +61.0$  /  $-61.0$  PSF ON PROJECTED FACE OF UNIT
4. THE EXTENT, CONFIGURATION AND DETAILS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS ARE BASED UPON LIMITED INFORMATION AVAILABLE AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO THE FULLEST PRACTICAL EXTENT DURING DEMOLITION AND CONSTRUCTION. NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH ANY NEW CONSTRUCTION.
5. ALL DIMENSIONS, OTHER THAN PURELY STRUCTURAL DIMENSIONS, SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST ARCHITECTURAL DRAWINGS AND AGAINST EXISTING CONDITIONS ON SITE. REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO PROCEEDING WITH THE WORK.
6. DO NOT SCALE THE DRAWINGS.
7. NO PROVISION HAS BEEN MADE IN THE STRUCTURAL DESIGN FOR TEMPORARY CONDITIONS OCCURRING DURING CONSTRUCTION, UNLESS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING REQUIRED TO RESIST STRESSES OR INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR SUCH MEASURES.

2. CONCRETE:

1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE AND SHALL CONFORM WITH ACI 301, ACI 318 AND ASTM C-94, AND 2010 FBC.
2. MINIMUM 28-DAY COMPRESSIVE STRENGTH (F<sub>C</sub>): CONCRETE HOUSEKEEPING PADS: 3000 PSI
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615; YIELD STRENGTH = 60 KSI, MIN.
4. MINIMUM CONCRETE COVER TO REINFORCING STEEL: 1-1/2" AT TOP AND SIDES OF PADS.

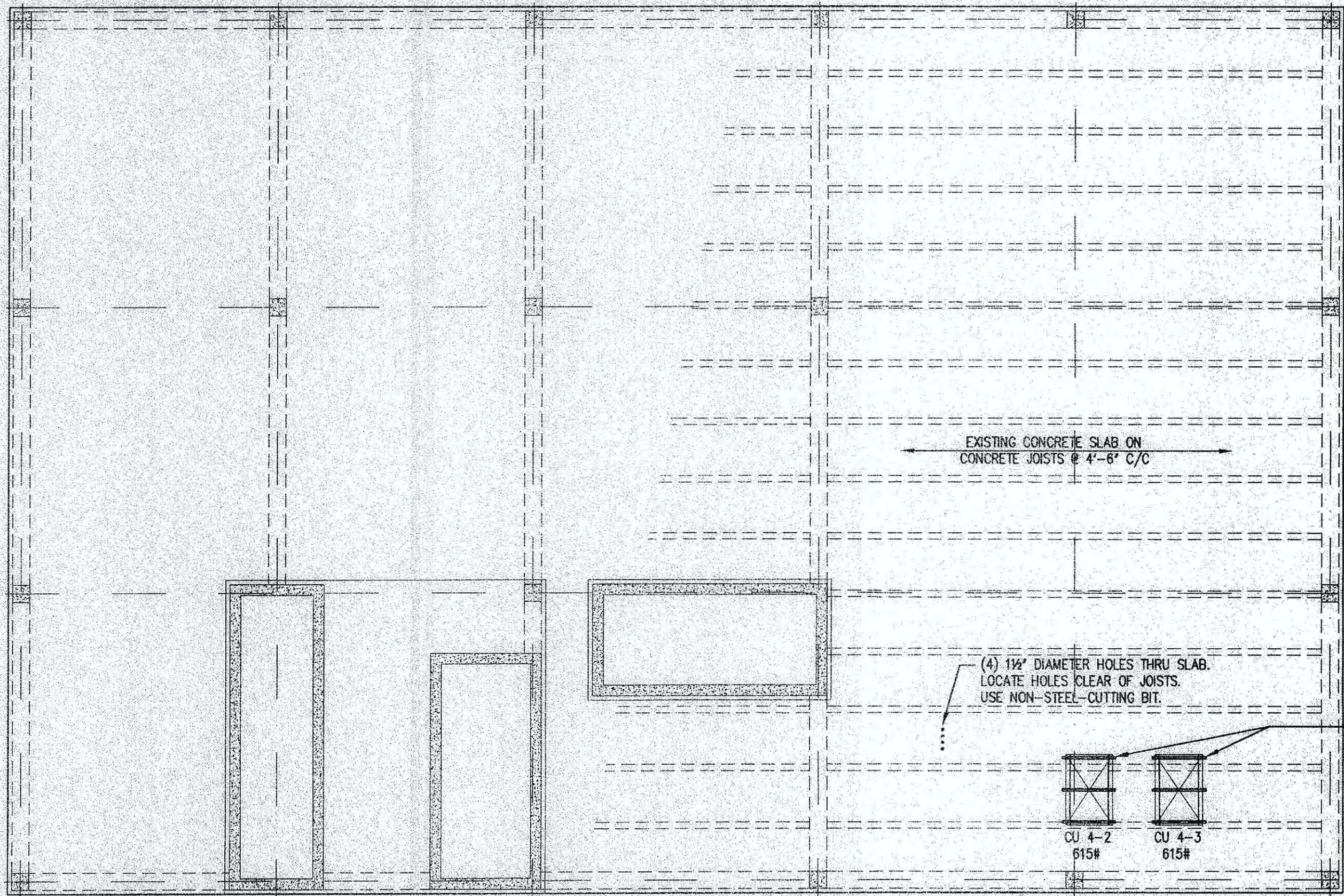
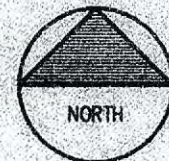
EXISTING 4TH FLOOR FRAMING PLAN

1/8"=1'-0"

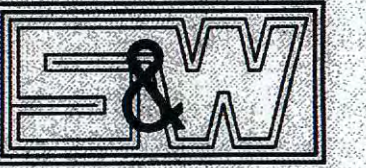


EXISTING ROOF FRAMING PLAN

1/8"=1'-0"



STIRLING & WILBUR  
ENGINEERING GROUP



7085 SOUTH TAMAMI TRAIL, SARASOTA, FL 34231  
PHONE (941) 929-1552 FAX (941) 929-1553  
email: cad@stirlingwilbur.com  
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EB0402

PROJECT NAME

MANATEE COUNTY  
HENSLEY WING  
4TH FLOOR IT RENOVATION

1051 MANATEE AVENUE W.  
BRADENTON, FLORIDA

IFAS # 1300147 WA#10

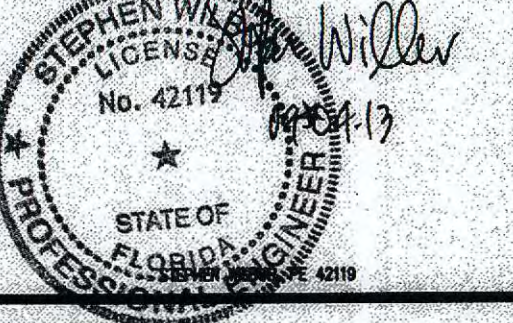
ISSUED FOR

CONSTRUCTION 09-03-13

PROJECT NUMBER

W2013-091

SIGN/SEAL



REVISIONS

1		
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DRAWN BY

RTR

CHECKED BY

SW

DATE

09-03-13

PLOT SCALE

1/8"=1'-0"

THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

FRAMING PLANS +  
STRUCTURAL NOTES

SHEET NUMBER

S1 OF 1



# ELECTRICAL SYMBOLS AND ABBREVIATIONS

## NOTE:

THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

## EQUIPMENT

SYMBOL	DESCRIPTION
	DISTRIBUTION PANELBOARD AND CABINET - RECESSED MOUNT
	DISTRIBUTION PANELBOARD AND CABINET - SURFACE MOUNT
	BRANCH PANELBOARD AND CABINET - RECESSED MOUNT
	BRANCH PANELBOARD AND CABINET - SURFACE MOUNT
	LOAD CENTER - SURFACE MOUNT
	LOAD CENTER - RECESSED MOUNT
	DENOTES PANEL/PANELBOARD DESIGNATION
	MOTOR "X" INDICATES HORSEPOWER "Y" INDICATES PHASE
	CAPACITOR "X" INDICATES KVAR
	DISCONNECT SWITCH - FUSED "X"= RATING, "Y" = FUSE SIZE
	DISCONNECT SWITCH - NON-FUSED
	DISCONNECT SWITCH - CIRCUIT BREAKER
	MOTOR STARTER
	COMBINATION MOTOR STARTER
	DRY TYPE TRANSFORMER - "XX" INDICATES KVA
	METER SOCKET
	CURRENT TRANSFORMER METER SOCKET
	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	GENERATOR
	TRANSFER SWITCH ATS = AUTOMATIC TRANSFER SWITCH MTS = MANUAL TRANSFER SWITCH N = NORMAL POWER E = EMERGENCY POWER L = LOAD

	WIREWAY
	BUSWAY
	GROUND CONNECTION
	HORSEPOWER RATED MANUAL MOTOR STARTER TOGGLE SWITCH WITH THERMAL OVERLOAD PROTECTION "X" INDICATES AS FOLLOWS NONE - SINGLE POLE 2 - 2 POLE 3 - 3 POLE
	HORSEPOWER RATED MANUAL MOTOR STARTER TOGGLE SWITCH WITH THERMAL OVERLOAD PROTECTION WITH PILOT LIGHT "X" INDICATES AS FOLLOWS "Y" INDICATES AS FOLLOWS NONE - SINGLE POLE Y - YELLOW LENS 2 - 2 POLE G - GREEN LENS 3 - 3 POLE R - RED LENS W - WHITE LENS B - BLUE LENS A - AMBER
	LOW VOLTAGE DRAWOUT TYPE CIRCUIT BREAKER "X" INDICATES AS FOLLOWS A - AIR TYPE S - SF6 TYPE V - VACUUM TYPE
	MOLDED CASE CIRCUIT BREAKER
	FUSE
	DRAW OUT MOTOR STARTER ASSEMBLY

## RACEWAY SYSTEM

SYMBOL	DESCRIPTION
	CONCEALED CONDUIT
	4" CONDUIT SLEEVE WITH BUSHINGS THRU WALL ABOVE CEILING
	LETTER DESIGNATION REFERS TO SYSTEM (SEE ABBREVIATIONS)
	QUANTITY OF CONDUCTORS OR CABLES IN CONDUIT "F50" DENOTES THE FEEDER SIZE "A-XX" DENOTES PANEL AND CIRCUIT #
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	JUNCTION OR PULL BOX
	CABLE TRAY
	U/G CONDUIT TURNED UP
	U/G CONDUIT TURNED DOWN

## LIGHTING

SYMBOL	DESCRIPTION
	X = FIXTURE TYPE, 2 = CIRCUIT NUMBER, C = SWITCH LEG F - FLUORESCENT K - INCANDESCENT H - H.I.D.
	FLUORESCENT STRIP TYPE FIXTURE
	FLUORESCENT TYPE FIXTURE
	FLUORESCENT TYPE FIXTURE WITH EMERGENCY BATTERY BALLAST
	CEILING MOUNT LIGHT FIXTURE
	CEILING MOUNT RECESSED LIGHT FIXTURE
	WALL MOUNT FIXTURE
	LIGHT POLE WITH ONE FIXTURE (FIXTURE LOCATION AND SPACING AS SHOWN)
	2 HEAD POLE LIGHT. LOCATION AND SPACING AS SHOWN.
	3 HEAD POLE LIGHT. LOCATION AND SPACING AS SHOWN.
	4 HEAD POLE LIGHT. LOCATION AND SPACING AS SHOWN.
	EXIT LIGHT -CEILING MOUNTED ARROWS DENOTE EGRESS PATH
	EXIT LIGHT - WALL MOUNTED ARROWS DENOTE EGRESS PATH
	EMERGENCY WALL MOUNT W/ BATTERY UNIT
	EXIT / EMERGENCY WALL MOUNT W/ BATTERY UNIT ARROWS DENOTE EGRESS PATH
	EMERGENCY WALL MOUNT REMOTE HEAD

## DEVICES

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE - NORMAL CIRCUIT "X" INDICATES AS FOLLOWS: NONE = 20 AMP, 125VAC GFI = 20 AMP, 125VAC, GROUND FAULT INTERRUPTER TYPE D = 20 AMP, 125VAC, DEDICATED CIRCUIT IG = 20 AMP, 125VAC, ISOLATED GROUND TYPE S = 20 AMP, 125VAC, SURGE PROTECTION TYPE WP = 20 AMP, 125VAC, WEATHERPROOF TYPE
	DOUBLE DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE - ABOVE COUNTER. 44" AFF
	DOUBLE DUPLEX RECEPTACLE - ABOVE COUNTER. 44" AFF
	SINGLE RECEPTACLE - SEE DRAWINGS AND CONTRACT SPECIFICATIONS.
	SPECIAL RECEPTACLE - SEE DRAWINGS AND CONTRACT SPECIFICATIONS.
	SINGLE RECEPTACLE - CEILING, SEE DRAWINGS & CONTRACT SPECIFICATIONS.
	DUPLEX RECEPTACLE - CEILING, SEE DRAWINGS & CONTRACT SPECIFICATIONS.
	CLOCK RECEPTACLE - 120VAC
	TOGGLE SWITCH - SINGLE POLE
	TOGGLE SWITCH - DOUBLE POLE
	TOGGLE SWITCH - 3-WAY
	TOGGLE SWITCH - 4-WAY
	TOGGLE SWITCH - o- INDICATES TYPE T: TIMER, K: KEY OPERATED
	SWITCH - DIMMER
	SWITCH - FAN SPEED CONTROL
	WALL MOUNTED OCCUPANCY SENSOR
	CEILING MOUNTED OCCUPANCY SENSOR x = TYPE, SEE PLANS
	JUNCTION BOX
	HVAC THERMOSTAT
	HVAC HUMIDISTAT
	FURNITURE POWER POLE
	FURNITURE CABLE MANAGEMENT POLE.
	MUSHROOM HEAD RED PUSH BUTTON
	TCC - TEMPERATURE CONTROL PANEL

## FIRE ALARM SYSTEM

SYMBOL	DESCRIPTION
	HORN / STROBE O = CEILING MOUNT O = WALL MOUNT
	HORN O = CEILING MOUNT O = WALL MOUNT
	SPEAKER/STROBE O = CEILING MOUNT O = WALL MOUNT
	STROBE O = CEILING MOUNT O = WALL MOUNT
	BELL O = CEILING MOUNT O = WALL MOUNT
	SMOKE DETECTOR
	HEAT DETECTOR
	PULL STATION
	ELEVATOR WARNING LIGHT
	FIREFIGHTER PHONE JACK
	TAMPER SWITCH
	FLOW SWITCH

F.A.A.P. REMOTE ANNUNCIATOR

FACP FIRE ALARM CONTROL PANEL

DOOR RELEASE DEVICE - FIRE ALARM ACTIVATED

SPEAKER - FIRE ALARM

AUTOMATIC DUCT DETECTOR ("X" DENOTES AS FOLLOWS):  
NONE = PHOTO ELECTRIC TYPE  
S= SUPPLY R= RETURN

EQUIPMENT SHUT DOWN RELAY

REMOTE DUCT DETECTOR INDICATOR LIGHT  
X= AIR HANDLER / ROOF TOP UNIT

FSS FIRE SUPPRESSION SYSTEM

SMOKE DAMPER - 24V, INTERLOCK WITH FACP

MOTORIZED DAMPER, 24V, INTERLOCK WITH FACP

## DOOR SECURITY SYSTEM

SYMBOL	DESCRIPTION
	DOOR CONTACT ROUGH-IN
	PROXIMITY CARD READER ROUGH-IN
	ELECTRO-MAGNETIC DOOR LOCK

## COMMUNICATION SYSTEMS

SYMBOL	DESCRIPTION
	WALL MOUNTED VOICE OUTLET
	WALL MOUNTED DATA OUTLET
	WALL MOUNTED COMBINATION VOICE / DATA OUTLET
	FLOOR MOUNTED VOICE OUTLET.
	FLOOR MOUNTED DATA OUTLET.
	FLOOR MOUNTED COMBINATION VOICE / DATA OUTLET.
	TELEPHONE CABINET
	COMMUNICATIONS CABINET

## DRAWING SYMBOLS

2 - DETAIL NUMBER  
E X - DRAWING NUMBER WHERE DRAWN

A - SECTION LETTER  
E X - DRAWING NUMBER WHERE DRAWN

1 REFER TO LIKE NUMBER NOTES.

1 REFER TO LIKE NUMBER NOTES.

1 HOUR RATED WALL

2 HOUR RATED WALL

1/2" CONDUIT FOR CONTROL WIRING (UNLESS OTHERWISE NOTED)

## ABBREVIATIONS

A	AMPERE
ACC	AIR CONDITIONING OR ALTERNATING CURRENT
AF	ACCESS
AFF	AMPERE FRAME
AFG	ABOVE FINISHED FLOOR
AHJ	ABOVE FINISHED GRADE
AHU	AUTHORITY HAVING JURISDICTION
AM	AIR HANDLER UNIT
ARCH	ARCHITECT
AT	AMPERE TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CAT	CATEGORY
CB	CIRCUIT BREAKER
CH	CHILLER
CKT	CIRCUIT
CL	CENTER LINE
CLF	CURRENT-LIMITING FUSE
CM	CEILING MOUNTED
CNTRL	CONTROL
CU	COPPER
DWG(S)	DRAWING(S)
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EWG	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXISTING TO REMAIN
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FACC	FIRE ALARM COMMAND CENTER
FATC	FIRE ALARM TERMINAL CABINET
FLR	FLOOR
FMC	FURNISHED BY MECHANICAL CONTRACTOR
FO	FIBER OPTIC
FOTC	FIBER OPTIC TERMINAL CABINET
FSS	FIRE SUPPRESSION SYSTEM
FWE	FURNISHED WITH EQUIPMENT
GFI	GROUND FAULT INTERRUPTER
GND,G	GROUND
GRS	GALVANIZED RIGID STEEL CONDUIT
HOA	HAND-OFF-AUTO
HACR	HEATING/AIR CONDITIONING-RATED
HID	HIGH INTENSITY DISCHARGE
HFP	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
HP	HORSEPOWER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
JB	JUNCTION BOX
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KWIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
KW	KILOWATT
LC	LIGHTING CONTACTOR
MC	MECHANICAL CONTRACTOR
MCC	MOTOR CONTROL CENTER
M-G	MOTOR GENERATOR
MDP	MAIN DISTRIBUTION PANEL
MH	METAL HALIDE
MOD	MOTOR OPERATED DAMPER OR DOOR
MTD	MOUNTED
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON-FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OCPD	OVER CURRENT PROTECTIVE DEVICE
PNL	PANEL
PB	PUSHBUTTON
PE	PHOTOELECTRIC CONTROLLER
PC	PLUMBING CONTRACTOR
PVC	POLYVINYL CHLORIDE CONDUIT
R	RELOCATED
RTU	ROOF TOP UNIT
SCH	SCHEDULE
SEC	SECURITY
SW	SWITCH
SWGR	SWITCHGEAR
TEL,T	TELEPHONE
TBB	TELEPHONE BACKBOARD
TVS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TC	TIME CLOCK
XFMR	TRANSFORMER
XFR	TRANSFER
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL,UL,L	UNDERWRITERS LABORATORIES
UPS	UNINTERRUPTIBLE POWER SUPPLY
U.O.N.	UNLESS OTHERWISE NOTED
VT	VAPORTIGHT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
V	VOLT
VM	VOLTMETER
W	WATT
WHM	WATTHOUR METER
WM	WATTMETER
WP	WEATHER PROOF

## GENERAL NOTES (APPLY TO ALL DRAWINGS):

- THE WORK INDICATED ON THESE DRAWINGS IS DIAGRAMMATIC AND IS INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL ARRANGEMENT OF EQUIPMENT AND DEVICES FOR A COMPLETE SYSTEM IN EVERY RESPECT AND DETAIL, TESTED AND LEFT READY IN PERFECT OPERATING CONDITION FOR THE OWNER/COUNTY'S USE. MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITERS' LABORATORIES AND SHALL BE INSTALLED IN ACCORDANCE WITH SUCH LISTINGS. INSTALLATIONS SHALL BE MADE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. WORK SHALL MEET THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS AND CONFORM TO THE NEC (NFPA 70 & 72) AND ALL APPLICABLE CODES, AND BE COMPLETED BY A QUALIFIED, EXPERIENCED, LICENSED ELECTRICAL CONTRACTOR.
- THE ENGINEER HAS MADE AN EFFORT TO COORDINATE WORK WITH OTHER TRADES AND IDENTIFY ANY AND ALL CONFLICTS. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE FIELD WORK BETWEEN TRADES AND TO IDENTIFY FIELD CONDITIONS PRIOR TO INSTALLATION AND REPORT ANY CONFLICTS TO THE ENGINEER.
- FOR BIDDING PURPOSES, WHEN A CONFLICT OCCURS BETWEEN THE CONTRACT SPECIFICATIONS AND DRAWINGS, THE ITEMS OF GREATER QUANTITY AND/OR COST SHALL BE PROVIDED. ANY SUCH CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- CONTRACTOR SHALL VERIFY THE LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT FURNISHED BY OTHER TRADES PRIOR TO INSTALLATION. COORDINATE ROUGH-IN INSTALLATION WITH EQUIPMENT DETAILS.
- ALL OPENINGS IN FIRE AND SMOKE PARTITIONS SHALL BE SEALED AS REQUIRED BY THE NEC/ FLORIDA BUILDING CODE. PROVIDE UL LISTED COMPOUND TO MATCH PARTITION RATING.
- DO NOT SCALE DRAWINGS. VERIFY FIELD CONDITIONS PRIOR TO AND DURING CONSTRUCTION FOR EXACT DEVICE / EQUIPMENT LOCATION.
- DEMOLITION WORK: PROVIDE DEMOLITION AND REMOVAL WORK AS INDICATED OR NEEDED. EQUIPMENT THAT IS TO BE REMOVED INCLUDES ALL ASSOCIATED WIRING, BOXES AND CONDUIT BACK TO SOURCE. CLOSE ALL UNUSED OPENINGS IN JUNCTION BOXES THAT REMAIN WITH SUITABLE PLUG OR COVER. WHEN REMOVING OR RELOCATING LIGHT FIXTURES OR OTHER DEVICES, FIELD VERIFY REMAINING DEVICES IN THE SAME CIRCUIT AND RECONNECT FOR CONTINUED SERVICE. EXISTING ELECTRICAL WORK INTERFERING WITH NEW CONSTRUCTION SHALL BE RELOCATED OR REROUTED TO SUIT FINAL INSTALLATION. CUTTING AND PATCHING REQUIRED SHALL BE DONE TO RESTORE AREAS TO ORIGINAL CONDITION.
- CONTRACTOR SHALL PROVIDE TO LOCAL AHJ OR PERMITTING AGENCY A COPY OF ALL MAJOR EQUIPMENT CUT SHEETS AT TIME OF APPLICATION IF REQUESTED.
- PROVIDE A FULLY COMPREHENSIVE 3 YEAR WARRANTY ON ALL MATERIALS, EQUIPMENT, AND LABOR. THIS STATEMENT TAKE PRECEDENTS OVER THE CONTRACT SPECIFICATIONS. IF THE MANUFACTURER'S WARRANTY EXCEEDS THREE YEARS THEN THE PROVIDE THE MANUFACTURER'S WARRANTY WITH MATERIALS, PARTS, EQUIPMENT AND LABOR FOR AT LEAST THREE YEARS.

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

DRAWING TITLE  
ELECTRICAL  
SYMBOLS, LEGEND  
AND GENERAL  
NOTES

FILE: MC HENSLEY 4TH FL  
JOB NO.: 2013.35  
DATE : 3/20/2013  
PLOT SIZE: 1:1  
DRAWN BY: CMD/MC  
CHECKED BY: JOC  
SHEET No.:

E1.0

S/L

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

DATE

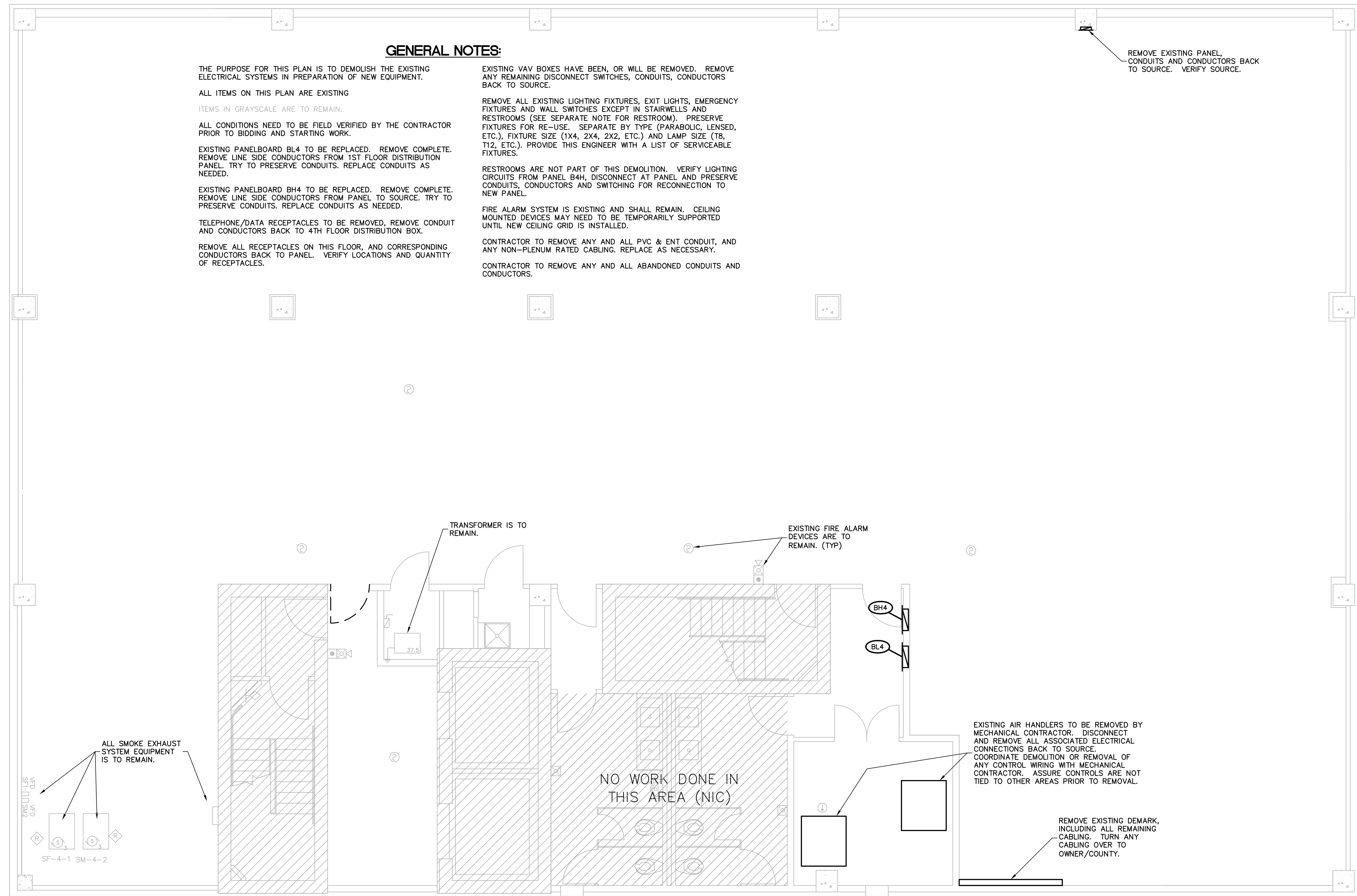
09/09/2013

REV #

DESCRIPTION

OWNER/COUNTY REVIEW

FL#5468



1  
E2.0

**DEMO ELECTRICAL PLAN**

1/4" = 1'-0"

DRAWING TITLE

**ELECTRICAL  
DEMO FLOOR  
PLAN**

FILE: MC HENSLEY 4TH FL

JOB NO.: 2013.35

DATE : 3/20/2013

PLOT SIZE: 1:1

DRAWN BY: CMD/MC

CHECKED BY: JDC

SHEET No.:

**E2.0**

**MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10**



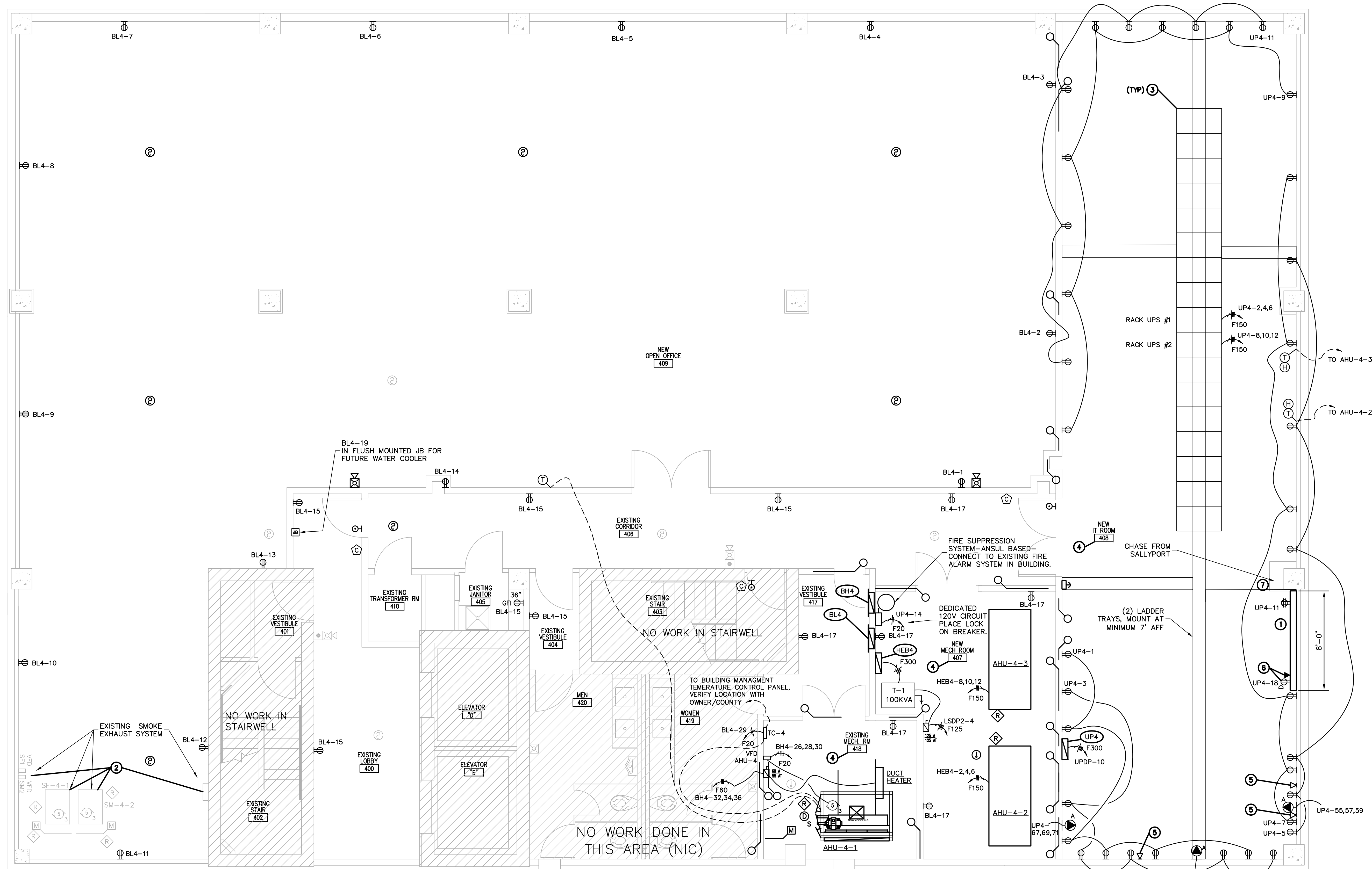
**ATP ENGINEERING SOUTH, PL  
SARASOTA, FLORIDA  
ENGR. BUSINESS #8908  
941-751-6485**

REV.#	DESCRIPTION	OWNER/COUNTY REVIEW	DATE
			09/06/2013

SJL

FL#5468





#### GENERAL NOTES:

NEW CEILING GRID TO BE INSTALLED AT 8'-6". INSURE ALL CONDUITS, JUNCTION BOXES, ETC. ARE INSTALLED TO INSURE THIS HEIGHT.

ALL CEILING MOUNTED RECEPTACLES IN IT ROOM SHALL BE L6-30R TWIST LOCK.

ALL ROUGH-IN'S IN FIRE RATED WALLS SHALL BE INSTALLED AS PER DETAIL, SEE SHEET E7.0.

PROVIDE FIRE-SAFING FOR ALL FIRE WALL PENETRATIONS.

FURNISH CONDUIT AND FLUSH MOUNTED BACKBOXES FOR THERMOSTATS AS SHOWN AT 46" A.F.F. TO TOP OF BOX. INSTALL (1) 1/2" CONDUIT W/ PULL STRING TO CORRESPONDING AHU. THERMOSTATS PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

PROVIDE AND INSTALL SIMPLEX GRINNELL SMOKE, PULL STATIONS, AND MODULES THAT CONNECT ITEMS TO THE EXISTING SIMPLEX FIRE ALARM SYSTEMS FOR A COMPLETE FIRE ALARM ON THE 4TH FLOOR. HAVE SIMPLEX RE-PROGRAM THE FIRE ALARM SYSTEM FOR THE NEW DEVICES AND PROVIDE 2 CD OR DVD COPIES OF THE SYSTEM RE-PROGRAMMING TO MANATEE COUNTY PROPERTY MANAGEMENT AND THE OWNER/COUNTY'S REPRESENTATIVE.

#### RECEPTACLE KEY

A = L6-30  
B = L6-20  
C = L6-15

#### PROPOSED POWER AND SYSTEMS PLAN

1/4" = 1'-0"

#### TRANSFORMER SCHEDULE

DESIGNATION	LOCATION	KVA	PHASE	VOLTAGE		CONNECTION		MOUNT	TYPE	LOAD SERVED	REMARKS
				PRIMARY	SECONDARY	PRIMARY	SECONDARY				
T-1	ROOM 407	100	3ø	480	120/208	DELTA	WYE	FLOOR	DRY	PANEL HEB4	-

#### PLAN NOTES:

- NEW COMMUNICATIONS DEMARK PLACEMENT -VERIFY WITH THE IT DEPARTMENT ALL REQUIREMENTS.
- EXISTING FIRE EXHAUST SYSTEM.
- CONTRACTOR SHALL INSTALL OWNER/COUNTY'S EQUIPMENT RACKS, PROVIDE 3 YEAR WARRANTY ON INSTALLATION.
- ALL NEW DEVICES IN THIS ROOM ARE TO BE SURFACE MOUNTED.
- FIELD VERIFY CONDUIT RUN FOR DATA. SEE DETAIL SHEET FOR FILL SCHEDULE.
- PROVIDE AUTO-DIALER FOR ROOM TEMPERATURE SENSING. OWNER/COUNTY SHALL PROVIDE CONTACT INFORMATION.
- PROVIDE AND INSTALL A 4" CONDUIT WITH PULL STRING FROM THE SALLYPORT CROSS CONNECT PULL BOX TO THE ADJACENT CHASE. VERIFY LOCATIONS WITH IT AND OWNER/COUNTY'S REPRESENTATIVE.

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

DATE  
09/26/2013  
10-18-2013

DESCRIPTION  
OWNER/COUNTY REVIEW  
OWNER/COUNTY CHANGES

REV #

FL#5468

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IFAS# W1300147 WA#10

ELECTRICAL  
PROPOSED POWER  
AND SYSTEMS PLAN

DRAWING TITLE

FILE: MC HENSLEY 4TH FL  
JOB NO.: 2013.35  
DATE: 3/20/2013  
PLOT SIZE: 1:1  
DRAWN BY: CMD/MC  
CHECKED BY: JDC  
SHEET No.:  
E3.0



1  
E3.1

**PARTIAL ROOF PLAN**

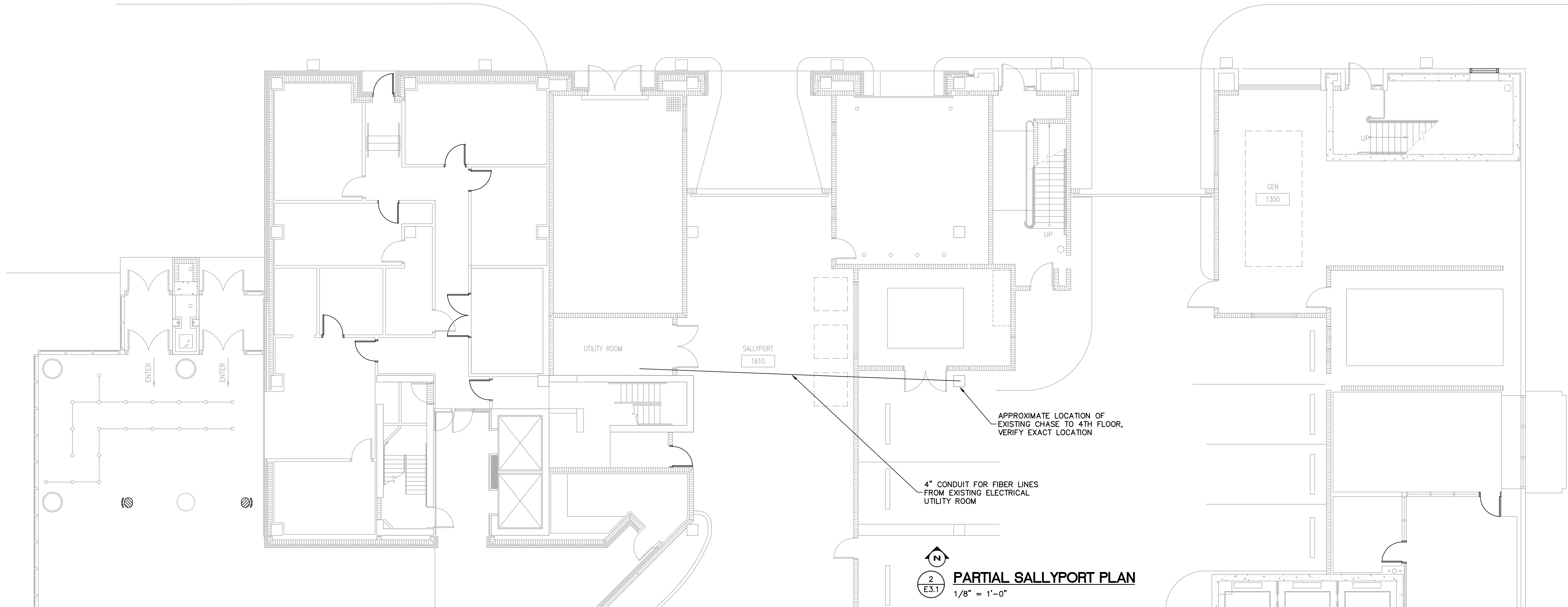
1/4" = 1'-0"

**GENERAL NOTES:**

EXTEND LIGHTNING PROTECTION TO NEW CONDENSERS ON ROOF.

CONDUITS TO RUN IN CEILING SPACE ON 5TH FLOOR. ONLY STUB UP TO DISCONNECTS AND FINAL CONNECTIONS TO BE ON ROOF TOP.

PROVIDE (1) 3/4" CONDUIT FROM EACH CU BACK TO CORRESPONDING AHU ON THE 4TH FLOOR FOR CONTROL WIRING.



2  
E3.1

**PARTIAL SALLYPORT PLAN**

1/8" = 1'-0"

REV #	DESCRIPTION	DATE
	OWNED/COUNTY REVIEW	09/06/2013







PANELBOARD SCHEDULE		DESIGNATION:		LSPD2		LOCATION:		3RD Fl Justice Center		MAINS:		1600 A MLO		
		VOLTAGE:		480Y/277		PHASE:		3 PHASE, 4 WIRE		BUS SIZE:		1600 AMP		
										PANEL MOUNTING:		SURFACE		
										ALL BREAKERS:		65,000 AIC		
CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	POLE	CONNECTED LOAD			BREAKER AMPS	POLE	CONN. KVA	LOAD CODE	LOAD DESCRIPTION	CKT NO.
1	DP ELEV	M	95.06	600	3	95.06	A	B	C					2
		M	95.06					95.06						
		M	95.06					95.06						
3	DOMESTIC WATER PUMP	M	10.00	100	3	30.54				*100	3	20.54	P HEB4	4
		M	10.00					29.65				19.65	P VIA 75KVA XFMR	
		M	10.00					29.65				19.65	P *	
5	ELEV 7	M	16.00	125	3	32.00				150	3	16.00	M ELEV 12 & 14	6
		M	16.00					32.00				16.00	M	
		M	16.00					32.00				16.00	M	
7	ELEV 10-11	M	22.00	125	3	39.70				150	3	17.70	P HNE 1	8
		M	22.00					39.70				17.70	P	
		M	22.00					39.70				17.70	P	
9	HNE 9	P	9.00	175	3	22.05				100	3	13.05	P XHB2	10
		P	9.00					22.05				13.05	P	
		P	9.00					21.94				12.94	P	
11	HNE 7	P	9.50	175	3	29.50				175	3	20.00	P HNE 8	12
		P	9.50					29.50				20.00	P	
		P	9.50					29.50				20.00	P	
13					3	16.80				175	3	16.80	P HNE 5	14
								16.80				16.80	P	
								16.80				16.80	P	
15	HNE 6	P	13.00	225	3	17.00				50	3	4.00	P HEB	*16*
		P	13.00					17.68				4.68	P VIA 35KVA XFMR	
		P	13.00					16.00				3.00	P *	
17	HNE 2	P	13.50	225	3	26.90				225	3	13.40	P HNE 4	18
		P	13.50					26.90				13.40	P	
		P	13.50					26.90				13.40	P	
19	HNE3	P	44.80	400	3	44.80								20
		P	44.80					44.80						
		P	44.80					44.80						
21						0.00								22
								0.00						
								0.00						
23						0.00								24
								0.00						
								0.00						
TOTAL CONNECTED AMPS:						1279.21 AMPS	354.34	354.13	352.35	KVA				
TOTAL CONNECTED LOAD:						1060.82 KVA	1279.21	1279.45	1272.01	AMPS				
TOTAL DEMAND AMPS:						1135.66 AMPS								
TOTAL DEMAND LOAD:						941.52 KVA								
LOAD CODES:														
L= LIGHTING														
R= RECEPTACLES														
M= MECHANICAL/EQUIPMENT														
C= COMPUTER														
K= KITCHEN														
P= PANELBOARD														
* - PROVIDE AND INSTALL NEW 100A BREAKER FOR NEW PANEL HEB4														
H= MATCH EXISTING														
RE-LABEL PANEL AS "LSPD2"														

1  
E5.1

### EXISTING PANELBOARD LSPD2

NTS 277/480V

LIFE SAFETY PANEL, LABEL AS PER DETAILS.

PANELBOARD SCHEDULE			DESIGNATION: BH4			LOCATION: RM 417 WOMEN'S BATH Vestibule			MAINS: 225 A MCB			BUS SIZE: 225 AMP			PANEL MOUNTING: FLUSH			VOLTAGE: 208Y/120			PHASE: 3 PHASE, 4 WIRE			ALL BREAKERS: 25,000 AIC						
CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	POLE	CONNECTED LOAD			BREAKER AMPS	POLE	CONN. KVA	LOAD CODE	LOAD DESCRIPTION	CKT NO.																
1	Lighting	L	1.32	20	1	1.32			20	1				2																
3	Lighting	L	1.08	20	1		1.08		20	1				4																
5	Lighting	L	0.96	20	1			0.96	20	1				6																
7				20	1	0.00			20	1				8																
9				20	1	0.00			20	1				10																
11				20	1			0.00	20	1				12																
13				20	1	0.00			20	1				14																
15				20	1	0.00			20	1				16																
17				20	1			0.00	20	1				18																
19				20	1	0.00			20	1				20																
21				20	1			0.00	20	1				22																
23				20	1				0.00	20	1			24																
25				20	1	2.10			15	3	2.10	M	New AHU-4-1	26																
27				20	1		2.10				2.10	M	5hp	28																
29				20	1			2.10			2.10	M	*	30																
31	Spare			20	1	9.67			55	3	9.67	M	Duct Heater - AHU-4-1	32																
33	Spare			20	1		9.67				9.67	M	29 KW	34																
35	Spare			20	1			9.67			9.67	M	*	36																
37	Space					0.00							Space	38																
39	Space						0.00						Space	40																
41	Space							0.00					Space	42																
TOTAL CONNECTED AMPS:				47.26 AMPS			47.26			12.85			12.73			KVA			47.26			46.39			45.96			AMPS		
TOTAL CONNECTED LOAD:				38.67 KVA																										
TOTAL DEMAND AMPS:				36.16 AMPS																										
TOTAL DEMAND LOAD:				29.51 KVA																										
LOAD CODES:																														
L= LIGHTING																														
R= RECEPTACLES																														
M= MECHANICAL/EQUIPMENT																														
C= COMPUTER																														
K= KITCHEN																														
P= PANELBOARD																														

4  
E5.1

### PANELBOARD BH4

NTS 277/480V

NEW PANEL TO REPLACE EXISTING PANEL.  
KAIC RATINGS MATCH OLD PANELBOARD.  
FED FROM MSB1.

PANELBOARD SCHEDULE		DESIGNATION: HEB4				LOCATION: 4TH FL IT AC Room				MAINS: 300A MB				BUS SIZE: 400 AMP				PANEL MOUNTING: SURFACE				VOLTAGE: 208Y/120				PHASE: 3 PHASE, 4 WIRE				ALL BREAKERS: 42,000 AIC				FED FROM LSDP2 VIA TRANSFORMER			
CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	POLE	CONNECTED LOAD			BREAKER AMPS	POLE	CONN. KVA	LOAD CODE	LOAD DESCRIPTION			CKT NO.																					
1	IT Rm Lighting	L	0.99	20	1	14.09										2																					
3	Blank						13.10		150	3	13.10	M	*	AHU-4-2		4																					
5	Blank							13.10			13.10	M	*			6																					
7	Blank					13.10			150	3	13.10	M	*	AHU-4-3		8																					
9	Blank						13.10				13.10	M	*			10																					
11	Blank							13.10			13.10	M	*			12																					
13						0.00										14																					
15							0.00									16																					
17								0.00								18																					
19						0.00										20																					
21							0.00									22																					
23								0.00								24																					
25						0.00										26																					
27							0.00									28																					
29								0.00								30																					
31						0.00										32																					
33							0.00									34																					
35								0.00								36																					
37						0.00										38																					
39							0.00									40																					
41								0.00								42																					
TOTAL CONNECTED AMPS:						226.55 AMPS		27.19	26.20	26.20	KVA																										
TOTAL DEMAND LOAD:						226.55		218.33	AMPS																												
TOTAL DEMAND AMPS:						171.15 AMPS																															
TOTAL DEMAND LOAD:						59.84 KVA																															
LOAD CODES:																																					
L= LIGHTING																																					
R= RECEPTACLES																																					
M= MECHANICAL/EQUIPMENT																																					
C= COMPUTER																																					
K= KITCHEN																																					
P= PANELBOARD																																					
LIFE SAFETY																																					
PROVIDE AS A 12 CIRCUIT BOARD																																					



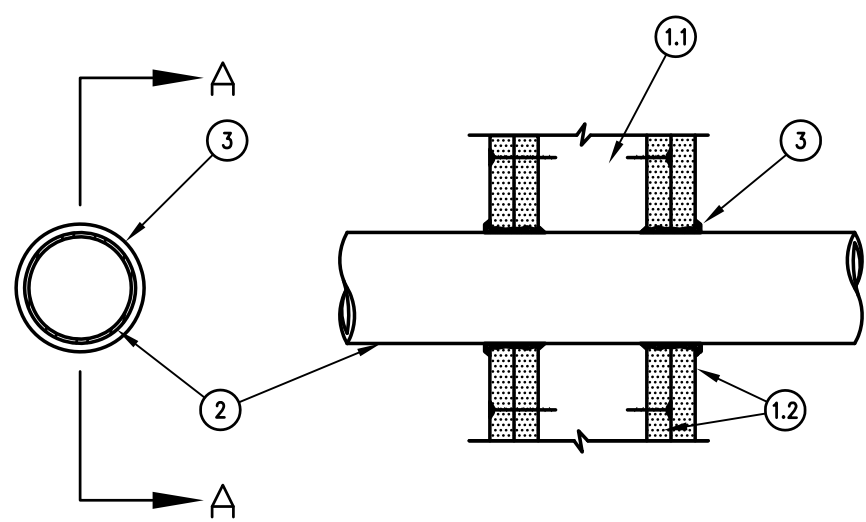
GENERAL NOTES:

(APPLY TO ALL ELECTRICAL SHEETS)

1. PROVIDE COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM.
2. ALL WORK SHALL CONFORM TO OR EXCEED THE MINIMUM REQUIREMENTS OF THE CURRENT ANSI/NFPA 70 WITH STATE OF FLORIDA AMENDMENTS, ANSI/IEEE C2 AND ALL FEDERAL, STATE, LOCAL, AND MUNICIPAL CODES AND ORDINANCES. THE ELECTRICAL SUBCONTRACTOR SHALL COMPLY WITH THE DIRECTIONS OF ALL AUTHORITIES HAVING JURISDICTION.
3. INSTALL WORK USING PROCEDURES DEFINED IN NECA STANDARDS OF INSTALLATION. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR CEILING AND MILLWORK WORK BY THE SEPARATE GENERAL CONTRACT. COORDINATE ALL ELECTRICAL WORK.
5. THE ELECTRICAL SUBCONTRACTOR SHALL PROVIDE ALL FLOOR, WALL, AND CEILING PENETRATIONS TO COMPLETE HIS WORK. PROVIDE PROPER FIRE SAFEING FOR ALL PENETRATIONS MADE.
6. COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES TO ENSURE EFFECTIVE AND EFFICIENT OVERALL INSTALLATION.
7. COORDINATE ALL ELECTRICAL SYSTEM DOWNTIME WITH THE OWNER/COUNTY, PERFORMANCE SERVICES, AND OTHER TRADES. DOWNTIME OF THE SYSTEM SHALL BE MINIMIZED. WEEKEND AND AFTER HOUR WORK SHALL BE REQUIRED TO PREVENT OR MINIMIZE INTERFERENCE WITH THE OWNER/COUNTY'S OPERATION.
8. THE LOCATIONS OF NEW RECEPTACLES, PHONE/DATA JACKS, AND ROOM EQUIPMENT SHOWN ON THESE DRAWINGS ARE APPROXIMATE. FINAL LOCATIONS WILL BE DETERMINED DURING THE CONSTRUCTION PHASE.
9. ALL NEW EQUIPMENT SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ORDERING.
10. PHYSICAL SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT SHOWN ON THESE DRAWINGS ARE APPROXIMATE. COORDINATE ELECTRICAL WORK FOR THIS EQUIPMENT WITH THE OTHER TRADES.
11. PROVIDE APPROPRIATE SEALANT (I.E. FIRESAFEING) TO MAINTAIN CONSTRUCTION INTEGRITY FOR ANY PENETRATIONS THROUGH FLOORS, STRUCTURAL CEILINGS, AND FIRE WALLS.
12. ALL BRANCH CIRCUITS SHALL UTILIZE SEPARATE INDEPENDENT NEUTRAL CONDUCTOR, AND INSULATED GROUNDING CONDUCTOR. DO NOT COMBINE NEUTRAL CONDUCTORS.
13. ALL FEEDER NEUTRAL/GROUNDED CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. DERATE MULTIPLE CONDUCTORS IN A RACEWAY ACCORDINGLY WITH NEC TABLES.
14. INSTALL ALL CONDUITS, RACEWAYS, AND CABLE TRAY FOR MAXIMUM HEAD CLEARANCE IN MECHANICAL AREAS, AND ATTIC. COORDINATE CLEARANCES WITH PERFORMANCE SERVICES AND THE OWNER/COUNTY.
15. ALL ELECTRICAL SERVICE WORK SHALL COMPLY WITH THE LOCAL UTILITY. COORDINATE ALL REQUIREMENTS AND MAXIMUM AVAILABLE FAULT CURRENT PRIOR TO BID AND INCLUDE ALL NECESSARY MATERIAL AND LABOR REQUIRED FOR THE ADDITION TO THE ELECTRICAL SERVICE. ADD UTILITY FEES TEXT.
16. CONTRACTOR SHALL DEMOLISH ANY REMAINING EXISTING ELECTRICAL EQUIPMENT, DEVICES, CONDUIT, FIXTURES, WIRE, UTILITY TRANSFORMER, ETC. COMPLETE. FIELD VERIFY EXACT REQUIREMENTS PRIOR TO BID. ALL REMOVED EQUIPMENT/FIXTURES SHALL BE TURNED OVER TO THE OWNER/COUNTY.
17. CAP AND FIRE STOP ALL EXISTING UNUSED CONDUITS AND CONDUIT PENETRATIONS THROUGH THE FLOOR AND TO THE FLOOR ABOVE.
18. TEST GROUNDING SYSTEM AFTER COMPLETION OF JOB TO INSURE PROPER GROUND CONDUCTIVITY.
19. RECORD DRAWINGS: PROVIDE AMPERE READINGS ON ALL PANELBOARDS TO PROVE PANELS ARE BALANCED. PROVIDE PHASE ROTATION READINGS ON ALL PANELBOARDS.

SYSTEM NO. WL1001

(FORMERLY SYSTEM NO. 147)  
F RATING - 1, 2, 3 AND 4HR. (SEE ITEM 2 AND 3)  
T RATINGS- 0, 1, 2, 3, AND 4 HR. (SEE ITEM 3)



SECTION A-A

1. WALL ASSEMBLY - THE 1, 2, 3 OR 4 HOUR FIRE-RATED GYPSUM WALLBOARD / STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
  - 1.1. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS CONSIST OF NOMINAL 2 BY 4 IN. LUMBER SPACED 16 INCHES OC WITH NOMINAL 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN. 3-5/8 IN. WIDE BY 1-3/8 IN. DEEP CHANNELS SPACED MAX 24 IN. OC.
  - 1.2. WALL BOARD GYPSUM\* - 1/2 IN. OR 5/8 IN. THICK 4 FOOT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 13-1/2 IN.
2. PIPE OR CONDUIT - NOMINAL 12 IN. DIAM. (OR SMALLER) SCHEDULE 10 (OR HEAVIER STEEL CONDUIT, NOM. 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL CONDUIT MECHANICAL OR TYPE L OR (HEAVIER) COPPER TUBING OR MON. 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT.
3. FILL, VOID OR CAVITY MATERIAL\* - CAULK - CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND W/ A MIN. 1/4 IN. DIAM BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAXIMUM PIPE OR CONDUIT DIAMETER (IN INCHES)	ANNULAR SPACE (IN INCHES)	F RATING HR	T RATING HR
1	0 TO 3/16	1 OR 2	0+, 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1 1/2	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0
+WHEN COPPER PIPE IS USED, T RATING IS 0 H.			

MINNESOTA MINING & MANUFACTURING CO. - TYPES CP-25 S/L, CP-25 N/S, CP-25 WB, CP-25 WB+

\* BEARING THE UL CLASSIFICATION MARKING

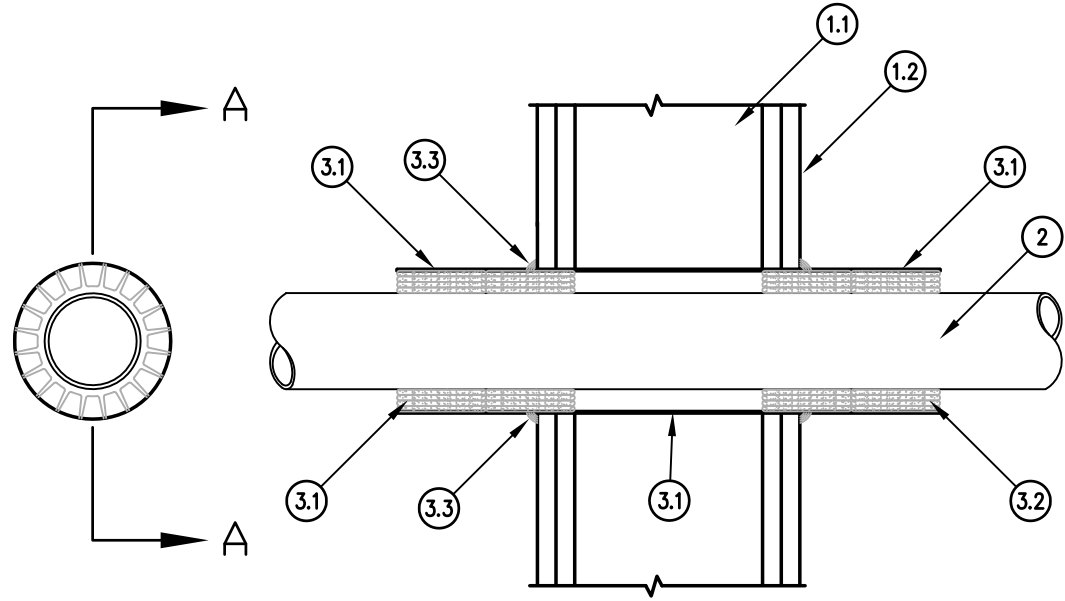


U.L. PENETRATION DETAIL

NOT TO SCALE

SYSTEM NO. WL2154

F Ratings - 1 or 2 HR (See Item 1)  
T Ratings - 1 or 2 HR (See Item 1)



SECTION A-A

1. WALL ASSEMBLY - THE 1 OR 2 HR FIRE RATED GYPSUM WALLBOARD / STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
  - 1.1. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. LUMBER SPACED 16 IN. OC. STEEL STUDS TO BE MIN 3-1/2 IN. WIDE AND SPACED MAXIMUM 24 IN. OC.
  - 1.2. WALLBOARD, GYPSUM BOARD\* - THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL PARTITION AND PARTITION DESIGN. MAXIMUM DIAMETER OF OPENING IS 7-3/4 IN. THE HOURLY F AND T RATINGS OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
2. THROUGH PENETRANTS - ONE NONMETALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN OPENING WITH A NOM. 1/4 IN. ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND PERIPHERY OF OPENING. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF NONMETALLIC PIPES OR CONDUITS MAY BE USED:
  - 2.1. POLYVINYL CHLORIDE (PVC) PIPE - NOM. 6 IN. DIAMETER (OR SMALLER) SCHEDULE 40 SOLID CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEM.
  - 2.2. RIGID NONMETALLIC CONDUIT +- - NOM. 6 IN. DIAMETER (OR SMALLER) SCHEDULE 40 PVC CONDUIT INSTALLED IN ACCORDANCE WITH ARTICLE 347 OF THE NATIONAL ELECTRICAL CODE (NFPA NO. 70).
  - 2.3. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE - NOM 6 IN. DIAMETER (OR SMALLER) SDR17 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS.
3. FIRESTOP SYSTEM - THE DETAILS OF THE FIRESTOP SYSTEM SHALL BE AS FOLLOWS:
  - 3.1. STEEL SLEEVE - MINIMUM 26 GAUGE GALVANIZED STEEL CUT 6 IN. LONGER THAN OVERALL WIDTH OF WALL WITH THE OUTSIDE DIAMETER EQUAL TO DIAMETER OF OPENING IN WALL WITH A MINIMUM 1 IN. OVERLAP ALONG LONGITUDINAL SEAM. SLEEVE PLACED IN WALL OPENING SUCH THAT 3 IN. EXTENDS BEYOND BOTH SIDES OF WALL. EDGES OF SLEEVE TO BE PROVIDED WITH 1/2 IN. LONG SLITS TO FORM RETAINING TABS.
  - 3.2. FILL, VOID OR CAVITY MATERIALS\* - WRAP STRIP - NOM. 1/8 IN. THICK INTUMESCENT MATERIAL SUPPLIED IN 2 IN. WIDE STRIPS. MINIMUM FOUR CONTINUOUS LAYERS OF WRAP STRIP TIGHTLY WRAPPED AROUND NONMETALLIC PIPE ON BOTH SIDES OF WALL, AND RECESSED WITHIN STEEL SLEEVE 2-1/2 IN. FROM THE END OF SLEEVE ON BOTH SIDE OF WALL. AN ADDITIONAL STACK OF FOUR CONTINUOUS LAYERS OF WRAP STRIP TIGHTLY WRAPPED AROUND NONMETALLIC PIPE ON BOTH SIDES OF THE WALL AND BUTTED TIGHTLY AGAINST SLEEVE. THE SLIT EDGES OF SLEEVE TO BE BENT 90 DEGREES TOWARD PIPE. TWO MINIMUM 1/2 IN. WIDE BY 0.028 IN. THICK STAINLESS STEEL BAND CLAMPS SHALL BE TIGHTLY FASTENED AROUND SLEEVE ON BOTH SIDES OF WALL, APPROXIMATELY 1/2 IN. FROM THE WALL SURFACES AND 3/4 IN. FROM EACH END OF SLEEVE. MINNESOTA MINING & MFG. CO. - ULTRA GS
  - 3.3. FILL, VOID OR CAVITY MATERIALS\* - CAULK - MINIMUM 1/2 IN. DIAMETER BEAD OF CAULK SHALL BE APPLIED TO OUTER PERIMETER OF SLEEVE ON BOTH SIDES OF WALL AT SLEEVE / WALL INTERFACE. MINNESOTA MINING & MFG. CO. - CP 25WB+ CAULK

\* BEARING THE UL CLASSIFICATION MARKING

+- BEARING THE UL LISTED MARK

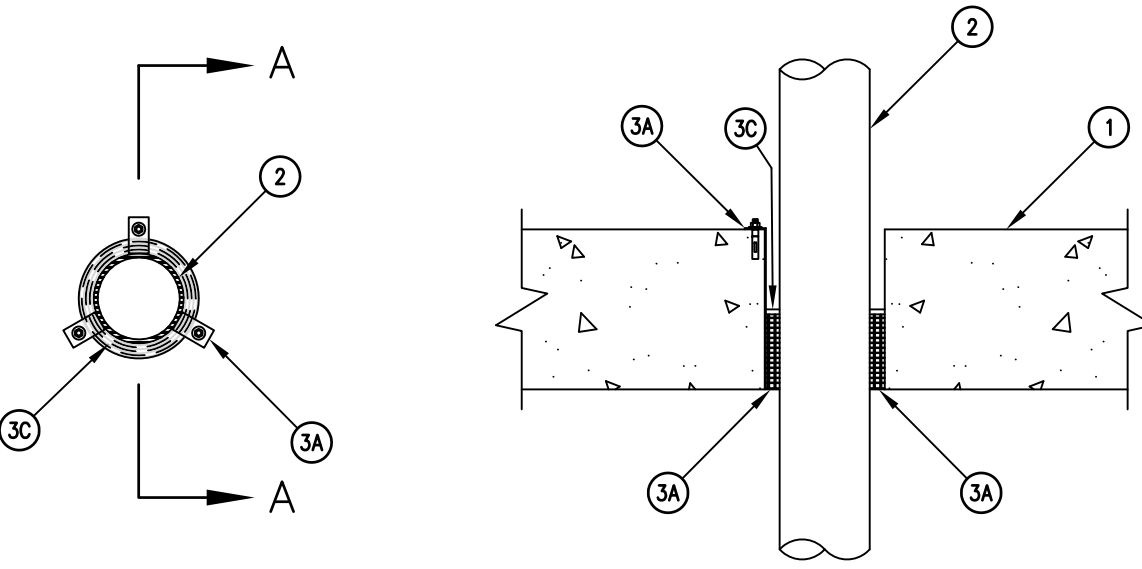


U.L. PENETRATION DETAIL

NOT TO SCALE

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 I (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 (a)	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 TIE 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.

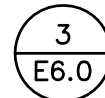
B. FILL, VOID OR CAVITY MATERIALS\* - WRAP STRIP - NOM 1/4 IN. (6 MM) THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2 IN. (51 MM) WIDE STRIPS. NOM 2 IN. (51 MM) WIDE STRIPS TIGHTLY WRAPPED AROUND NONMETALLIC PIPE (FOIL SIDE EXPOSED) TO FILL ANNULAR SPACE AROUND 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

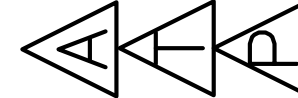


CONCRETE WALL OR FLOOR PENETRATION DETAIL

NOT TO SCALE

SAL

ATP ENGINEERING SOUTH, PL  
SARASOTA, FLORIDA  
ENGR. BUSINESS #8908  
941-781-6485



DATE

09/26/2013

REV.# DESCRIPTION

OWNER/COUNTY REVIEW

MANATEE COUNTY HENSLEY WING  
4TH FLOOR IT RENOVATIONS  
1051 MANATEE AVE. W., BRADENTON, FL 34208  
IF-AS# W1300147 WA#10

DRAWING TITLE  
ELECTRICAL  
GENERAL NOTES AND  
DETAILS

FILE: MC HENSLEY 4TH FL

JOB NO.: 2013.35

DATE : 3/20/2013

PLOT SIZE: 1:1

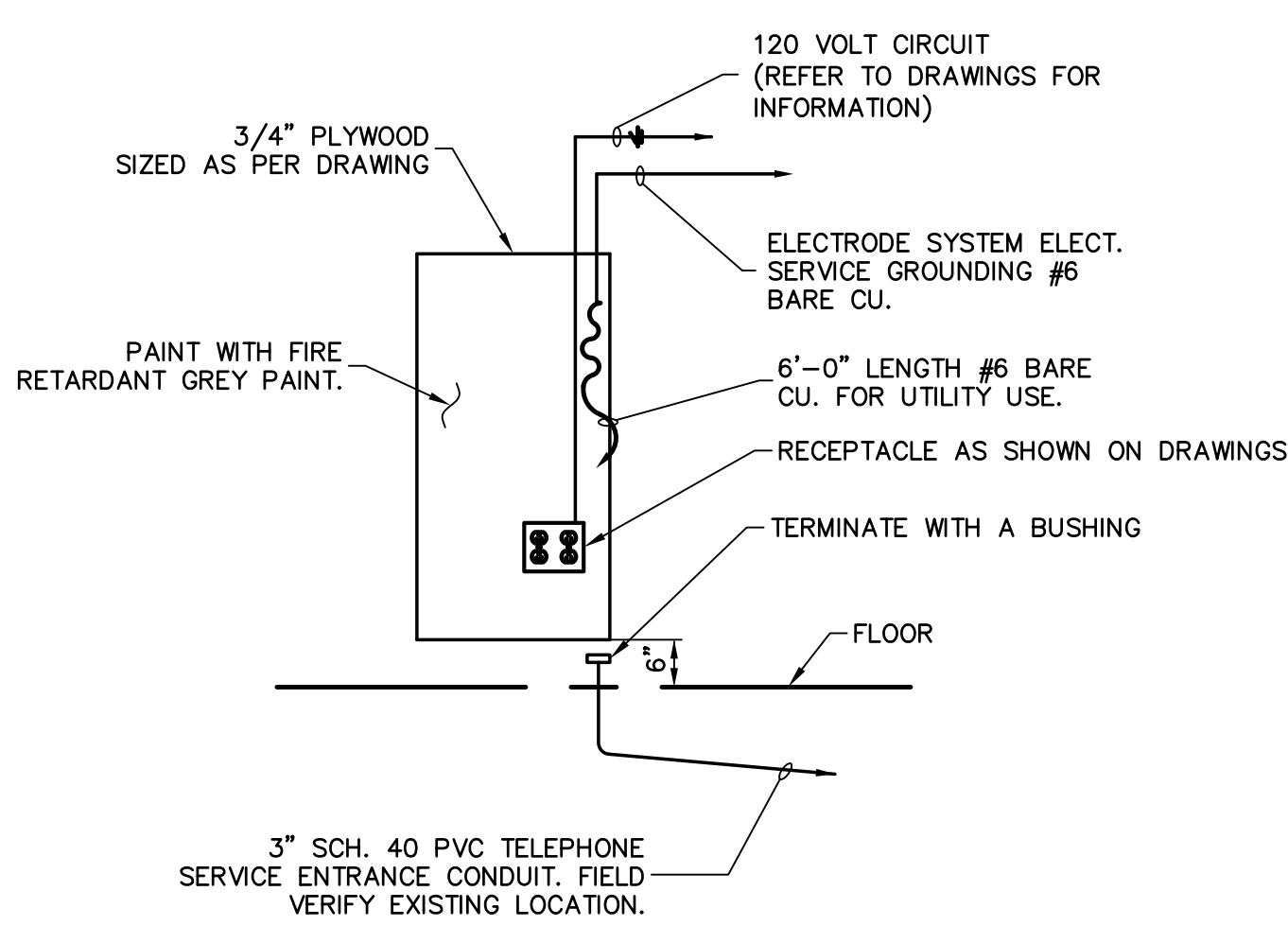
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CHECKED BY: JDC

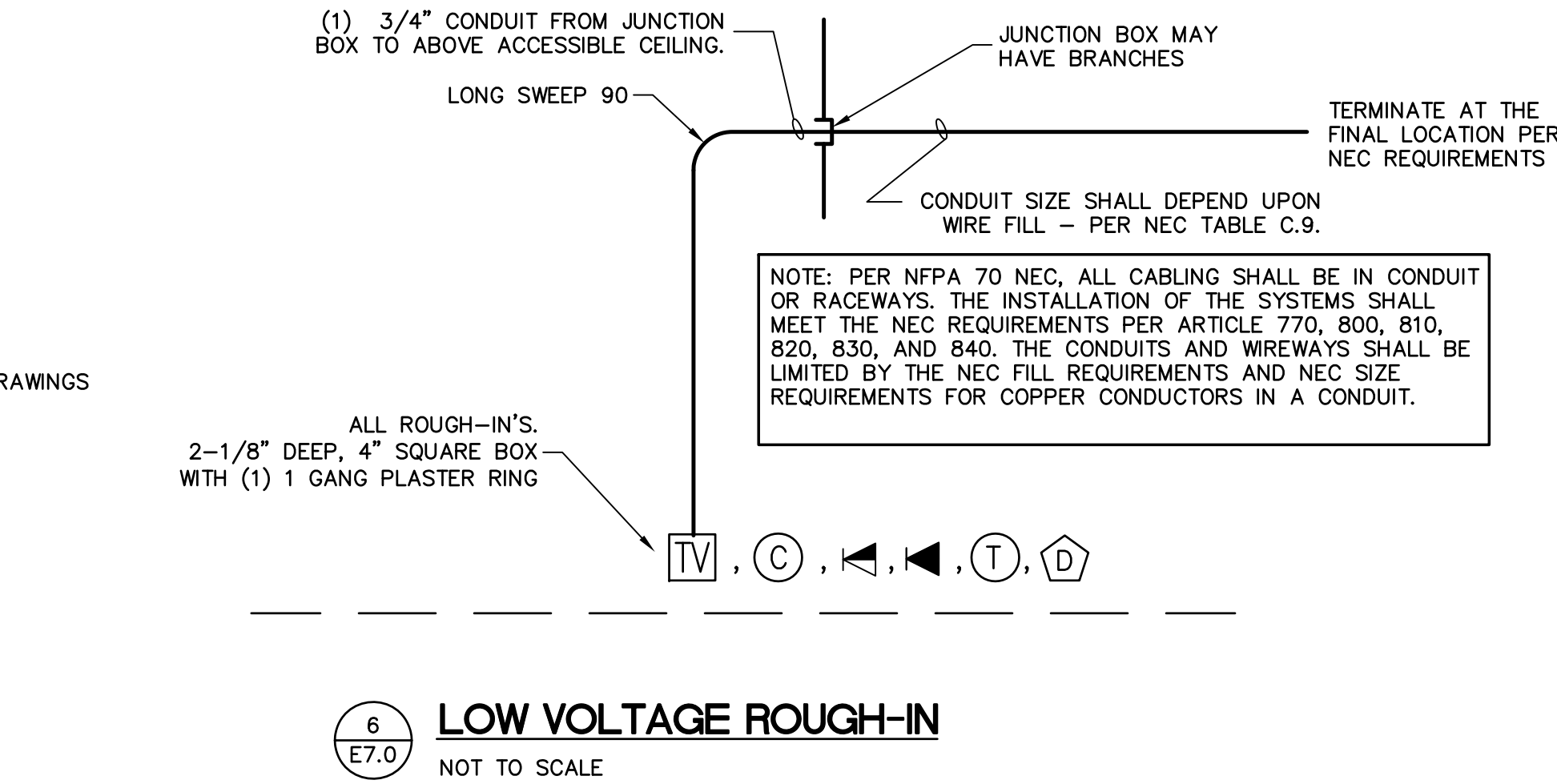
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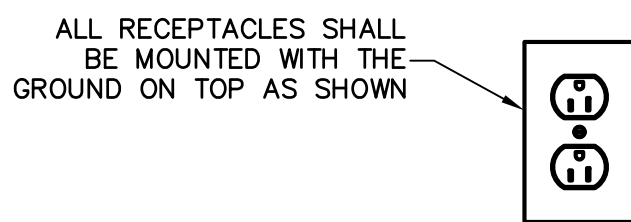




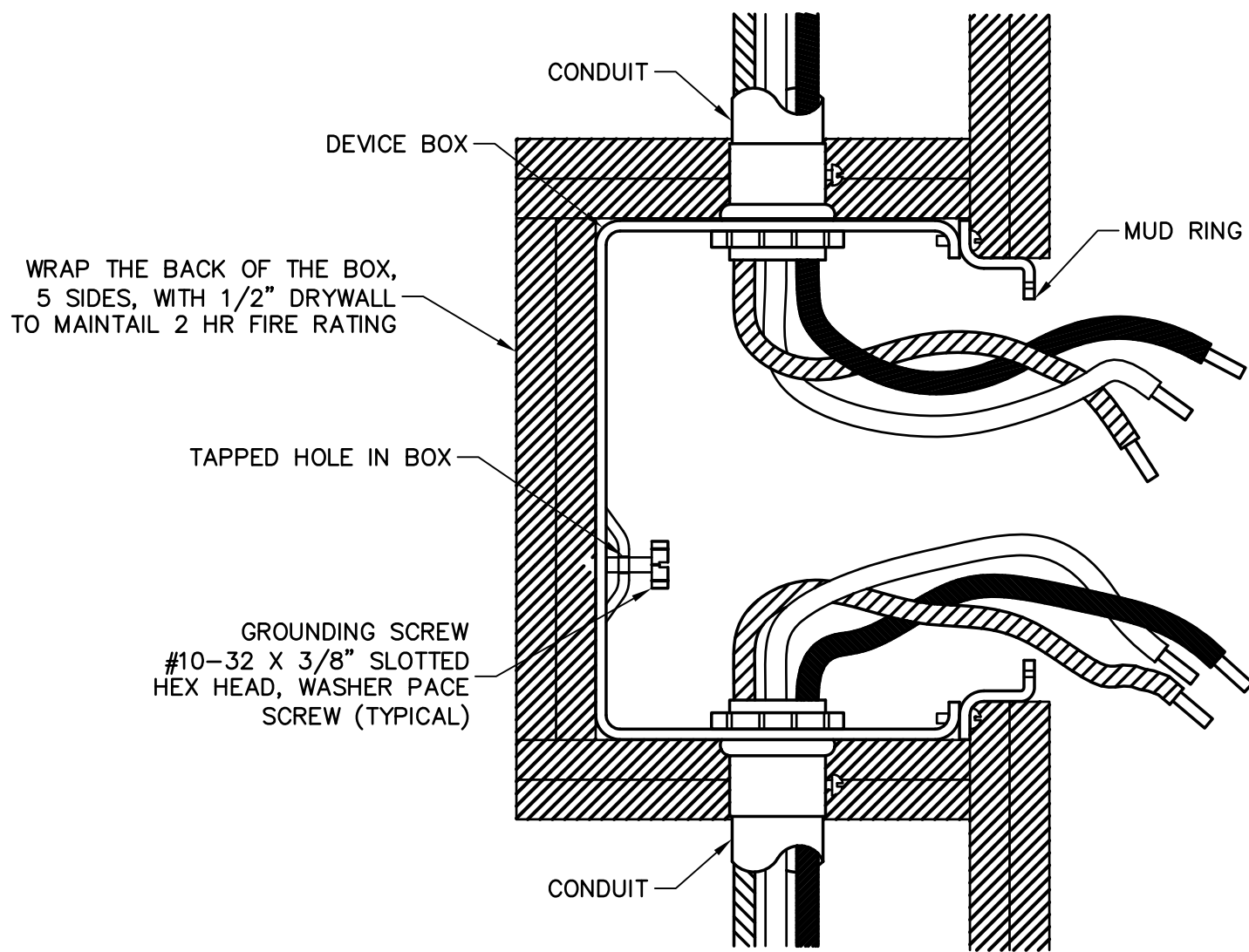
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DEMARK DETAIL  
NOT TO SCALE



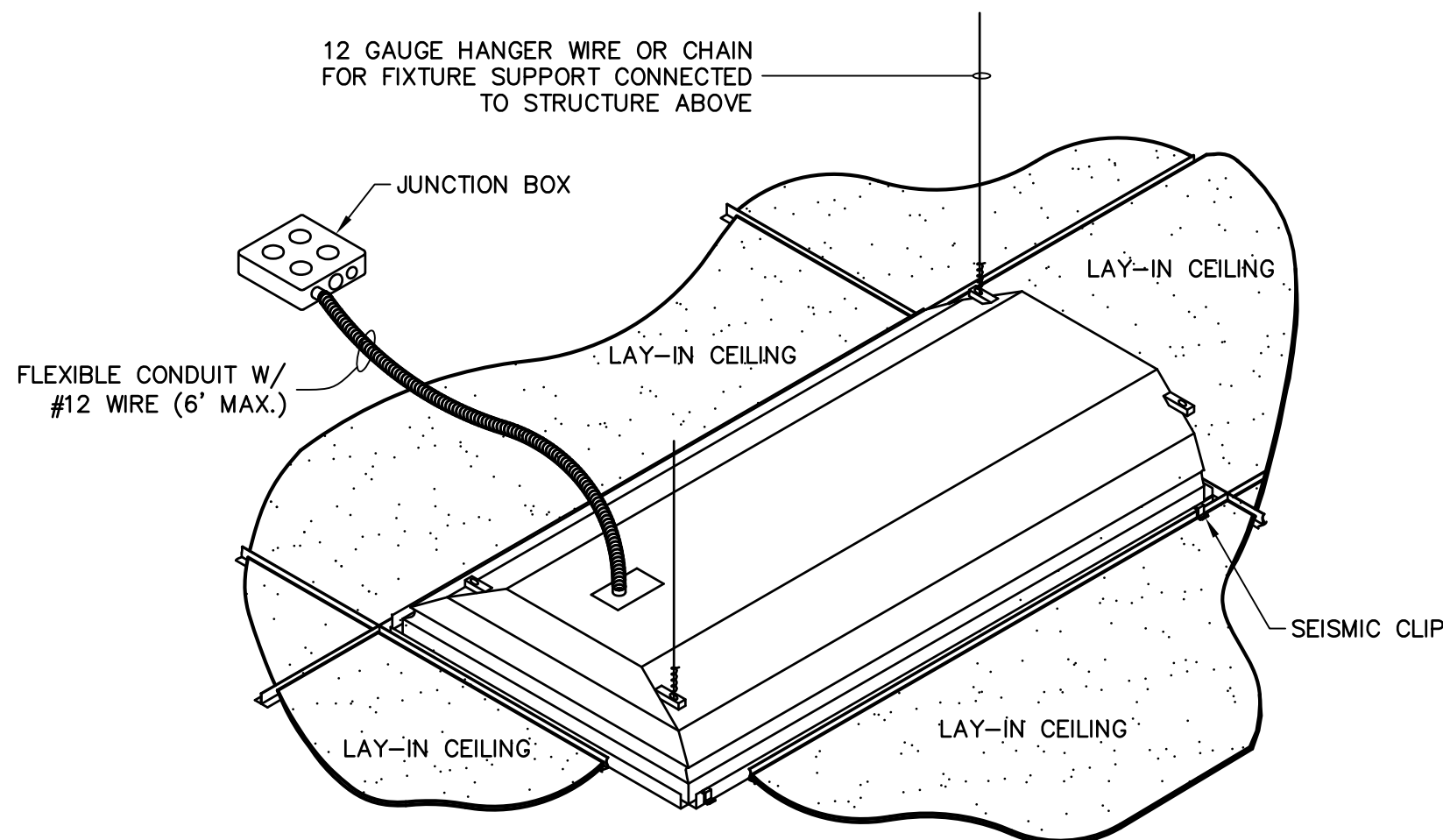
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E7.0  
LOW VOLTAGE ROUGH-IN  
NOT TO SCALE



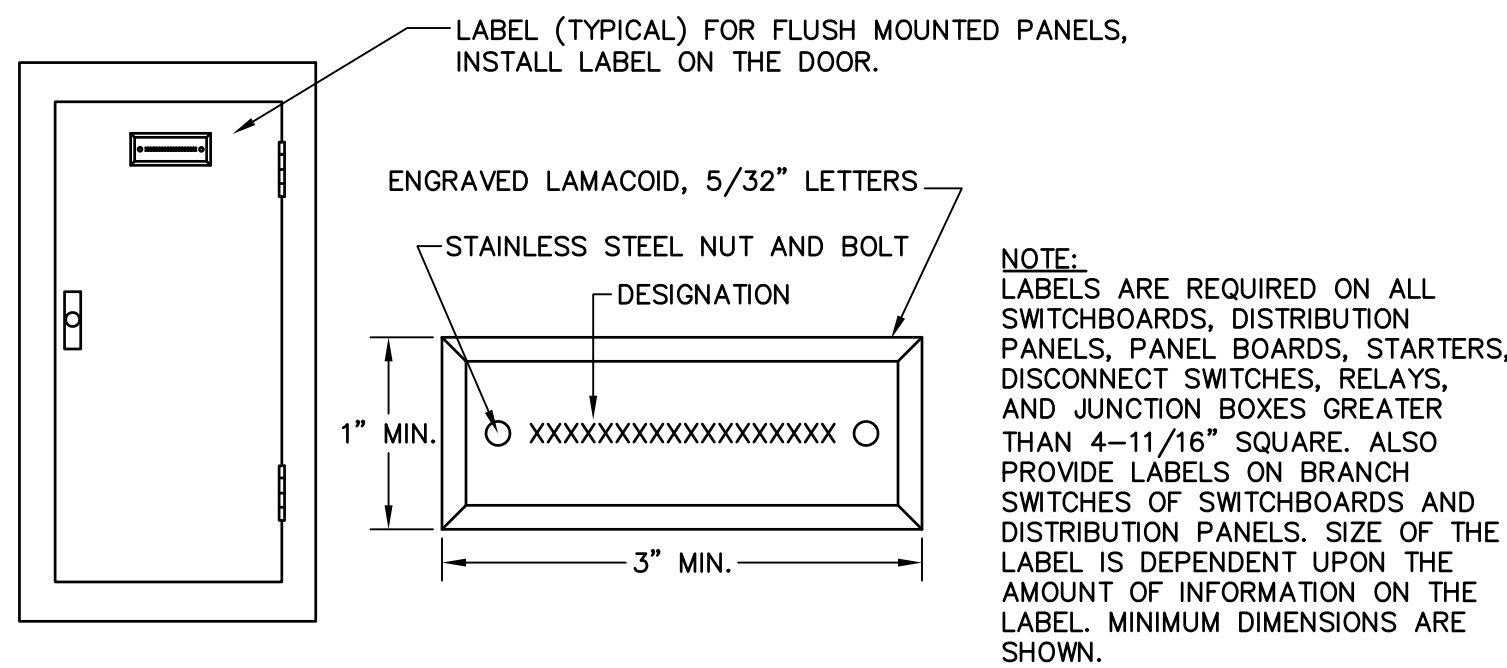
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E7.0  
RECEPTACLE MOUNTING DETAIL  
NOT TO SCALE



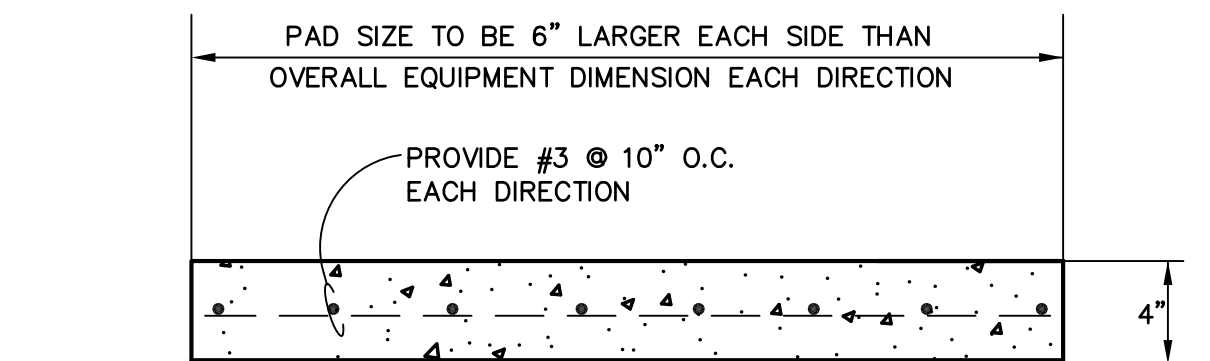
5  
E7.0  
TYPICAL FIRE WALL ROUGH-IN  
NOT TO SCALE



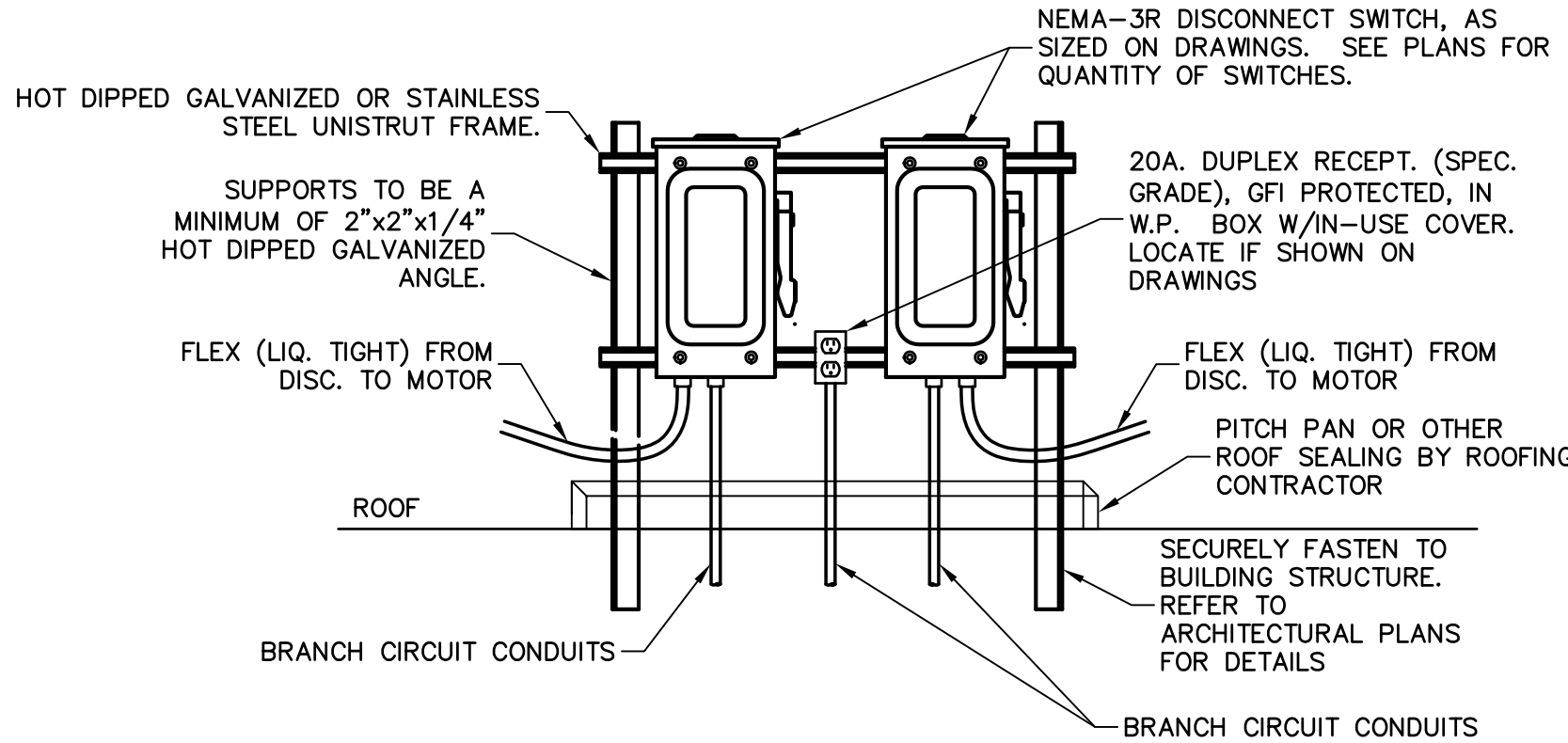
1  
E7.0  
LAY-IN FIXTURE DETAIL  
NOT TO SCALE




2  
E7.0  
EQUIPMENT LABELING DETAIL  
NOT TO SCALE



10  
E7.0  
HOUSEKEEPING PAD DETAIL  
NOT TO SCALE



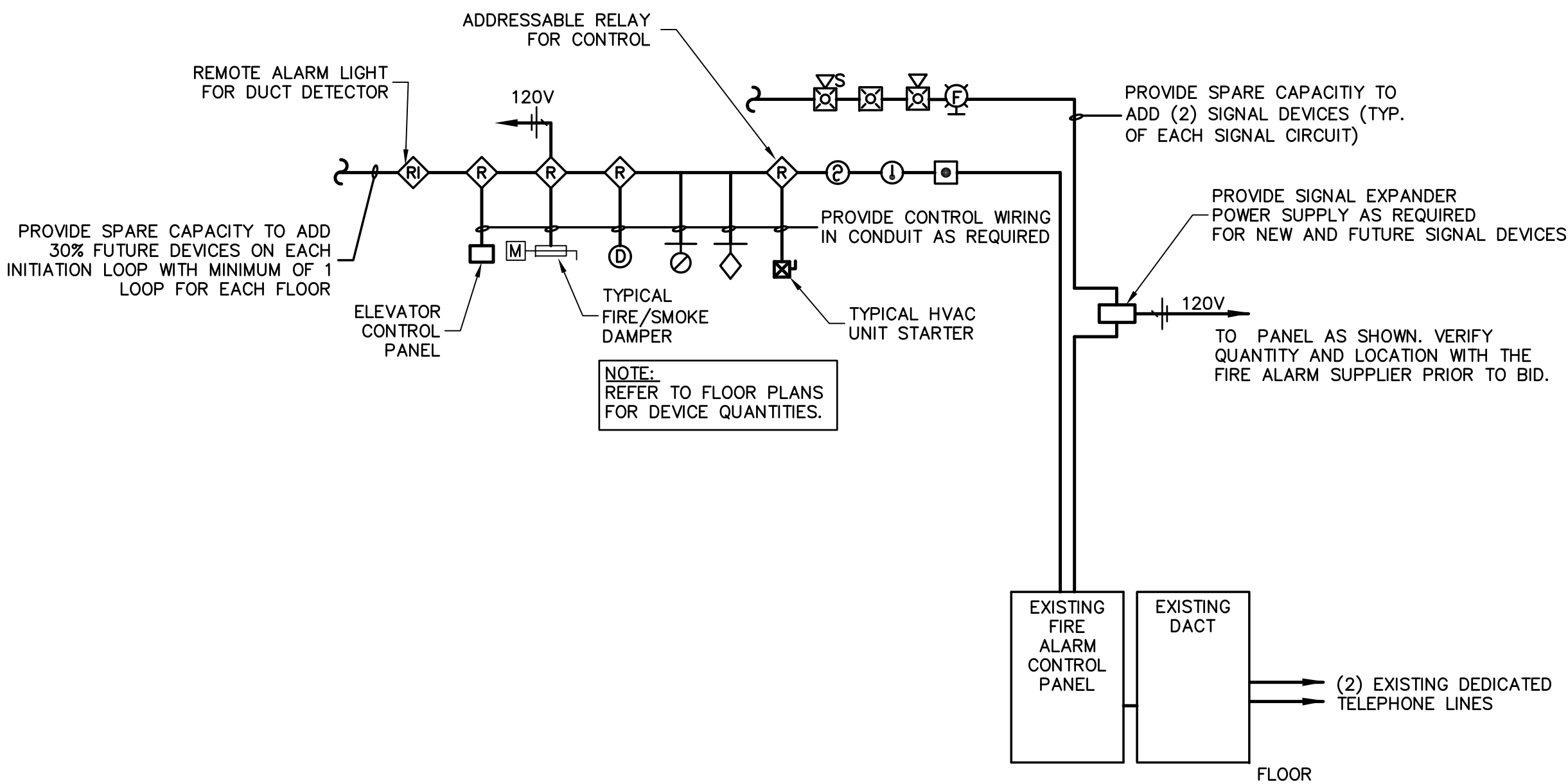
7  
E7.0  
ROOF TOP DISCONNECT SWITCH MOUNTING DETAIL  
NOT TO SCALE

LIGHT FIXTURE SCHEDULE								
TYPE	DESCRIPTION	VOLT	LAMP NUMBER AND TYPE	MOUNT	LENS	SERIES	ACCEPTABLE MANUFACTURERS	REMARKS
F1	NOMINALLY 2'x4'x4" DEEP TROFFER, CODE GAUGE STEEL HOUSING, WHITE ENAMEL FINISH. FLOATING EXTRUDED ALUMINUM DOOR. AIR HANDLING OPTION.	277	(2) 32W T8	CEILING RECESSED T-BAR	PATTERN NO. 12, 0.125" NOMINAL PRISMATIC ACRYLIC	GCAFA DP 6PA SP AIR RG R2	METALUX DAY-BRITE COLUMBIA LITHONIA LUMAX LSI	ELECTRONIC BALLAST
F2	NOMINALLY 1'x4'x4" DEEP TROFFER, CODE GAUGE STEEL HOUSING, WHITE ENAMEL FINISH. FLOATING EXTRUDED ALUMINUM DOOR. AIR HANDLING OPTION.	277	(2) 32W T8	CEILING RECESSED T-BAR	PATTERN NO. 12 0.125" NOMINAL PRISMATIC ACRYLIC	GCAFA DP 6PA SP AIR RG R2	METALUX DAY-BRITE COLUMBIA LITHONIA LUMAX LSI	ELECTRONIC BALLAST
F3	EXISTING 8" APERTURE OPEN DOWN LIGHT	277	VERIFY	CEILING RECESSED	N/A	EXISTING	EXISTING	CLEANUP AND RELAMP FIXTURES AS NECESSARY
F4	4' FLUORESCENT INDUSTRIAL STRIP. DIE FORMED STEEL CHANNELS WITH HIGH GLOSS BAKED ENAMEL FINISH, AND SOLID TOP SYMMETRICAL REFLECTOR AND WIRE GUA	277	(2) 32W T8	WIRE	N/A	SNF C CS T	METALUX DAY-BRITE COLUMBIA LITHONIA	ELECTRONIC BALLAST
	LED EDGE LIT EXIT LIGHT, SINGLE OR DOUBLE FACE AS INDICATED ON DRAWINGS. UNIVERSAL SURFACE MOUNTING CANOPY, END, BACK OR TOP MOUNT, DIRECTIONAL ARROW PANEL, STROKE STENCIL FACE RED LETTERS "EXIT".	277	MULTIPLE LED WITH RED DIFFUSING PANEL	SURFACE/CEILING		EDG 44 LINE EUR LE	LITHONIA MCPHILBEN SURE-LITES DUALITE	AC POWER ONLY, NO BATTERY PACK
NOTES:								
1. ALL LIGHT FIXTURES TO BE SUPPLIED WITH LAMPS. LAMPS SHALL BE GE, PHILIPS, OR OSRAM/SYLVANIA, NO EXCEPTIONS.								
2. FLUORESCENT LAMP COLOR SHALL BE 3500 DEGREES K.								
3. PROVIDE UNIT COST TO REPLACE EXISTING FIXTURES IN KIND, ACCEPTABLE MFR'S: LITHONIA, COOPER, HUBBELL, PHILIPS.								
4. COORDINATE WITH CONTRACT SPECIFICATIONS 16510 - INTERIOR LIGHTING.								

Conduit Fill NEC 2011 in Rigid PVC Conduit - Ch 9 Articles 352 and 353 and are less than Article 358							
Number of Conductors/Cables in Rigid PVC or EMT							
Conduit Size(inches)->	0.75	1	1.25	1.5	2	2.5	3
Cable type							
Cat-5 (688A or B) RJ-45	4	7	12	17	29	41	64
Coaxial Cable RG-58/U	0	1	2	3	5	8	12
Coaxial Cable RG-6	3	5	10	13	22	32	50

Typical Area of Cat-5 Cable is:	0.045238 inches						
Typical Area of RG-58/U Cable is:	0.229 inches						
Typical Area of RG-6 Cable is:	0.057255526 inches						
Conduit Fill Calculation based upon 40% fill Over 2 wires -							
	40% Fill Value						
	3/4 inch conduit Rigid PVC Schedule 40				per Table 4 Articles 352 and 353		
	Conductor Size	0.203 inches squared					
		0.045238 inches squared					
Fill =	40% Fill Value	rounded down to nearest whole number					
Fill =	Conductor Size						
		4 conduits					

9  
E7.0  
CONDUIT FILL SCHEDULE  
NOT TO SCALE



8  
E7.0  
ADDRESSABLE FIRE ALARM SYSTEM SCHEMATIC  
NOT TO SCALE