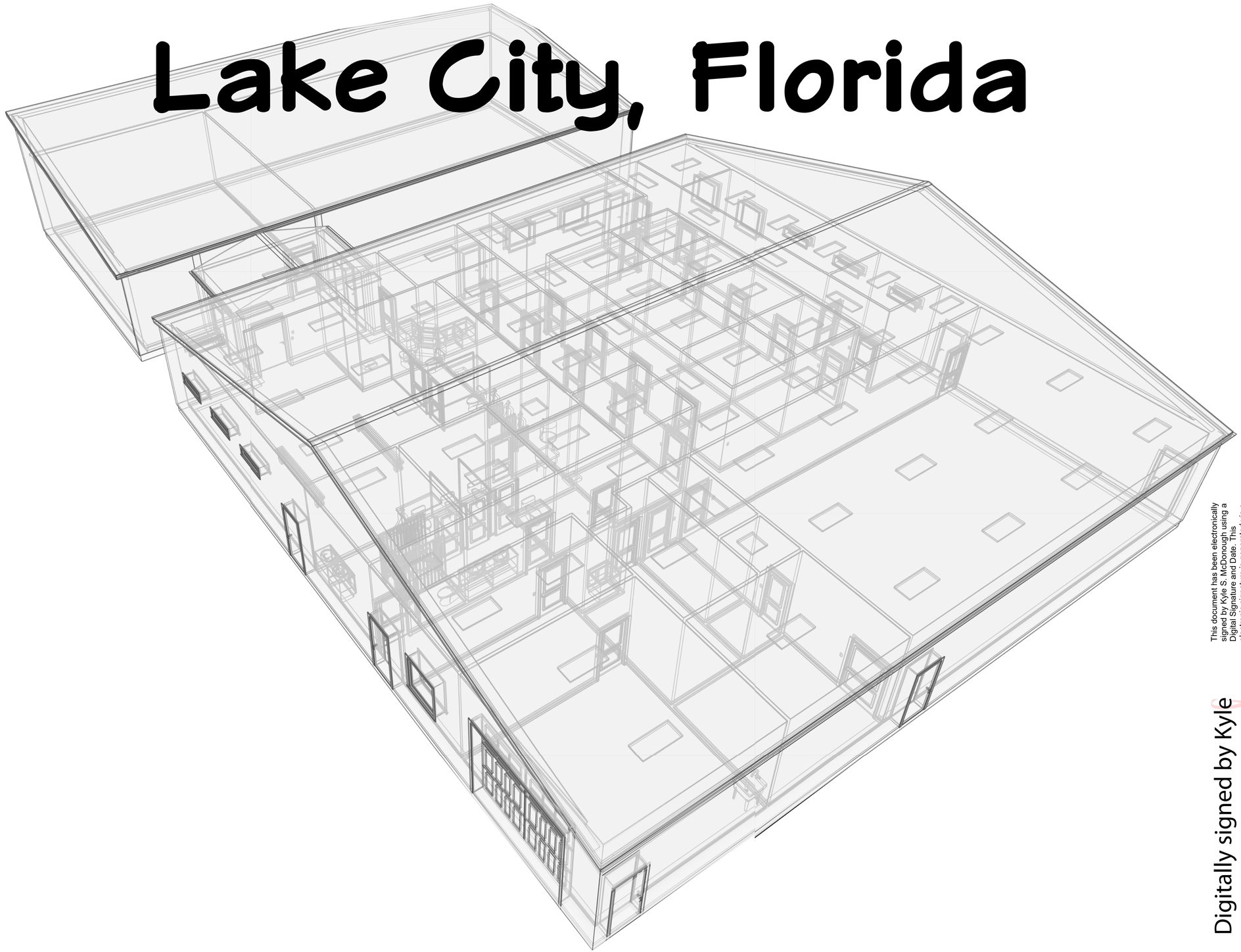
New Millennium Expansion

Lake City, Florida



Digitally signed by Kyle McDonough
Date: 2023.05.26 '10:31:44 -04'00

This document has been electronically signed by Kyle S. McDonough using a Digital Signature and Date. This electronic signature is generated via a third-party verification service, and the application of it signs and certifies the entire PDF document. As such, only the first page of this document requires a digital verified signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Intro Page

Kyle McDonough
William Brown

KYLE S. McDONOUGH
No. 73991
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER

Construction of a New Commercial Building

New Millennium

1492 NW Bascom Norris Dr, Lake City, Fl, 30255

DATE 07/07/22
DRAWN BY KMB
JOB # 2022-142

SHEET A101

SCOPE OF WORK:

TO SHOW INTERIOR BUILDOUT OF A 6400sf COMMERCIAL OFFICE BUILDING. EXTERIOR: CONSTRUCTION, FINISH & DETAILS ARE ALL PERFORMED BY OTHERS.

INDEX:

PROJECT DATA:

PROJECT NAME: NEW MILLENNIUM EXPANSION

PROJECT ADDRESS: 1992 NW BASCOM NORRIS DR, LAKE CITY, FLORIDA, 32055

PROJECT ZONING: 4100 - LIGHT MANUFACTURING

DESIGN CODE: FLORIDA BUILDING CODE 2020 7TH EDITION, FLORIDA FIRE PREVENTION CODE 2018, AND ASCE-7-16

SQUARE FOOTAGE: 6400SF (+/-)

STORIES: 1 STORY

OCCUPANCY LOAD: 42

OCCUPANCY TYPE: B (BUSINESS OFFICE)

CONSTRUCTION TYPE: II UNSPRINKLED/ UNPROTECTED

ENCLOSURE: ENCLOSED BUILDING

FIRE CODE: NFPA 101 FIRE PREVENTION CODE 2018

PROJECT ANALYSIS:

2017 FLORIDA ACCESSIBILITY ANALYSIS
100% ADA COMPLIANT: YES
VERTICAL ACCESSIBILITY: N/R
IDENTIFY 20% HANDICAP UPGRADES: YES
AN ACCESSIBLE ENTRANCE: YES
AN ACCESSIBLE ROUTE TO ALTERED AREA: YES
ACCESSIBLE RESTROOM(S): YES
ACCESSIBLE FOUNTAIN: N/R

PLUMBING REQUIREMENTS FOR BUILDINGS:
OCCUPANT LOAD: 43 PER FBC 1004.1.2
43 / 2 = 22 MEN, 22 WOMEN
PER FBC 403.1.1

		REQUIRED	PROVIDED
MEN	WC	1	11
	LAV	1	5
WOMEN	WC	1	4
	LAV	1	3
SVC	FTN	1	1
	WC	1	1

GENERAL

1. ALL CONSTRUCTION MUST COMPLY WITH ALL GOVERNING CODES.

2. ALL CONTRACTORS AND SUB-CONTRACTORS WILL THOROUGHLY FAMILIARIZE THEMSELVES WITH THESE CONSTRUCTION DOCUMENTS AND WILL VERIFY EXISTING SITE AND BUILDING CONDITIONS PRIOR TO SUBMITTING A BID.

3. SUB-CONTRACTORS BEFORE STARTING THEIR WORK WILL CHECK AND VERIFY THEIR PARTICULAR RELATED REQUIREMENTS FOR COMPLIANCE ALONG WITH MEASUREMENTS, SURFACE LEVELS, SURFACE CONDITIONS NEAR & ABOUT THEIR WORK. IT WILL BE CONCLUDED THAT EACH BIDDER UNDERSTANDS AND KNOWS WHAT WILL BE REQUIRED.

4. THIS ENGINEER AND HIS PROFESSIONAL CONSULTANTS WILL NOT HAVE CONTROL OF & WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES, OR SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK ON THE PROJECT OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK ON THIS SITE.

5. ALL CONTRACTORS WILL PROVIDE ADEQUATE BRACING AND/OR SHORING TO INSURE STRUCTURAL STABILITY OF THE BUILDING AND ALL RELATED BUILDING COMPONENTS, I.E.: STRUCTURAL WALLS, INTERIOR WALL ASSEMBLIES ETC., DURING THE CONSTRUCTION PHASE OF THIS PROJECT.

6. ALL WORK WILL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCE & PRESERVE MAXIMUM HEADROOM & AVOID OMISSIONS. EACH CONTRACTOR WILL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED BY CODE AND NEEDS TO COMPLETE THIS WORK.

7. ALL MATERIAL USED WILL BE NEW & BEAR UL LABELS WHERE REQUIRED & MEET NEMA STANDARDS.

8. LAYOUT ALL PARTITIONS BEFORE BEGINNING CONSTRUCTION TO PREVENT ERRORS BY DISCREPANCY. ALL DRYWALL PARTITIONS WILL BE INSTALLED AS NOTED ON THE DRAWINGS.
DO NOT SCALE THE DRAWINGS.

9. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING, CUTTING, AND/OR INSTALLING MATERIAL, PRODUCT OR EQUIPMENT. IN THE EVENT OF ANY DISCREPANCIES, CONTACT THE ENGINEER BEFORE PROCEEDING WITH THAT WORK.

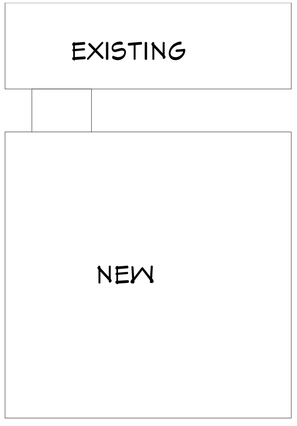
10. ALL SUB-CONTRACTORS WILL PROVIDE A CERTIFICATE OF INSURANCE TO THE OWNER PRIOR TO STARTING ANY WORK ON THIS PROJECT. CERTIFICATE OF INSURANCE CAN NOT BE TERMINATED OR CANCELED WITHOUT 10 DAYS PRIOR WRITTEN NOTICE TO THE OWNER.

11. NO SUBSTITUTIONS OF ANY KIND FOR MATERIALS SPECIFIED ON THESE CONSTRUCTION DOCUMENTS IS ALLOWED. NO "EQUIVALENT" SUBSTITUTIONS WILL BE MADE, UNLESS APPROVED IN WRITING BY THE ENGINEER & APPROVED BY THE OWNER DUE TO THE LACK OF AVAILABILITY OF ORIGINAL, U.O.N. IN THESE DOCUMENTS

12. EACH CONTRACTOR IS RESPONSIBLE FOR THE FIRST CLASS WORKMANSHIP & WILL ASSUME ALL RESPONSIBILITY FOR THE CARE AND PROTECTIONS OF HIS OWN WORK & MATERIAL FRO DAMAGE. HE WILL MAKE GOOD ANY DAMAGE TO HIS OWN OR OTHER WORK CAUSED BY HIMSELF OR WORKMAN EMPLOYED BY HIM.

13.EACH CONTRACTOR WILL ABIDE BY LOCAL AREA STANDARDS & RELATED OSHA STANDARDS FOR THE SAFETY OF THEIR EMPLOYEES ON SITE. THIS ENGINEER AND HIS PROFESSIONAL CONSULTANTS WILL BE HELD HARMLESS BY THE: OWNER, GC, AND RELATED AWARDED TRADES, ON THIS PROJECT FOR ACCIDENTS OR INJURIES CAUSED OR ACCRUED ON THIS PROPERTY DURING CONSTRUCTION PHASES OF THIS PROJECT.

14. SHOULD FIRE ALARM & SPRINKLER DRAWINGS BECOME A REQUIREMENT, IT WILL BE THE RESPONSIBILITY OF THE SUB-CONTRACTOR AND TO BE SUBMITTED AS SEPARATE PERMIT ISSUE.



Key
Scale - No Scale

PLUMBING NOTES:

A - CONTRACTOR IS RESPONSIBLE FOR PERFORMING FIELD ASSESSMENT TO VERIFY & ENSURE INFORMATION WITHIN THESE DRAWINGS ARE AN ACCURATE REPRESENTATION.

B - THE WORK SHALL CONFORM TO ALL FEDERAL, STATE & LOCAL CODES/ORDINANCES. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL.

C - ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCES. ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM HAS BEEN ACCEPTED.

D - DO NOT SCALE DRAWINGS

E - PLUMBING CONTRACTOR SHALL MAINTAIN A CURRENT SET OF PLUMBING DRAWINGS AT THE PROJECT SITE TO BE USED FOR CONSTRUCTION PROGRESS, REVIEW & FUTURE "AS-BUILTS". ALL MARKS AND REVISIONS SHALL BE MADE WITH RED PENCIL/PEN AND SHALL BE LEGIBLE & ACCURATE. SUBMIT DRAWINGS TO EOR AT THE COMPLETION OF WORK FOR REVISION.

F - SANITARY WASTE AND VENT PIPING ABOVE GRADE SHALL BE SCH. 40 SOLVENT WELDED FITTINGS. COLD WATER PIPING SHALL BE SCH. 40 W/ MATCHING SOLVENT WELDED FITTINGS. HOT WATER PIPING SHALL BE SCH. 40 CPVC W/ MATCHING SOLVENT WELDED FITTINGS.

G - PLUMBING FIXTURES SHALL BE AS SCHEDULED ON DRAWING. PROVIDE CONTROL STOP VALVES IN EA. SUPPLY TO EA. FIXTURE. THE FINISH OF FITTINGS, ACCESSORIES & SUPPLY EXPOSED TO VIEW SHALL BE CHROME PLATED.

H - PENETRATIONS: PROVIDE CHROME PLATED BRASS ADJUSTABLE ESCUTCHEON PLATES AT EXPOSED PIPE PENETRATIONS THROUGH WALLS, PARTITIONS, CEILINGS & FLOORS.

I - TESTING WATER SYSTEM: TEST THE ADDED PORTION OF THE PLUMBING SYSTEM @ 150% OF DESIGN PRESSURE, BUT NOT LESS THAN 100 PSIG. ALLOW PRESSURE TO REMAIN FOR 24 HOURS. INSPECT EVERY JOINT FOR LEAKS WHILE UNDER TEST PRESSURE. REPAIR ALL LEAKS DETECTED WITH NEW MATERIAL & RETEST.

ELECTRICAL NOTES:

A - THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK AS INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE EOR AS SOON AS POSSIBLE; FIELD ALLOCATED DECISIONS IN ARE NOT TO BE PERFORMED WITHOUT EOR APPROVAL TO ADDRESS THESE ISSUES.

B - CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND FAMILIARIZE HIMSELF/HERSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL & COMMUNICATIONS INSTALLATION. IT IS CONTRACTORS RESPONSIBILITY TO MAKE PROVISIONS TO THE COST THEREOF.

C - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CODE/ ORDINANCE AUTHORITATIVE JURISDICTION & THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE. THE SPECIFICATION, CODES & STANDARDS LISTED ARE UTILIZED IN THIS PROJECT: NFPA-70, NFPA-101, UL, NEMA, ANSI, FED. SPEC., IPCEA, IEEE, OSHA.

D - DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO ENGINEERING PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNERS REPRESENTATIVE/ CONSULTANT.

E - IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

MECHANICAL NOTES:

A - IT IS CONTRACTORS RESPONSIBILITY TO ASSESS REFERENCED INFORMATION WITHIN THESE PLANS TO ENSURE ACCURACY PRIOR TO BID, OR COMMENCEMENT OF WORK

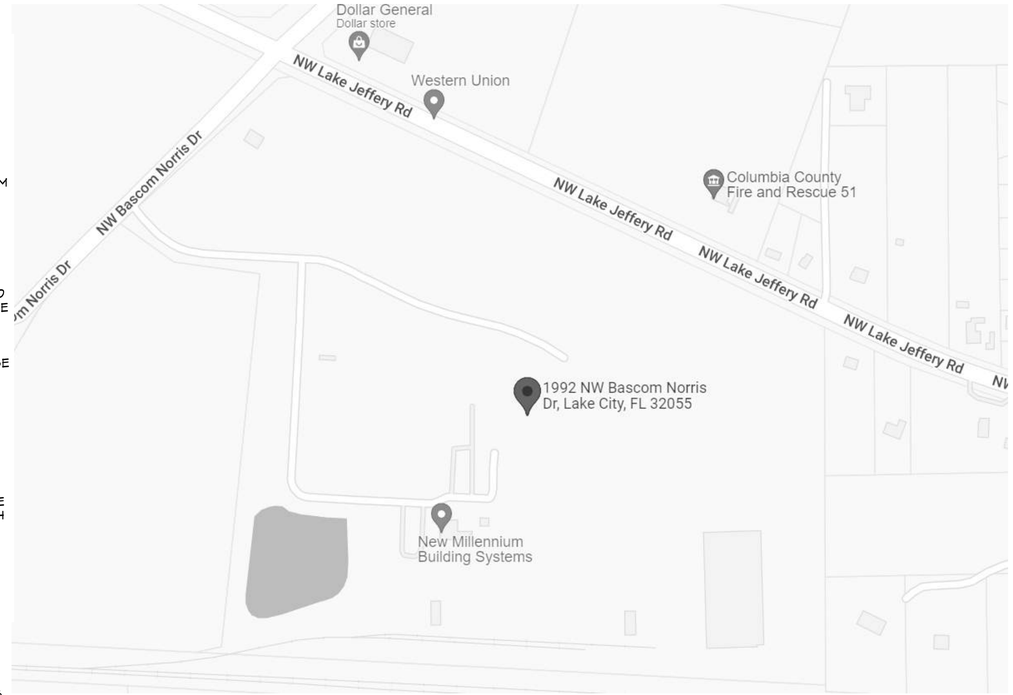
B - ALL WORK SHALL BE DONE IN CONFORMITY WITH THE LATEST EDITION OF ALL APPLICABLE CODES AND AUTHORITY HAVING JURISDICTION

C - ALL INFORMATION ILLUSTRATED WITHIN THESE PLANS ARE ACCORDING TO CONSTRUCTION DOCUMENTATION PROVIDED, OR INFORMATION GATHERED BY EOR TO THE BEST OF THEIR ABILITY. EOR MAKES NO REPRESENTATION FOR THE ACCURACY OF GIVEN INFORMATION AS ILLUSTRATED WITHIN DRAWINGS. INFORMATION, MATERIALS, EQUIPMENT, DIMENSIONS, CONDITIONS, ETC SHALL BE FIELD VERIFIED

D - ALL WORK SHALL BE DONE IN STRICT COORDINATION AND AS APPROVED BY OWNER. ALL INTERRUPTIONS IN THE FUNCTIONING OF MECHANICAL SYSTEMS SHALL BE DONE DURING OFF-PEAK, OR UNOCCUPIED TIME (STRICTLY APPROVED BY OWNER).

E - CONTRACTOR IS RESPONSIBLE FOR COORDINATING INFORMATION REQUEST AND WORK PERFORMED. ANY REQUEST FOR INFORMATION PERTAINING TO CONFLICT OF WORK BEING PERFORMED THAT IS ILLUSTRATED ON THESE PLANS IS TO BE REFERENCED TO EOR THE MOMENT IT IS NOTICED.

F - ALL A/R GRILLES SHALL BE PROVIDED WITH PROTECTIVE CONSTRUCTION FILTERS AND A/C UNITS SHALL HAVE THEIR FILTERS REPLACED NEW ONES AT THE END OF THE CONSTRUCTION PERIOD.



Location Map
Scale - No Scale

Parcel Map
Scale - No Scale

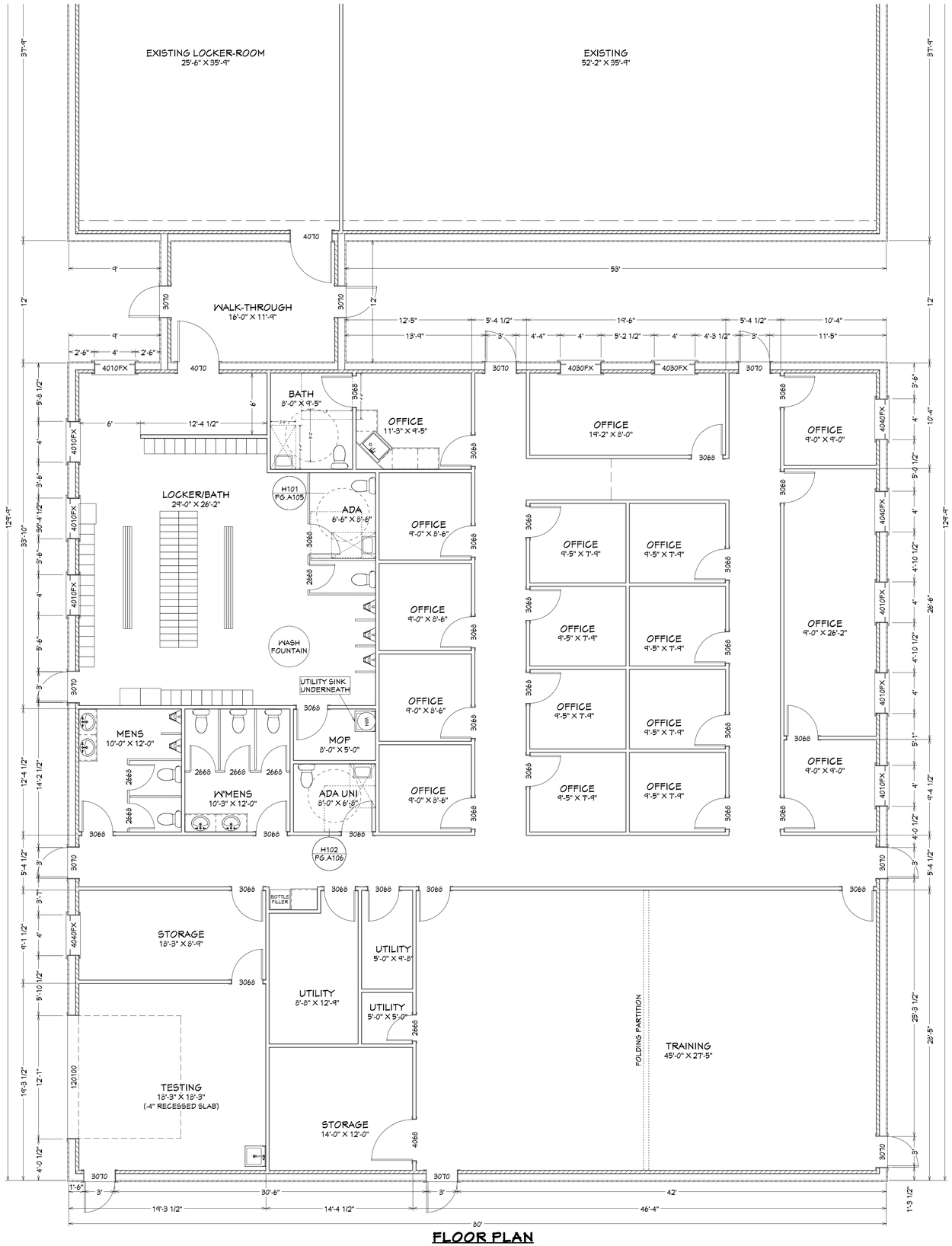
Project Analysis/
Project Data/
General Notes

Kyle Mcdonough
William Brown

Construction of a New Commercial Building
New Millennium
1992 NW Bascom Norris Dr, Lake City, Fl, 32055

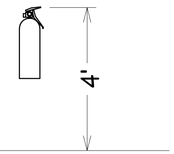
DATE 07/07/22
DRAWN KWB
JOB # 2022.142

SHEET A102

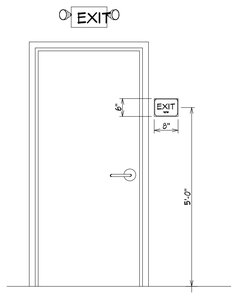


FLOOR PLAN
SCALE - 3/16" = 1'

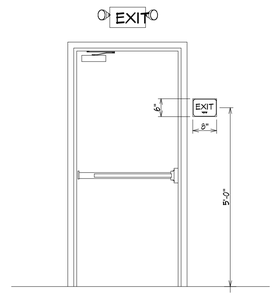
"AMEREX" MODEL B500 / B500T HAND HELD
TYPE A, B, C, #5 OR EQUAL AS INDICATED
ON PLAN. (MOUNT NO MORE THAN 5'-0"
A.F.F. FROM TOP OF EXTINGUISHER TO FLOOR)
PROVIDE TYPE 'K' @ KITCHEN AREAS



Fire Extinguisher Mounting Height
Scale - 1/2" = 1'



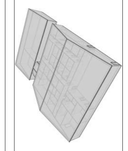
Door Signage Detail
Scale - 1/2" = 1'



Emergency w/ Panic Hardware Detail
Scale - 1/2" = 1'

Interior Layout Plans

Kyle McDonough
William Brown



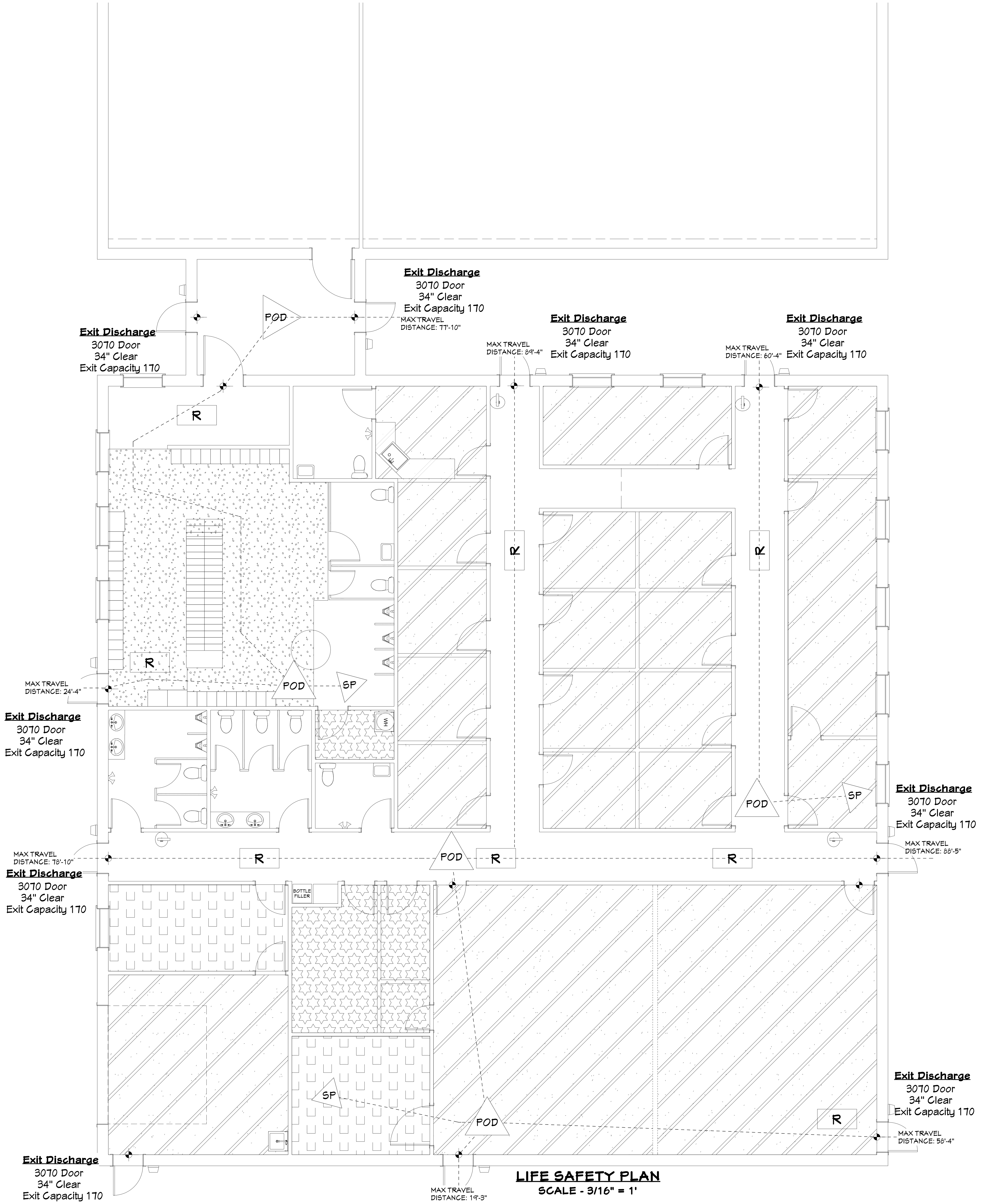
Construction of a New Commercial Building

New Millennium

1942 NW Bascom Norris Dr. Lake City, Fl, 30255

DATE 07/07/22
PROJECT NO. 2022.142

SHEET A103



LIFE SAFETY PLAN
SCALE - 3/16" = 1'

Business Office Use Analysis

	Project Information	Code References Used	
Code Requirements	±6400 S.F. Unsprinkled Unprotected	2020 FBC 7th Edition	2018 Fire Prevention Code NFPA 101
Occupancy Use:	Group B (Business)	304.1 - Business	NFPA 101.6.1.11
Required Separation:	N/R	508.4	NFPA 101 6.1.14.4.1 (B)
Construction Type:	Type II	603	
Occupant Load:	42 (Max)	1004.1.2	NFPA 101 7.3.1.2
Egress Width:	306"	1005.1	NFPA 101 7.3.3.1
Max Travel Distance:	29'-7"	1017.2 (200' Allowed)	NFPA 101.37.2.6.1 (200' Allowed)

Business Office Egress

Egress Width Hinged Door(s)

42 Occupants * 0.2
= 34" of Egress Required (Min.)
= 306" of Egress Provided

306" / 0.2 = 1530 Occ. Capacity (Actual 42)

Office Areas	SF	MAX OCC.	SEAT COUNT
Office Areas 1 per 100sf (Gross)	2758	28	-
Locker-Room Area 1 per 50sf (Net)	570	12	-
Storage Area 1 per 300sf (Gross)	280	1	-
Utility Area 1 per 300sf (Gross)	214	1	-

Wall Legends

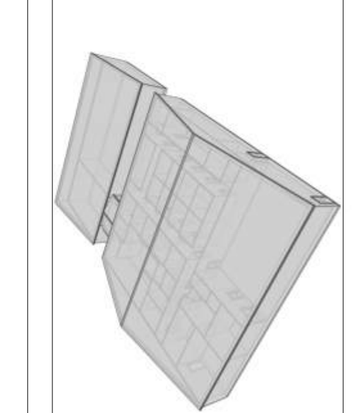
STEEL PANELING
STEEL BUILDING
3-5/8" STEEL STUD
1/2" GYPSUM

1/2" GYPSUM
3-5/8" STEEL STUD
1/2" GYPSUM

Life Safety Plan Legend	
SP	Starting Point
POD	Point of Decision
	Exit Sign w/ Emergency Flood Lighting & Battery Back-Up
	Emergency Flood Light w/ Battery Back-Up
	Fire Extinguisher
R	Emergency 24 Hr. Light w/ Battery Back-Up**
M	Electric Meter Can Location

Life Safety Plan

Kyle Mcdonough
William Brown

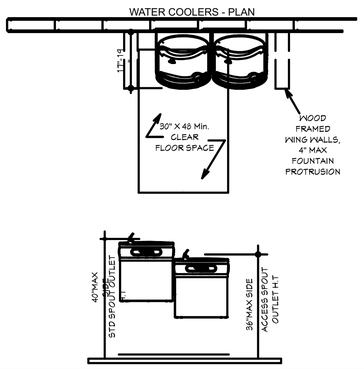


Construction of a New Commercial Building
New Millennium
1992 NW Bascom Norris Dr, Lake City, Fl, 30255

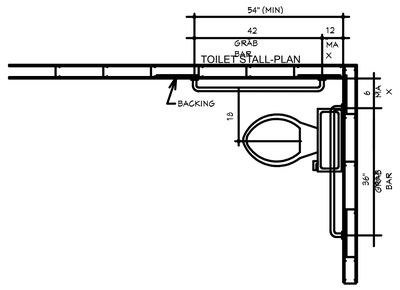
DATE 07/07/22
DRAWN BY: WEB
JOB # 2022-142

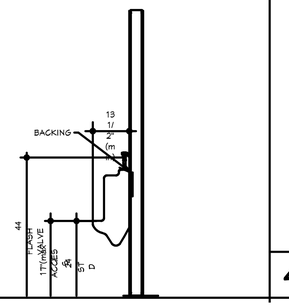
SHEET A104

Bathroom Fixture Details - 1/2" = 1' Scale

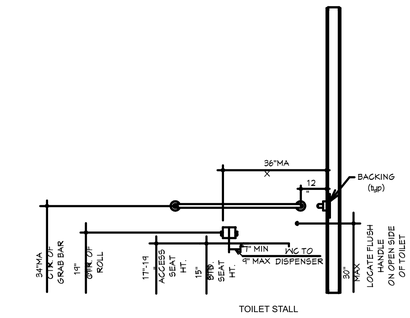


1 **Drinking Fountain Detail**

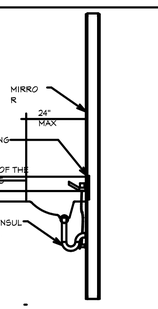




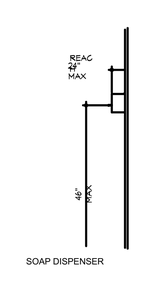
2 **Wall Mounted Urinal Detail**



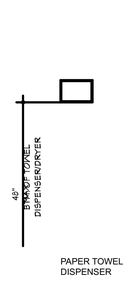
4 **ADA Toilet Detail**



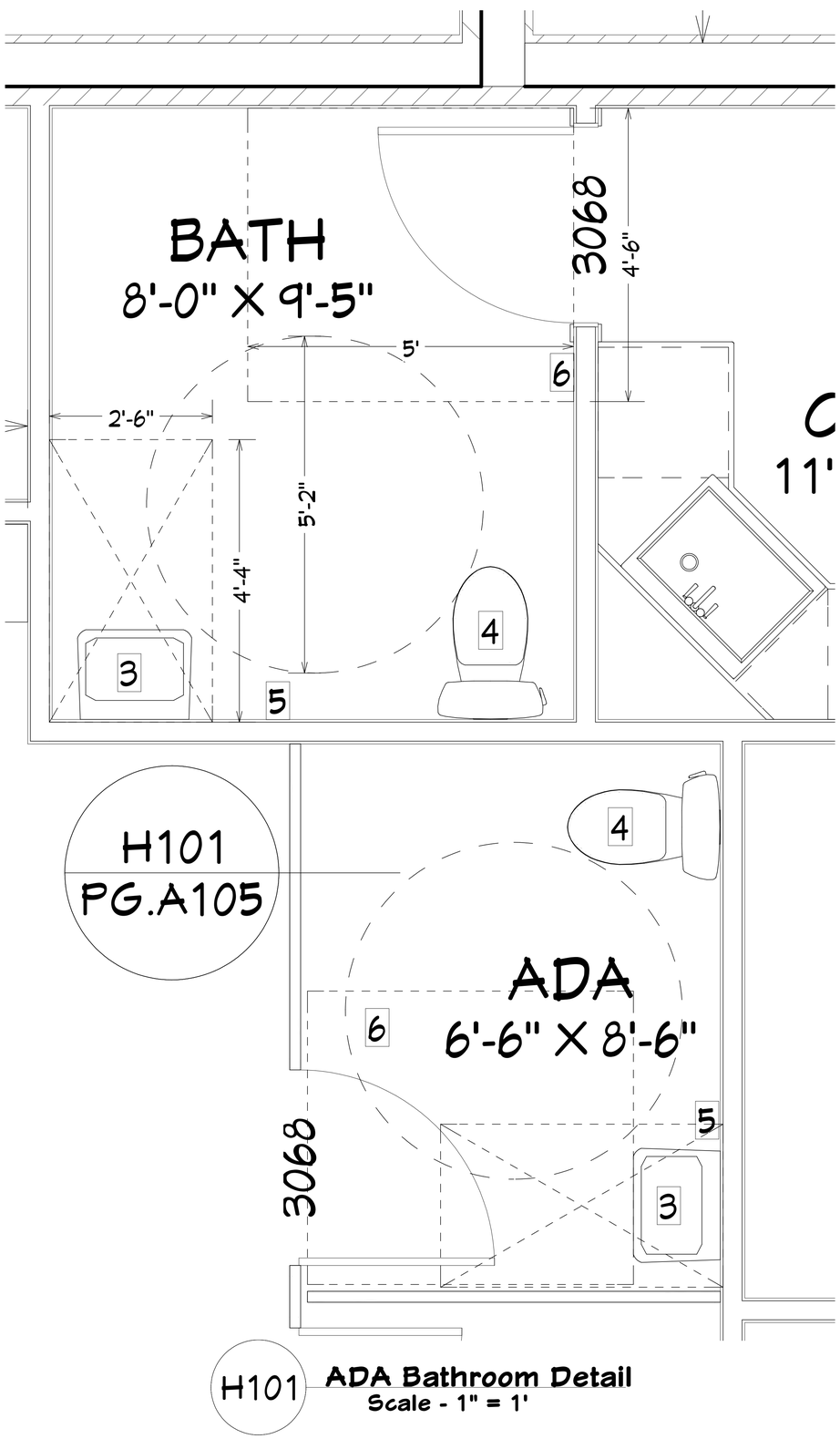
3 **ADA Sink Detail**



5 **Dispense Details**



6



H101 **ADA Bathroom Detail**
Scale - 1" = 1'

ADA Sections & Details

Kyle Mcdonough
William Brown

Construction of a New Commercial Building

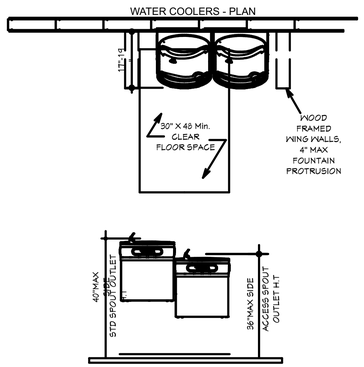
New Millennium

1492 NW Bascom Norris Dr, Lake City, Fl, 32255

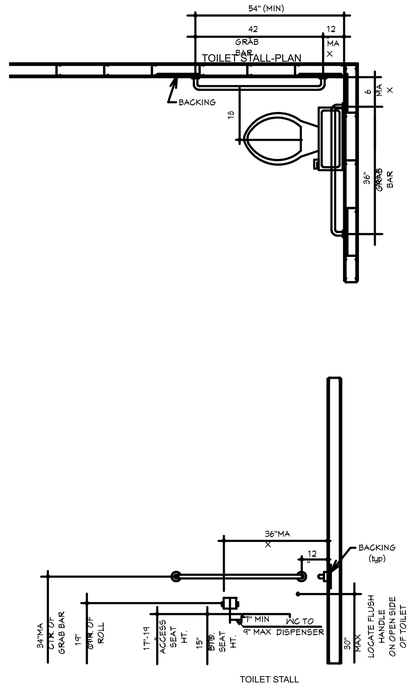
DATE 07/07/22
DRAWN BY KWEB
JOB # 2022.142

SHEET A105

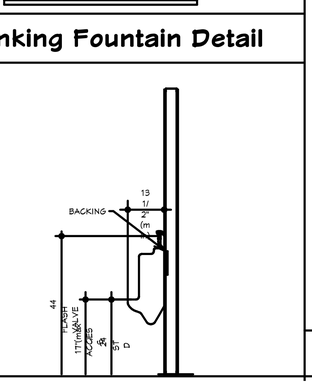
Bathroom Fixture Details - 1/2" = 1' Scale



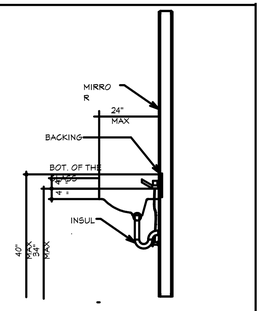
1 **Drinking Fountain Detail**



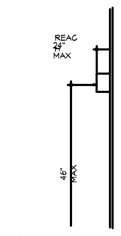
4 **ADA Toilet Detail**



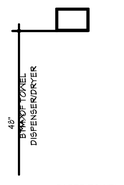
2 **Wall Mounted Urinal Detail**



3 **ADA Sink Detail**

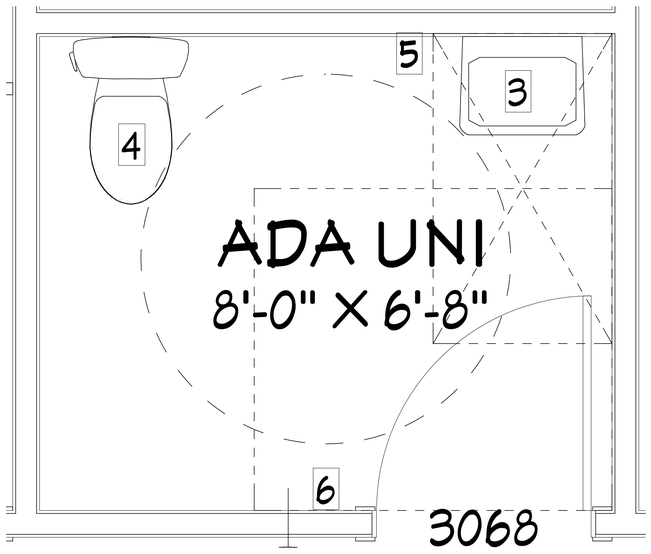


SOAP DISPENSER



PAPER TOWEL DISPENSER

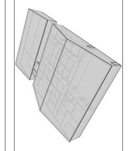
5 **Dispense Details** 6



H102 **ADA Bathroom Detail**
Scale - 1" = 1'

ADA Sections & Details

Kyle Mcdonough
William Brown



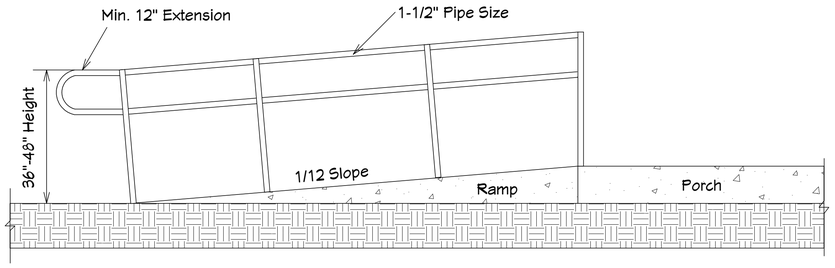
Construction of a New Commercial Building

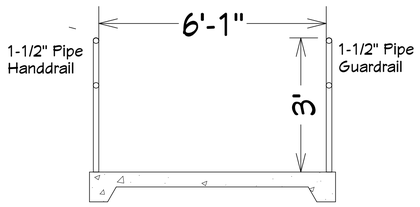
New Millennium

1942 NW Bascom Norris Dr, Lake City, Fl, 32055

DATE 07/07/22
DRAWN KEB
JOB # 2022-142

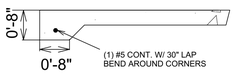
SHEET A106





H103 Ramp Section Detail

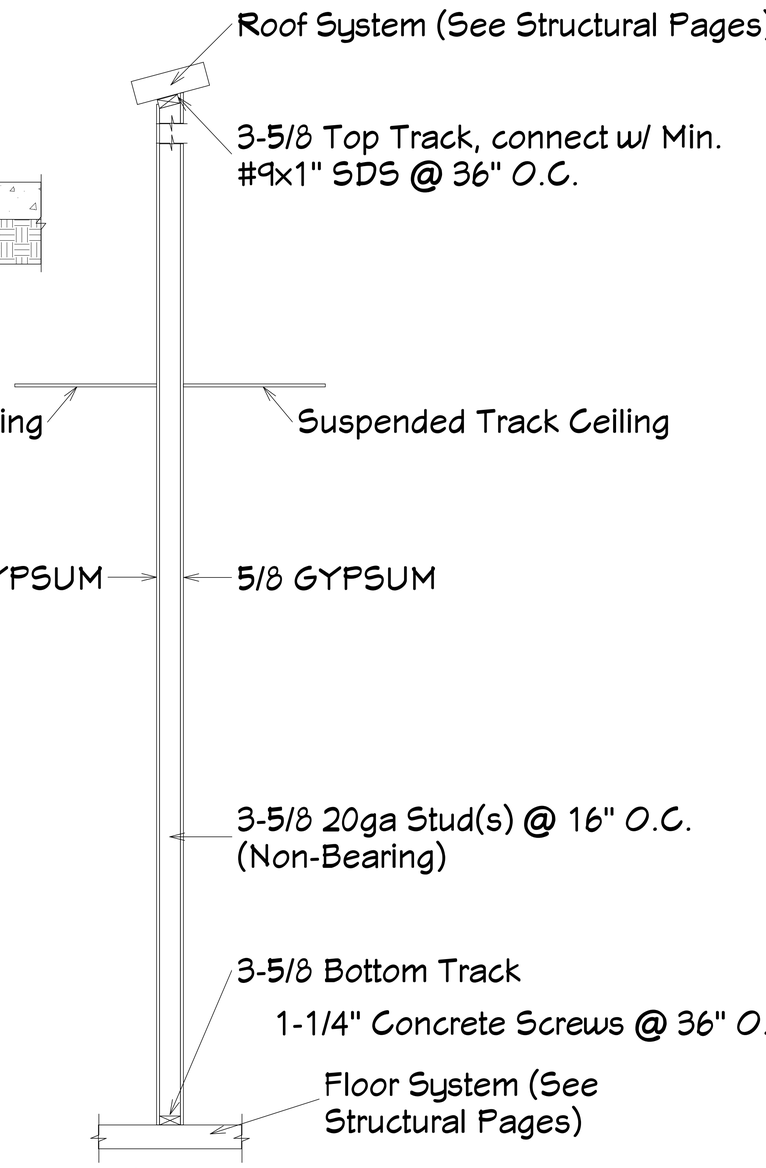
Scale - 5/8" - 1'



SLAB: THICKENED EDGE

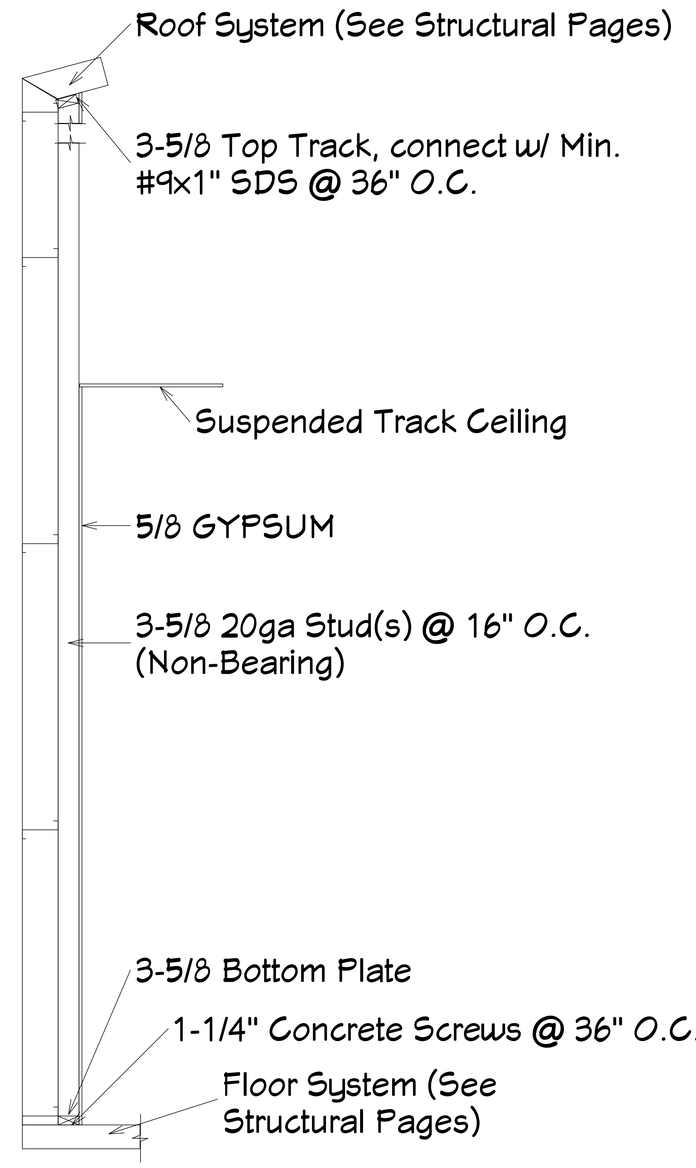
SCALE: 5/8" = 1'

A1



S101 **Wall Section Detail**

Scale - 1" = 1'



S102 **Wall Section Detail**

Scale - 1" = 1'

Wall Sections & Details

Kyle McDonough
William Brown

Construction of a New Commercial Building

New Millennium

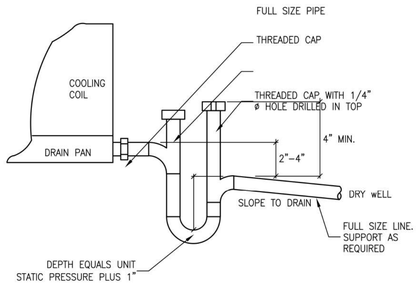
1492 NW Bascom Norris Dr, Lake City, Fl, 32055

DATE 07/07/22
DRAWN KEB
JOB # 2022-142

SHEET A107

MECHANICAL LEGEND

- SUPPLY DIFFUSER
- RETURN REGISTER
- EXHAUST REGISTER
- MOTORIZED DAMPER
- BACKDRAFT DAMPER
- SPIN-IN TAP W/DAMPER
- CD — CONDENSATE DRAIN
- T — THERMOSTAT
- FLEXIBLE DUCT
- DW — DRYWELL
- UC — 3/4" DOOR UNDERCUT



AHU CONDENSATE DRAIN DETAIL

NOT TO SCALE

DESIGN CONDITIONS

EXTERIOR DESIGN CONDITIONS
SUMMER DRY/WET BULB 96°F/77°F
WINTER DRY BULB 29°F

INTERIOR DESIGN CONDITIONS
SUMMER 75°F, +/- 3°F
50% R.H. +/- 10%
WINTER 72°F

AHU-2/3 SEQUENCE OF OPERATION

1. SUPPLY FAN IS ENERGIZED BY A TWO POSITION SWITCH. WHEN THE SWITCH IS CLOSED IT SHALL ENERGIZE THE SYSTEM PROVIDING POWER TO ALL COMPONENTS AND LOW VOLTAGE CONTROL TO ALL CONTROL DEVICES, AND OPEN THE MINIMUM OUTSIDE AIR DAMPER.
2. SYSTEM SHALL BE CONTROLLED WITH A WALL MOUNTED THERMOSTAT DEVICE CONTROLLING SPACE TEMPERATURE. THE THERMOSTAT SHALL INCLUDE OFF-AUTO-COOLING-HEATING MODES AND TIME-DAY-WEEK SCHEDULING CAPABILITIES. THERMOSTAT SHALL BE SET TO "AUTO" MODE.
3. WHEN THE SPACE TEMPERATURE RISES ABOVE THE SETPOINT THE COMPRESSOR/S SHALL CYCLE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
4. WHEN THE SPACE TEMPERATURE IS SATISFIED THE CONDENSER SHALL COMPLETELY SHUT-DOWN. THE SUPPLY FAN SHALL RUN CONTINUOUSLY WHEN THE SPACE IS OCCUPIED.
5. WHEN THE SPACE TEMPERATURE FALLS BELOW THE SETPOINT THE ELECTRIC HEAT SHALL ENERGIZE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
6. THE SYSTEM SHALL IMPOSE A 30 SECOND TIME DELAY TO RESTART THE SUPPLY FAN, COMPRESSORS, AND CONDENSER FANS AFTER SYSTEM SHUT DOWN.
7. PROVIDE NEW 24 HR / 7 DAY THERMOSTAT FOR ALL EXISTING AND NEW SYSTEMS TO INSURE THAT DURING UNOCCUPIED HOURS THAT UNIT DOES NOT ENERGIZE.

SPLIT SYSTEM COOLING AIR CONDITIONING UNIT SCHEDULE

PLAN MARK	NOMINAL TONS	MANUFACTURER – CARRIER		AIR FLOWS		FAN DATA				COOLING COIL						INDOOR UNIT ELECT. DATA				OUTDOOR UNIT ELECT. DATA			MIN. SYSTEM SEER2
		INDOOR UNIT	OUTDOOR UNIT	TOTAL CFM	OA CFM	EXT. SP	TOT. SP	HP	TYPE	DESIGN CONDITIONS EDB	EWB	LDB	LWB	SEN. MBH	TOTAL MBH	HEAT KW	MCA	MOCP	VOLT/ PHASE	MCA	MOCP	VOLT/ PHASE	
AHU-1/CU-1	5	FX4DN(B,F)061L	24SCA560W**30*	1750	200/510	0.40	–	3/4	D	79	65	56	54	41.0	55.9	10	53.8	60	208/1	33.4	50	208/1	14.5
AHU-2/CU-2	3 1/2	FX4DN(B,F)043L	24SCA542W**30*	1400	140	0.40	–	3/4	D	79	65	56	54	31.7	38.2	10	53.8	60	208/1	32.8	50	208/1	14.5
AHU-3/CU-3	4	FX4DN(B,F)061L	24SCA548W**30*	1400	160	0.40	–	1/2	D	79	65	56	54	34.1	45.5	10	53.8	60	208/1	22.3	50	208/1	15.2

NOTES:
1. PROVIDE FIELD INSTALLED ELECTRIC UN-LOADER ACCESSORY FOR CONDENSING UNITS.
2. PROVIDE LOW-AMBIENT ACCESSORY FOR CONDENSING UNITS.

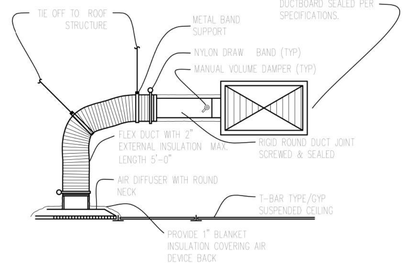
FAN SCHEDULE

PLAN MARK	BASIC OF DESIGN	TYPE	CFM	STATIC PRESS. IN. WG.	FAN RPM	MOTOR RPM	MOTOR WATTS	VOLT/ PHASE	DRIVE TYPE	WALL OP'NG INCHES	FAN INTERLOCK
EF-1	LOREN COOK GC-542	CEIL.	280	0.33	1600	–	94.8	115/1	D	–	OCC SENSOR
EF-2	LOREN COOK GC-186	CEIL.	210	0.33	1100	–	86.1	115/1	D	–	OCC SENSOR
EF-3	LOREN COOK GC-146	CEIL.	70	0.33	1075	–	31	115/1	D	–	OCC SENSOR
EF-4	LOREN COOK GC-146	CEIL.	350	0.33	1210	–	31	115/1	D	–	OCC SENSOR
EF-5	LOREN COOK GC-146	CEIL.	70	0.33	1075	–	31	115/1	D	–	OCC SENSOR

NOTES: PROVIDE VIBRATION ISOLATOR KIT, BACK DRAFT DAMPER, SPEED CONTROLLER, DISCONNECT, AND ROOF CAP WITH INSECT SCREEN.

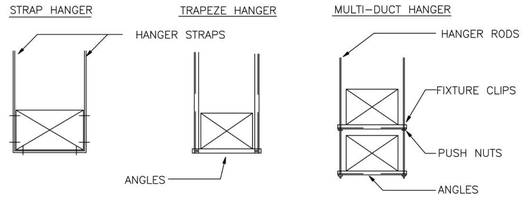
GENERAL NOTES AND SPECIFICATIONS

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE – MECHANICAL. CONCEALED SUPPLY DUCTS AND ALL RETURN DUCTS SHALL BE RIGID, FIBERGLASS DUCT-BOARD, 1.5" THICK. FLEXIBLE DUCTS SHALL BE R-6.5 UL LISTED CLASS 1 AND NOT EXCEED 5' IN LENGTH, EXPOSED SUPPLY DUCTS SHALL BE 1" INTERNALLY INSULATED, SINGLE WALL, ROUND SHEET-METAL TRUNKS AND RUN-OUTS WHERE DISTANCES TO DIFFUSER EXCEED 5'. AIR CONDITIONING UNITS FOR THE SPACE SHALL BE BY CARRIER OR ENGINEER APPROVED EQUAL. PROVIDE VIBRATION ISOLATION SUSPENSION FROM ROOF ASSEMBLY, PROVIDE SECONDARY DRAIN PAN WITH FLOAT SWITCH INTERLOCKED WITH UNIT TO DE-ENERGIZE IN ALARM MODE. PROVIDE 1" THICK MEDIUM EFFICIENCY PLEATED FILTERS. PROVIDE NEW PRO PROVIDE 1 YEAR WARRANTY ON LABOR AND MATERIAL BY CONTRACTOR, AND MANUFACTURER'S WARRANTY ON ANY NEW EQUIPMENT.
2. ANY FIELD CHANGES AS A RESULT OF VALUE ENGINEERING SHALL BE COMMUNICATED TO THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO COMMENCEMENT OF VALUE ENGINEERING WORK. ENGINEERING PLAN REVISIONS REQUIRED BY BUILDING INSPECTORS TO MATCH VALUE ENGINEERING CHANGES SHALL BE COMPENSATED TO THE ENGINEER AT A NEGOTIATED AMOUNT BY THE SUB-CONTRACTOR ENACTING THE VALUE ENGINEERING CHANGE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE TO ARCHITECT A COMPLETE TEST AND BALANCE REPORT, PERFORMED BY AN AABC OR NEBB CERTIFIED CONTRACTOR, UPON COMPLETION OF THE PROJECT.



CEILING DIFFUSER DETAIL

NOT TO SCALE



HANGER SIZES FOR RECTANGULAR DUCT				
LONGEST DIMENSION OF DUCT	ROUND HANGERS	STRAP HANGERS	TRAPEZE STRAP HANGERS	MAXIMUM SPACING
UP THRU 18"	8 GA. WIRE	1"X22 GAUGE	1"X1"X1/8"	10'-0"
19" THRU 30"	8 GA. WIRE	1"X22 GAUGE	1"X1"X1/8"	10'-0"
31" THRU 42"	3/8" ROD	1"X18 GAUGE	1-1/2"X1-1/2"X1/8"	10'-0"
43" THRU 60"	3/8" ROD	1"X18 GAUGE	1-1/2"X1-1/2"X1/8"	10'-0"
61" THRU 84"	3/8" ROD	1"X18 GAUGE	2"X2"X1/8"	8'-0"
85" THRU 96"	3/8" ROD	1"X18 GAUGE	2"X2"X3/16"	8'-0"
97" THRU 120"	3/8" ROD	1"X16 GAUGE	2"X2"X1/4"	8'-0"

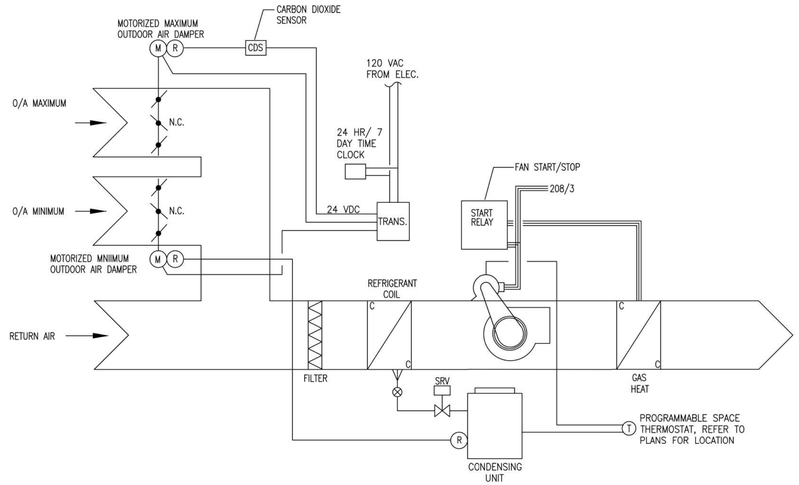
RETANGULAR DUCT HANGERS

NOT TO SCALE

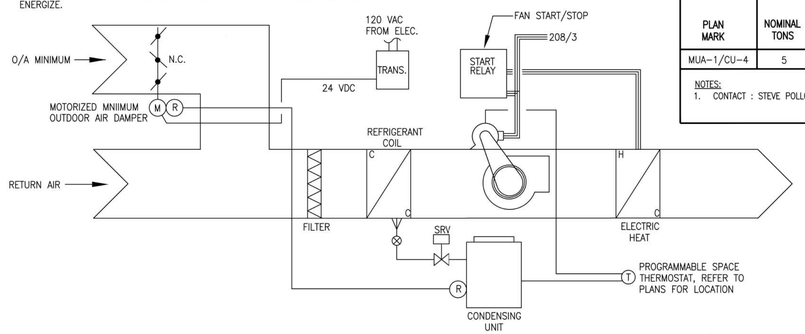
DIFFUSER SCHEDULE

TYPE	SERVICE	CFM RANGE MIN	CFM RANGE MAX	MODULE SIZE	NECK 'N'	MODEL
A	SUPPLY-CEILING	0	140	24x24	6"	TITUS – TMS-I
		141	325	24x24	8"	TITUS – TMS-I
		326	475	24x24	10"	TITUS – TMS-I
		476	650	24x24	12"	TITUS – TMS-I
		651	900	24x24	14"	TITUS – TMS-I
		901	1200	24x24	15"	TITUS – TMS-I
B	RETURN/EXHAUST CEILING	0	150	24x24	6"	TITUS 50F
		151	260	24x24	8"	TITUS 50F
		261	450	24x24	10"	TITUS 50F
		451	695	24x24	12"	TITUS 50F
		696	900	24x24	14"	TITUS 50F
		901	1200	24x24	16"	TITUS 50F
C	SUPPLY – CEILING	0	120	12x12	6"	TITUS – TDC
		121	210	12x12	8"	TITUS – TDC
D	SUPPLY – SIDEWALL	0	165	8X6	–	TITUS – 300FL
		166	275	12X6	–	TITUS – 300FL
		276	400	12X8	–	TITUS – 300FL

NOTES:
1. DIFFUSER RUNOUT SIZE SHALL BE DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED ON DRAWINGS.
2. COORDINATE COLOR OF DIFFUSERS WITH INTERIOR DESIGNER.
3. PROVIDE OPPOSED BLADE VOLUME DAMPER INSTALLED ON BACK-SIDE OF SUPPLY/RETURN REGISTERS INSTALLED IN GYPSUM CEILINGS. PROVIDE STARTING COLLAR WITH BALANCING DAMPER AT FLEX DUCT CONNECTION ALL OTHER SUPPLY/RETURN REGISTERS/DIFFUSERS.
4. PROVIDE SURFACE MOUNT FRAME TYPE FOR DIFFUSERS INSTALLED IN GYPSUM/HARD CEILINGS AND 24"X24" MODULE LAY-IN FOR T-BAR DROP CEILINGS.



CONTROL SCHEMATIC – AHU-1



CONTROL SCHEMATIC – AHU-2/3

NOT TO SCALE

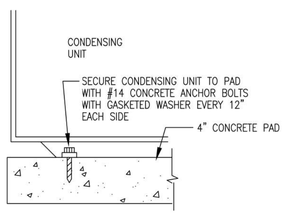
SPLIT SYSTEM COOLING MAKE UP AIR CONDITIONING UNIT SCHEDULE

PLAN MARK	NOMINAL TONS	MANUFACTURER – AAON		AIR FLOWS		FAN DATA				COOLING COIL						INDOOR UNIT ELECT. DATA				OUTDOOR UNIT ELECT. DATA			MIN. SYSTEM EER
		INDOOR UNIT	OUTDOOR UNIT	TOTAL CFM	OA CFM	EXT. SP	TOT. SP	HP	TYPE	DESIGN CONDITIONS EDB	EWB	LDB	LWB	SEN. MBH	TOTAL MBH	HEAT KW	MCA	MOCP	VOLT/ PHASE	MCA	MOCP	VOLT/ PHASE	
MUA-1/CU-4	5	H3-CRB-8-0-161C-3B2:AABE-HA0-000-0A0-00A00F0-00-B00000D00	CFA-007-A-A-8-DA00H:A-00-E0-A0-AN0-L-EE00-0000G00-0A000DB	1225	500	0.50	–	1.34	D	86.7	70.2	52.64	52.27	44.46	66.21	10.5	40	40	208/3	38	40	208/3	11.2

NOTES:
1. CONTACT : STEVE POLLOCK (904-294-8657)

AHU-1 SEQUENCE OF OPERATION

1. SUPPLY FAN IS ENERGIZED BY A TWO POSITION SWITCH. WHEN THE SWITCH IS CLOSED IT SHALL ENERGIZE THE SYSTEM PROVIDING POWER TO ALL COMPONENTS AND LOW VOLTAGE CONTROL TO ALL CONTROL DEVICES, AND OPEN THE MINIMUM OUTSIDE AIR DAMPER.
2. SYSTEM SHALL BE CONTROLLED WITH A WALL MOUNTED THERMOSTAT DEVICE CONTROLLING SPACE TEMPERATURE. THE THERMOSTAT SHALL INCLUDE OFF-AUTO-COOLING-HEATING MODES AND TIME-DAY-WEEK SCHEDULING CAPABILITIES. THERMOSTAT SHALL BE SET TO "AUTO" MODE.
3. WHEN THE SPACE TEMPERATURE RISES ABOVE THE SETPOINT THE COMPRESSOR/S SHALL CYCLE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
4. THE SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS.
5. WHEN THE SPACE TEMPERATURE FALLS BELOW THE SETPOINT THE ELECTRIC HEAT SHALL ENERGIZE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
6. AN ALARM CONDITION (>1000 PPM) FROM THE CARBON DIOXIDE SENSOR SHALL RELAY A SIGNAL TO OPEN THE NORMALLY CLOSED MAXIMUM OUTSIDE AIR DAMPER. WHEN THE ALARM CONDITION CEASES (<800 PPM) THE MAXIMUM OUTSIDE AIR DAMPER SHALL CLOSE.
7. THE SYSTEM SHALL IMPOSE A 30 SECOND TIME DELAY TO RESTART THE SUPPLY FAN, COMPRESSORS, AND CONDENSER FANS AFTER SYSTEM SHUT DOWN.



CONDENSING UNIT MOUNTING DETAIL

NOT TO SCALE

Mechanical Note & Details

Kyle McDonough William Brown

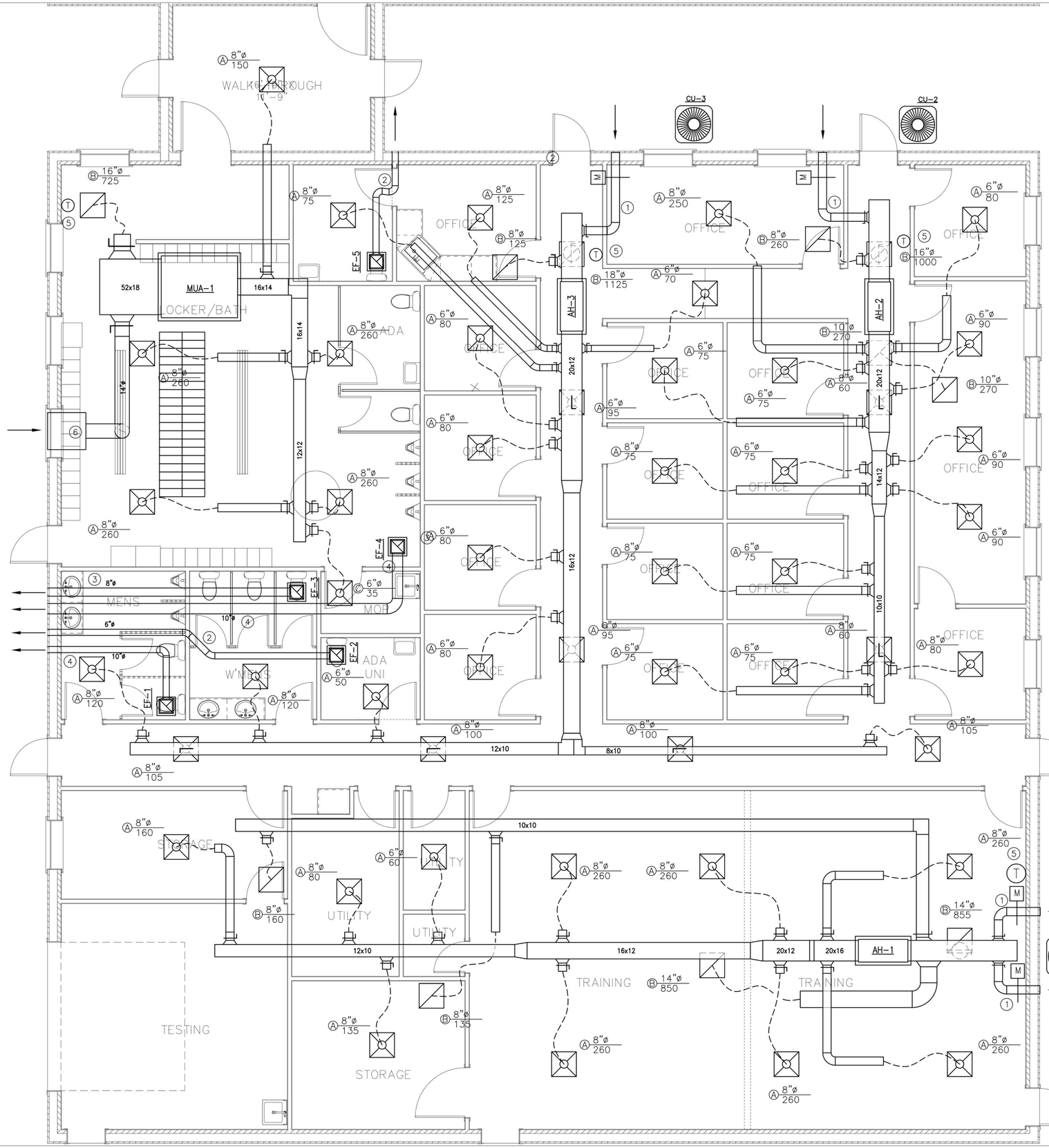
Construction of a New Commercial Building

New Millennium

1992 NW Bascom Norris Dr, Lake City, Fl, 32055

DATE 07/07/22
DRAWN BY KWEB
JOB # 2022-142

SHEET M-1



CONSTRUCTION NOTES

1. 8"ø OA DUCT WITH MOTORIZED DAMPER TERMINATING AT WALL CAP
2. 6"ø EA DUCT WITH BACKDRAFT DAMPER TERMINATING AT WALL CAP
3. 8"ø EA DUCT WITH BACKDRAFT DAMPER TERMINATING AT RUSKIN ELF6375DX OA INTAKE LOUVER
4. 10"ø EA DUCT WITH BACKDRAFT DAMPER TERMINATING AT WALL CAP
5. 7 DAY 24 HOUR PROGRAMMABLE THERMOSTAT
6. 14"ø OA DUCT UP TO RUSKIN ELF6375DX OA INTAKE LOUVER WITH 24" CONNECTION PLENUM

FLOOR PLAN – MECHANICAL

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

0 1' 2' 4' 8' 12'

Mechanical Plan

Kyle McDonough
William Brown

STATE OF FLORIDA — REGISTERED PROFESSIONAL ENGINEER — No. 70001 — KYLE T. MCDONOUGH

Construction of a New Commercial Building

New Millennium

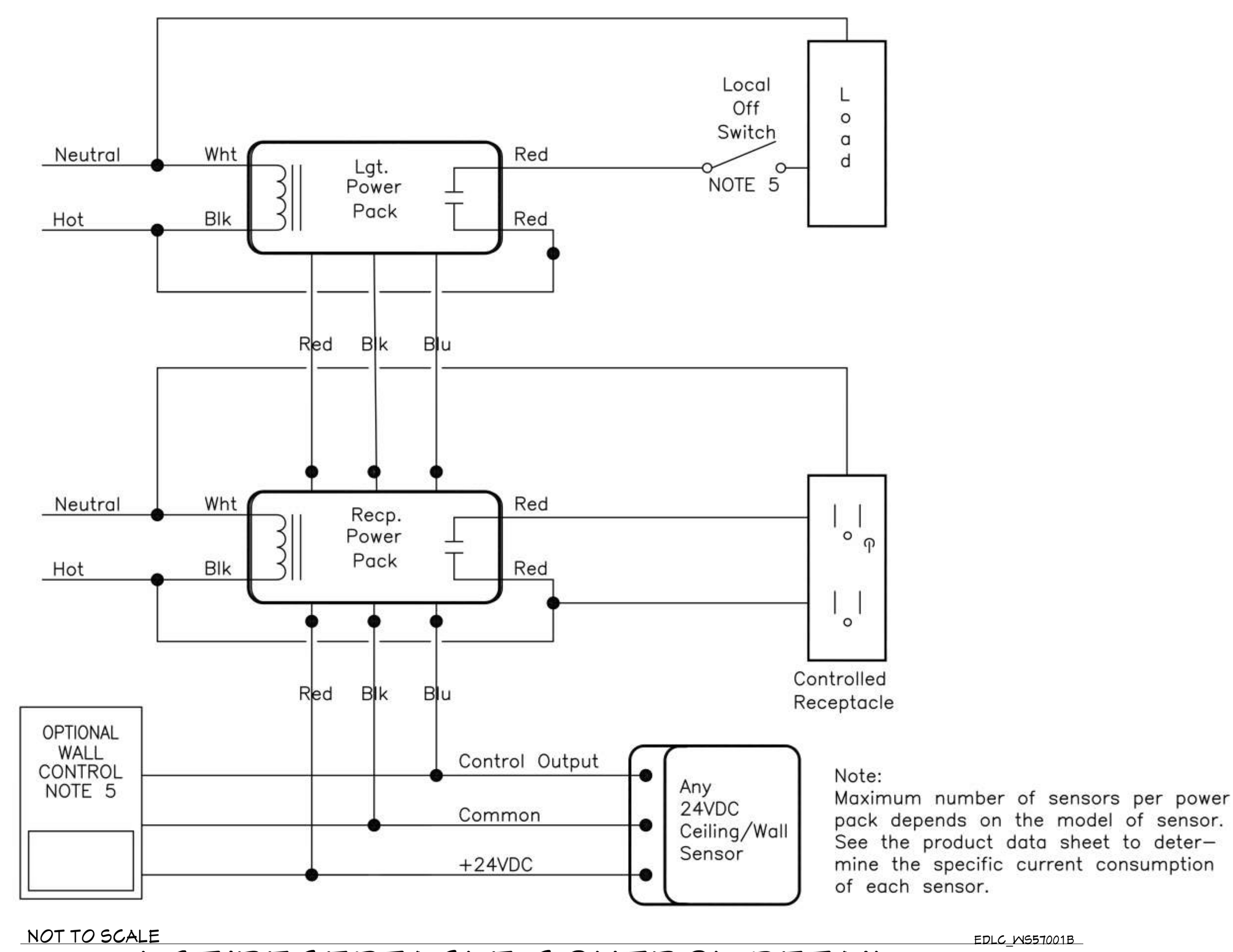
1492 N/A Bascom Norris Dr, Lake City, Fl, 32055

DATE 07/07/22
DRAWN BY MEB
JOB # 2022.142

SHEET M-2

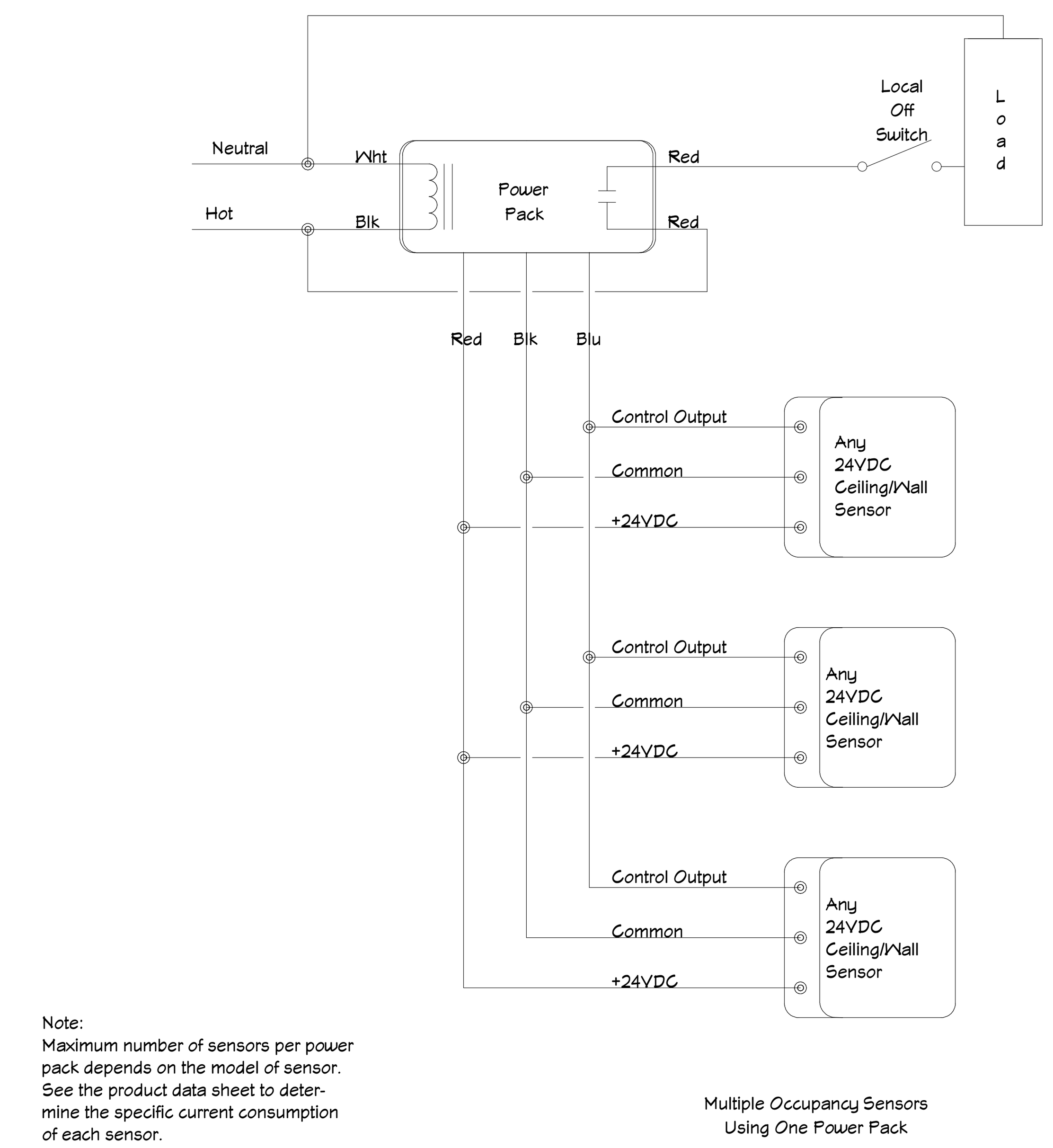
ELECTRICAL LEGEND

	FLUORESCENT LIGHTING FIXTURE - SURFACE MOUNTED.
	PL FLUORESCENT, INCANDESCENT OR H.I.D. LIGHTING FIXTURE - RECESSED.
	PL FLUORESCENT, H.I.D. OR INCANDESCENT LIGHTING FIXTURE - SURFACE OR WALL MOUNTED.
	EMERGENCY LIGHTING FIXTURE. DO NOT SWITCH. TYPE "E" FIXTURE TYPICAL U.N.O.
	EXIT LIGHT - PROVIDE ARROWS AS INDICATED, SHADING DENOTES FACE ORIENTATION. DO NOT SWITCH. TYPE "E" FIXTURE TYPICAL U.N.O.
$	TOGGLE SWITCH - SINGLE POLE - QUIET TYPE 20 AMP, 120/277 VOLT HUBBELL NO. HBL1221I WITH NO. P1 COVERPLATE - 46" MOUNTING HEIGHT U.N.O. PROVIDE MOTION SENSOR SWITCH WHERE REQUIRED PER FL ENERGY CODE 415
$3	TOGGLE SWITCH - THREE-WAY QUIET TYPE, 20 AMP, 120/277 VOLT, HUBBELL NO. HBL1223I WITH NO. P1 COVERPLATE - 46" MOUNTING HEIGHT, U.N.O.
$M	MOTION SWITCH - SINGLE POLE - QUIET TYPE 20 AMP, 120/277 VOLT UNLESS INDICATED OTHERWISE ON PLANS - 46" MOUNTING HEIGHT. LEVITON ODSSMT-MD
	DUPLEX RECEPTACLE - 20 AMP, 120 VOLT, 3 WIRE GROUNDING, HUBBELL NO. 5352I WITH NO. P8 COVERPLATE, 18 INCH MOUNTING HEIGHT, U.N.O.
	FLOOR RECEPTACLE - STEEL CITY 662/LIFT LID COVER ARCHITECT TO SELECT TRIM COVER
	DOUBLE DUPLEX RECEPTACLES-(2) TWO 20AMP,120VOLT,3 WIRE GROUNDING, HUBBELL NO. 5352I WITH NO. P82 COVERPLATE, 18 INCH MOUNTING HEIGHT, U.N.O.
	DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER, 20 AMP, 120 VOLT, 3 WIRE GROUNDING. HUBBELL NO. GF5352IA WITH NO. HPS1I COVERPLATE, 46 INCH MOUNTING HEIGHT, U.N.O. EXTERIOR LOCATIONS SHALL BE MOUNTED AT 18" A.F.F.
▲	DATA/TELEPHONE OUTLET - 4 INCH SQUARE JUNCTION BOX WITH 1-GANG EXTENSION RING, BLANK COVER PLATE - 18 INCH MOUNTING HEIGHT, U.N.O. PROVIDE 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE.
J	JUNCTION BOX.
	MOTOR, FAN, PUMP OR AIR CONDITIONING UNIT.
	LIGHTING AND/OR POWER PANELBOARD.
	WIRING IN CONDUIT, RUN CONCEALED IN SLAB OR UNDERGROUND.
	WIRING IN CONDUIT, RUN CONCEALED ABOVE CEILING OR IN WALLS.
	HOMERUN TO PANELBOARD - NUMBER OF ARROWS DENOTES QUANTITY OF CIRCUITS. CROSSMARKS INDICATE QUANTITY OF NO. 12 CONDUCTORS. RUNS VOID OF CROSSMARKS ARE 1/2 INCH CONDUIT, 3 NO. 12, U.N.O. DO NOT COMBINE HOMERUNS EXCEPT AS SPECIFICALLY INDICATED ON THE PLAN.
WP	DENOTES WEATHERPROOF - MOUNT RECEPTACLES HORIZONTALLY AND PROVIDE TAYMAC 60350 COVERPLATE, FOR SWITCHES PROVIDE TAYMAC 40110 COVERPLATE.
U.N.O.	UNLESS NOTED OTHERWISE.
A.F.F.	ABOVE FINISHED FLOOR.
3 60/40 N3R	DISCONNECT SWITCH, "3 60/40 N3R" DENOTES 3 POLE, 60 AMPS, 40 AMPS FUSES N3R DENOTES DISCONNECT NEMA RATING.



NOT TO SCALE

LGT/RECEPTACLE CONTROL DETAIL



NOT TO SCALE

CEILING LIGHTING CONTROL DETAIL

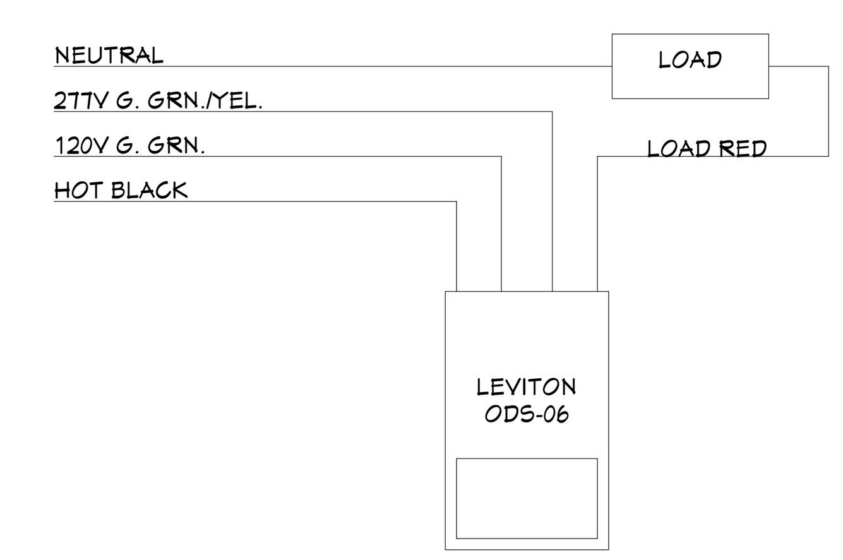
NOTES:

1. THIS DIAGRAM AND ALL PART NUMBERS ARE BASED ON "WATTSTOPPER" PRODUCTS.
2. PROVIDE SENSORS IN ALL ROOMS AS REQUIRED BY FBC 13-415.1

ELECTRICAL NOTES:

1. ELECTRICAL SERVICE AND INSTALLATION SHALL CONFORM TO THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE, APPLICABLE STATE AND LOCAL CODES AND LOCAL UTILITY COMPANY REQUIREMENTS
2. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE SERVICE WITH THE UTILITY COMPANY PRIOR TO BID. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS AND REQUIREMENTS OF TRANSFORMERS, POLES, SERVICE EQUIPMENT AND OBTAIN ALL NECESSARY APPROVALS FROM THE UTILITY COMPANY PRIOR TO COMMENCMENT OF WORK. UTILITIES SHOWN ON DRAWINGS ARE TO BE USED AS A GUIDELINE ONLY AND MAY NOT NECESSARILY BE APPROVED. FINAL APPROVALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN TO DETERMINE ROUTES THAT WILL NOT INTERFERE WITH OTHER TRADES.
4. CONNECT EXIT LIGHTS AND EMERGENCY BALLASTS OF FIXTURES DENOTED AS EMEGENCY TO UNSWITCHED LIGHTING CIRCUIT
5. ALL LIGHT FIXTURES SHALL BE MOUNTED AS CLOSE TO ADJACENT DOOR FRAME AS POSSIBLE
6. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES. REFER TO ARCHITECTURAL, MECHANICAL AND CIVIL DRAWINGS IN ORDER TO BE AWARE OF CONDITIONS AFFECTING ELECTRICAL WORK.
7. CONTRACTOR SHALL COORDINATE ALL MECHANICAL EQUIPMENT CONNECTIONS WITH MECHANICAL CONTRACTOR AND EQUIPMENT SUBMITTALS PRIOR TO ROUGH IN FOR EXACT LOCATIONS, CIRCUIT SIZES, AND BREAKER REQUIREMENTS. NOTIFY ARCHITECT OF ANY CHANGES TO CONTRACT PRICE IF WIRE SIZE INCREASES.
8. MECHANICAL CONTRACTOR TO PROVIDE BATH FANS AND RELAYS TO INTERLOCK AHU'S.
9. ALL CONDUIT TO BE SUPPORTED INDEPENDANT FROM CEILING GRID
10. ALL LIGHT SWITCHS SHALL BE INSTALLED PER FLORIDA ENERGY CODES. PROVIDE OCCUPANCY SENSORS OR DUAL SWITCHING AS REQUIRED.

Luminaire Schedule						
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts
		A	COOPER LTG: 24FPSL2SCT3 (3500K-HI OUTPUT)	0.950	6249	60.5
		AE	COOPER LTG: 24FPSL2SCT3-EL14W (3500K-HI OUTPUT)	0.950	6249	60.5
		B	COOPER LTG: 22FPSL2SCT3 (3500K-MID OUTPUT)	0.950	2694	24.1
		BE	COOPER LTG: 22FPSL2SCT3-EL14W (3500K-MID OUTPUT)	0.950	2694	24.1
		D1	COOPER LTG: PR6FS12D010 PR6M12WD8FSMW(2000Lm3500K)	0.950	2674	20.4
		D1E	COOPER LTG: PR6FS12D010REM14 PR6M12WD8FSMW (2000Lm3500K)	0.950	2674	20.4
		D2	COOPER LTG: PR6FS24D010 PR6M24WD8FSMW (3000Lm3500K)	0.950	3433	26.1
		D2E	COOPER LTG: PR6FS24D010REM14 PR6M24WD8FSMW(3000Lm3500K)	0.950	3433	26.1
		F1	COOPER LTG: 4SNLED-LD5-44SL-LW-UNV-L835-CD1-U	0.950	4589	38.7
		F1E	COOPER LTG: 4SNLED-LD5-44SL-LW-UNV-EL14W-L835-CD1-U-AYCCHAINSET	0.950	4589	38.7
		G1E	COOPER LTG: 4SWLED-40SL-LW-UNV-EL14W-L835-CD1-SVPD3-U	0.950	3936	37.9
		S4	COOPER LIGHTING: PRV-C40-D-UNV-T4 (25FT ABOVE GRADE CONCRETE POLE)	0.912	17087	131
		S5B	COOPER LIGHTING: PRV-C40-D-UNV-T5 (25FT ABOVE GRADE CONCRETE POLE)	0.912	18264	131
		LCP	GREENGATE: CK4A-SSRCNO WITH GDS-6TSB-W CONTROL STATION			



OCCUPANCY DETECTOR WIRING DIAGRAM

NOTES:

1. THIS DIAGRAM AND ALL PART NUMBERS ARE BASED ON "LEVITON" PRODUCTS.
2. PROVIDE SENSORS IN ALL ROOMS AS REQUIRED BY FBC 13-415.1

NOT TO SCALE

LIGHTING CONTROL DETAIL

GENERAL NOTES:

A. THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK AS INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE EOR AS SOON AS POSSIBLE; FIELD ALLOCATED DECISIONS ARE NOT TO BE PERFORMED WITHOUT EOR APPROVAL TO ADDRESS THESE ISSUES.

B. CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND FAMILIARIZE HIMSELF/HERSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL & COMMUNICATIONS INSTALLATION. IT IS CONTRACTORS RESPONSIBILITY TO MAKE PROVISIONS TO THE COST THEREOF.

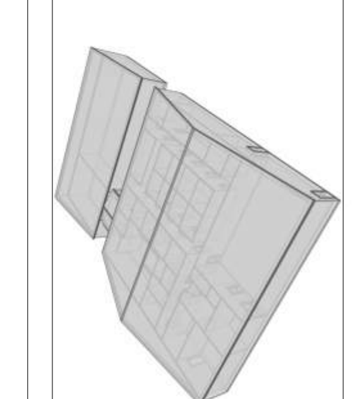
C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CODE/ORDINANCE AUTHORITATIVE JURISDICTION & THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE. THE SPECIFICATION, CODES & STANDARDS LISTED ARE UTILIZED IN THIS PROJECT: NFPA-70, NFPA-101, UL, NEMA, ANSI, FED. SPEC., IPCEA, IEEE, OSHA.

D. DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO LAYOUT PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNERS REPRESENTATIVE/CONSULTANT.

E. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

Electrical Notes & General Details

Kyle Mcdonough
William Brown



Construction of a New Commercial Building

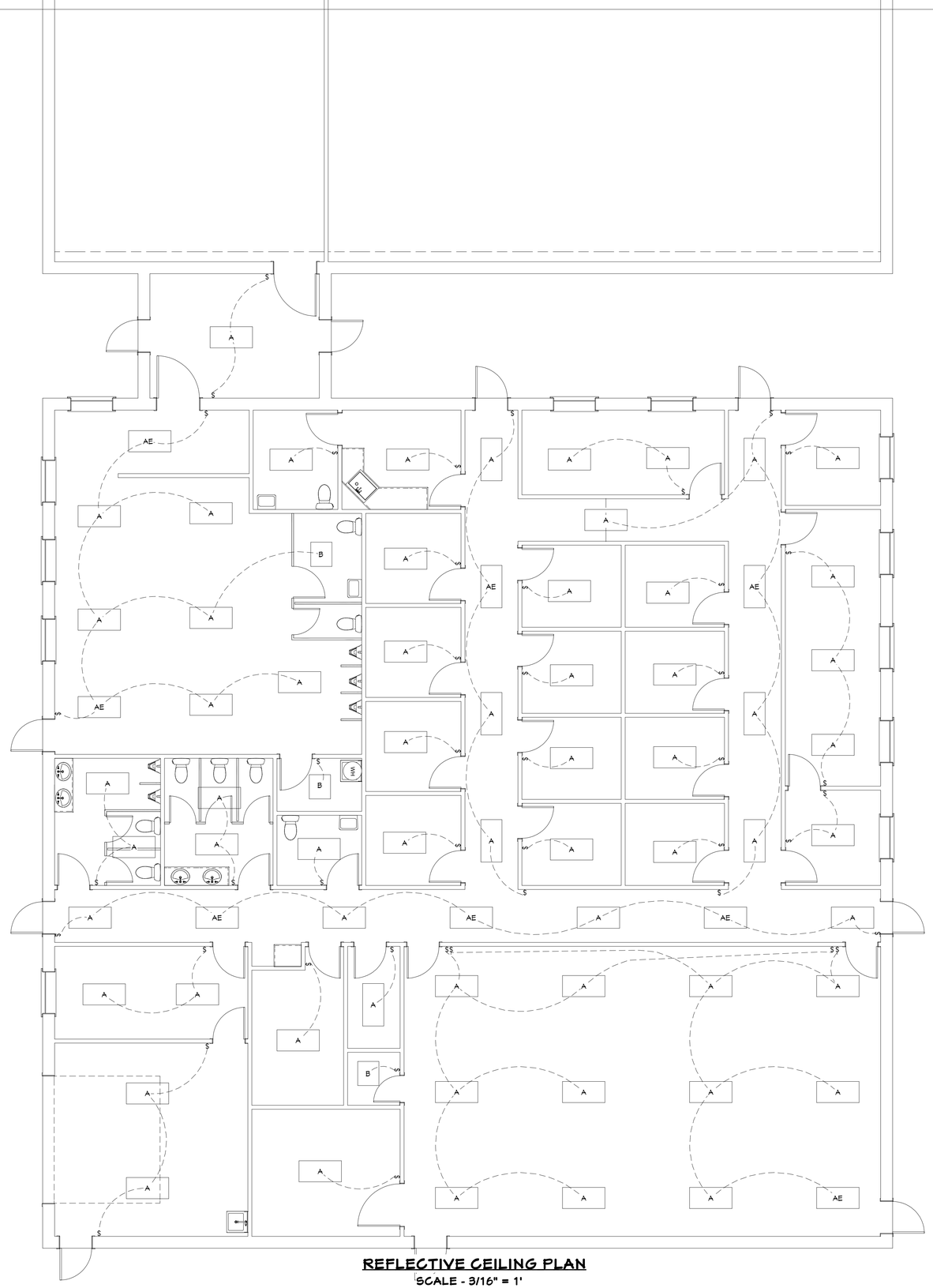
New Millennium

1992 NW Bascom Norris Dr, Lake City, Fl, 30255

DATE 07/07/22
DRAWN BY: WEB
JOB # 2022-142

SHEET E-1

Luminaire Schedule						
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts
		A	COOPER LTG: 24FPSL2SCT3 (3500K-HI OUTPUT)	0.950	6249	60.5
		AE	COOPER LTG: 24FPSL2SCT3-EL14W (3500K-HI OUTPUT)	0.950	6249	60.5
		B	COOPER LTG: 22FPSL2SCT3 (3500K-MID OUTPUT)	0.950	2694	24.1
		BE	COOPER LTG: 22FPSL2SCT3-EL14W (3500K-MID OUTPUT)	0.950	2694	24.1
		D1	COOPER LTG: PR6FS12D010 PR6M12WD8FSMW(2000Lm3500K)	0.950	2674	20.4
		D1E	COOPER LTG: PR6FS12D010REM14 PR6M12WD8FSMW (2000Lm3500K)	0.950	2674	20.4
		D2	COOPER LTG: PR6FS24D010 PR6M24WD8FSMW (3000Lm3500K)	0.950	3433	26.1
		D2E	COOPER LTG: PR6FS24D010REM14 PR6M24WD8FSMW(3000Lm3500K)	0.950	3433	26.1
		F1	COOPER LTG: 4SNLED-LD5-44SL-LW-UNV-L835-CD1-U	0.950	4589	38.7
		F1E	COOPER LTG: 4SNLED-LD5-44SL-LW-UNV-EL14W-L835-CD1-U-AYCCHAINSET	0.950	4589	38.7
		G1E	COOPER LTG: 4SWLED-40SL-LW-UNV-EL14W-L835-CD1-SVPD3-U	0.950	3936	37.9
		S4	COOPER LIGHTING: PRV-C40-D-UNV-T4 (25FT ABOVE GRADE CONCRETE POLE)	0.912	17087	131
		S5B	COOPER LIGHTING: PRV-C40-D-UNV-T5 (25FT ABOVE GRADE CONCRETE POLE)	0.912	18264	131
		LCP	GREENGATE: CK4A-SSRCNO WITH GDS-6TSB-W CONTROL STATION			

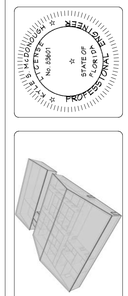


REFLECTIVE CEILING PLAN

SCALE - 3/16" = 1'

Lighting Plan

Kyle McDonough
William Brown



Construction of a New Commercial Building

New Millennium

1492 NW Bascom Norris Dr, Lake City, Fl, 32255

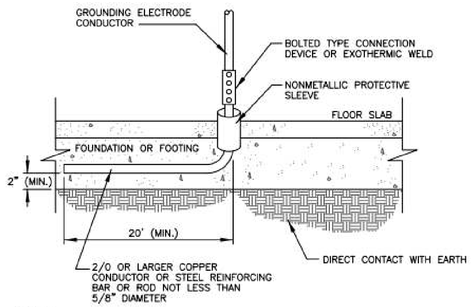
DATE 07/07/22
DRAWN BY KEB
JOB # 2022.142

SHEET E-2

LOAD CALCULATIONS

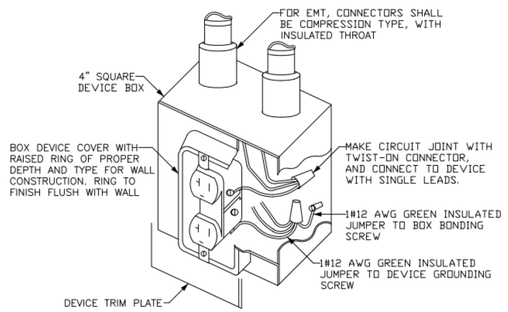
QTY	DESC.	UNIT	EXT. KW
100	RECEPTACLES (ALLOWANCED)	180VA	22,500
20	GFCI RECEPTACLES (ALLOWANCED)	180VA	4,500
1	AHU-1/CU-1	18.1KVA	18,138
1	AHU-2/CU-2	18KVA	18,013
1	AHU-3/CU-3	15.8KVA	15,829
1	WATER HEATER (WH-1)	9KVA	9000
	TOTAL 208/1 LOADS	**87,980 VA**	
	TOTAL 208/1 AMPS	**423 AMPS**	
1	MUA-1/CU-4	30.3KVA	30,300
6400	LIGHTING (SQUARE FOOTAGE ALLOWANCE)	3VA	19200
2	480V/50A RECEPTACLES	41.6KVA	83138
	TOTAL 277/480-3 LOADS	**132,638 VA**	
	TOTAL 277/480-3 AMPS	**159.6 AMPS**	
	TOTAL AMPS	**583**	

GROUNDING DETAIL



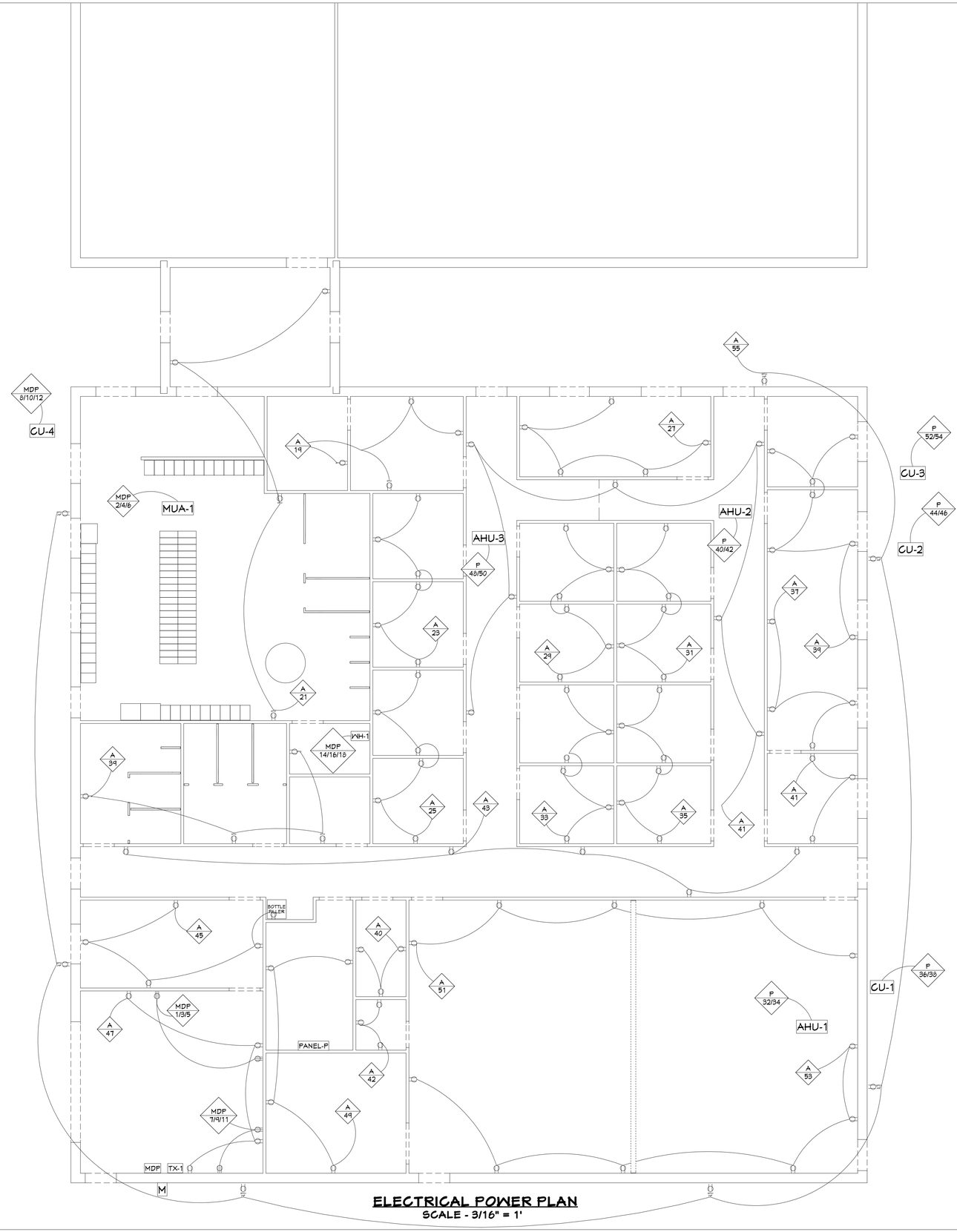
NOTES:

1. SHOULD THIS PIECE OF REBAR OR COPPER ROD BE LEFT OUT OF THE SLAB OR FOOTER, A SUITABLE SUBSTITUTE GROUND CONSISTING OF A CONDUCTOR SIZED PER N.E.C. 250-94, (BARE COPPER) ENCIRCLING THE ENTIRE BUILDING WILL BE INSTALLED 30" BELOW FINISHED GRADE AND AT NO ADDITIONAL COST TO THE FACILITY OWNER.
2. A BONDING POINT MUST BE MADE AVAILABLE FOR OTHER EQUIPMENT WHICH REQUIRES GROUNDING ACCORDING TO N.E.C. SECTION 250-70(b)



TYPICAL DUPLEX RECEPTACLE INSTALLATION

NOT TO SCALE

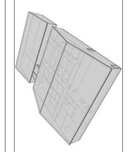


ELECTRICAL POWER PLAN

SCALE - 3/16" = 1'

Power Plan

Kyle Mcdonough
William Brown



Construction of a New Commercial Building

New Millennium

1942 NW Bascom Norris Dr. Lake City, Fl, 32055

DATE 07/07/22
PROJECT NO. KEEB 2022.142

SHEET E-3

SCHEDULE OF BRANCH CIRCUIT PANEL "MDP"

MAIN: 600 MLO: NO MCB: 600
SPEC: NEW MAIN
MOUNTING: SURFACE

VOLTAGE: 277/480V, 3C 4W
GRND BUS: YES LOCATION: TESTING ROOM
AIC SYMM: 65,000 FED FROMMETER

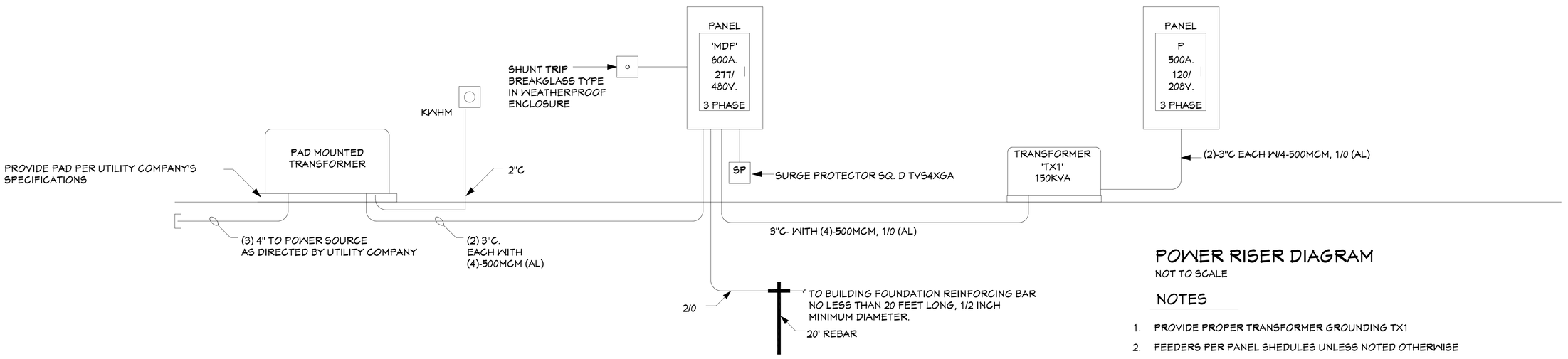
DESCRIPTION	WIRE	GND	COND.	TRIP	CKT.	KVA	NOTES	KVA	CKT.	TRIP	COND.	GND	WIRE	DESCRIPTION
RECEPTACLE	#6	#8	1"	50	1 3 5	41.6		18.3	2 4 6	25	3/4"	#8	#8	MUA-1
RECEPTACLE	#6	#8	1"	50	7 9 11	41.6		12	8 10 12	20	3/4"	#8	#8	CU-4
					13				14					
					15				16					
					17				18					
					19				20					
					21				22					
					23				24					
LIGHTING	#12	#12	1/2"	20	25	2.4			26					
LIGHTING	#12	#12	1/2"	20	27	2.4			28					
LIGHTING	#12	#12	1/2"	20	29	2.4			30					
LIGHTING	#12	#12	1/2"	20	31	2.4			32					
LIGHTING	#12	#12	1/2"	20	33	2.4			34					
LIGHTING	#12	#12	1/2"	20	35	2.4			36					
LIGHTING	#12	#12	1/2"	20	37	2.4			38					
LIGHTING	#12	#12	1/2"	20	39	2.4		150	40	225	3"	1/0	250MCM	TX-1
					41				42					
							TOTAL KVA		294.4					

SCHEDULE OF BRANCH CIRCUIT PANEL "P"

MAIN: 500 MLO: NO MCB: 500
SPEC: NEW SUB
MOUNTING: SURFACE

VOLTAGE: 120/208V, 3C 4W
GRND BUS: YES LOCATION: UTILITY ROOM
AIC SYMM: 22,000 FED FROMMDP

DESCRIPTION	WIRE	GND	COND.	TRIP	CKT.	KVA	NOTES	KVA	CKT.	TRIP	COND.	GND	WIRE	DESCRIPTION
RECEPTACLES	#12	#12	1/2"	20	1	2.4		11.3	2 4	60	3/4"	#8	#4	AHU-1
RECEPTACLES	#12	#12	1/2"	20	3	2.4								
RECEPTACLES	#12	#12	1/2"	20	5	2.4		5.7	6 8	50	3/4"	#8	#6	CU-1
RECEPTACLES	#12	#12	1/2"	20	7	2.4								
RECEPTACLES	#12	#12	1/2"	20	9	2.4		11.3	10 12	60	3/4"	#8	#4	AHU-2
RECEPTACLES	#12	#12	1/2"	20	11	2.4								
RECEPTACLES	#12	#12	1/2"	20	13	2.4		5.7	14 16	50	3/4"	#8	#6	CU-2
RECEPTACLES	#12	#12	1/2"	20	15	2.4								
RECEPTACLES	#12	#12	1/2"	20	17	2.4		11.3	18 20	60	3/4"	#8	#4	AHU-3
RECEPTACLES	#12	#12	1/2"	20	19	2.4								
RECEPTACLES	#12	#12	1/2"	20	21	2.4		5.7	22 24	35	3/4"	#8	#8	CU-3
RECEPTACLES	#12	#12	1/2"	20	23	2.4								
RECEPTACLES	#12	#12	1/2"	20	25	2.4		9	26 28	50	3/4"	#8	#6	CU-3
RECEPTACLES	#12	#12	1/2"	20	27	2.4								
RECEPTACLES	#12	#12	1/2"	20	29	2.4			30					
RECEPTACLES	#12	#12	1/2"	20	31	2.4			32					
RECEPTACLES	#12	#12	1/2"	20	33	2.4			34					
RECEPTACLES	#12	#12	1/2"	20	35	2.4			36					
RECEPTACLES	#12	#12	1/2"	20	37	2.4			38					
RECEPTACLES	#12	#12	1/2"	20	39	2.4		2.4	40	20	1/2"	#12	#12	RECEPTACLES
RECEPTACLES	#12	#12	1/2"	20	41	2.4		2.4	42	20	1/2"	#12	#12	RECEPTACLES
							TOTAL (NEW) KVA		154.9					



POWER RISER DIAGRAM

NOT TO SCALE

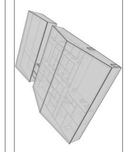
NOTES

1. PROVIDE PROPER TRANSFORMER GROUNDING TX1
2. FEEDERS PER PANEL SHEDULES UNLESS NOTED OTHERWISE
3. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY AND LABEL THE AVAILABLE FAULT CURRENT AT ALL NEW PANELS PER NEC 110.24(A)
4. CONTACT THE LOCAL UTILITY COMPANY FOR FINAL APPROVAL OF METERING EQUIP
5. Provide electrical service disconnect signage per NFPA 70 230.70(B)

Panels & Risers

Kyle Mcdonough
William Brown

REGISTERED PROFESSIONAL ENGINEER
KYLE M. MCDONOUGH
No. 33661
STATE OF GEORGIA



Construction of a New Commercial Building

New Millennium

1492 NW Bascom Norris Dr, Lake City, Fl, 30255

DATE 07/07/22
DRAWN BY KWEB
JOB # 2022.142

SHEET E-4

PLUMBING FIXTURE SCHEDULE

FIXTURE	DESCRIPTION	MANUFACTURER	WASTE	CW	HW
WC–1	WATER CLOSET, ADA 17–1/8" HEIGHT, ELONGATED TOILET. VITREOUS CHINA, FLOOR MOUNTED, FLOOR OUTLET, FLUSH TANK TYPE, LOW CONSUMPTION 1.6 GPF. SEAT INSTALLED MIN. 18" FROM FINISH FLOOR TO TOP OF SEAT SEAT: EXTRA HEAVY DUTY PLASTIC, OPEN FRONT SEAT LESS COVER WITH CONCEALED CHECK AND STAINLESS STEEL HINGE POST. STOP: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER WATER CLOSET RISER. ACCESSORIES: HEAVY DUTY WAX BOWL RING. WAX GASKET FOR SETTING ANY FLOOR TYPE WATER CLOSET BOWL.	AMERICAN STANDARD #211BA104.020 BEMIS CHURCH OLSONITE SLOAN 111 OATEY 31190	4"	1/2"	–
WC–2	WATER CLOSET ELONGATED TOILET. VITREOUS CHINA, FLOOR MOUNTED, FLOOR OUTLET, FLUSH TANK TYPE, LOW CONSUMPTION 1.6 GPF. SEAT: EXTRA HEAVY DUTY PLASTIC, OPEN FRONT SEAT LESS COVER WITH CONCEALED CHECK AND STAINLESS STEEL HINGE POST. STOP: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER WATER CLOSET RISER. ACCESSORIES: HEAVY DUTY WAX BOWL RING. WAX GASKET FOR SETTING ANY FLOOR TYPE WATER CLOSET BOWL.	AMERICAN STANDARD #2034314.02 BEMIS CHURCH OLSONITE SLOAN 111 OATEY 31190	4"	1/2"	–
L–1	LAVATORY, ADA WALL HUNG LAVATORY, VITREOUS CHINA, FAUCET HOLES ON 4" CENTERS. FAUCET: ADA COMPLIANT,SINGLE LEVER, CHROME TEMPERED WATER: PROVIDE WATER TEMPERATURE LIMITING DEVICE (THERMOSTATIC MIXING VALVE) THAT CONFORMS TO ASSE 1070 PER FPC 416.5 STOPS/ACCESSORIES: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISERS. GRID DRAIN WITH OFFSET TAILPIECE AND CHROME PLATED P–TRAP MOUNT AT HANDICAPPED HEIGHT, PROVIDE BLOCKING IN WALL FOR MOUNTING OF LAVATORY SUPPLY LAV–GUARD INSULATION KIT.	AMERICAN STANDARD #0321.026 CHICAGO FAUCETS #420–ABCP WATTS MMV McGUIRE MANUFACTURING TRUEBRO #102G	1–1/4"	1/2"	1/2"
L–2	LAVATORY, NON–ADA AQUALYN VITREOUS CHINA, ROUND DROP–IN, FAUCET HOLES ON 4" CENTERS FAUCET: 4" CENTERSET CAST BRASS FAUCET, GOOSENECK SPOUT WITH 1/4 TURN WASHERLESS CARTRIDGES. WRIST BLADE LEVER HANDLES. TEMPERED WATER: PROVIDE WATER TEMPERATURE LIMITING DEVICE (THERMOSTATIC MIXING VALVE) THAT CONFORMS TO ASSE 1070 PER FPC 416.5 STOPS/ACCESSORIES: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISERS. GRID DRAIN TAILPIECE AND CHROME PLATED P–TRAP SUPPLY LAV–GUARD INSULATION KIT	KOHLER K–2202–4R DELTA #501–DST WATTS MMV McGUIRE MANUFACTURING TRUEBRO #102G	1–1/4"	1/2"	1/2"
L–3	WASH FOUNTAIN WASH FOUNTAIN, 54 IN WIDE, SEMI CIRCULAR, SERIES WF2704, 4 PERSON SINK	OWNER PROVIDED	2"	1"	–
AAV	AIR ADMITTANCE VALVE SINGLE FIXTURE ISLAND COUNTER VENTING SYSTEM	STUDOR MINI–VENT	–	LINE SIZE	–
FD–1	FLOOR DRAIN DUCO CAST IRON BODY AND FLASHING COLLAR WITH SLOTTED SEDIMENT BUCKET, 12" SQUARE NICKEL BRONZE TOP. PROVIDE 1/2" TRAP PRIMER CONNECTION.	JAY R. SMITH 2240	3"	1/2"	–
MS–1	MOP SINK ONE PIECE MOLDED FIBERGLASS, 24" x 24" x 8" HIGH WALLS. 3" DRAIN PIPE. REMOVABLE STAINLESS STEEL STRAINER FAUCET: CHROME PLATED WALL MOUNTED FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT. ACCESSORIES: PROVIDE MOP HANGER AND WALL GUARD ACCESSORIES	MUSTEE 62M MUSTEE 63.600A MUSTEE 65.600, 67.2424	3"	1/2"	1/2"
EWC–1	ELECTRIC WATER COOLER, ADA DOUBLE UNIT, ADA, STAINLESS STEEL, REFRIGERATED W/ BOTTLE FILLER	ELKAY LZSTL8WSLK	1–1/4"	1/2"	–
TP–1	TRAP PRIMER WATER SAVER TYPE, CP BRONZE, 1/2" PIPING AND ESCUTCHEON PLATES. ROUTE PRIMER PIPING IN WALL TO FLOOR DRAIN.	J.R. SMITH 2698	–	1/2"	–
WH–1	HOSE BIBB FROST–PROOF, ANTI–SIPHON WALL HYDRANT	ZURN Z1321	–	3/4"	–
ECO	EXTERIOR CLEANOUT EXTERIOR, ADJUSTABLE CLEANOUT, DUCO COATED, CI BODY, ABS TAPERED PLUG WITH GASKET, HEAVY DUTY TOP.	ZURN ZB–1400–HD	MATCH PIPE	–	–
FCO	FLOOR CLEAN OUT NTERIOR, FLOOR TYPE. ABS TAPERED PLUG, WITH GASKET SEAL AND ADJUSTABLE SECURED, NICKEL BRONZE TOP. "C.O." CAST IN COVER. SPANNER WRENCH REMOVABLE.	JR SMITH 4033–NB	MATCH PIPE SIZE	–	–

PLUMBING FIXTURE SCHEDULE

FIXTURE	DESCRIPTION	MANUFACTURER	WASTE	CW	HW
UR–1	URINAL MAYBROOK 1.0 GPF WASHOUT ACTION, VITREOUS CHINA, WALL MOUNTED, FLUSH VALVE, MOUNT AT ADA HEIGHT (FRONT RIM AT 17" FROM FINISHED FLOOR). LOW–CONSUMPTION. FLUSH VALVE: CHROME PLATED BRASS, AUTOMATIC BATTERY POWERED, 1.0 GPF, ADJUSTABLE TAILPIECE, HIGH BACK PRESSURE VACUUM BREAKER FLUSH CONNECTION.	AMERICAN STANDARD #6581.015 SLOAN ROYAL 186–1	2"	3/4"	–
UR–2	URINAL MAYBROOK 1.0 GPF WASHOUT ACTION, VITREOUS CHINA, WALL MOUNTED, FLUSH VALVE, 24" HEIGHT FROM TOP OF RIM TO FINISH FLOOR. LOW–CONSUMPTION. FLUSH VALVE: CHROME PLATED BRASS, AUTOMATIC BATTERY POWERED, 1.0 GPF, ADJUSTABLE TAILPIECE, HIGH BACK PRESSURE VACUUM BREAKER FLUSH CONNECTION.	AMERICAN STANDARD #6581.015 SLOAN ROYAL 186–1	2"	3/4"	–
S–1	COUNTERTOP SINK SINGLE COMPARTMENT (RECTANGULAR) SINGLE COMPARTMENT, SELF–RIMMING,18 GAUGE, STAINLESS STEEL, 15"L x 15"W x 6.5" DEEP BOWL FAUCET: CHROME PLATED BRASS, CONCEALED MIXING FAUCET, GOOSENECK SPOUT, SINGLE HANDLE, SPRAY NOZZLE DRAIN: STAINLESS STEEL PERFORATED STRAINER STOPS/ACCESSORIES: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOPS, PVC P–TRAP	ELKAY BCR15 MOEN ELKAY MCGUIRE, CS & B	1–1/2"	1/2"	1/2"
LT–1	LAUNDRY TUB ONE PIECE MOLDED FIBERGLASS, 18 GALLON CAPACITY, 13.5" DEEP. REMOVABLE STAINLESS STEEL STRAINER FAUCET: CONCEALED MIXING FAUCET, GOOSENECK SPOUT STOPS/ACCESSORIES: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOPS, PVC P–TRAP	MUSTEE 18F MUSTEE 93.600 MCGUIRE, CS & B	1–1/2"	1/2"	1/2"

PLUMBING MATERIAL SPECIFICATIONS

SANITARY WASTE/VENT PIPING:
TUBE: PVC SCHEDULE 40 DWV, ASTM D 1785, FOAM CORE NOT ACCEPTED
FITTINGS: PVC PLASTIC FITTINGS, SCHEDULE 40, ASTM D 2466, FOAM CORE NOT ACCEPTED
JOINTS: SOLVENT CEMENTS FOR PVC PIPE AND FITTINGS, ASTM D 2564. FOAM CORE NOT ACCEPTED
PROVIDE FIRE WRAP FOR PVC PIPE IN PLENUM CEILING AREAS, 3M FIRE BARRIER PLENUM WRAP 5A OR EQUAL

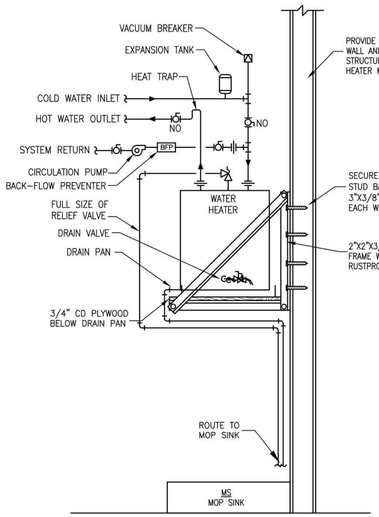
DOMESTIC WATER PIPING:
TUBE: CPVC, CTS PIPE, PLASTIC HOT AND COLD WATER DISTRIBUTION SYSTEMS, ASTM D2846
FITTINGS: CPVC PLASTIC FITTINGS, ASTM F438.
JOINTS: SOLVENT CEMENTS FOR CPVC PIPE AND FITTINGS, ASTM F493

VALVES
ALL VALVES FOR DOMESTIC HOT AND COLD WATER DRISTRIBUTION SYSTEM SHALL BE CONFORM TO REQUIREMENTS OF ASTM D 2846. OPERATING PRESSURE SHALL NOT EXCEED 80% OF THE VALVE PRESSURE CLASS.

INSULATION
PROVIDE 1" ELASTOMERIC INSULATION FOR ABOVE–GRADE DOMESTIC HOT WATER PIPING AND COLD WATER PIPING IF LOCATED IN VENTED ATTIC SPACE. PROVIDE 2" FIBERGLASS BLANKET WITH ASJ SEALED AND TAPED FOR STORM WATER PIPING.

SUPPORTS
PROVIDE PIPING HANGERS AND SUPPORTS SIZED AND SPACED PER CURRENT FBC 2007 AND PROVIDE 6" SADDLES UNDER ALL INSULATED PIPING.

SHOCK ARRESTORS
PROVIDE SHOCK ARRESTORS PER CODE SIZED TO PDI STANDARDS. AIR CHAMBERS ARE NOT ACCEPTABLE.



WATER HEATER DETAIL
NOT TO SCALE

PLUMBING LEGEND

ABBREVIATIONS & SYMBOLS:

	WALL CLEAN OUT
	FLOOR CLEAN OUT
AAV	AUTOMATIC AIR VENT
AP	ACCESS PANEL
B/G	BELOW GROUND
B/F	BELOW FLOOR
BFP	BACK FLOW PREVENTER
EX.	EXISTING
HD	HUB DRAIN
VTR	VENT THROUGH ROOF
TP	TRAP PRIMER
WH	WATER HEATER
FW	FILTERED WATER
COOG	CLEANOUT ON GRADE
WCO	WALL CLEANOUT
FCO	FLOOR CLEANOUT
	POINT OF CONNECTION – NEW WORK TO EXISTING

PLUMBING FIXTURES:

FD	FLOOR DRAIN
WH	WALL HYDRANT
HB	HOSE BIBB
L	LAVATORY
MS	MOP SINK
S	SINK
SA–A	SHOCK ARRESTOR – P.P.I SIZE
SS	SERVICE SINK
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
WC	WATER CLOSET
WB	WASHER BOX
TMV	THERMOSTATIC MIXING VALVE

PIPING

———	NEW SANITARY (S)
– – – – –	NEW SANITARY (S)
——— — ———	NEW COLD WATER (CW)
———110°———	HOT WATER (110°F)

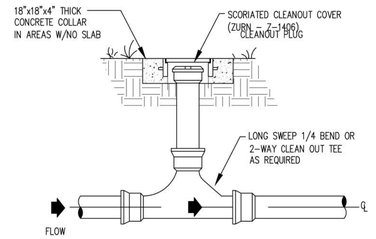
PLUMBING GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE – PLUMBING, NFPA 70, NFPA 101, AND THE AMERICAN DIABILITIES ACT (ADA).
2. PLANS ARE NOT COMPLETELY TO SCALE. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING AND ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
3. SLEEVE AND FIRE STOP PENETRATIONS OF RATED WALLS, FLOORS, CEILINGS AND ROOFS. FLASH AND COUNTERFLASH ROOF PENETRATIONS.
4. PROVIDE SIX SETS (GC DETERMINE EXACT QUANTITY) OF SHOP DRAWINGS OF PLUMBING FIXTURES, PIPING MATERIALS/FITTINGS, INSULATION, VALVES, AND EQUIPMENT FOR REVIEW BY ENGINEER OF RECORD. SHOP DRAWINGS SHALL BE ASSEMBLED BY THE CONTRACTOR IN A BOUND BOOKLET AND BE COMPLETE INCLUDING ALL ITEMS REQUIRED IN THE PLUMBING CONTRACT. IN–COMPLETE BOOKLETS PUT TOGETHER BY A FIXTURE MANUFACTURER WILL BE REJECTED AND RETURNED.

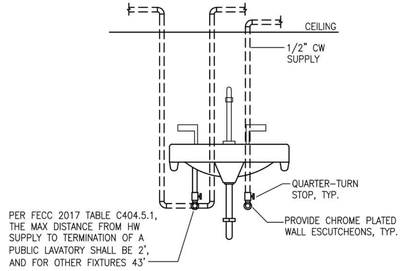
SHOCK ARRESTER SCHEDULE

PDI UNITS	SA–1	SA–2	SA–3	SA–4	SA–5	SA–6
FIXTURE UNITS	1–11	12–32	33–60	61–113	114–154	155–330

NOTES:
1. PROVIDE SHOCK ARRESTORS AS INDICATED ON PLAN AND SIZED IN ACCORDANCE WITH THIS SCHEDULE BASED ON STANDARD PDI–WH 201.



EXTERIOR CLEANOUT DETAIL
NOT TO SCALE



NOTES:
1. REFERENCE THE 2020 FLORIDA ENERGY CONSERVATION CODE 6TH EDITION, SECTION C404.5.1 FOR ADDITIONAL INFORMATION AND MAX DISTANCES ALLOWED FOR PIPE SIZES OTHER THAN 1/2".

CONNECTION DETAIL TYPICAL HOT WATER PIPING
NOT TO SCALE

PUMP SCHEDULE

NO.	MANUFACTURER	MODEL NO.	QUANTITY	GPM FLOW	HEAD PRESSURE	POWER	H.P.	RPM	REMARKS
RP–1	GRUNDFOS	UP–25–64 SF	1	2.0 GPM	1.7 FT (.75 PSI)	115/1/60	1/12	SINGLE SPEED	DOMESTIC HOT WATER RECIRCULATING PUMP

NOTES:
1. PROVIDE CONTROLS FOR HW CIRCULATING SYSTEM PER FLORIDA ENERGY CONSERVATION CODE C404.6.1 AND C404.7.
2. PROVIDE FLOW SWITCH AND TEMP SWITCH ACCESSORIES.
3. SEQUENCE OF OPERATIONS:
   a. FLOW SWITCH SHALL START PUMP ON A DEMAND FOR HW.
   b. WHEN THERE IS NO DEMAND SENSED FROM THE FLOW SWITCH AND THE HW SUPPLY TEMP IS 115° (ADJUSTABLE) THE PUMP SHALL DE–ENERGIZE

ELECTRIC WATER HEATER SCHEDULE

TAG	SERVICE	MANUFACTURER AND MODEL NO.	TYPE	GALLONS	RECOVERY	POWER	ELEMENTS/WATTS	AMPS	NOTES
WH–1	MAIN SERVICE	RHEEM PROE40 M21 RH95	ELECTRIC	50	55 GPH	208 V 1 PH	2/4500	––	3/4" NPT INLET & OUTLET

Plumbing Notes & General Details

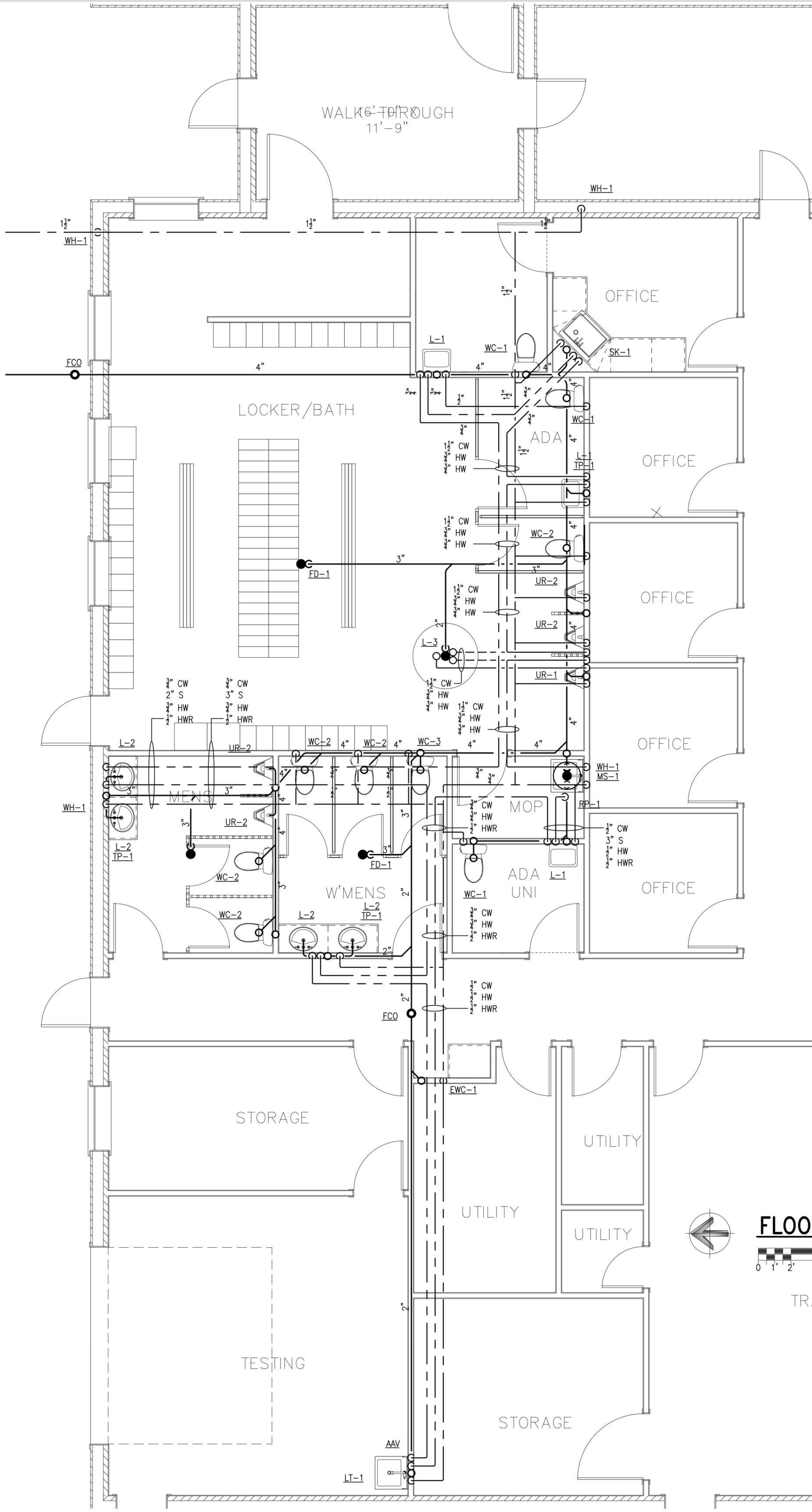
Kyle Mcdonough
William Brown

STATE OF FLORIDA
No. 90661
PROFESSIONAL ENGINEER

Construction of a New Commercial Building
New Millennium
1492 NW Bascom Norris Dr, Lake City, Fl, 32055

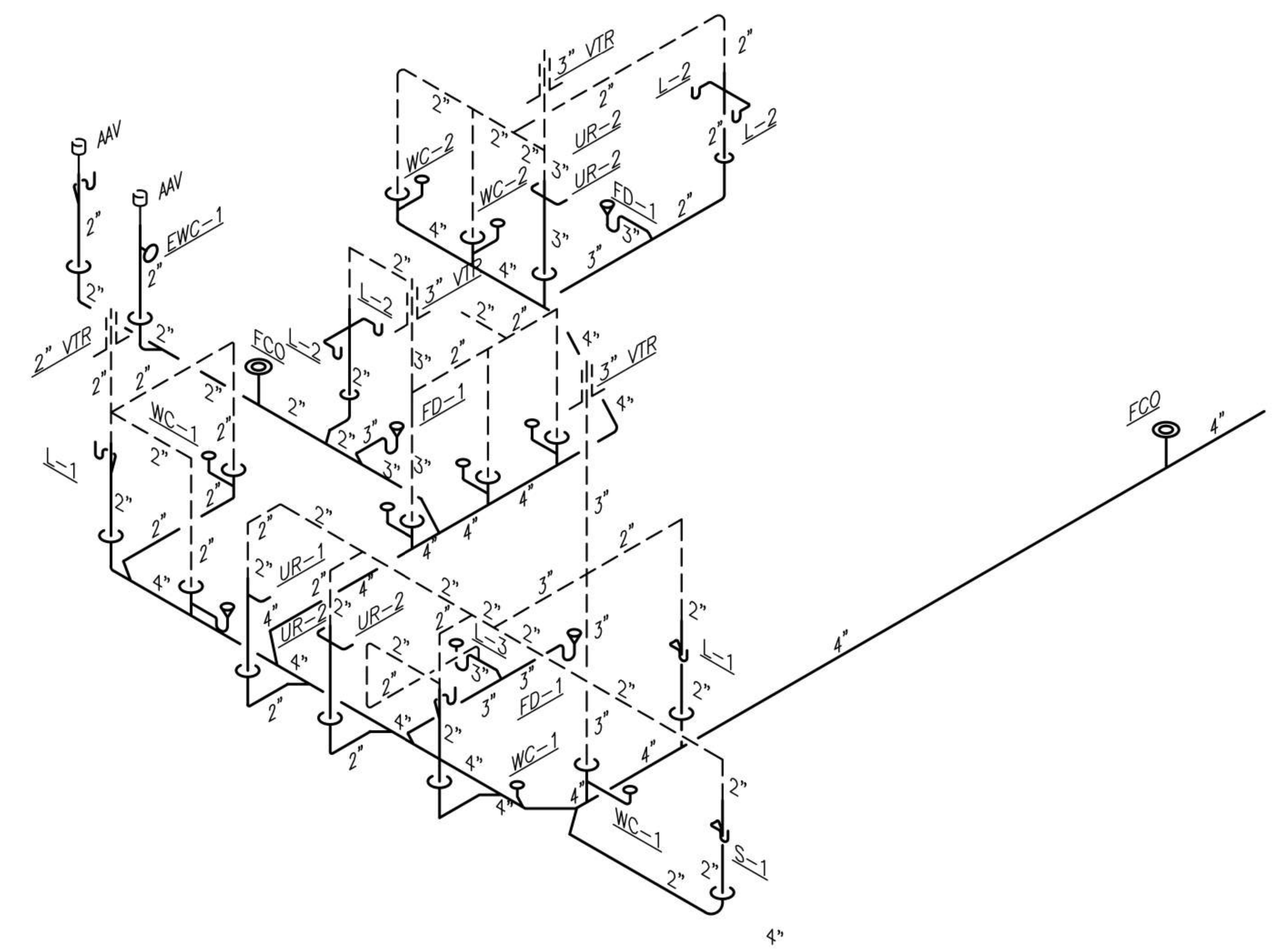
DATE 07/07/22
DRAWN BY KWEB
JOB # 2022-142

SHEET P-1



FLOOR PLAN – PLUMBING

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



SANITARY WASTE AND VENT RISER

NOT TO SCALE

Plumbing Floor Plan

Kyle Mcdonough
William Brown

Construction of a New Commercial Building

New Millennium

1992 NW Bascom Norris Dr, Lake City, Fl, 32055

DATE: 07/07/22
DRAWN BY: WEB
JOB: 2022-142

SHEET: P-2