ABBREVIATIONS ON CENTER AMPERE ABOVE OCCUPANT OUTSIDE DIAMETER ACOUSTICA **ADJUSTIBLE OPPOSITE** ABOVE FINISH FLOOR ORIENTED STRAND BOARD AIR HANDLING UNIT ALUMINUM PLUS OR MINUS ARCHITECTURAL PLATE OR PROPERTY LINE ALUMINUM THRESHOLD PUBLIC ADDRESS POUNDS PER LINEAL FOOT PLYWOOD **BITMINUOUS** POUNDS PER SQUARE FOOT BARRIER FREE POUNDS PER SQUARE INCH BUILDING PRESSURE TREATED BLKG BM BLOCKING PAPER TOWEL DISPENSER BENCH MARK POLYVINYL CHLORIDE **BEARING** RADIUS RETURN AIR RADIATOR ROOF CONDUCTOR CAPACITY CATCH BASIN REFRIDGERATOR CEILING DIFFUSER REINFORCING CERAMIC RESILIENT **CUBIC FEET** CONTROL JOINT CENTERLINE ROUGH OPENING CEILING CMU CO COL CONC CONT CONTR CT CPT RIGHT OF WAY CONCRETE REVOLUTIONS PER MINUTE CLEAN OUT RAINWATER CONDUCTOR CONCRETE CONTINUOUS CONTRACTOR CERAMIC TILE CARPET SANITARY SOAP DISPENSER SIMILIAR SANITARY NAPKIN **DEGREE DEPARTMENT** SANITARY NAPKIN DRINKING FOUNTAIN **SPECIFICATIONS** SQUARE DIFFUSER SERVICE SINK DIMENSION STAINLESS STEEL STANDARD DOWN SPOUT DISHWASHER STORM SUSPENDED SYMMETRICAL EXTERIOR INSULATION TONGUE AND GROOVE **ELEVATION TEMPERATURE** TERRAZZO **EQUIPMENT** TOP OF STEEL EDGE REDUCTION STRIP TOILET PAPER ELECTRIC WATER HEATER **EXIST EXHAUST EXPANSION** UNIT HEATER EXTERIOR UNIT VENTILATOR **FARENHEIT** FIRE ALARM FRESH AIR INTAKE VINYL COMPOSITION TILE FLOOR DRAIN VERTICAL FIRE EXTINGUISHER VENTILATION FIRE EXTINGUISHER CABINET VERFIY IN FIELD FIXT VINYL WALL COVERING **FLOOR** FIBER REINFORCED PLASTIC **FOOT FOOTING WEATHERPROOF** WELDED WIRE FABRIC GAUGE **GALVANIZED** GENERAL CONTRACTOR GROUND FAULT CIRCUIT INTERRUPTER GLASS/GLAZING GYPSUM HARDWARE HOLLOW METAI HORIZONTAL HORSEPOWER HEATING VENTILATION AND AIR CONDITIONING INTERIOR INVERT KILOWATT **LAMINATE LAVATORY** LEFT HAND LIVE LOAD LONG LEG HORIZONTAL LIGHTWEIGHT MARKER BOARD MECHANICAL MANUFACTURER MANHOLE MINIMUM MISCELLANEOUS MASONRY METAL THRESHOLD MTD MOUNTED NOT IN CONTRACT

NOISE REDUCTION

COEFFICIENT NOT TO SCALE

RENOVATIONS TO PEOPLE'S STATE BANK FOR TUSCOLA COUNTY OFFICES

171 N STATE STREET CARO, MICHIGAN 48723

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	M GILFORD RD IS BUT THE ST IN FRANK ST PROJECT LOCATION PROJECT LOCATION	E5.3	OWNER'S REPRESENTATIVE: MIKE MILLER 125 W LINCOLN STREET CARO, MICHIGAN 48723 (989) 550-8836
	S ALMER		LANDLORD'S REPRESENTATIVE:
	CARO, MICHIGAN N LOCATIO	N (DOWNTOWN) N MAP	DAMIAN WASIK

ORDINANCES: * 2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS * 2015 MICHIGAN BUILDING CODE * 2015 MICHIGAN MECHANICAL CODE, ASHRAE STANDARD 90.1-2007 * 2018 MICHIGAN PLUMBING CODE * 2017 NATIONAL ELECTRIC CODE (NEC) * 2017 MICHIGAN ELECTRICAL CODE RULES PART 8 AMERICAN NATIONAL STANDARD FOR ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES ICC/ANSI AII7.1-2009 **BUILDING AREA:** 3,405 gross square feet 190 gross square feet 244 gross square feet 4,189 gross square feet
1,994 gross square feet
9,588 GROSS SF FIRST FLOOR SECOND FLOOR OVERALL TOTAL AREA: 10,212 GROSS SQUARE FEET **BUILDING USE:** COURTROOM: ASSEMBLY (A-3) **BUILDING CONSTRUCTION TYPE:** TYPE V B (36,000 sq ft ALLOWABLE W/ SPRINKLER SYSTEM INSTALLED) FLOOR CONSTRUCTION: WOOD JOIST / CONCRETE SLAB ROOF CONSTRUCTION: WOOD FRAMED STRUCTURAL DESIGN: SEE SHEET SI.2 FIRE SUPPRESSION: SPRINKLER EXTINGUISHING SYSTEM TO BE INSTALLED ON ALL LEVELS OCCUPANCY: BASEMENT AND SECOND FLOOR SHALL BE RESTRICTED ACCESS BY EMPLOYEES OF TUSCOLA COUNTY ONLY. FIRST FLOOR BUSINESS AREAS: 3,025 SQ FEET / 100 SF PER OCCUPANT = 30 OCCUPANTS (20 ACTUAL MAXIMUM) FIRST FLOOR ASSEMBLY AREA (COURTROOM): 1,360 SQ FT / 15 SF PER OCCUPANT (TABLES & CHAIRS) = 90 OCCUPANTS FIRST FLOOR TOTAL OCCUPANCY = 110 OCCUPANTS \times () SECOND FLOOR BUSINESS AREA: 2,216 SQ FEET / 100 SF PER OCCUPANT = 22 OCCUPANTS (3 ACTUAL) BASEMENT OCCUPANCY IS NON-CONCURRENT (STAFF LOUNGE AND STORAGE. OCCUPANTS HAVE BEEN COUNTED ON FIRST AND SECOND BASEMENT BUSINESS AREA: 1,312 SQ FEET / 100 SF PER OCCUPANT BASEMENT STORAGE/ MECHANICAL AREAS: 2,315 SQ FEET/ 300 SF PER OCCUPANT = 8 OCCUPANTS TOTAL BUILDING OCCUPANT LOAD = 142 OCCUPANTS (ACTUAL OCCUPANT LOAD = 113 OCCUPANTS) PATTERNS MASONRY INSULATION INSULATION SYMBOLS DEMOLITIC NUMBER DEMOLITION **ARCHITECTS** # SHT ELEVATION 105 ½ Main Street Flushing, Michigan 48433 COLUMN NUMBER/ CONSTRUCTION NOTE 810-659-7118 voice 810-659-7224 fax BUILDING SECTION # WINDOW NUMBER/ REVISION NUMBER www.njb-architects.com NAME ROOM
| # IDENTIFICATION ELEVATION DATUM

OF TOTAL SHEETS

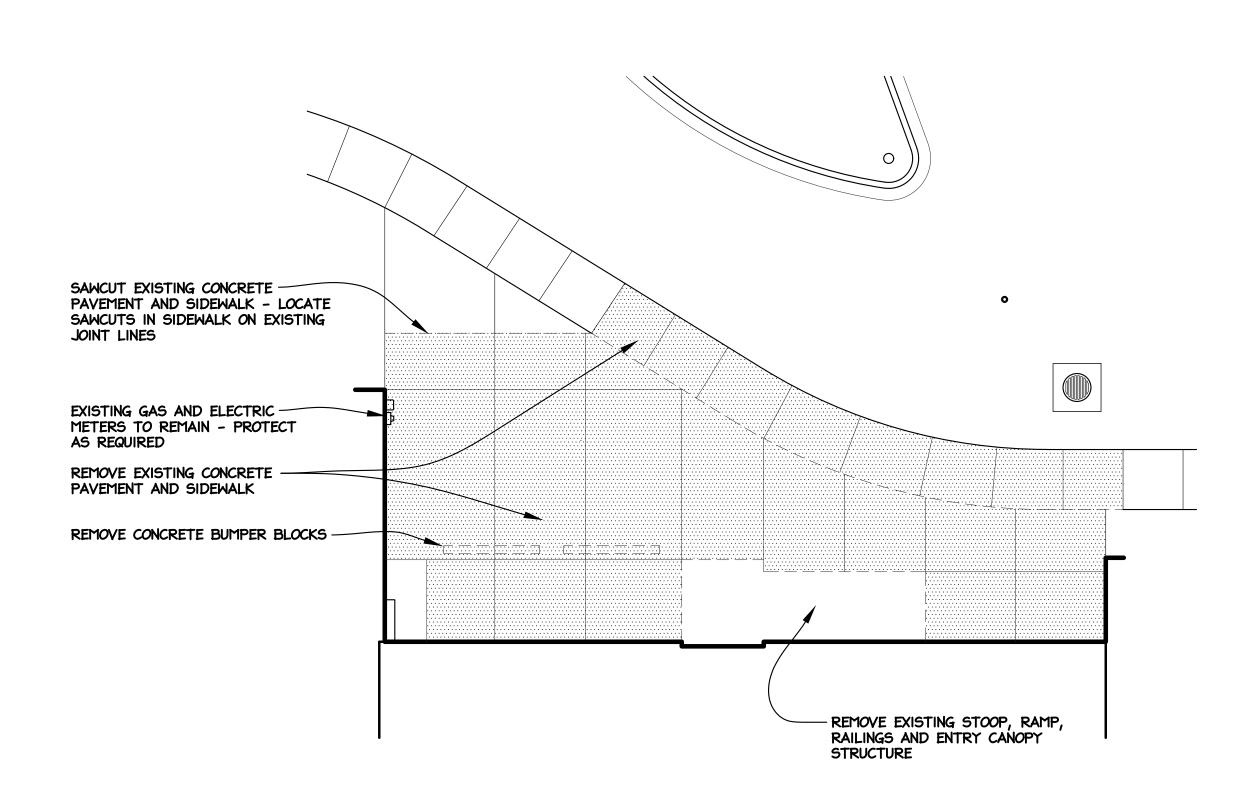
205 WEST SHERMAN STREET

CARO, MICHIGAN 48723

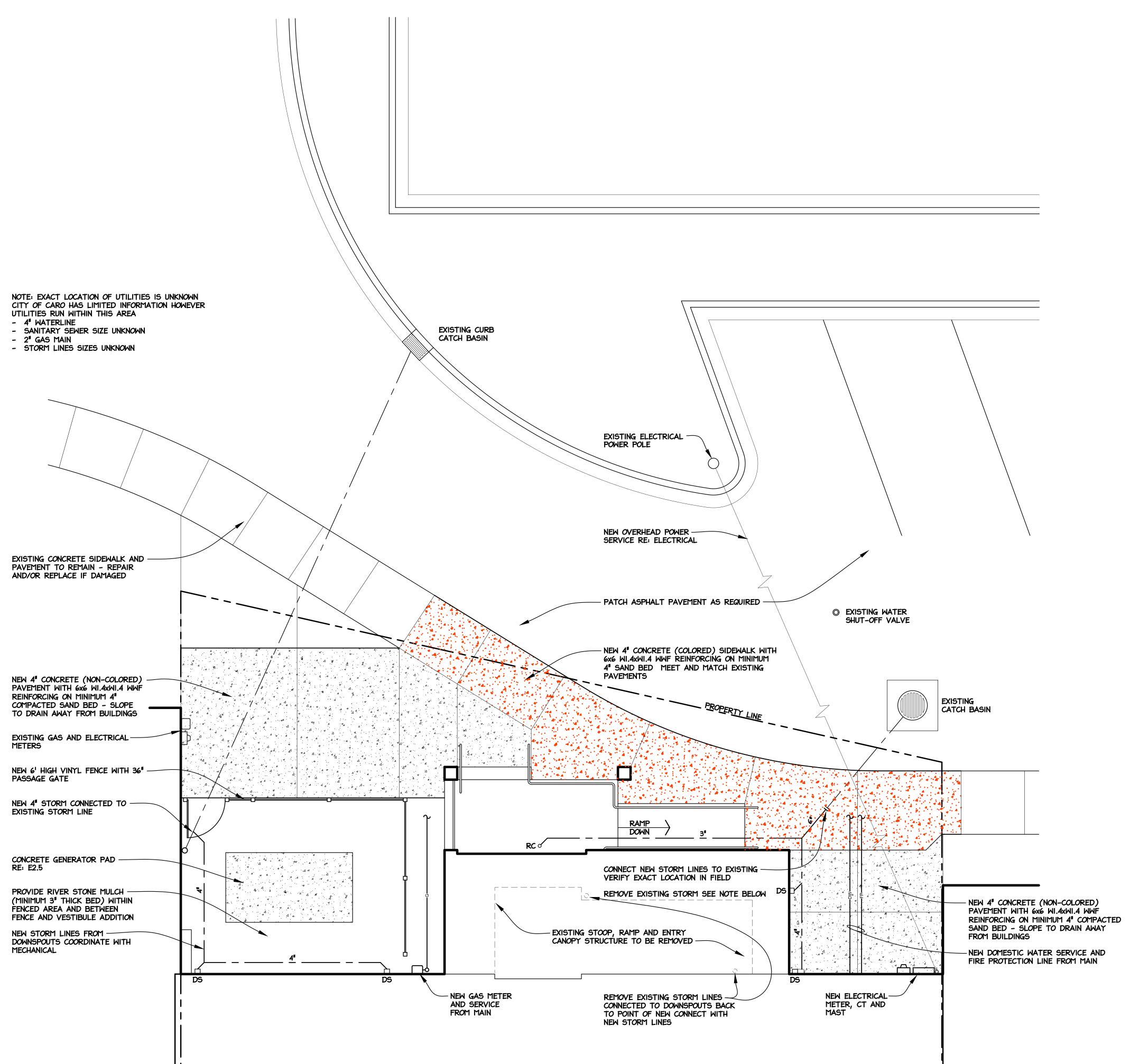
(989) 673-6126

APPLICABLE CODES AND

- I. CONTRACTOR / BIDDER TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING BID AND/OR STARTING WORK.
- 2. FINISH FIRST FLOOR ELEVATION = 100'-0" (MEET AND MATCH EXISTING)
- 3. ALL SITE WORK IS TO BE COORDINATED WITH THE CITY OF CARO DEPARTMENT OF PUBLIC WORKS. EVERY EFFORT SHALL BE MADE TO MAINTAIN ACCESS THRU ALLEY DRIVEWAY.
- 4. ALL CONNECTIONS TO WATER MAIN, SANITARY AND STORM LINES SHALL BE IN STRICT COMPLIANCE WITH REQUIREMENTS OF THE CITY OF CARO AND IT'S CONSULTANTS.
- 5. ALL NEW SURFACE PAVEMENTS AND PATCHING WORK SHALL BE IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF CARO.
- 6. ALL DEMOLITION MATERIALS AND EXCAVATED SOIL MATERIAL SHALL BE REMOVED FROM SITE. NO STORAGE OF THESE MATERIALS WILL BE ALLOWED ON SITE.



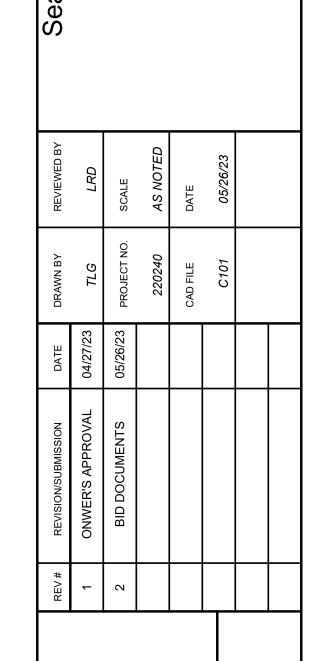




REAR PARKING LOT
PARTIAL SITE PLAN

1/4" = 1'-0"





TUSCOLA COUNTY OFFICES
171 N STATE ST
CARO, MI

PARTIAL

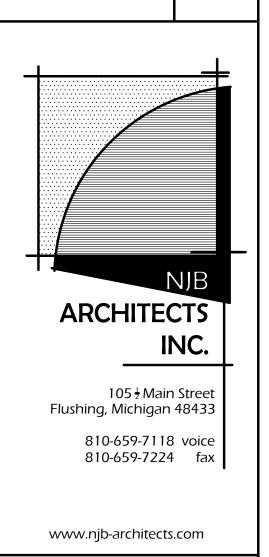
ATE

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PEOPLE'S

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RENOVATIONS



C1.1

DEMOLITION NOTES

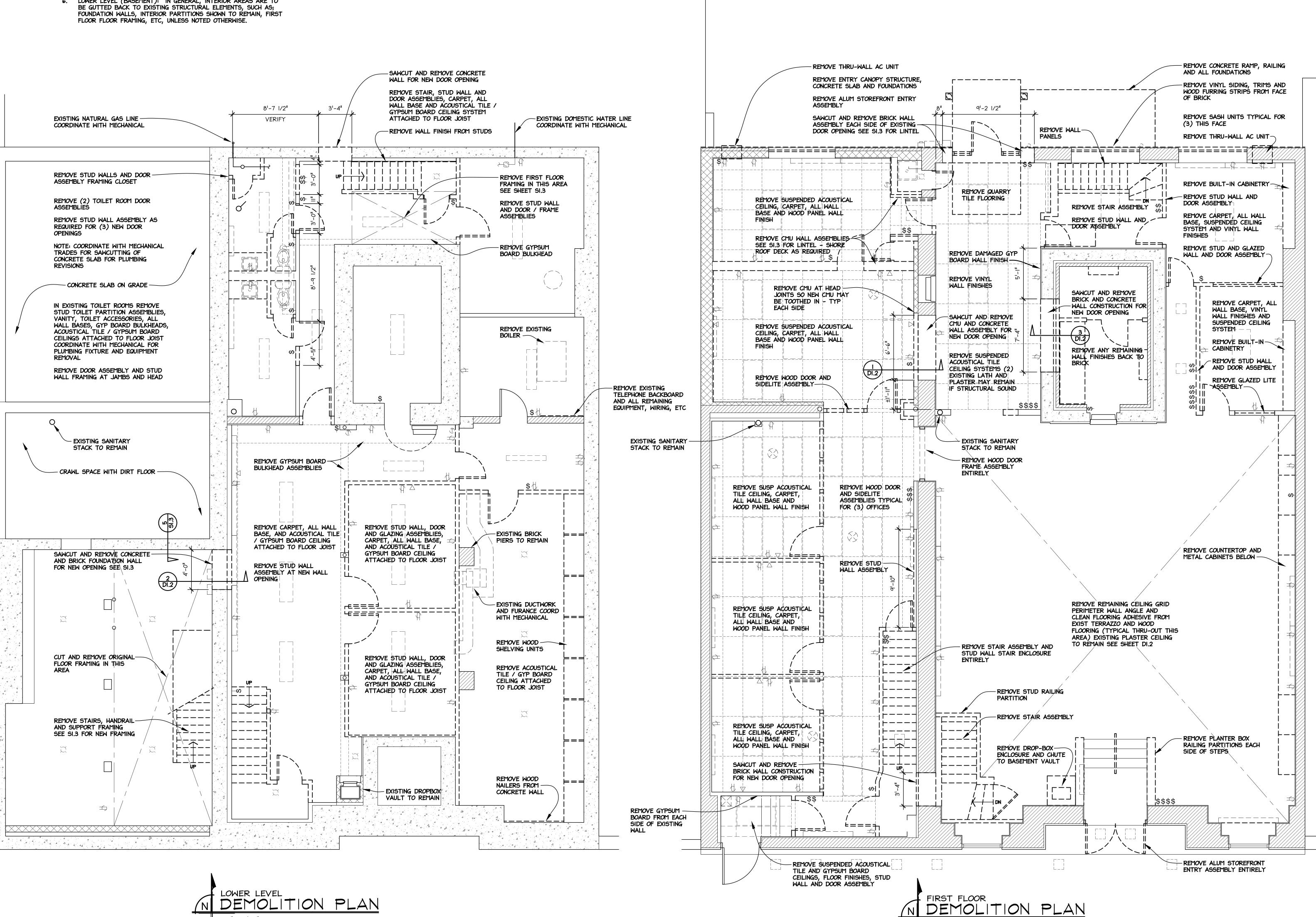
- CONTRACTOR / BIDDER TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING BID AND/OR STARTING DEMOLITION WORK.
- DEMOLITION PLANS SHOWS GENERAL INTENT OF DEMOLITION WORK REQUIRED. CONTRACTOR SHALL REMOVE ALL ITEMS WHETHER SPECIFICALLY SHOWN OR NOT, THAT ARE NOT BEING REUSED IN NEW
- COORDINATE WITH PLUMBING, MECHANICAL AND ELECTRICAL TRADES FOR DEMOLITION WORK. ALL WORK REQUIRED TO BE PREFORMED BY THESE TRADES SHALL BE DONE BY REQUIRED TRADE.
- 4. COORDINATE WITH SHEET SI.3 FOR REQUIRED FLOOR FRAMING MODIFICATIONS.
- LEGALLY DISPOSE OF AND/OR RECYCLE ALL DEMOLITION MATERIALS OFF SITE.
- 6. LOWER LEVEL (BASEMENT): IN GENERAL, INTERIOR AREAS ARE TO BE GUTTED BACK TO EXISTING STRUCTURAL ELEMENTS, SUCH AS; FOUNDATION WALLS, INTERIOR PARTITIONS SHOWN TO REMAIN, FIRST
- FIRST FLOOR: IN GENERAL, INTERIOR FINISHES ARE TO BE REMOVED. REMOVE VINYL WALLCOVERINGS FROM ALL GYPSUM BOARD OR PLASTER WALLS SHOWN TO REMAIN, UNLESS SHOWN TO BE FURRED
- CONTRACTOR TO PROVIDE AND DESIGN ALL SHORING REQUIRED TO SUPPORT FLOOR AND/OR ROOF FRAMING AREAS IMPACTED BY DEMOLITION AND PRIOR TO INSTALLATION OF NEW SUPPORT FRAMING, BEAMS OR LINTELS.
- CONTRACTOR TO SALVAGE BRICK UNITS FROM AREAS OF BRICK WALL DEMOLITION, AT NEW DOOR OPENINGS, TO USE AS INFILL AND REPAIR OF EXISTING BRICK MASONRY CONSTRUCTION AS REQUIRED.

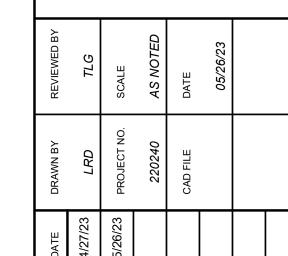
WALL CONSTRUCTION KEY

EXISTING WALLS

4 VA CONCRETE CMU

BRICK STUD / FURRING OR UNKNOWN



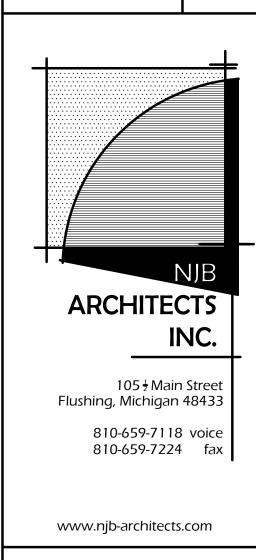


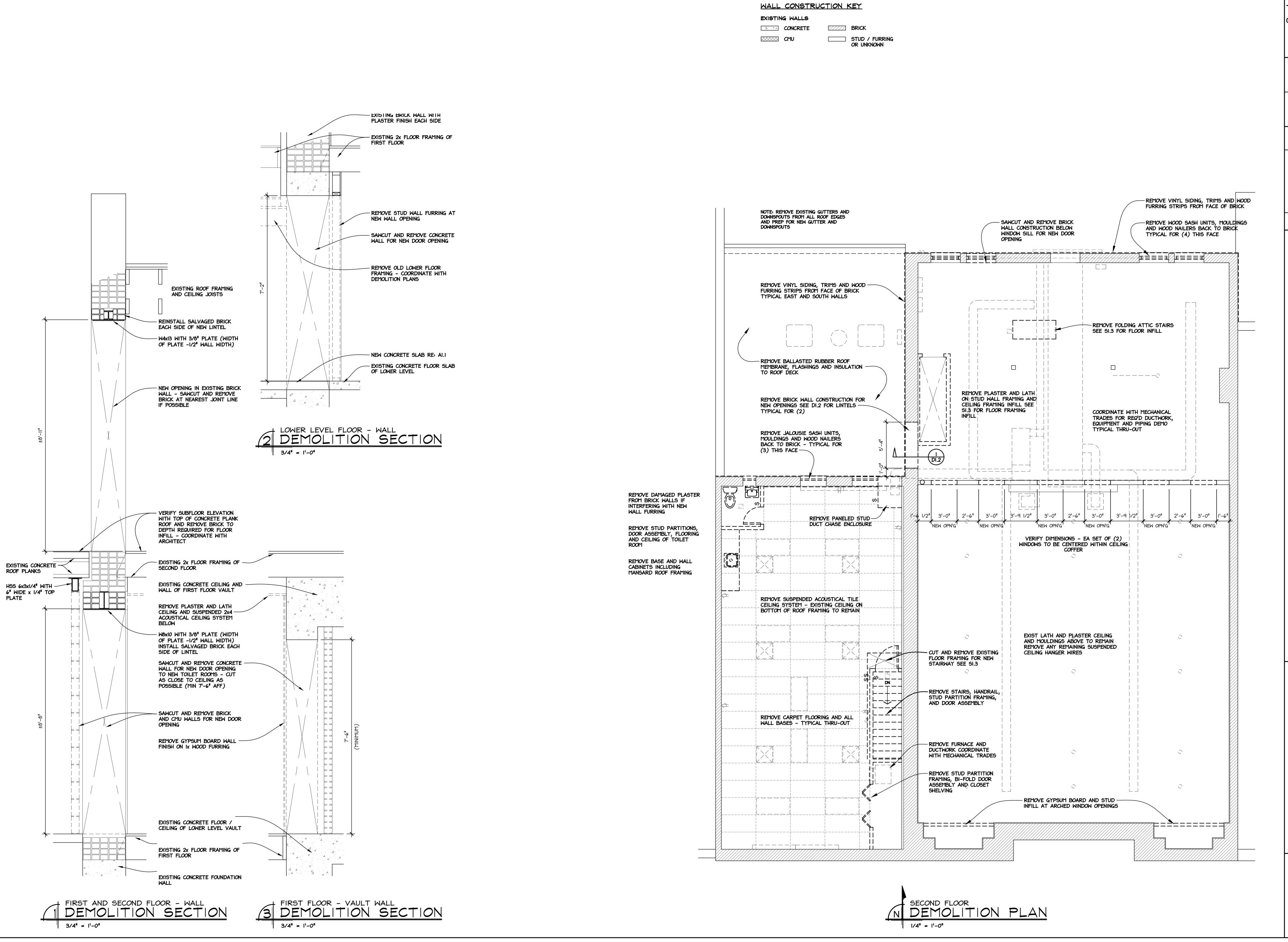
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PLAN Z ATE 0 RENOVATIONS ECOND S

NJB
ARCHITECTS
INC.

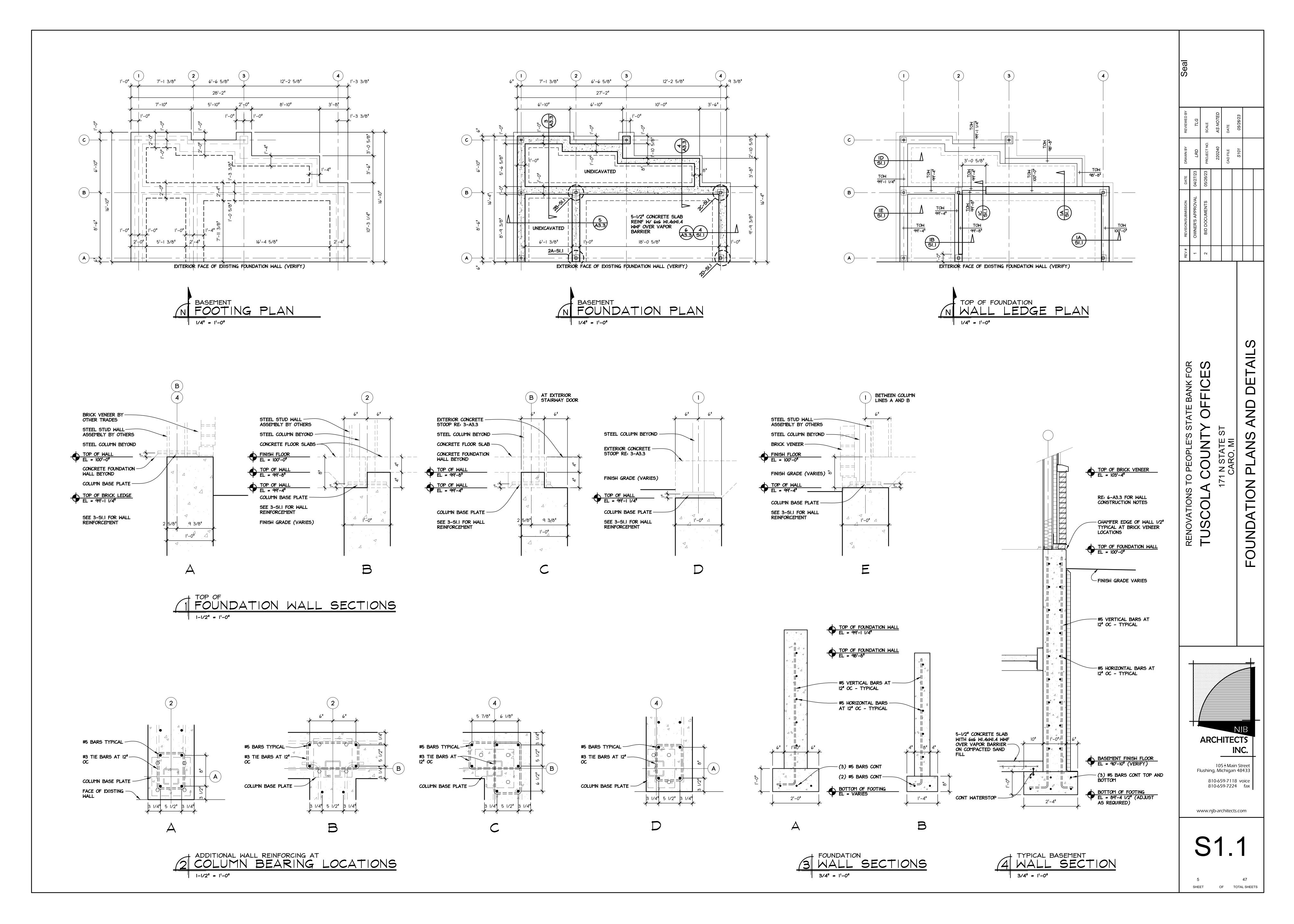
105 ½ Main Street
Flushing, Michigan 48433

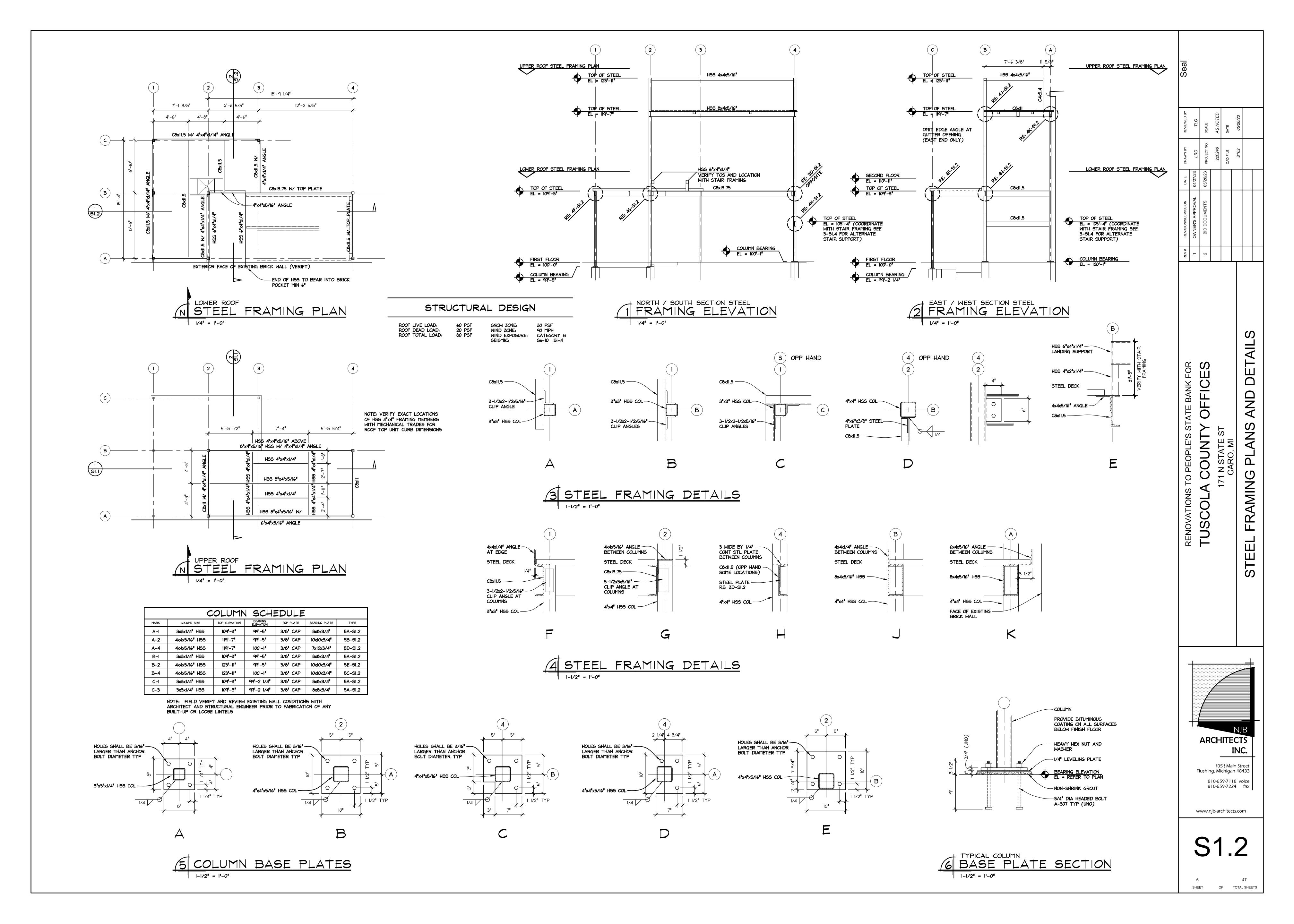
810-659-7118 voice
810-659-7224 fax

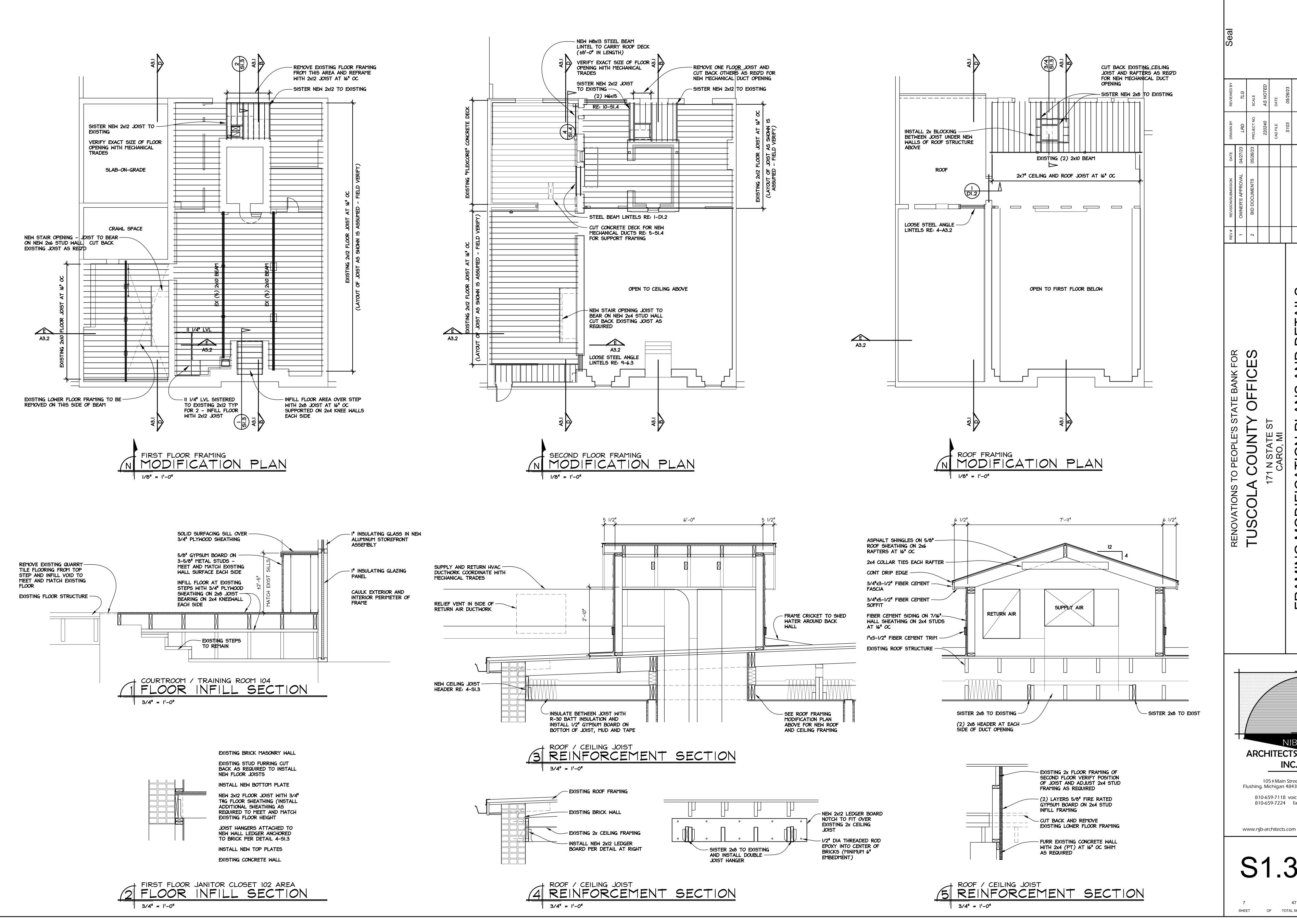
www.njb-architects.com

D1.2

4 47
SHEET OF TOTAL SHEETS



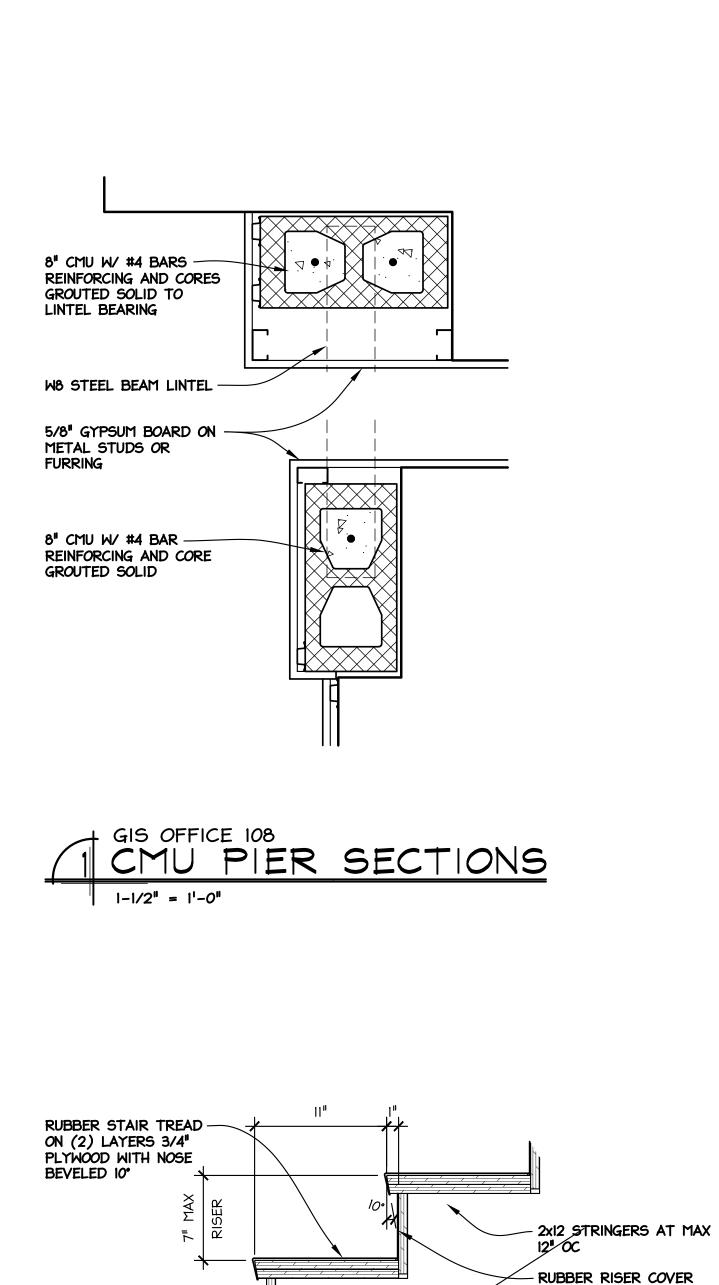




TAIL AND NPD FRAMING MODIFICA

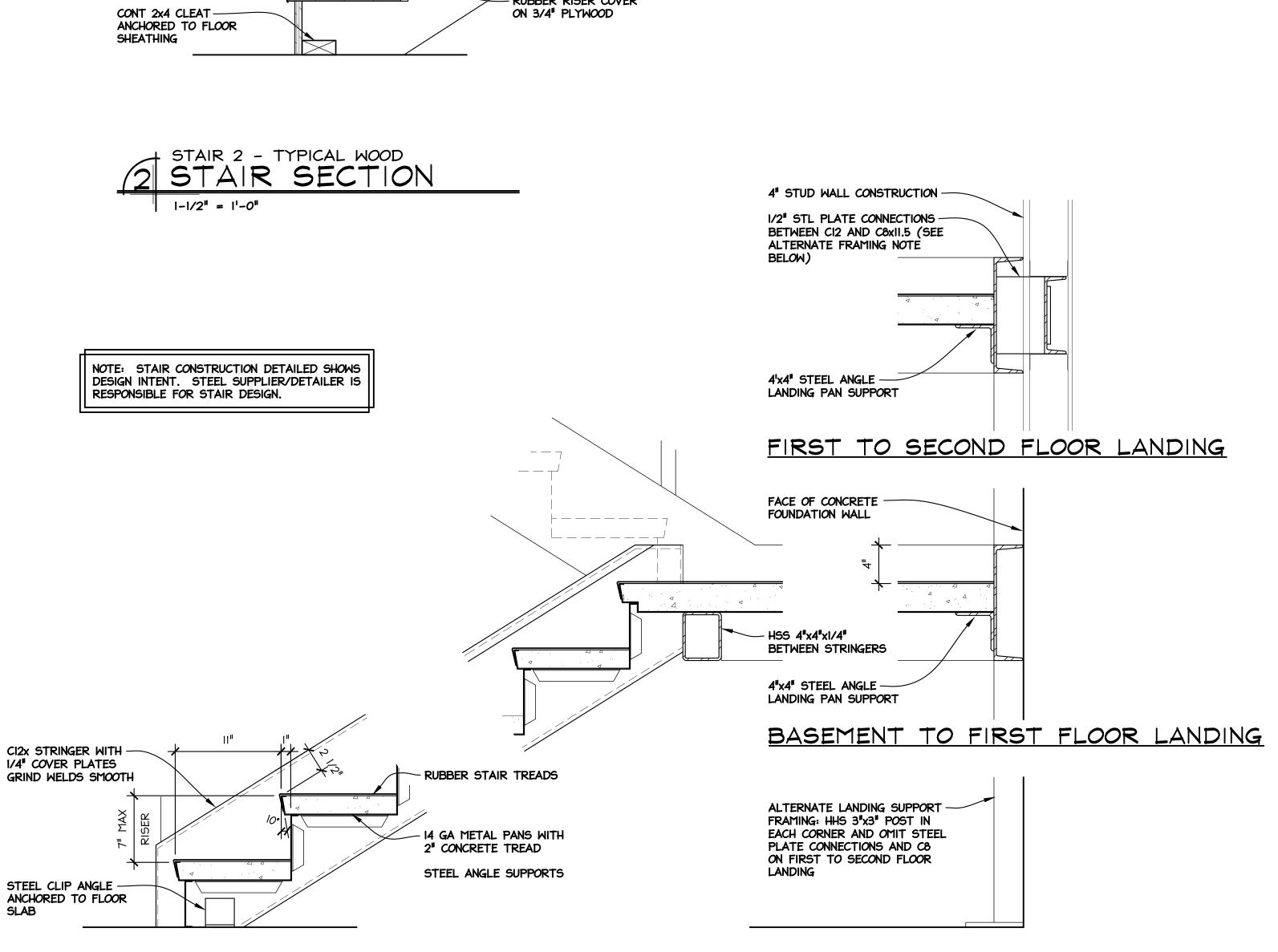
ARCHITECTS 105 ½ Main Street Flushing, Michigan 48433 810-659-7118 voice 810-659-7224 fax

SHEET OF TOTAL SHEETS



STAIR I - TYPICAL METAL
STAIR / LANDING DETAILS

1-1/2" = 1^1-0 "



EXISTING CONCRETE PLANK ROOF DECK

EXISTING BRICK AND CMU EXTERIOR WALL

1-1/2" = 1^1-0 "

TOP OF CMU

EL = ±109'-2 1/2"

- W8 STEEL BEAM LINTEL

PLATE WITH (2) 1/2" DIA

REINFORCING AND CORES

- 6"x8"x1/4" BEARING

6" HEADED STUDS

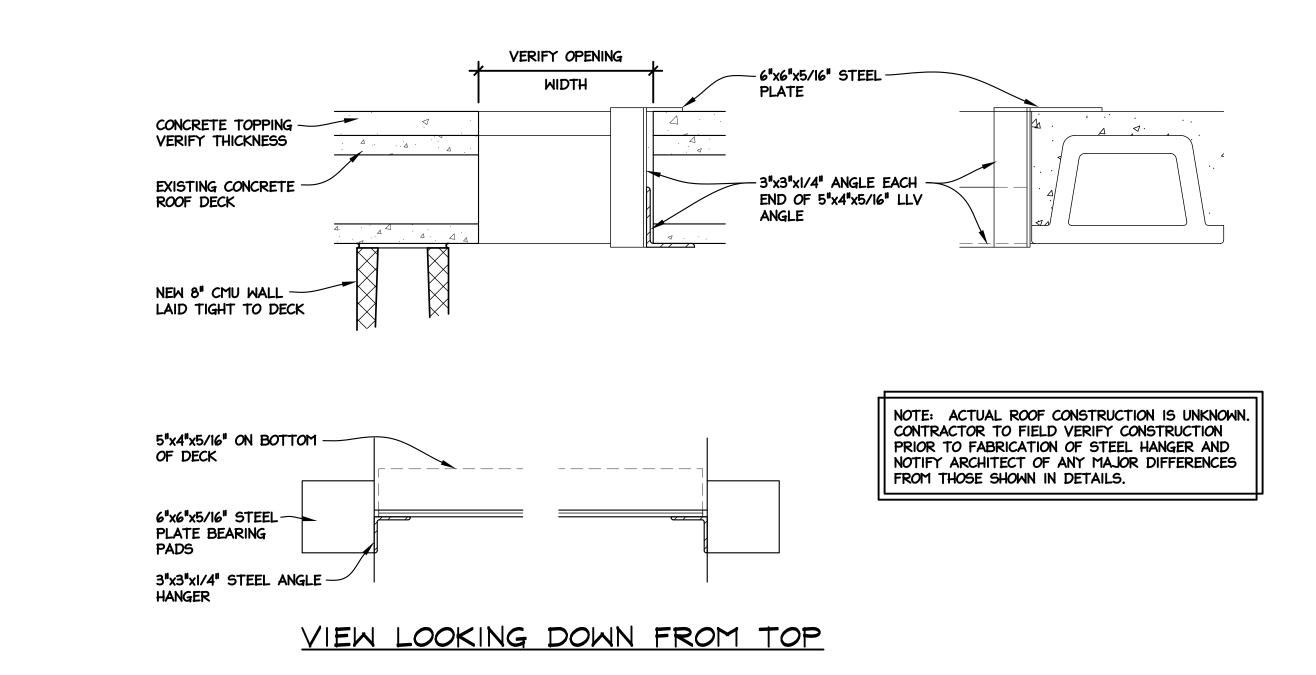
- 8" CMU W/ #4 BARS

GROUTED SOLID TO

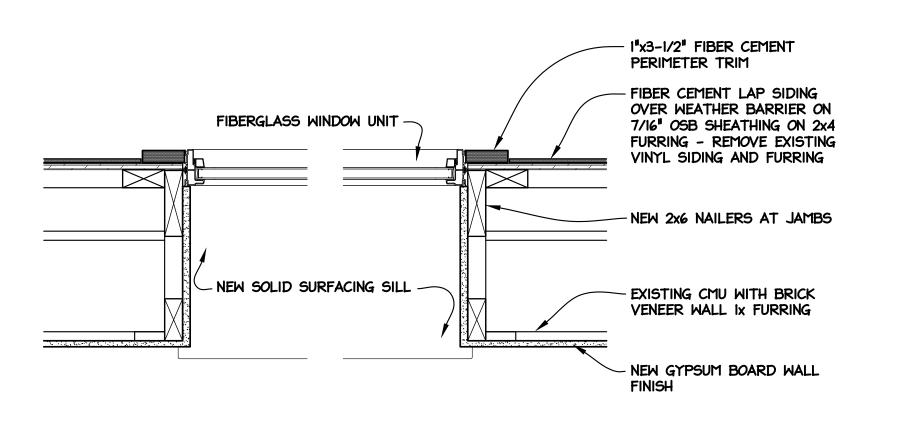
- SUSPENDED ACOUSTICAL

LINTEL BEARING

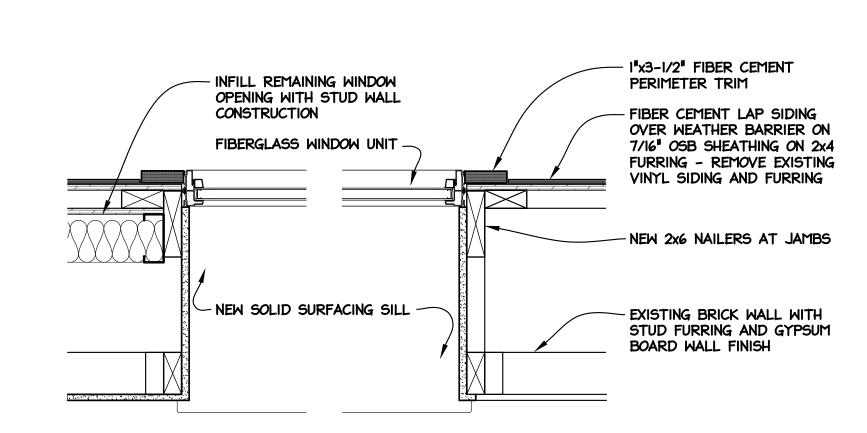
GIS OFFICE 108 - TOP OF CMU PIER SECTIONS



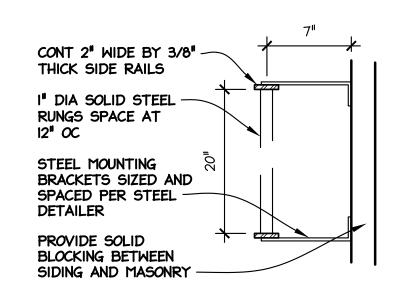
CONCRETE ROOF DECK HVAC DUCTS 5 OPENING SUPPORT 1-1/2" = 1'-0"



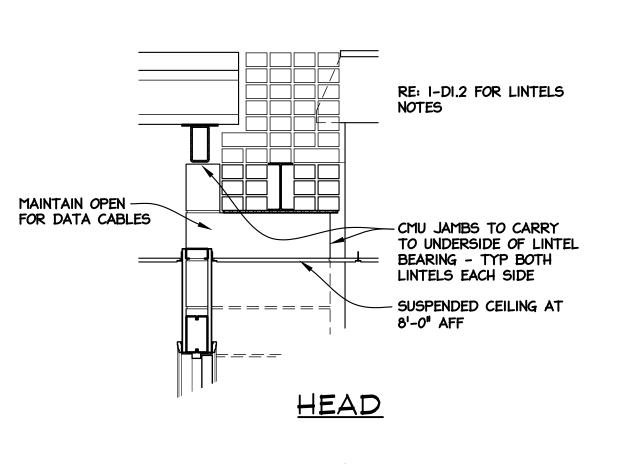


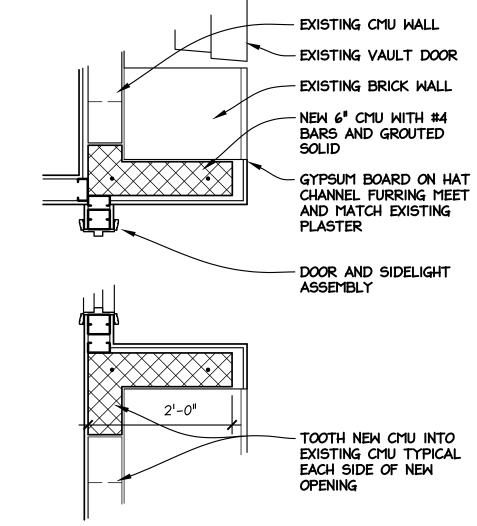




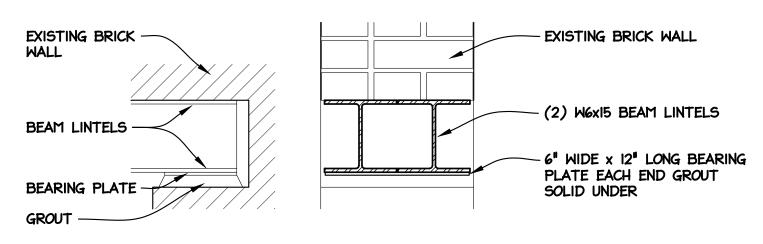












END BEARING

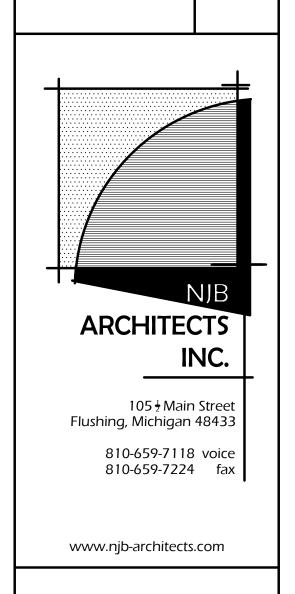
DOORS 102 / 104 HEAD LINTEL SECTION

05/26/23	DATE	AS NOTED	SCALE	71.6	REVIEWED BY
S104	CAD FILE	220240	PROJECT NO.	LRD	DRAWN BY
			05/26/23	04/27/23	DATE
			BID DOCUMENTS	OWNER'S APPROVAL	REVISION/SUBMISSION
			2	1	REV#

RENOVATIONS TO PEOPLE'S STATE BANK FOR

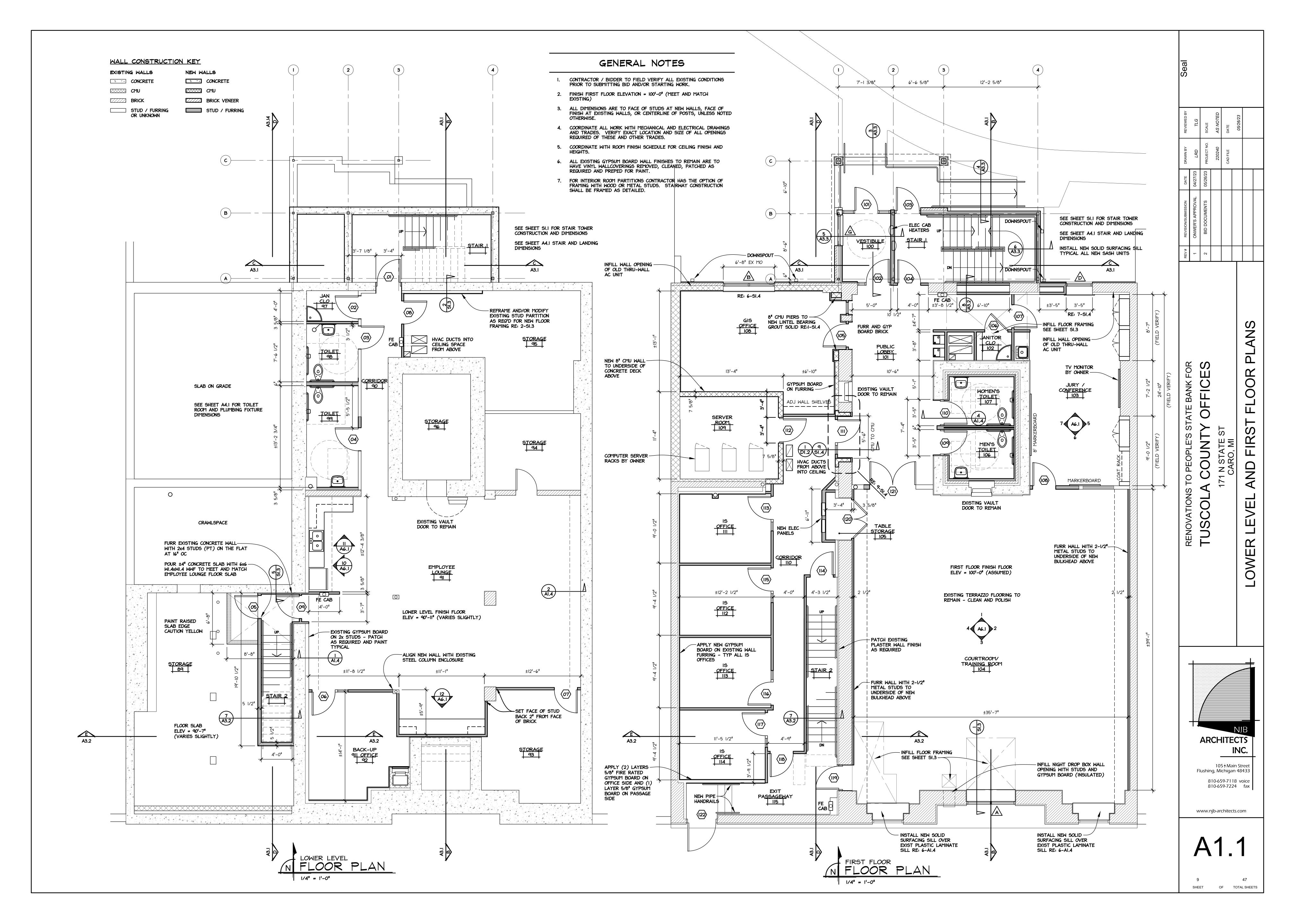
TUSCOLA COUNTY OFFICES

171 N STATE ST



S1.4

8 47
SHEET OF TOTAL SHEETS



		R	200	1 FI	NIS	H S	CHE	DU	LE		
ROOM NO.	ROOM NAME	FL <i>oo</i> r)E	NORTH WALL	EAST WALL	SOUTH WALL	MEST WALL	CEILING MATERIAL	CEILING HEIGHT	EQUIPMENT	
			BASE	_			_			EQL	NOTES
LOWER LEVEL	STAIR I	F03 F07	B03	MOI	MOI	EW03	MOI	C07	VARIES		
90	CORRIDOR	F <i>0</i> 5	B03	EW08	W03 EW04		EW08	C06	±8'-0"	E09	
91	EMPLOYEE LOUNGE	F05 F08	B03	EW04 EW05, W03	EW03	W03 EW06	W03 EW08	C06 C05	±8'-0" VARIES	E03	
92	BACKUP 911 OFFICE	F08	B03	W03	M03	W04	EW08	C03 C05	7'-8"		
93	STORAGE	F <i>0</i> 5	B03	M03 EM06	EM03	EW03	W03,EW06 EW03	C06	±8'-0"		
94	STORAGE	FOI	B01	EMOI	EWOI	EMOI	EMOI	COI			
95	STORAGE	FOI	B01	EWOI EWO9	EWOI	EMOI	EMOI WO3	COI			
96	STORAGE (VAULT)	F0I	B0I	EMOI	EWOI	EMOI	EMOI	COI	8'-0"		
97	JANITOR CLOSET	F05	B03	EW03	EM08	W05	EW04	C04	81-011	EOI	
98	TOILET	F05	B03	W03	EW08	W03	EW04	C04	7'-2"	E04	
99	TOILET	F <i>0</i> 5	B03	W03	EW08 W03	W03 EW08	EW04	C04	7'-2"	E04	
89	STORAGE	FOI	B01	EMOI MO3	WO3 EWOI	EMOI	EMOI	COI			STAIR WALLS I HR CONSTRUCTION
LOWER LEVEL	STAIR 2	F05 F07	B03	W04	W04 EW02		W03	C08	VARIES		STAIR WALLS I HR CONSTRUCTION
FIRST FLOOR	STAIR I	F03 F07	B03	W03	M03	EW06 W03	W03				
100	VESTIBULE	F04	B02	M06	W03	W06 W03	W03 W06	C04	8'-0"		
101	PUBLIC	F06	B03	W06,W03 EW08	W03	EW08	EW08	C03	8 ¹ -0 ¹¹	E09	VAULT DOOR
102	LOBBY JANITOR	F <i>0</i> 5	B03	W03	EW08 W05	EMIO	W03 W03	C04	7'-6"	E01, E02	FIXED SHUT
103	CLOSET JURY/	F08	B03	EW08	EM06	EW08	EW08	<i>C0</i> 3	8'-4"	E03,E05	GENERAL FINISH
104	CONFERENCE COURTROOM	F02	B04	W03 EW08	W03	W03 EW02	W03	C02	20¹-0ª	EÒ8	NOTE #7 VAULT DOOR
105	TRAINING ROOM TABLE	F06	B03	EW02, W03 EW08	EW02 EW08	W03 EW08	EW02 W03	C05 C04	VARIES MATCH		FIXED SHUT
106	STORAGE TOILET	F04	B02	W03 W03	W03	W03 W03	W03	C04	EXISTING 7'-6"	E04	
107	TOILET	F04	B02	W03	W03	W03	W03	C04	7'-6"	E04	
108	GIS	F06	B03	EW07	EW07	W02	EW07	<i>co</i> 3	81-0 ¹¹	E02	
109	OFFICE SERVER	F <i>0</i> 5	B03	W02	W02	W03	W02	C04	±9¹-1 "		SERVER EQPM
110	ROOM	F06	B03	W02	W03	W03	W03	<i>co</i> 3	8'-0"		BY OWNER STAIR WALLS I HR
	IS OFFICE	F06	B03	W03 EW08	EW08	W03	W02 EW09	<i>C0</i> 3	8'-0"		CONSTRUCTION GENERAL FINISH
									8'-0"		NOTE #7
112	IS OFFICE	F06	B03	W03	W03	W03	EW09	C03			GENERAL FINISH NOTE #7
113	IS OFFICE	F06	B03	W03	W03	W03	EW09	C03	81-011		GENERAL FINISH NOTE #7
114	IS OFFICE	F06	B03	W03	W03	EW08	EW09	C03	81-011		GENERAL FINISH NOTE #7
115	EXIT PASSAGEWAY	F05 F07	B03	EW08 W03	EW02 EW08	EW08	EW08 W03	C03	8'-0"	E09	
FIRST FLOOR	STAIR 2	F07	W03		EW02		W03	C08	VARIES		STAIRS/EXIT WALLS I HR CONSTRUCTION
SECOND FLOOR	STAIR I	F03 F07	B03	W03	W03	M03	W03	C07	VARIES		
200	CORRIDOR	F05	B03	EW06 W03	W03	W03	EW06	<i>C0</i> 3	7'-8"	E09	
201	IS MANAGER	F06	B03	EW06	EM06	EW09	W03	C03	8'-0"		GENERAL FINISH NOTE #7
202	CONFERENCE ROOM	F08	B03	W03	W03	EW09	W03	<i>C0</i> 3	8'-0"		GENERAL FINISH NOTE #7
203	JANITOR CLOSET	F <i>0</i> 5	B03	W03	W03	W03	W05	C04	7'-6"	E01, E02	
204	MECHANICAL	F <i>0</i> 5	B03	W03	W03	W03	W03	C04	±9¹-1#		GENERAL FINISH NOTE #7
205	EMERGENCY MANAGEMENT	F08 F05	B03	EW09 W03	EW08 W03	EW08 W03	EW08 W03	C03	8'-3"	E03,E09 E08	STAIR WALLS I HR CONSTRUCTION
205A	CL0SET	F08	B03	W03	M03	W03	W03	C04	8'-0"	E05 W/SHELF	STAIR WALL I HR CONSTRUCTION
206	TOILET	F <i>0</i> 5	B03	W03	W03	W03	W03	C04	8'-0"	E04	
SECOND FLOOR	STAIR 2	F05 F07	B03	W03	EM02	EW08	W03	C03 C09	VARIES		STAIR WALLS I HR CONSTRUCTION
	GENERAL F					1	ı	•	<u> </u>		

GENERAL FINISH NOTES:

- I. PAINT ALL HOLLOW METAL FRAMES AND DOORS FURNISHED PRIMED.
- 2. PAINT ALL EXPOSED STEEL BEAMS AND LINTELS.
- 3. PAINT ALL EXPOSED STEEL STRUCTURE OF STAIRS, HANDRAILS AND RAILINGS.
- 4. PAINT ALL EXTERIOR STEEL HANDRAILS AND RAILINGS.

OR CEILING COLOR.

- 5. PAINT ALL MECHANICAL GRILLES OR DIFFUSERS SUPPLIED UNFINISHED OR AS NOTED ON DRAWINGS TO BE PAINTED TO MATCH SURROUNDING WALL
- 6. PAINT ALL WALL OR CEILING ACCESS PANELS TO MATCH SURROUNDING WALL OR CEILING COLOR.
- 7. INSTALL SOUND INSULATION BATTS IN STUD WALL CAVITIES. COORDINATE WITH REFLECTED CEILING PLANS, SHEETS AI.3 AND AI.4.

FINISH SCHEDULE KEY FLOOR FINISHES FOI EXISTING FINISH TO REMAIN - NO WORK REQUIRED UNLESS NOTED OTHERWISE ON DRAWINGS FO2 EXISTING TERRAZZO, CLEAN AND POLISH FO3 EXPOSED CONCRETE SLAB, SEALED F04 PORCELAIN CERAMIC TILE FOS VINYL COMPOSITION TILE FO6 LUXURY VINYL TILE PLANKS FO7 VINYL STAIR TREADS WITH MATCHING TILE ON LANDINGS F08 CARPET WALL BASE FINISHES BOI EXISTING BASE TO REMAIN - NO WORK REQUIRED UNLESS NOTED OTHERWISE ON DRAWINGS BO2 3" PORCELAIN CERAMIC TILE BO3 4" COVED VINYL BASE BO4 7-3/4" PROFILED RUBBER BASE EXISTING WALL FINISHES EWOI FINISH TO REMAIN - NO WORK REQUIRED UNLESS NOTED OTHERWISE ON DRAWINGS EWO2 PLASTER, PATCH AS REQUIRED AND REPAINT EWO3 EXPOSED CONCRETE, PATCH AS REQUIRED, PREP AND PAINT EW04 EXPOSED PAINTED CONCRETE, PATCH AS REQUIRED AND REPAINT EWO5 PAINTED BRICK, REPAINT EWO6 UNPAINTED BRICK TO REMAIN EXPOSED EW07 CMU, APPLY GYPSUM BOARD TO EXISTING FURRING (OR NEW FURRING), FINISH TAPE AND PAINT EWO8 GYPSUM BOARD ON STUDS OR FURRING, PATCH AS REQUIRED AND REPAINT EWO9 APPLY GYPSUM BOARD TO EXISTING STUDS OR FURRING, FINISH TAPE AND PAINT EWIO FRP WALL PANELS OVER GYPSUM BOARD ON NEW WALL FINISHES WOI CONCRETE, PAINT WO2 CMU, PAINT WO3 GYPSUM BOARD ON STUDS, FINISH TAPE AND WO4 GYPSUM BOARD ON FURRING, FINISH TAPE AND WOS FRP WALL PANELS OVER GYPSUM BOARD ON STUDS WO6 ALUMINUM STOREFRONT ASSEMBLY CEILING FINISHES COI EXISTING CEILING TO REMAIN - NO WORK REQUIRED UNLESS NOTED OTHERWISE ON DRAWINGS CO2 EXISTING LATH AND PLASTER - SEE REFLECTED CEILING PLAN FOR REQUIRED WORK CO3 2x2 SUSPENDED ACOUSTICAL LAY-IN CO4 GYPSUM BOARD, PAINT COS GYPSUM BOARD SOFFIT OR BULKHEAD, PAINT CO6 EXPOSED JOIST FLOOR FRAMING, PAINT COT EXPOSED METAL DECK, PAINT CO8 2 LAYERS FIRE-RATED GYPSUM BOARD, PAINT

OF EXISTING CEILING JOIST

EO2 ADJUSTABLE WALL SHELVING

E04 TOILET ROOM ACCESSORIES

E08 MARKERBOARD / TACKBOARD

E09 FIRE EXTINGUISHER CABINET

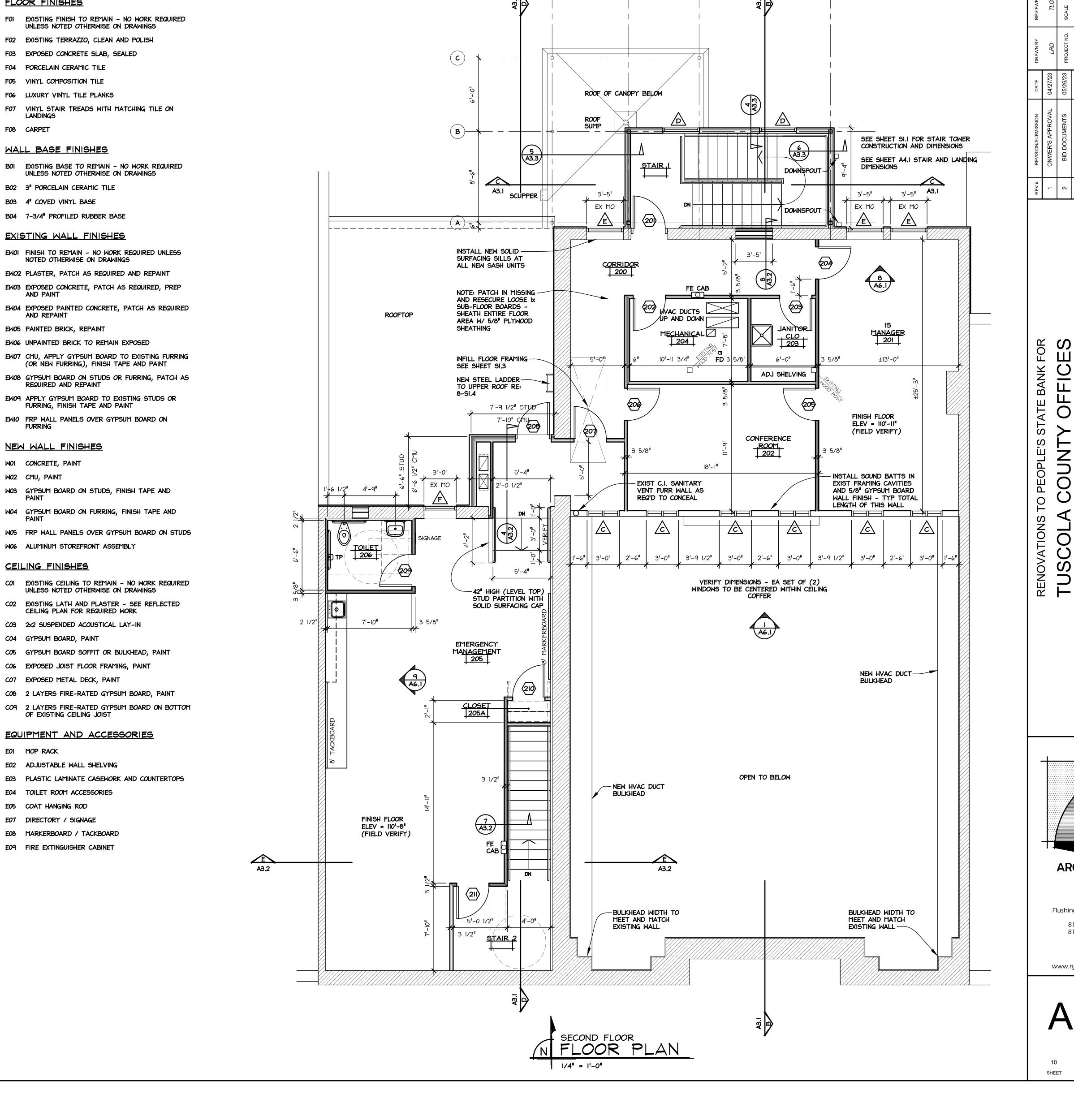
E05 COAT HANGING ROD

E07 DIRECTORY / SIGNAGE

EOI MOP RACK

EQUIPMENT AND ACCESSORIES

E03 PLASTIC LAMINATE CASEWORK AND COUNTERTOPS



3

6'-6 5/8"

7'-1 3/8"

12'-2 5/8"

DOL

CHE

S

SH

=

A

FLOOR

SECOND

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OF TOTAL SHEETS

WALL CONSTRUCTION KEY

NEW WALLS

CMU

4 CONCRETE

BRICK VENEER

STUD / FURRING

EXISTING WALLS

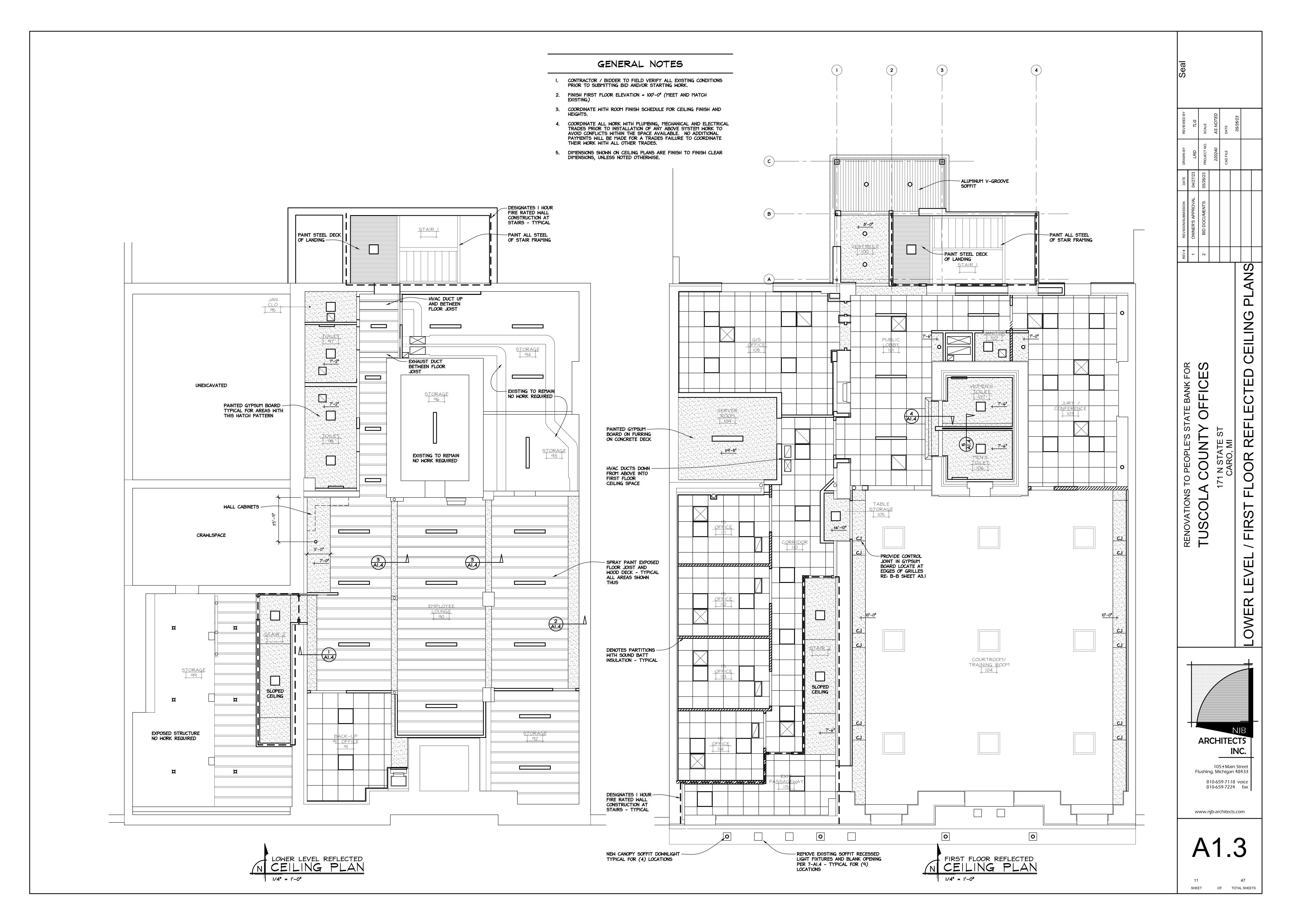
4 CONCRETE

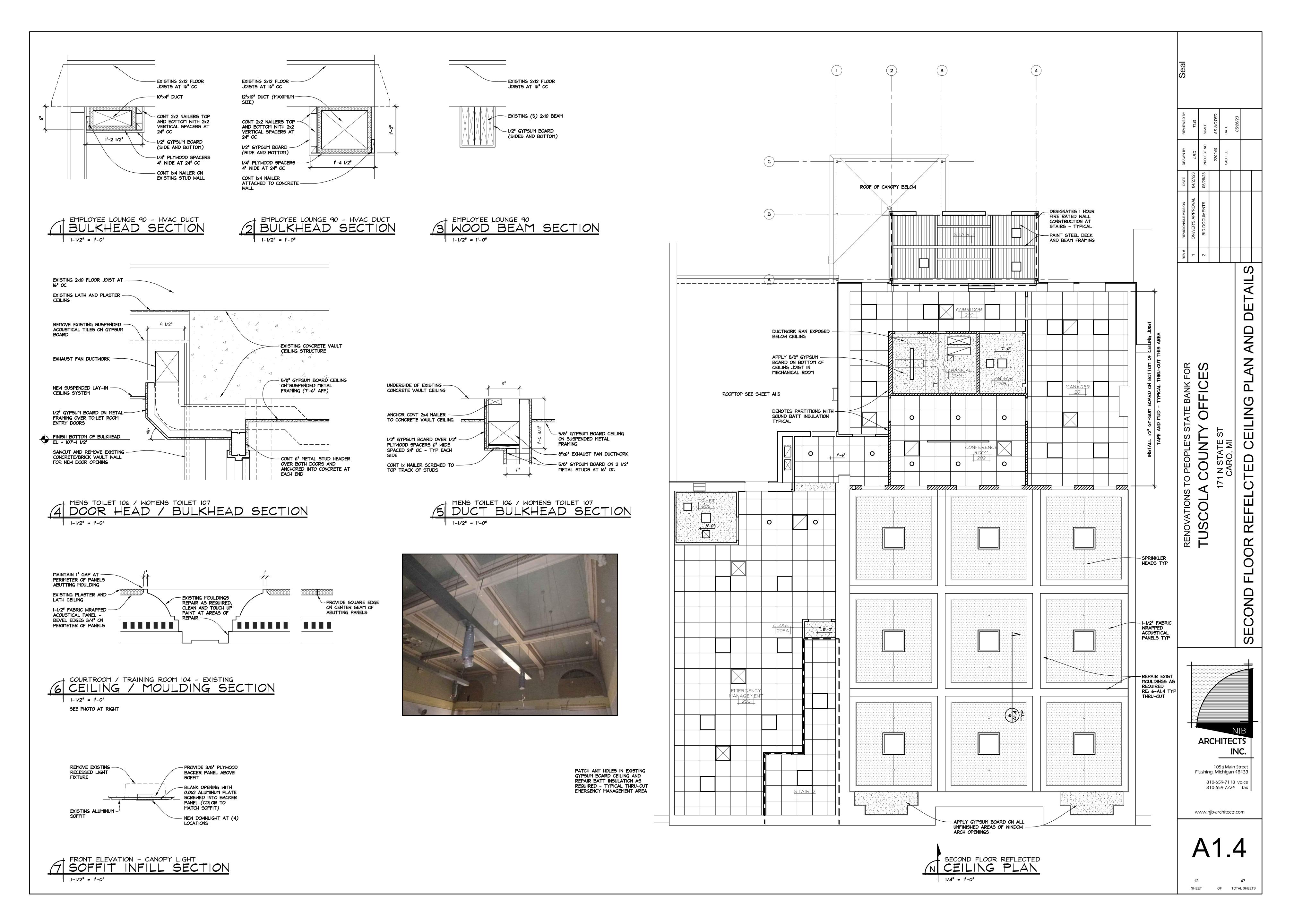
CMU

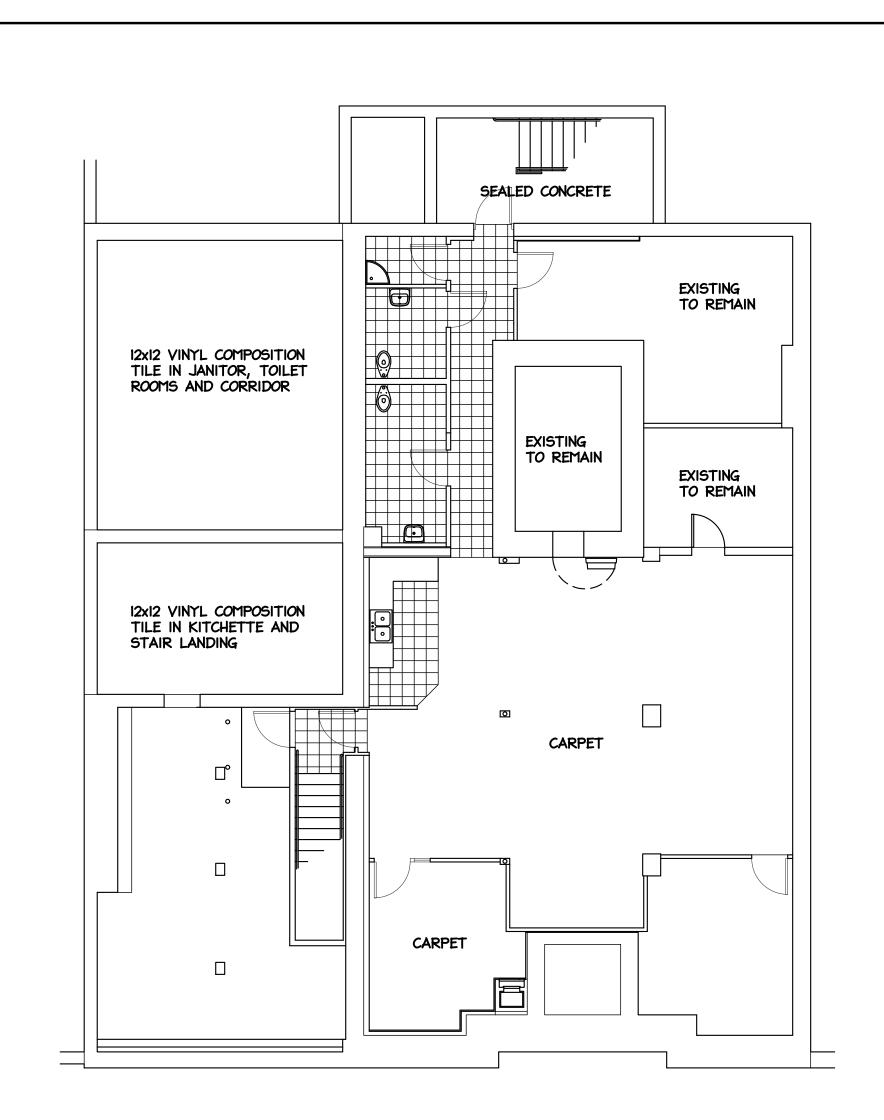
BRICK

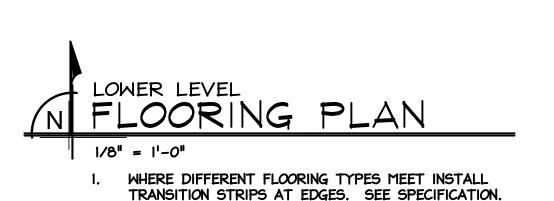
____ STUD / FURRING

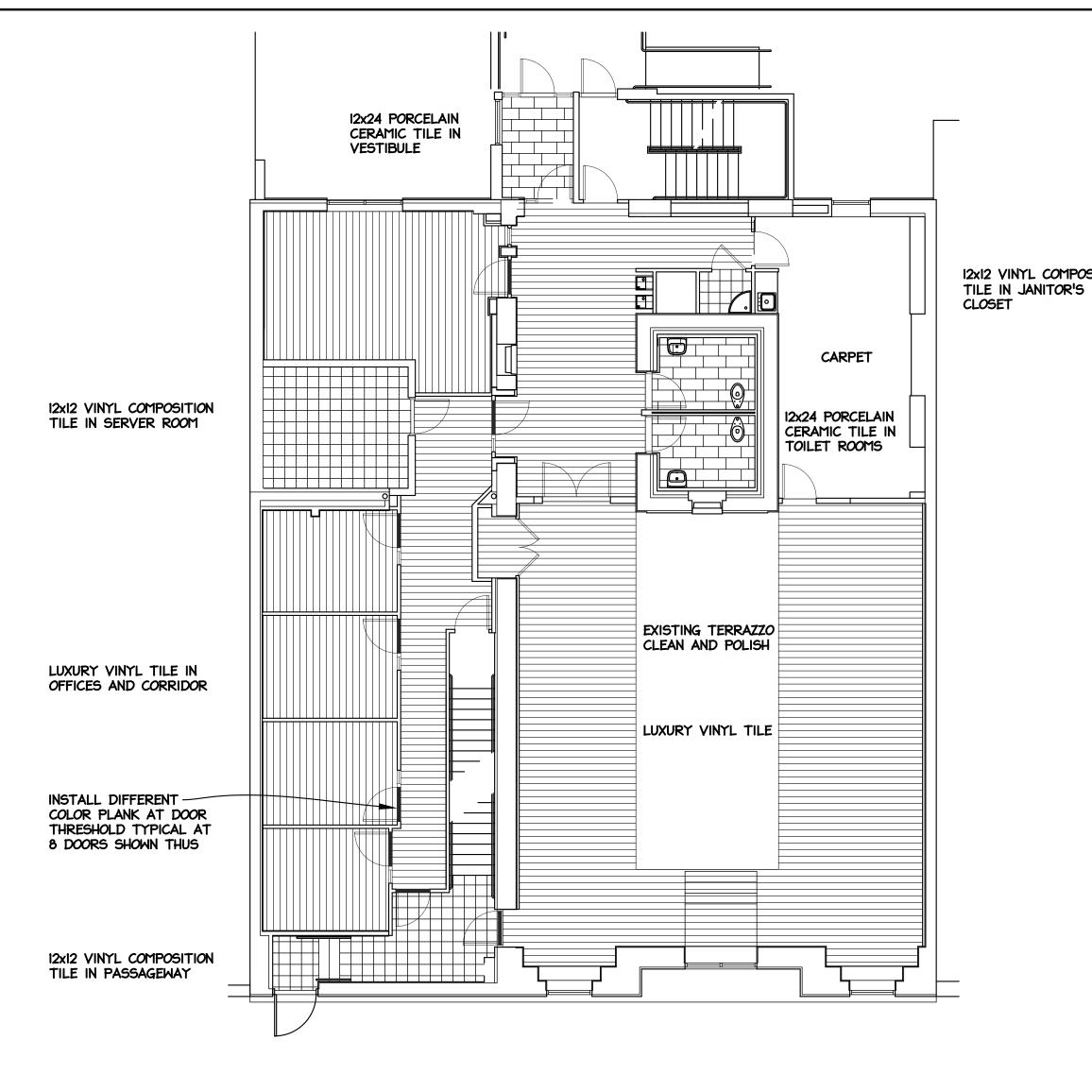
OR UNKNOWN





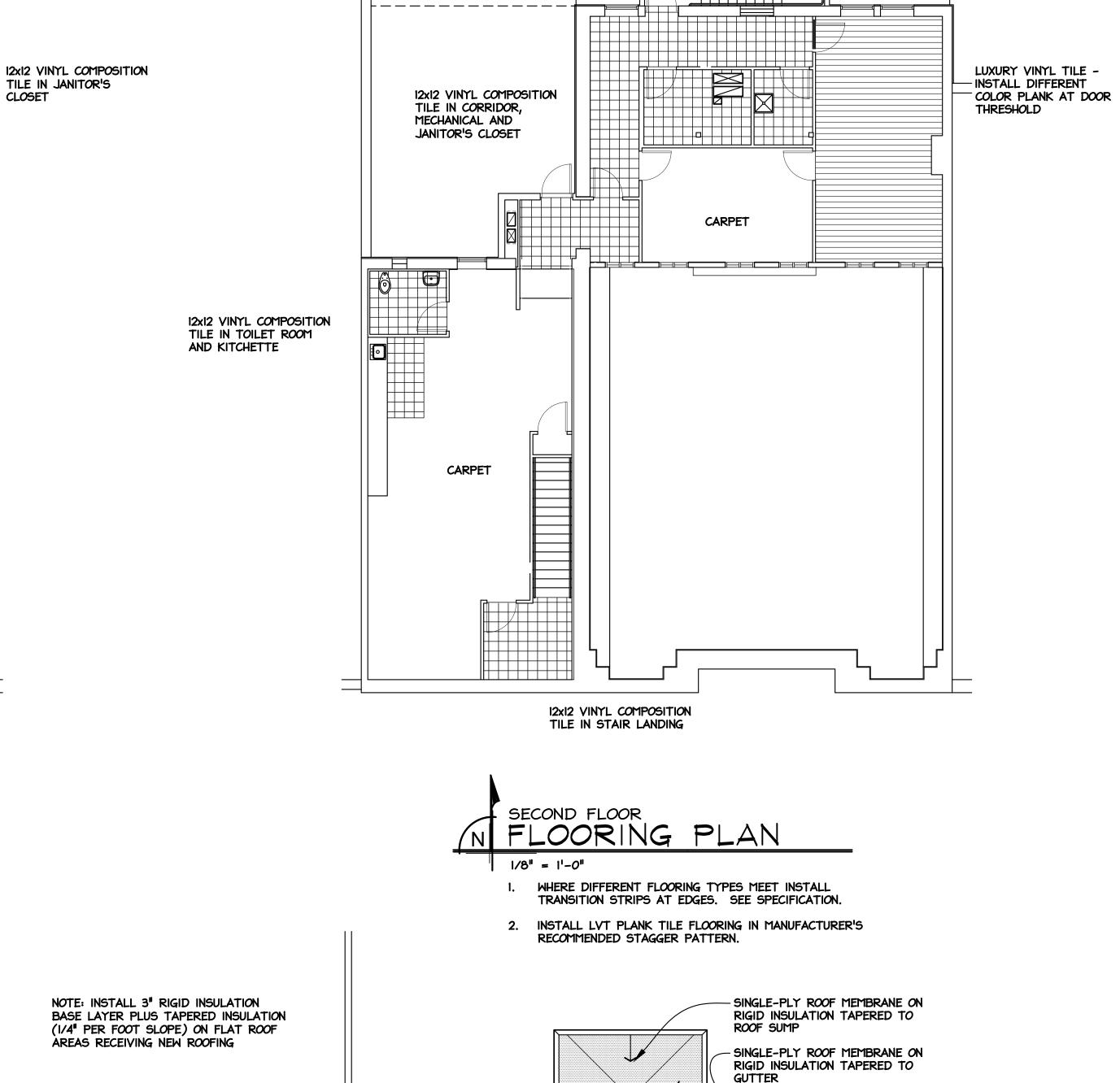


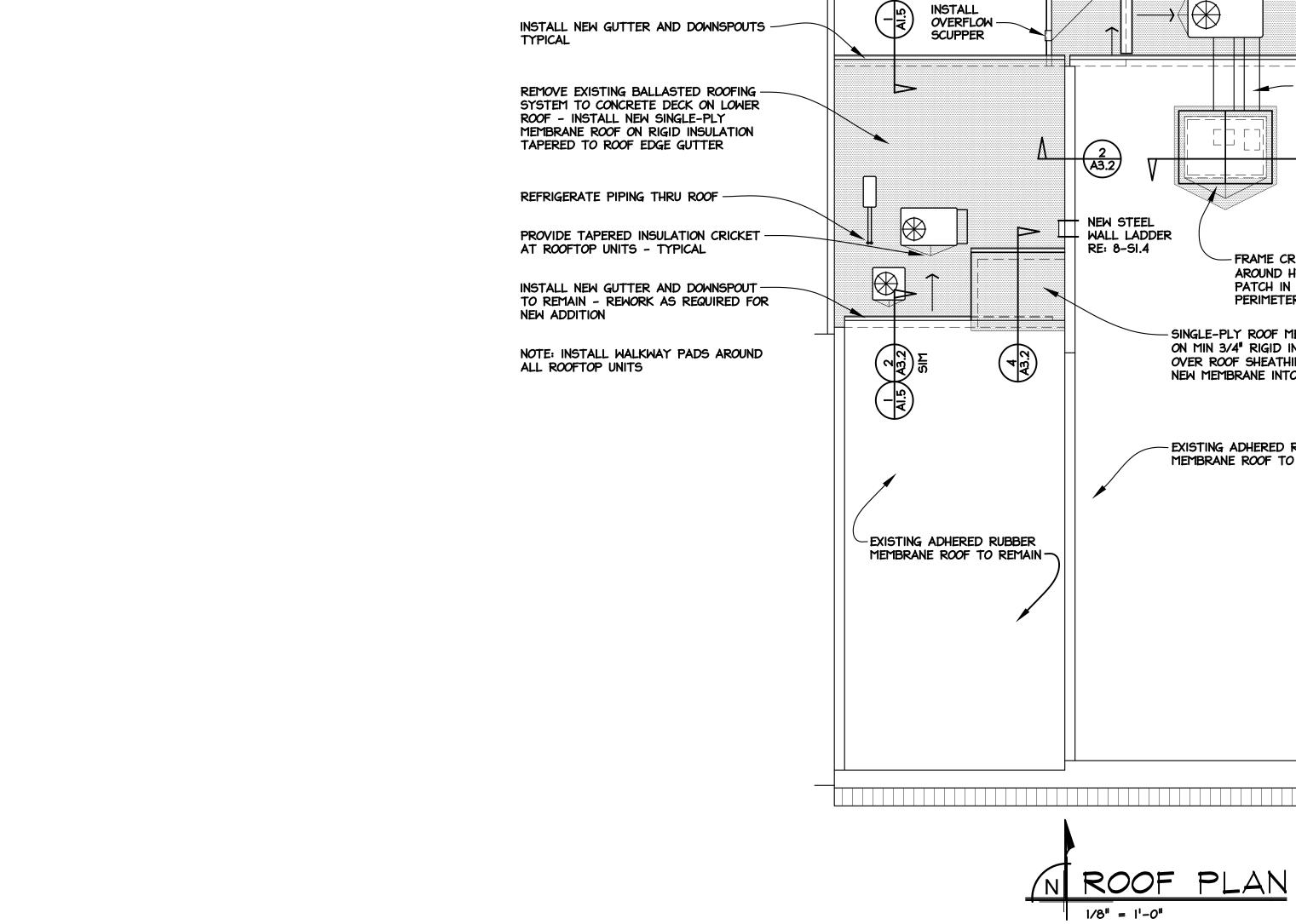


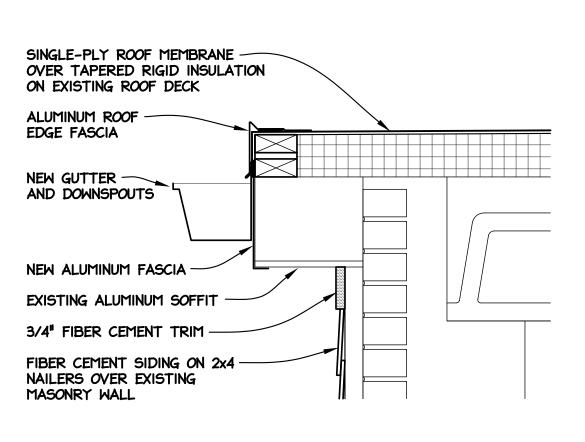




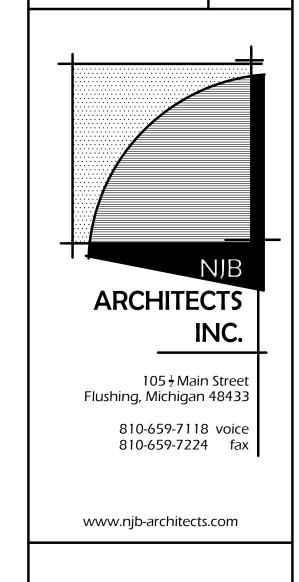
- WHERE DIFFERENT FLOORING TYPES MEET INSTALL TRANSITION STRIPS AT EDGES. SEE SPECIFICATION.
- 2. LAY PORCELAIN CERAMIC TILE IN RUNNING BOND PATTERN OFFSET 8".
- INSTALL LVT PLANK TILE FLOORING IN MANUFACTURER'S RECOMMENDED STAGGER PATTERN.







1 ROOF EDGE SECTION



DETAILS

PLAN

ROOF

FINIS

FLOOR

ATE

- GUTTER AND

DOWNSPOUT

HVAC DUCTS

- FRAME CRICKET TO SHED WATER AROUND HVAC "DOGHOUSE" AND PATCH IN ROOF MEMBRANE AT

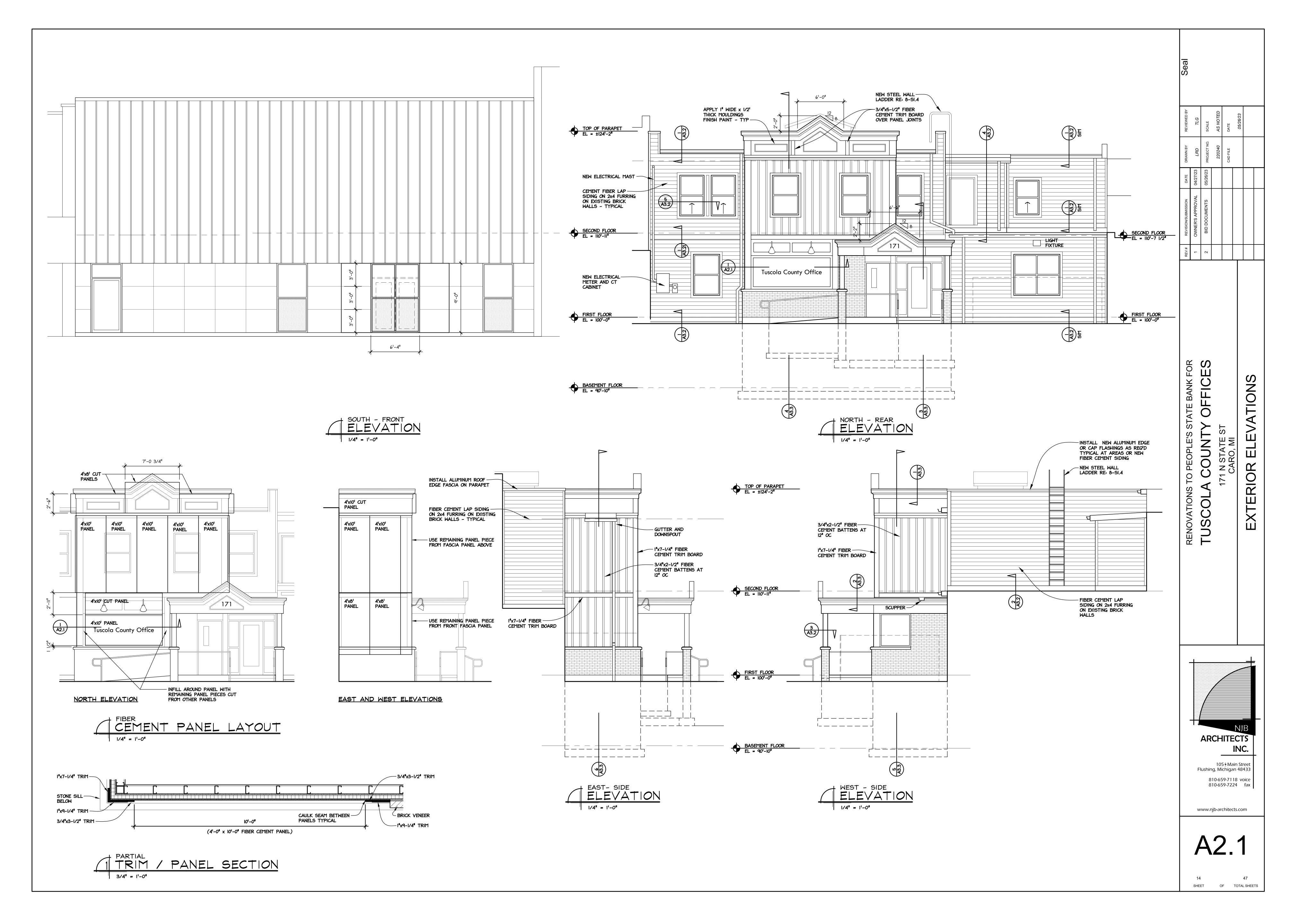
PERIMETER

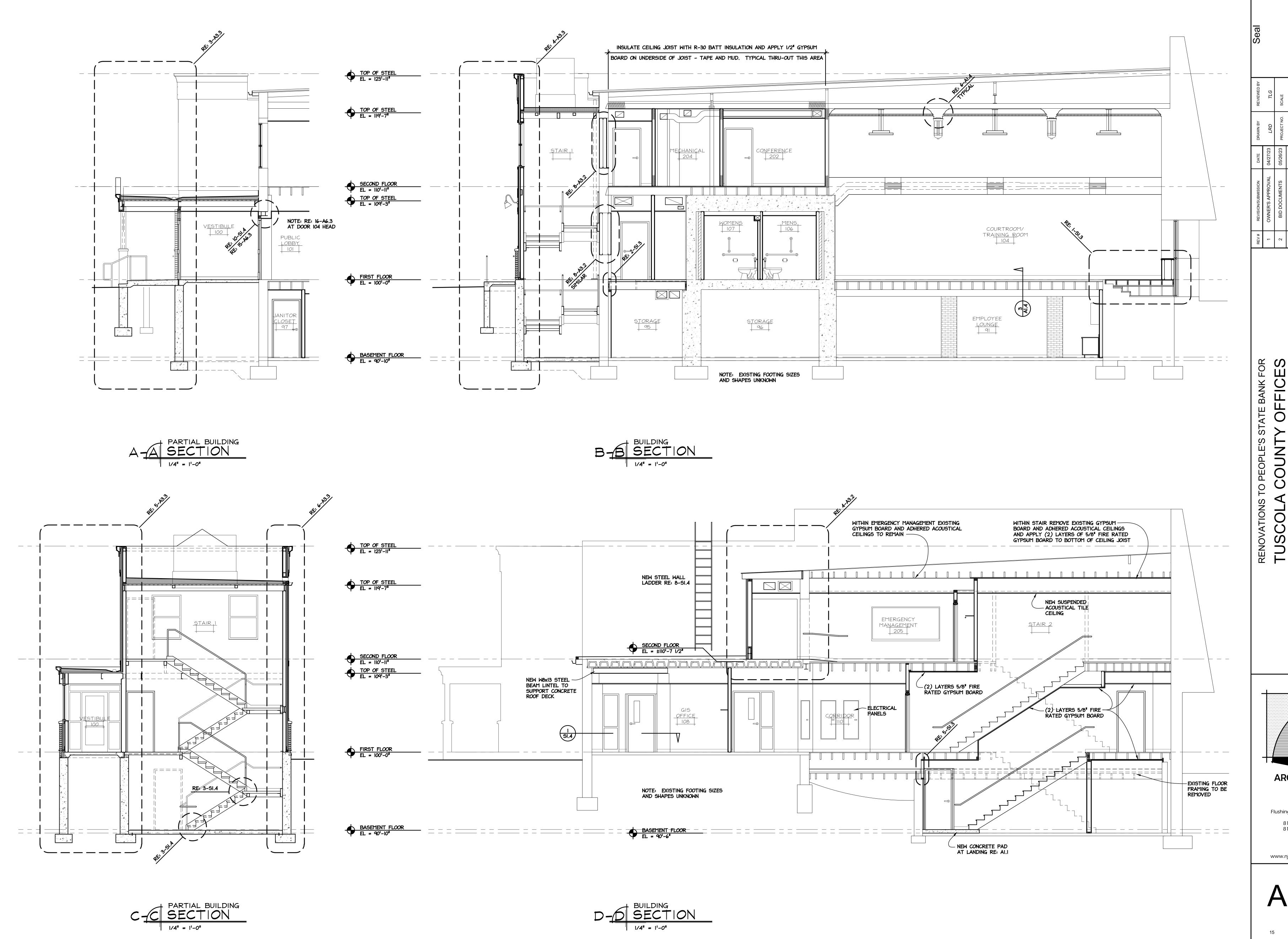
- SINGLE-PLY ROOF MEMBRANE ON MIN 3/4" RIGID INSULATION

OVER ROOF SHEATHING - TIE

- EXISTING ADHERED RUBBER -MEMBRANE ROOF TO REMAIN

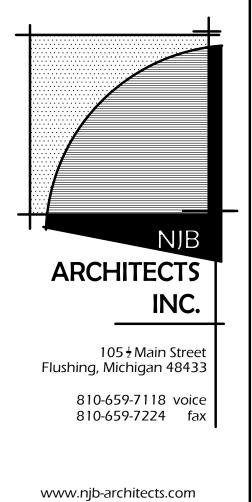
NEW MEMBRANE INTO EXISTING



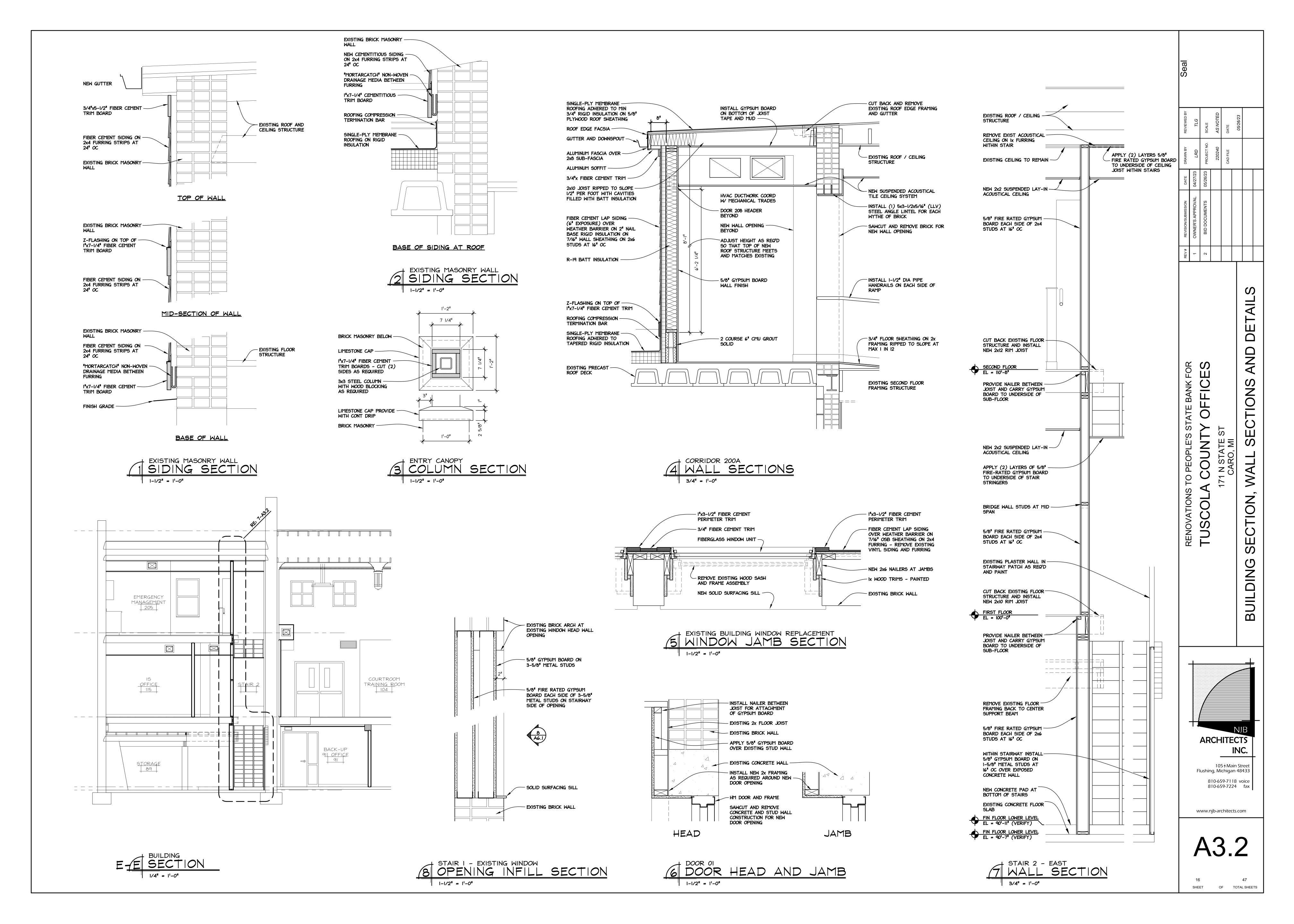


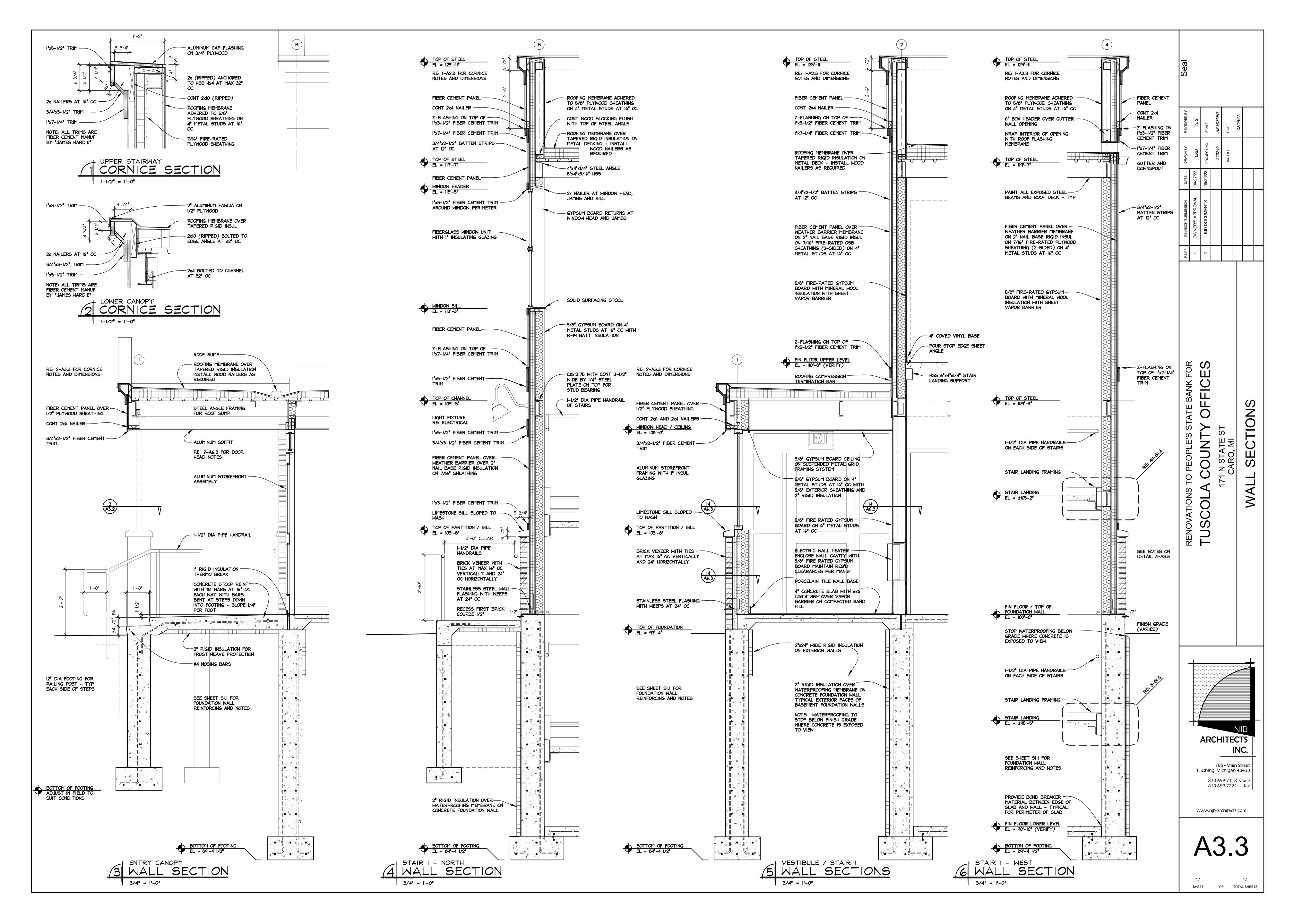
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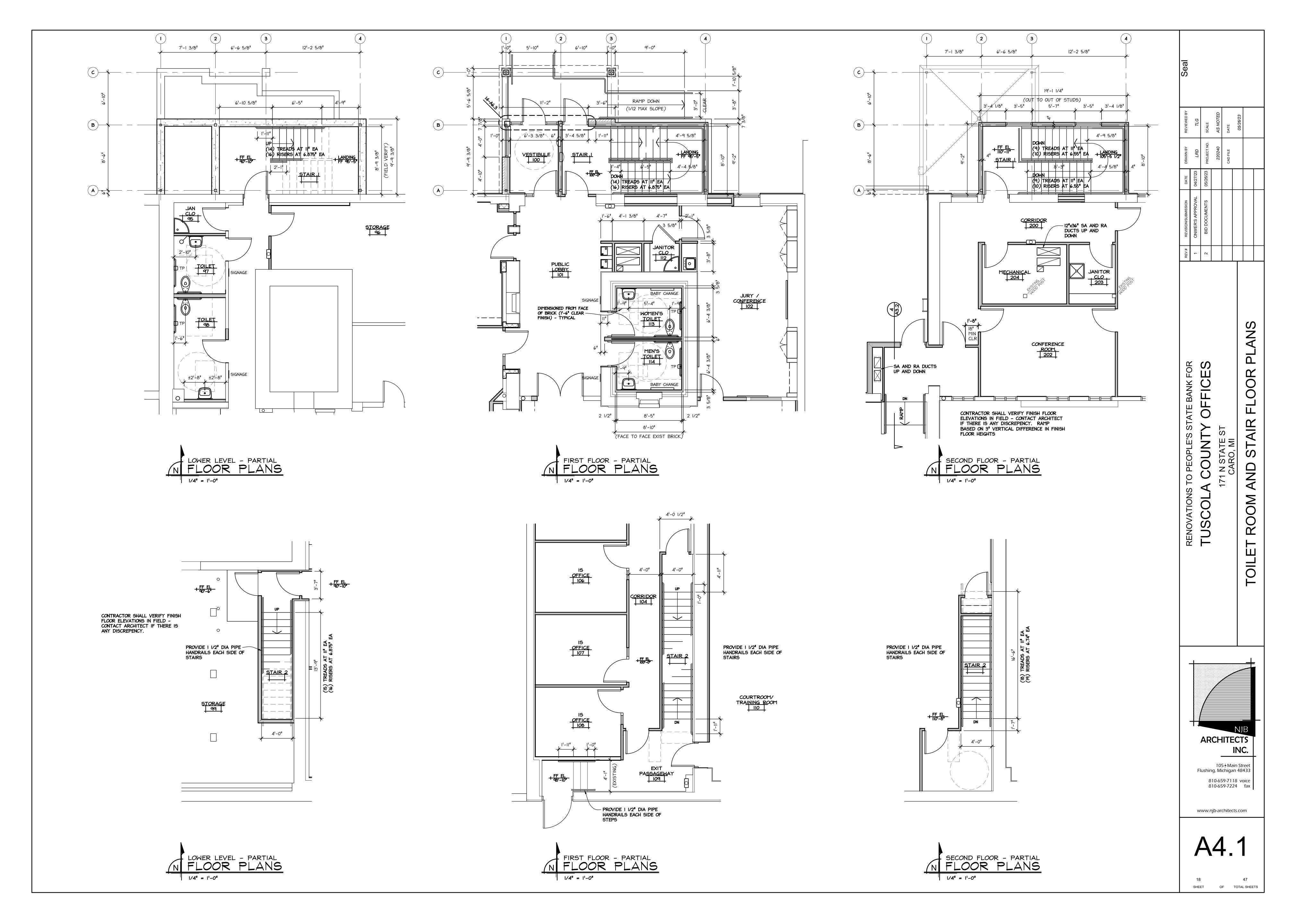
SECTIONS

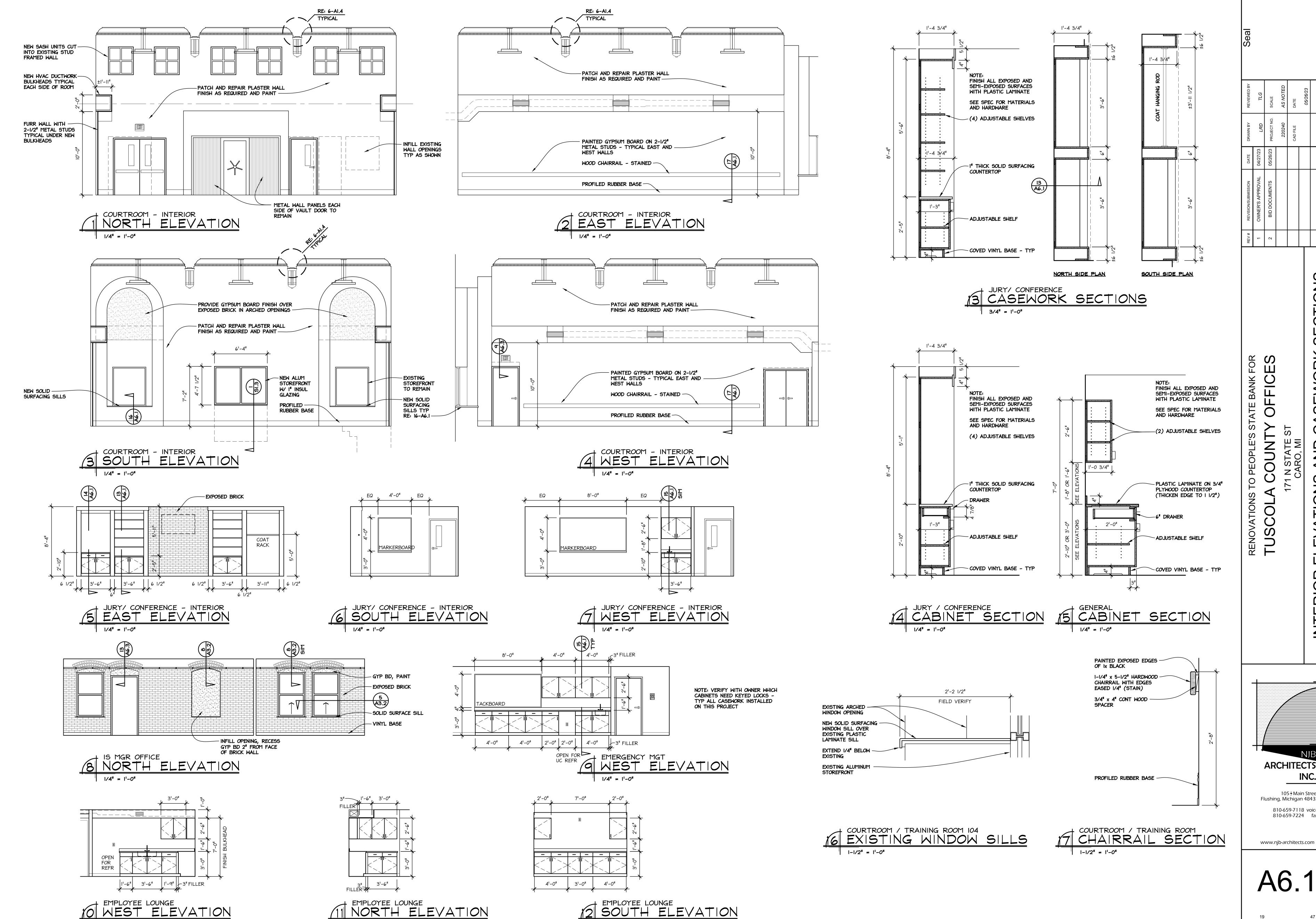


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1/4'' = 1'-0''

1/4" = 1'-0"

 $1/4^{\parallel} = 1^{1} - 0^{\parallel}$

SECTIONS

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CASEW

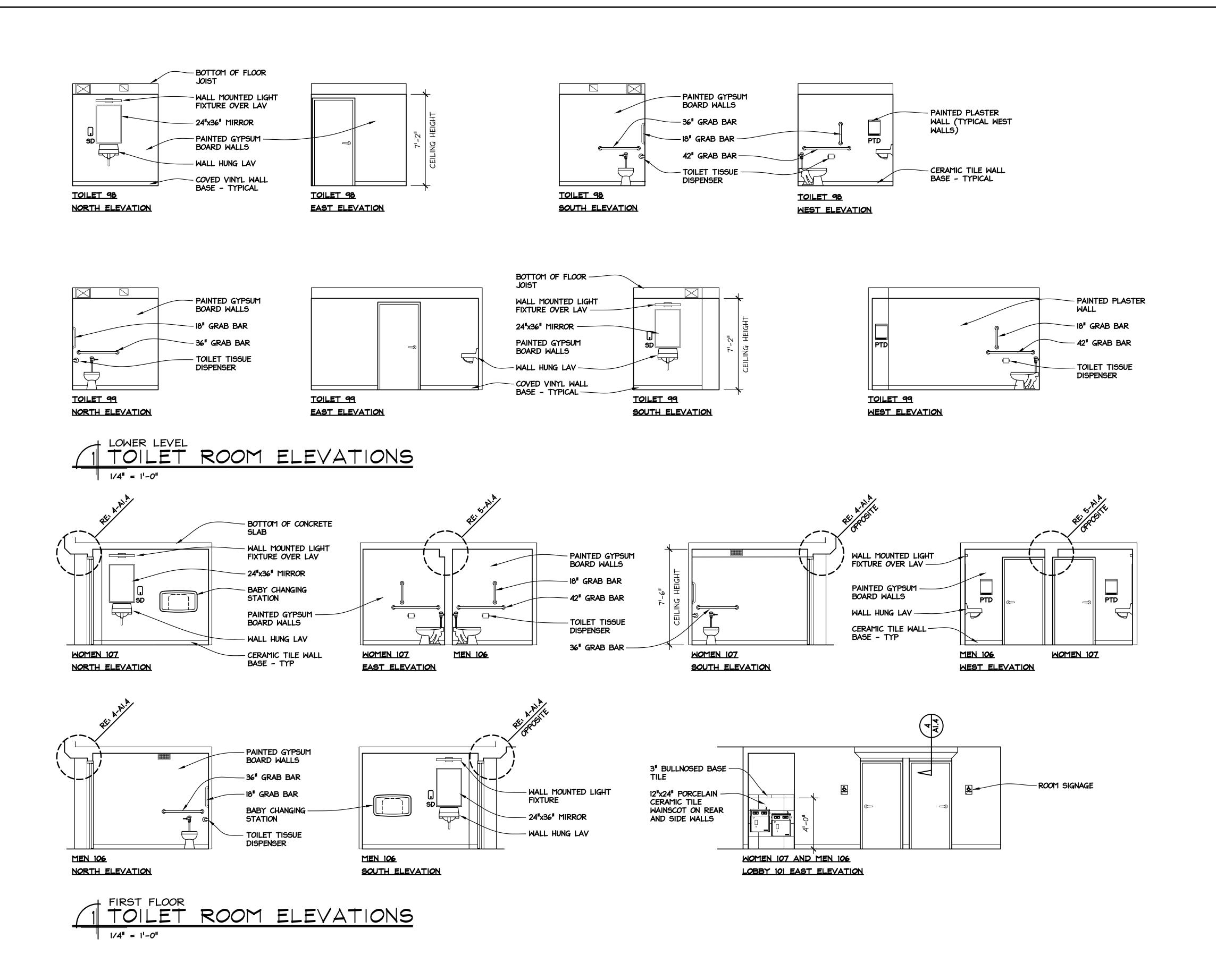
ELEVATIONS

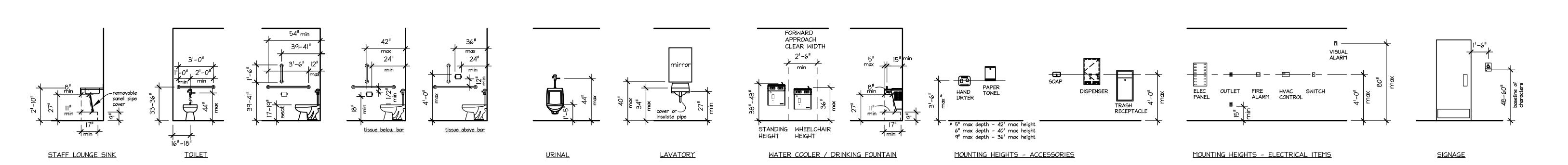
INTERIOR

BANK FFIC

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A6.1







/ATIONS TOILET ROOM INTERIOR ELEV

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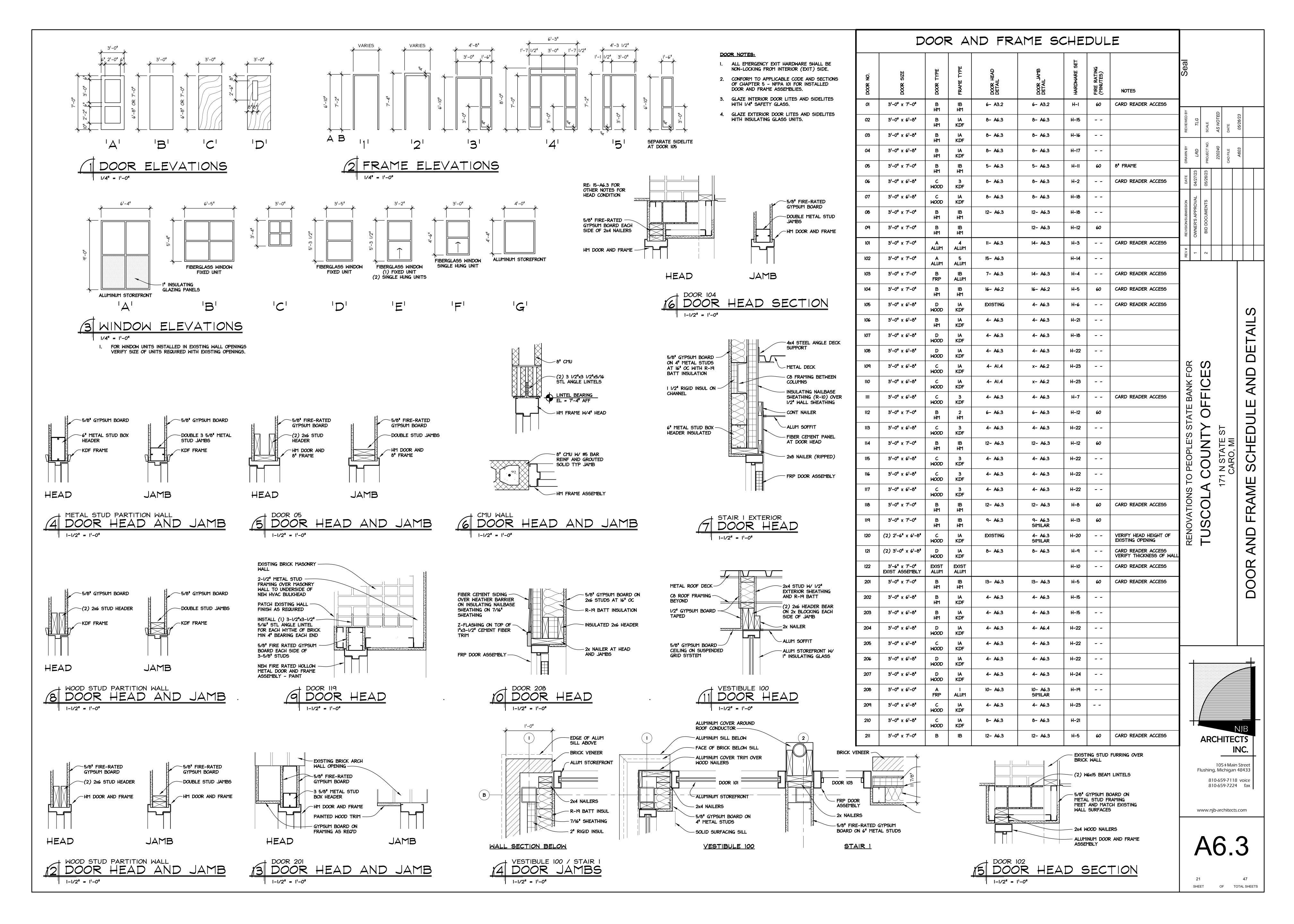
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A6.2

20 47
HEET OF TOTAL SHEETS



KEYED DEMOLITION NOTES

- REMOVE HOT WATER FIN TUBE RADIATION AND ALL ASSOCIATED PIPING. CAP PIPING FLUSH WITH FLOOR OR WALL SURFACE WERE CONCEALED.
- REMOVE RECESSED HOT WATER CABINET HEATER AND ALL ASSOCIATED PIPING. CAP PIPING IN WALL.
- REMOVE FORCED AIR FURNACE AND ALL ASSOCIATED GAS PIPING, DUCTWORK, ETC.
- (4) REMOVE WATER METER AND CAP WATER SOURCE AT WALL SURFACE
- 5 REMOVE HOT WATER BOILER AND ASSOCIATED PUMPS, PIPING, BREECHING, ETC.
- 6 REMOVE DOMESTIC HOT WATER HEATER AND ALL ASSOCIATED PIPING
- REMOVE PLUMBING FIXTURE AND PREP / REWORK COLD WATER, HOT WATER, SANITARY AND VENT PIPING CONNECTIONS AS REQUIRED FOR NEW FIXTURES
- 8 REMOVE SUPPLY AND/OR RETURN AIR DIFFUSERS
- 9 REMOVE ALL SUPPLY AND/OR RETURN AIR DUCTWORK

— UNEXCAVATED - SLAB ON GRADE ——

- REMOVE EXHAUST FANS, GRILLES AND ALL ASSOCIATED DUCTWORK
- REMOVE SERVICE SINK AND ALL CONNECTED HOT WATER, COLD WATER, SANITARY AND VENT PIPING

EXISTING NATURAL GAS SERVICE

REMOVE AND RELOCATE GAS METER (BY UTILITY COMPANY)

GENERAL DEMOLITION NOTES

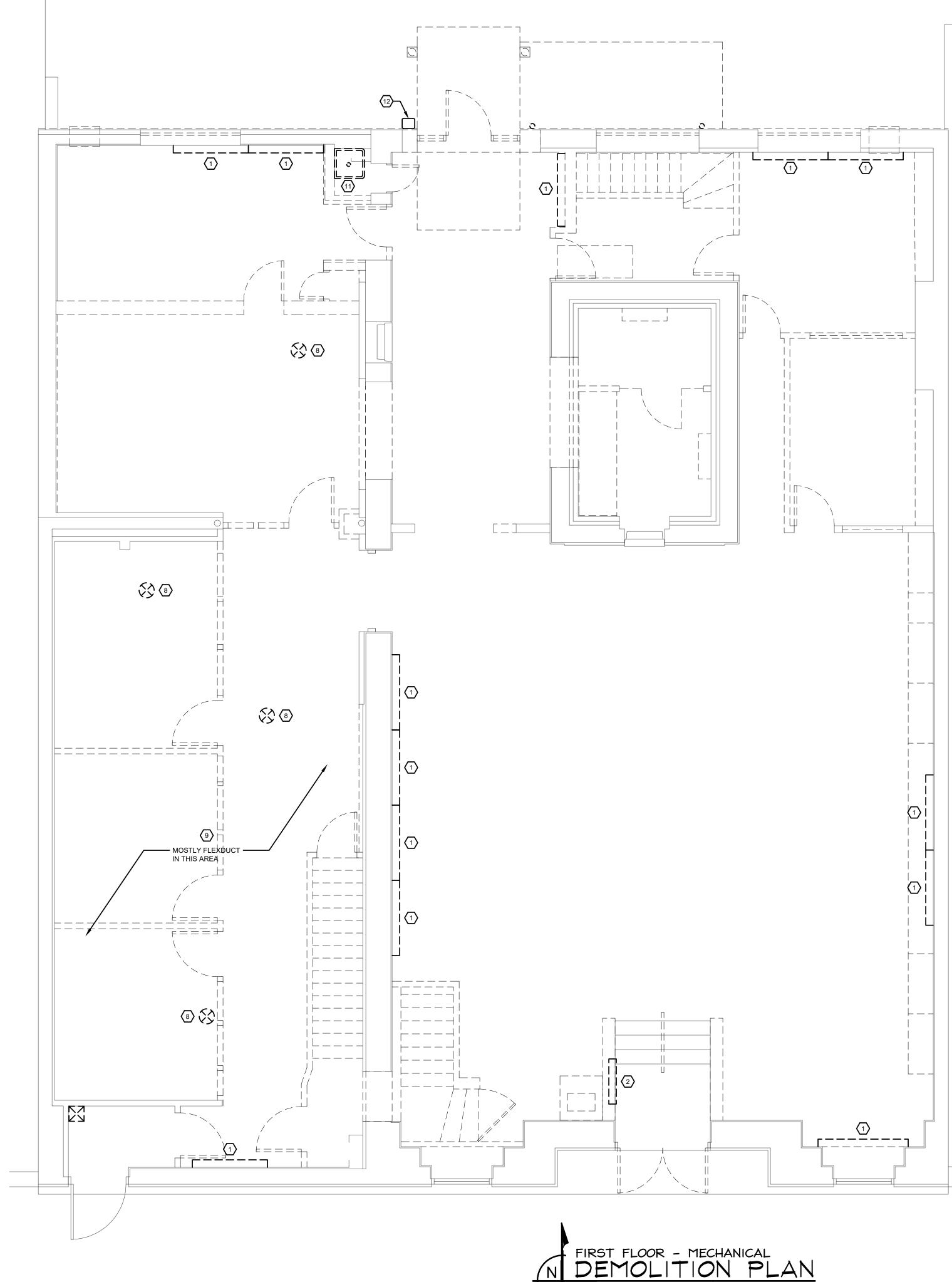
- DEMOLITION INFORMATION IS PROVIDED TO ASSIST WITH REMOVAL COSTS. MECHANICAL TRADES SHALL BE RESPONSIBLE TO CONFIRM ALL QUANTITIES AND THE INFORMATION PROVIDE.
- MECHANICAL CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS TRADES FAILURE TO COORDINATE REQUIRED MECHANICAL DEMOLITION WITH
- 3. ALL EXISTING SHEET METAL DUCTWORK AND/OR FLEXDUCTS ARE TO BE
- 4. ALL EXISTING HOT WATER HEATING PIPING IS TO BE REMOVED.

4 EXISTING WATER METER

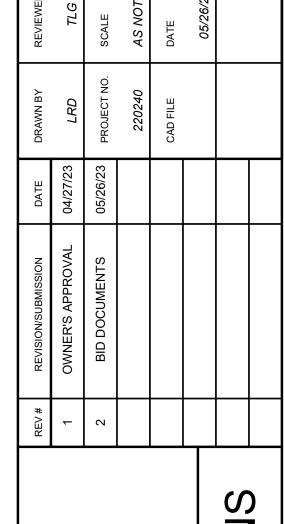
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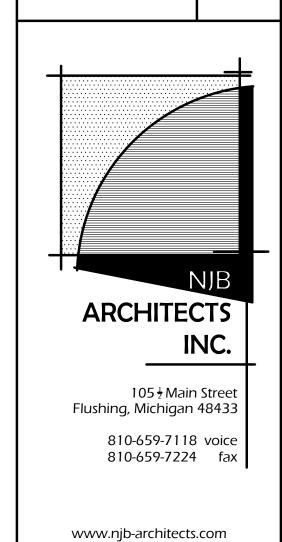
5. ALL EXISTING DOMESTIC COLD WATER AND HOT WATER PIPING IS TO BE







RENOVATIONS TUSCOLA



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SHEET OF TOTAL SHEETS

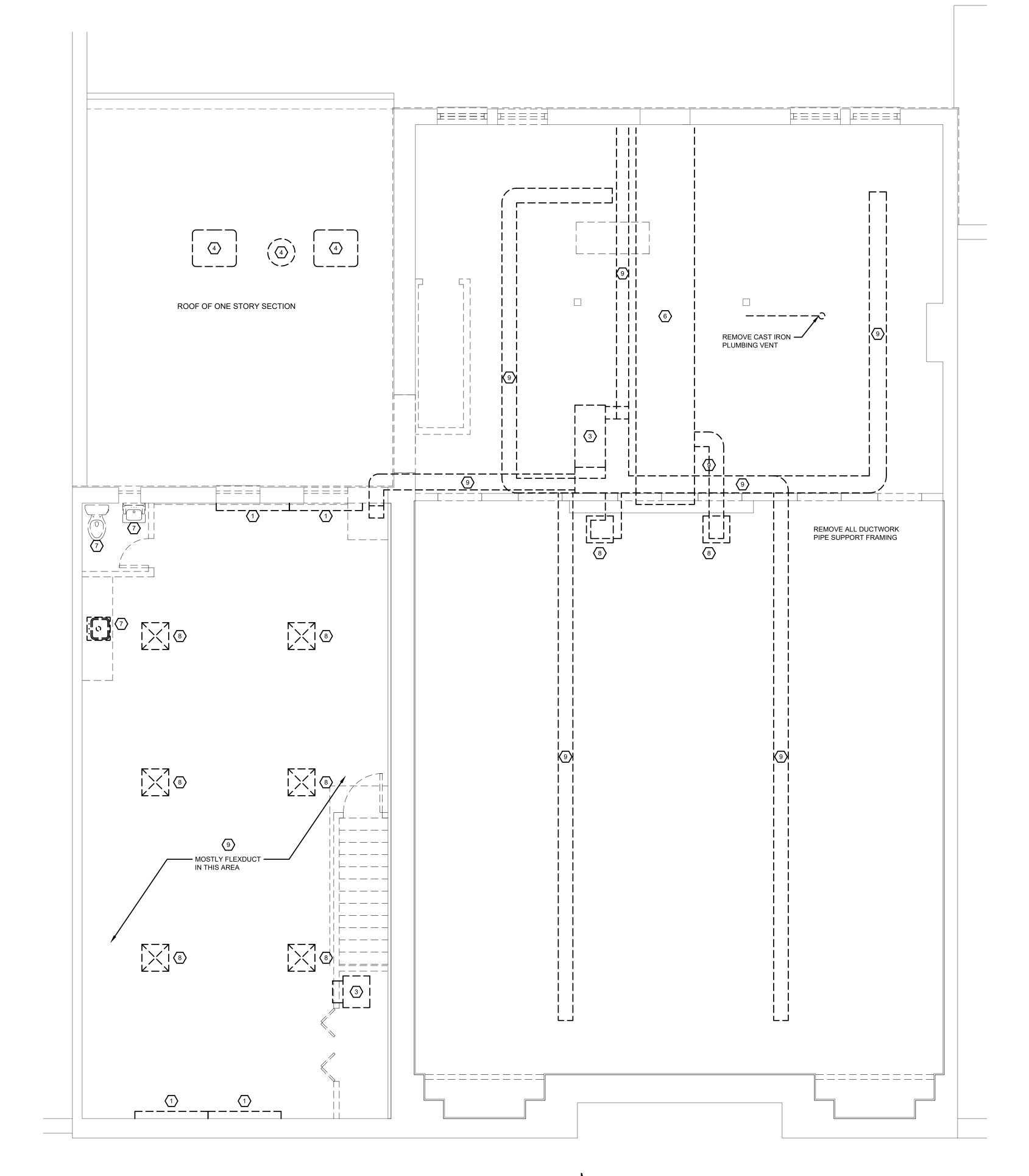


KEYED DEMOLITION NOTES

- REMOVE HOT WATER FIN TUBE RADIATION AND ALL ASSOCIATED PIPING. CAP PIPING FLUSH WITH FLOOR OR WALL SURFACE WERE CONCEALED.
- REMOVE RECESSED HOT WATER CABINET HEATER AND ALL ASSOCIATED PIPING, CAP FLUSH WITH WALL SURFACE.
- REMOVE FORCED AIR FURNACE AND ALL ASSOCIATED GAS PIPING, DUCTWORK, ETC.
- REMOVE AIR CONDITIONING CONDENSING UNITS AND ALL ASSOCIATED PIPING
- 5 REMOVE ALL GAS PIPING
- 6 REMOVE OUTSIDE AIR DUCTWORK AND FAN
- REMOVE PLUMBING FIXTURE AND PREP / REWORK PIPING CONNECTIONS AS REQUIRED FOR NEW FIXTURES
- 8 REMOVE SUPPLY AND/OR RETURN AIR DIFFUSERS
- REMOVE ALL SUPPLY AND/OR RETURN AIR DUCTWORK
- REMOVE EXHAUST FANS, GRILLES AND ALL ASSOCIATED DUCTWORK

GENERAL DEMOLITION NOTES

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- 3. ALL EXISTING SHEET METAL DUCTWORK AND/OR FLEXDUCTS ARE TO BE
- 4. ALL EXISTING HOT WATER HEATING PIPING IS TO BE REMOVED.
- 5. ALL EXISTING DOMESTIC COLD WATER AND HOT WATER PIPING IS TO BE

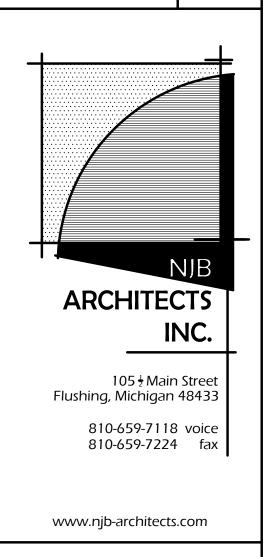


SECOND FLOOR - MECHANICAL

N DEMOLITION PLAN

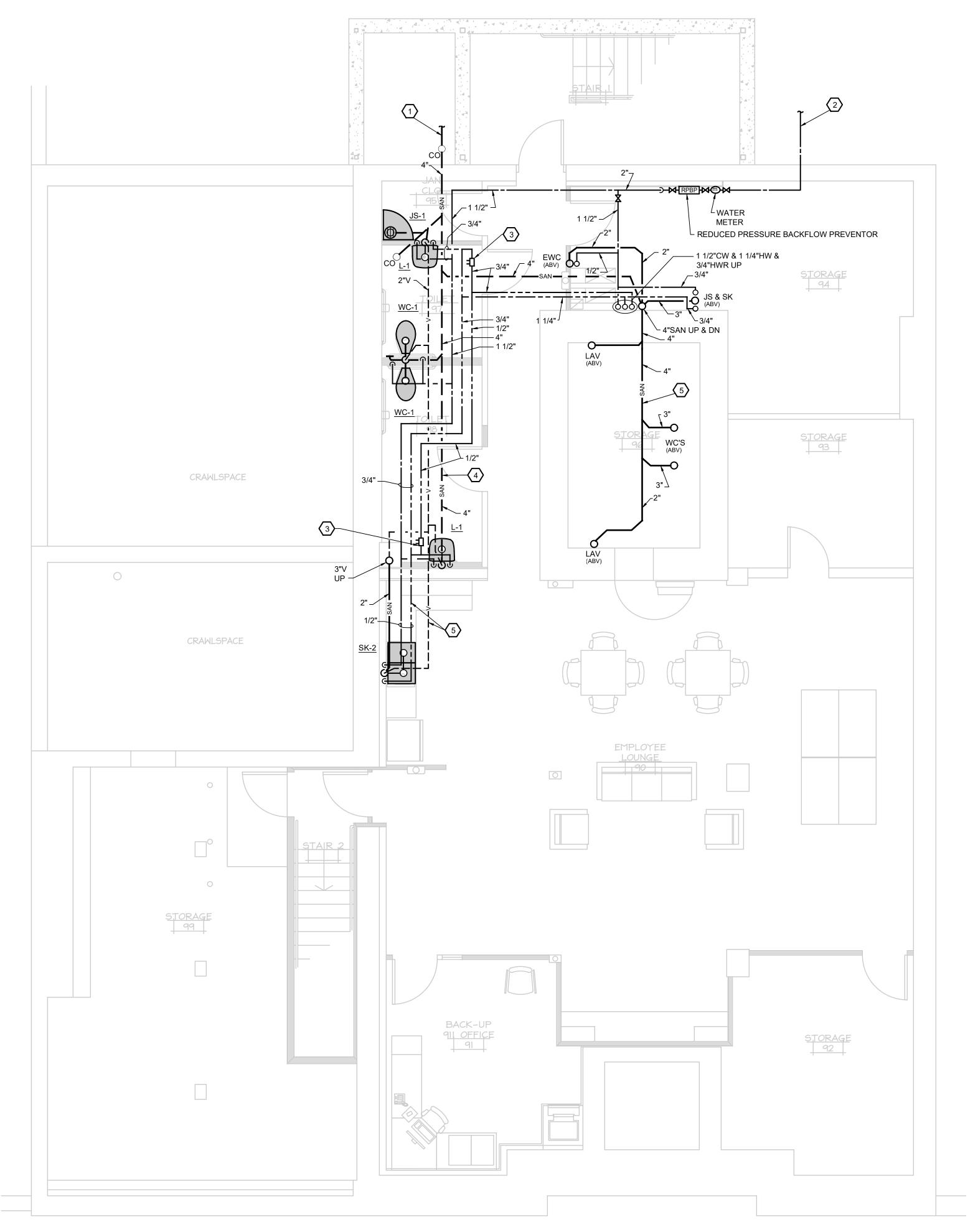
1/4" = 1'-0"

 REVISION/SUBMISSION	DATE	DRAWN BY	REVIEWED BY
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BID DOCUMENTS	05/26/23	PROJECT NO.	SCALE
		220240	AS NOTED
		CAD FILE	DATE
			05/26/23



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SHEET OF TOTAL SHEETS



1. ALL PLUMBING, PIPING, VENTING, ETC. SHALL MEET CODE.

KEYED NOTES

NEW 4" SANITARY PIPING CONNECT TO EXISTING OUTSIDE BUILDING WITH CLEANOUT. FIELD VERIFY INV, EL,

2" COLD WATER SERVICE STUBBED 5'-0" OUTSIDE BUILDING. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING TO WATER SERVICE OUTSIDE OF BUILDING. COORDINATE EXACT LOCATION WITH SITE CONTRACTOR.

3 AUTOMATIC FLOW LIMITING VALVE, BALANCE TO 1 GPM.

4 NEW SANITARY BELOW FLOOR (TYP).

5 NEW SANITARY, VENT, DOMESTIC WATER PIPING ABOVE CEILING (TYP).

RENOVATIONS TO PEOPLE'S STATE BANK

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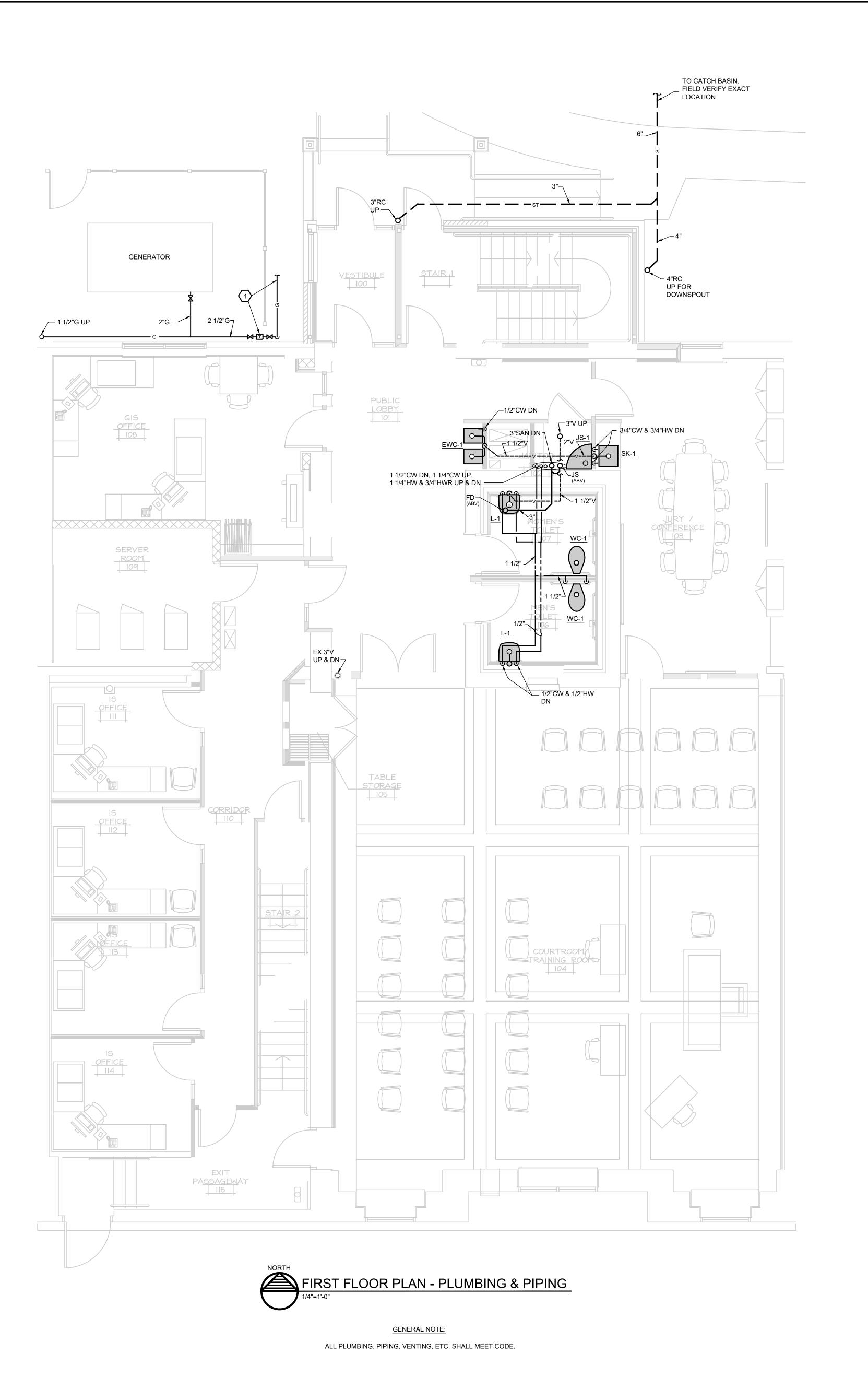
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PLUMBIN

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LOWER LEVEL PLAN - PLUMBING & PIPING



KEYED NOTES

GAS SERVICE AND METER INSTALLED BY GAS COMPANY. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY COORDINATION WITH THE GAS COMPANY. THE OWNER WILL PAY ALL GAS COMPANY CHARGES ASSOCIATED WITH GAS SERVICE DIRECTLY TO THE GAS COMPANY. APPROXIMATE CONNECTED GAS LOAD IS 2113 CU. FT. PER HR AT 7" W.C..

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RENOVATIONS TO PEOPLE'S STATE BANK FOR

TUSCOLA COUNTY OFFICES

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FIRST FLOOR PLAN - PLUMBING & PIF

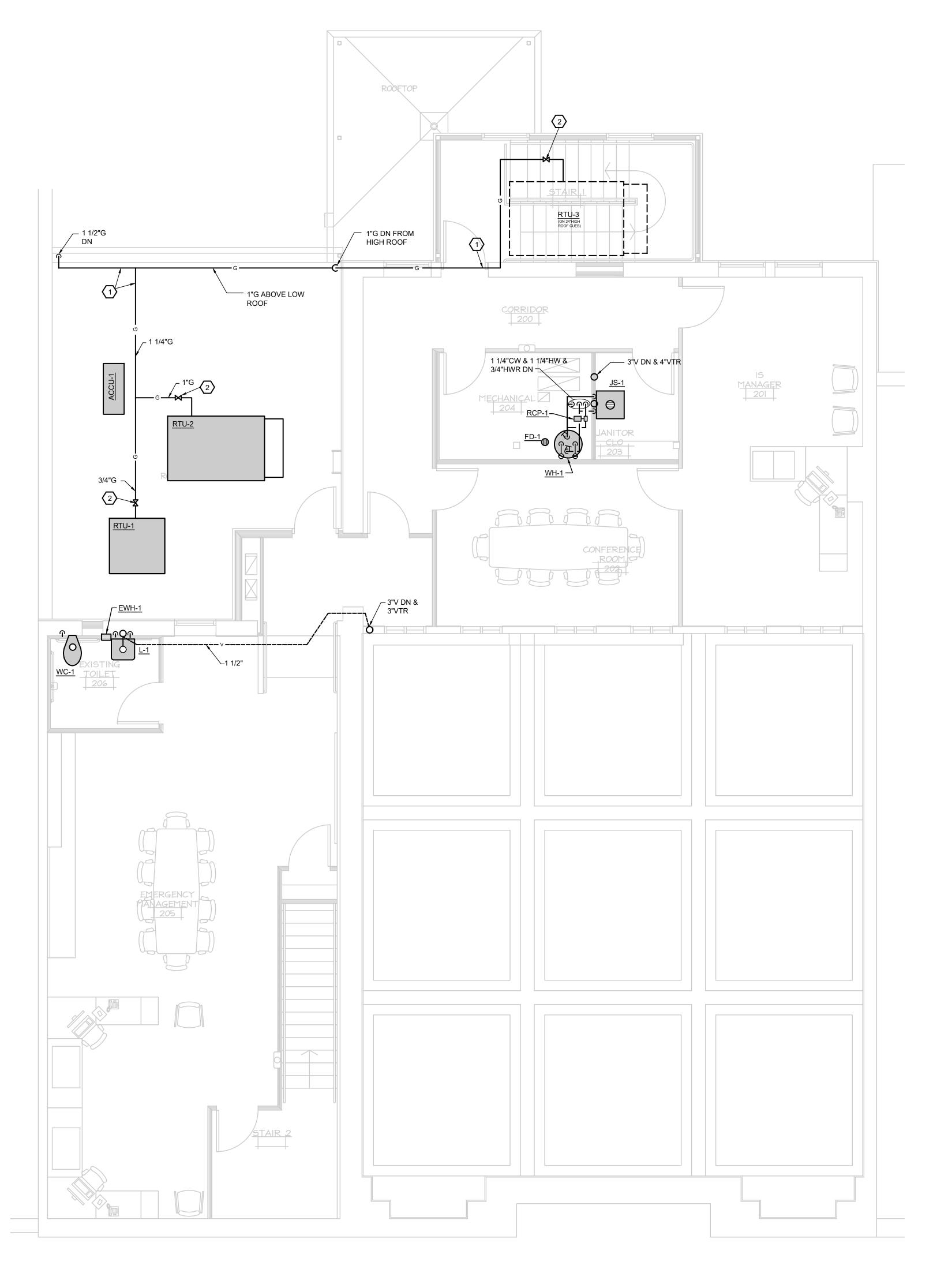
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M1.2





KEYED NOTES

ROUTE NATURAL GAS PIPING ON ROOF. SUPPORT NATURAL GAS PIPING WITH MIRO ROOF SUPPORTS MODEL 3-RS4-7 WITH SUPPORT AND SPACING PER CODE. PRIME AND PAINT ALL NATURAL GAS PIPING OUTDOORS WITH RUST INHIBITOR PAINT INCLUDING ZINC. COLOR OF PAINT SHALL BE YELLOW OR AS SELECTED BY ARCHITECT.

SHUT-OFF VALVE AT EACH ROOF TOP UNIT, SHUT-OFF VALVE SHALL BE PIPE SIZE AS SHOWN ON DRAWINGS AND SHALL NOT MATCH CONNECTION SIZE ON RTU. REDUCE NATURAL GAS CONNECTION AT RTU AS NECESSARY TO CONNECT TO RTU.

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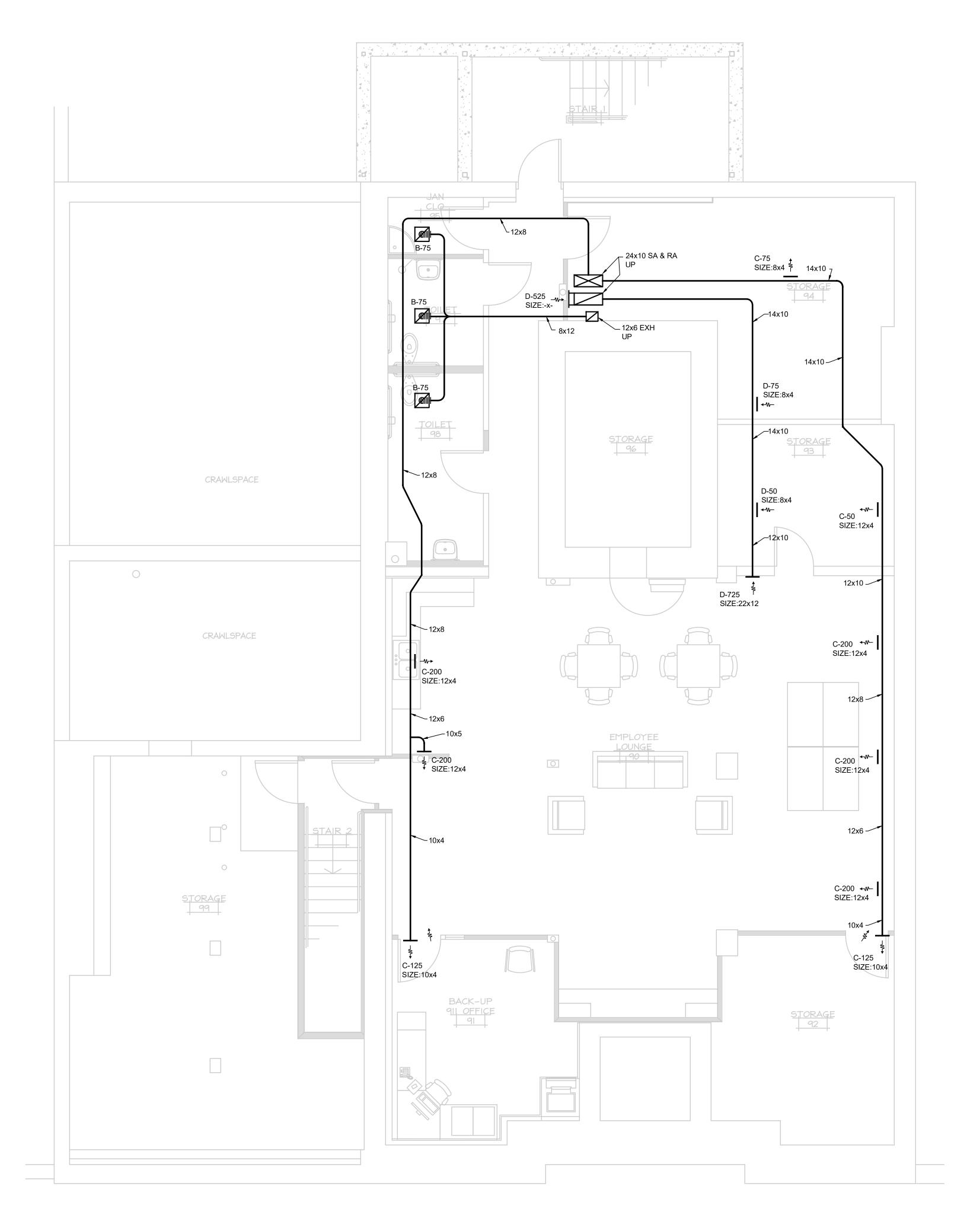
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M1.3

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26 47





- ALL NEW INDIVIDUAL BRANCH DUCTS SHALL BE SAME SIZE AS DIFFUSER, GRILLE OR VAB BOX INLET UNLESS NOTED OTHERWISE.
- 2. FIELD VERIFY EXACT LOCATION OF NEW TEMPERATURE CONTROL SENSORS.
- 3. TEST AND BALANCE CONTRACTOR SHALL BALANCE NEW DIFFUSERS AND GRILLES TO CFM'S SHOWN 1-10%.
- 4. NEW TEMPERATURE SENSORS SHALL BE TIED INTO EXISTING TEMPERATURE CONTROL SYSTEM.
- COORDINATE DIFFUSER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.

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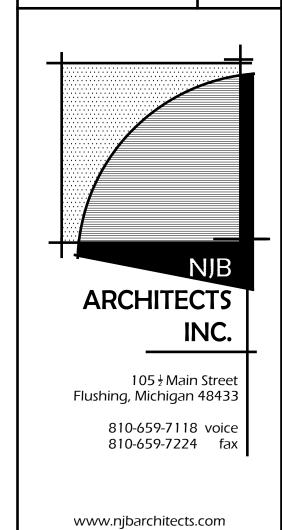
RENOVATIONS TO PEOPLE'S STATE BANK

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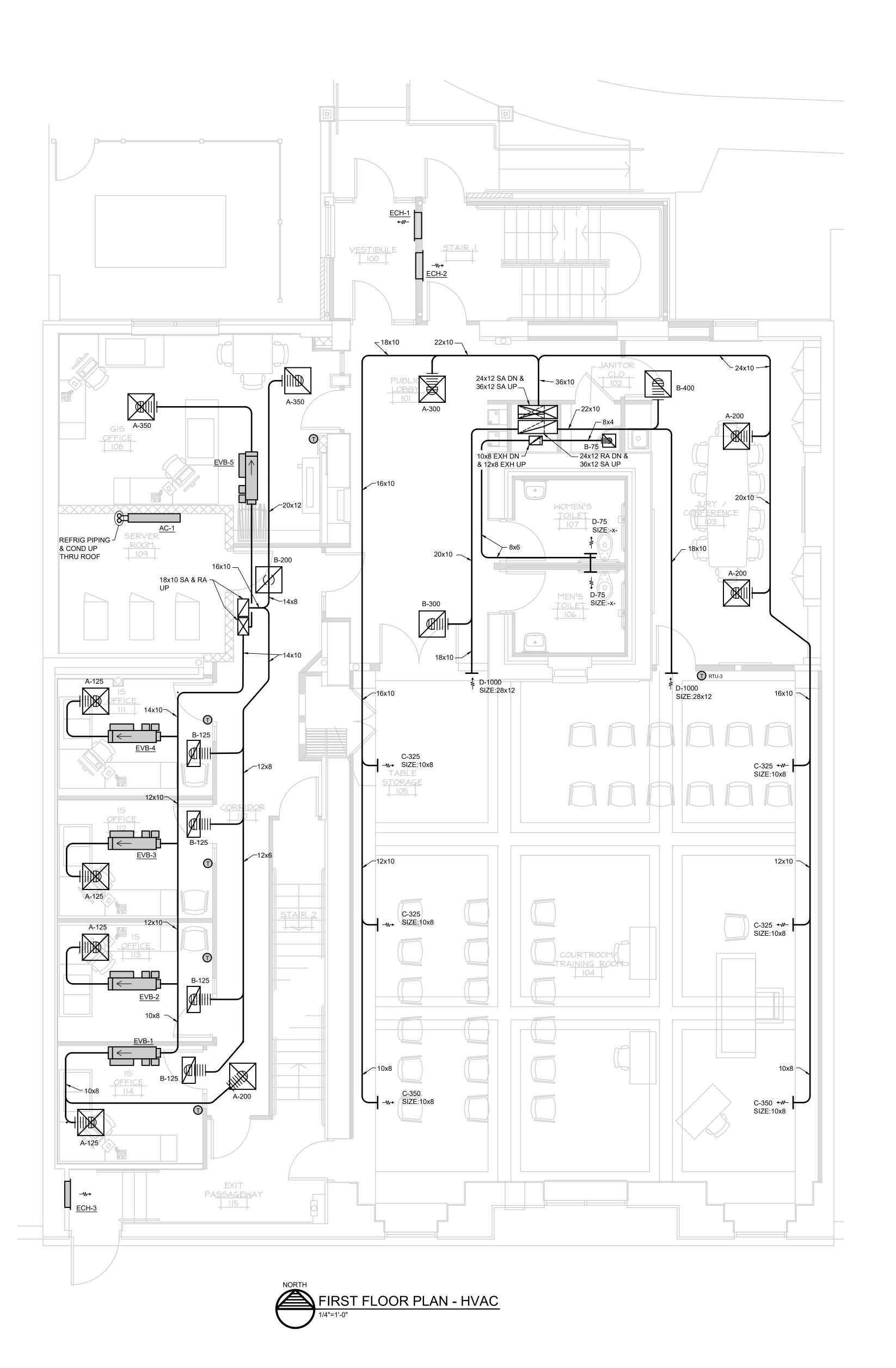
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LOWER LEVEL



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SHEET OF TOTAL SHEET:



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5. COORDINATE DIFFUSER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.

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~	BID DOCUMENTS	05/26/23	DWM	CAV	
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			220240	AS NOTED	
			CAD FILE	DATE	
				05/26/23	

RENOVATIONS TO PEOPLE'S STATE BANK FOR TUSCOLA COUNTY OFFICES CARO, MI CARO, MI FIRST FLOOR PLAN - HVAC

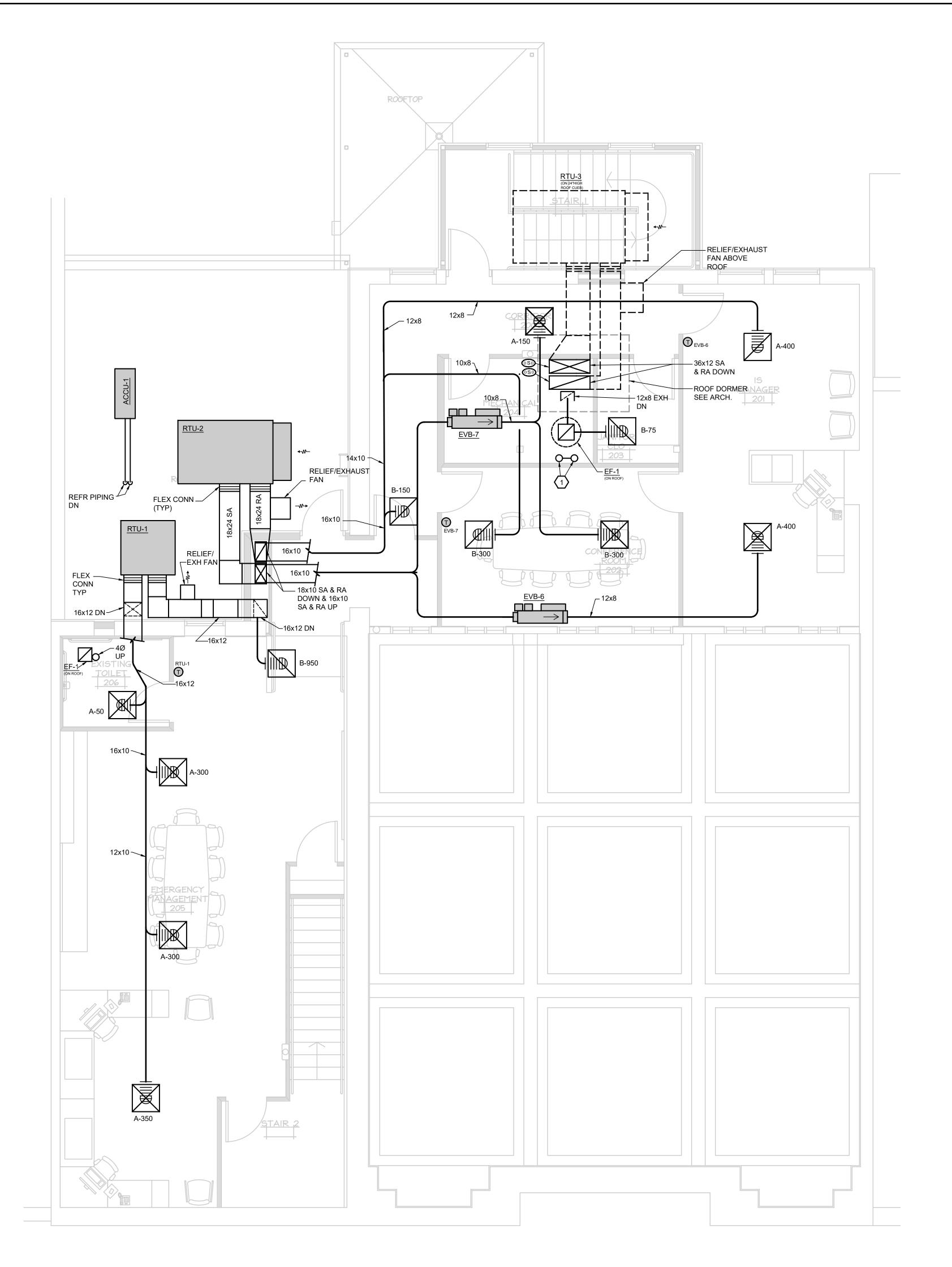
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M2.2





- ALL NEW INDIVIDUAL BRANCH DUCTS SHALL BE SAME SIZE AS DIFFUSER, GRILLE OR VAB BOX INLET UNLESS NOTED OTHERWISE.
- FIELD VERIFY EXACT LOCATION OF NEW TEMPERATURE CONTROL SENSORS.
- 3. TEST AND BALANCE CONTRACTOR SHALL BALANCE NEW DIFFUSERS AND GRILLES TO CFM'S SHOWN 1-10%.
- 4. NEW TEMPERATURE SENSORS SHALL BE TIED INTO EXISTING TEMPERATURE CONTROL SYSTEM.
- COORDINATE DIFFUSER AND GRILLE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.

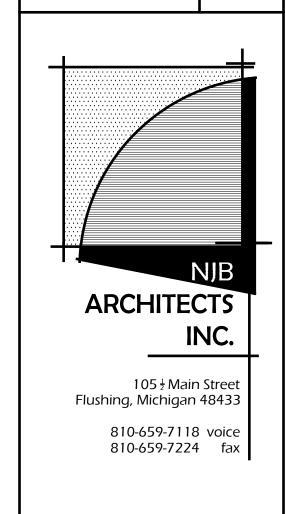
KEYED NOTES

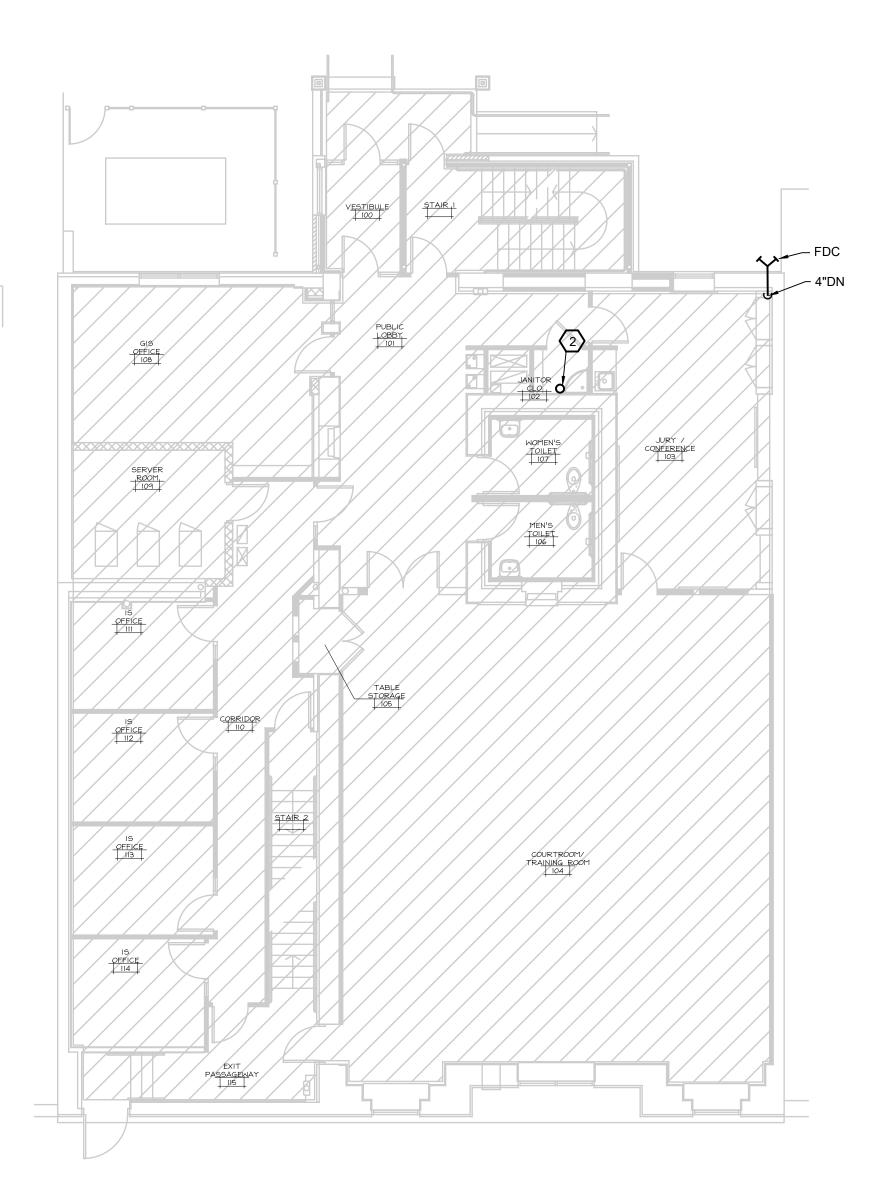
2"PVC VENT AND INTAKE FROM WATER HEATER THRU ROOF TO CONCENTRIC VENT KIT.

RENOVATIONS TO PEOPLE'S STATE BA

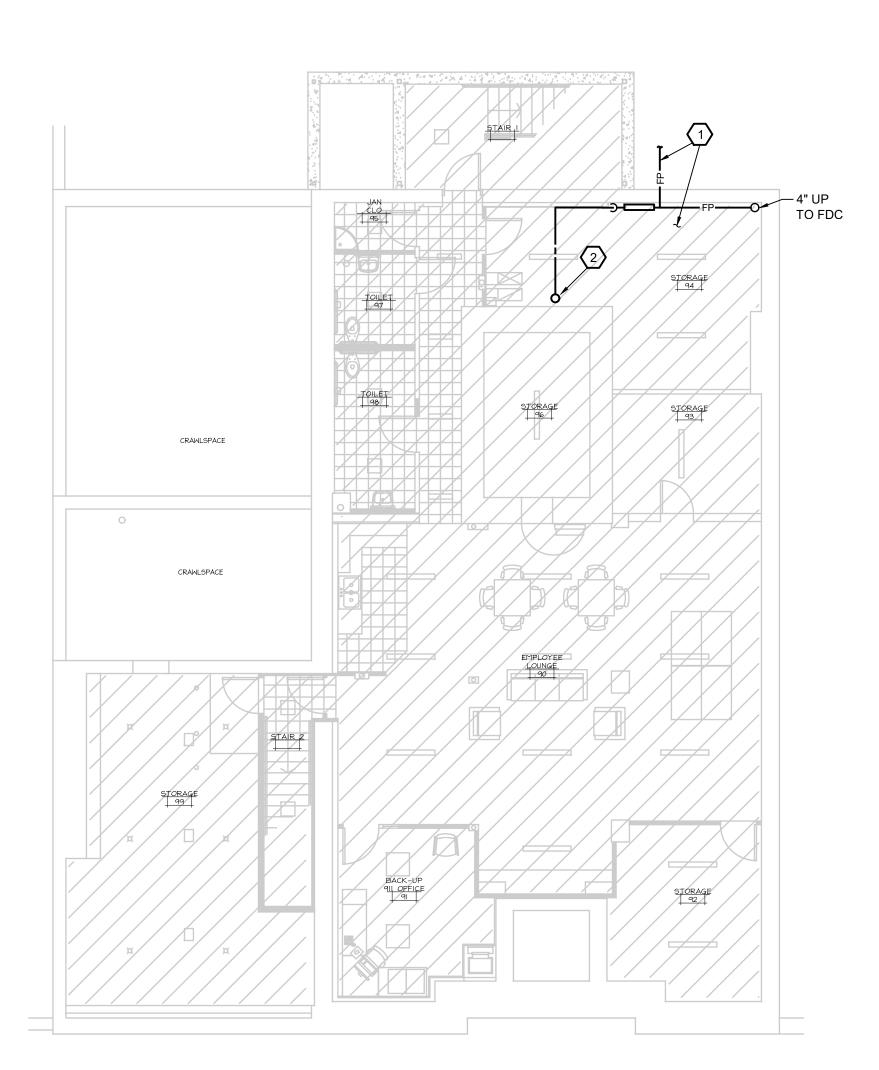
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SECOND FLOOR PLAN - H

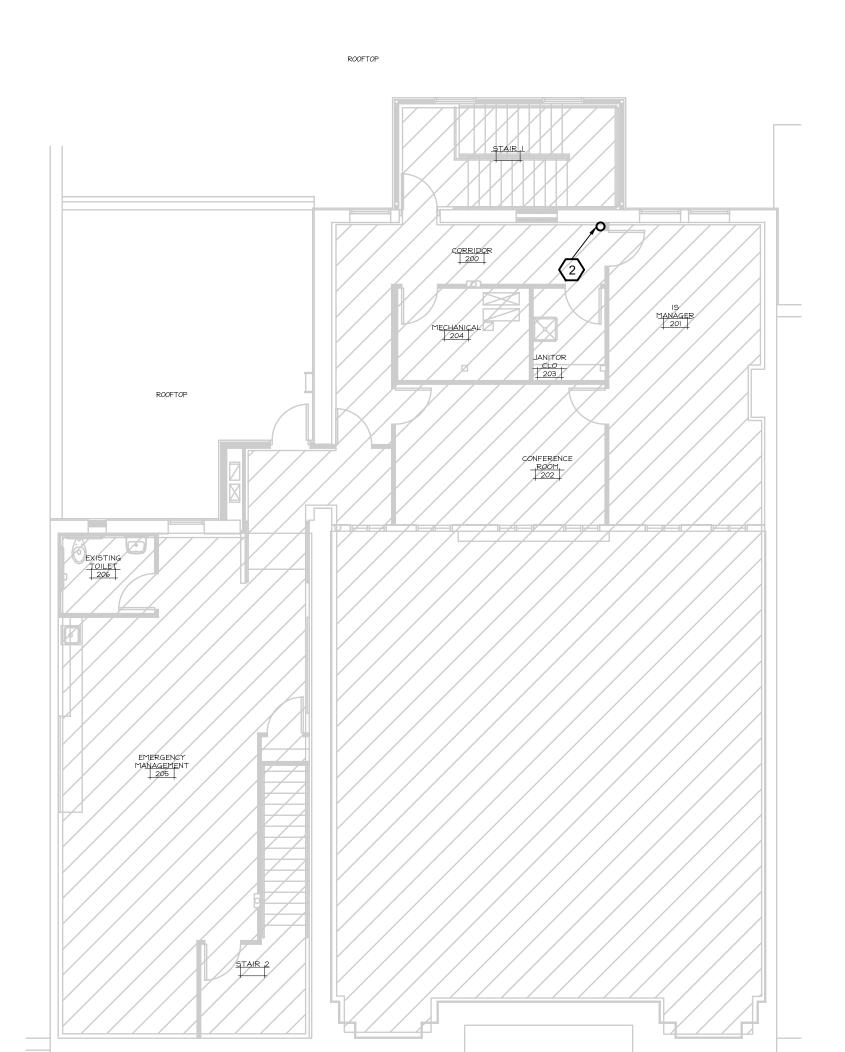








LOWER LEVEL PLAN - FIRE PROTECTION





FIRE PROTECTION NOTES

- 1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING THE SERVICES OF A LICENSED FIRE PROTECTION CONTRACTOR TO DESIGN, DETAIL AND INSTALL A FIRE PROTECTION SPRINKLER SYSTEM TO COVER THE NEW AND/OR REMODELED AREAS.
- 2. THE ENTIRE FIRE PROTECTION SYSTEM DESIGN AND INSTALLATION SHALL BE STRICTLY IN ACCORDANCE WITH NFPA 13 SPRINKLER SYSTEMS AND SHALL MEET THE REQUIREMENTS OF THE LOCAL AND STATE FIRE MARSHAL AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
- 3. ALL PERMITS, LICENSES, FEES, INSPECTIONS AND ARRANGEMENT/COORDINATION OF SUCH SHALL BE OBTAINED AND PAID FOR BY THE FIRE PROTECTION CONTRACTOR.
- 4. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE A FLOW TEST AND FURNISH COMPLETE DETAILED COMPUTER AIDED DESIGN (CAD) WORKING DRAWINGS OF THE SYSTEM AND SHALL SUBMIT THEM TO THE FIRE MARSHAL, ARCHITECT/ENGINEER, AND ALL AGENCIES REQUIRED BY CODE FOR THEIR REVIEW AND APPROVAL. NO WORK OR FABRICATION SHALL COMMENCE BEFORE THE DETAILED WORKING DRAWINGS OF THE SYSTEM, WITH THE AGENCIES APPROVALS, ARE SUBMITTED TO AND ARE REVIEWED BY THE ARCHITECT/ENGINEER. SYSTEM SHALL BE COMPLETE WITH OUTSIDE ALARM BELL, FLOW SWITCH, SUPERVISORY SWITCH ON SYSTEM CONTROL VALVE, HYDRAULIC DESIGN PLATE AT MAIN RISER, SPARE HEADS AND WRENCH, DOCUMENTATION, ETC.
- 5. THE FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND VERIFY TIE-IN LOCATION, ROUTING OF PIPING, LOCATION OF SPRINKLER HEADS WITH RESPECT TO DUCTS, EQUIPMENT, LIGHT FIXTURES, ETC. SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILES AND HALF TILES.
- 6. LAYOUT AND DESIGN OF THE SYSTEM SHALL BE BASICALLY AS DESIGNED FOR REQUIRED OCCUPANCY HAZARD. SECURITY TYPE HEADS SHALL BE USED IN SECURE AREAS. SYSTEMS SHALL BE SIZED BY HYDRAULIC CALCULATIONS PER NFPA PAMPHLET NO. 13. EXTENDED COVERAGE SPRINKLER HEAD SYSTEM WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL FROM ENGINEER.
- 7. DRAWINGS SHOW POSSIBLE LOCATION AND SIZE FOR FIRE PROTECTION WATER SERVICE. THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE FIRE PROTECTION WATER SERVICE SIZE BY VERIFICATION OF LOCAL WATER PRESSURE AND FLOW FROM THE LOCAL AUTHORITIES. THIS VERIFICATION SHALL BE PERFORMED DURING BIDDING AND NOTIFICATION TO THE ARCHITECT/ENGINEER OF ANY NECESSARY FIRE PROTECTION SERVICE CHANGES SHALL BE MADE 5 DAYS PRIOR TO BID DATE. THE COMPLETED SYSTEM SHALL BE IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
- 8. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ANY COST FOR REQUESTING AUTOCAD BACKGROUNDS FOR THEIR USE FROM THE ARCHITECT OR ENGINEER. THE COST WILL BE \$150.00 FOR THE FIRST PLAN, AND \$50.00 FOR EACH ADDITIONAL PLAN THAT MAY BE REQUESTED FOR AUTOCAD USE. A WAIVER OF RESPONSIBILITY FOR THE ARCHITECT AND ENGINEER RELATED TO CONTRACTOR USE OF THE CAD FILES SHALL BE SIGNED BY THE CONTRACTOR.
- 9. SEE SPECIFICATION FOR FURTHER INFORMATION AND REQUIREMENTS.

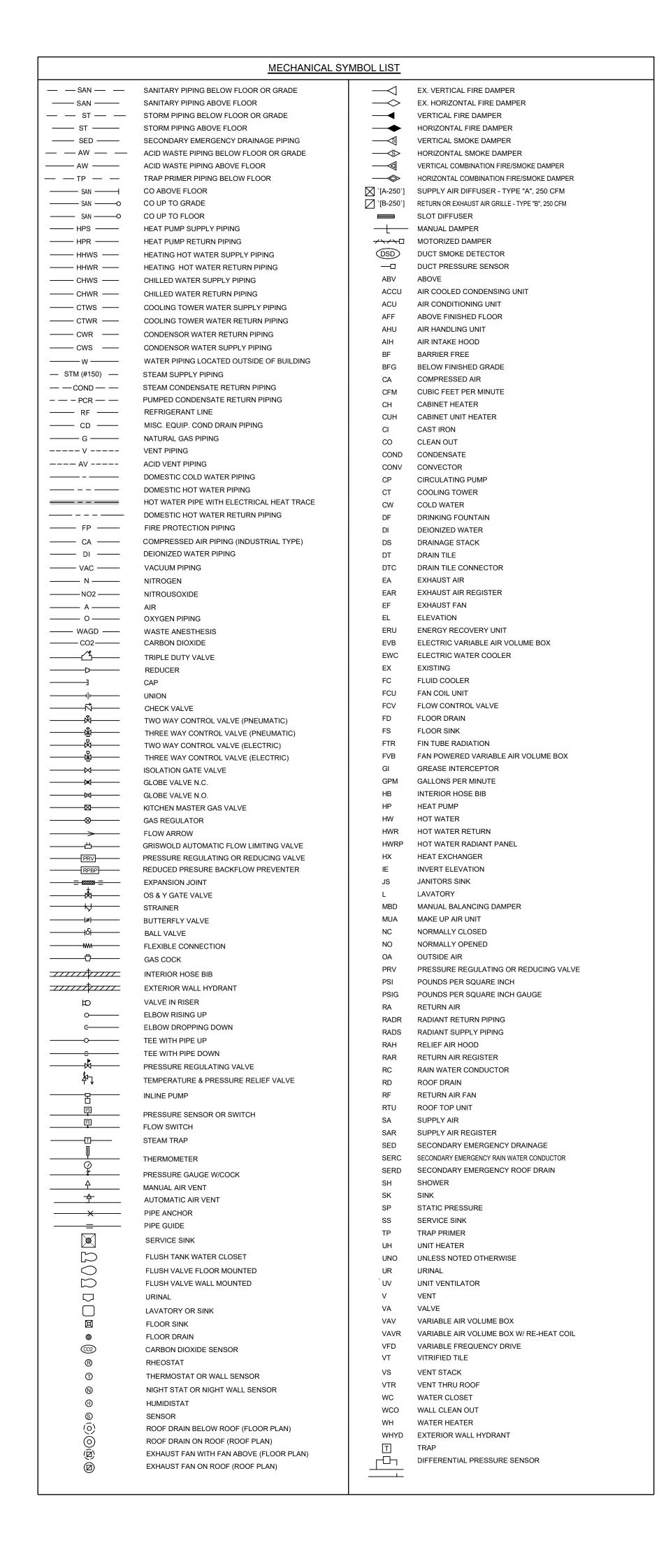
KEYED NOTES

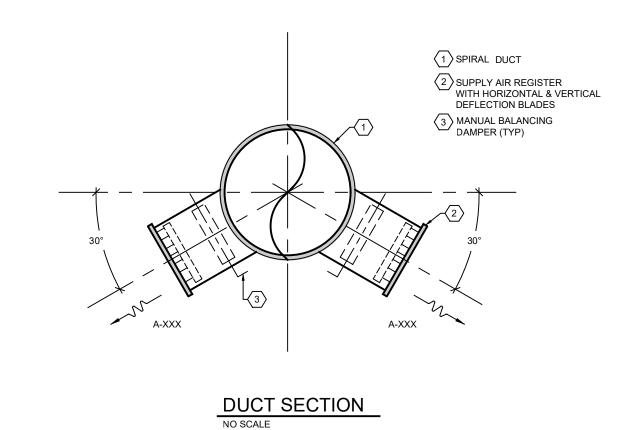
- FIRE PROTECTION SERVICE TO 5'-0" BEYOND BUILDING WALL. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL DESIGN, LAYOUT, FURNISH AND INSTALL THE FIRE PROTECTION SPRINKLER SYSTEM FOR THE ENTIRE BASEMENT, FIRST FLOOR AND SECOND FLOOR AREAS THAT ARE HATCHED.
- FIRE PROTECTION RISER UP SERVING FIRST AND SECOND FLOOR. FIELD VERIFY EXACT LOCATION.

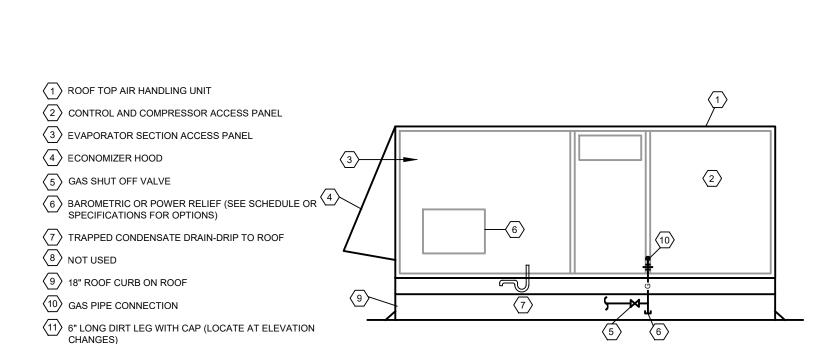
PLUMBIN

RENOVATIONS TO PEOPLE'S STANDARD TO SECOPTION OF STANDARD COUNTY

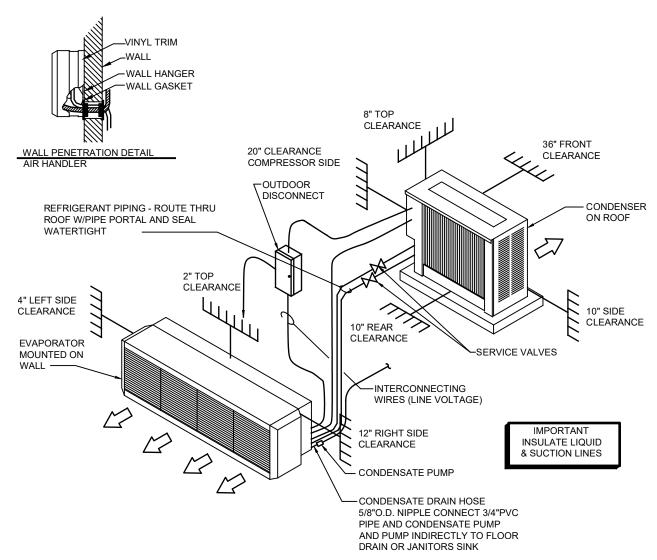
Flushing, Michigan 48433 810-659-7118 voice 810-659-7224 fax



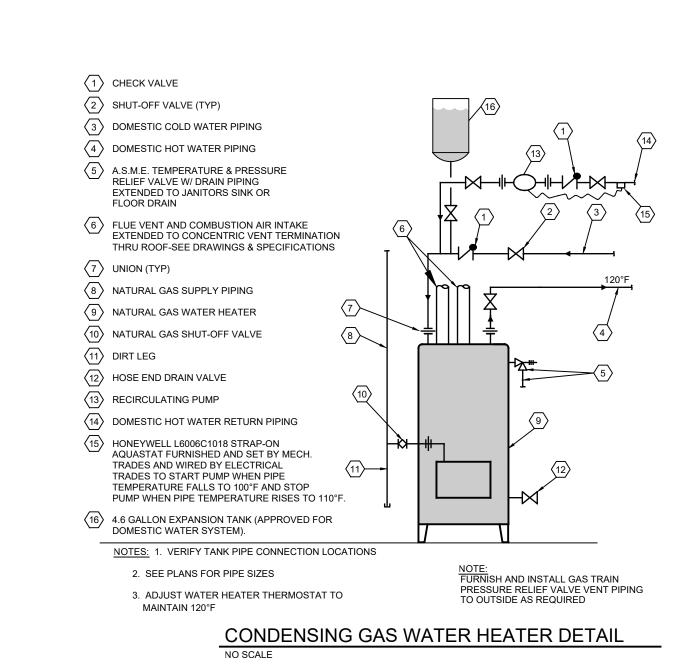


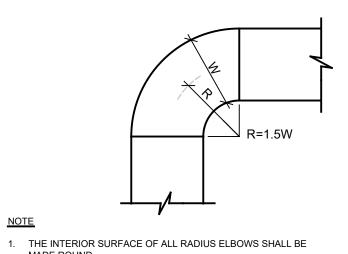


ROOF TOP UNIT DETAIL



SERVER ROOM AIR CONDITIONER INSTALLATION DETAIL NO SCALE (WALL MOUNTED)



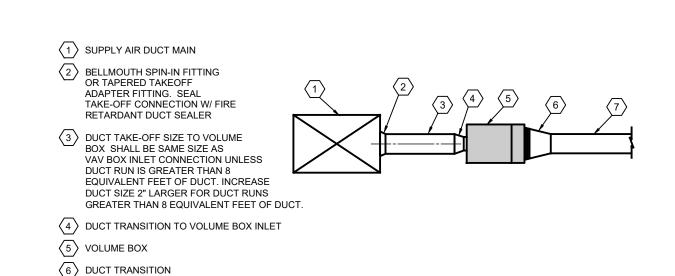


MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH A SQUARE VANE MITERED ELBOW. 3. NO MITERED ELBOWS WITHOUT VANES SHALL BE INSTALLED.

DUCTWORK RADIUS ELBOW

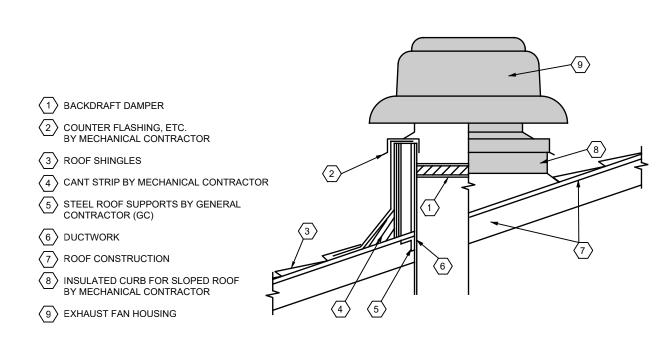
1 BRANCH DUCT 2 TRANSITION DAMPER WITH POSITIVE LOCKING WING NUT 4 FLEXIBLE INSULATED DUCT SIMILAR TO FLEXMASTER TYPE 3 OR APPROVED EQUAL MAXIMUM 5'-0" LENGTH 5 DIFFUSER OR GRILLE W/ ROUND NECK OR SQUARE TO ROUND NECK ADAPTER 6 LAY-IN CEILING TAKE-OFF FITTING SIMILAR TO FLEXMASTER MODEL #CB-D CONICAL BELL MOUTH FITTING WITH DAMPER AND POSITIVE LOCKING WING NUT

BRANCH DUCT CONNECTION TO DIFFUSER OR GRILLE DETAIL

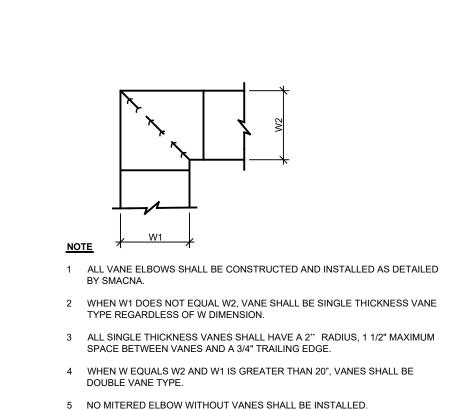


VOLUME BOX DUCTING DETAIL

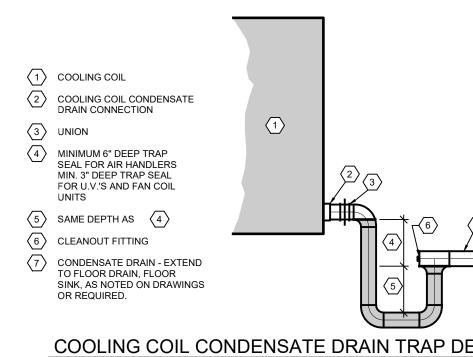
7 SUPPLY AIR DUCT TO DIFFUSERS



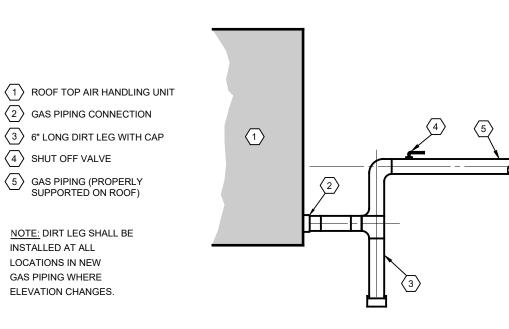
PITCHED ROOF EXHAUST FAN DETAIL



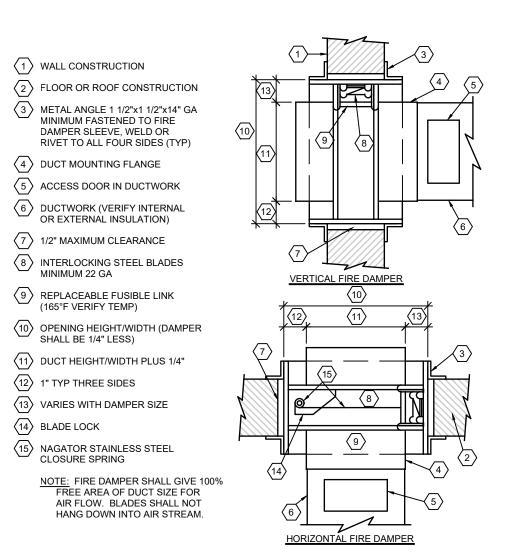
DUCTWORK SQUARE VANE MITERED ELBOWS



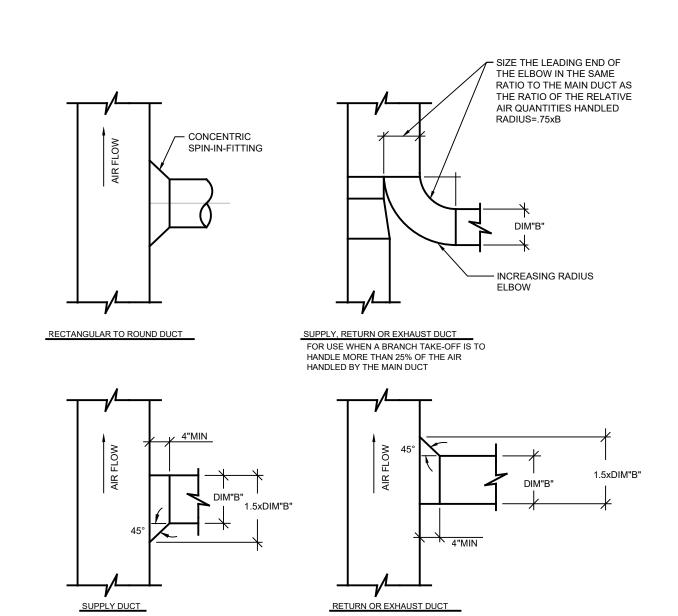
COOLING COIL CONDENSATE DRAIN TRAP DETAIL



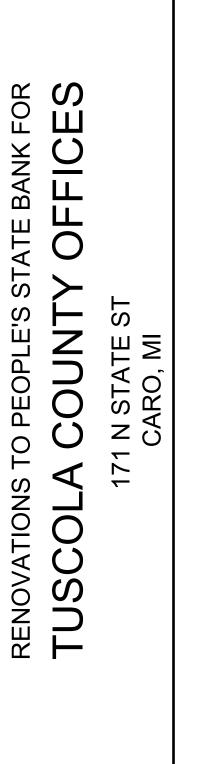
ROOF TOP UNIT GAS PIPING DETAIL GAS PIPING ABOVE ROOF NO SCALE



FIRE DAMPER DETAIL



RECTANGULAR DUCT BRANCH TAKE-OFF DETAILS



105 ½ Main Street Flushing, Michigan 48433 810-659-7118 voice 810-659-7224 fax

ROOFTOP UNIT SCHEDULE

- RTU-1: TRANE CONVERTIBLE #4YCC4030A1070A GAS/ELECTRIC 2.5 TON HORIZONTAL ROOFTOP UNIT. 900 CFM AT .50" EXTERNAL STATIC PRESSURE, ½ H.P., 1050 FRPM CONSTANT TORQUE ECM MOTOR, 208V-3PH, 22.6 MCA, 35 AMP MAXIMUM CIRCUIT BREAKER.
- COOLING PERFORMANCE: 28,200 BTUH GROSS COOLING CAPACITY. 80/67F EDB/EWB, 1 SCROLL COMPRESSOR. 12.0 EER/14.0 SEER R410A REFRIGERANT.
- HEATING PERFORMANCE: 70,000 BTUH NATURAL GAS INPUT, 30/60 MIN/MAX DEGREE. TEMPERATURE RISE 81%
- RTU-2: TRANE PRECEDENT#YSC060G3R0Z GAS/ELECTRIC 5 TON DOWNFLOW (HORIZONTAL) ROOFTOP UNIT. 2000 CFM AT .50" EXTERNAL STATIC PRESSURE, 1.5 H.P., 208V-3PH, 29 MCA, 40 AMP MAXIMUM CIRCUIT BREAKER.

 COOLING PERFORMANCE: 60,000 BTUH GROSS COOLING CAPACITY, 58,500 BTUH ARI NET COOLING CAPACITY.
- 80/67F EDB/EWB, 1 SCROLL COMPRESSOR. 12.0 EER/14.0 SEER, R410A REFRIGERANT.

 HEATING PERFORMANCE: 150,000 BTUH NATURAL GAS INPUT, 105,000 BTUH OUTPUT. 81% AFUE.
- RTU-3: TRANE PRECEDENT#YSC120H3ROZ GAS/ELECTRIC 10 TON HORIZONTAL ROOFTOP UNIT. 4,000 CFM AT .50" EXTERNAL STATIC PRESSURE, 3.45 H.P., DIRECT/VARIABLE DRIVE 208V-3PH, 49 MCA, 60 AMP MAXIMUM CIRCUIT
- COOLING PERFORMANCE: 116,000 BTUH GROSS COOLING CAPACITY, 113,000 BTUH ARI NET COOLING CAPACITY. 80/67F EDB/EWB, 2 SCROLL COMPRESSORS. 12.9/EER R410A REFRIGERANT.
- HEATING PERFORMANCE: 188,000 BTUH NATURAL GAS INPUT, 131,600 BTUH OUTPUT. 80% AFUE.

RTU NOTES:

- 1. THE MECHANICAL TRADE SHALL VERIFY UNIT CONFIGURATION (HORIZONTAL OR DOWNFLOW) WITH SCHEDULE
- LISTED ABOVE AND PROJECT DESIGN DRAWINGS.

 2. UNITS SHALL HAVE REFERENCE ENTHALPY BASED ECONOMIZERS WITH POWER RELIEF EXHAUST FAN AND LOW AMBIENT CONTROL FOR OPERATION IN 0 DEGREES F AMBIENT CONDITION.
- 3. FURNISH PREFABRICATED ROOF CURB FOR EACH UNIT, WITH HEIGHT OF CURB TO GIVE MINIMUM 12" CLEAR FROM FINISHED ROOF TO CURB CAP. THE MECHANICAL TRADE SHALL FURNISH AND SET IN PLACE/LEVEL THE ROOF CURB. THE GENERAL TRADE SHALL PERFORM ALL ROOFING, FLASHING ETC.
- 4. MECHANICAL TRADES SHALL FILL ALL OPEN VOIDS IN CURB (BETWEEN DECK AND BOTTOM OF RTU) WITH SPRAY FOAM INSULATION FOR ACOUSTICAL PURPOSES.
- ALL UNITS SHALL HAVE 4" THICK HIGH EFFICIENCY THROW AWAY FILTERS.
 OUTSIDE AIR INTAKE DAMPERS SHALL BE ULTRA LOW-LEAK TYPE WITH BLADE AND JAMB SEALS.
- 7. MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
- 8. EACH RTU TO HAVE:A. SERVICE VALVES ON LIQUID, SUCTION AND DISCHARGE LINES.
- B. THRU-THE-BASE ELECTRICAL PROVISION.
 C. NON-FUSED DISCONNECT SWITCH WITH EXTERNAL HANDLE.
- D. TRANE COMMUNICATION INTERFACE WITH SUPPLY AIR SENSING AND CLOGGED FILTER SWITCH. E. VENTILATION OVERRIDE.
- F. HINGED SERVICE ACCESS.
- G. CONDENSER COIL GUARDS.H. SLOPED STAINLESS STEEL DRAIN PANS.
- 9. ALL UNITS OVER 2000 CFM SHALL HAVE DRY CONTACTS FOR DUCT SMOKE DETECTOR CIRCUIT FACTORY WIRED TO STOP UNIT UPON DETECTION OF SMOKE. TWO DUCT SMOKE DETECTORS FOR EACH RTU AND REMOTE WIRING FURNISHED BY ELECTRICAL TRADES. SENSING TUBES FOR DUCT SMOKE DETECTORS SHALL BE INSTALLED BY MECHANICAL TRADES. THE DUCT SMOKE DETECTORS SHALL BE POWERED FROM AN INDEPENDENT CIRCUIT AND
- NOT THROUGH THE RTU POWER CIRCUIT.

 9. (WITH NO FIRE ALARM) ALL UNITS SHALL HAVE DRY CONTACTS FOR DUCT SMOKE DETECTOR CIRCUIT FACTORY WIRED TO STOP UNIT UPON DETECTION OF SMOKE. TWO DUCT SMOKE DETECTORS FOR EACH RTU AND REMOTE WIRING FURNISHED BY MECHANICAL TRADES. MECHANICAL TRADES SHALL BE RESPONSIBLE FOR POWER AND CONTROL WIRING TO DUCT SMOKE DETECTORS AND SHALL POWER THE DUCT SMOKE DETECTORS THROUGH AN INDEPENDENT CIRCUIT AND NOT THROUGH THE RTU POWER CIRCUIT. SENSING TUBES FOR DUCT SMOKE DETECTORS SHALL BE INSTALLED BY MECHANICAL TRADES.
- 10. THE MECHANICAL TRADES SHALL BE RESPONSIBLE FOR COMPLETING ALL LOW-VOLTAGE WIRING, CONDUIT, AND ASSOCIATED POWER SUPPLY NECESSARY FOR A COMPLETE AND OPERATIONAL TEMPERATURE CONTROL SYSTEM. REFER TO THE ELECTRICAL DRAWINGS FOR AVAILABLE 120 VOLT POWER LOCATIONS. THE ELECTRICAL TRADE SHALL BE RESPONSIBLE FOR PROVIDING THE MAIN POWER FEED FOR ALL MECHANICAL EQUIPMENT. REFER TO THE ELECTRICAL DRAWINGS FOR CLARIFICATION OF ELECTRICAL TRADES FURNISHED POWER.
- 11. FURNISH 5 YEAR COMPRESSOR WARRANTY FOR ROOFTOP UNITS.
 12. FURNISH ONE YEAR OF COMPLETE SERVICE AND MAINTENANCE OF ROOFTOP UNITS. INCLUDE CHECK TEST AND START-UP OF ROOFTOP UNITS AND CONTROL SYSTEM. PROVIDE FACTORY AND FIELD WIRING DIAGRAMS, AND PROVIDE TECHNICAL ASSISTANCE AS REQUIRED TO ASSURE FIRST CLASS OPERATING SYSTEMS.

DIFFUSER AND GRILLE SCHEDULE

TYPE A: <u>SUPPLY AIR DIFFUSER (4- WAY THROW)</u>: PRICE #SMDA-4 OR EQUAL CARNES OR T&B SQUARE CEILING SUPPLY DIFFUSER, ALL STEEL CONSTRUCTION, ADJUSTABLE HORIZONTAL TO VERTICAL AIRFLOW PATTERN, (OPPOSED BLADE DAMPER), BAKED-ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AS REQUIRED FOR CEILING TYPE WITH DIFFUSER PANEL TO MATCH GRID SIZE WHERE INSTALLED IN A LAY IN CEILING. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25.

 CFM
 NECK SIZE
 CFM
 NECK SIZE

 0-125
 6"X6" (6" DIA.)
 451-600
 15"X15" (14" DIA.)

 126-250
 9"X9" (8" DIA.)
 601-900
 18"X18" (16" DIA.)

 251-350
 12"X12" (10" DIA)
 901-1200
 21"X21"

 351-450
 12"X12" (12" DIA.)

TYPE B: <u>CEILING RETURN AIR OR EXHAUST AIR GRILLE</u>: PRICE SMD-4 OR EQUAL CARNES OR T&B SQUARE CEILING SUPPLY DIFFUSER USED AS A RETURN OR EXHAUST GRILLE, ALL STEEL CONSTRUCTION, (OPPOSED BLADE DAMPER), BAKED-ON ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT. FRAME AS REQUIRED FOR CEILING TYPE, WITH DIFFUSER PANEL TO MATCH GRID SIZE FOR LAY-IN CEILINGS. MAXIMUM NECK VELOCITY SHALL BE 700 FPM AND MAXIMUM NC LEVEL SHALL BE 25.

 CFM
 NECK SIZE
 CFM
 NECK SIZE

 0-125
 6"X6" (6" DIA.)
 451-600
 15"X15" (14" DIA.)

 126-250
 9"X9" (8" DIA.)
 601-900
 18"X18" (16" DIA.)

 251-350
 12"X12" (10" DIA)
 901-1200
 21"X21"

 351-450
 12"X12" (12" DIA.)

TYPE D: WALL RETURN OR EXHAUST GRILLE: PRICE 530DL (530DS) OR EQUAL CARNES OR T&B WALL RETURN OR EXHAUST GRILLE, ALL STEEL CONSTRUCTION, BAKED-ON ENAMEL FINISH WITH COLOR BY ARCHITECT. ONE SET OF HORIZONTAL BLADES SET AT 35 DEGREES. IF GRILLE SIZE REQUIRES 2 OR MORE SECTIONS, DECREASE WIDTH OF TRIM AT JOINT AS MUCH AS POSSIBLE. [48" MAXIMUM DIMENSION FOR SINGLE SECTION]

EXHAUST FAN SCHEDULE

- EF-1: GREENHECK #G-098-1/6 CENTRIFUGAL DIRECT DRIVE ROOF MOUNTED EXHAUST FAN, 574 CFM AT .50" SP, 8.9 SONES, 1490 FAN RPM, .12 HP, 115 VOLT MOTOR WITH MINIMUM 18" HIGH INSULATED PREFABRICATED ROOF CURB WITH CANT TO MATCH ROOF INSULATION, GALVANIZED BIRDSCREEN, GRAVITY BACKDRAFT DAMPER, FACTORY MOUNTED NEMA 1 DISCONNECT SWITCH MOUNTED AND WIRED, INTERNAL CONDUIT CHASE. FAN TO BE U.L.-705 LISTED. 525 CFM TOTAL SHALL BE BALANCED TO EXHAUST GRILLES OR INLETS.
- EF-2: GREENHECK #SP-APO511WL CEILING EXHAUST FAN, 80 CFM AT .25" SP, 1.2 SONES, 878 FAN RPM, .25 AMPS, 16.7 WATTS, 115 VOLT, WITH INTEGRAL BACKDRAFT DAMPER, INLET GRILLE, SPEED CONTROLLER FOR MOUNTING ON FAN HOUSING TO ALLOW AIR BALANCING OF EXHAUST FAN, AND MODEL WC ROUND CONNECTION ALUMINUM WALL CAP WITH BUILT-IN DAMPER. FAN SHALL HAVE ISOLATION KIT AND DISCHARGE ACCESS. FAN TO BE U.L -705 LISTED. 75 CFM TOTAL SHALL BE BALANCED TO EXHAUST GRILLES OR INLETS.

NOTES: 1. EXHAUST FANS SHALL BE RATED FOR CONTINUOUS OPERATION.

- 2. ALL EXHAUST FANS 120 VOLT SHALL BE FURNISHED WITH A FACTORY MOUNTED DISCONNECT SWITCH BY THE MECHANICAL TRADES. THE TEMPERATURE CONTROL CONTRACTOR SHALL TIE INTO THE POWER RELAY FOR CONTROL OF THE EXHAUST FANS.
- 3. ALL EXHAUST FANS SHALL HAVE THE ELECTRICAL TRADE FURNISH AND INSTALL A COMBINATION STARTER DISCONNECT. THE TEMPERATURE CONTROL CONTRACTOR SHALL TIE IN TO THE COMBINATION STARTER FOR CONTROL OF THE EXHAUST FAN.
- 4. FURNISH AN INSULATED ROOF CURB FOR EACH EXHAUST FAN TO GIVE MINIMUM 12" CLEAR FROM FINISHED ROOF MEMBRANE TO LOWEST EDGE OF ROOF CURB TOP. THE MECHANICAL TRADE SHALL FURNISH, SET IN PLACE, LEVEL AND FASTEN ROOF CURB TO ROOF DECK AND SUPPORT STEEL. THE GENERAL TRADE SHALL MAKE ALL FINAL ROOFING AND FLASHING INSTALLATION.

WATER HEATER SCHEDULE

- WH-1: LOCHINVAR #PRN40ES DIRECT VENT NATURAL GAS WATER HEATER, 38 GALLON CAPACITY, 40,000 BTUH NATURAL GAS INPUT, 45 GALLON PER HOUR RECOVERY AT 90 DEGREES F RISE, 110V-1-60HZ., 2.1 AMPS VENT WITH 3" PVC VENT AND INTAKE UP TO 3" CONCENTRIC VENT KIT.
- NOTES:

 1. FURNISH ASME TEMPERATURE AND PRESSURE RELIEF VALVE FOR EACH WATER HEATER, EXTEND DRAIN PIPING TO FLOOR DRAIN OR JANITOR'S SINK.
- 2. WATER HEATER SHALL BE SET TO 140 DEGREES F HOT WATER TEMPERATURE.
- 3. FURNISH AND INSTALL CHECK VALVE IN INCOMING COLD WATER LINE AND AN EXPANSION TANK IN COLD WATER LINE BETWEEN HEATER AND CHECK VALVE.
- 4. FURNISH MANUAL RESET HIGH LIMIT, ALARM BELL, CONTACTS FOR FLAME FAILURE, LOW WATER CUT OFF WITH MANUAL RESET AND CONTACT FOR COMBUSTION DAMPER CONTROL.
- 5. FURNISH AND INSTALL A 1 1/2" DEEP GALVANIZED STEEL SECONDARY DRAIN PAN WITH DRAIN OUTLET FOR WATER HEATER. EXTEND DRAIN PIPING TO F.D. OR JANITORS CLOSET.

EWH-1: EMAX MODEL NO. SPEX 1812, 1.81 LW 120 VOLT ELECTRIC TANKLESS WATER HEATER.

MISCELLANEOUS PLUMBING EQUIPMENT SCHEDULES

EXPANSION TANK FOR DOMESTIC WATER HEATER: BELL & GOSSETT PT-12, 4.7 GALLONS, 3.2 GALLON ACCEPTANCE, DIAPHRAGM TANK WITH POLYPROPYLENE LINER, AIR CHARGING VALVE, AND PRECHARGED TO 40 PSI.

RCP-1:DOMESTIC HWR PUMP: BELL & GOSSETT NBF-25 ALL BRONZE 3 SPEED CIRCULATOR RATED FOR 2 GPM MODEL TC-1 AUTOMATIC TIMER KIT SET TO OPERATE THE PUMP DURING THE OWNERS SPECIFIED HOURS OF OPERATION. THE MECHANICAL CONTRACTOR SHALL FURNISH AND SET A HONEYWELL L6006C1018 STRAP-ON AQUASTAT AND ADJUST TO START PUMP WHEN PIPE TEMPERATURE FALLS BELOW 126 DEGREES AND STOP PUMP WHEN PIPE TEMPERATURE RISES ABOVE 135 DEGREES. ELECTRICAL TRADES WILL PROVIDE STARTER WITH THERMAL OVERLOAD ELEMENTS AND ALL WIRING.

GENERAL MECHANICAL NOTES

- 1. THE MECHANICAL TRADES SHALL FAMILIARIZE THEMSELVES WITH ALL EXISTING AND NEW CONDITIONS, THESE DRAWINGS, ADDENDA & RELATED SPECIFICATIONS. THEY SHALL COMPLETELY SATISFY THEMSELVES AS TO THE CONDITIONS TO WHICH THE WORK IS TO BE PERFORMED BEFORE SUBMITTING THEIR BID. NO ALLOWANCES OR CONSIDERATIONS WILL BE GIVEN AT A LATER DATE FOR ALLEGED MISUNDERSTANDINGS AS TO THE REQUIREMENTS OF THE WORK, MATERIALS TO BE FURNISHED, OR CONDITIONS REQUIRED BY THE NATURE OF THIS PROJECT SITE DUE TO NEGLECT ON THE BIDDERS PART TO MAKE SUCH AN EXAMINATION AND
- 2. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW APPROXIMATE LOCATION AND GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT. DRAWINGS SHALL NOT BE SCALED FOR LOCATION OF SYSTEMS, EQUIPMENT, ETC. ALL LOCATIONS OF SYSTEMS AND EQUIPMENT SHALL BE VERIFIED IN FIELD AND COORDINATED WITH ALL OTHER TRADES AND EXISTING FIELD CONDITIONS. SOME SYSTEMS (PIPING, DUCTWORK, ETC.) AND EQUIPMENT LOCATIONS MAY REQUIRE CHANGES IN LOCATION DUE TO FIELD CONDITIONS AND COORDINATION WITH OTHER TRADES. THESE CHANGES SHALL BE MADE WITH NO ADDITIONAL COST TO THE OWNER. FAILURE TO VERIFY AND COORDINATE WILL BE NO REASON FOR ADDITIONAL COMPENSATION.
- 3. THE INSTALLATION OF ALL SYSTEMS, EQUIPMENT, ETC., IS SUBJECT TO CLARIFICATION WITH SUBMITTED SHOP DRAWINGS AND FIELD COORDINATION REQUIREMENTS. EQUIPMENT OUTLINES SHOWN ON DRAWINGS OR DIMENSIONED ON DRAWINGS ARE LIMITING DIMENSIONS. ANY EQUIPMENT THAT REDUCES THE INDICATED CLEARANCES OR EXCEEDS SPECIFIED OR SCHEDULED EQUIPMENT DIMENSIONS SHALL NOT BE USED.
- 4. THE MECHANICAL CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL EQUIPMENT WITH PIPING, DUCTWORK, ETC., AT THE TIME OF ROUGH-IN. ALL EQUIPMENT TO BE SERVICEABLE. ABOVE CEILING EQUIPMENT SHALL BE WITHIN 18" OF CEILING WITHOUT ANY OBSTRUCTIONS AND SHALL HAVE ALL SERVICE AND ACCESS SPACES KEPT CLEAR. PERFORM ABOVE CEILING COORDINATION WITH ALL TRADES.
- 5. THESE DRAWINGS AND THE ASSOCIATED SPECIFICATIONS ARE INTENDED TO PROVIDE COMPLETELY FURNISHED, INSTALLED AND OPERATIONAL MECHANICAL SYSTEM (HEATING, VENTILATING, AIR CONDITIONING, PLUMBING AND PIPING, ETC.). IF THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS HAVE INFORMATION OMITTED THAT WOULD NOT ALLOW A COMPLETELY OPERATIONAL SYSTEM AS IS THE INTENT OF THE ENGINEER, THE BIDDER SHALL NOTIFY THE ENGINEER A MINIMUM ONE WEEK PRIOR TO THE BID DATE TO ALLOW FOR ADDENDA. ONCE BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL, LABOR, ETC., TO FURNISH AND INSTALL A COMPLETELY OPERATIONAL MECHANICAL SYSTEM AS IS THE INTENT OF THESE DRAWINGS AND ASSOCIATED SPECIFICATION. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. IF ANY DISCREPANCIES ARE ON DRAWINGS, AS COMPARED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND INSTALL EQUIPMENT AS REQUIRED AT NO ADDITIONAL COST TO THE PROJECT.
- 6. THE MECHANICAL TRADES SHALL TAKE OUT ALL PERMITS AND ARRANGE FOR NECESSARY INSPECTIONS AND SHALL PAY ALL FEES AND COSTS.
- 7. THE MECHANICAL TRADES SHALL VERIFY AMOUNT OF EXISTING PIPING, VALVES, DUCTWORK, ETC. TO BE REMOVED OR RELOCATED TO ALLOW FOR INSTALLATION OF NEW PIPING, DUCTWORK, VALVES, EQUIPMENT, WALLS, ETC. ALL ABANDONED PIPING, VALVES, ETC., SHALL BE REMOVED.
- 8. THE MECHANICAL TRADES SHALL COORDINATE ALL WORK WITH OTHER TRADES AND SHALL COORDINATE ANY SYSTEMS SHUT-DOWN WITH THE ARCHITECT/ENGINEER AND OWNER.
- 9. ALL EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. THAT IS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL REMOVE AND LOCATE THIS MATERIAL THAT REMAINS THE PROPERTY OF THE OWNER TO A LOCATION DETERMINED BY THE OWNER SOMEWHERE ON SITE. IF THE OWNER DOES NOT WANT TO MAINTAIN POSSESSION OF THE REMOVED MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING MATERIAL FROM THE SITE AND DISPOSING OF THIS MATERIAL AS NECESSARY TO MEET ALL CODES AND REQUIREMENTS AND SHALL PAY ALL COSTS AS REQUIRED FOR ANY DISPOSAL FEES, INSPECTIONS, PERMITS, ETC.
- 10. ATTACHMENTS OF MECHANICAL OR ELECTRICAL EQUIPMENT TO STRUCTURAL MEMBERS ARE THE RESPONSIBILITY OF THE INSTALLING TRADE. STRUCTURAL MEMBERS SHALL NOT BE FIELD CUT, WELDED OR OTHERWISE MODIFIED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. ATTACHMENT TO STEEL JOISTS SHALL BE MADE AT PANEL POINTS WHENEVER POSSIBLE. STEEL JOISTS SHALL BE REINFORCED FOR NON-PANEL POINT CONCENTRATED LOADS IN ACCORDANCE WITH THE STRUCTURAL DETAILS; THIS WORK SHALL BE PERFORMED BY CERTIFIED WELDERS AND IS THE RESPONSIBILITY OF THE TRADE INSTALLING THE SUBJECT LOAD. STRUCTURAL MEMBERS SHALL NOT BE OVERLOADED AS A RESULT OF ATTACHMENTS. ATTACHMENT/EQUIPMENT LOADING FOR ALL TRADES RESULTING IN TOTAL LOAD GREATER THAN AN EQUIVALENT UNIFORM 5 PSF FOR ANY MEMBER SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW.
- 11. THE MECHANICAL TRADES SHALL FURNISH AND LOCATE CEILING AND/OR WALL ACCESS DOORS AS REQUIRED TO GIVE ACCESS TO VALVES, EQUIPMENT, ETC. COORDINATE WALL OR CEILING FIRE RATINGS AND FURNISH ACCESS DOOR WITH RATING AS NECESSARY. THE GENERAL TRADES SHALL INSTALL ACCESS DOORS.
- 12. FURNISH PREFABRICATED ROOF CURB FOR EACH EXHAUST FAN, WITH HEIGHT OF CURB TO GIVE MINIMUM 12"
 CLEAR FROM FINISHED ROOF TO EXHAUST FAN CURB CAP. THE MECHANICAL TRADE SHALL FURNISH THE ROOF
 CURB TO THE GENERAL TRADE. THE GENERAL TRADE SHALL LEVEL CURB, PERFORM ALL ROOFING AND FLASHING
- 13. SEE SPECIFICATION FOR FURTHER INFORMATION.

SPECIFIED AND SCHEDULED EQUIPMENT NOTE

EQUIPMENT MANUFACTURERS AND MATERIALS SPECIFIED OR SCHEDULED ON THESE PROJECT DRAWINGS AND SPECIFICATIONS SHALL BE INCLUDED UNDER THE BASE BID PRICE. SUBSTITUTE OR ALTERNATE EQUIPMENT SHALL BE PRICED AS AN ADD OR DEDUCT PRICE TO THE CONTRACTOR'S BASE BID PRICE. IF ONE OR MORE SUBSTITUTIONS ARE ACCEPTED WITH THE PROPOSAL AT THE CORRESPONDING ALTERNATE PRICE, IT SHALL BE UNDERSTOOD THAT APPROVAL OF SAID EQUIPMENT SHALL BE SUBJECT TO STRICT ADHERENCE TO THE PLANS AND SPECIFICATIONS. SHOULD ANY OF THE SUBSTITUTE EQUIPMENT FAIL TO MEET THE SPECIFICATIONS AFTER THE PROPOSAL HAS BEEN ACCEPTED, REGARDLESS IF EQUIPMENT HAS BEEN SHIPPED TO THE SITE AND INSTALLED, THE CONTRACTOR SHALL FURNISH AT NO EXTRA COST TO THE OWNER, THE SPECIFIED EQUIPMENT MEETING THE REQUIREMENTS AS STATED IN THESE SPECIFICATIONS AND COVER ALL COSTS NECESSARY FOR REMOVAL AND REINSTALLATION OF EQUIPMENT.

FIRE PROTECTION NOTES

- 1. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIRING THE SERVICES OF A LICENSED FIRE PROTECTION CONTRACTOR TO DESIGN, DETAIL AND INSTALL A FIRE PROTECTION SPRINKLER SYSTEM TO COVER THE NEW AND/OR REMODELED AREAS.
- 2. THE ENTIRE FIRE PROTECTION SYSTEM DESIGN AND INSTALLATION SHALL BE STRICTLY IN ACCORDANCE WITH NFPA 13 SPRINKLER SYSTEMS AND SHALL MEET THE REQUIREMENTS OF THE LOCAL AND STATE FIRE MARSHAL AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
- 3. ALL PERMITS, LICENSES, FEES, INSPECTIONS AND ARRANGEMENT/COORDINATION OF SUCH SHALL BE OBTAINED AND PAID FOR BY THE FIRE PROTECTION CONTRACTOR.
- 4. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE A FLOW TEST AND FURNISH COMPLETE DETAILED COMPUTER AIDED DESIGN (CAD) WORKING DRAWINGS OF THE SYSTEM AND SHALL SUBMIT THEM TO THE FIRE MARSHAL, ARCHITECT/ENGINEER, AND ALL AGENCIES REQUIRED BY CODE FOR THEIR REVIEW AND APPROVAL. NO WORK OR FABRICATION SHALL COMMENCE BEFORE THE DETAILED WORKING DRAWINGS OF THE SYSTEM, WITH THE AGENCIES APPROVALS, ARE SUBMITTED TO AND ARE REVIEWED BY THE ARCHITECT/ENGINEER. SYSTEM SHALL BE COMPLETE WITH OUTSIDE ALARM BELL, FLOW SWITCH, SUPERVISORY SWITCH ON SYSTEM CONTROL VALVE, HYDRAULIC DESIGN PLATE AT MAIN RISER, SPARE HEADS AND WRENCH, DOCUMENTATION, ETC.
- 5. THE FIRE PROTECTION CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND VERIFY TIE-IN LOCATION, ROUTING OF PIPING, LOCATION OF SPRINKLER HEADS WITH RESPECT TO DUCTS, EQUIPMENT, LIGHT FIXTURES, ETC. SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILES AND HALF TILES.
- 6. LAYOUT AND DESIGN OF THE SYSTEM SHALL BE BASICALLY AS DESIGNED FOR REQUIRED OCCUPANCY HAZARD. SECURITY TYPE HEADS SHALL BE USED IN SECURE AREAS. SYSTEMS SHALL BE SIZED BY HYDRAULIC CALCULATIONS PER NFPA PAMPHLET NO. 13. EXTENDED COVERAGE SPRINKLER HEAD SYSTEM WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL FROM ENGINEER.
- 7. DRAWINGS SHOW POSSIBLE LOCATION AND SIZE FOR FIRE PROTECTION WATER SERVICE. THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE FIRE PROTECTION WATER SERVICE SIZE BY VERIFICATION OF LOCAL WATER PRESSURE AND FLOW FROM THE LOCAL AUTHORITIES. THIS VERIFICATION SHALL BE PERFORMED DURING BIDDING AND NOTIFICATION TO THE ARCHITECT/ENGINEER OF ANY NECESSARY FIRE PROTECTION SERVICE CHANGES SHALL BE MADE 5 DAYS PRIOR TO BID DATE. THE COMPLETED SYSTEM SHALL BE IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
- 8. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ANY COST FOR REQUESTING AUTOCAD BACKGROUNDS FOR THEIR USE FROM THE ARCHITECT OR ENGINEER. THE COST WILL BE \$150.00 FOR THE FIRST PLAN, AND \$50.00 FOR EACH ADDITIONAL PLAN THAT MAY BE REQUESTED FOR AUTOCAD USE. A WAIVER OF RESPONSIBILITY FOR THE ARCHITECT AND ENGINEER RELATED TO CONTRACTOR USE OF THE CAD FILES SHALL BE SIGNED BY THE CONTRACTOR.
- 9. SEE SPECIFICATION FOR FURTHER INFORMATION AND REQUIREMENTS.

PLUMBING FIXTURE SCHEDULE

- WC-1: FLOOR MOUNTED SENSOR OPERATED FLUSH VALVE WATER CLOSET (BARRIER FREE): AMERICAN STANDARD #3043.001 MADERA FLOWISEA.D.A. EL 1.6, 16 1/2" HIGH WATER SAVER TOILET WITH SIPHON JET ACTION, ELONGATED BOWL, WHITE VITREOUS CHINA, 1 1/2" TOP SPUD, 1.6 GALLONS PER FLUSH. FITTINGS SHALL INCLUDE ZURN ZER-6000AV-CPM-WS1 FLUSH VALVE WITH BATTERY OPERATED SENSOR WITH OVERRIDE BUTTON AND VACUUM BREAKER, CENTOCO 1500 CC WHITE OPEN FRONT SEAT, LESS COVER, TO GIVE 17" HIGH TOP OF SEAT ABOVE FINISHED FLOOR FOR BARRIER FREE USE, BOLT CAPS, ETC. INSTALLATION SHALL MEET A.D. A. REQUIREMENTS. CONTROL FOR FLUSH VALVE SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREA.
- 1: WALL HUNG LAVATORY: AMERICAN STANDARD #0356.421 LUCERNE, NOMINAL 20"X18" WHITE VITREOUS CHINA, FRONT OVERFLOW, FAUCET LEDGE, "D" SHAPED BOWL, SELF DRAINING DECK, ONE CENTER HOLE PUNCHING CONSTRUCTED FOR CONCEALED ARM CARRIER AND ADA COMPLIANT. FITTINGS SHALL INCLUDE ZURN Z-6913 BATTERY OPERATED SENSOR FAUCET WITH RIGID SPOUT, 0.5 GPM FLOW DEVICE, SOLENOID VALVE, GRID DRAIN, P-TRAP, WHEEL HANDLE STOPS AND TAILPIECE, ALL POLISHED CHROME FINISH, UNDERSINK PROTECTIVE PIPE COVERS, ZURN CONCEALED ARM CARRIER WITH FLOOR SUPPORT, ETC. INSTALL THERMOSTATIC MIXING VALVE THAT IS ASSE 1070 LISTED UNDER EACH LAVATORY, PIPE SOLENOID VALVE FOR SENSOR FAUCET, AND ADJUST TO 105 DEGREE HOT WATER MAXIMUM AT FAUCET. NOTE: MECHANICAL TRADES SHALL INSTALL SOLENOID VALVE.
- SK-1: SINGLE COMPARTMENT COUNTERTOP SINK: ELKAY LUSTERTONE # LR-AD1716, 14" X 10" X 6 1/2" DEEP INSIDE BOWL, SEAMLESS DRAW #18 GAUGE TYPE 304 (18-8) NICKEL BEARING STAINLESS STEEL, 1 3/4" RADIUS COVED CORNERS, SELF RIM, SATIN FINISH, UNDERSIDE SHALL BE FULLY UNDERCOATED, THREE FAUCET HOLES. FITTINGS SHALL INCLUDE ELKAY LK-1000 WASHERLESS, SINGLE METAL HANDLE LEVER KITCHEN DECK FAUCET SWING SPOUT, 0.5 GPM FLOW DEVICE, POLISHED CHROME FINISH WITH SWIVEL AERATOR. ALSO INCLUDE LK-35 STAINLESS STEEL CONICAL STRAINER BASKET WITH NEOPRENE STOPPER, TAILPIECE, P-TRAP, WHEEL HANDLE STOPS, ETC. FURNISH AND INSTALL THERMOSTATIC MIXING VALVE THAT IS ASSE 1070 LISTED UNDER EACH LAVATORY, PIPE TO HOT WATER SIDE OF FAUCET AND ADJUST TO 105 DEGREE HOT WATER MAXIMUM AT FAUCET.
- SK-2: DOUBLE COMPARTMENT COUNTERTOP SINK: ELKAY LUSTERTONE #LR-AD3322, EACH COMPARTMENT 13 1/2" X 16" X 6 1/2" DEEP INSIDE BOWL, SEAMLESS DRAWN #18 GAUGE TYPE 304 (18-8) NICKEL BEARING STAINLESS STEEL, SELF RIM, SATIN FINISH, UNDERSIDE SHALL BE FULLY UNDERCOATED, THREE FAUCET HOLES. FITTINGS SHALL INCLUDE ELKAY LK-1000 WASHERLESS, SINGLE METAL HANDLE LEVER KITCHEN DECK FAUCET, SWING SPOUT, 0.5 GPM FLOW DEVICE, POLISHED CHROME FINISH WITH SWIVEL AERATOR. ALSO INCLUDE LK-35 STAINLESS STEEL CONICAL STRAINER BASKET WITH NEOPRENE STOPPER, TAILPIECE, P-TRAP, WHEEL HANDLE STOPS, ETC. INSTALL THERMOSTATIC MIXING VALVE THAT IS ASSE 1070 LISTED UNDER EACH SINK, PIPE TO HOT WATER SIDE OF FAUCET, AND ADJUST TO 105 DEGREE HOT WATER MAXIMUM AT FAUCET.
- JS-1: JANITOR'S SINK: FLORESTONE #96 242412 OR EQUAL, TERRAZZO, 24"X24"X12" WITH DROPPED FRONT, STAINLESS STEEL THRESHOLD, TILING FLANGES AND STAINLESS STEEL SPLASH CATCHER PANELS. DRAIN BODY SHALL BE 3" STAINLESS STEEL CAST INTEGRAL WITH REMOVABLE FLAT TYPE 16 GAUGE #302 STAINLESS STEEL STRAINER. RECEPTOR SHALL BE COMPOSED OF MARBLE CHIPS AND WHITE PORTLAND CEMENT GROUND SMOOTH, GROUTED AND SEALED TO RESIST STAINS. FITTINGS SHALL BE MOP SERVICE SINK FAUCET WITH HOSE END OUTLET, INTEGRAL STOPS, VACUUM BREAKER, ADJUSTABLE TOP BRACE PAIL HOOK AND ROUGH CHROME FINISH. PROVIDE MOP HANGER, HOSE AND HOSE BRACKET, AND SILICONE SEALANT. REINFORCE WALL FOR FAUCET AS REQUIRED.
- EWC-1: MANUFACTURER ELKAY MODEL #LZSTL8WS5P, FILTERED REFRIGERATED LIGHT GRAY. PROVIDE ZURN Z OR EQUAL WALL HANGER WITH FLOOR SUPPORT. HI-LO ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION, WALL MOUNTED BARRIER FREE, BI-LEVEL HIGH EFFICIENCY VANDAL RESISTANT COOLER, FILTERED 8 GPH STAINLESS, CHILLING CAPACITY OF 0.8 GPH. FEATURES SHALL INCLUDE HANDS FREE, VISUAL FILTER MONITOR, FILTERED HIGH EFFICIENCY, LAMINAR FLOW, ANTIMICROBIAL, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER SENSOR WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION, CORD WITH 3 PRONG PLUG, 115 VOLT, 260 WATTS, 5.5 AMP. UNIT SHALL BE MOUNTED AT HEIGHT TO MEET BARRIER FREE AND ADA REQUIREMENTS. VERIFY MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
- HB-1: INTERIOR HOSE BIBB: ZURN Z1341 INTERIOR HOSE BIB, VACUUM BREAKER BACKFLOW PROTECTOR, 3/4" MALE
- WHYD-1: EXTERIOR WALL HYDRANT: ZURN Z-1321-6, EXTERIOR RECESSED BRONZE WALL HYDRANT, AUTOMATIC DRAINING, VACUUM BREAKER BACKFLOW PROTECTOR, FREEZELESS FROST-PROOF WALL HYDRANT WITH LOOSE KEY AND 3/4" MALE HOSE THREAD.
- CO-_: CLEANOUTS: PROVIDE ZURN Z-1400 SERIES DURA-COATED CAST IRON CLEANOUTS WITH BRONZE PLUG AS FOLLOWS:
 EXTERIOR: ZB-1400 POLISHED BRONZE ROUND TOP
 FINISHED FLOORS: ZN-1400 NICKEL BRONZE ROUND TOP
 CERAMIC TILE: ZN-1400-T NICKEL BRONZE SQUARE TOP
- CARPETED FLOORS: ZN-1400-CM NICKEL BRONZE WITH CARPET MARKER ROUND TOP WALL CLEANOUTS: ZS-1469 STAINLESS STEEL ACCESS AS REQUIRED BY PIPE SIZE HEAVY DUTY CLEANOUTS: (AT LOCATIONS OF VEHICLE/FORKLIFT TRAFFIC) ZN-1400HD
- AD-__: AREA DRAIN (LOCATED IN SLAB ON GRADE): ZURN Z-550-D CI FLOOR DRAIN WITH DOME STRAINER.

 FD-1: FLOOR DRAIN (LOCATED IN A FINISHED FLOOR): ZURN ZN-415-5B CAST IRON FLOOR DRAIN WITH FLANGE, INTEGRAL REVERSIBLE CLAMPING COLLAR 5" DIAMETER SATIN NICKEL BRONZE STRAINER AND TRAP PRIMER CONNECTION WHERE REQUIRED. FURNISH A DEEP SEAL TRAP FOR EACH FLOOR DRAIN.

WADE CI FLOOR DRAIN WITH FLANGE, INTEGRAL CLAMPING COLLAR, SEEPAGE OPENINGS, TRAP PRIMER TAP,

- FD-2: FLOOR DRAIN (LOCATED IN AN UNFINISHED FLOOR): SAME AS IN FINISHED FLOOR, EXCEPT WITH 7" STRAINER.

 FD- : FLOOR DRAIN (LOCATED IN UNFINISHED FLOOR SUBJECT TO VEHICLE TRAFFIC): ZURN Z-520-CP OR EQUAL
- ROUND ADJUSTABLE HEAVY DUTY CI 9" DIAMETER DUCTILE IRON GRATE.

 TP-__: TRAP SEALER: EACH FLOOR DRAIN SHALL HAVE A MEANS OF MAINTAINING THE WATER SEAL IN THE TRAP BY MEANS OF TRAP PRIMER OR TRAP SEALER.

 TRAP SEAL OPTION: 2692 QUAD CLOSE TRAP SEAL DEVICE BY JAY R. SMITH MFG. CO. FOR FLOOR DRAIN. SIZE
- GPM (TRAP SEAL INSTALLED IN STRAINER). 4" 35 GPM.

 RD-1: ROOF DRAIN: ZURN ZC-100-EADP DURA-COATED CAST IRON BODY AND DOME, WITH FLASHING, CLAMP/GRAVEL GUARD, TOP-SET DECK PLATE, ADJUSTABLE EXTENSION, AND 18" SQUARE ROOF DRAIN

OF TRAP SEALER SHALL MATCH INTERNAL PIPE SIZE DIAMETER. FLOW RATES FOR TRAP SEAL ARE AS

FOLLOWS: 2" - 8GPM. 3" - 24 GPM (LARGER FLOW DUE TO TRAP SEAL BEING LOWER IN DRAIN BODY). 3.5" - 14

PPC-_: UNDER LAVATORY PROTECTIVE PIPE COVERS: ZURN OR EQUAL "INSUL-GARD" TRAP AND STOP/RISER INSULATED COVERS SHALL BE FURNISHED AND INSTALLED ON ALL EXPOSED PIPING AND VALVES BELOW LAVATORIES TO MEET ADA REQUIREMENTS. THIS SHALL INCLUDE DRAIN, CW & HW PIPING, VALVES, ETC.

ELECTRIC CABINET HEATER SCHEDULE

ECH-1 QMARK #COF-RE-S47 ELECTRIC CABINET HEATER, CEILING
ECH-2 & RECESSED 300 CFM. 2KW/3KW/4KW ELECTRIC HEAT CAPACITY, 1/8 HP MOTOR, 208V-1-60 HZ. CABINET 23 3/4"
ECH-3 x23 3/4"x 4 1/2".

- 1. FURNISH RECESS TRIM FRAMES AND/OR BASE MOUNTING KITS AS REQUIRED FOR CEILING MOUNTED CABINET
- HEATERS.

 2. COLOR OF CABINET HEATERS SHALL BE SELECTED BY THE ARCHITECT/ENGINEER DURING SHOP DRAWING
- SUBMITTALS.

 3. EACH UNIT SHALL HAVE A REMOTE MOUNTED THERMOSTAT FOR CEILING MOUNTED UNITS.
- MOTORS SHALL BE TWO-SPEED, RESILIENT MOUNTED WITH AUTOMATIC OVERLOAD PROTECTION.
 ALL INTERIOR CONTROLS AND THERMOSTAT SHALL BE 24 VOLT OPERATION FROM UNIT FACTORY MOUNTED 24
- 6. UNITS SHALL ALSO INCLUDE AUTOMATIC FAN DELAY, SILENT RELAYS, FRONT COVER INTERLOCK, INTERLOCK FOR REMOTE FAN ONLY SWITCH, THERMAL SAFETY CUTOUT, CIRCUIT BREAKERS AND AUTO-ON (SUMMER FAN) SWITCH.

VOLUME BOX SCHEDULE WITH ELECTRIC HEAT SCHEDULE

<u>MARK</u>	MODEL NO.	<u>CFM</u>	ELECTRIC <u>HEAT KW</u>	COOLING <u>CFM</u>	HTG. <u>CFM</u>	INLET SIZE INCHES D
EVB-04	VCEF-04	125	1.0 KW	60	100	4"
EVB-05&06	VCEF-06	300	1.5 KW	60	150	6"
EVB-7	VCEF-08	400	2.5 KW	100	200	8"
NOTES:						

- SEE SPECIFICATION FOR FURTHER INFORMATION.
- VOLUME BOXES SHALL HAVE DIRECT DIGITAL CONTROLS.
 VOLUME BOXES SHALL HAVE DUAL MINIMUMS.
- ELECTRIC DUCT HEATERS SHALL BE 208V-3-60 HZ.
 FURNISH 3 STAGES OF ELECTRIC HEATER CONTROL WITH MERCURY CONTACTORS FOR EACH VAV BOX.
- FURNISH FACTORY MOUNTED MAGNETIC CONTACTORS, DISCONNECTS, FUSE AND CONTROL TRANSFORMER FOR EACH VOLUME BOX.
 ALL VOLUME BOXES SHALL HAVE FACTORY MOUNTED DAMPER ACTUATOR WIRED TO A TERMINAL STRIP AND FLOW
- RING. AIR FLOW AT EACH VOLUME BOX SHALL BE DISPLAYED AT THE MAIN CONTROL SYSTEMS COLOR GRAPHICS.

 8. DIRECT DIGITAL CONTROLS SHALL BE FURNISHED AND INSTALLED AT THE FACTORY PRIOR TO SHIPPING TO SITE.

DUCTLESS SPLIT SYSTEM AIR CONDITIONER SCHEDULE

- AC-1: TRANE MODEL NTXSPH 188 112 AA WALL MOUNTED INDOOR EVAPORATOR UNIT AS SHOWN ON THE DRAWING, NOMINAL 1.5 TON DX COOLING, WITH AUXILIARY ELECTRIC HEAT, CONDENSATE PUMP AND REMOTE THERMOSTAT AND CONTROL. APPROXIMATELY 1 MINIMUM CIRCUIT AMPS AT 208 VOLT, 1 PHASE.
- ACC-1: MATCHING TRANE MODEL NTXSPH 188 112 AA MOUNTED OUTDOOR AIR COOLED CONDENSING UNIT WITH ANTI SHORT CYCLE PROTECTION, LOW AMBIENT CONTROL AND TUBE SET. APPROXIMATELY 20 AMP FUSE/BREAKER S12 AT 208 VOLT, 1 PHASE.

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INC.

105 ½ Main Street
Flushing, Michigan 48433

810-659-7118 voice
810-659-7224 fax

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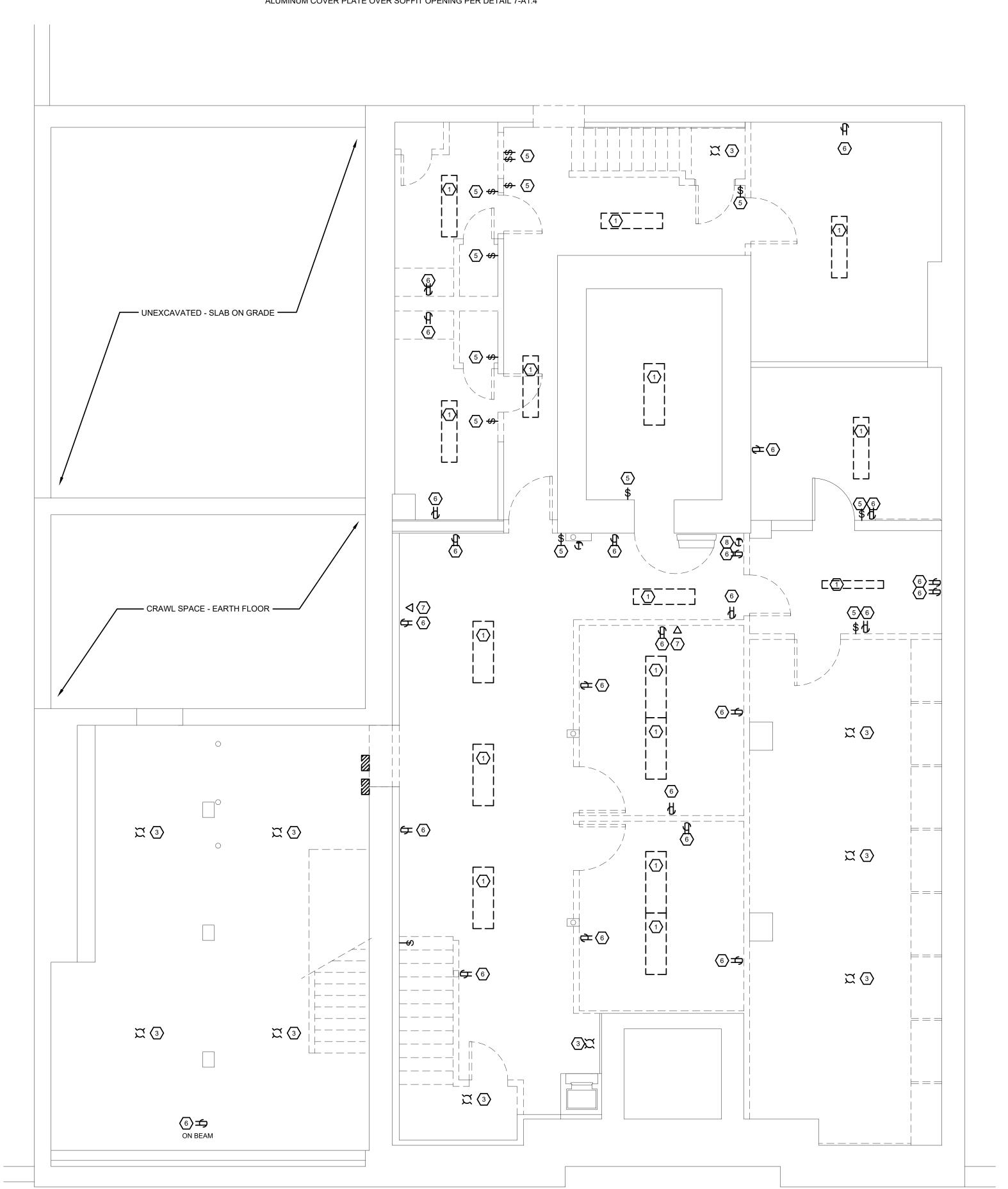
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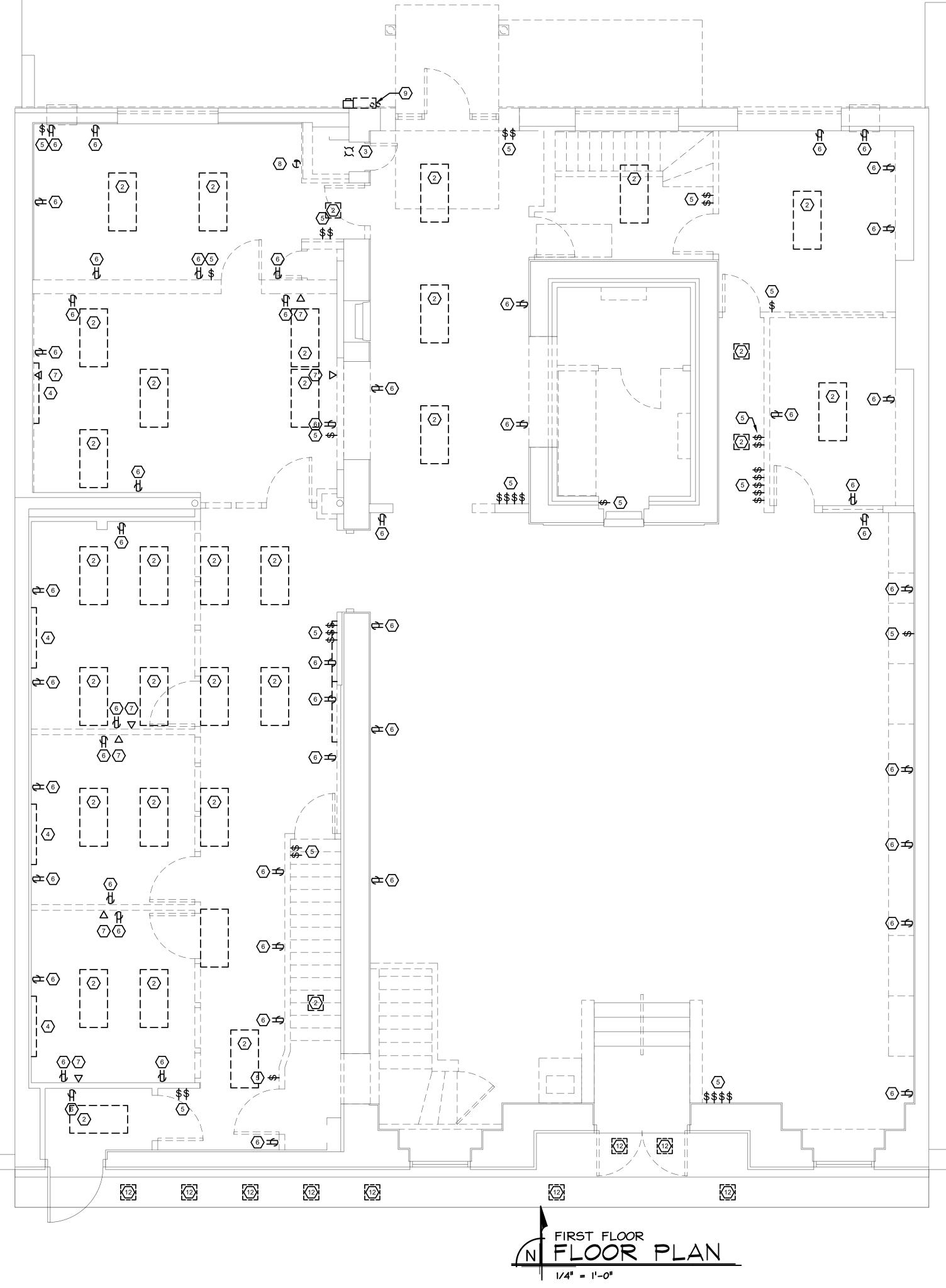
KEYED DEMOLITION NOTES

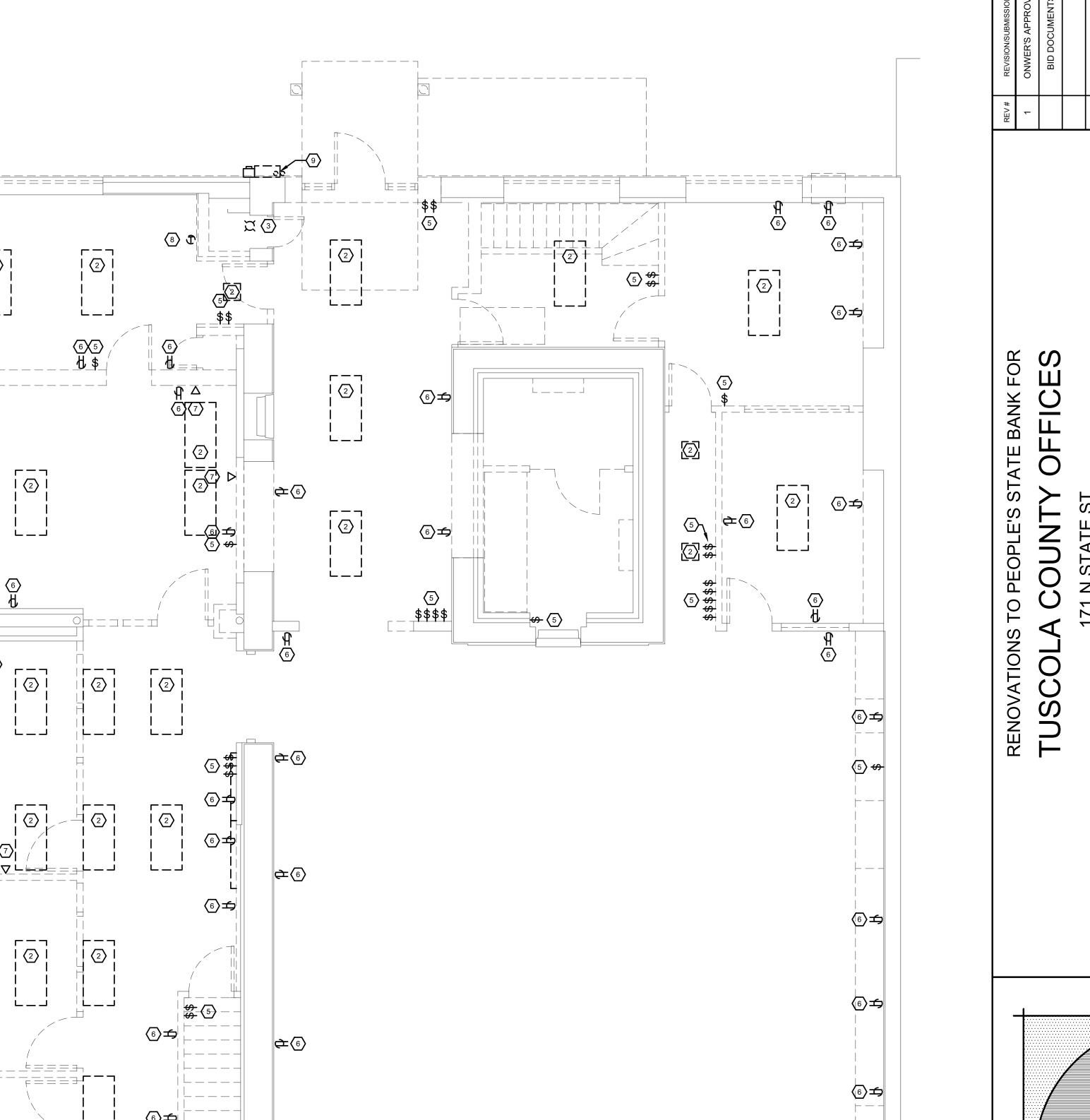
- REMOVE SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE AND ALL ASSOCIATED CONDUIT AND WIRING
- REMOVE LAY-IN FLUORESCENT LIGHT FIXTURE AND ALL ASSOCIATED CONDUIT AND
- REMOVE SURFACE MOUNTED INCANDESCENT LIGHT FIXTURE AND ALL ASSOCIATED CONDUIT AND WIRING
- REMOVE ELECTRIC BASEBOARD HEATER AND ALL ASSOCIATED CONDUIT AND
- 5 REMOVE LIGHT SWITCH(S) AND ALL ASSOCIATED CONDUIT AND WIRING
- REMOVE DUPLEX RECEPTACLE AND ALL ASSOCIATED CONDUIT AND WIRING 7 REMOVE DATA AND ALL ASSOCIATED WIRING
- 8 REMOVE THERMOSTAT AND ALL ASSOCIATED WIRING
- (9) REMOVE CONDUIT MAST AND WIRING FROM AERIAL SEVICE DROP TO CT CABINET
- REMOVE PANELBOARD, FEEDER AND ALL BRANCH CIRCUITS. COORDINATE REMOVAL TO MAINTAIN POWER FOR CONSTRUCTION OPERATIONS
- REMOVE DISCONNECT SWITCH AND ALL ASSOCIATED CONDUIT AND WIRING FOR EXISTING ROOFTOP UINTS
- REMOVE RECESSED LIGHT FIXTURE AND ALL ASSOCIATED WIRING AND INSTALL ALUMINUM COVER PLATE OVER SOFFIT OPENING PER DETAIL 7-A1.4

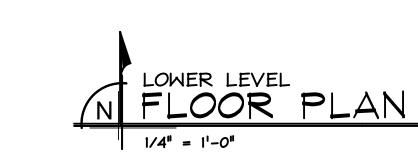
GENERAL DEMOLITION NOTES

- DEMOLITION INFORMATION IS PROVIDED TO ASSIST WITH REMOVAL COSTS. ELECTRICAL TRADES SHALL BE RESPONSIBLE TO CONFIRM ALL QUANTITIES AND THE INFORMATION PROVIDE.
- 2. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS TRADES FAILURE TO COORDINATE REQUIRED ELECTRICAL DEMOLITION WITH OTHER TRADES.
- 3. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING DATA AND COMMUNICATION SYSTEMS WIRING.









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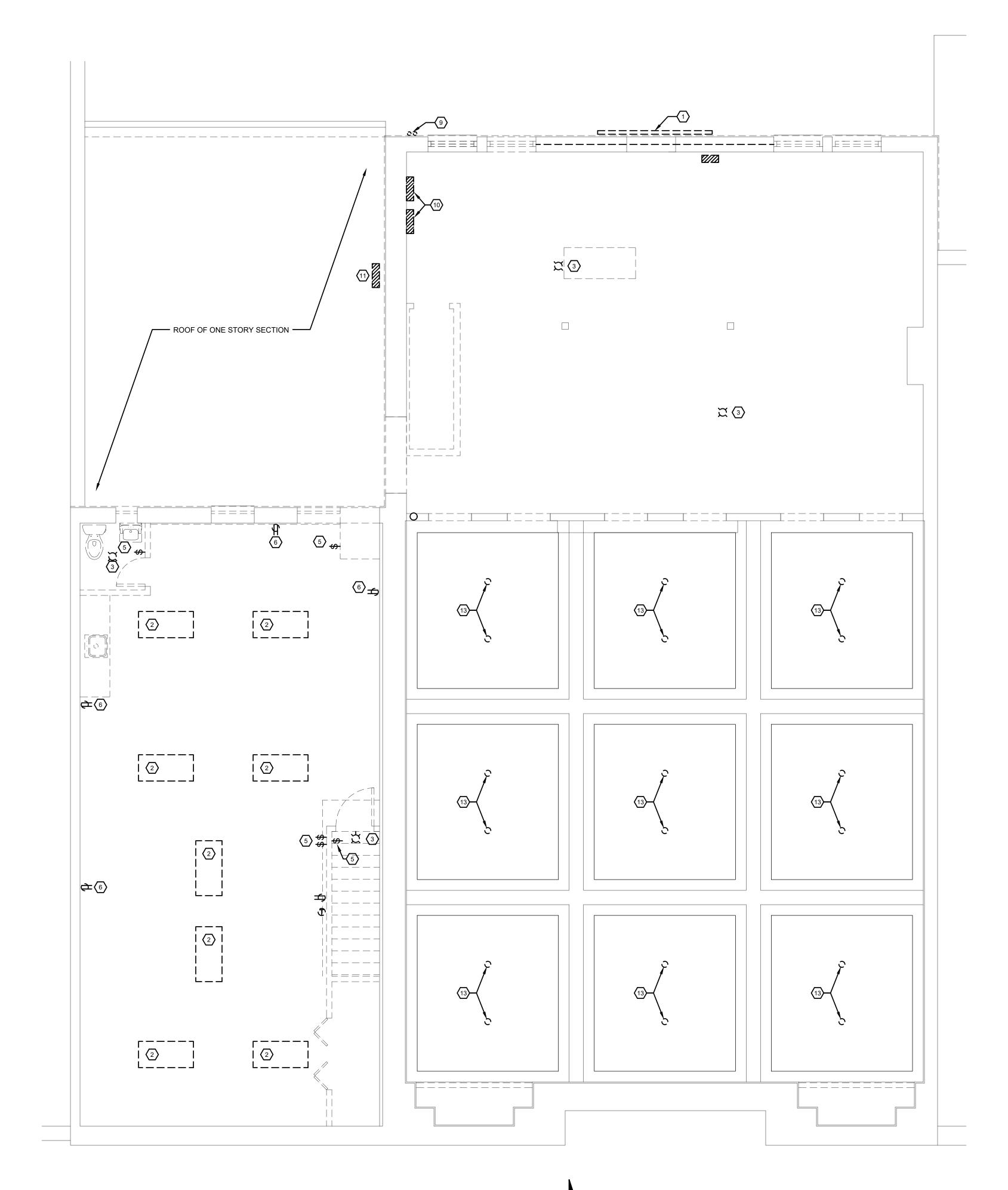
OF TOTAL SHEETS

KEYED DEMOLITION NOTES

- REMOVE SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE AND ALL ASSOCIATED CONDUIT AND WIRING
- REMOVE LAY-IN FLUORESCENT LIGHT FIXTURE AND ALL ASSOCIATED CONDUIT AND WIRING
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- 7 REMOVE DATA AND ALL ASSOCIATED WIRING
- 8 REMOVE THERMOSTAT AND ALL ASSOCIATED WIRING
- PREMOVE CONDUIT MAST AND WIRING FROM AERIAL SEVICE DROP TO CT CABINET
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- REMOVE DISCONNECT SWITCH AND ALL ASSOCIATED CONDUIT AND WIRING FOR EXISTING ROOFTOP UNITS
- REMOVE RECESSED LIGHT FIXTURE AND ALL ASSOCIATED WIRING AND INSTALL ALUMINUM COVER PLATE OVER SOFFIT OPENING PER DETAIL 7-A1.4
- REMOVE REMAINING SUSPENDED LIGHT FIXTURE BASES AND INSTALL COVER PLATE OVER EXISTING JUNCTION BOX

GENERAL DEMOLITION NOTES

- DEMOLITION INFORMATION IS PROVIDED TO ASSIST WITH REMOVAL COSTS. ELECTRICAL TRADES SHALL BE RESPONSIBLE TO CONFIRM ALL QUANTITIES AND THE INFORMATION PROVIDE.
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- 3. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING DATA AND COMMUNICATION SYSTEMS WIRING.

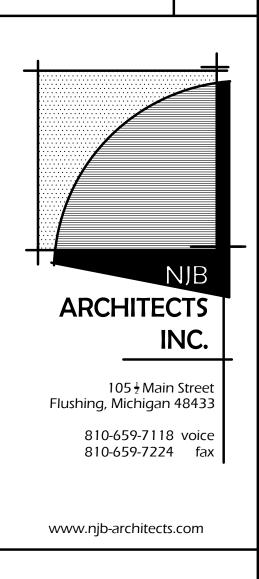


SECOND FLOOR FLOOR PLAN Seal

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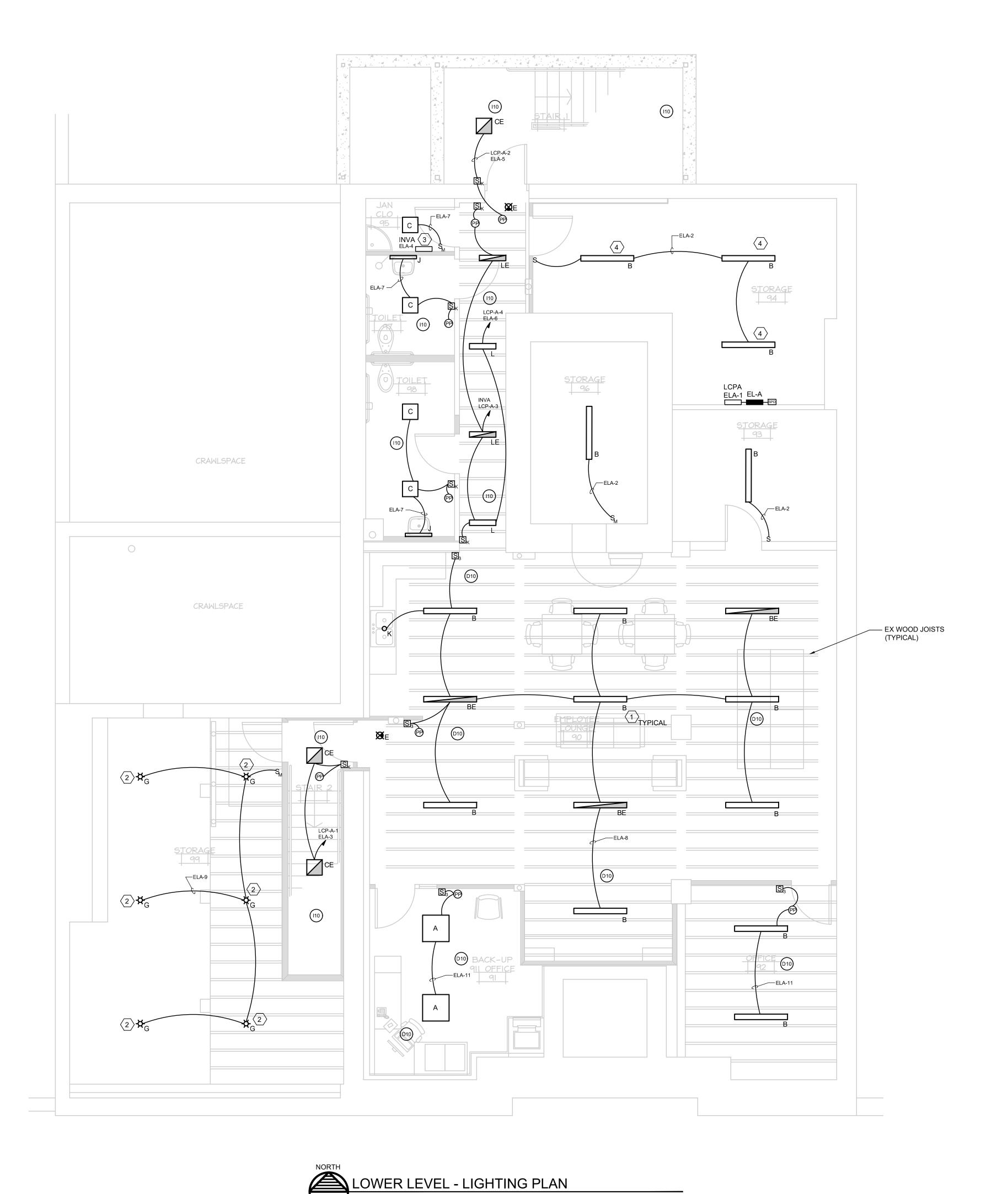
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SHEET OF TOTAL SHEETS



- REFER TO SHEET E3.1 FOR OCCUPANCY SENSOR WIRING DIAGRAMS AND LIGHTING CONTROL SCHEMES.
- REFER TO SHEET E3.2 FOR LIGHT FIXTURE SCHEDULE AND SYMBOLS.

- 5. EXIT LIGHTS SHALL OPERATE 24/7. WIRE TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY CONDUITS.

KEYED NOTES

- 1) INSTALL THE LIGHT FIXTURE CENTERED IN BETWEEN THE WOOD JOIST.
- $\stackrel{\textstyle igg(2)}{}$ KEYLESS LAMP HOLDER FOR A19 LED LAMP. SEE LIGHT FIXTURE SCHEDULE.
- $\overline{3}$ WALL MOUNT INV A AT THE CEILING.
- COORDINATE LIGHT FIXTURE LOCATION WITH HVAC DUCTS TO AVOID INTERFERENCES, SEE MECHANICAL.

GENERAL NOTES

 REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES AND LCP PANEL SCHEDULES. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND STAIRWAY ELEVATIONS.

RENOVATIONS TO PEOPLE'S STATE BA

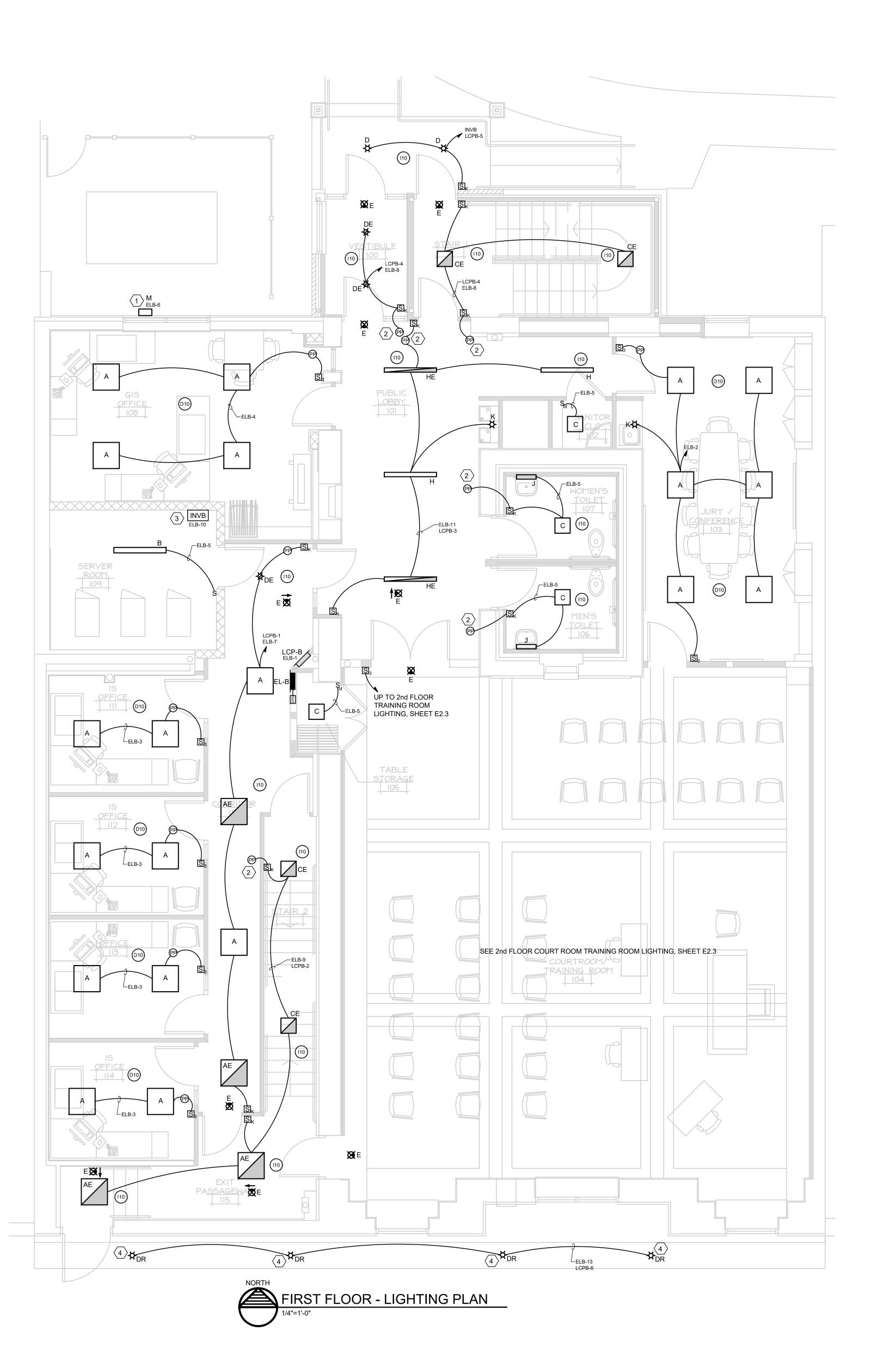
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- 1. REFER TO SHEET E3.1 FOR OCCUPANCY SENSOR WIRING DIAGRAMS AND LIGHTING CONTROL SCHEMES.
- 2. REFER TO SHEET E3.2 FOR LIGHT FIXTURE SCHEDULE AND
- 3. REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES AND LCP PANEL SCHEDULES.
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND STAIRWAY ELEVATIONS.
- 5. EXIT LIGHTS SHALL OPERATE 24/7. WIRE TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY CONDUITS.

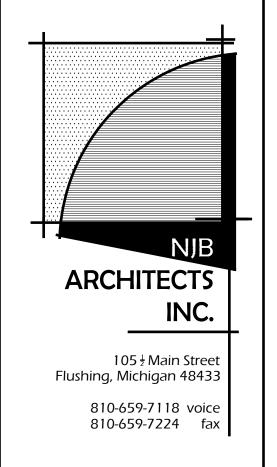
KEYED NOTES

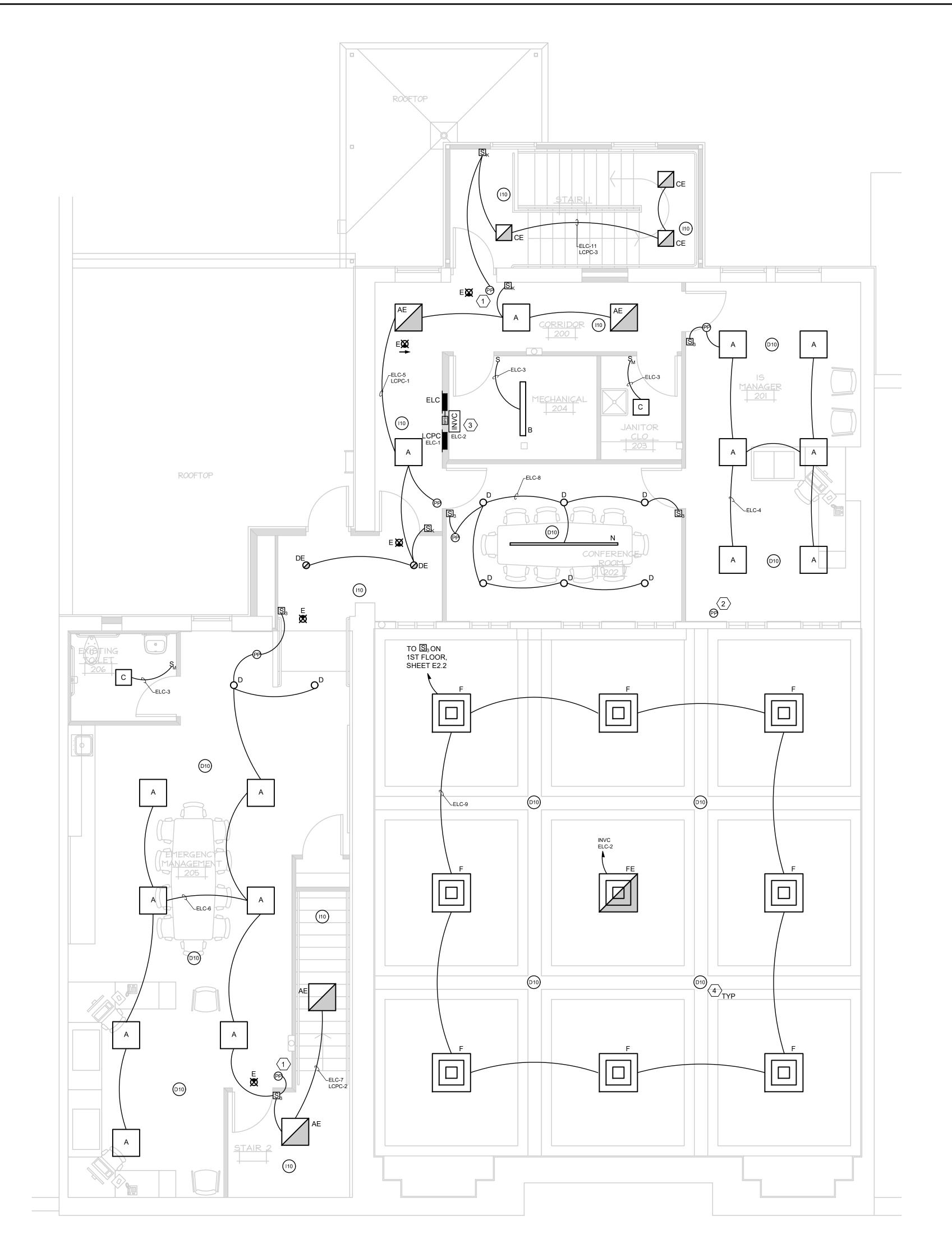
- 1 MOUNT TYPE M WALL PACK ABOVE THE WINDOW. SEE ARCHITECTURAL ELEVATION DRAWING FOR THE MOUNTING HEIGHT. LIGHT FIXTURE SHALL AUTOMATICALLY OPERATE DUSK
- $\left\langle 2 \right
 angle$ MOUNT THE POWER PACK IN THE ACCESSIBLE CEILING SPACE.
- $\sqrt{3}$ WALL MOUNT INVB AT THE CEILING LINE.
- $\overline{\langle 4 \rangle}$ REMOVE THE EXISTING SOFFIT MOUNTED 12" SQUARE RECESSED LIGHT FIXTURE. PROVIDE A 1/8" ALUMINUM PLATE TO FIT THE SOFFIT OPENING. DRILL THE ALUMINUM PLATE TO FIT THE TYPE D LIGHT FIXTURE FOR RECESSED MOUNT. PAINTING TRADES SHALL COLOR MATCH THE ALUMINUM PLATE.

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RENOVATIONS TO PEOPLE'S STATE BA

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SECOND FLOOR - LIGHTING PLAN

GENERAL NOTES

- REFER TO SHEET E3.1 FOR OCCUPANCY SENSOR WIRING DIAGRAMS AND LIGHTING CONTROL SCHEMES.
- 2. REFER TO SHEET E3.2 FOR LIGHT FIXTURE SCHEDULE AND SYMBOLS.
- 3. REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES AND LCP PANEL SCHEDULES.
- REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND STAIRWAY ELEVATIONS.
- 5. EXIT LIGHTS SHALL OPERATE 24/7. WIRE TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY CONDUITS.

KEYED NOTES

- $\langle 1 \rangle$ MOUNT THE POWER PACK IN THE ACCESSIBLE CEILING SPACE. POWER PACK FOR COURTROOM OCCUPANCY SENSOR. MOUNT IN THE ACCESSIBLE CEILING SPACE.
- $\overline{3}$ WALL MOUNT INVC AT CEILING LINE.
- COORDINATE OCCUPANCY SENSOR INSTALLATION ON THE CEILING TRIM WITH THE ARCHITECT.

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RENOVATIONS TO PEOPLE'S STATE BANK

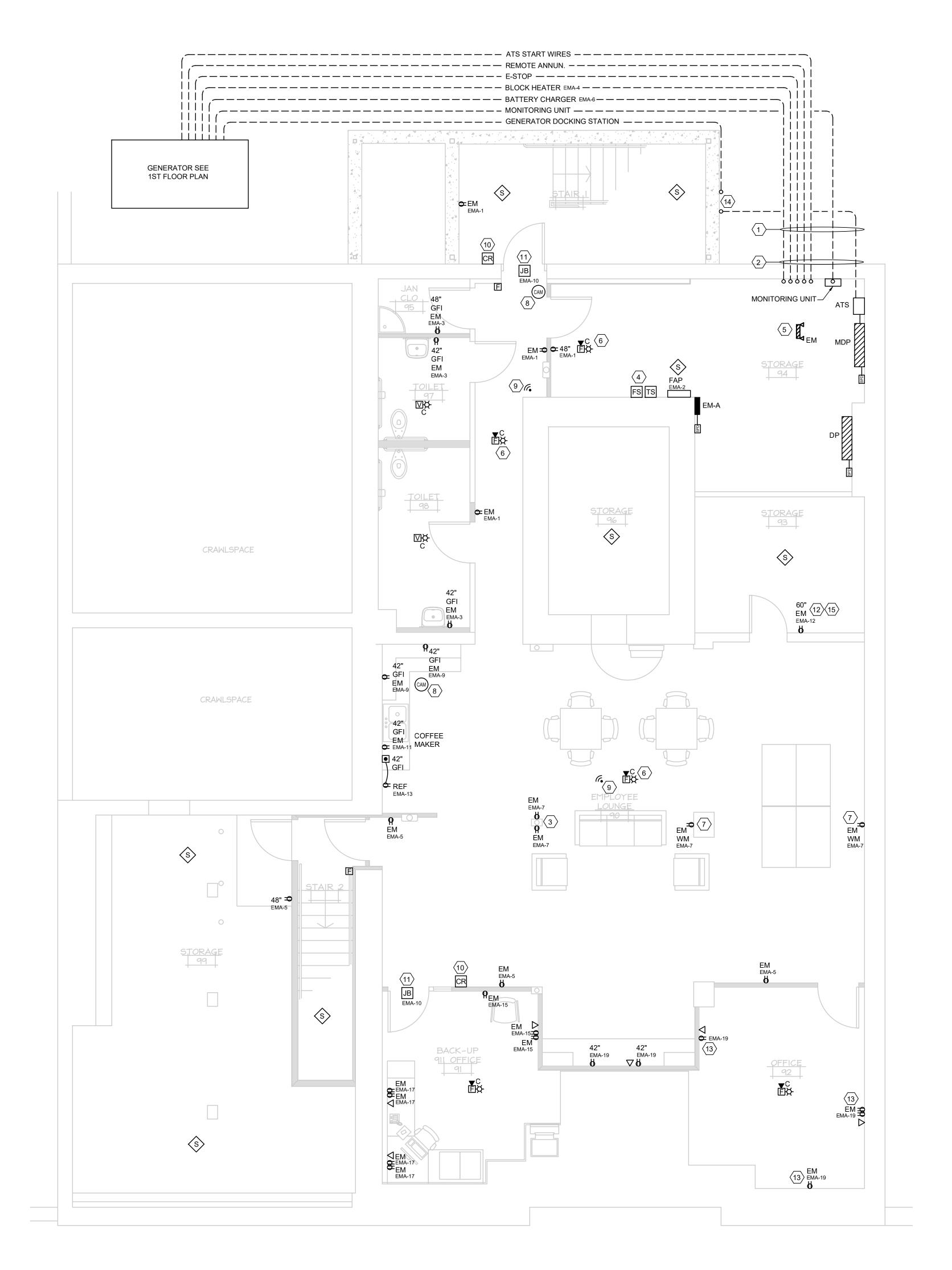
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CARO, MI

SECOND FLOOR - LIGHTING

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LOWER LEVEL - POWER AND SYSTEMS PLAN

GENERAL NOTES

- 1. REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES.
- 2. REFER TO SHEET E4.1 FOR ONE-LINE DIAGRAM.
- 3. REFER TO SHEET E3.2 FOR SYMBOLS, WIRING METHODS AND SCHEDULES.
- 4. OWNER SHALL BE RESPONSIBLE FOR DATA CABLES, FACEPLATES, TESTING AND TERMINATIONS.

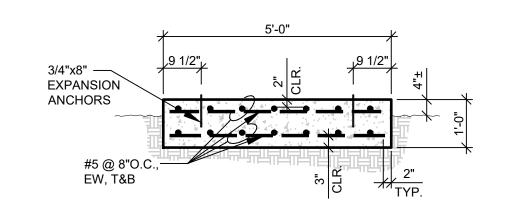
KEYED NOTES

- 1 SAW CUT, EXCAVATE AND BACKFILL TO FINAL GRADE FOR NEW UNDERGROUND CONDUITS. FIELD CORRDINATE CONDUITS WITH THE NEW UTILITY CT CABINET. GENERATOR DOCKING STATION AND THE MAIN SERVICE ENCLOSED CIRCUIT BREAKER. SEE 1ST LEVEL PLAN. ELECTRICAL TRADES SHALL REVIEW MECHANICAL DRAWINGS FOR NEW FIRE PROTECTION SERVICE AND WATER SERVICE AND RAIN CONDUCTOR PIPING BEING INSTALLED ON THE EAST SIDE OF THE NEW STAIRWAY, PROVIDE 24" MINIMUM COVER, USE SCH 40 PVC CONDUIT WITH BOTTOM, INTERMEDIATE AND TOP SPACERS. REVIEW UTILITY.
- 2 USE "LINK SEAL" WHERE CONDUITS PASSES THRU THE FOUNDATION WALL.
- 3 ELECTRICAL TRADES SHALL FLUSH MOUNT THE RECEPTACLE BACKBOXES AND CONCEAL THE CONDUIT DROP. COORDINATE THIS WORK WITH THE GENERAL TRADES WITH THE COLUMN TRIM OUT.
- $\overline{\langle}_4$ NEW FLOW AND TAMPER SWITCHES. FIELD CONFIRM THE FINAL LOCATION WITH THE FIRE PROTECTION CONTRACTOR. WIRE TO THE FIRE ALARM SYSTEM.
- 5 NEW TWIN HEAD EMERGENCY LIGHT. CEILING MOUNT. LIGHTING UNIT HEADS SHALL BE AHEAD TOWARDS THE ATS SWITCH. EMERGENCY LIGHTING UNIT SHALL BE UTILIZED FOR EMERGENCY LIGHTING FOR THE ATS SWITCH IN THE EVENT THE GENERATOR FAILS TO START DURING A POWER OUTAGE. WIRE TO A LOCAL LIGHTING CIRCUIT, BUT WIRED AHEAD OF ANY LOCAL SWITCHING.
- 6 CENTER THE FIRE ALARM DEVICE BETWEEN THE EXPOSED EXISTING CEILING JOISTS. PROVIDE A SUPPORT.
- T UTILIZE "WIREMOLD" ONE-PIECE STEEL 700 SERIES RACEWAY. PROVIDE A "WIREMOLD" RECEPTACLE BOX.
- 8 CAMERA ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER. CAMERA FURNISHED AND INSTALLED BY THE OWNER. NO 120 VOLT CIRCUIT IS REQUIRED. POE (POWER OVER ETHERNET) SHALL BE UTILIZED FOR THE CAMERA POWER.
- 9 WIFI ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER. WIFI FURNISHED AND INSTALLED BY THE OWNER.
- (10) CARD READER ROUGH-IN. FURNISH AND INSTALL AN EMPTY FLUSH MOUNTED 4" SQUARE BOX. INCLUDE A SINGLE GANG DEVICE RING AND A CONCEALED 3/4" CONDUIT DROP. EXTEND THE CONDUIT TO THE DOOR'S JUNCTION BOX.
- INSTALL A JUNCTION BOX ABOVE THE DOOR WITH A 120 VOLT CIRCUIT. THE 120 VOLT CIRCUIT IS FOR USE BY THE CARD READER VENDOR TO INSTALL A POWER SUPPLY UNIT. ELECTRICAL TRADES SHALL FURNISH AND INSTALL AN EMPTY 3/4" CONDUIT IN THE DOOR FRAME FOR USE BY THE INSTALLING CARD READER VENDOR.
- DUPLEX RECEPTACLE FOR OWNER'S WALL MOUNTED DATA RACK. FIELD CONFIRM THE LOCATION WITH THE OWNER.
- UTILIZE SURFACE MOUNTED EMT CONDUIT AND 4" SQUARE BOX.
- $\langle 14 \rangle$ CONDUIT RISERS TO GENERATOR DOCKING STATION.
- BOND THE DATA RACK TO THE 1ST FLOOR SERVER ROOM ISOLATED GROUND BAR. PROVIDE #4 BARE COPPER CONDUCTOR.

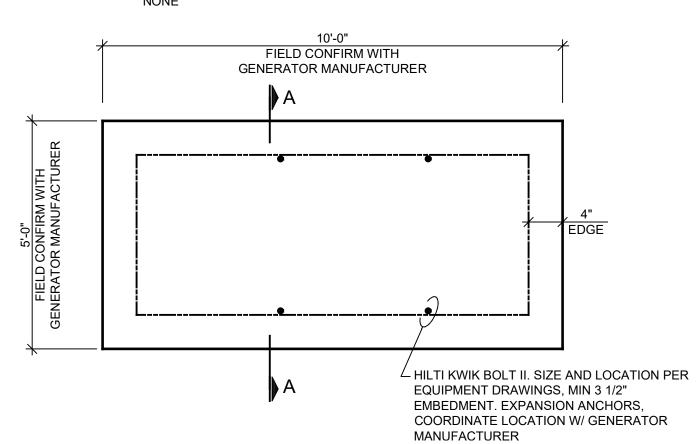
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SECTION A-A



GENERATOR PAD DETAIL PLAN

NOTES:

CONCRETE - F'C=4000 PSI, 6% AIR ENTRAINED

- 2. REBAR ASTM A605 GRADE 60
- 3. DIMENSIONS INDICATED ARE ONLY A GUIDELINE AND SHOWN FOR COORDINATION PURPOSES. FIELD VERIFY DIMENSIONS WITH GENERATOR MANUFACTURER PRIOR TO PAD CONSTRUCTION.
- 4. FIELD CONFIRM THE NATURAL GAS PIPING CONNECTION WITH THE GENERATOR MANUFACTURER.

- GENERAL NOTES
- 1. REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES.
- REFER TO SHEET E4.1 FOR ONE-LINE DIAGRAM.
 REFER TO SHEET E3.2 FOR SYMBOLS, WIRING METHODS
- AND SCHEDULES.
- PROVIDE (4) EMPTY 3/4" CONDUITS STUBBED INTO THE ACCESSIBLE CEILING SPACE ABOVE PANEL EM-B.
 OWNER SHALL BE RESPONSIBLE FOR COURTROOM
- TRAINING ROOM AUDIO/VIDEO AND MICROPHONE SYSTEM. NO ELECTRICAL ROUGH-INS OR POWER WORK REQUIRED.
- 6. OWNER SHALL BE RESPONSIBLE FOR DATA CABLES, FACEPLATES, TESTING AND TERMINATIONS.

KEYED NOTES

- GENERATOR'S REMOTE ANNUNCIATOR PANEL. COMPLETE WIRING TO THE GENERATOR.
- GENERATOR'S REMOTE E-STOP STATION. COMPLETE WIRING TO THE GENERATOR.
- GENERATOR CONDUIT RISERS CONDUIT RISERS LOCATION IS SHOWN DIAGRAMMATIC. FIELD CONFIRM WITH THE GENERATOR SHOP DRAWINGS. SEE LOWER LEVEL POWER AND SYSTEMS PLAN E2.4 FOR CONDUITS ROUTE.
- MULTI-POLE CONTACTOR FOR SERVER ROOM HVAC SHUTDOWN. SEE SHEET E3.2 FOR WIRING DIAGRAM.
- E-STOP BUTTON FOR SERVER ROOM HVAC SHUTDOWN. SEE SHEET E3.2 FOR WIRING DIAGRAM.
- 6 ELECTRIC VOLUME BOX SHALL BE FACTORY EQUIPPED WITH A MAIN POWER DISCONNECTING MEANS. COMPLETE A SINGLE POINT POWER CONNECTION.
- 7 1/4"x4"x12" COPPER GROUND BAR. PROVIDE STAND-OFF SUPPORTS. CONNECT THIS GROUND BAR TO THE MAIN SERVICE ENCLOSED CIRCUIT BREAKER.
- CORE DRILL THE EXISTING TERRAZZO FLOOR FOR THE POKE THRU TYPE FLOOR BOX. COORDINATE THE FINAL LOCATION WITH OWNER AND ARCHITECT. JUDGE'S BENCH, WITNESS STAND AND ATTORNEY TABLES ARE ONLY SHOWN FOR REFERENCE PURPOSES. PROVIDE 1" CONDUIT FOR DATA AND 3/4" CONDUIT FOR POWER TO EACH RESPECTIVE POKE THRU BOX.
- 9 METER AND UTILITY CT CABINET. ELECTRICAL TRADES SHALL FURNISH AND INSTALL THE CABINET. THE CONDUIT MAST, WEATHERHEAD FITTING AND CONDUCTORS. UTILITY SHALL COMPLETE THE AERIAL SERVICE. COORDINATE THE FINAL LOCATION WITH THE OWNER AND UTILITY.
- MAIN SERVICE ENCLOSED CIRCUIT BREAKER. SEE E4.1 ONE-LINE DIAGRAM.
- GENERATOR DOCKING STATION ENCLOSURE FOR TEMPORARY GENERATOR CONNECTION AND LOAD BANK TEST. SEE E4.1 ONE-LINE FOR CONNECTIONS.
- EMPTY 4" SQUARE BOX FOR FUTURE FIRE ALARM MODULE RELAYS FOR DOOR RELEASE.

 AC 1 IS POWERED FROM BOOK UNIT ACCULA WIRING
- AC-1 IS POWERED FROM ROOF UNIT ACCU-1. WIRING HARNESS IS SUPPLIED WITH ACC-1. COMPLETE POWER CONNECTIONS.
- ELECTRICAL TRADES SEAL THE WALL OPENING. USE A "NELSON BARRIER" OR EQUAL FOR USE BY THE OWNER TO INSTALL AND SEAL DATA CABLES.
- SUSPEND THE FLEXIBLE WIRE MESH CABLE TRAY OVERHEAD. USE CENTER ROD SUPPORTS. FIELD POSITION THE CABLE TRAY OVER EACH RESPECTIVE SERVER.
- FURNISH AND INSTALL A #4 BARE COPPER BOND
 CONDUCTOR FROM THE SERVER GROUND BAR TO THE
 CABLE TRAY. EXTEND THE BARE COPPER BOND
 CONDUCTOR FOR THE ENTIRE CABLE TRAY LENGTH OF
 RUN.

 17
 NEW EXTERIOR HORN/STROBE. WIRE TO THE FIRE ALARM
- SYSTEM AND TO SPRINKLER RISER FLOW AND TAMPER SWITCHES. FIELD CONFIRM THE FINAL LOCATION WITH THE FIRE PROTECTION CONTRACTOR.

 [18] ELECTRICAL TRADES SHALL FURNISH AND INSTALL A
- GALVANIZED RIGID STEEL CONDUIT AND WEATHER HEAD FOR USE BY UTILITY FOR AERIAL SERVICE CONNECTION. FIELD CONFIRM WITH THE OWNER AND UTILITY.
- FP (FLAT PANEL) ROUGH-IN AND RECEPTACLE. CONFIRM FINAL LOCATION WITH THE OWNER.
- PROVIDE 3/4" CONDUIT FOR POWER AND 1" CONDUIT FOR DATA. FIELD ROUTE FLOOR BOX CONDUITS IN BASEMENT OPEN JOIST SPACE.
- COMPLETE 120 VOLT POWER CONNECTION TO THE SERVER'S POWER STRIP. FIELD CONFIRM WITH THE OWNER.

 22 208 VOLT RECEPTACLE FOR CORD/PLUG CONNECTION TO THE SERVER. FIELD CONFIRM WITH THE OWNER.
- CARD READER ROUGH-IN. FURNISH AND INSTALL AN EMPTY FLUSH MOUNTED 4" SQUARE BOX. INCLUDE A SINGLE DEVICE RING AND A CONCEALED 3/4" CONDUIT DROP.

EXTEND THE CONDUIT TO THE DOOR'S JUNCTION BOX.

- INSTALL A JUNCTION BOX ABOVE THE DOOR WITH A 120 VOLT CIRCUIT. THE 120 VOLT CIRCUIT IS FOR USE BY THE CARD READER VENDOR. TO INSTALL A POWER SUPPLY UNIT. ELECTRICAL TRADES SHALL FURNISH AND INSTALL AN EMPTY 3/4" CONDUIT IN THE DOOR FRAME FOR USE BY THE INSTALLING CARD READER VENDOR.
- CAMERA ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER. CAMERA FURNISHED AND INSTALLED BY THE OWNER. POE (POWER OVER ETHERNET) SHALL BE UTILIZED FOR THE CAMERA POWER. NO 120 VOLT CIRCUIT IS REQUIRED.
- (26) WIFI ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER.

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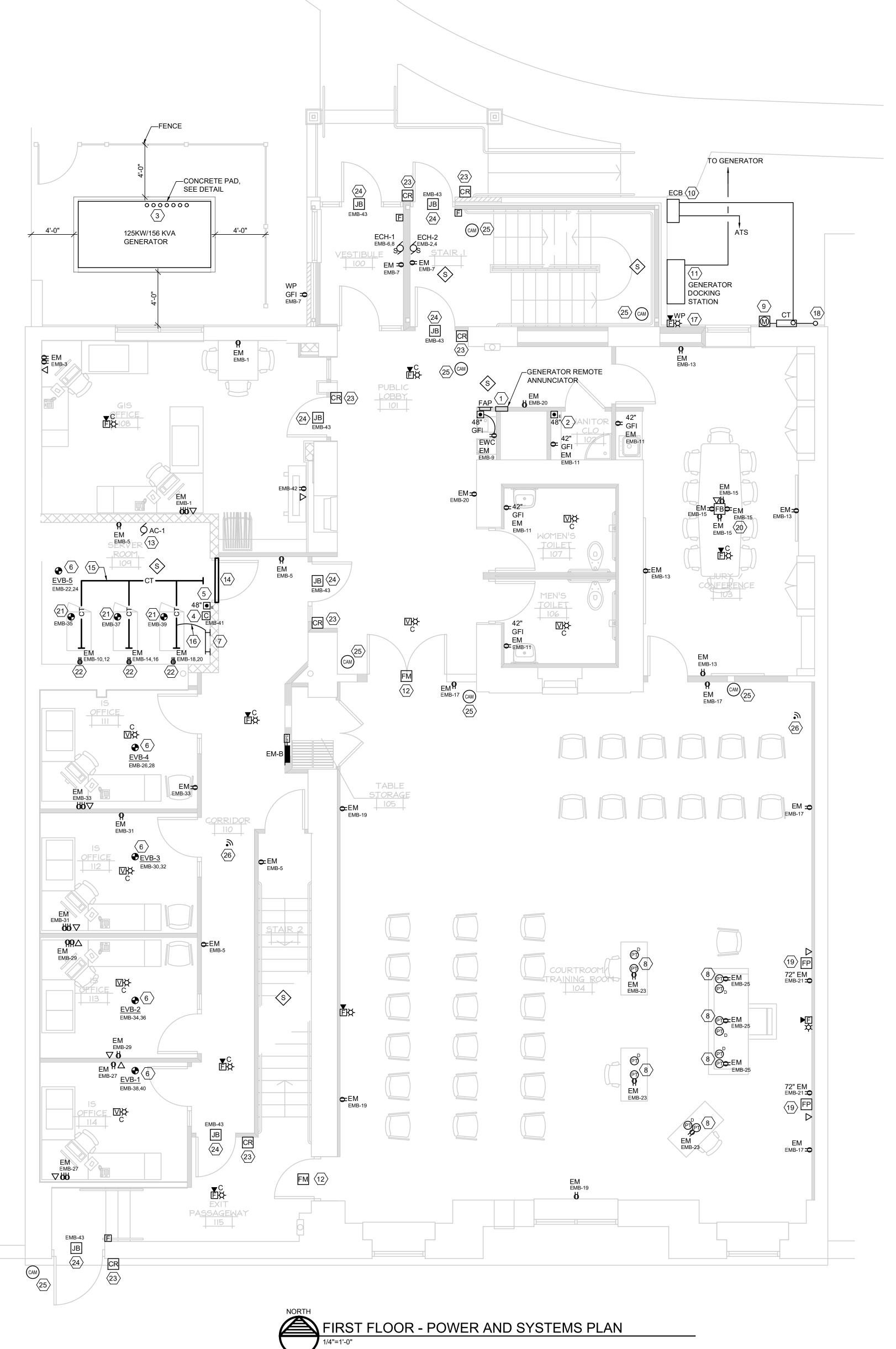
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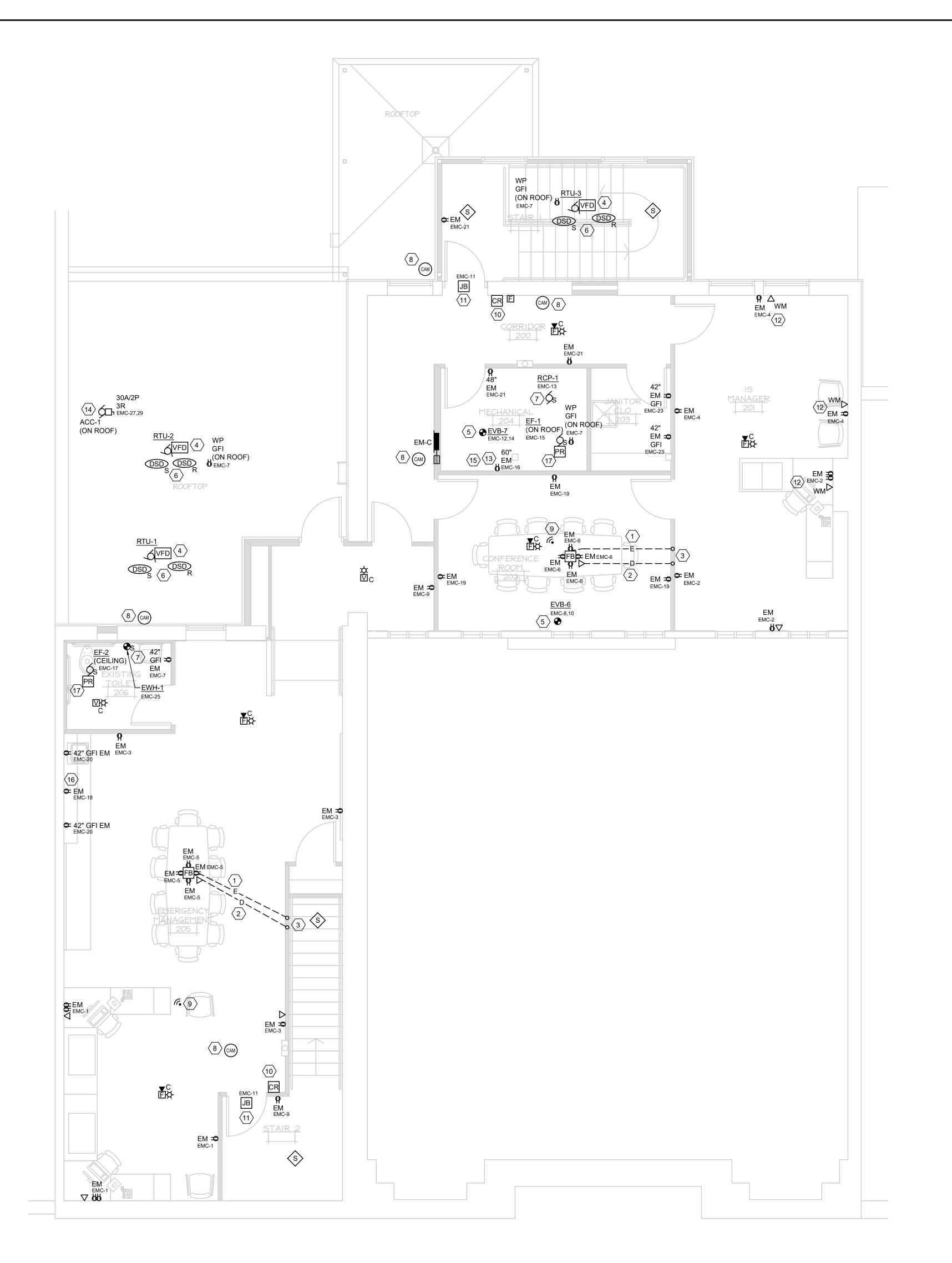
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SECOND FLOOR - POWER AND SYSTEMS PLAN

1/4"=1'-0"

GENERAL NOTES

- 1. REFER TO SHEET E3.3 FOR PANELBOARD SCHEDULES.
- 2. REFER TO SHEET E4.1 FOR ONE-LINE DIAGRAM.
- 3. REFER TO SHEET E3.2 FOR SYMBOLS, WIRING METHODS AND SCHEDULES.
- 4. PROVIDE (4) EMPTY 3/4" CONDUITS STUBBED INTO THE ACCESSIBLE CEILING SPACE ABOVE PANEL EM-B.

THE TEMPERATURE CONTROL CONTRACTOR.

- 5. EF-1 AND EF-2 EXHAUST FAN SHALL BE CONTROLLED BY
- OWNER SHALL BE RESPONSIBLE FOR DATA CABLES, FACEPLATES, TESTING AND TERMINATIONS.

KEYED NOTES

- SAW CUT THE FLOOR FOR A 3/4" POWER CONDUIT CONNECTION TO THE FLOOR BOX. EXTEND THE CONDUIT TO THE WALL FOR A CONCEALED DROP.
- SAW CUT THE FLOOR FOR A 1 1/4" DATA CONNECTION TO THE FLOOR BOX. EXTEND THE CONDUIT TO THE WALL FOR A CONCEALED DROP.
- CONCEALED CONDUIT RISER IN NEW WALL. EXTEND THE CONDUITS INTO THE ACCESSIBLE CEILING SPACE.
- COMBINATION VFD/ DISCONNECT SWITCH FACTORY INSTALLED WITH ROOF TOP UNIT. COMPLETE A SINGLE POINT POWER CONNECTION.
- 5 ELECTRIC VOLUME BOX SHALL BE FACTORY EQUIPPED WITH A MAIN POWER DISCONNECTIIN MEANS. COMPLETE A SINGLE POINT.
- 6 FIELD LOCATE DUCT SMOKE DETECTORS IN A STRAIGHT DUCT SECTION. FOR COMPLIANCE TO NFPA 90A REQUIREMENTS. SEE MECHANICAL PLANS. FURNISH AN INSTALL A REMOTE TEST STATION. FIELD LOCATE.
- 7 FURNISH AND INSTALL A 120 VOLT SNAP SWITCH FOR THE DISCONNECTING MEANS.
- (8) CAMERA ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER. CAMERA FURNISHED AND INSTALLED BY THE OWNER. NO 120 VOLT CIRCUIT REQUIRED. POE (POWER OVER ETHERNET) SHALL BE UTILIZED FOR CAMERA POWER.
- 9 WIFI ROUGH-IN. FIELD CONFIRM THE FINAL LOCATION WITH THE OWNER. WIFI FURNISHED AND INSTALLED BY THE OWNER.
- CARD READER ROUGH-IN. FURNISH AND INSTALL AN EMPTY FLUSH MOUNTED 4" SQUARE BOX, SINGLE GANG DEVICE AND A CONCEALED 3/4" CONDUIT INCLUDE A DROP. EXTEND THE CONDUIT TO THE DOOR'S JUNCTION BOX.
- INSTALL A JUNCTION BOX ABOVE THE DOOR WITH A 120 VOLT CIRCUIT. 120 VOLT CIRCUIT IS FOR USE BY THE CARD READ VENDOR TO INSTALL A POWER SUPPLY UNIT. ELECTRICAL TRADES SHALL FURNISH AND INSTALL AN EMPTY 3/4" CONDUIT IN THE DOOR FRAME FOR USE BY THE INSTALLING CARD READER VENDOR.
- UTILIZE "WIREMOLD" ONE-PIECE STEEL 700 SERIES RACEWAY. PROVIDE A 'WIREMOLD" A RECEPTACLE AND EMPTY DOUBLE GANG DATA OUTLET BOX.
- EMERGENCY POWERED RECEPTACLES FOR WALL MOUNTED DATA CABINET. CONFIRM THE FINAL LOCATION WITH THE OWNER
- ACC-1 POWERS AC-1 IN THE SERVER ROOM. COMPLETE THE FACTORY WIRING HARNESS CONNECTION.
- BOND THE DATA RACK TO THE 1ST FLOOR SERVER ROOM ISOLATED GROUND BAR. PROVIDE #4 BARE COPPER CONDUCTOR.
- DUPLEX RECEPTACLE UNDER THE COUNTER REFRIGERATOR.
- PROVIDE A POWER RELAY FOR EF. MECHANICAL TRADES SHALL PROVIDE CONTROLS TO POWER RELAY.

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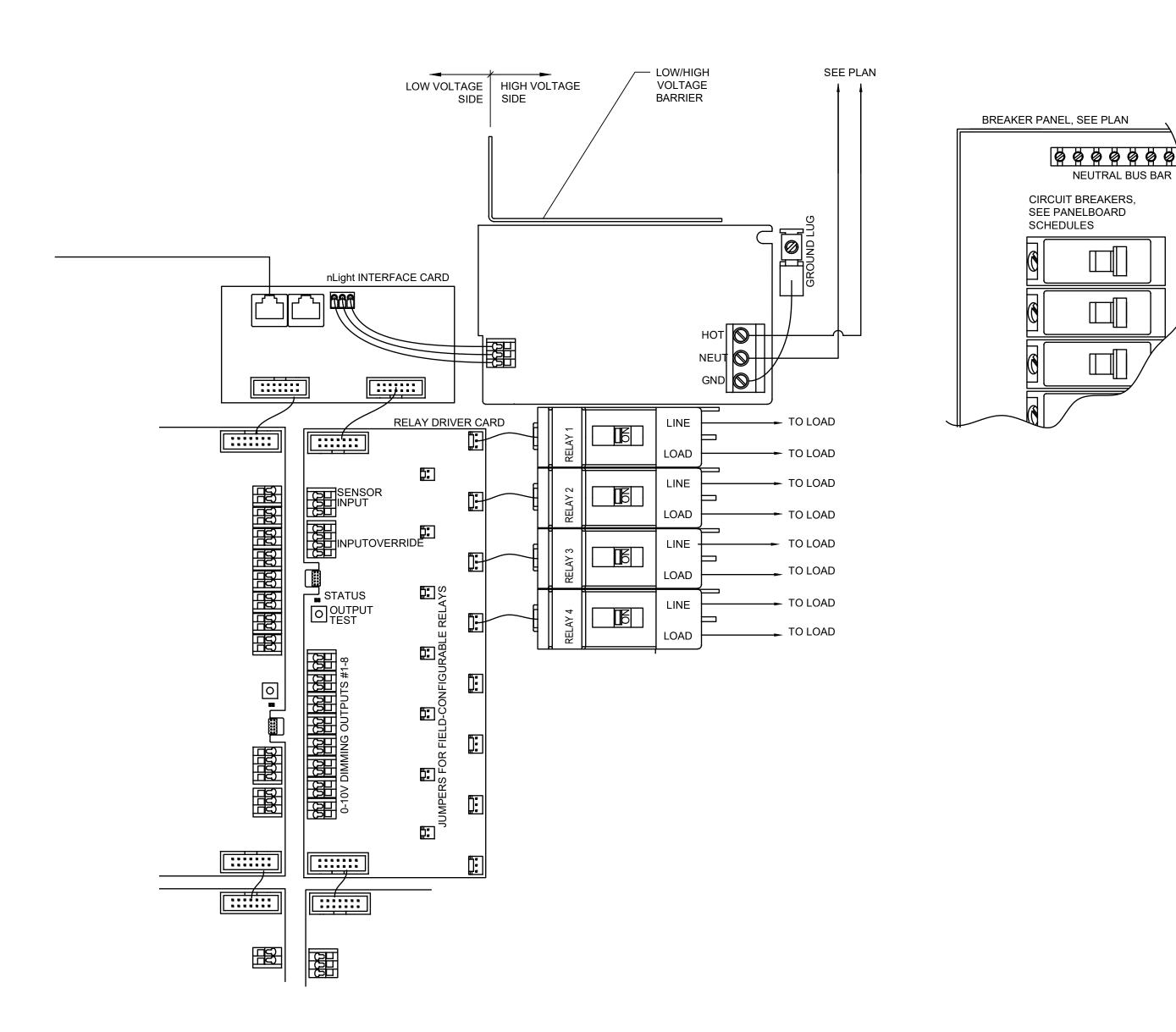
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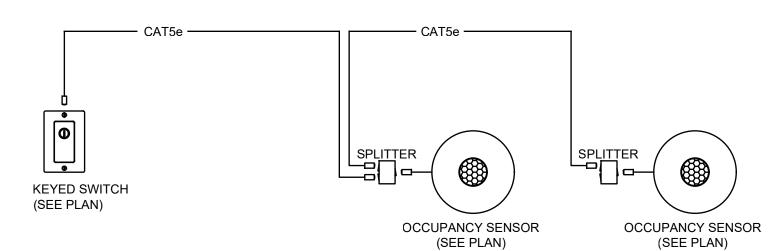
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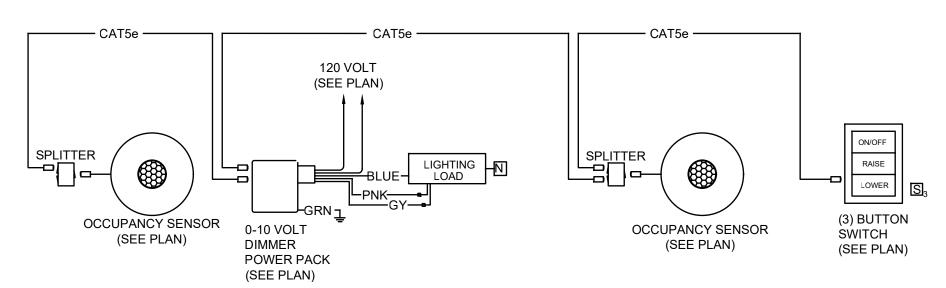
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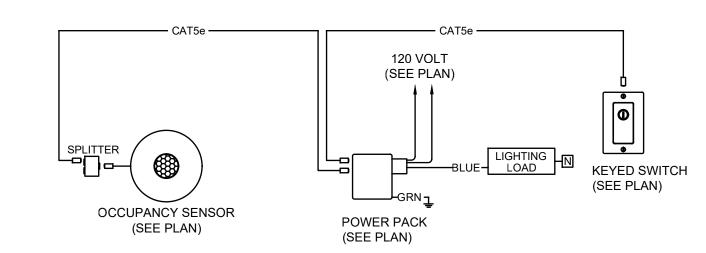
TYPICAL STAIRWAY AND CORRIDOR OCCUPANCY SENSOR CONTROL DIAGRAM



TYPICAL 0-10 VOLT DIMMING LIGHT CONTROL DIAGRAM

WIRING DIAGRAM NOTES

- 1. USE FACTORY GREEN JACKETED CAT5E CABLE.
- 2. CONTRACTOR SHALL UTILIZE CAT5E CABLES WITH FACTORY RJ45 ENDS FROM THE MANUFACTURER. CONTRACTOR ASSEMBLED CABLES AND ENDS IS NOT ACCEPTABLE FOR THIS PROJECT.
- 3. PROVIDE GRAY AND PINK WIRES FOR 0-10 VOLT DIMMING.
- 4. WIRING DIAGRAM AND COMPONENTS IS ACUITY BASE BID.



TYPICAL TOILET ROOM OCCUPANCY SENSOR LIGHT CONTROL DIAGRAM

WIRING DIAGRAM NOTES

- 1. USE FACTORY GREEN JACKETED CAT5E CABLE.
- CONTRACTOR SHALL UTILIZE CAT5E CABLES WITH FACTORY RJ45 ENDS FROM THE MANUFACTURER. CONTRACTOR ASSEMBLED CABLES AND ENDS IS NOT ACCEPTABLE FOR THIS PROJECT.
- WIRING DIAGRAM AND COMPONENTS IS ACUITY BASE BID.

GENERAL NOTES

- ACUITY COMPONENTS AND WIRING DIAGRAMS ARE BASE BID. NO OTHER MANUFACTURES WILL BE ACCEPTED.
- NETWORK WIRE ALL LIGHTING CONTROLS RELAYS TOGETHER SO THE OWNER CAN MONITOR LIGHTING CONTROLS WITH THEIR PC'S OR A MOBILE APP.
- 3. INCLUDE COSTS FOR ON-SITE LIGHTING CONTROL TRAINING.
- ADJUST CORRIDOR, STAIRWAYS AND PUBLIC LOBBY AUTO-ON AND AUTO-OFF TIMES WITH THE OWNER.

LIGHTING CONTROL EXECUTIVE SUMMARY

THE FOLLOWING IS A SPACE BY SPACE DESIGN INTENT SUMMARY FOR LIGHTING CONTROLS. ALL LIGHTING CONTROLS DESIGN IS MADE IN COMPLIANCE WITH THE 2015 MICHIGAN ENERGY CODE AND 2013 ASHRAE.

OFFICES/ EMPLOYEE LOUNGE/ EMERGENCY MANAGEMENT

LIGHTING CONTROL SHALL BE MADE WITH LOCAL CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSORS, POWER PACK AND LOW-VOLTAGE SWITCHING. LIGHTING SHALL COME ON TO 50% AT FIRST SENSING DETECTION. MANUAL ON TO 100%. MANUAL ON TO 90%, DIM TO 30% AFTER 10 MINUTES OF NO DETECTION. AUTO-OFF AFTER 20 MINUTES OF NO DETECTION. THE LOCAL LOW-VOLTAGE SWITCH SHALL HAVE THE FUNCTION

- ON/OFFRAISE
- LOWER

CONFERENCE ROOMS

LIGHTING CONTROL SHALL BE MADE WITH LOCAL CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSORS, POWER PACK AND LOW-VOLTAGE SWITCHING. LIGHTING SHALL COME ON TO 50% AT FIRST SENSING DETECTION. MANUAL ON TO 100%. AUTO-OFF AFTER 20 MINUTES OF NO DETECTION. THE LOCAL LOW-VOLTAGE SWITCH SHALL HAVE THE FUNCTION OF:

- ON/OFFRAISE
- RAISELOWER

PUBLIC LOBBY / VESTIBULES

LIGHTING CONTROL SHALL BE MADE WITH LIGHTING CONTROL RELAY PANEL AND INFRARED OCCUPANCY SENSORS. AUTO-ON AT 7 AM AND OFF AT 6 PM. BETWEEN 6 PM AND 7 AM OCCUPANCY SENSORS ON AND OFF AFTER 15 MINUTES. LOW-VOLTAGE KEYED SWITCHING FOR MANUAL OVERRIDE.

COURTROOM-TRAINING ROOM

LIGHTING CONTROL SHALL BE MADE WITH LOCAL DUAL TECHNOLOGY SENSOR, POWER PACKS, AND LOW-VOLTAGE SWITCH FOR MANUAL ON AND AUTO OFF.

LOW-VOLTAGE SWITCH FUNCTIONS:

ON - ALL LIGHTS ON 100%

OFF - TURN OFF ALL LIGHTS

DIM - ALL LIGHTS ON TO 25% OUTPUT
 RAISE - RAISE INTENSITY FOR ALL LIGHTING
 LOWER - LOWER INTENSITY FOR ALL LIGHTING

TOILET ROOMS

LIGHTING CONTROL SHALL BE AUTO-ON, AUTO-OFF BY OCCUPANCY SENSOR WITH A MANUAL OVERRIDE KEYED SWITCH.

CORRIDORS AND STAIRWAYS

LIGHTING CONTROL SHALL BE MADE WITH LOCAL CEILING MOUNTED PASSIVE INFRARED OCCUPANCY SENSORS VIA A LIGHTING CONTROL PANEL. OCCUPANCY SENSORS AUTO-ON AT 7:00 AM, AND OFF AT 6:00 PM. BETWEEN 6 PM TO 7 AM, OCCUPANCY SENSOR ON AND OFF AFTER 15 MINUTES. LOW-VOLTAGE KEYED SWITCHING FOR MANUAL OVERRIDE.

MECHANICAL/ELECTRICAL ROOM / SERVER ROOM

MANUAL ON, MANUAL OFF LINE-VOLTAGE SWITCHING. NO OCCUPANCY SENSOR CONTROL.

JANITOR CLOSET

WALL BOX MOTION SENSOR SWITCHING. AUTO-ON TO 100% AT FIRST SENSING DETECTION. AUTO-OFF AFTER 20 MINUTES OF NO DETECTION. THE SWITCH SHALL HAVE MANUAL ON/OFF AS WELL.

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DIAGRAM

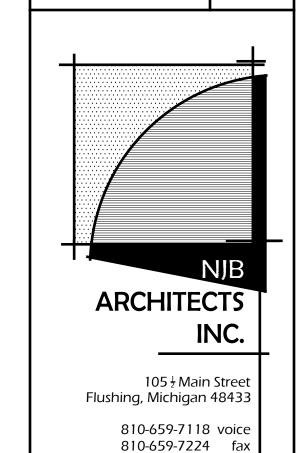
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POKE THRU SCHEDULE (PT)

7" DIAMETER MULTI-SERVICE, NON-METALLIC SLIDE HOLDER SUITABLE FOR CARPET OR TILE FLOOR. 20 AMP RECEPTACLE WITH DATA KEYSTONE SLOTS. FINAL COVER FINISH BY ARCHITECT FROM STANDARD COLORS.

REMOTE GFI TEST STATION

20 AMP RATED. TEST / RESET BUTTON. UL LISTED AS A GROUND FAULT CIRCUIT INTERRUPTER. PASS AND SEYMOUR OR EQUAL.

SURGE PROTECTION DEVICE SCHEDULE

SQUARE D SDS4.

GENERATOR SCHEDULE

STANDBY GENERATOR. 125KW/156KVA, NATURAL GAS FUELED. 120/208 VOLT, 3PH, 4W, 60Hz, 400 AMP, 3 POLE CIRCUIT BREAKER. 12 VOLT BATTERY. BATTERY CHARGER. REMOTE ANNUNCIATOR PANEL, NEPA 110 COMPLIANT. LEVEL 1 SOUND ENCLOSURE. REMOTE E-STOP. START WIRE MONITORING UNIT. START UP AND COMMISSIONING SERVICE. CUMMINS BASE BID. OTHER MANUFACTURERS MAY QUOTE AS A VOLUNTARY ALTERNATE.

FLOOR BOX SCHEDULE (FB)

4 COMPARTMENT MULTI-SERVICE BOX SUITABLE FOR WOOD FLOOR. FULLY ADJUSTABLE DUPLEX MOUNTING PLATE. STAMPED STEEL HOUSING. PROVIDE EMPTY BRACE ON SLOTS DATA KEYSTONE TO ACCEPT RJ45 JACKS. PROVIDE CUT-OUT COVER ASSEMBLY. INSERT LID PROVISIONS FOR CARPET OR TILE. TUNNEL CHANNELS FOR DATA AND POWER WIRING. CONDUIT KNOCKOUT PROVISIONS TO ACCEPT 3/4" TO 1 1/2" RANGE SIZE. FINAL COVER FINISH BY ARCHITECT FROM STANDARD COLORS, WIREMOLD RF SERIES.

CONTACTOR SCHEDULE

30 AMP, 4 POLE.ELECTRICALLY HELD TYPE. NEMA 1 ENCLOSURE 120 VOLT COIL VOLTAGE. SQUARE D CLASS 8903.

SERVER ROOM EPO SCHEDULE

SQUARE D 9001KR16H13 THAT HOUSES THE FOLLOWING

- ONE-HOLE ENCLOSURE 9001KY-1
- RED MUSHROOM PLASTIC HEAD 1NC AND 1NO CONTACT BLOCK
- TURN TO RELEASE
- EMERGENCY OFF LEGEND PLATE 120 VOLT

CABLE TRAY SCHEDULE (CT)

4"x12" FLEXIBLE WIRE MESH CABLE TRAY. CENTER RAIL SUPPORTED. INCLUDE BLANK END PLATES. T-FITTINGS. DROP OUTS. SPLICE KITS, GROUNDING LUG CONNECTIONS AND HARDWARE. CABLOFIL OR

250 WATT MICRO INVERTER, 120 VOLT INPUT, PURE SINE WAVE OUTPUT. LEAD ACID BATTERY. 90 MINUTE EMERGENCY OPERATION. UL924. DIMMING RELAY OPTION. FACTORY START UP. IOTA. NO OTHER MANUFACTURERS WILL BE ACCEPTED.

LIGHT FIXTURE SCHEDULE

LIGHT FIXTURES SHALL BE DLC COMPLIANT. LIGHT FIXTURES HAVE BEEN PRE-APPROVED BY OWNER AND ARCHITECT. NO OTHER MANUFACTURERS WILL BE ACCEPTED.

TYPE DESCRIPTION

- 2' X 2' LED FLAT PANEL. 4800 LUMENS. 45 WATTS. 4000°K, M-VOLT. WHITE FINISH. LITHONIA E-PANEL.
- SAME AS TYPE A EXCEPT INCLUDES A BATTERY DRIVER
- 4 FT LED STRIP LIGHT. LENSED FIXTURE. 4000 LUMENS. 26 WATTS. 4000°K M-VOLT. WHITE FINISH. LITHONIA CLX.
- SAME AS TYPE B EXCEPT INCLUDES A BATTERY DRIVER.
 - 14" SQUARE SURFACE MOUNT. SHALLOW HOUSING DEPTH. UL LISTED FOR WET/DAMP LOCATION. 1800 LUMENS. 20 WATTS. 4000°K, M-VOLT. WHITE FINISH. JUNO SLIMFORM.
- 8" ROUND DOWNLIGHT. ADJUSTABLE LUMENS 1000/1500/2000 LUMENS OUTPUT. 13.19 AND 25 WATTS. 4000°K. WHITE FINISH. SEMI-SPECULAR REFLECTOR FINISH. MEDIUM DISTRIBUTION. LITHONIA LBR8.
- SAME AS TYPE D EXCEPT INCLUDES A BATTERY DRIVER.
- SAME AS TYPE D EXCEPT RETRO FIT HOUSING TYPE
- EXIT LIGHT. SINGLE FACE. RED LETTERS. EDGE LIT. MIRROR ON MIRROR 120 VOLTS. NI-CAD BATTERY. LITHONIA EDGE.
- TWIN HEAD EMERGENCY LIGHT. ADJUSTABLE HEADS. .56 WATTS EACH.120 VOLTS. NI-CAD BATTERY. LITHONIA EU2C.
- AIR CRAFT SUSPENDED LED LIGHT FIXTURE. WHITE ACRYLIC DIFFUSE. OAH 36". 34" SQUARE HOUSING. BLACK POWER CORD. 11.100 LUMENS. 93 WATTS - M-VOLT. FINAL FINISH TBD BY ARCHITECT FROM STANDARD COLORS 3500K. VISA FIFTH AVENUE. CP2012 CBL
- SAME AS TYPE F EXCEPT CONNECTED TO THE INVERTER
- KEYLESS LAMP HOLDER FOR A19 LED LAMP. 900 LUMENS. 11 WATTS. 3000K. 120 VOLTS SORAA-VIVID
- 48"x4" RECESSED LED LINEAR. STANDARD OUTPUT. DOWNLIGHT DISTRIBUTION. 3500 LUMENS. 37 WATTS, 120 VOLTS
- SAME AS TYPE H, EXCEPT INCLUDES A BATTERY DRIVER. NOT USED.
- SQUARE SHADED VANITY LIGHT. 24" LENGTH. 1550 LUMENS. M-VOLT. 18 WATTS. 4000°K. LITHONIA FMVCS LS.
- 4" ROUND DOWNLIGHT. ADJUSTABLE LUMENS OUTPUT. M-VOLT. WHITE FINISH. SEMI-SPECULAR REFLECTOR FINISH. 4000°K. LITHONIA LBR4.
- 24" LED STRIP LIGHT. LENSED FIXTURE. 2000 LUMENS. 25 WATTS. M-VOLT. LITHONIA CLX.
- SAME AS TYPE L EXCEPT CONNECTED TO THE INVERTER
- LED WALL PACK. 1200 LUMENS. 14 WATTS. M-VOLT. BUTTON TYPE PHOTOCELL. DARK BRONZE FINISH. LITHONIA WDGEZ SERIES
- SAME AS TYPE H, EXCEPT 96" LENGTH AND 72 WATTS

LIGHTING WIRING METHODS

- 1. ELECTRICAL TRADES SHALL INCLUDE COSTS FOR LIGHTING CONTROL FUNCTIONAL TESTING.
- 2. EXIT LIGHTS SHALL OPERATE 24/7.
- 3. POWER PACKS INSTALLED IN THE ACCESSIBLE CEILING SPACE AS SHOWN, LOCATE ABOVE THE SWITCHING STATION FOR EASE OF OWNER'S MAINTENANCE OR TROUBLE SHOOTING.
- 4. ALL LIGHTING CIRCUITS SHALL BE INSTALLED IN CONDUIT. LOW-VOLTAGE LIGHTING CONTROL WIRING INSTALLED IN THE ACCESSIBLE CEILING SPACE NEED NOT BE INSTALLED IN CONDUIT. PROPERLY SECURE AND NEATLY TRAIN TO STRUCTURE.
- 5. OCCUPANCY SENSORS INSTALLED IN LAY-IN CEILINGS SHALL BE CENTERED IN THE CEILING TILE.
- 6. ELECTRICAL TRADES SHALL PROVIDE ENGRAVED LABELS FOR ALL LOW-VOLTAGE MULTI-BUTTON SWITCHES AS SHOWN.
- 7. REFER TO OCCUPANCY SENSOR MANUFACTURER FOR DETAILED WIRING CONNECTIONS AND METHODS BETWEEN SENSORS, POWER PACKS AND SWITCHING.
- 8. MC CABLE IS ONLY ACCEPTABLE FOR FINAL LIGHT FIXTURE CONNECTIONS ABOVE THE ACCESSIBLE LAY-IN CEILINGS.

POWER AND SYSTEMS WIRING METHODS

- 1. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH RECEPTACLE CIRCUITS. SHARED NEUTRALS IS NOT ACCEPTABLE FOR THIS PROJECT.
- 2. PROVIDE EQUIPMENT GROUND CONDUCTOR FOR EACH LIGHTING FIXTURE AND RECEPTACLE.
- 3. ALL POWER WIRING SHALL BE INSTALLED IN CONDUIT.
- 4. J-HOOKS AND D-RINGS SHALL BE USED FOR LOW-VOLTAGE CABLE MANAGEMENT.
- 5. ALL NEW RACEWAYS ROUTED TO NEW LOADS IN FINISHED SPACES SHALL BE CONCEALED. SURFACE MOUNTED RACEWAY IN NON-FINISHED SPACES IS ACCEPTABLE.
- 6. ALL INTERIOR BRANCH DEVICE BACKBOXES SHALL BE 4" SQUARE STEEL BOX WITH SINGLE GANG TRIM RING, UNLESS SPECIFIED OR NOTED OTHERWISE. NON-METALLIC BOXES ARE NOT ACCEPTABLE FOR THIS
- 7. ALL NEW RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT A MINIMUM OF 16" TO THE BOTTOM OF THE BOX ABOVE THE FINISHED FLOOR, UNLESS NOTED OTHERWISE.

FIRE ALARM GENERAL NOTES

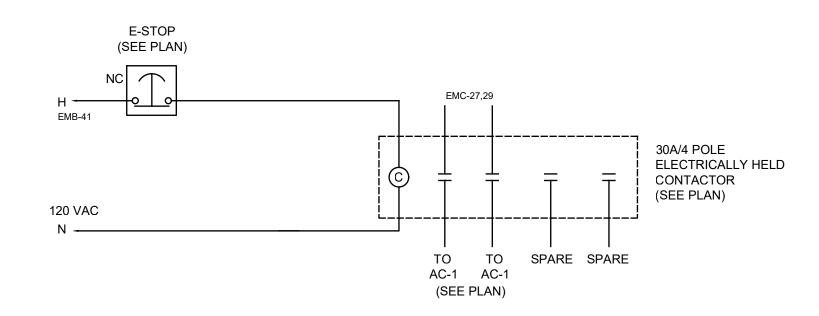
- 1. ELECTRICAL TRADES SHALL BE RESPONSIBLE TO REVIEW ARCHITECTURAL DRAWINGS FOR FIRE ALARM INSTALLATION
- 2. ELECTRICAL TRADES SHALL BE RESPONSIBLE TO SCHEDULE FIRE ALARM INSPECTIONS AND FINAL SIGN OFF.

FIRE ALARM WIRING METHODS

- 1. FIRE ALARM WIRING INSTALLED ABOVE ACCESSIBLE CEILINGS. IT IS ACCEPTABLE TO USE J-HOOKS OR D-RINGS PROPERLY SUPPORTED FROM STRUCTURE.
- 2. WALL MOUNTED AUDIO/VISUAL OR VISUAL DEVICES SHALL BE MOUNTED SUCH THAT THE DEVICE LENS IS NOT LESS THAN 80" AND NOT GREATER THAN 96" ABOVE THE FLOOR.
- 3. MANUAL PULL STATION SHALL BE MOUNTED 48" MAXIMUM TO THE TOP OF THE BOX FROM THE FINISHED FLOOR.
- 4. INSTALL CEILING MOUNTED FIRE ALARM DEVICES TO AVOID INTERFERENCES WITH LIGHT FIXTURES, HVAC DIFFUSERS OF OWNER'S
- 5. CEILING MOUNTED FIRE ALARM DEVICES INSTALLED IN LAY-IN CEILING

TILES SHALL BE CENTERED IN THE TILE.

6. INSTALL FIRE ALARM WIRING IN CONDUIT FOR PHYSICAL PROTECTION IN STORAGE ROOMS, MECHANICAL FLOORS, STAIRWAYS, VESTIBULES AND DATA RACK ROOMS.



EMERGENCY SERVER ROOM HVAC SHUTDOWN WIRING DIAGRAM NO SCALE

ELECTRICAL SYMBOLS

- 2 X 2 LED FIXTURE, TYPE INDICATED
- DOWNLIGHT FIXTURE, TYPE INDICATED
- 14" SQUARE FIXTURE, TYPE INDICATED
- LINEAR LED, TYPE INDICATED
- PENDANT FIXTURE, TYPE INDICATED
- EXIT LIGHT
- ₩ WALL MOUNTED EXIST LIGHT
- TWIN HEAD EMERGENCY LIGHT
- S SINGLE SWITCH
- ELECTRICAL CONNECTION
- GFI

 → GROUND FAULT RECEPTACLE
- GFI REMOTE GFI TEST STATION
- EMERGENCY STOP BUTTON
- WR

 EMERGENCY WEATHER RESISTANT GROUND FAULT RECEPTACLE
- EM

 EMERGENCY DUPLEX RECEPTACLE
- EM 🕏 EMERGENCY DOUBLE DUPLEX RECEPTACLE
- EM

 EMERGENCY 208 VOLT RECEPTACLE EM SEMERGENCY WIREMOLD RECEPTACLE BOX
- ATS AUTOMATIC TRANSFER SWITCH
- EMERGENCY LIGHTING PANEL
- EMERGENCY RECEPTACLE PANEL
- SPD SURGE PROTECTIVE DEVICE
- LIGHTING CONTROL PANEL
- TS FIRE ALARM TAMPER SWITCH FS FIRE ALARM FLOW SWITCH
- DSD DUCT SMOKE DETECTOR SUPPLY
- DSD DUCT SMOKE DETECTOR RETURN F FIRE ALARM PULL STATION
- ⟨S⟩ SMOKE DETECTOR
- 以 CEILING MOUNTED HORN/STROBE FIRE ALARM DEVICE ☑☆ CEILING MOUNTED VISUAL FIRE ALARM DEVICE
- ₩ALL MOUNTED WEATHER PROOF HORN/STROBE DEVICE
- FIRE ALARM PANEL
- FAA FIRE ALARM ANNUNCIATOR PANEL
- ☐ NON-FUSED DISCONNECT SWITCH
- SINGLE PHASE MOTOR 3 PHASE MOTOR
- JB JUNCTION BOX
- MDP PANEL DISTRIBUTION PANEL

P POWER PACK

- S LOW-VOLTAGE DIGITAL SWITCH STATION
- S LOW-VOLTAGE KEYED SWITCH
- CEILING MOUNTED DUAL TECHNOLOGY SENSOR 360° SENSING 1000 SQUARE
- CEILING MOUNTED INFRARED SENSOR 360° SENSING 1000 SQUARE FOOT COVERAGE
- S_M WALL SWITCH OCCUPANCY SENSOR
- (PT) POKE-THRU FLOOR BOX (PT) DATA POKE THRU FLOOR
- FB MULTI-SERVICE FLOOR BOX
- □ DATA OUTLET
- FP FLAT PANEL OUTLET
- (CAM) CAMERA OUTLET
- C CONTACTOR € WiFi
- CR CARD READER
- PR POWER RELAY 120 VOLT/ 24 VOLT
- CT CABLE TRAY
- RTU ROOF TOP UNIT
- EF EXHAUST FAN

ACC ROOF AIR COOLED CONDENSER UNIT

- ECH ELECTRIC CABINET HEATER AC SERVER ROOM AIR CONDITIONER UNIT
- EVB ELECTRIC VOLUME BOX
- RCP RECIRCUITING PUMP EWH ELECTRIC WATER HEATER

Σ 0 SC

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RENO

ARCHITECTS 105 ½ Main Street 810-659-7118 voice 810-659-7224

NE.	W	MAIN: SIZ	ministration into the control	125 A	MLO						PANEL LC		STOR 94		
DN	NL EL-A	BUS RATI	NG:	125 A							FEEDER S	SIZE:			
ГІ	NL LL-A	VOLTAGE	:	120 / 208	V 3	Ø,	4	WII	RE		FED FROM	/ 1:	DP		
3	SQUARE D QO LOAD CENTER	MOUNTING	3:	SURFAC	773						MIN RMS	AMPS:			
CKT #	CIRCUIT DESCRIPTION	A L	OAD (KVA) B) C	AMPS / POLES	CKT #	OAD	TYPE	CKT #	AMPS / POLES	A	OAD (KVA B	() C	CIRCUIT DESCRIPTION	CK ⁻
-	LCP-A	0.500			20A	1	o	L	2	20A	0.130			LIGHTS	2
_	STAIR #2 LIGHTS		0.040		20A	3	T	L	4	20A		0.250		INVA	4
5	STAIR #1 LIGHTS			0.020	20A	5	L	L	6	20A			0.050	HALLWAY	6
7	LIGHTS	0.110			20A	7	L	L	8	20A	0.270			LOUNGE LIGHTS	8
9	LIGHTS		0.060		20A	9	L	П	10	20A				SPARE	10
11	LIGHTS			0.140	20A	11	L	П	12	20A	,			SPARE	12
13	SPARE				20A	13	П	П	14	20A				SPARE	14
15	SPARE				20A	15			16	20A				SPARE	16
17	SPARE				20A	17			18	20A	3			SPARE	18
19	SPARE				20A	19			20	20A		*		SPARE	20
		T KVA	CONNEC	TED							KV	A SUMMA	RY		
	LOAD SUMMARY	Α	В	С							TOTAL		DEMAND		
REC	EPTACLES F	200	0.000	0.000							0.000		0.000		
IGH	ITING L	0.510	0.350	0.210							1.070	1.000	1.070		
НТС	ER (0.500	0.000	0.000	1					1	0.500	0.600	0.300		
EXIS	TING	0.000	0.000	0.000	1						0.000	1.000	0.000		
TOT	AL KVA	1.010	0.350	0.210	1						1.570		1.370	TOTAL ESTIMATE KVA	
/OL	TS / PHASE	120	120	120							208		208	SYSTEM VOLTAGE	
ARAE	S / PHASE	8.417	2.917	1.750	l						4.358		3.803	AMPS	

NE	W	MAIN: SIZE	E & TYPE:	125 A	MLO					PANEL LO	CATION:	SERVER	ROOM	
DN	NL EL-B	BUS RATII	NG:	125 A						FEEDER S	SIZE:			
FI	NL EL-D	VOLTAGE		120 / 208	V 3	Ø,	4 V	/IRE		FED FROM	M:	DP		
	SQUARE D QO LOAD CENTER	MOUNTING	3:	FLUSH						MIN RMS	AMPS:			
CKT	CIRCUIT DESCRIPTION	L	DAD (KVA)	AMPS /	0.0001001501111			AMPS /		OAD (KVA	4)	CIRCUIT DESCRIPTION	CKT
#	GINGGIT BESCHIT TION	Α	В	С	POLES	#	9 ≿	#	POLES	Α	В	С	CIRCOIT DESCRIPTION	#
1	LCP-B	0.500			20A	1	O L	2	20A	0.290			LIGHTS	2
3	LIGHTS		0.360		20A	3	LL	4	20A		0.290		LIGHTS	4
5	LIGHTS			0.120	20A	5	LL	6	20A			0.010	WALL PACK	6
7	LIGHTS	0.190			20A	7	LL	. 8	20A	0.090			LIGHTS	8
9	LIGHTS		0.130		20A	9	LL	10	20A		0.250		INV B	10
11	LIGHTS			0.140	20A	11	L	12	20A					12
13	SOFFIT LIGHTS	0.080			20A	13	L	14	20A					14
15					20A	15		16	20A					16
17					20A	17		18	20A					18
19					20A	19		20	20A					20
	LOAD SUMMARY	KVA	CONNEC	ΓED						KV	A SUMMA	25.530		
	EOAD COMMAKT	Α	В	С						TOTAL		DEMAND	ĺ	
REC	EPTACLES R	0.000	0.000	0.000						0.000		0.000		
LIGH	ITING L	0.650	1.030	0.270						1.950	1.000	1.950		
OTH	T. (174)	0.500	0.000	0.000	1					0.500	CONTRACTOR CONTRACTOR	0.300		
EXIS	TING E	0.000	0.000	0.000						0.000	1.000	0.000		
TOT	AL KVA	1.150	1.030	0.270						2.450		2.250	TOTAL ESTIMATE KVA	
VOL	TS / PHASE	120	120	120						208		208	SYSTEM VOLTAGE	
AMF	S / PHASE	9.583	8.583	2.250						6.801		6.246	AMPS	
NO	TES:													

NE	W	MAIN: SIZ	E & TYPE:	125 A	MLO						PANEL LC	CATION:	CORR 200		
DN	NL EL-C	BUS RATI	NG:	125 A							FEEDER S	SIZE:			
	AL LL-O	VOLTAGE	20	120 / 208	V 3	Ø,	4	W	RE		FED FROM	0.00	DP		
5	SQUARE D QO LOAD CENTER	MOUNTING	G:	FLUSH							MIN RMS	AMPS:			
CKT	CIRCUIT DESCRIPTION	L	OAD (KVA))	AMPS /		AD	PΕ	CKT	AMPS /	L	OAD (KVA	A)	CIRCUIT DESCRIPTION	T
#	CIRCUIT BESCRIPTION	Α	В	С	POLES	#	Ŝ	7	#	POLES	Α	В	С	CIRCUIT DESCRIPTION	
1	LCP-C	0.500			20A	1	0	L	2	20A	0.250			INV C	Τ
3	LIGHTS		0.060		20A	3	L	L	4	20A		0.270		LIGHTS	Τ
5	LIGHTS			0.230	20A	5	L	L	6	20A			0.360	LIGHTS	Τ
7	LIGHTS	0.040			20A	7	L	L	8	20A	0.220			LIGHTS	Τ
9	LIGHTS		0.740		20A	9	L		10	20A					T
11	LIGHTS			0.040	20A	11	L		12	20A					T
13					20A	13			14	20A					T
15					20A	15			16	20A					T
17					20A	17			18	20A					
19					20A	19			20	20A					Т
															_
	LOAD CHMMADY	KVA	CONNECT	ΓED							KV	A SUMMA	\RY		_
	LOAD SUMMARY	Α	В	С	1						TOTAL		DEMAND		
REC	EPTACLES R	0.000	0.000	0.000	1						0.000		0.000		
LIGH	ITING L	0.510	1.070	0.630	1						2.210	1.000	2.210		
ОТН	ER O	0.500	0.000	0.000	1						0.500	0.600	0.300		
EXIS	TING E	0.000	0.000	0.000	1						0.000	1.000	0.000		
	A 1 1/3 / A	1.010	1.070	0.630	1						2.710		2.510	TOTAL ESTIMATE KVA	_
TOTA	AL KVA	1.010									200		200	SYSTEM VOLTAGE	_
F. (49-10) S. (5)	TS / PHASE	120	120	120	1						208		208	STSTEIN VOLIAGE	

	LIGHTING CONTROL PANEL LCPA	4	ELA-1
RELAY	ZONE CONTROLLED	CHANNEL	CIRCUIT
1	STAIR #2	Α	ELA-3
2	STAIR #1	Α	ELA-5
3	HALLWAY	Α	INVA
4	HALLWAY	Α	ELA-6
5	SPARE RELAY		
6	SPARE RELAY		
7	SPARE RELAY		
8	SPARE RELAY		
NOTES	A OCC SENSOR ON / SCHEDULED OFF AT 10PM		

	LIGHTING CONTROL PANEL LCPB ELB-1								
RELAY	ZONE CONTROLLED	CHANNEL	CIRCUIT						
1	CORR 110 LIGHTS	Α	ELB-7						
2	STAIR #2	Α	ELB-9						
3	LOBBY LIGHTS	Α	ELB-11						
4	STAIR/ VESTIBULE LIGHTS	Α	ELB-8						
5	CANOPY LIGHTS	Α	INV B						
6	SOFFIT LIGHTS	В	ELB-13						
7	SPARE RELAY								
8	SPARE RELAY								
NOTES	A OCC SENSOR ON / SCHEDULED OFF AT 10PM B DUSK TILL DAWN VIA LCP-B								

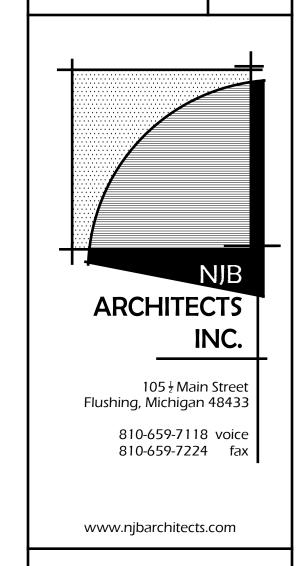
	LIGHTING CONTROL PANEL LCPC										
RELAY	ZONE CONTROLLED	CHANNEL	CIRCUIT								
1	CORR 200 LIGHTS	Α	ELC-5								
2	STAIR LIGHTS	Α	ELC-7								
3	STAIR LIGHTS	Α	ELC-11								
4	SPARE RELAY										
5	SPARE RELAY										
6	SPARE RELAY										
7	SPARE RELAY										
8	SPARE RELAY										
NOTES	A OCC SENSOR ON / SCHEDULED OFF AT 10PM										

NΕ	N	MAIN: SIZ	E & TYPE:	125 A	MLO						PANEL LO	CATION:	STOR 94		
	II = R/I A	BUS RATI	NG:	125 A							FEEDER S	SIZE:			
PI	IL EM-A	VOLTAGE		120 / 208	V 3	Ø,	4	WII	RE		FED FROM	/l:	DP		
5	SQUARE D QO LOAD CENTER	MOUNTING	G :								MIN RMS	AMPS:			
CKT	CIRCUIT DESCRIPTION	L	OAD (KVA))	AMPS /	СКТ	LOAD	PE	CKT	AMPS /	L	OAD (KVA	١)	CIRCUIT DESCRIPTION	СКТ
#	CIRCUIT DESCRIPTION	Α	В	С	POLES	#	으	<u></u>	#	POLES	Α	В	С	CIRCUIT DESCRIPTION	#
1	RECEPTACLE	0.720			20A	1	R	0	2	20A	0.500			FIRE ALARM PANEL	2
3	GFI RECEPT		0.540		20A	3		0	4	20A		1.500		BLOCK HEATER	4
5	RECEPTACLE			0.540	20A	5	R	0	6	20A			1.500	BATTERY CHARGER	6
7	RECEPTACLE	0.720			20A	7	R		8	20A				SPARE	8
9	RECEPTACLE		0.360		20A	9	R	0	10	20A		0.500		DOOR	10
11	COFFEE MAKER			1.500	20A	11	R	0	12	20A			1.500	DATA RACK	12
13	REFRIGERATOR	1.500			20A	13	R		14	20A				SPARE	14
15	RECEPTACLE		0.540		20A	15	R		16	20A				SPARE	16
17	RECEPTACLE			0.720	20A	17	R		18	20A				SPARE	18
19	RECEPTACLE	0.720			20A	19	R		20	20A				SPARE	20
21	SPARE				20A	21			22	20				SPARE	22
23	SPARE				20A	23			24	20A				SPARE	24
25	SPARE				20A	25			26	20A				SPARE	26
27	SPARE				20A	27			28	20A				SPARE	28
29	SPARE				20A	29			30	20A				SPARE	30
	LOAD SUMMARY	KVA	CONNEC	ŒD							KV.	A SUMMA	.RY		
	LOAD SOMMARY	Α	В	С	1						TOTAL		DEMAND		
REC	EPTACLES R	3.660	1.440	2.760	1						7.860		7.860		
LIGH	TING L	0.000	0.000	0.000	1						0.000	1.000	0.000		
HVA	С Н	0.000	0.000	0.000	1						0.000	0.950	0.000		
ОТН	ER O	0.500	2.000	3.000	1						5.500	0.600	3.300		
EXIS	TING E	0.000	0.000	0.000	1						0.000	1.000	0.000		
TOTA	AL KVA	4.160	3.440	5.760	1						13.360		11.160	TOTAL ESTIMATE KVA	
	TS / PHASE	120	120	120	1						208		208	SYSTEM VOLTAGE	
VOL.		34.667	28.667	48.000	1						37.085		30.978	AMPS	

NE	N	MAIN: SIZ	E & TYPE:	225 A							PANEL LO	CATION:	CORR 110)	
D	II EM D	BUS RATI	NG:	225 A							FEEDER S	SIZE:			
Pr	NL EM-B	VOLTAGE		120 / 208	V 3	Ø,	4 V	VIR	E		FED FROM	Л :	DP		
;	SQUARE D QO LOAD CENTER	MOUNTING	G :	FLUSH		-					MIN RMS	AMPS:			
CKT	CIDCUIT DESCRIPTION	L	OAD (KVA)	AMPS /	СКТ	P H	С	KT	AMPS /	L	OAD (KV	م	CIDCUIT DESCRIPTION	CKT
#	CIRCUIT DESCRIPTION	Α	В	С	POLES	#	⊴ ≿		#	POLES	Α	В	С	CIRCUIT DESCRIPTION	#
1	RECEPTACLES	0.540			20A	1	RΗ	╗	2	20A/2	1.500			ECH-1	2
3	RECEPTACLES		0.360		20A	3	RH	4	4			1.500			4
5	RECEPTACLES			0.720	20A	5	RH	1	6	20A/2			1.500	ECH-2	6
7	RECEPTACLES	0.360			20A	7	RΙ	╗	8		1.500				8
9	WATER COOLER		0.700		20A	9	RC	<u> </u>	10	20A/2		1.500		SERVER	10
11	GFI RECEPTACLES			0.720	20A	11	RC	7	12				1.500		12
13	RECEPTACLES	0.720			20A	13	RC	<u> </u>	14	20A/2	1.500			SERVER	14
15	FLOOR BOX		0.720		20A	15	RC	<u> </u>	16			1.500			16
17	RECEPTACLES			0.720	20A	17	RC		18	20A/2			1.500	SERVER	18
19	RECEPTACLES	0.720			20A	19	RC) :	20		1.500				20
21	FLAT PANEL		1.200		20A	21	RH	-1 :	22	20A/2		0.750		EVB-5	22
23	FLOOR BOXES			0.540	20A	23	RH	-1 :	24				0.750		24
25	JUDGE'S BENCH FLOOR BOXES	0.540			20A	25	RH	-1 :	26	20A/2	0.500			EVB-4	26
27	RECEPTACLES		0.540		20A	27	RH	1 :	28			0.500			28
29	RECEPTACLES			0.540	20A	29	RH	 	30	20A/2			0.500	EVB-3	30
31	RECEPTACLES	0.540			20A	31	RH	- -	32		0.500				32
33	RECEPTACLES		0.540		20A	33	RH	- ;	34	20A/2		0.500		EVB-2	34
35	SERVER			1.500	20A	35	ОН	1 ;	36				0.500		36
37	SERVER	1.500			20A	37	OΗ	-∏ :	38	20A/2	0.500			EVB-1	38
39	SERVER		1.500		20A	39	OΗ	- 1	40			5.000			40
41	EPO CONTACTOR			0.500	20A	41	0) (42	20A			1.100	PRINTER	42
43	DOORS	1.000			20A	43	0	Τ.	44	20A				SPARE	44
	SPARE				20A	45		١.	46	20A				SPARE	46
47	SPARE				20A	47		٠	48	20A				SPARE	48
49	SPARE				20A	49		**	50	20A				SPARE	50
	SPARE				20A	51		_	52	20A				SPARE	52
53	SPARE				20A	53			54	20A				SPARE	54
	LOAD SUMMARY	KVA	CONNEC	TED							KV.	A SUMMA	\RY		
		Α	В	С							TOTAL		DEMAND		
	EPTACLES R	3.420	4.060	3.240							10.720		10.360		
	ITING L	0.000	0.000								0.000	1.000	0.000	1	
HVA	С Н	4.500	8.250	3.250							16.000	0.950	15.200		
OTH		5.500	4.500		4						16.100		16.100		
	TING E	0.000	0.000								0.000	1.000	0.000		
	AL KVA	13.420									42.820			TOTAL ESTIMATE KVA	
	TS / PHASE	120	120	120							208			SYSTEM VOLTAGE	
	S / PHASE	111.833	140.083	104.917							118.860		115.640	AMPS	
NO	TES:														
	•														

ΝE	N	MAIN: SIZE	E & TYPE:	125 A	MLO						PANEL LO	CATION:	CORR 200)	
DN	IL EM-C	BUS RATII	NG:	125 A							FEEDER S	IZE:			
L I	AL EIAI-C	VOLTAGE		120 / 208	V 3	Ø,	4	WIF	RE		FED FROM	1:	DP		
;	SQUARE D QO LOAD CENTER	MOUNTING	3:	FLUSH							MIN RMS A	AMPS:			
CKT	CIRCUIT DESCRIPTION	L	OAD (KVA))	AMPS /	СКТ	LOAD	<u>P</u>	CKT	AMPS /	Lo	OAD (KVA	١)	CIRCUIT DESCRIPTION	CK
#	CIRCUIT DESCRIPTION	Α	В	С	POLES	#	9 í	<u></u>	#	POLES	Α	В	С	CIRCUIT DESCRIPTION	#
1	RECEPTACLES	1.080			20A	1	R	R	2	20A	0.540			RECEPTACLES	2
3	RECEPTACLES		0.540		20A	3	R	R	4	20A		0.540		RECEPTACLES	4
5	FLOOR BOX			0.720	20A	5	R	R	6	20A			0.720	FLOOR BOX	6
7	GFI RECEPTACLES	0.540			20A	7	R	Н	8	20A/2	0.750			EVB-6	8
9	RECEPTACLES		0.360		20A	9	R	Н	10			0.750			10
11	DOORS			0.520	20A	11	0	Н	12	20A/2			1.250	EVB-7	12
13	RCP-1 PUMP	0.700			20A	13	Н	Н	14		1.250				14
15	EF-1		0.700		20A	15	Н	ा	16	20A		1.500		DATA RACK	16
17	EF-2			0.700	20A	17	Н	R	18	20A			1.500	REFRIDGERATOR	18
19	RECEPTACLES	0.360			20A	19	Н	R	20	20A	0.360			GFI RECEPTACLES	20
21	RECEPTACLES		0.540		20A	21	Н		22	20A				SPARE	22
23	RECEPTACLES			0.360	20A	23	R		24	20A				SPARE	24
25	EWH-1	0.700			20A	25	Н		26	20A				SPARE	26
27	ACC-1		1.660		30A	27	H		28	20A				SPARE	28
29	ACC-1			1.660	2P	29	Н		30	20A				SPARE	30
	LOAD SUMMARY	KVA	CONNEC	ΓED							KVA	A SUMMA	ιRY		
	LOAD SOMMANT	Α	В	С							TOTAL		DEMAND		
REC	EPTACLES	₹ 2.520	1.440	3.300							7.260		7.260		
LIGH	TING	_ 0.000	0.000	0.000							0.000	1.000	0.000		
HVA	С	∃ 3.760	3.650	3.610							11.020	0.950	10.469		
OTH	ER	O.000	1.500	0.520							2.020	1.000	2.020		
EXIS	TING	0.000	0.000	0.000							0.000	1.000	0.000		
TOT	\L KVA	6.280	6.590	7.430							20.300		19.749	TOTAL ESTIMATE KVA	
VOL	TS / PHASE	120	120	120							208		208	SYSTEM VOLTAGE	
AMF	S / PHASE	52.333	54.917	61.917							56.349		54.819	AMPS	

1 PROVIDE CIRCUIT BREAKER LOCKING DEVICE.



RENOVATIONS TO PEOPLE'S STATE BANK

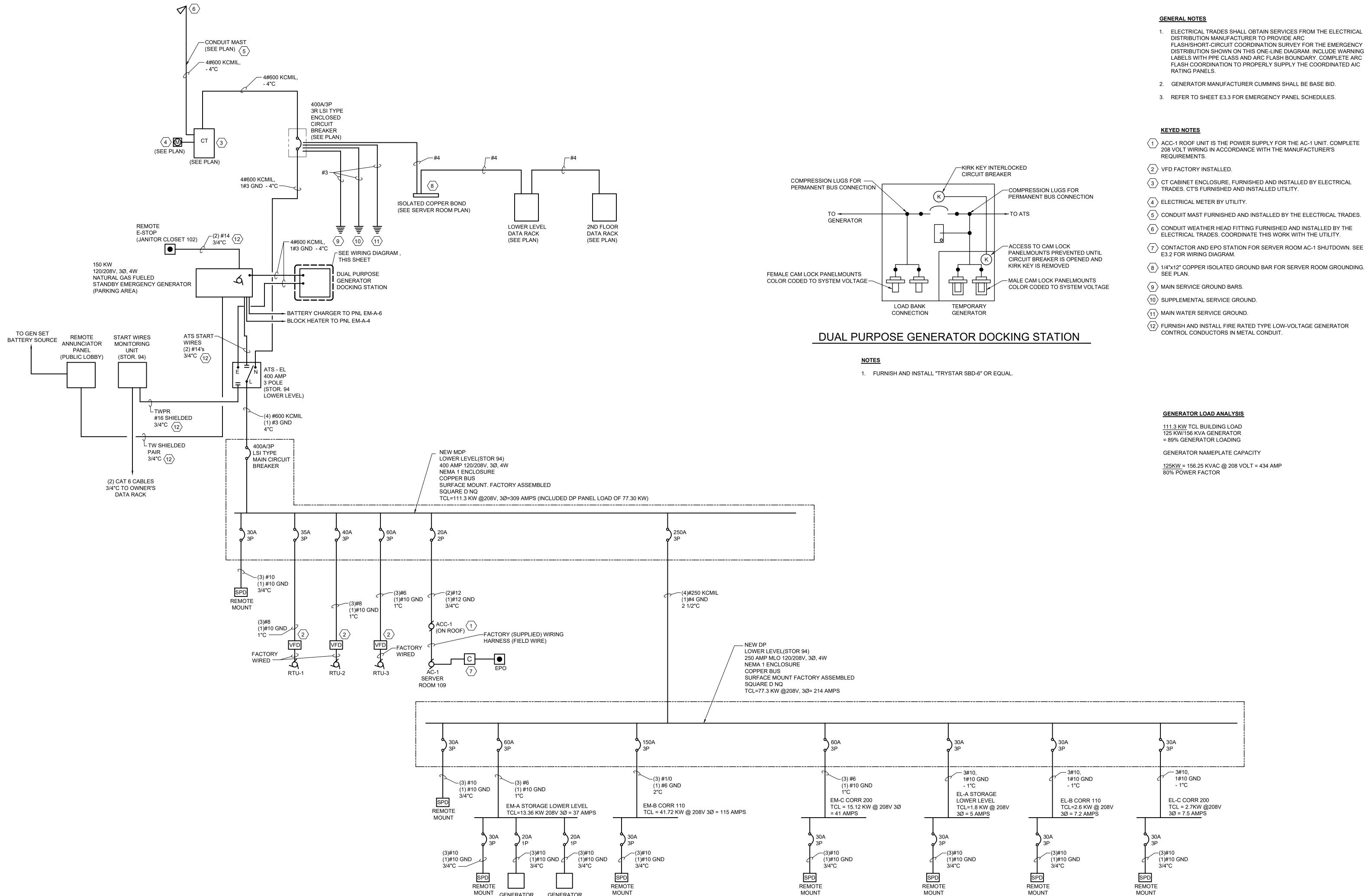
TUSCOLA COUNTY OFFIC

171 N STATE ST

CARO, MI

AND LIGHTING

E3.3



EMERGENCY GENERATOR ONE-LINE DIAGRAM

GENERATOR

BATTERY

CHARGER

GENERATOR

BLOCK HEATER MOUNT

MOUNT

MOUNT

MOUNT

- 1. ELECTRICAL TRADES SHALL OBTAIN SERVICES FROM THE ELECTRICAL DISTRIBUTION MANUFACTURER TO PROVIDE ARC FLASH/SHORT-CIRCUIT COORDINATION SURVEY FOR THE EMERGENCY DISTRIBUTION SHOWN ON THIS ONE-LINE DIAGRAM. INCLUDE WARNING LABELS WITH PPE CLASS AND ARC FLASH BOUNDARY. COMPLETE ARC FLASH COORDINATION TO PROPERLY SUPPLY THE COORDINATED AIC
- 2. GENERATOR MANUFACTURER CUMMINS SHALL BE BASE BID.
- $\langle 1 \rangle$ ACC-1 ROOF UNIT IS THE POWER SUPPLY FOR THE AC-1 UNIT. COMPLETE 208 VOLT WIRING IN ACCORDANCE WITH THE MANUFACTURER'S
- (5) CONDUIT MAST FURNISHED AND INSTALLED BY THE ELECTRICAL TRADES.

- $\left\langle 8\right\rangle$ 1/4"x12" COPPER ISOLATED GROUND BAR FOR SERVER ROOM GROUNDING.
- 12 FURNISH AND INSTALL FIRE RATED TYPE LOW-VOLTAGE GENERATOR

TO PEOPLE RENOVATIONS TUSCOLA

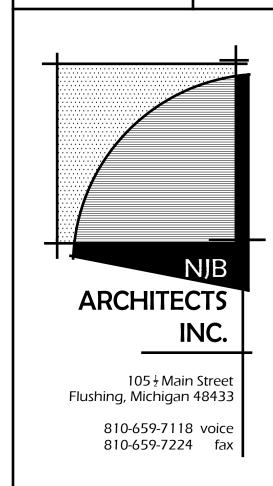
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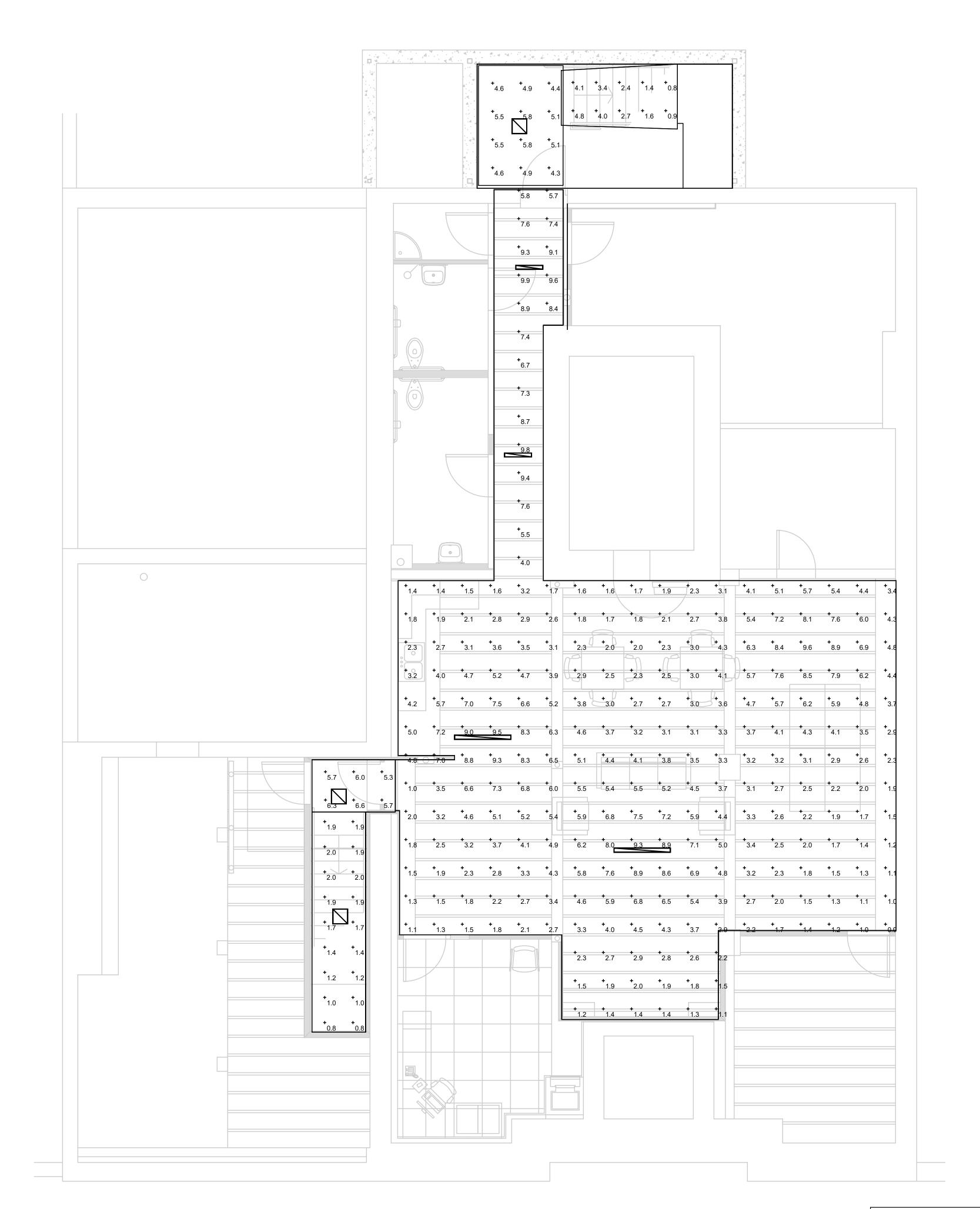
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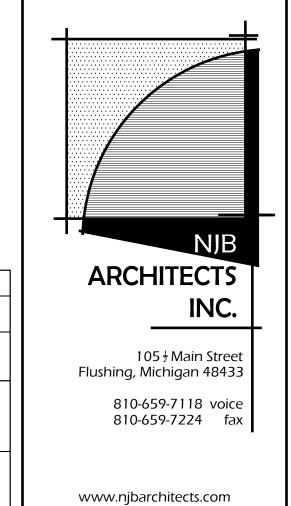


Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Stair 1 EM	+	5.0 fc	5.8 fc	4.3 fc	1.3:1	1.2:1
Stair 1 EM	+	2.6 fc	4.8 fc	0.8 fc	6.0:1	3.3:1
Stair 2 EM	+	5.9 fc	6.6 fc	5.3 fc	1.2:1	1.1:1
Stair 2 EM	+	1.5 fc	2.0 fc	0.8 fc	2.5:1	1.9:1
Lounge and Corridor EM	+	4.1 fc	9.9 fc	0.9 fc	11.0:1	4.6:1

LOWER LEVEL - EMERGENCY LIGHTING POINT BY POINT PLAN

1/4"=1'-0"

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	CE	3	Juno Lighting	JSFSQ 14IN 18LM 40K 90CRI 120 FRPC WH	14" Square Edgelit (Slimform) Surface Mount, 4000K, 90CRI, 120V	1	1932	0.45	20.4
	LE	2	Lithonia Lighting	CLX L24 2000LM SEF FDL MVOLT GZ10 40K 80CRI	CLX LED Linear 24" 2,000 lumens, Standard Efficiency, Less louver, flat diffuse lens, General distribution, MVOLT, 0-10V dimming, 4000 CCT, 80 CRI	1	1925	0.62	14.48
	BE	4	Lithonia Lighting	CLX L48 4000LM SEF FDL MVOLT 40K 80CRI	CLX LED linear 48", 4000 lumens, Standard efficiency, Less louver, Flat diffuse, General, MVOLT, 4000K, 80CRI	1	3955	0.4	25.5429
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RENOVATIONS TO PEOPLE'S STATE BANK

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CARO, MI

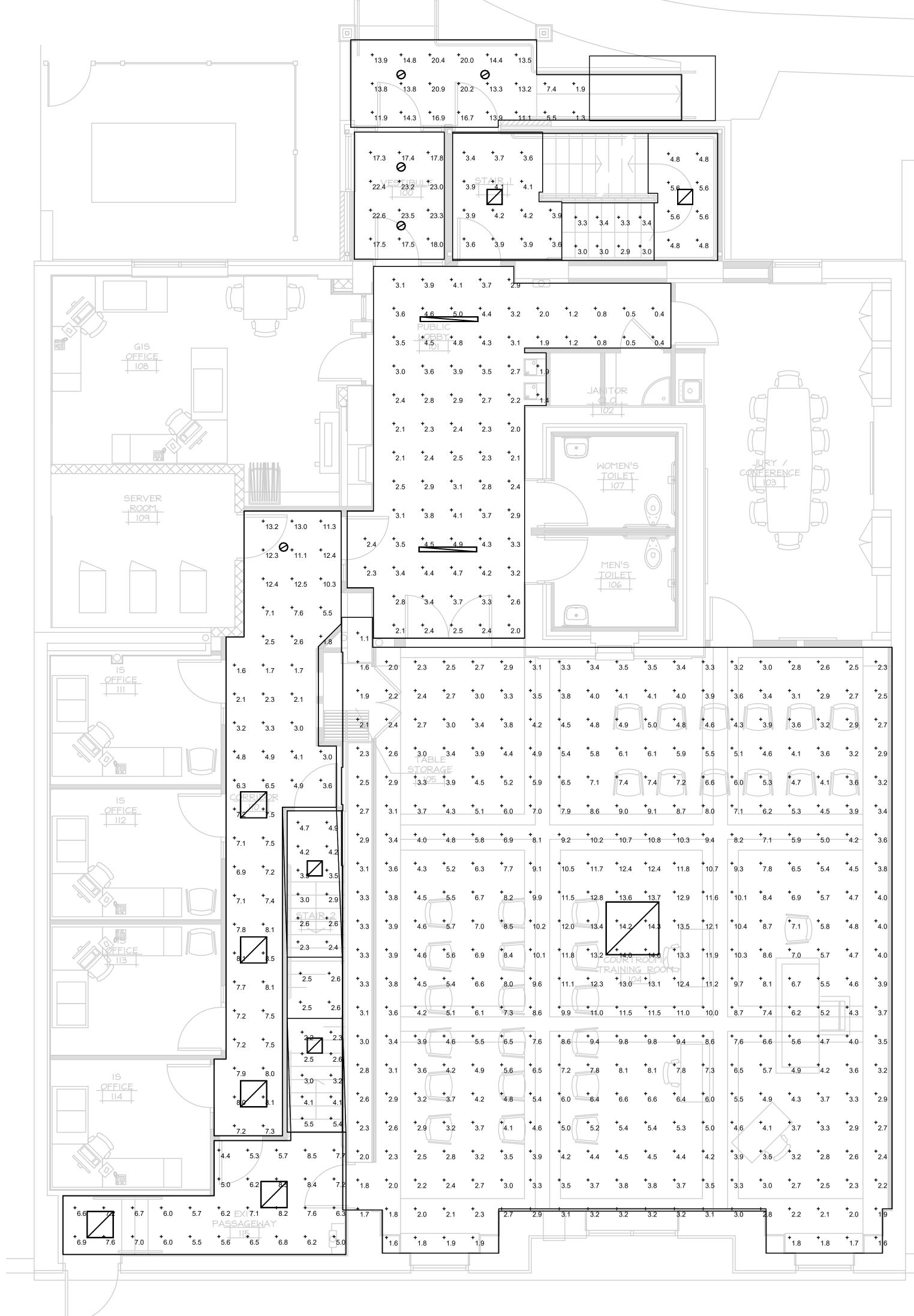
EMERGENCY

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Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	AE	5	Lithonia Lighting	EPANL 2X2 4800LM 80CRI 40K	EPANL 2x2, 4800 Nominal Lumens, 80 CRI, 4000K CCT	1	4843	0.2	44.6
	CE	4	Juno Lighting	JSFSQ 14IN 18LM 40K 90CRI 120 FRPC WH	14" Square Edgelit (Slimform) Surface Mount, 4000K, 90CRI, 120V	1	1932	0.45	20.4
\bigcirc	DE	5	Lithonia Lighting	LBR8 ALO3 (2000LM) SWW1 (4000K) AR LSS WD 80CRI	8 INCH LBR DOWNLIGHT 2000LM 4000K CLEAR SEMI-SPECULAR WIDE 80 CRI	1	2341	0.35	25.03
	FE	1	VISA LIGHTING	CP2014	SQUARE PENDANT 44 INCH WITH UP LIGHT	1	22865	0.45	190.6
	HE	2	FINELITE, INC.	HP-4-D-4ft-V-835	EXTRUDED WHITE PAINTED METAL HOUSING WITH WHITE PAINTED FLAT METAL END CAPS, FORMED WHITE PAINTED METAL REFLECTOR/CIRCUIT BOARD MOUNT, 4 CIRCUIT BOARDS EACH WITH 40 LEDS, EXTRUDED FROSTED PLASTIC DIFFUSER. DIFFUSER FROSTED BOTH SIDES.	160	23	0.2	37

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Courtroom EM	+	5.4 fc	14.3 fc	1.1 fc	13.0:1	4.9:1
Exit Passageway 115 EM	+	6.6 fc	8.5 fc	4.4 fc	1.9:1	1.5:1
Exterior EM	+	13.3 fc	20.9 fc	1.3 fc	16.1:1	10.2:1
Public Lobby 101 EM	+	2.9 fc	5.0 fc	0.4 fc	12.5:1	7.3:1
Stair 1 EM	+	3.2 fc	3.4 fc	2.9 fc	1.2:1	1.1:1
Stair 1 EM	+	5.2 fc	5.6 fc	4.8 fc	1.2:1	1.1:1
Stair 1 EM	+	3.9 fc	4.2 fc	3.4 fc	1.2:1	1.1:1
Stairs to Lower Level EM	+	2.5 fc	2.6 fc	2.5 fc	1.0:1	1.0:1
Stairs to Lower Level EM	+	3.5 fc	5.5 fc	2.2 fc	2.5:1	1.6:1
Stairs to Lower Level EM	+	3.4 fc	4.9 fc	2.3 fc	2.1:1	1.5:1
Vestibule 100 EM	+	20.3 fc	23.5 fc	17.3 fc	1.4:1	1.2:1
Corridor EM	+	6.7 fc	13.2 fc	1.6 fc	8.3:1	4.2:1



FIRST FLOOR - EMERGENCY LIGHTING POINT BY POINT PLAN

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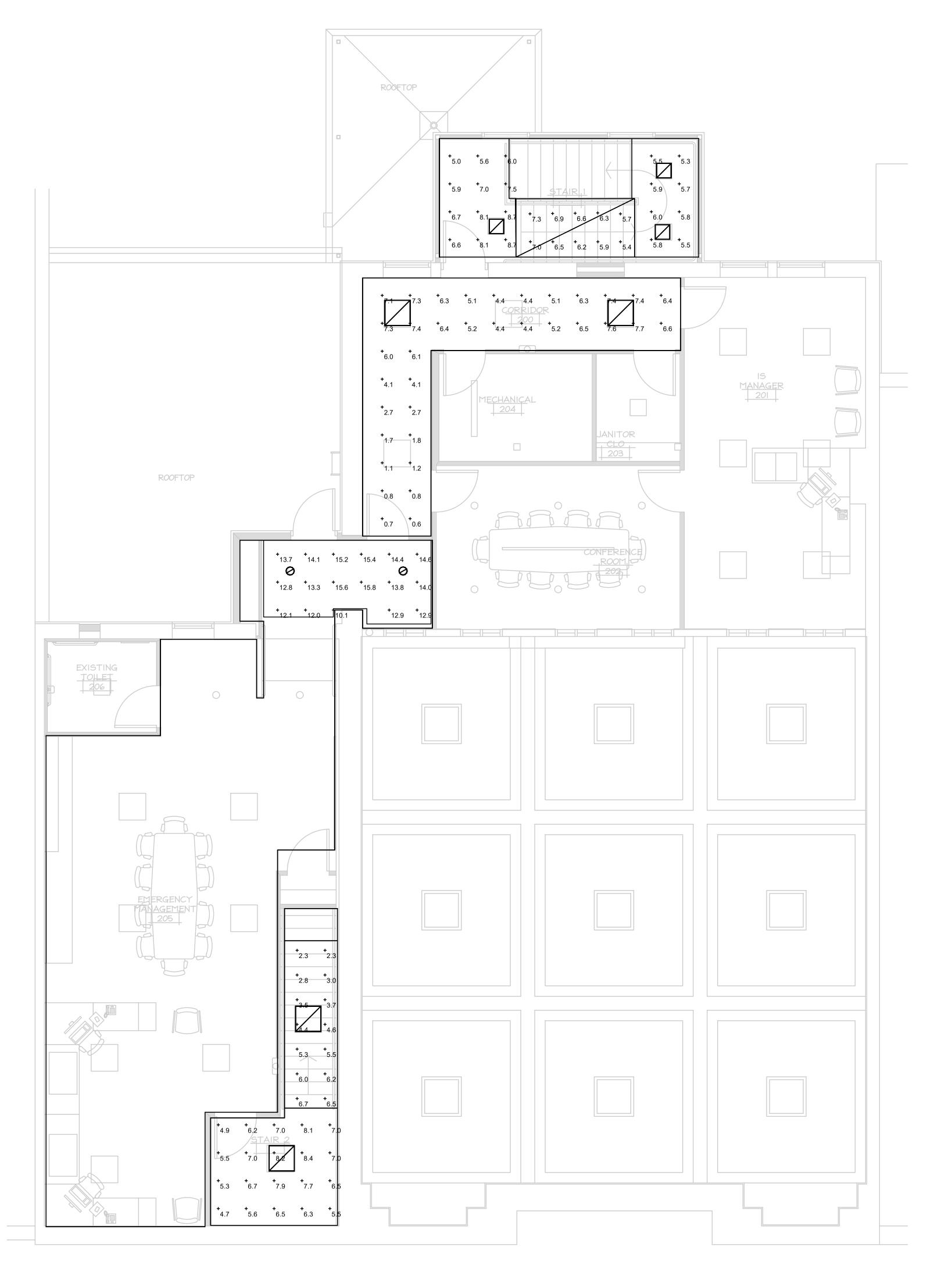
TUSCOLA COUNTY

171 N STATE ST

CARO, MI

ARCHITECTS Flushing, Michigan 48433 810-659-7118 voice 810-659-7224

E5.2



Description	Symbol	Avg	Max	Min	Max/Min	Avg/N
Corridor 200 EM	+	4.7 fc	7.7 fc	0.6 fc	12.8:1	7.8
Stair 1 EM	+	5.7 fc	6.0 fc	5.3 fc	1.1:1	1.1
Stair 1 EM	+	6.8 fc	7.3 fc	6.3 fc	1.2:1	1.1
Stair 1 EM	+	5.9 fc	6.5 fc	5.4 fc	1.2:1	1.1
Stair 1 EM	+	7.0 fc	8.7 fc	5.0 fc	1.7:1	1.4
Stair 2 EM	+	6.6 fc	8.4 fc	4.7 fc	1.8:1	1.4
Stair 2 EM	+	4.5 fc	6.7 fc	2.3 fc	2.9:1	2.0
Calc Zone #1	+	13.7 fc	15.8 fc	10.1 fc	1.6:1	1.4

SECOND FLOOR - EMERGENCY LIGHTING POINT BY POINT PLAN

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	AE	4	Lithonia Lighting	EPANL 2X2 4800LM 80CRI 40K	EPANL 2x2, 4800 Nominal Lumens, 80 CRI, 4000K CCT	1	4843	0.2	44.6
	CE	3	Juno Lighting	JSFSQ 14IN 18LM 40K 90CRI 120 FRPC WH	14" Square Edgelit (Slimform) Surface Mount, 4000K, 90CRI, 120V	1	1932	0.45	20.4
\bigcirc	DE	2	Lithonia Lighting	LBR8 ALO3 (2000LM) SWW1 (4000K) AR LSS WD 80CRI	8 INCH LBR DOWNLIGHT 2000LM 4000K CLEAR SEMI-SPECULAR WIDE 80 CRI	1	2341	0.35	25.03

SECOND FLOOR - EMERGENCY LIGHTING PT BY PT PLAN

NJB
ARCHITECTS
INC.

105 ½ Main Street
Flushing, Michigan 48433
810-659-7118 voice
810-659-7224 fax

www.njbarchitects.com

E5.3