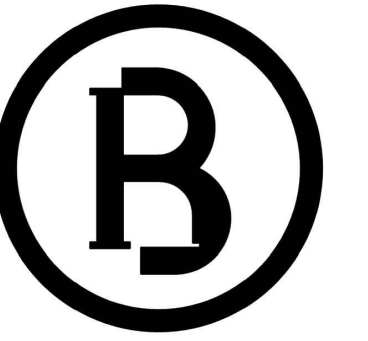


PROPOSED Design Assurance Building

Atec INDUSTRIES INC.

2106 Riverside - St. Joseph, Missouri



river bluff architects
1214 frederick ave
st. joseph, missouri 64501
816 232 7248
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CODE INFORMATION

CODES:
2012 IBC (International Building Code)
2012 IMC (International Mechanical Code)
2011 NEC (National Electrical Code)
2012 UPC (Uniform Plumbing Code)
2012 IFC (International Fire Code)

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION
Section 304 - F1 (Moderate hazard factory industrial)

CHAPTER 4 - SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY
Section 406 Motor Vehicle related occupancies.

406.8 - Repair Garages (no motor fuel dispensing)

Mixed use allowed

Must be mechanically vented.

406.8.5 - Requires a flammable gas detection approved system.

406.8.6 - Automatic Sprinkler System REQUIRED (provided)

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

Table 503 - Allowable Height and Building Areas

Occupancy Group: F1

Type of Construction: TYPE II-B

Allowable Height and Area:

Height: 2 stories

Area: 15,500 s.f./floor

Section 506 - Area Modifications

Frontage Increase:

If $[1-0.25] \frac{30}{75}$

Sprinkler Increase:

Is = 3

TOTAL ALLOWABLE BUILDING AREA

Allowable Area = 15,500 s.f.

Frontage Increase = 11,625 s.f.

Sprinkler Increase = 46,500 s.f.

ALLOWABLE AREA = 73,625 s.f.

(Building is unlimited area per single story and sprinkler

system provided)

Actual Building Area: 29,940 s.f.

Section 508 - Mixed Uses
508.4 - No separation required between F1 & B occupancy.

Section 509 - Incidental Uses

Furnace room where any equip. over 400,000 btu per hour.

1 hr. Fire Barrier or Sprinkled

Under (N.E.C. article 450) areas with dry-type transformers over 112½ kVA.

1 hr. Fire Barrier

CHAPTER 6 - TYPE OF CONSTRUCTION

Section 602 - Type of Construction: TYPE II B

Table 601 - Fire-Resistance Rating Requirements:

Bearing Walls - Exterior: 0 hrs

Bearing Walls - Interior: 0 hrs

Non-Bearing Exterior Walls: 0 hrs

Structural Frame: 0 hrs

Permanent Partitions: 0 hrs

Floors and Floor-Ceilings: 0 hrs

Roof and Roof-Ceilings: 0 hrs

Exterior Doors and Windows: 0 hrs

Corridor Ratings: 0 hrs

Table 602 - Fire Resistance Rating Requirements for Exterior

Walls Based on Fire Separation Distance - $X \geq 30 = 0$ hrs.

CHAPTER 7 - FIRE-RESISTANCE RATED CONSTRUCTION

Section 708 - Fire Partitions:

708.3 - Fire Resistance Rating Fire - 1 hr.

CHAPTER 9 - FIRE PROTECTION SYSTEMS

Section 903 Automatic Sprinkler Systems

903.2.4 Group F1

Automatic sprinkler system is REQUIRED for fire area exceeding 12,000 s.f.

and combined area of all Group F-1 fire areas exceed 24,000 s.f.

(Automatic Sprinkler System PROVIDED)

Section 907 - Fire Alarm & Detection System

907.2.4 - Group F - Not Required.

Building does not exceed one story and has less than 500 occupants.

CHAPTER 10 MEANS OF EGRESS

Section 1004 - Occupant Load

Refer to Code Footprint Plan

Occupant Load: 206 occupants

Section 1005 - Means of Egress Sizing

Stairways - 0.37/occup. (not applicable)

Other - 0.27/occup. & 0.15/occup. with sprinkler system

76 Occupants

Other Egress - 76 Occupants = 15.2 inches

Required - 15.2 inches

Provided - 288 inches

Section 1015 - Exit and Exit Access Doorways

Table 1051.1 Spaces with one exit or exit access doorway:

B Occupancies under 49 occupants only one exit required.

Section 1018 - Corridors

Table 1018.1 - Corridor Fire Resistance Rating:

B Occupancy - Greater than 30 occupant served by Corridor = 1 hr.

Minimum

Number of Exits Required:

2 Exits

Exits Provides:

8 Exits

Table 1018.2 - Min. Corridor Width = 44 inches.

CHAPTER 29 - PLUMBING

B -

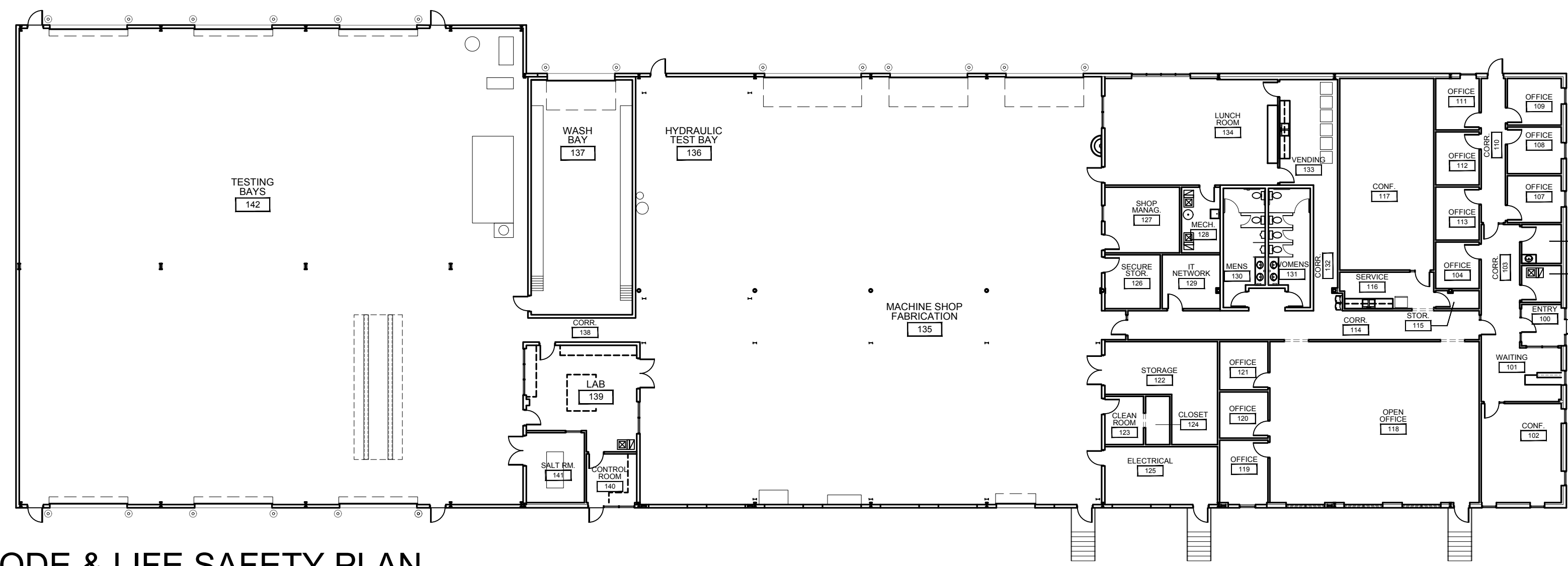
Toilets 1 / 25 first 50

Lavatories 1 / 40 first 80

1 / 50 after 1 / 80 after

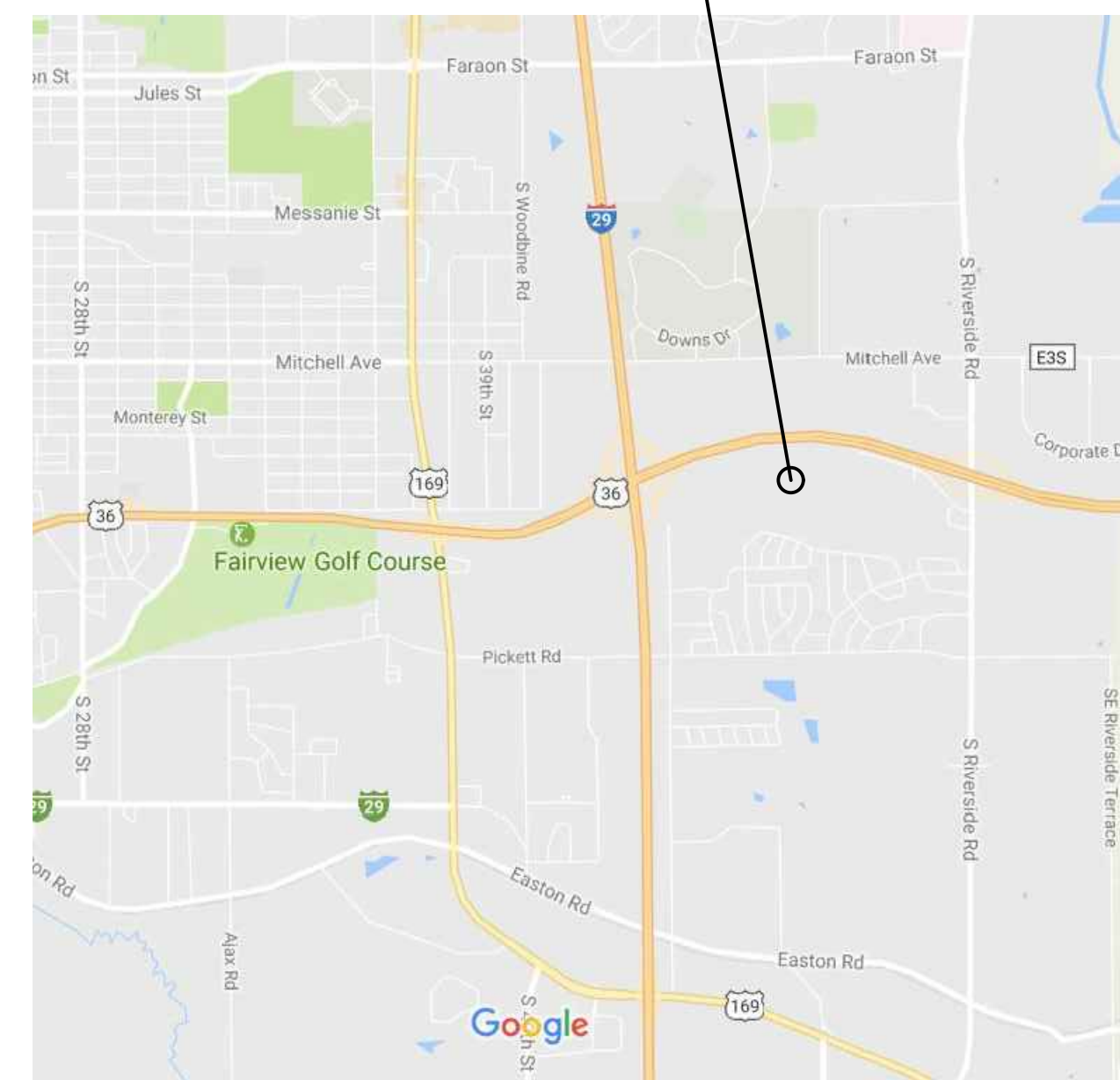
Drinking Fountain - 1 / 100 = (2 Provided)

Service Sink = 1 required (1 Provided)



CODE & LIFE SAFETY PLAN

PROJECT LOCATION
4906 East 36 Highway
ST. JOSEPH, MO.



LOCATION MAP

SHEET INDEX

Material Legend

	METAL STUD WALL CONSTRUCTION
	CMU (CONCRETE MASONRY UNIT)
	CONCRETE
	GYPSUM BOARD
	FIRE EXTINGUISHER CABINET
	FLOOR DRAIN
	ELECTRIC DRINKING FOUNTAIN

Symbols Legend

	VEST. ROOM NAME ROOM NUMBER
	139.C DOOR NUMBER
	W4 WINDOW TYPE REFER: SHEET A601
	20 KEYNOTE
	1-A3.2 BUILDING SECTION
	1-A3 SHEET NUMBER 1-A5 DETAIL NUMBER
	1-A3 ELEVATION REFERENCE
	1-A4 SECTION REFERENCE
	1-A5 DETAIL REFERENCE
	REVISION CLOUD

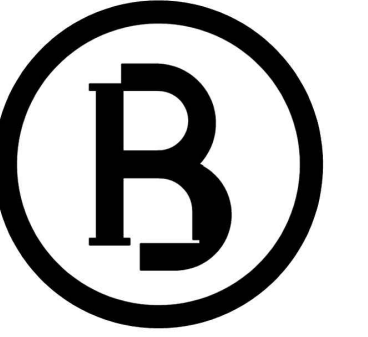
Preliminary

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Cover Sheet

A001



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Floor
Plan

A100

DEMO KEYNOTES

1. REMOVE EXISTING DOCK LEVELERS AND OVERHEAD DOORS - 15 UNITS.
2. REMOVE EXISTING METAL SIDING.
3. REMOVE END WALL SIDING AND GIRTS.

DEMO GENERAL NOTES:

1. CONTRACTORS SHALL FIELD VERIFY EXTENT, TYPE AND LOCATION OF SELECTIVE DEMOLITION WORK. PROVIDE PATCH AND REPAIR AS REQUIRED TO MATCH EXISTING CONSTRUCTION.
2. ALL SUB-CONTRACTORS TO COORDINATE LOCATIONS AND EXTENTS OF ALL CONCRETE SLAB REMOVAL WITH G.C.
3. ALL SUB-CONTRACTORS SHALL COORDINATE WITH G.C. EXTENT PREPARATION FOR THE SELECTED FLOOR FINISHES. COORDINATE THE SCOPE OF WORK WITH G.C.
4. FIELD VERIFY THE EXTENT OF WORK REQUIRED FOR FLOOR PREPARATION FOR THE SELECTED FLOOR FINISHES. COORDINATE THE SCOPE OF WORK WITH G.C.
5. REMOVE ALL ELECTRICAL, PLUMBING AND/OR MECHANICAL CONSTRUCTION AS REQUIRED FOR NEW CONSTRUCTION AND AS DIRECTED BY G.C. PATCH AND REPAIR WALL OR CEILING AS REQD FOR FINISH AS SCHEDULED.

Wall Legend

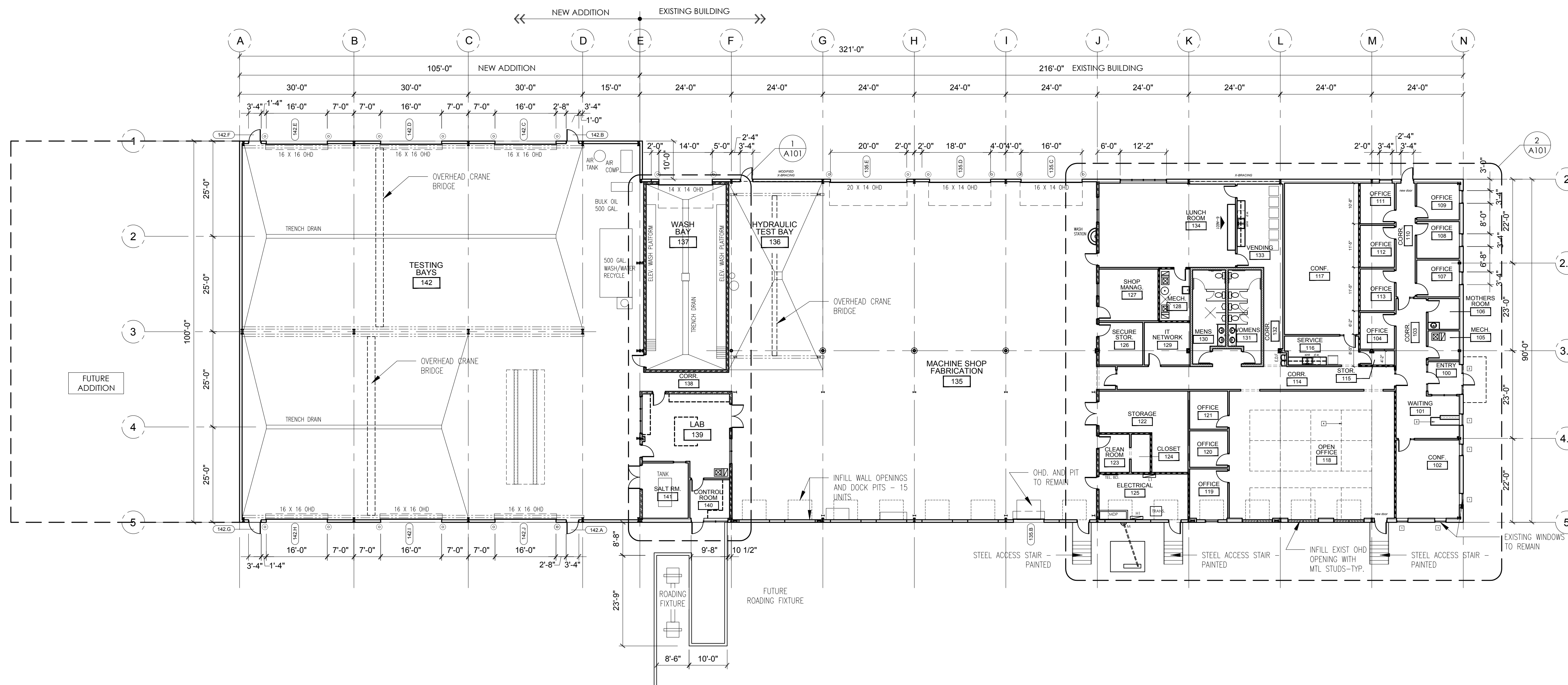
	8" CMU - 10-0 HEIGHT - REINF. PER STRUCTURAL
	8" CMU - FULL HEIGHT - REINF. PER STRUCTURAL
	GYP SUM BOARD PARTITIONS - 10-0 HEIGHT 3 5/8" MTL. STUDS AT 16" O.C. WITH 5/8" GYP. BD. EACH SIDE - SOUND ATTENUATION BATT
	GYP SUM BOARD PARTITIONS - FULL HEIGHT 3 5/8" MTL. STUDS AT 16" O.C. WITH 5/8" GYP. BD. EACH SIDE SOUND ATTENUATION BATT

PLAN KEYNOTES

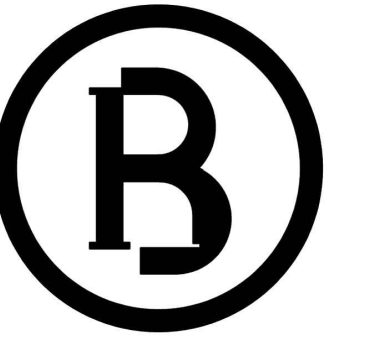
1. EXISTING STOREFRONT WINDOWS TO REMAIN - PROVIDE NEW SILLS AT INTERIOR.
2. EXISTING STOREFRONT ENTRY DOOR & WINDOWS TO REMAIN.
3. RECEPTION DESK
4. SYSTEMS FURNITURE - PROVIDE CONNECTIONS AND ROUGH INS AS REQUIRED FOR FURNITURE INSTALLATION - VERIFY WITH FURNITURE SUPPLIER.

GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
2. DIMENSIONS FOR GYPSUM BOARD AND CMU WALLS SHOWN TO THE FACE OF GYPSUM BOARD OR CMU.
3. PROVIDE WATER RESISTANT GYP BOARD IN WET LOCATIONS.
4. PROVIDE SOLID BLOCKING BEHIND ALL WALL MOUNTED ITEMS IN GYPSUM BOARD PARTITIONS.
5. REFER TO CIVIL STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND COORDINATION.
6. CUBICLES TO BE PROVIDED AND INSTALLED BY OWNER. VERIFY AND COORDINATE REQUIREMENTS WITH OWNER.
7. ALL VENDING AND ICE MACHINES, MICROWAVES, REFRIGERATORS, DRINK COOLERS, ETC. TO BE PROVIDED AND INSTALLED BY OWNER.



1 Floor Plan
Scale: 1/16" = 1'-0"



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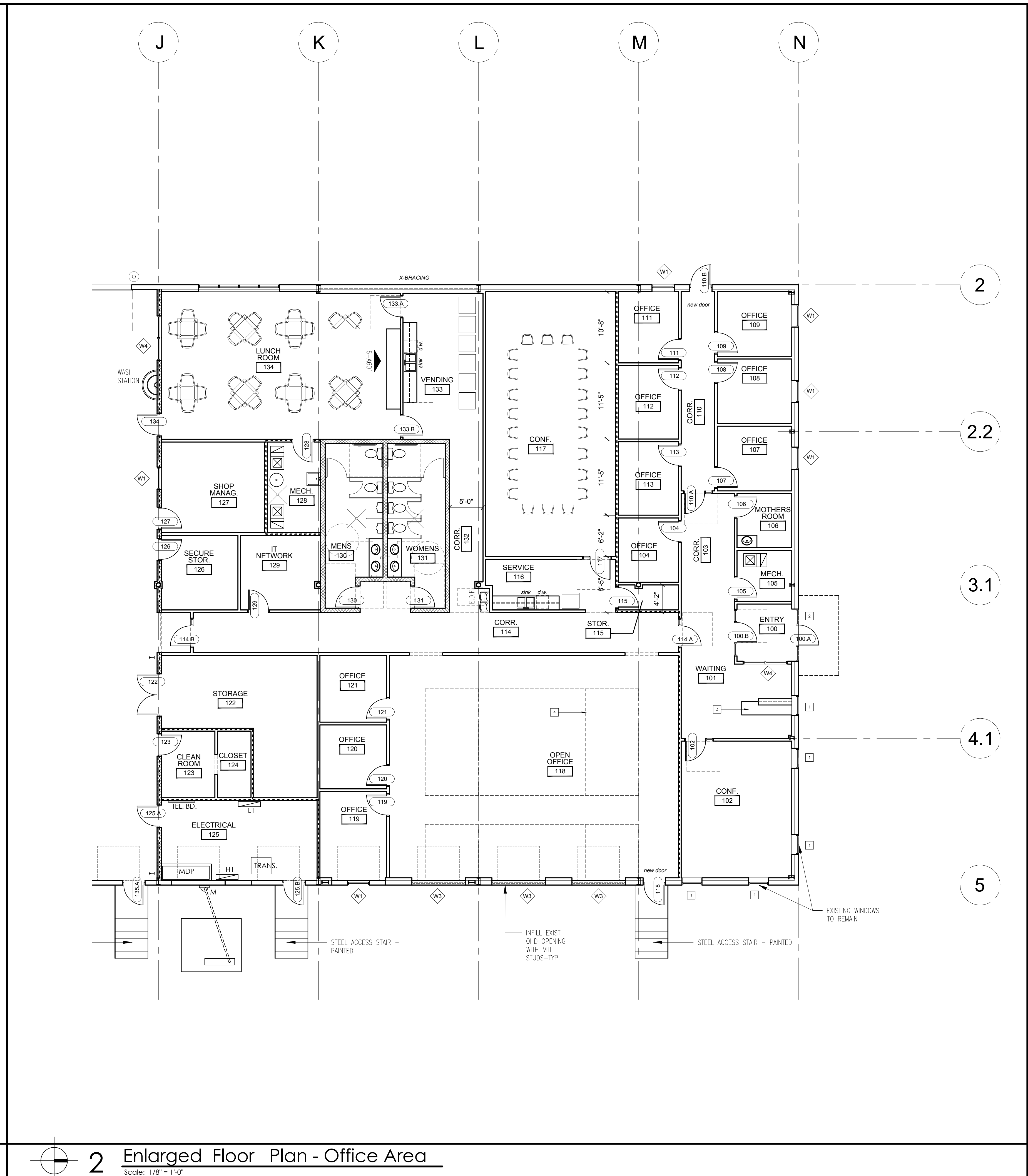
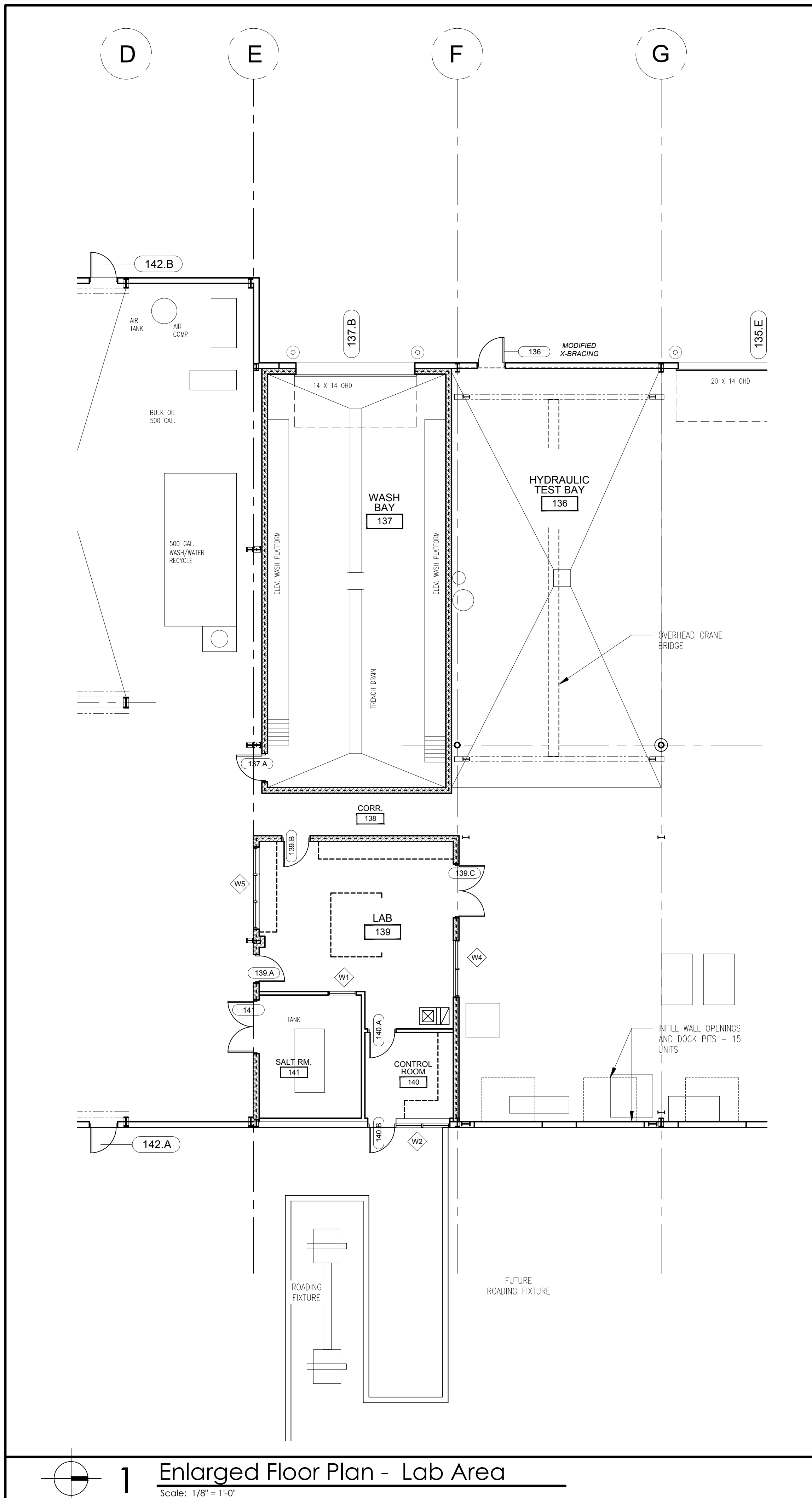
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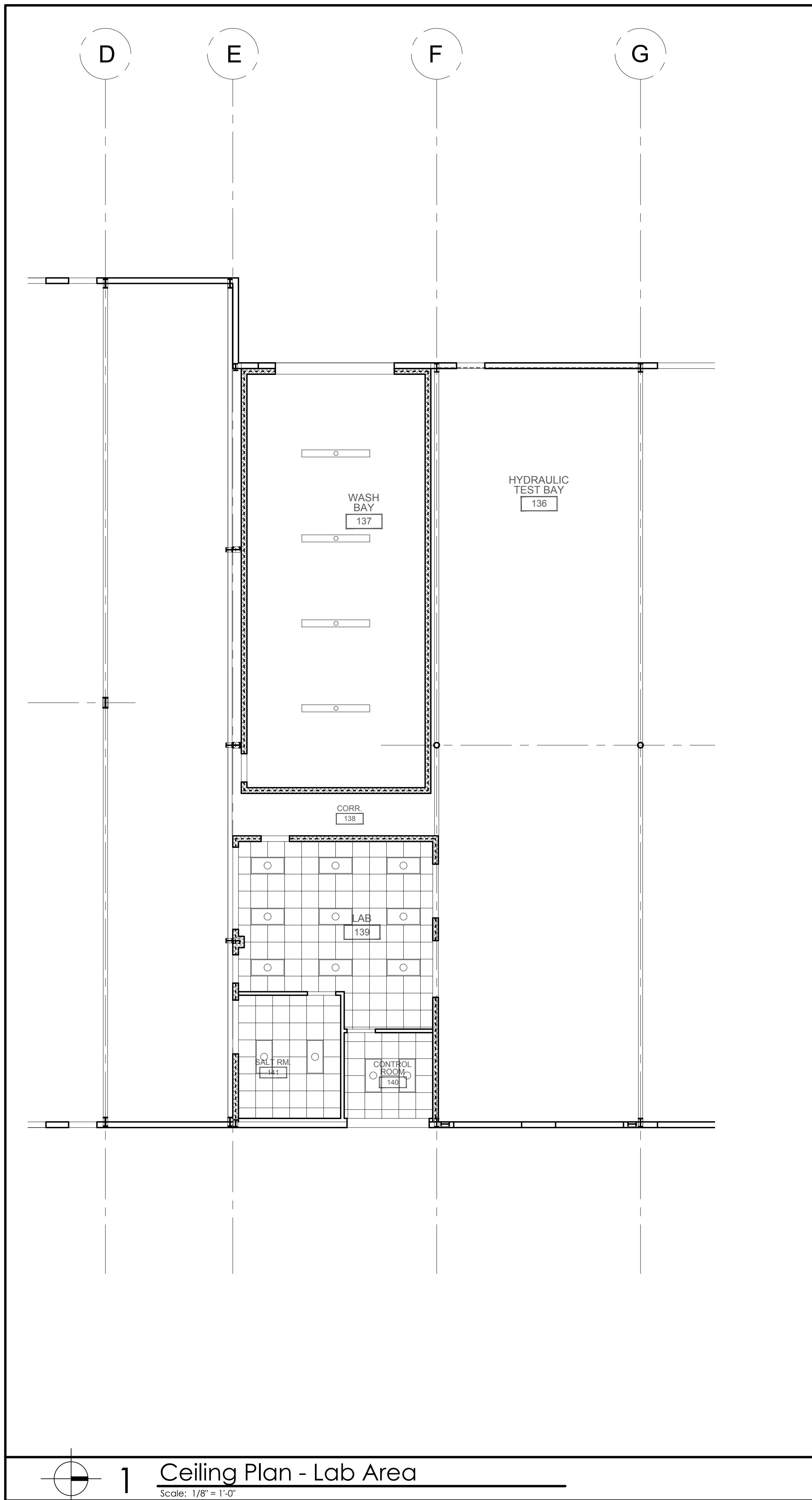
Office Floor
Plan

A101

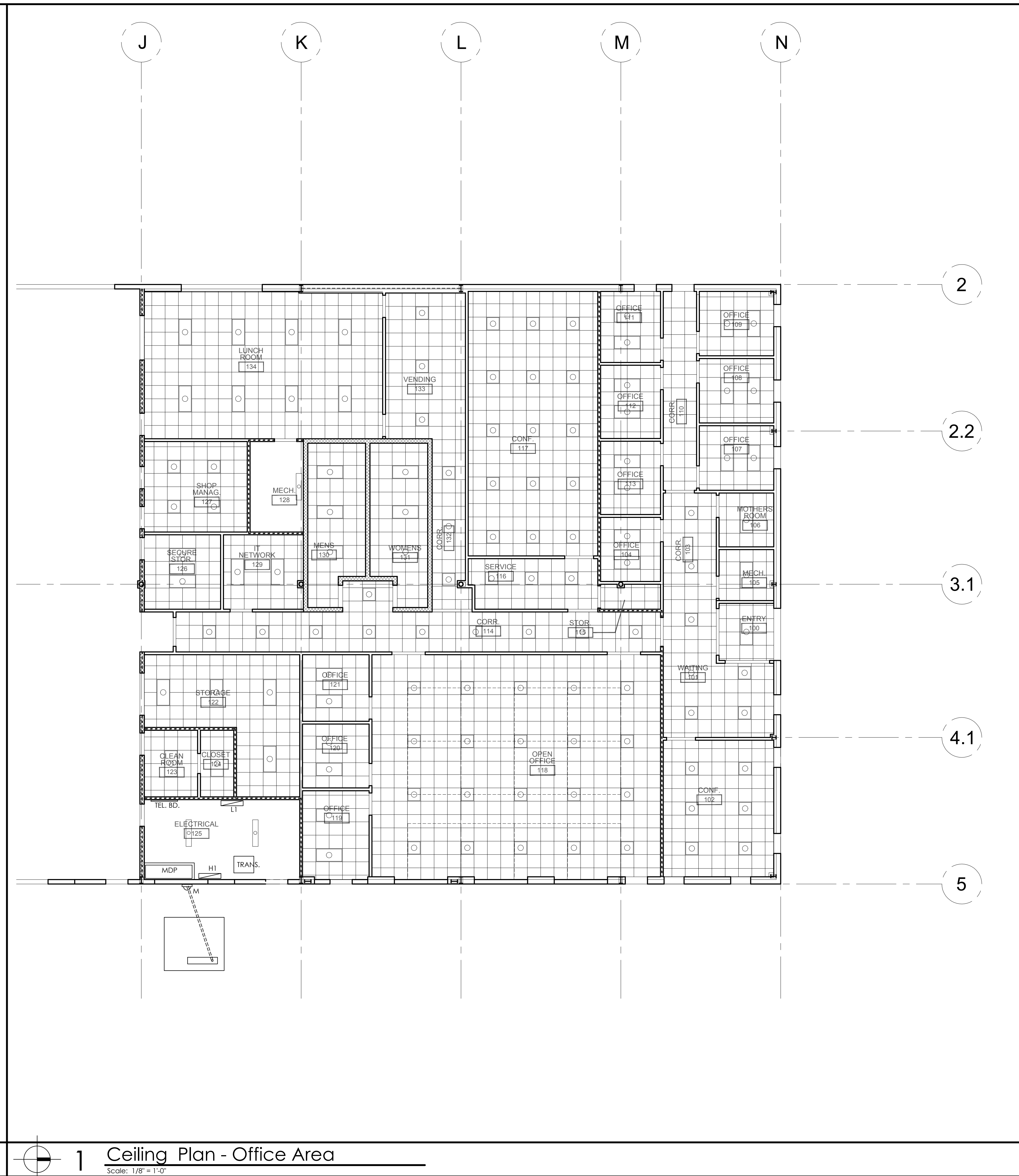


1 Enlarged Floor Plan - Lab Area
Scale: 1/8" = 1'-0"

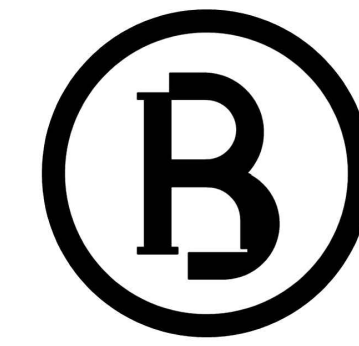
2 Enlarged Floor Plan - Office Area
Scale: 1/8" = 1'-0"



1 Ceiling Plan - Lab Area
Scale: 1/8" = 1'-0"



1 Ceiling Plan - Office Area
Scale: 1/8" = 1'-0"



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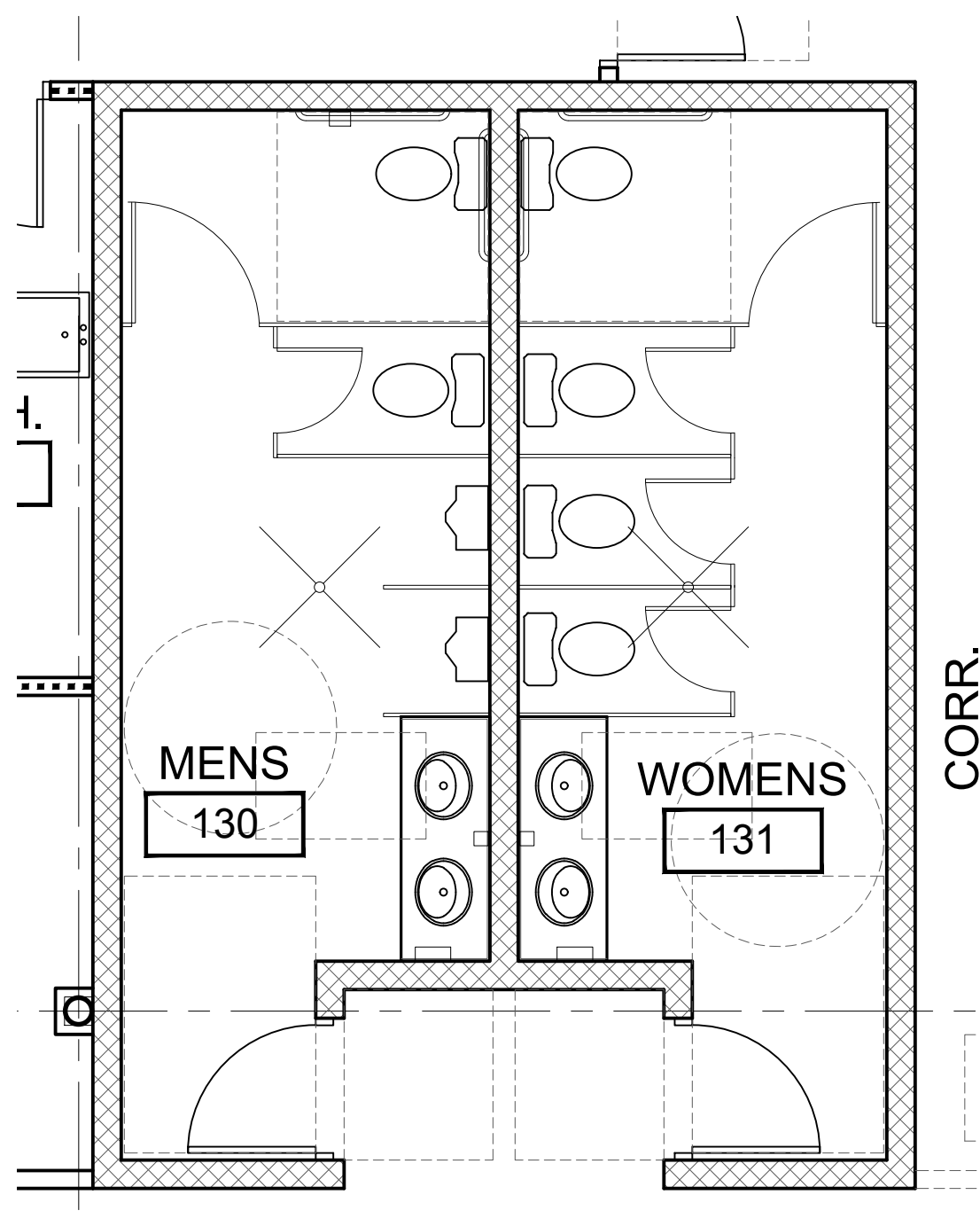
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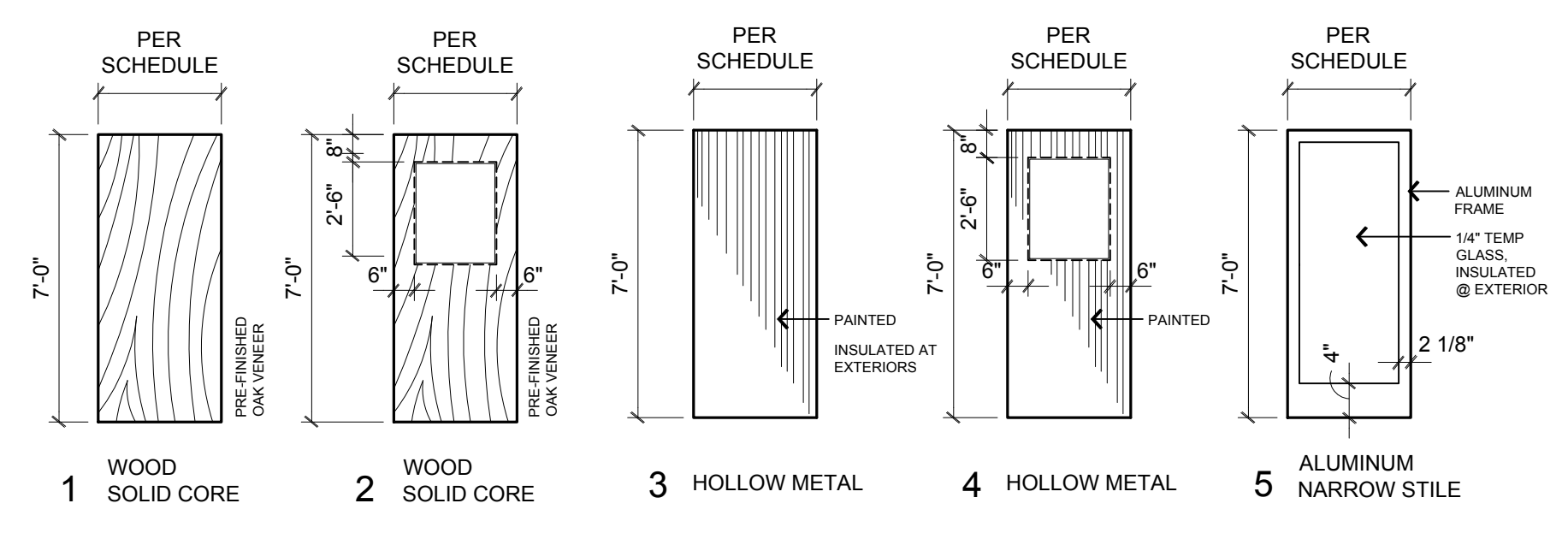
March 23, 2017

Ceiling Plans

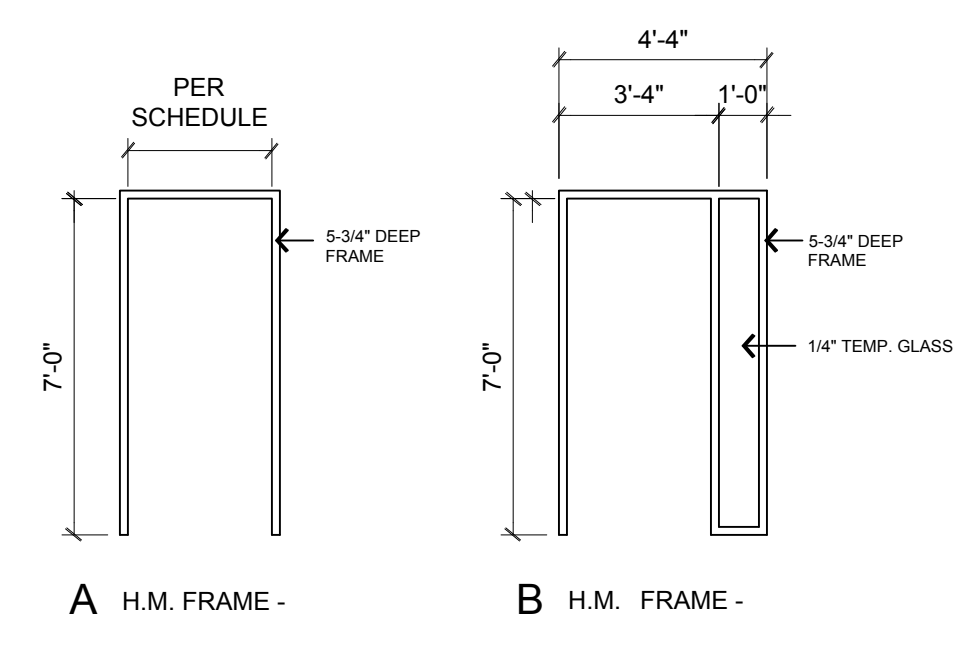
A102



1 Enlarged Floor Plan - Toilets
Scale: 1/4" = 1'-0"



DOOR TYPES



DOOR FRAME TYPES

- GENERAL NOTES DOORS & WINDOWS:**
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF WINDOWS AND SHOP DRAWING SUBMITTALS.
 - COORDINATE WITH G.C. WALL THICKNESS AND JAMB DEPTH REQUIRED.
 - 1" INSULATED LOW 'E' GLASS AT EXTERIOR.
 - PROVIDE TEMPERED GLASS IN ALL AREAS REQUIRED BY CODE.
 - AS REQUIRED BY CODE: DOOR, FRAME AND GLAZING SHALL BE LABELED WITH CODE APPROVED LABELS.
 - ALUMINUM STOREFRONT TO BE CLEAR ANODIZED FINISH.
 - ALL EXTERIOR SILLS TO HAVE SUB-SILL.

DOOR SCHEDULE						
DOOR NUMBER	DOOR SIZE	MTL. TYPE	DOOR TYPE	FRAME TYPE	HRDW.	REMARKS
100.A	3-0 X 7-0	AL	-	-	-	EXISTING DOOR
100.B	3-0 X 7-0	AL	5	?		
102	3-0 X 7-0	WD	1	B		
104	3-0 X 7-0	WD	1	A		
104	3-0 X 7-0	WD	2	A		
105	3-0 X 7-0	WD	1	A		
106	3-0 X 7-0	WD	1	A		
107	3-0 X 7-0	WD	1	A		
108	3-0 X 7-0	WD	1	A		
109	3-0 X 7-0	WD	1	A		
110.A	3-0 X 7-0	WD	1	B		
110.B	3-0 X 7-0	HM	3	A		INSULATED
111	3-0 X 7-0	WD	1	A		
112	3-0 X 7-0	WD	1	A		
113	3-0 X 7-0	WD	1	A		
114.A	3-0 X 7-0	WD	1	B		
114.B	3-0 X 7-0	HM	3	B		
115	3-0 X 7-0	WD	1	A		
117	3-0 X 7-0	WD	1	A		
118	3-0 X 7-0	HM	3	A		INSULATED
119	3-0 X 7-0	WD	1	A		
120	3-0 X 7-0	WD	1	A		
121	3-0 X 7-0	WD	1	A		
122	PR.-3-0 X 7-0	HM	3	A		
123	3-0 X 7-0	HM	3	A		
125.A	3-0 X 7-0	HM	3	A		45 MIN.
125.B	3-0 X 7-0	HM	3	A		45 MIN., INSULATED
126	3-0 X 7-0	HM	3	A		
127	3-0 X 7-0	HM	3	A		
128	3-0 X 7-0	WD	1	A		
129	3-0 X 7-0	WD	1	A		
130	3-0 X 7-0	WD	1	A		
131	3-0 X 7-0	WD	1	A		
133.A	3-0 X 7-0	WD	2	A		
133.B	3-0 X 7-0	WD	2	A		
134	3-0 X 7-0	HM	4	A		
135.A	3-0 X 7-0	HM	3	A		INSULATED
135.B	EXIST. OHD.					EXISTING TO REMAIN
135.C	16-0 X 14-0 OHD.	-	OHD-1	-		
135.D	16-0 X 14-0 OHD.	-	OHD-1	-		
135.E	20-0 X 14-0 OHD.	-	OHD-1	-		
136	3-0 X 7-0	HM	3	A		INSULATED
137.A	3-0 X 7-0	HM	4	A		
137.B	14-0 X 14-0 OHD.	-	OHD-1	-		
139.A	3-0 X 7-0	HM	4	A		
139.B	3-0 X 7-0	HM	4	A		
139.C	PR.-3-0 X 7-0	HM	3	A		
140.A	3-0 X 7-0	HM	4	A		
140.B	3-0 X 7-0	AL	5	?		
141	PR-3-0 X 7-0	HM	3	A		
142.A	3-0 X 7-0	HM	3	A		INSULATED
142.B	3-0 X 7-0	HM	3	A		INSULATED
142.C	16-0 X 16-0 OHD.	-	OHD-1			
142.D	16-0 X 16-0 OHD.	-	OHD-1			
142.E	16-0 X 16-0 OHD.	-	OHD-1			
142.F	3-0 X 7-0	HM	3	A		INSULATED
142.G	3-0 X 7-0	HM	3	A		INSULATED
142.H	16-0 X 16-0 OHD.	-	OHD-1			
142.J	16-0 X 16-0 OHD.	-	OHD-1			
142.J	16-0 X 16-0 OHD.	-	OHD-1			

ROOM FINISH SCHEDULE										
ROOM NUMBER	ROOM NAME	FLOOR	BASE	NORTH	EAST	SOUTH	WEST	CEILING	CEILING HEIGHT	NOTES
100	VESTIBULE	CPTW	VYL	P1	P1	P1	P1	ACT	8-0	WALK-OFF CARPET TILE
101	WAITING	CPT	VYL	P1	P1	P1	P1	ACT	10-0	
102	CONFERENCE	CPT	VYL	P1	P1	P1	P1	ACT	10-0	
103	CORRIDOR	CPT	VYL	P1	P1	P1	P1	ACT	10-0	
104	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
105	MECHANICAL	SC	VYL	P1	P1	P1	P1	X	X	
106	MOTHER'S ROOM	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
107	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
108	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
109	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
110	CORRIDOR	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
111	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
112	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
113	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
114	CORRIDOR	EPX	EPX	P1	P1	P1	P1	ACT	10-0	
115	STORAGE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
116	SERVICE	EPX	EPX	P1	P1	P1	P1	ACT	10-0	
117	CONFERENCE	CPT	VYL	P1	P1	P1	P1	ACT	10-0	
118	OPEN OFFICE	EPX	EPX	P1	P1	P1	P1	ACT	10-0	
119	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
120	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
121	OFFICE	CPT	VYL	P1	P1	P1	P1	ACT	8-6	
122	STORAGE	SC	VYL	P1	P1	P1	P1	EXP	-	
123	CLEAN ROOM	SC	VYL	P1	P1	P1	P1	EXP	-	
124	CLOSET	SC	VYL	P1	P1	P1	P1	EXP	-	
125	ELECTRICAL ROOM	SC	VYL	P1	P1	P1	P1	EXP	-	PROVIDE F.T. PLYWOOD ON WALLS.
126	SECURE STORAGE	SC	VYL	P1	P1	P1	P1	EXP	-	
127	SHOP MANAGER	EPX	EPX	P1	P1	P1	P1	ACT	8-6	
128	MECHANICAL	SC	VYL	P1	P1	P1	P1	EXP	-	
129	IT NETWORK	EPX	EPX	P1	P1	P1	P1	EXP	-	
130	MENS	EPX	EPX	PE	PE	PE	PE	EXP		
131	WOMENS	EPX	EPX	PE	PE	PE	PE			
132	CORRIDOR	EPX	EPX	PE	PE	PE	PE			
133	VENDING	EPX	EPX	PE	PE	PE	PE			
134	LUNCH ROOM	EPX	EPX	PE	PE	PE	PE			
135	MACHINE SHOP/FAB.	SC	-	PREFIN	PREFIN	PE	PREFIN	EXP		8-0 HGT. - MTL. LINER PANELS AT EXTERIOR
136	HYDRAULIC TEST BAY	SC	-	PREFIN	PREFIN	PE	PREFIN	EXP		8-0 HGT. - MTL. LINER PANELS AT EXTERIOR
137	WASH BAY	SC	-	PE	PE	PE	PE	EXP/PE		
138	CORRIDOR	SC	-	-	-	PE	-	EXP/PE		
139	LAB	EPX	EPX	PE	PE	PE	PE			
140	CONTROL ROOM	EPX	EPX	PE	PE	PE	PE			
141	SALT ROOM	SC	VYL	PE	PE	PE	PE	EXP		VINYL BASE AT GYP. BD. WALLS
142	TESTING BAYS	SC	-	PE	PREFIN	PREFIN	PREFIN	EXP		16-0 HGT. - MTL. LINER PANELS AT EXTERIOR

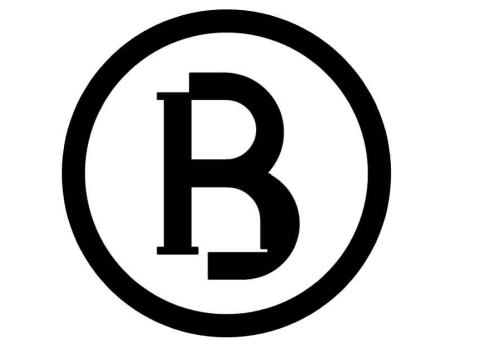
- FINISH SCHEDULE NOTES:**
- NOTES

- GENERAL SCHEDULE NOTES:**
- ALL DOOR FRAMES (NON PRE-FINISHED) TO BE PAINTED - SEMI-GLOSS ENAMEL.

ROOM FINISH LEGEND

FLOOR	CPTW CPT SC EPX	CARPET TILE - WALK OFF CARPET TILE SEALED CONCRETE EPOXY FLOOR
BASE	VYL EPX	4" COVERED VINYL BASE INTEGRAL 4" EPOXY COVERED BASE
WALL	P1 P2 P3 PE	PAINT - GYP. BD - EGGSHELL PAINT - GYP. BD - SEMI-GLOSS ENAMEL PAINT - CMU - SEMI-GLOSS ENAMEL PAINT - CMU - EPOXY

DOOR	ST P4	STAIN (PRE-FINISHED) PAINT - SEMI-GLOSS ENAMEL
CEILING	ACT P-GB EXP	ACOUSTICAL CEILING TILE, LAY-IN GRID, 24x24 GYPSUM BOARD, PAINTED - FLAT EXPOSED



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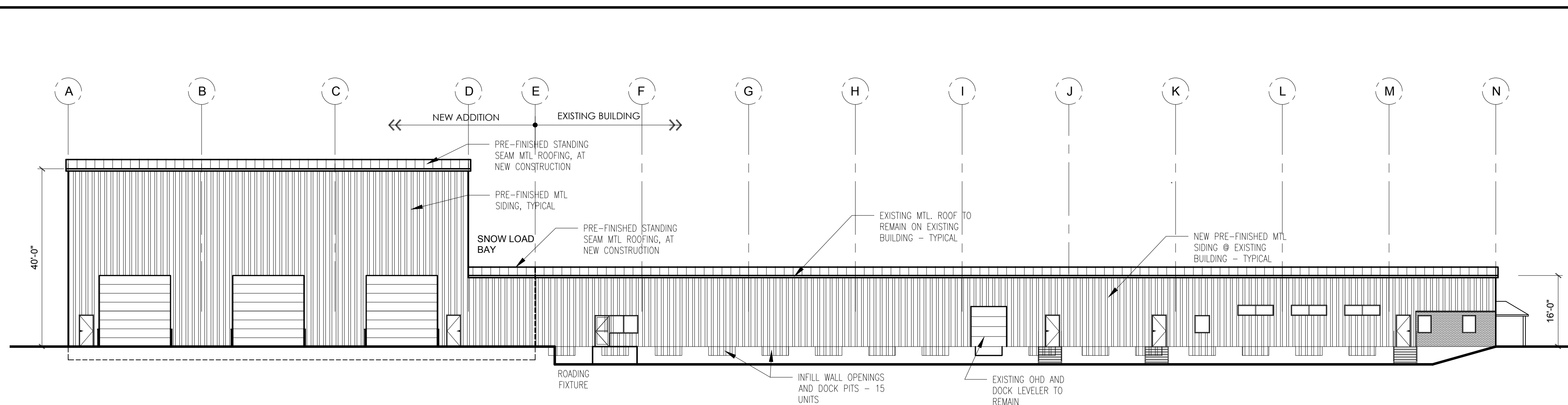
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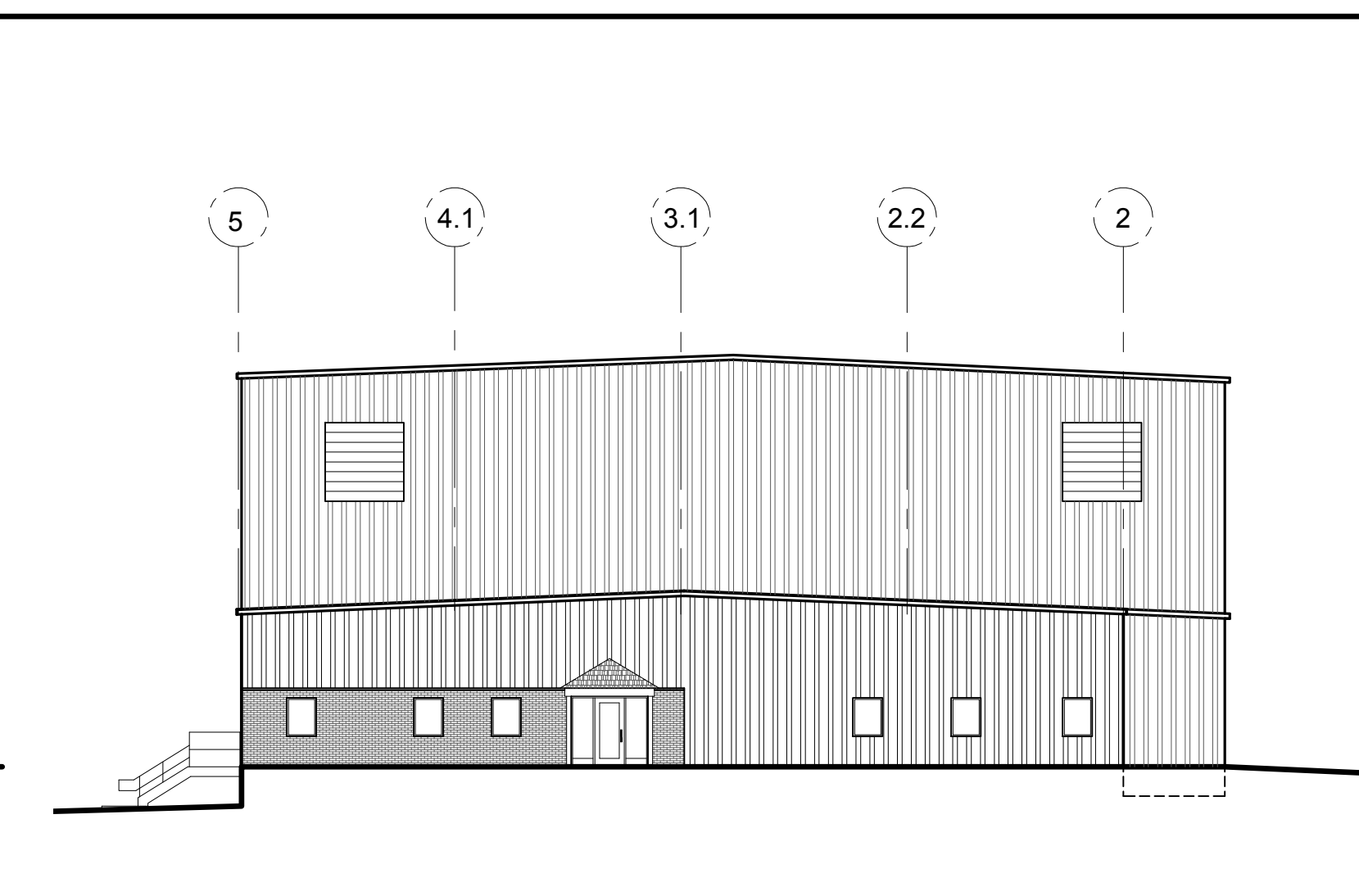
March 23, 2017

Office Floor
Plan

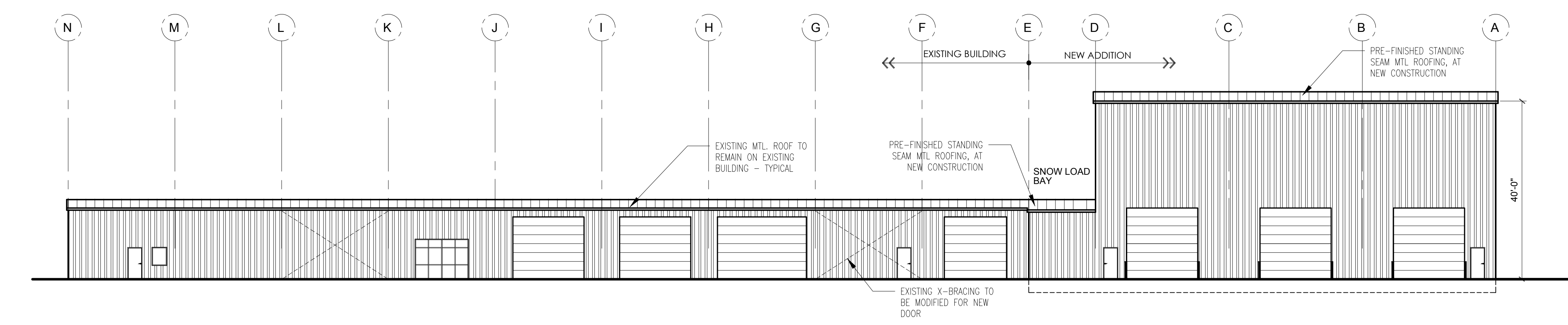
A103



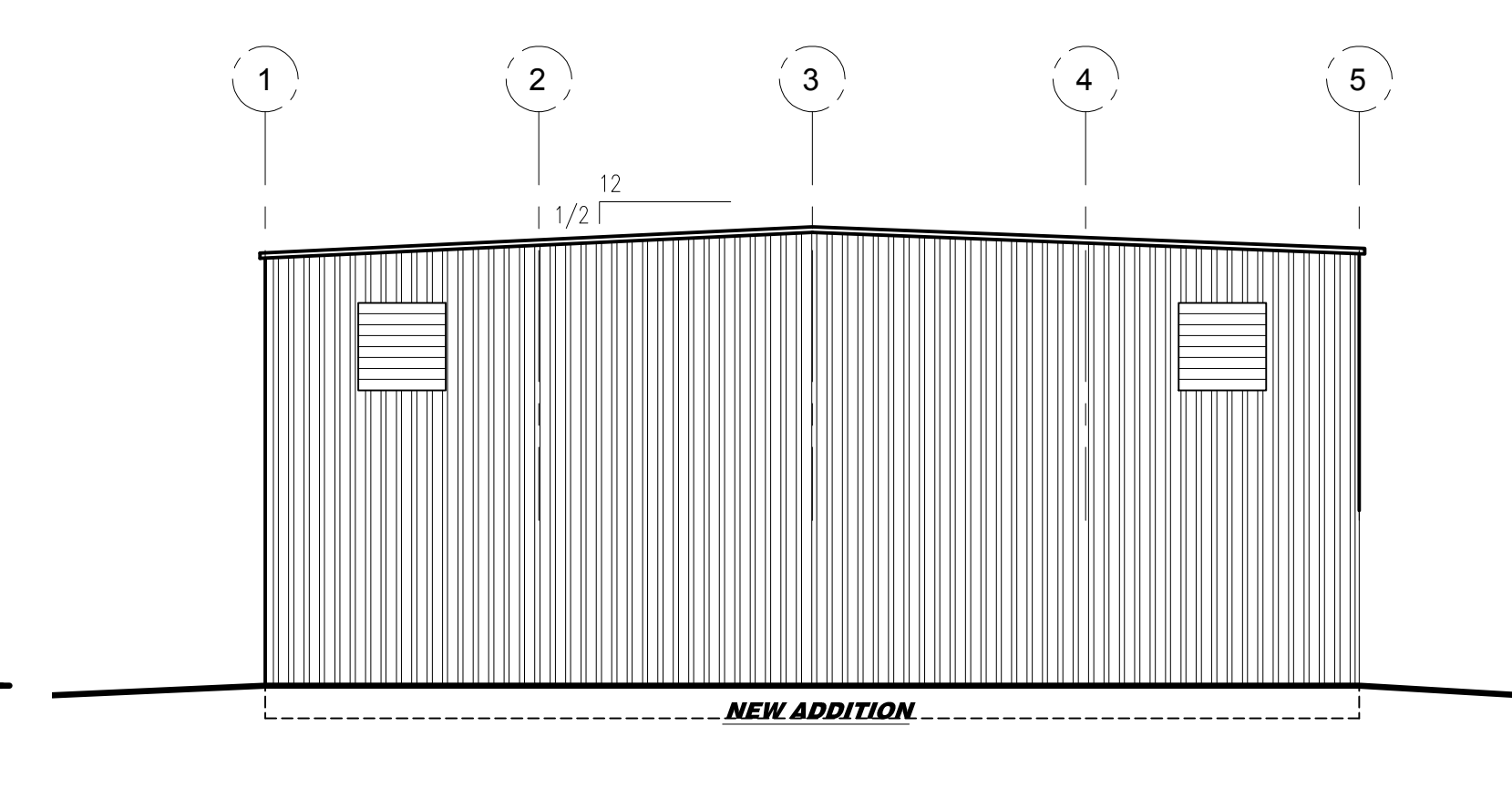
1 East Elevation
Scale: 1/16" = 1'-0"



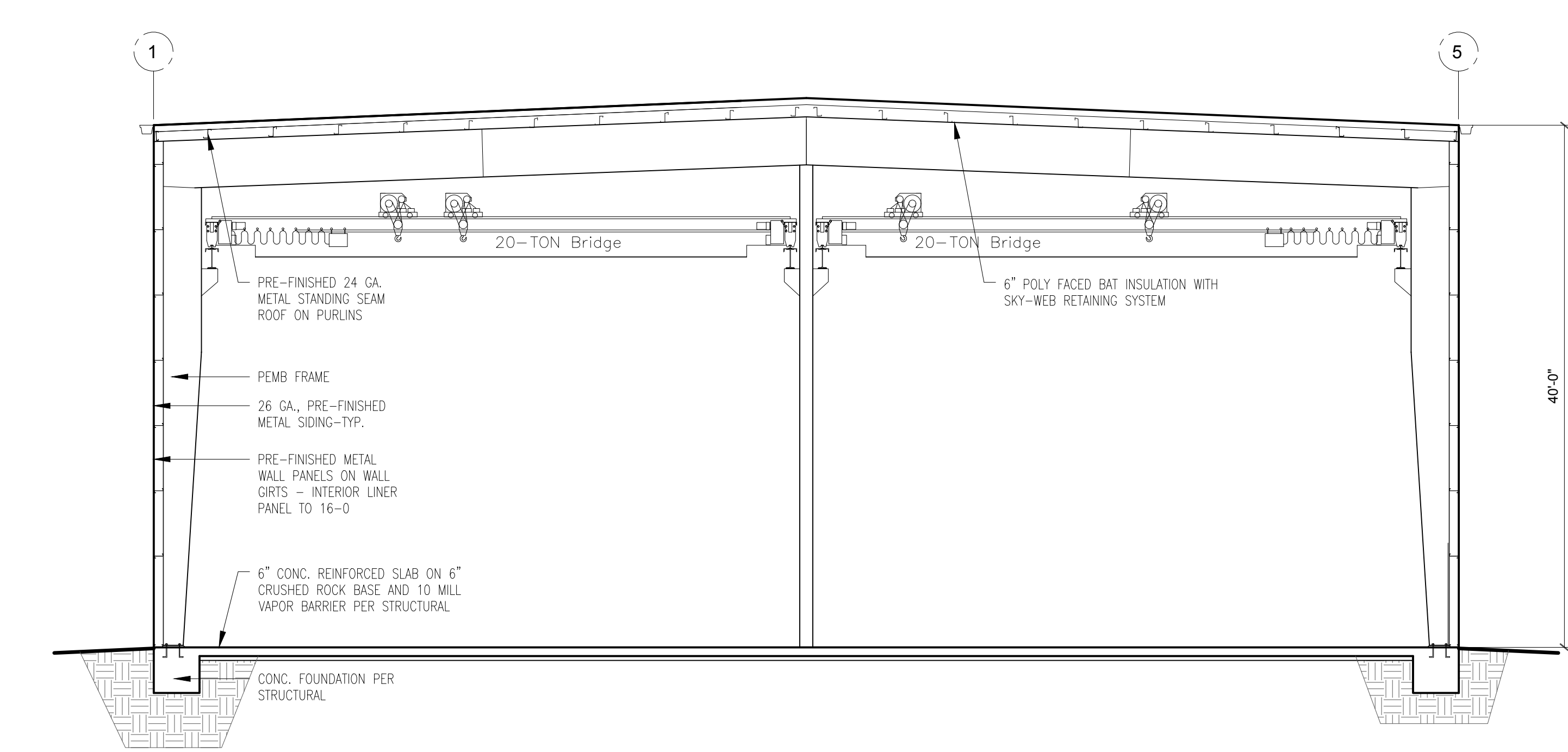
2 North Elevation
Scale: 1/16" = 1'-0"



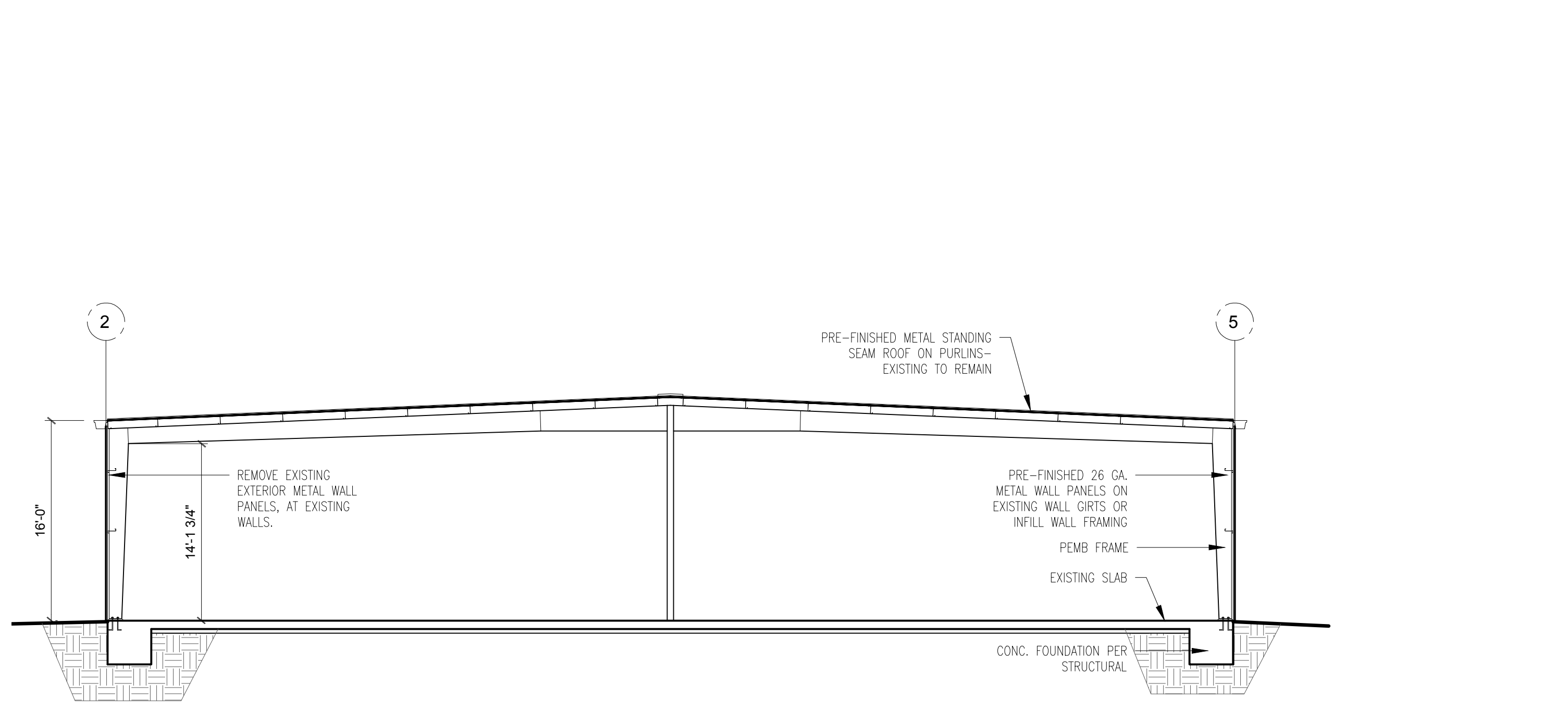
3 West Elevation
Scale: 1/16" = 1'-0"



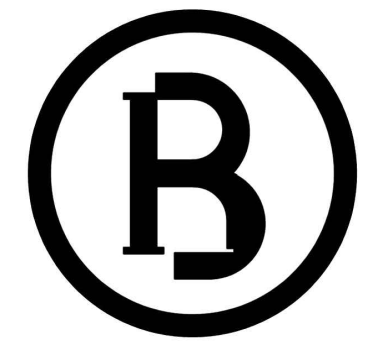
4 South Elevation
Scale: 1/16" = 1'-0"



5 Building Section
Scale: 1/8" = 1'-0"



6 Building Section
Scale: 1/8" = 1'-0"



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PROPOSED
Design Assurance Building
RATEC INDUSTRIES INC.
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PRELIMINARY

River Bluff Architects, Inc.
Missouri State Cert. of Authority
#A-2008008319

March 23, 2017

Exterior Elevations

A200