# HORIZON MASONRY-SUITE B

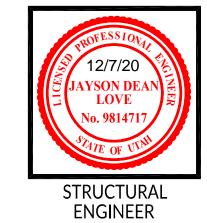
LOCATION:

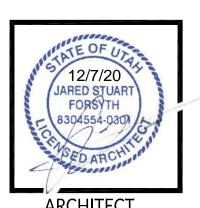
850 WEST 350 NORTH KAYSVILLE, UT 84037

# **ARCHITECT - STRUCTURAL**



177 E. ANTELOPE DR. STE. B LAYTON, UT 84041 PHONE: (801) 499-5054





OWNER	MECHANICAL	ELECTRICAL
JEREMY HERRON  926 NORTH 1875 WEST FARMINGTON, UT 84025 PHONE: (801) 755-5003	CUNNING & ASSOCIATES MECHANICAL CONSULTING ENGINEERS 4685 W. 11600 N. TREMONTON, UT 84337 PHONE: (801) 726-5047	PVE ENGINEERING 1040 NO. 2200 WEST SALT LAKE CITY, UT 84116 PHONE: (801) 359-3158

I. FIRE SPRINKLER AND FIRE ALARM DRAWINGS WILL BE PROVIDED PRIOR TO INSTALLATION. FIRE SPRINKLER AND FIRE ALARM PLANS SHALL BE GIVEN TO SOUTH DAVIS METRO FIRE	_
KAYSVILLE CITY.	4

**DEFERRED SUBMITTALS** 

2. NFRC CERTIFICATE SHALL BE SUBMITTED AS PART OF THER CERTIFICATE OF OCCUPANCY REQUIREMENT.

2018 IBC 2018 IFC 2018 IECC 2018 IPC

2018 IFGC

2018 IMC NEC 2011 2003 UPC ICC/ANSI A117.1-2009

**CURRENT CODE EDITIONS** 

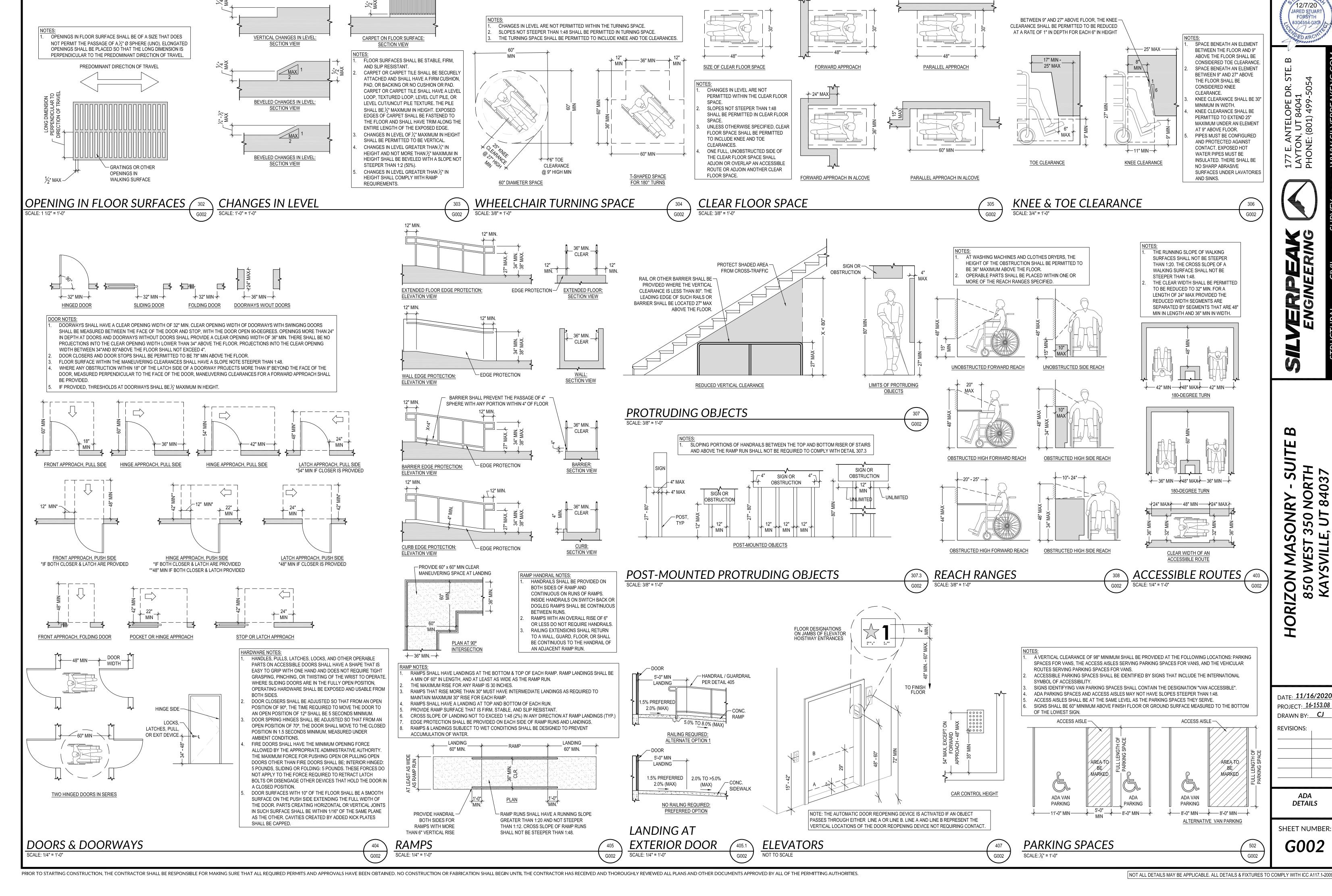
# **SUITE A: 2018 IBC CODE ANALYSIS**

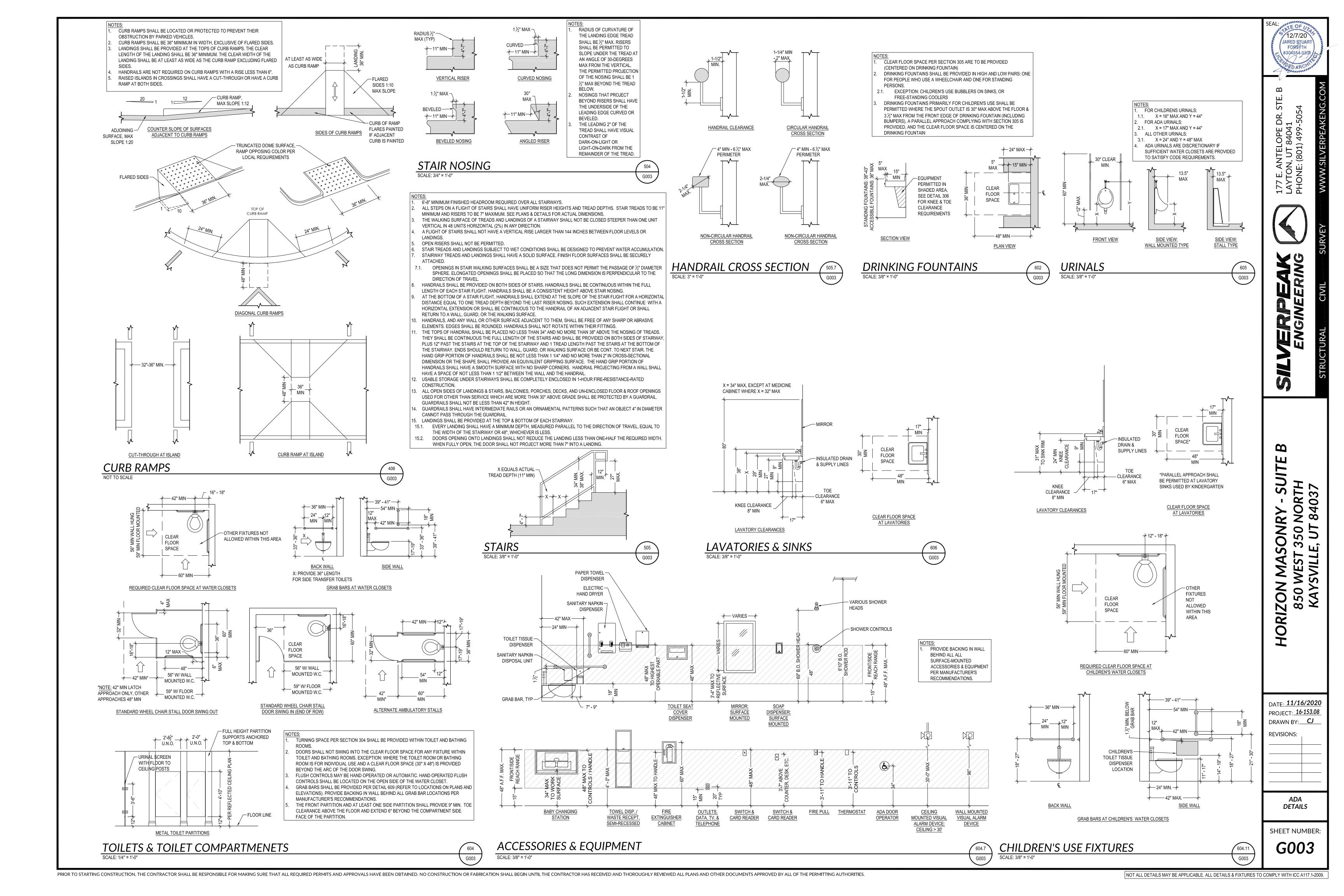
ENTIRE BUILDING	
OCCUPANCY GROUP	B, S-I
CONSTRUCTION TYPE	Ш - В
FIRE SPRINKLERS PROVIDED?	YES
TOTAL NUMBER OF STORIES	2
TENANT IMPROVEMENT AREA: SU	ITE B
SUITE B MAIN FLOOR AREA	3,272 SQ. FT.
SUITE B UPPER FLOOR AREA	875 SQ. FT.
TOTAL SUITE B AREA	4,147 SQ. FT.
OCCUPANT LOADS (TABLE 1004.1.2)	
BUSINESS AREAS MAIN (100 GROSS)	878 S.F. / 100 = 9
BUSINESS AREAS UPPER (100 GROSS)	875 S.F. / 100 = 9
STORAGE AREAS MAIN (300 GROSS)	118 S.F. / 300 = 1
WAREHOUSE AREAS (500 GROSS)	2,276 S.F. / 500 = 5
MAIN FLOOR OCCUPANT LOAD	15
UPPER FLOOR OCCUPANT LOAD	9
TOTAL OCCUPANT LOAD	24
EXITS REQUIRED	2
EXITS PROVIDED	2
MAX ALLOWABLE TRAVEL DISTANCE (1017.	_
ACTUAL MAX. TRAVEL DISTANCE	90'
WATER CLOSETS REQUIRED	24/25 =
WATER CLOSETS PROVIDED	2
LAVATORIES REQUIRED	24/40 =
LAVATORIES PROVIDED	2

G001 G002 G003 G004	ADA DETAILS ADA DETAILS ADA DETAILS ADA DETAILS
A101 A102 A111 A112 A131 A132 A301 A501	MAIN DEMOLITION PLAN UPPER DEMOLITION PLAN MAIN FLOOR PLAN UPPER FLOOR PLAN MAIN REFLECTED CEILING PLAN UPPER REFLECTED CEILING PLAN BUILDING SECTION & DETAILS SCHEDULES & DETAILS
5001 5101 5501	STRUCTURAL NOTES & SPECIAL INSPECTIONS FLOOR FRAMING PLAN STRUCTURAL DETAILS
E001 E201 E202 E301 E302 E401 E501	ELECTRICAL NOTES & SYMBOLS MAIN LEVEL POWER PLAN MEZZANINE POWER PLAN MAIN LEVEL LIGHTING PLAN MEZZANINE LIGHTING LAN ELECTRICAL SCHEDULES ELECTRICAL DETAILS
M-000 M-100 M-700 1D-100 MS-100 P-000	MECHANICAL SCHEDULES, SYMBOL LEGENDS, AND DETAILS MAIN / SECOND FLOOR HVAC PLANS / DETAILS HVAC CONTROLS, DETAILS, AND SECTIONS HVAC DEMO PLANS AND DETAILS MECHANICAL SPECIFICATIONS PLUMBING SCHEDULES / DETAILS AND PLANS

**INDEX TO DRAWINGS** 

**COVER SHEET / DRAWING INDEX** 







Z

- SEE PLANS FOR

DESIGN DETAILS

GUARDRAIL

— 4" Ø SPHERE

FLOOR LINE

- 21" Ø SPHERE

-FLOOR LINE

TYPICAL GUARDRAIL

**EQUIPMENT PLATFORM** 

GUARDRAIL

ON STAIRWAYS & STEPPED AISLES, FROM THE LINE

ON RAMPS & RAMPED AISLES, FROM THE RAMP

FROM A HEIGHT OF 36" - 42, GUARDS SHALL NOT

HAVE OPENINGS THAT ALLOW PASSAGE OF A

OF A STAIR, FORMED BY THE RISER, TREAD &

THE TRIANGULAR OPENINGS AT THE OPEN SIDES

BOTTOM RAIL SHALL NOT ALLOW PASSAGE OF A

AT ELEVATED WALKING SURFACES FOR ACCESS

TO AND USE OF ELECTRICAL, MECHANICAL OR

PLUMBING SYSTEMS OR EQUIPMENT, GUARDS

SHALL NOT HAVE OPENINGS THAT ALLOW

PASSAGE OF A SPHERE 21" IN DIAMETER.

SURFACE AT THE GUARD.

SPHERE 4 3/8" IN DIAMETER.

SPHERE 6" IN DIAMETER.

CONNECTING THE LEADING EDGES OF THE TREAD

IZON MASC 850 WEST 3 KAYSVILLE,

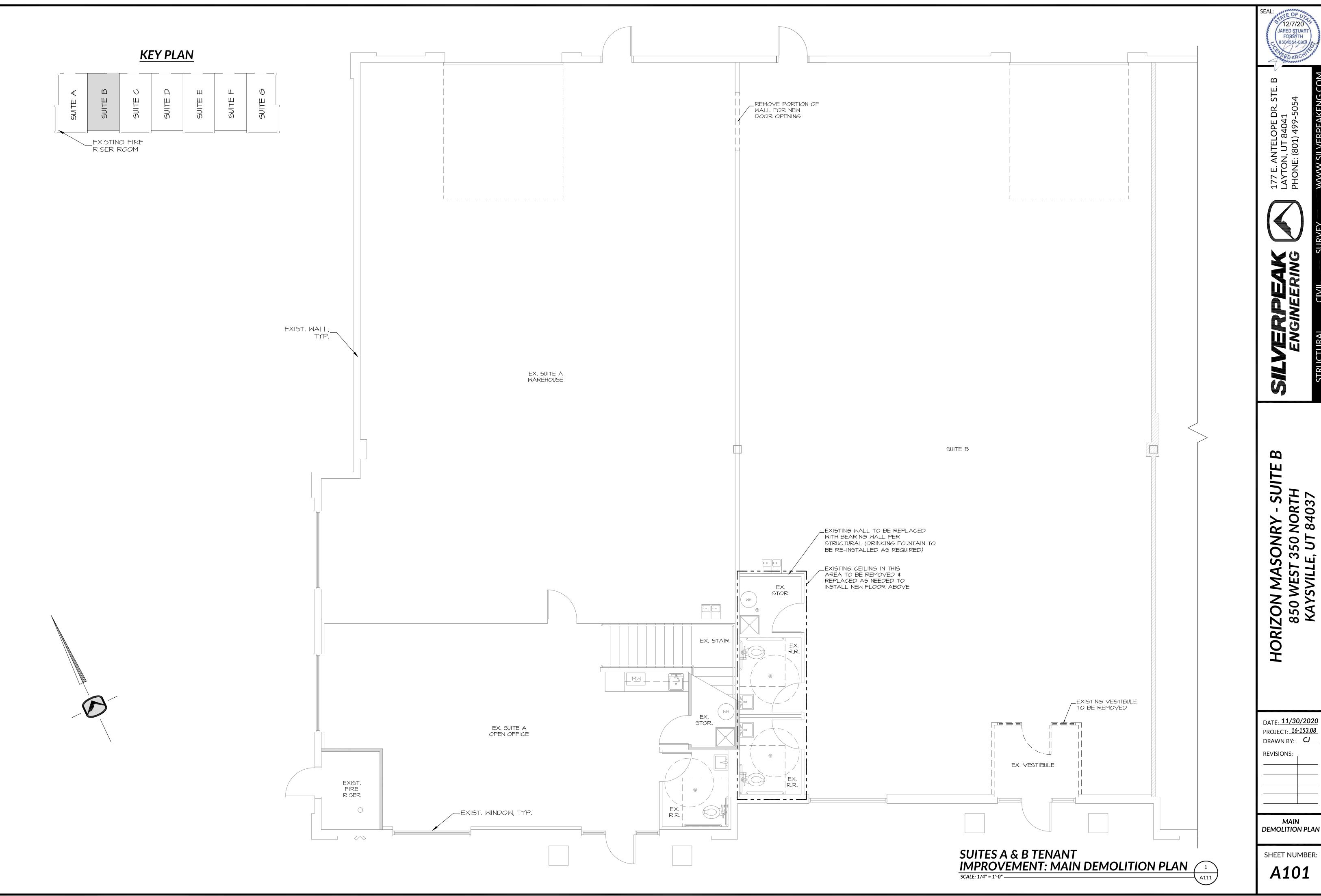
DATE: 11/16/2020 PROJECT: 16-153.08 DRAWN BY: CJ **REVISIONS:** 

**DETAILS** 

G004

**SHEET NUMBER** 

G004



PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.



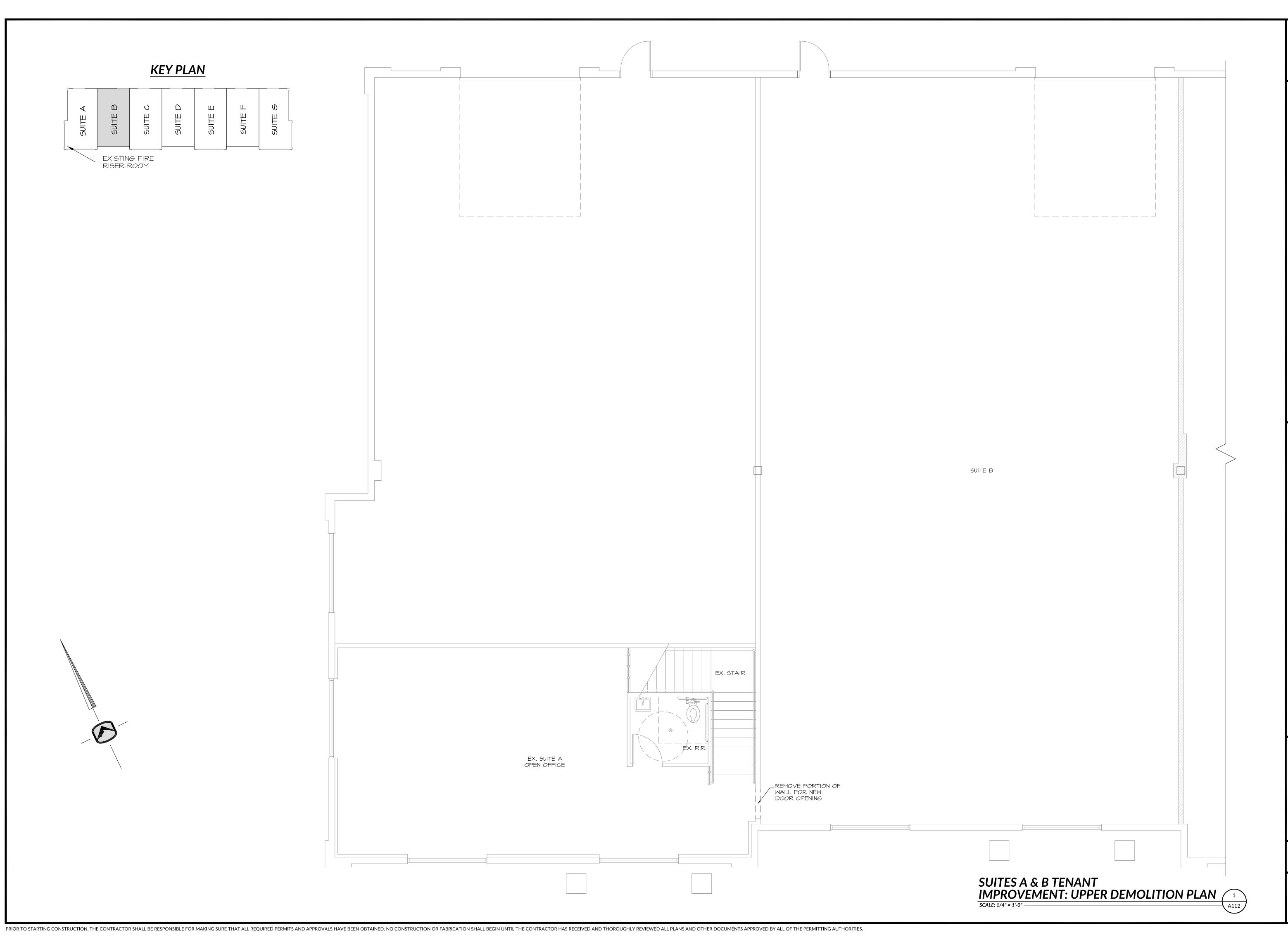
IRY - SUITI NORTH F 84037

DATE: 11/30/2020 PROJECT: 16-153.08

DRAWN BY: **CJ** 

**DEMOLITION PLAN** 

A101





177 E. ANTELOPE DR. STE LAYTON, UT 84041 PHONE: (801) 499-5054



SILVERRIPEANK ENGINEERING

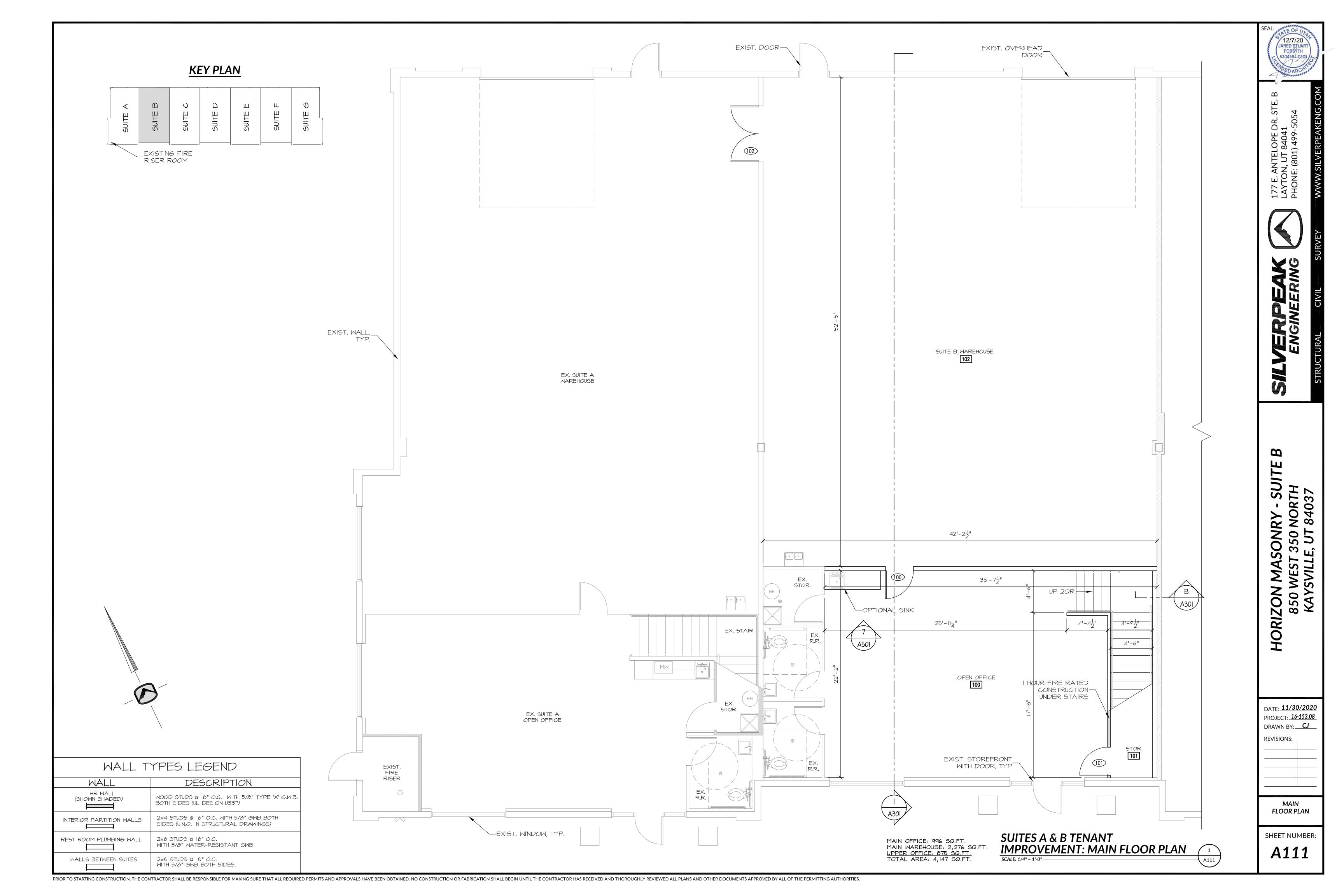
HORIZON MASONRY - SUITE B 850 WEST 350 NORTH KAYSVILLE, UT 84037

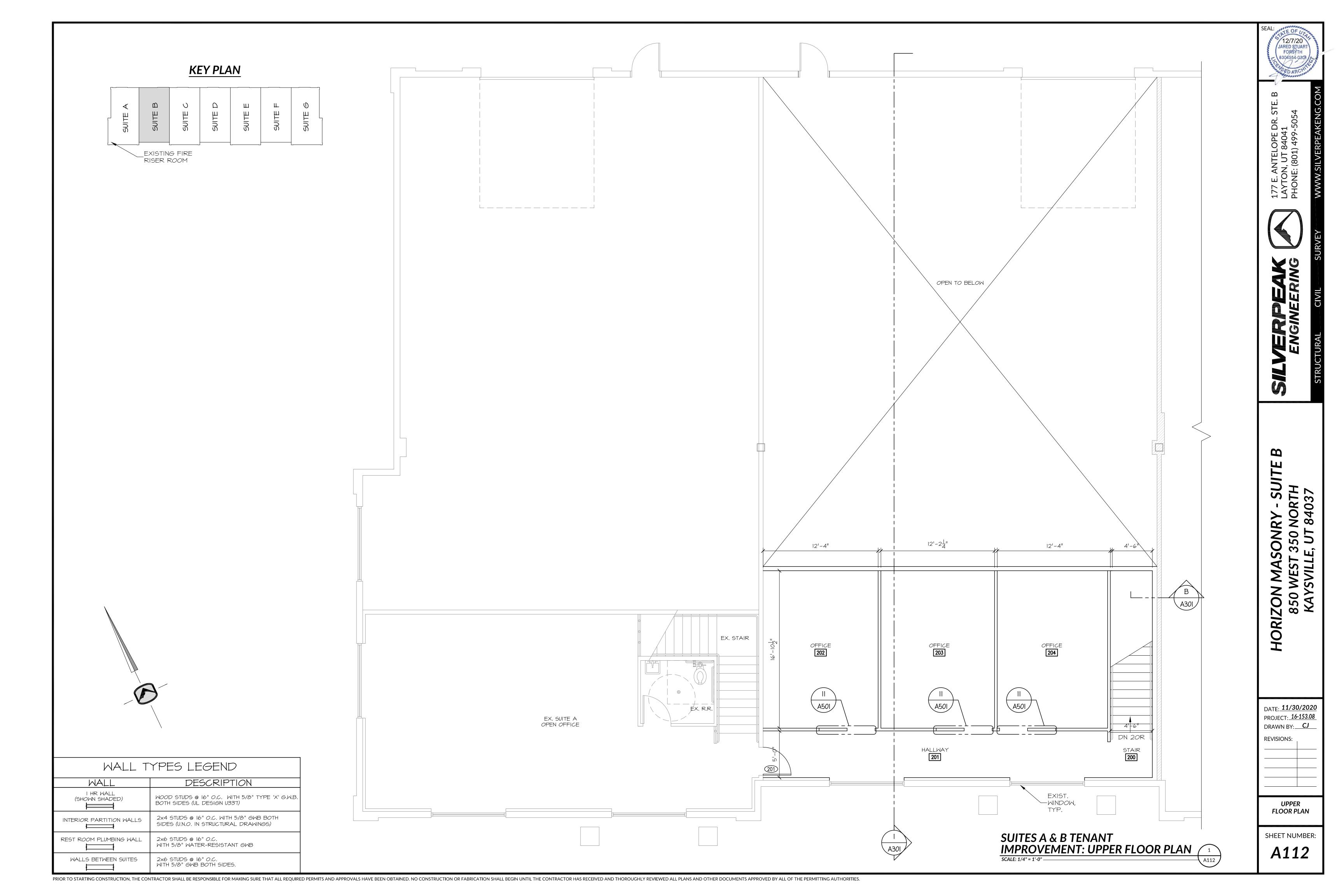
DATE: 11/30/2020
PROJECT: 16-153.08
DRAWN BY: CJ

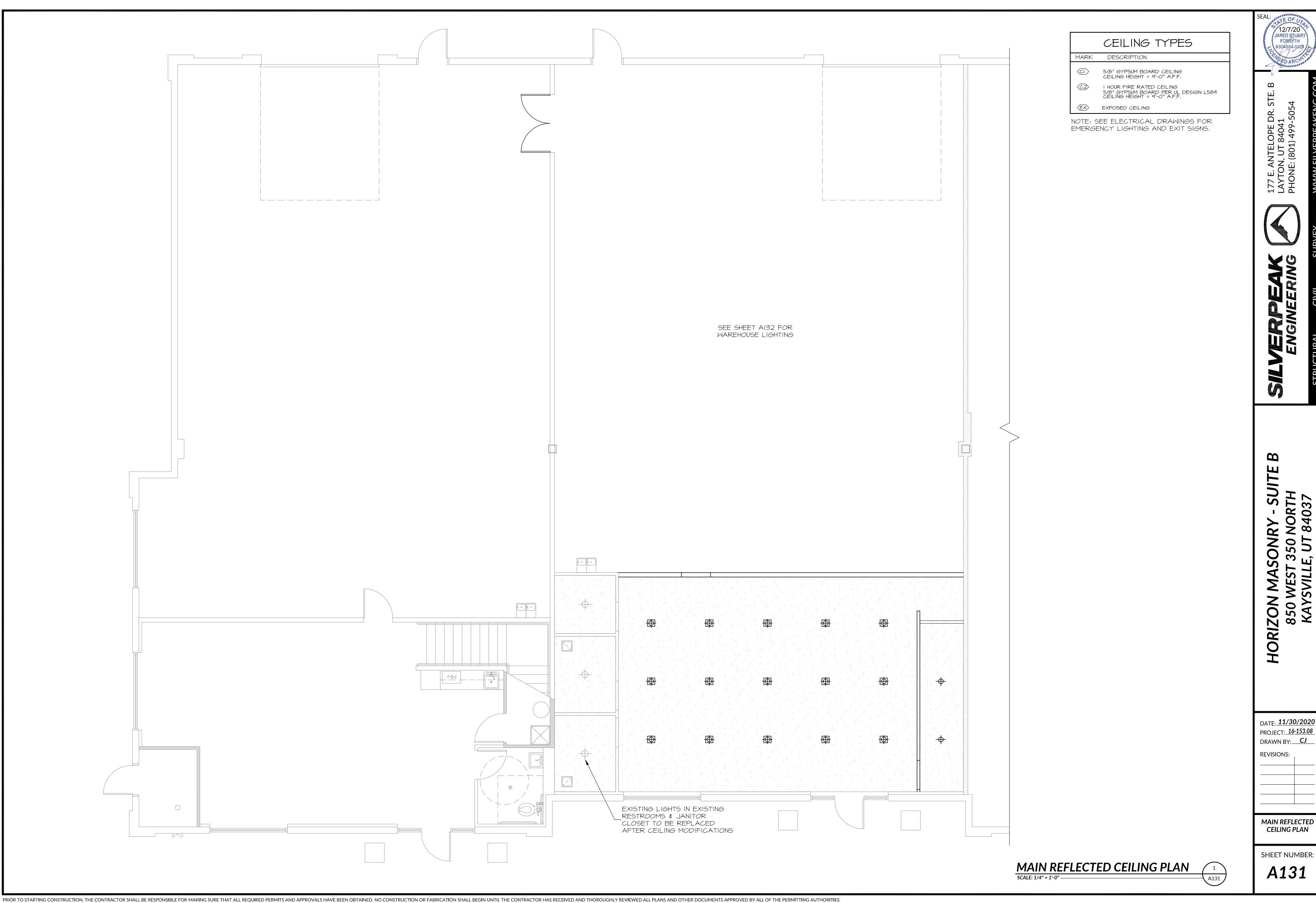
DRAWN BY: CJ

UPPER DEMOLITOIN PLAN

SHEET NUMBER: **A102** 







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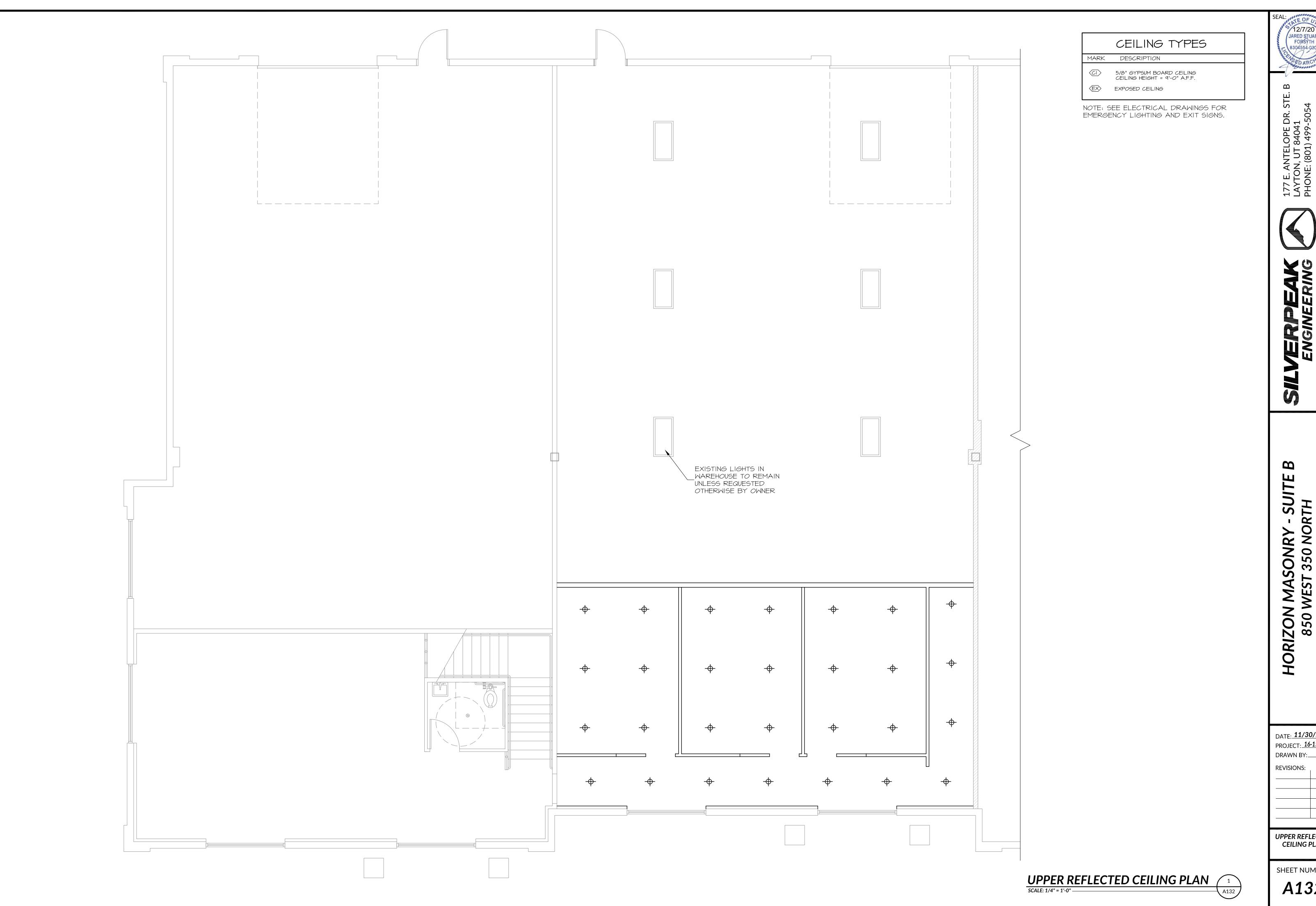
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HORIZON MASONRY - SUIT 850 WEST 350 NORTH KAYSVILLE, UT 84037

DATE: 11/30/2020 PROJECT: <u>16-153.08</u> DRAWN BY: **CJ REVISIONS:** 

SHEET NUMBER:

A131



PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

12/7/20 JARED STUART FORSYTH 8304554-030

HORIZON MASONRY - SUIT 850 WEST 350 NORTH KAYSVILLE, UT 84037

DATE: 11/30/2020 PROJECT: <u>16-153.08</u>

DRAWN BY: **CJ** REVISIONS:

UPPER REFLECTED CEILING PLAN

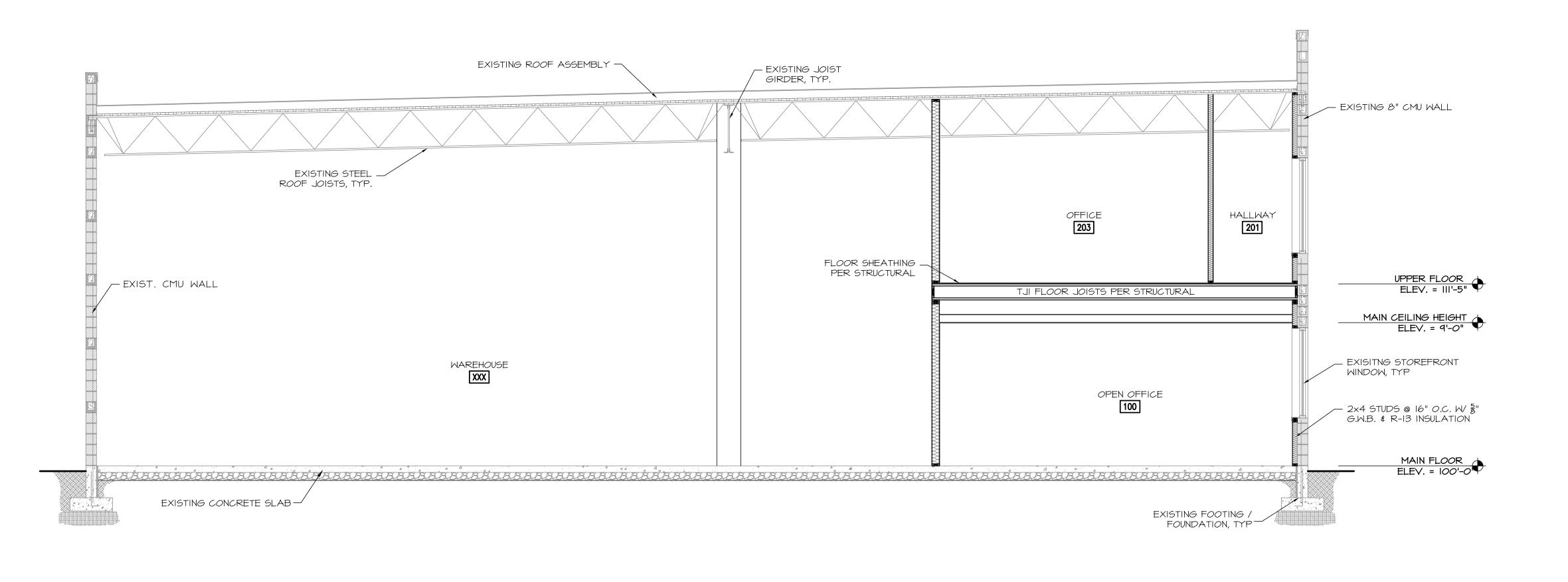
SHEET NUMBER:

HORIZON 850 V KAYS

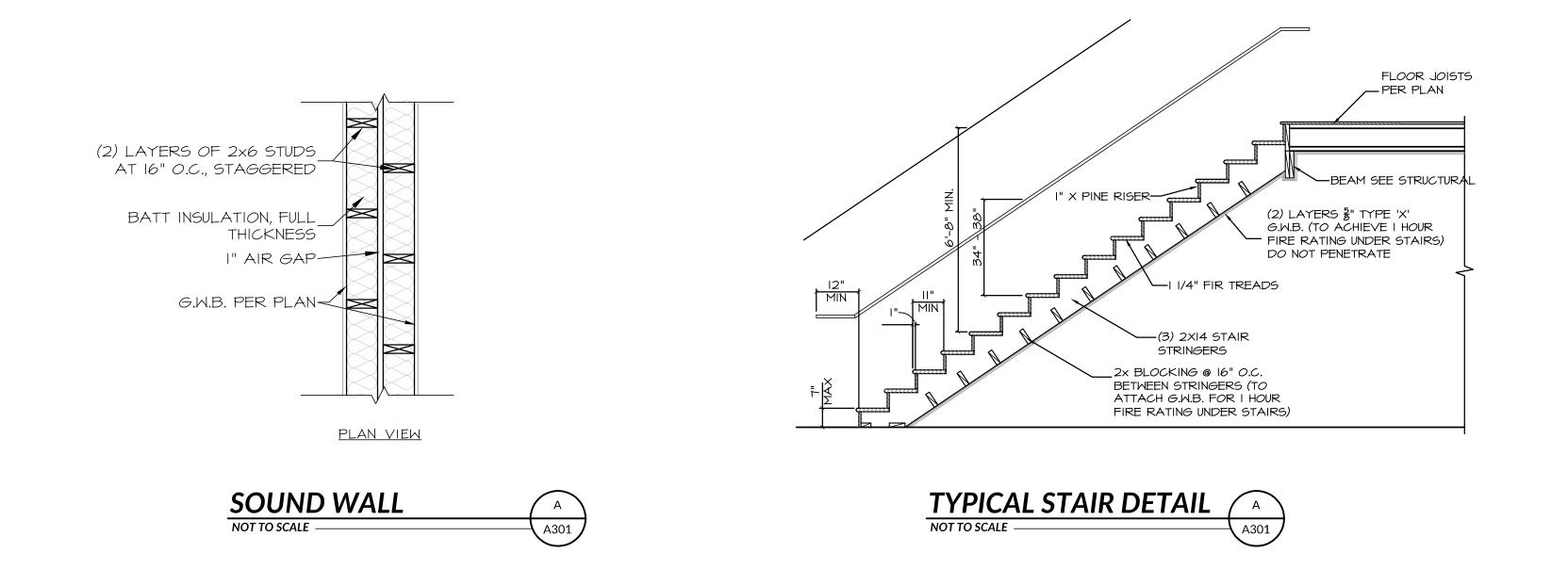
DRAWN BY: **CJ** REVISIONS:

**SECTION** 

SHEET NUMBER: A301







## STAIR AND RAILING NOTES

- 1. 6'-8" MINIMUM FINISHED HEADROOM REQ'D OVER ALL STAIRWAYS.
- 2. STAIR TREADS TO BE II" MINIMUM AND RISERS TO BE 7" MAXIMUM. SEE PLANS & DETAILS FOR ACTUAL DIMENSIONS.
- 3. THE TOPS OF HANDRAIL SHALL BE PLACED NO LESS THAN 34" AND NO MORE THAN 38" ABOVE THE NOSING OF TREADS. THEY SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS AND SHALL BE PROVIDED ON BOTH SIDES OF STAIRWAY, PLUS 12" PAST THE STAIRS AT THE TOP OF THE STAIR WAY AND I RISER LEGTH PAST THE STAIRS AT THE BOTTOM OF THE STAIRWAY. ENDS SHOULD RETURN TO WALL, GUARD, OR WALKING SURFACE OR BE CONT. TO NEXT STAIR. THE HAND GRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN I 1/4" AND NO MORE THAN 2" IN CROSS-SECTIONAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HAND GRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS. HANDRAIL PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN I 1/2" BETWEEN THE WALL AND THE HANDRAIL PER IBC.
- 4. ALL OPEN SIDES OF LANDINGS AND STAIRS, BALCONIES, PORCHES, DECKS, AND UN-ENCLOSED FLOOR AND ROOF OPENINGS USED FOR OTHER THAN SERVICE WHICH ARE MORE THAN 30" ABOVE GRADE SHALL BE PROTECTED BY A GUARDRAIL. GUARDRAILS SHALL NOT BE LESS THAN 42" IN HEIGHT.
- 5. GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH THAT NO OBJECT 4" IN DIAMETER CAN-NOT PASS THROUGH THE GUARDRAIL PER IBC.
- 6.5/8" SHEETROCK IS TO BE INSTALLED UNDER STAIRS AND IN ALL REQUIRED LOCATIONS, U.N.O.
- 7. USABLE STORAGE UNDER STAIRWAYS SHALL BE COMPLETELY ENCLOSED IN I-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION, PER IBC.

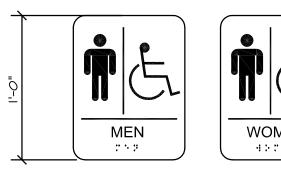
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SCHEDULES & DETAILS

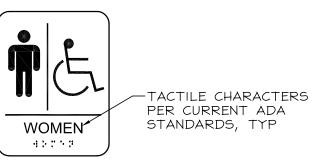
SHEET NUMBER: **A501** 

SIGNS TO BE PLACED ON THE WALL
NEAR THE LATCH SIDE OF THE DOOR

DOOF



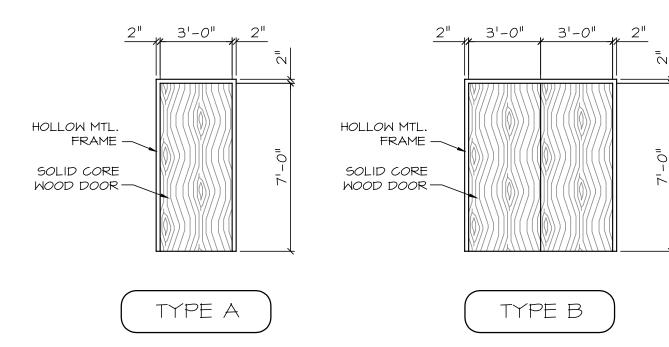
**REST ROOM SIGNS** 



SIGNS ON THE RESTROOM DOORS AT 60" A.F.F. FROM THE CENTER OF THE SIGN

	DOOR SCHEDULE								
DOOR		Ι	700F	2		FRAME	REMARKS		
NO.	MIDTH	HEIGHT	THICK	TYPE	MATL.	MATERIAL			
100	3'-0"	7'-0"	1 3/4"	Α	MOOD	H.M.			
101	3'-0"	7'-0"	1 3/4"	Α	MOOD	H.M.	PROVIDE LOCK, I HR FIRE RATED		
102	6'-0"	7'-0"	3/4"	Α	MOOD	H.M.	PROVIDE LOCK		
201	3'-0"	7'-0"	3/4"	Α	MOOD	H.M.	PROVIDE LOCK		

## DOOR TYPES



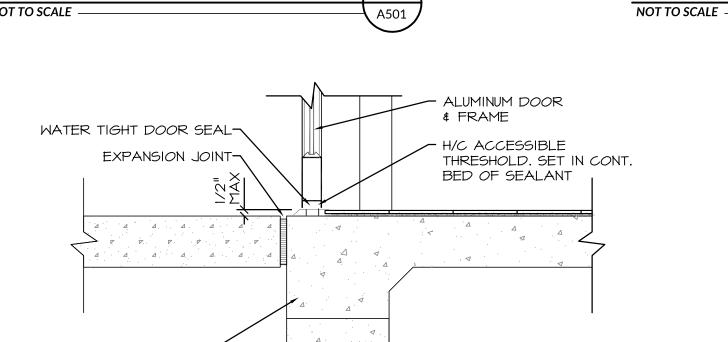
**DOOR NOTES:** 

ADA & IBC STANDARDS

2. LEVER TYPE HARDWARE ONLY

DOOR HARDWARE TO COMPLY WITH CURRENT

FINISH SCHEDULE												
		F	L00	R	BASE			WA	LLS		CEILING	
ROOM NAME AND NUMBER		LAMINATE WOOD FLOORING	NON-POROUS CERAMIC TILE	SEALED CONCRETE	RUBBER BASE	CERAMIC TILE	PAINTED G.W.B.	6' CERAMIC TILE WAINSCOT	F.R.P PANELS OVER 5/8" G.W.B.	PAINTED CMU	PAINTED G.W.B.	PAINTED EXPOSED CEILING
100	OPEN OFFICE	•			•		•				•	
101	STORAGE			•	•		•				•	
102	WAREHOUSE				•		•			•		•
200	STAIR	•			•		•					•
201	HALLWAY	•			•		•					•
202	OFFICE	•			•		•					•
203	OFFICE	•			•		•					•
204	OFFICE	•			•		•					•



- DBL. 2x4 JAMB

- HOLLOW METAL

DOOR FRAME

SIGNS TO BE PLACED ON THE WALL NEAR THE LATCH SIDE OF THE DOOR

LETTERS: MIN. 5/8" HIGH RAISED MIN. 1/32" SAN-SERIF UPPERCASE

**TYPICAL ROOM SIGNS** 

HOLD FND. WALL DOWN AT -DOORS & POUR OVER

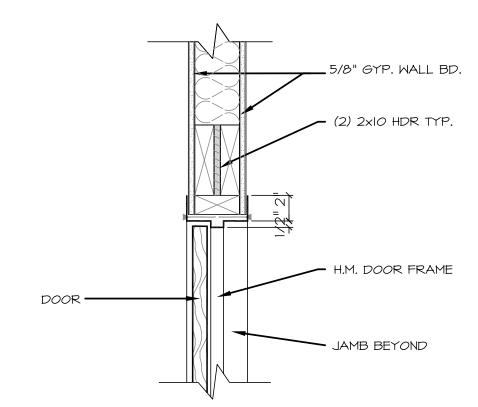
NOT TO SCALE

DOOR -

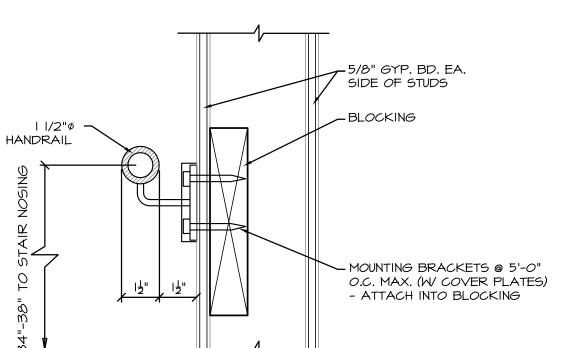
**INTERIOR JAMB DETAIL** 

(TYPICAL AT DOORS)

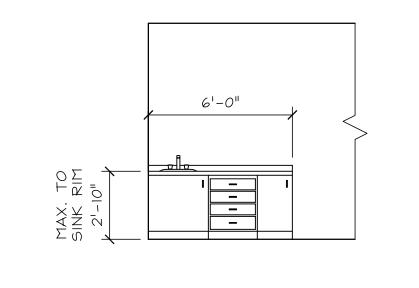
THRESHOLD AT STOREFRONT



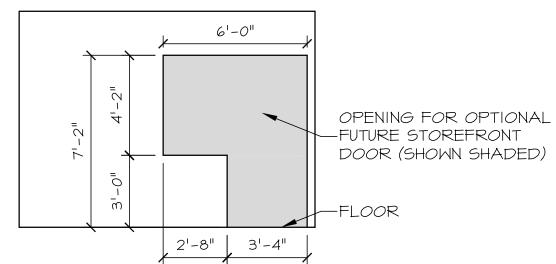




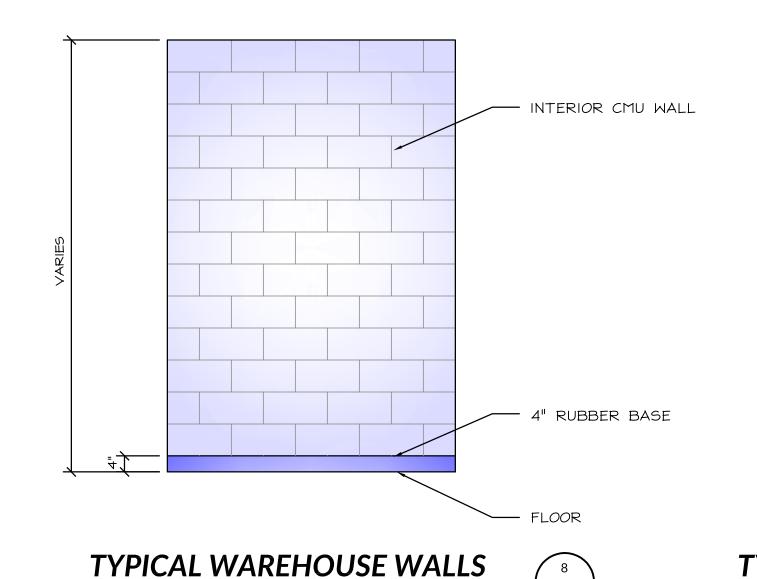




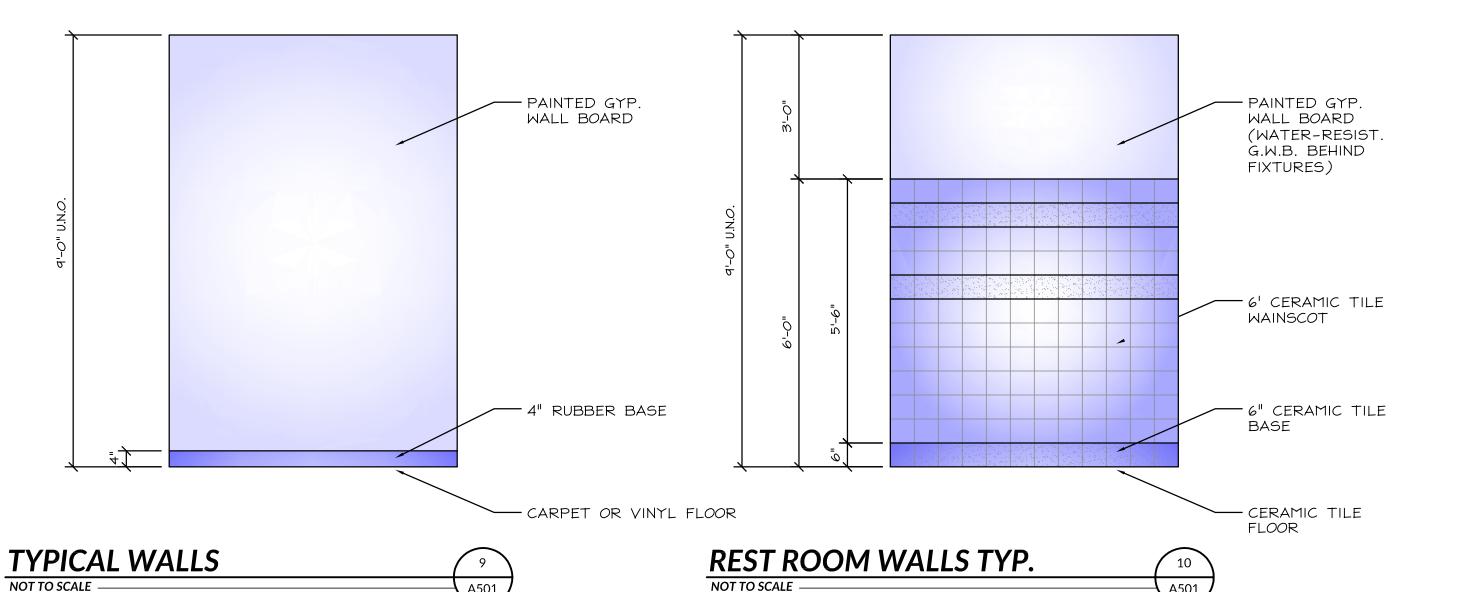
OPTIONAL CABINET ELEVATION	7
SCALE: 1/4" = 1'-0" —	A501



1 1	7	
WALL OPENING ELEVA	TION 11	
SCALE: 1/4" = 1'-0" —	A501	



A501



## NOTE:

I. CONTRACTOR TO PROVIDE BLOCKING/BACKING FOR ALL ACCESSORIES. BLOCKING AT GRAB BARS TO WITHSTAND A 250 LB./FT. LOAD.

2. DRINKING FOUNTAINS, TOILETS & URINALS ARE TO BE MOUNTED AS PER MANUFACTURERS RECOMMENDATIONS FOR STANDARD UNITS UNLESS THEY ARE DESIGNATED TO BE FOR HANDICAPPED USE. H.C. ACCESSIBLE UNITS TO BE MOUNTED AS SHOWN ABOVE.

- CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES. DO NOT SCALE
- SHOP DRAWINGS SHALL BE REVIEWED BY THE ENGINEER/ARCHITECT PRIOR TO FABRICATION OR ERECTION FOR ANY PREFABRICATED OR MANUFACTURER- DESIGNED COMPONENTS AND SHALL BE STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THIS STRUCTURE RESIDES.
- 5. SIZES, LOCATIONS, LOADS, AND ANCHORAGES OF EQUIPMENT SHALL BE VERIFIED IN THE FIELD WITH EQUIPMENT MANUFACTURERS (SUPPLIERS) PRIOR TO FABRICATION OR INSTALLATION OF SUPPORTING STRUCTURES.
- 6. TEMPORARY BRACING SHALL BE PROVIDED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING WIND. SUCH BRACING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY, OR UNTIL ALL THE STRUCTURAL ELEMENTS ARE INSTALLED.
- DURING AND AFTER CONSTRUCTION THE CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOAD.
- 8. CONTRACTOR AND ALL SUBCONTRACTORS SHALL PERFORM THEIR TRADES AND DUTIES IN A MANNER CONFORMING TO THE PROCEDURES AND REQUIREMENTS AS STATED IN THE 2015 INTERNATIONAL BUILDING CODE, (OR LATEST ACCEPTED CODE ADOPTED BY THE LOCAL BUILDING OFFICIALS).
- 9. ANY SPECIAL INSPECTIONS REQUIRED BY THE BUILDING OFFICIAL OR THE BUILDING CODE ARE THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR.
- IO. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE JOB SITE.

## FOUNDATION AND EARTHWORK NOTES

. SOILS INFORMATION / REPORT

I.I. SOILS REPORT BY SOILS REPORT PROJECT NUMBER

I.2. SOIL BEARING CAPACITY (PSF)

3/24/2017 2,000, ON COMPACTED FILL 2. ANY SOIL CONDITION ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THOSE USED

CMT ENGINEERING

9474

- FOR DESIGN OF FOOTINGS AS OUTLINED IN THE WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING. ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL
- COMPACTED TO 95% OF MAX DENSITY, BASED ON ASTM D 1557 METHOD OF COMPACTION. FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX INCHES IN DEPTH AFTER COMPACTION AND SHALL EXTEND DOWN TO IN-SITU SOILS. FILL SHALL BE COMPACTED UNDER ALL CONCRETE WORK ON THE SITE.
- 4. NO FOOTINGS SHALL BE PLACED IN WATER, SNOW, FROZEN GROUND, OR UNSTABLE SOILS.
- 5. ALL EXCAVATIONS ADJACENT TO AND BELOW FOOTING ELEVATION FOR OTHER TRADES SHALL BE ACCOMPLISHED PRIOR TO POURING ANY FOOTINGS.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR LATERALLY SUPPORTING ALL RETAINING TYPE FOUNDATION WALLS WHILE COMPACTING BEHIND WALLS AND UNTIL ALL SUPPORTING MEMBERS HAVE BEEN PLACED (SUCH AS FLOOR SLABS). ALL OPEN EXCAVATIONS AND TRENCHES SHALL BE SUPPORTED AND BARRICADED BY CONTRACTOR TO CONFORM WITH OSHA SAFETY STANDARDS.
- 7. ALL REINFORCEMENTS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.
- 8. CONSULT THE PROJECT SPECIFICATIONS AND SOILS REPORT FOR FURTHER EARTHWORK REQUIREMENTS.

## **CONCRETE NOTES**

I. CONCRETE MATERIALS: I.I. CEMENT TYPE - ASTM C-150

CEMENT SOURCE SHALL REMAIN THE SAME FOR THE ENTIRE JOB.

I.2. FLY ASH - ASTM C618 CLASS F, 25% MAX CEMENT. CONTENT I.3. ADMIXTURES:

I.3.I. AIR-ENTRAINING - ASTM C260

I.3.2. WATER-REDUCING ADMIXTURE - ASTM C494, TYPE A

I.3.3. RETARDING ADMIXTURE - ASTM C494, TYPE B

1.3.4. WATER-REDUCING AND RETARDING ADMIXTURE - ASTM C494, TYPE F

I.3.5. HIGH-RANGE, WATER-REDUCING AND RETARDING ADMIXTURE - ASTM 494, TYPE G

I.3.6. ADMIXTURE MANUFACTURER SHALL HAVE ISO 9001 QUALITY CERTIFICATION. 1.3.7. ALL ADMIXTURES SHALL BE FROM THE SAME MANUFACTURER TO ENSURE COMPATIBILITY

1.3.8. CALCIUM CHLORIDE SHALL NOT BE ADDED TO THE CONCRETE MIX

I.4. NORMAL WEIGHT AGGREGATES

1.4.2. COMBINED AGGREGATE GRADATION FOR SLABS ON GRADE AND OTHER DESIGNATED CONCRETE SHALL BE 8% TO 18% FOR LARGE TOP SIZE AGGREGATES (1 1/2") OR 8% TO 22% FOR SMALLER TOP SIZE AGGREGATES (I" OR 3/4") RETAINED ON EACH SIEVE BELOW THE TOP SIZE AND ABOVE THE NO. 100. THE RANGE FOR THE NO. 30 AND NO. 50 SIEVES SHALL BE 8% TO 15% RETAINED IN EACH. TO AVOID GAP GRADING THE FOLLOWING SHALL OCCUR.

1.4.2.I. THE PERCENT RETAINED ON TWO ADJACENT SIEVES SHALL NOT FALL BELOW

1.4.2.2. THE PERCENT RETAINED ON THREE ADJACENT SIEVES THAT NOT FALL BELOW

1.4.2.3. WHEN THE PERCENT RETAINED ON TWO ADJACENT SIEVES IS LESS THAN 8%, THE TOTAL RETAINED ON EITHER OF THESE SIEVES AND THE ADJACENT OUTSIDE SIEVE SHALL BE AT LEAST 13%. SEE ACI 302 SECTION 5.4.3.3

I.4.3. MAXIMUM AGGREGATE SIZE SHALL BE NOT LARGER THAN:

1.4.3.1. 1/5 THE NARROWEST DIMENSION OF THE FORMS

1.4.3.2. 1/3 THE DEPTH OF THE SLAB

1.4.3.3. 3/4 THE MINIMUM SPACING BETWEEN BARS

1.5. REINFORCING STEEL - ASTM A615, GRADE GO (Fu = 60 ksi)

USE GRADE 40 (Fy = 40 ksi) FOR FIELD BENT DOWELS WITH SPACINGS REDUCED BY 1/3 FROM THAT INDICATED IN THE DRAWINGS.

I.6. ANCHOR RODS (TYPICAL)

ASTM FI554, GRADE 36 1.7. WATER CEMENT RATIO SHALL MEET THE REQUIREMENTS OF ACI 318

1.8. PROVIDE AIR ENTRAINMENT AS RECOMMENDED BY ACI 318.

HORIZONTAL USE CONCRETE THAT EXTENDS ABOVE GRADE AND IS EXPOSED TO FREEZING AND THAWING WHILE MOIST SHALL BE AIR ENTRAINED (UNLESS OTHERWISE INDICATED)

I.A. ITEMS NOT PERMITTED TO BE DIRECTLY EMBEDED IN CONCRETE ARE ALUMINUM CONDUIT. PRODUCTS CONTAINING ALUMINUM, OR OTHER SUCH NON-COMPATIBLE MATERIALS.

3,000 PSI

FO, SO, WO, CO

2. CONCRETE COMPRESSIVE STRENGTHS OF CONCRETE AT 28 DAYS AND ACI 318

CLASSIFICATIONS SHALL BE AS FOLLOWS (OR AS OTHERWISE INDICATED) 2.I. INTERIOR FOOTINGS & INTERIOR FOUNDATION WALLS STRENGTH 3,000 PSI FO, SO, WO, CO

CLASSIFICATION 2.2. INTERIOR SLABS ON GRADE STRENGTH

CLASSIFICATION 2.3. WAREHOUSE INTERIOR SLABS-ON-GRADE STRENGTH

3,000 PSI CLASSIFICATION FO, SO, WO, CO 3. REINFORCEMENT COVER 3.I. CAST-IN-PLACE CONCRETE CLEAR COVER 3.I.I. PERMANENTLY CAST AGAINST EARTH 3.1.2. CONCRETE NOT EXPOSED TO WEATHER OR AGAINST EARTH

SLABS, WALLS AND THEIR PIERS

BEAMS, COLUMNS:

4. ONLY ONE GRADE OR TYPE OF CONCRETE SHALL BE POURED ON THE SITE AT ANY GIVEN

3/4"

1 1/2"

4.I. ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE ACI STANDARDS AND PRACTICES

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND FORMWORK. 5.1. SUPPORTING FORMS AND SHORING SHALL NOT BE REMOVED UNTIL STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY CONSTRUCTION LOAD TO WHICH THE MAY BE SUBJECTED.

6. CONSTRUCTION JOINTS, CONTROL JOINTS

6.1. UNLESS OTHERWISE NOTED, ALL CONSTRUCTION JOINTS SHALL BE KEYED WITH A KEY 1-1/2" DEEP, A LENGTH 2" LESS THAN THE MEMBER, AND A WIDTH 1/2 OF THE MEMBER. REINFORCING SHALL BE CONTINUOUS THRU JOINT.

6.2. UNLESS NOTED OTHERWISE, CONTROL JOINTS (CONTRACTION JOINTS) SHALL BE SPACED NO FURTHER THAN 30 TIMES THE SLAB THICKNESS. THE CONTROL JOINTS SHALL BE INSTALLED SO THAT THE LENGTH TO WIDTH RATIO IS NO MORE THAN 1.20:1.

6.2.I. CONTROL JOINTS SHALL BE COMPLETED AS SOON AS FINAL SET IS ACHIEVED. THE JOINT DEPTH FOR SAWCUT AND TOOLED JOINTS SHALL BE 1/4" THE SLAB THICKNESS. THE SAWCUT DEPTH SHALL INCREASE TO 1/3 THE SLAB THICKNESS FOR MACRO FIBER REINFORCED SLABS.

7. CONSTRUCTION AND DETAILING

7.I. ALL SPLICES IN CONTINUOUS CONCRETE REINFORCING BARS SHALL LAP 40 BAR DIAMETERS. ALL SUCH SPLICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS OTHERWISE SHOWN.

7.2. BEFORE CONCRETE IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT. OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC. RELATIVE TO WORK. 7.3. NO PIPES, DUCTS, SLEEVES, ETC SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS

SPECIFICALLY DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER, PENETRATIONS THROUGH WALLS WHEN APPROVED SHALL BE BUILT INTO THE WALL PRIOR TO CONCRETE PLACEMENT. PENETRATIONS THROUGH WALLS WHEN APPROVED SHALL BE BUILT INTO THE

WALL PRIOR TO CONCRETE PLACEMENT. 7.4. ALL REINFORGEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE CURRENT VERSION OF ACI-318.

7.5. USE CHAIRS OR OTHER SUPPORT DEVICES RECOMMENDED BY THE CRSI TO SUPPORT AND TIE REINFORCEMENT BARS PRIOR TO PLACING CONCRETE. REINFORCING STEEL FOR SLABS ON GRADE AND SLABS OVER METAL DECK SHALL BE ADEQUATELY SUPPORTED. SUPPORT REINFORCING STEEL OF SLABS ON GRADE WITH PRECAST CONCRETE UNITS.

LIFTING THE REINFORCING OFF THE GRADE DURING PLACEMENT IS NOT PERMITTED. 7.6. REINFORCING BARS SHALL NOT BE WELDED UNLESS SPECIFICALLY NOTED ON DRAWINGS.

## LUMBER NOTES

I. WOOD MATERIALS

I.2. ENGINEERED LUMBER

THESE DRAWINGS.

I.I. FRAMING LUMBER I.I.I. STUDS BEARING WALLS DOUG-FIR LARCH #2 BTR I.I.2. STUDS NON BEARING WALLS DOUG-FIR LARCH STUD GRADE BTR I.I.3. JOISTS DOUG-FIR LARCH #2 BTR I.I.4. HEADERS DOUG-FIR LARCH #2 BTR I.I.5. POSTS DOUG-FIR LARCH #1 BTR I.I.6. SILL PLATES IN CONTACT WITH CONCRETE DOUG-FIR LARCH #2 (PRESS. TREAT.)

1.9E

FLOORS (23/32 INCH THICK)

I.2.I. LAMINATED VENEER LUMBER (LVL)

1.3. SHEATHING I.4. WOOD SHEATHING SHALL BE UNSANDED PLYWOOD OR ORIENTED STRAND BOARD (OSB) AND SHALL BE INTERIOR GRADE WITH EXTERIOR GLUE AND HAVE THE MINIMUM FOLLOWING SPAN RATING AND THICKNESS, UNLESS NOTED OTHERWISE. WALLS (7/16 INCH THICK)

2. WHERE NOT NOTED OTHERWISE, CONNECT ALL WOOD TO CONCRETE, WOOD TO STEEL AND

WOOD TO WOOD (EXCEPT STUD TO PLATE) WITH SIMPSON CONNECTORS OR APPROVED EQUAL.

3. ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY OR SOIL SHALL BE PRESSURE TREATED OR BE REDWOOD

4. ALL MULTIPLE PLATES AND LEDGERS SHALL BE NAILED TOGETHER WITH 16d NAILS AT 8" ON

5. STUD WALLS SHALL RUN CONTINUOUS BETWEEN POINTS OF HORIZONTAL SUPPORT. PROVIDE BRACING WHERE OTHERWISE.

6. BLOCK ALL HORIZONTAL EDGES OF PLYWOOD WALL SHEATHING OR GYPBOARD SHEAR PANLES WITH 2" NOMINAL BLOCKING, BLOCK EDGES OF PLYWOOD ON FLOORS AS DIRECTED

7. SOLID 2" NOMINAL BLOCKING (SHAPED AND FULL DEPTH) SHALL BE PROVIDED AT ENDS OR POINTS OF SUPPORT OF ALL WOOD JOISTS, ATTACH BLOCKING TO THE WOOD TOP PLATE WITH ONE SIMPSON 'A35' CONNECTOR PER EACH PIECE OF BLOCKING WITH (12) 8d x 1-1/2" NAILS.

8. ALL WALLS SHALL HAVE A MINIMUM OF TWO TOP PLATES. SPLICES IN TOP PLATES SHALL BE STAGGERED A MINIMUM OF FOUR FEET FROM THE NEAREST ADJOINING SPLICE IN THE TOP

9. ALL LEDGER BOLTS SHALL HAVE PLATE WASHERS WITH A MINIMUM DIA, EQUAL TO 3 TIMES THE BOLT DIA. UNLESS SHOWN OTHERWISE IN DETAILS.

IO. MINIMUM NAILING FOR GENERAL FRAMING AND CARPENTRY SHALL BE PER THE IRC/IBC OR

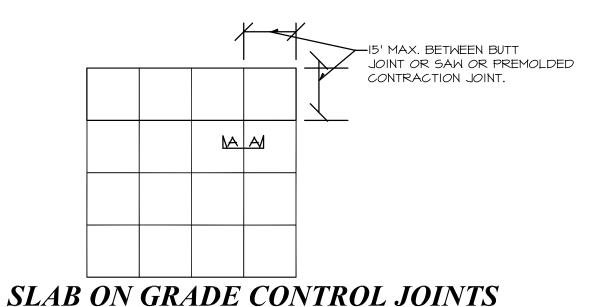
PER THE "MINIMUM NAILING SCHEDULE" IN THESE DRAWINGS. II. FASTENERS SUCH AS STAPLES, CAN ONLY BE SUBSTITUTED FOR NAILS AT A RATE EQUAL TO LOAD VALUES PROVIDED BY I.C.B.O. APPROVAL. SEE EQUIVALENT STAPLE SCHEDULE IN

12. JOISTS SHALL HAVE BRIDGING, BLOCKING AND NOTCHED BEARING PLATES AS RECOMMENDED BY THE MANUFACTURER WITH A MINIMUM OF ONE ROW OF BRACING AT MID SPAN. MANUFACTURER SHALL SUPPLY AND CONTRACTOR SHALL INSTALL. PROVIDE AT 8'-O" O.C. MAXIMUM BETWEEN JOIST END SUPPORTS.

13. ALL FASTENERS (I.E. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (I.E. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.10.5.1

SPECIAL INSPECTIONS AND TESTS OF WOOD					
TYPE	CONTINUOUS SPECIAL INSPECTION	SPECIAL	REFERENCED STANDARD		
WOOD DIAPHRAGMS A	ND SHEAR WA	LLS			
I. VERIFY WOOD PANEL SHEATHING, GRADE, THICKNESS AND NOMINAL SIZE OF FRAMING MEMBERS, ADJOINING PANEL EDGES, NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHING THE LATERAL FORCE RESISTING SYSTEM.	-	×			

REQUIRED SPECIAL INSPE CONCRETE CON			STS OF
TYPE	CONTINUOUS SPECIAL INSPECTION	SPECIAL	REFERENCED STANDARD
I. INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	-	Х	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3
3. INSPECT ANCHORS CAST IN CONCRETE			
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEI	MBERS	•	
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X		ACI 318: 17.8.2.4
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.		Х	ACI 318: 17.8.2
5. VERIFY USE OF REQUIRED DESIGN MIX		Х	ACI 318: CH. 19, 26.4.3, 26.12
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	Х		ASTM CI72, ASTM C31, ACI 318: 26.4.5, 26.12
7. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	×		ACI 318: 26.4.5
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		Х	ACI 318: 26.4.7-26.4.9
12 INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х	ACI 318: 26.10.1(B)



#### EQUIV. SPACING OF APPR. **FASTENERS** COMMON STAPLES NAILS/T-NAIL GAUGE 14 113 15 SPACING PENETRATION 1/4" 3 1/2" 4" 5" 4" 6" 8" 6 1/2" 6" 9 1/2" 10" 8 1/2" 10" | 12" 10" | 10" | 12" |14 1/2"| 12" |14 1/2 12" 2" |2 1/2"| 3" |2 1/2" |2 1/2"|3 1/2"| 4" |3 1/2"| 4" 6" 4" | 5" 6" 8d AT |5 |/2"|6 |/2"| 8" |6 |/2"| 8" 10" 10" 12" 8" | 10" | 12" |9 1/2"| 12"

TABLE OF EQUIVALENT FASTENERS

STAPLES, NAILS AND T-NAILS

(VALID FOR LATERAL LOAD ONLY)

2" |2 1/2"| 3" |2 1/2"|3 1/2 4" 5" Od AT 4 1/2"|5 1/2"|6 1/2"|5 1/2"| 10" |6 1/2"| 8" |9 1/2"|8 1/2"| 10"

PENETRATION IS THE DEPTH OF EMBEDMENT OF THE STAPLE OR NAIL INTO THE MAIN MEMBER REQUIRED TO ATTAIN ITS FULL CAPACITY (SHEAR VALUE) FOR LATERAL LOADING.

ALL FASTENERS (I.E. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH

ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOR (I.E.

SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.9.5

STUDS SPACING MAX. HEIGH 16" O.C. 10'-0" 2×4 2×4 12" O.C. 11'-6" 16'-0" 2x6 16" O.C. 18'-0" 2x6 20'-0" 5 1/2" LV

STUD HEIGHT CHART

FOR ALL STUD'S U.N.O.

## MINIMUM NAILING SCHEDULE

JOIST TO SILL GIRDER, TOENAIL. 3-8d BRIDGING TO JOIST, TOENAIL EA. END. SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL ....6d @ 16" 0C TOP PLATE TO STUD, END NAIL .2-16d STUD TO SOLE PLATE .. ..4-8d TOENAIL, 2-6d END NAIL DOUBLE STUDS, FACE NAIL ... ...16d @ 24" *0*C DOUBLE TOP PLATES, FACE NAIL. ...16d @ 16" OC D. TOP PLATES, LAPS & INTERSECTIONS, FACE NAIL............ 2-16d CONTINUOUS HEADERS TWO PIECES, ALONG EA. EDGE...16d @ 16" OC O. CEILING JOISTS TO PLATE, TOENAIL. ..3-8d

CONTINUOUS HEADERS TO STUD, TOENAIL 12. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL....3-16d 13. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL ..... 3-16d 14. RAFTER TO PLATE, TOENAIL.. 15. BUILT-UP CORNER STUDS ....

# SEISMIC LOADS

"CONNECTION" "NAILING" ...16d @ 24" OC 16. BUILT-UP GIRDER AND BEAMS......20d @ 24" OC T/B STAGGERED

2-20d @ ENDS & SPLICES

## **DESIGN CRITERIA**

2018 INTERNATIONAL BUILDING CODE GOVERNING BUILDING CODE(S) RISK CATEGORY

SEISMIC IMPORTANCE FACTOR, I/e SEISMIC DESIGN CATEGORY 2.I. MAPPED SPECTRAL ACCELERATION

2.2. SOIL SITE CLASS 2.3. SOIL SITE COEFFICIENTS

2.4. 5% DAMPED ACCELERATION

2.5. BASIC SFRS 2.6. RESPONSE MOD. COEFFICIENT SYSTEM OVER-STRENGTH FACTOR DEFLECTION AMPLIFICATION FACTOR

2.7. SEISMIC RESPONSE COEFFICIENT 2.9. ANALYSIS PROCEDURE

3. FLOOR LIVE LOADS 3.I. OFFICE

S<sub>I</sub> = 0.50 Fa = 1.0  $F_{v} = 1.50$ S<sub>DS</sub> = 2/3 \* F/a \* S/S = 0.94  $S_{DI} = 2/3 * F/v * S/I = 0.50$ 

LT. FRAMED GYP. SHEAR WALLS R = 2 C/s = S/DS \* I/e / R = 0.32

DEAD LOADS OF STRUCTURE

EQUIVALENT LATERAL FORCE

50 PSF + 20 PSF PARTITION

**S001** 





SE 75 X Z 0 N D 3 0 0 3 8

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DATE: 11/30/2020 PROJECT: 16-153.08 DRAWN BY: CJ

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**REVISIONS:** 

STRUCT. NOTES & SPEC. INSPECTIONS

SHEET NUMBER:

## **KEY PLAN**

SUITE A	SUITE B	SUITE C	SUITE D	SUITE E	SUITE F	SUITE 6
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EXISTING FIRE RISER ROOM

## FLOOR SHEATHING NOTES:

- I. FLOOR SHEATHING SHALL BE 3/4" T&G WAFERBOARD GLUED & NAILED WITH IOD NAILS AT 6" OC AT ALL PANEL ENDS, SUPPORTED EDGES AND ALL BLOCKING; IOD AT 12" OC ALONG INTERMEDIATE FRAMING MEMBERS. GLUE WITH GLUE CONFORMING TO AFG-OI ACCORDING TO APA SPECIFICATIONS.
- 2. BLOCK JOISTS SOLID AT ALL BEARING POINTS.
- 3. ALL HEADERS OVER DOOR & WINDOWS ARE (2) 2" x 10" U.N.O.
- 4. PROVIDE SQUASH BLOCKING AT ALL POINT LOADS THROUGH FLOOR

## GENERAL FRAMING NOTES

- I. USE DOUGLAS FIR-LARCH #2 AND BETTER FOR ALL SAWN LUMBER BEAMS & STRUCTURAL COLUMNS
- 2. USE I.9E (MIN) LVL BEAMS.
- 3. CONNECT 4 PLY AND GREATER LVL BEAMS WITH (2) ROWS 1/2" THRU BOLTS @ 12" O.C. (SEE MANUFACTURERS SPECIFICATIONS)
- 4. CARRY ALL COLUMN LOADS DOWN TO FOOTING OR FOUNDATION WALL.
- 5. PROVIDE SOLID BLOCKING OR SQUASH BLOCKS IN JOIST SPACE AT ALL COLUMN LOCATIONS
- 6. ALL NOTES PERTAINING TO APPLIED LOADS ARE BASED ON ALLOWABLE STRESS DESIGN (ASD).

FLO	OR BEAM SCHEDULE
FB-I	(2) 2×10
FB-2	(2) 9 1/2" MICROLAM

NOTE: SEE DETAIL 2/S501 FOR TYPICAL BEAM CONNECTIONS OVER 6'-0" IN LENGTH

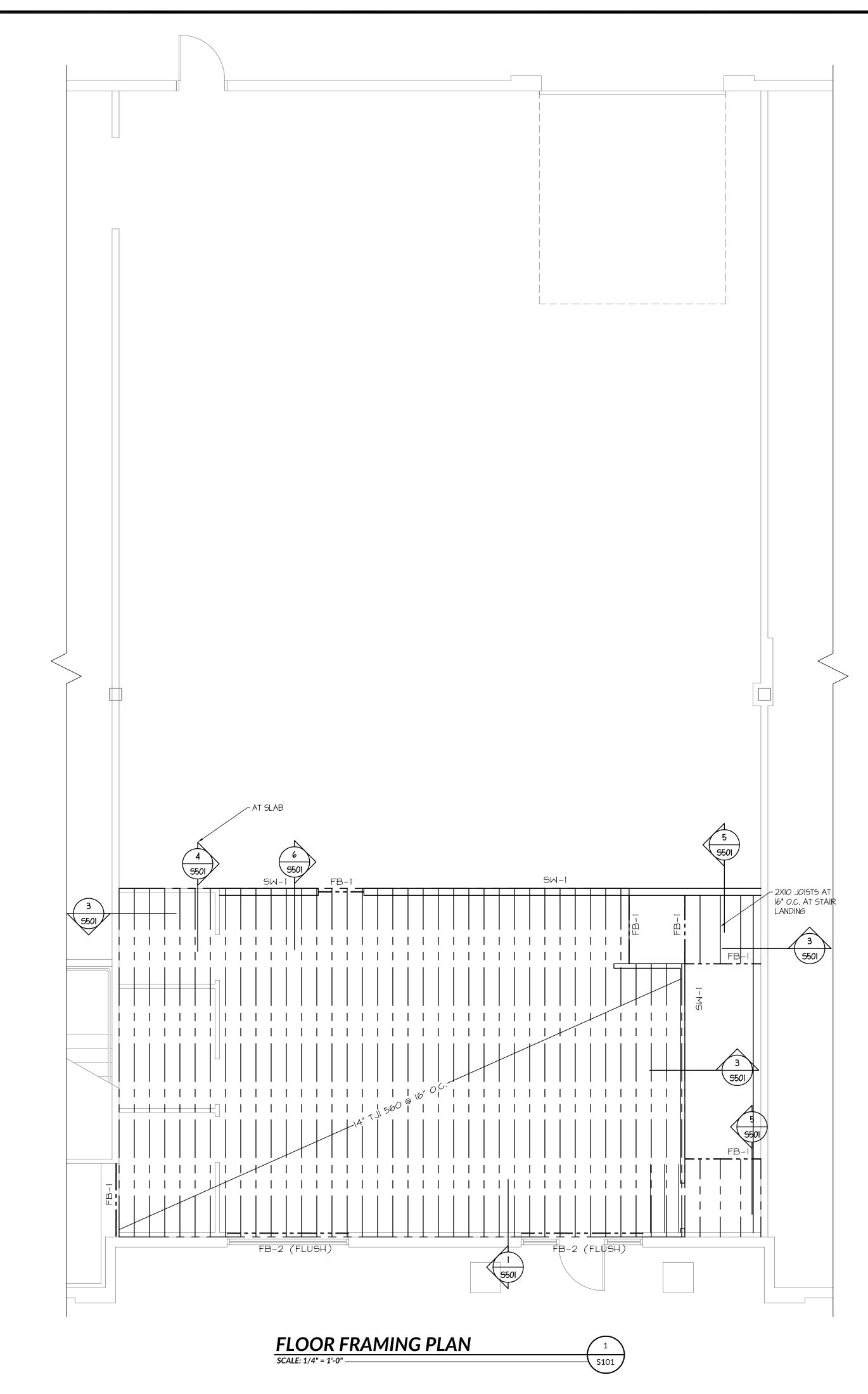
SHEARWALL SCHEDULE							
MARK	SHEATHING	FASTENER REQ'S		ANCHOR BOLTS		SILL	NOTES
		ED <i>G</i> E	FIELD	DIAMETER	SPACING	PLATE	NOTES
SM-I	5/8" G.W.B. BOTH SIDES	I-‡" No. 6 TYPE 'S' SCREWS @ 8" O.C.	I-¼" No. 6 TYPE 'S' SCREWS @ I2" O.C.	5/8"	32" O.C.	2 ×	1, 2, 3

## NOTES:

I. BLOCK ALL PANEL EDGES

2. PROVIDE 3"  $\times$  3"  $\times$  1/4" PLATE WASHERS ON ANCHOR BOLTS (Typical).

3. ALL SHEATHING SHALL EXTEND CONTINUOUS FROM SILL PLATE TO FLOOR SHEATHING.



12/7/20
LOVE
No. 9814717

STATE OF WAR

N, UT 84041

E: (801) 499-5054

LAYTON, UT 8 PHONE: (801)

LNERNEERING ENGINEERING

HORIZON MASONRY - SUITE B 850 WEST 350 NORTH KAYSVILLE, UT 84037

DATE: 11/30/2020
PROJECT: 16-153.08
DRAWN BY: CJ

DRAWN BY: <u>CJ</u>
REVISIONS:

FLOOR FRAMING PLAN

SHEET NUMBER: **5101** 

MERING ENGINEERING

HORIZON MASONRY - SUIT 850 WEST 350 NORTH KAYSVILLE, UT 84037

DATE: 11/30/2020 PROJECT: 16-153.08 DRAWN BY: **CJ REVISIONS:** 

> STRUCTURAL **DETAILS**

SHEET NUMBER: *S*501