NEW CONSTRUCTION:

DAVINCIACADEMY REMODEL

LOCATION: **215 22ND STREET** OGDEN, UTAH



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

2018 IBC CODE ANALYSIS

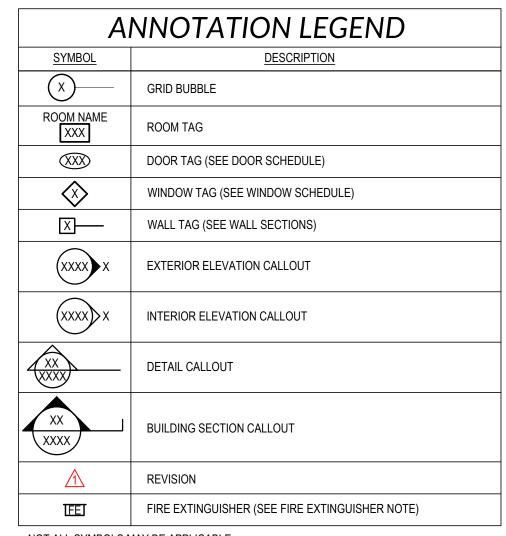
OCCUPANCY GROUP (CHAPTER 3) CONSTRUCTION TYPE (TABLE 601) FIRE SPRINKLERS PROVIDED?	E V-B YES
BUILDING HEIGHT & AREA ALLOWABLE BUILDING HEIGHT (TABLE 504.3)	40'
ALLOWABLE NUMBER OF STORIES (TABLE 504.4) ACTUAL NUMBER OF STORIES	2
TOTAL ALLOWABLE BUILDING AREA (506.2.3) $Aa = [At + (NS \times If)] \times Sa$ $Aa = [28,500 + (9,500 \times 0.75)] \times 2$	70,500 SQ.FT.
FRONTAGE INCREASE (506.3.3) If = [F/P - 0.25] x W/30 If = [1044/1044 - 0.25] x 30/30	0.75
ACTUAL EXISTING MAIN FLOOR AREA ACTUAL EXISTING UPPER FLOOR AREA ACTUAL NEW UPPER FLOOR AREA ACTUAL BUILDING AREA (BOTH FLOORS)	14,987 SQ.FT. 9,461 SQ.FT. 1,756 SQ.FT. 26,204 SQ.FT.
OCCUPANT LOAD (TABLE 1004.5)	
MAIN LEVEL EXISTING OFFICE AREAS (150 GROSS) EXISTING STORAGE (300 GROSS)	5 2
EXISTING CLASSROOMS (20 NET)	187
EXISTING ASSEMBLY - UNCONCENTRATED (15 NET)	
EXISTING LIBRARY (50 NET) KITCHEN (200 GROSS)	25 3
<u>UPPER LEVEL</u>	
EXISTING OFFICE AREAS (150 GROSS)	5
EXISTING STORAGE (300 GROSS)	2
EXISTING CLASSROOMS (20 NET) NEW CLASSROOMS (20 NET)	244 77
	4.45
MAIN LEVEL OCCUPANT LOAD UPPER LEVEL OCCUPANT LOAD	445 328
TOTAL OCCUPANT LOAD	773
STUDENTS ALLOWED PER CHARTER	340
TOTAL STAFF	50
TOTAL OCCUPANT LOAD	390
BASED ON EXCEPTION 1004.1.2	
MEANS OF EGRESS	2
NUMBER OF EXITS REQUIRED (TABLE 1006.3.2) NUMBER OF EXITS PROVIDED	2 PER PLAN
MAX ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	250'
ACTUAL MAX. TRAVEL DISTANCE (TABLE 1017.2)	197'
FIRE RATED STAIR ENCLOSURE REQUIRED? (1019.3)	
CORRIDOR FIRE-RESISTANCE RATING (TABLE 1020.1)	0
PLUMBING FIXTURES (IBC TABLE 2902.1)	
REQURIED WATER CLOSETS (1 PER 50)	8
REQUIRED LAVATORIES (1 PER 50)	8
REQUIRED DRINKING FOUNTAINS (1 PER 100) REQUIRED SERVICE SINKS	4 1
TOTAL PROVIDED FIXTURES	
EXISTING WATER CLOSETS PROVIDED	11
EXISTING URINALS PROVIDED	5
EXISTING LAVATORIES PROVIDED	14
EXISTING DRINKING FOUNTAINS PROVIDED	8
EXISTING SERVICE SINKS PROVIDED	2

			
ALL ITEM	S MAY BE APPLICABLE) FEET	G001 G002	CO TYI
)A	INCHES DEGREES AMERICAN DISABILITIES ACT	G003 G004	TY! TY!
RCH F A	ARCHITECTURAL ABOVE FINISH FLOOR THE AMERICAN INSTITUTE OF ARCHITECTS	G010 G011	LIF
UM.A. PROX	ALUMINUM APPROXIMATELY	A101 A111 A112	DEI OV LEV
/ DG KG	AUDIO / VISUAL BUILDING BLOCKING	A141 A142	REI RCI
G	CONTROL JOINT CENTERLINE CEILING	A301 A311 A501	BU! WA AR
R 1U	CLEAR CONCRETE MASONRY UNIT	A601 A621	DO FIN
ONC ONT V	CONCRETE CONTINUOUS COLD WATER	5001 5002	GEI STI
MO A M	DEMOLITION DIAMETER DIMENSION	S101 S121 S501	FO RO STF
ST	DISTANCE DRINKING FOUNTAIN	E001 E200	ELE DEI
 	DOWN DOWNSPOUT DISHWASHER	E201 E202	LEV LEV
ECT EV EV	ELECTRICAL ELEVATION ELEVATOR	E301 E401	ELE ELE
LV ! !UIP	EQUAL EQUIPMENT	M000 MP-100 MP-700	ME ME ME
IST	EXISTING EXISTING FIRE EXTINGUISHER	700	I*IL
С	FLOOR DRAIN FIRE DEPARTMENT CONNECTION		
R D	FINISH GRADE FLOOR FOUNDATION		
G \ \LV	FOOTING GAGE GALVANIZED, GALVANIC		
) T	GENERAL CONTRACTOR GROUND FAULT INTERRUPTER		
CI P VB	GROUND FAULT CIRCUIT INTERRUPTER GYPSUM GYPSUM WALL BOARD		
;)R)RIZ	HANDICAP HEADER HORIZONTAL		
1 V	HOLLOW METAL HOT WATER		
N V	ISOLATION JOINT JANITOR LAVATORY		
X ECH EZZ	MAXIMUM MECHANICAL MEZZANINE		
R SC	MANUFACTURE(R) MISCELLANEOUS		
N L A	MINIMUM METAL NOT APPLICABLE		
S C	NOT TO SCALE ON CENTER OCCUPANT(S)		
CI OI	OWNER FURNISHED & CONTRACTOR INSTALLED OWNER FURNISHED & OWNER INSTALLED		
l · PNG	OVERHANG OCCUPANT LOAD OPENING		
RF :P :V	PERFORATED REFLECTED CEILING PLAN		
.v 1 1	REVISION(S), REVISED REQUEST FOR INFORMATION ROOM		
))W QU'D	ROUGH OPENING RIGHT OF WAY REQUIRED		
t M	RESTROOM SIMILAR		
ECS E.	SPECIFICATION SPECIFICATIONS SQUARE FOOT (FEET)		
).FT. G	SQUARE FOOT (FEET) SANITARY SEWER TONGUE & GROOVE		
L	TELEPHONE TENANT IMPROVEMENT		
OS OW	TOP OF SLAB TOP OF WALL TELEVISION		
P IO :RT	TYPICAL UNLESS NOTED OTHERWISE VERTICAL		
C D	WITH WATER CLOSET WASHER & DRYER		
H	WATER HEATER		

ABBREVIATIONS

COOT COVER SHEET & CENERAL INFORMATION TYPICAL ADA DETAILS (COORD TYPICAL ADA DETAILS ADA	X TO DRAWINGS	ARCHI7
A101 A111 A111 A111 OVERALL LEVEL 1 FLOOR PLAN A112 LEVEL 1 FLOOR PLAN-AREA A A112 A121 A122 A121 REPLECTED CEILING PLANS A121 A121 A121 REPLECTED CEILING PLANS A121 BULLONG-SUCTIONS BULLONG-SUCTIONS A221 BULLONG-SUCTIONS A231 A231 A341 A341 A341 A341 A341 BULLONG-SUCTIONS BULLONG-SUCTIONS A231 BOOD G SCHEBULE S001 SO02 STRUCTURAL NOTES STRUCTURAL SPECIAL INSPECTIONS S101 FOOD-FRAMING PLAN S121 ROOF-FRAMING PLAN S121 ROOF-FRAMING PLAN S121 ROOF-FRAMING PLAN S121 ROOF-FRAMING PLAN S121 EVEL 1 NEW ELECTRICAL PLANS E201 LEVEL 1 NEW ELECTRICAL PLANS E201 LEVEL 1 NEW ELECTRICAL PLAN E201 E202 E204 E204 E204 E205 E201 ECCTRICAL STRIBOLS & NOTES E201 ECCTIFICAL SCHEDULES E301 ECCTRICAL SCHEDULES EXCHANGE GORBLING BIGNEERING ATIN KORD CURRING ASS 91.1681 IN TERRICITION UNBOX TREMOTION UNBOX TREM	ADA DETAILS ADA DETAILS ADA DETAILS TY PLANS	ATTN: JARED FORSYTH 177 E ANTELOPE DR, SUITE B LAYTON, UT 84041 PHONE: (801) 499-5054
SO21 GENERAL STRUCTURAL NOTES SO02 STRUCTURAL SPECIAL INSPECTIONS 15101 FOUNDATION AND FLOOR FRAMING PLAN 1521 ROOF FRAMING PLAN 1522 DEMOLITION ELECTRICAL PLAN 1520 LEVEL 1 NEW ELECTRICAL PLAN 1520 LEVEL 1 NEW ELECTRICAL PLAN 1520 LECTRICAL SCHEDULES 15301 ELECTRICAL SCHEDULES 15401 ELECTRICAL SCHEDULES 15401 ELECTRICAL SCHEDULES 15401 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MECH. FLOOR PLANS / ROOF PLANS DIAG. MP-700 MECH. FLOOR PLANS DIAG. MP-700 MECH.	ION PLAN LEVEL 1 FLOOR PLAN LOOR PLAN - AREA A ED CEILING PLANS ERAL NOTES / DETAILS ES SECTIONS ETIONS	SILVERPEAK ENGINEERING ATTN: JAYSON LOVE 177 E ANTELOPE DR, SUITE B LAYTON, UT 84041
E200 DEMOLITION ELECTRICAL PLANS E201 LEVEL 3 NEW ELECTRICAL PLAN E202 LEVEL 3 NEW ELECTRICAL PLAN ELECTRICAL SCHEDULES ELECTRICAL SCHEDULES ELECTRICAL DETAILS MO00 MP-100 MECH. SYMBOL LEGEND, SCHED. AND DETAILS MP-700 MECH. PLUMB. CONTROLS & SPECS / DET. MECH. PLUMB. CONTROLS & SPECS / DET. MECH. PROMITTION FOR THE STATE OF PLANS AND DETAILS MECH. PLUMB. CONTROLS & SPECS / DET. MECH. PROMITTION FOR THE STATE OF PLANS AND DETAILS MECH. PLUMB. CONTROLS & SPECS / DET. CUI 2018 IPC 201	STRUCTURAL NOTES RAL SPECIAL INSPECTIONS TION AND FLOOR FRAMING PLAN AMING PLAN	PVE ENGINEERING ATTN: TODD HAIGHT 1040 N. 2200 W. SALT LAKE CITY, UT 84116
CUI 2018 IBC 2018 IFC 2018 IF	ION ELECTRICAL PLANS IEW ELECTRICAL PLAN IEW ELECTRICAL PLAN AL SCHEDULES AL DETAILS IMBOL LEGEND, SCHED. AND DETAILS	CUNNING & ASSOCIATES MECHANICAL CONSULTING ENGINEERS ATTN: NORM CUNNING 4685 W. 11600 N. TREMONTON, UT 84337
2018 IBC 2018 IFC 2018 IPC 201		
SYMBOL X GRID BUIL ROOM NAME XXXX DOOR TA WINDOW X XXXX X EXTERIO XXXX DETAIL C XXXX REVISION TEEL FIRE EXT		2018 IBC 2018 IFC 2018 IECC 2018 IPC
ROOM NAME ROOM TA WINDOW XXXXX WINTERIOR XXXXX DETAIL C XXXXX REVISION REVISION REVISION		
WINDOW X WALL TA XXXXX X EXTERIOR XXXXX X INTERIOR XXXX DETAIL CO XXX XXXX BUILDING XXX REVISION TEEL FIRE EXT		ROOM NAME ROOM TA
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
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REVISION FIRE EXT		DETAIL C
TEE ST		BUILDING
		HEET & GENERAL INFORMATION ADA DETAILS ADA DETAILS ADA DETAILS ADA DETAILS TY PLANS TY PLANS HON PLAN LEVEL 1 FLOOR PLAN LOOR PLAN - AREA A ED CEILING PLANS ERAL NOTES / DETAILS ES SECTIONS ETIONS ETIONS ETIONS ETIONS ETIONAL DETAILS HEDULE HEDULE HEDULE HEDULE HEDULE HEDULE STRUCTURAL NOTES RAL SPECIAL INSPECTIONS FION AND FLOOR FRAMING PLAN AMING PLAN RAL DETAILS HEW ELECTRICAL PLANS HEW ELECTRICAL PLAN AL SCHEDULES AL SCHEDULES AL DETAILS MBOL LEGEND, SCHED. AND DETAILS OOR PLANS / ROOF PLAN & DIAG.

SILVERPEAK ENGINEERING ATTN: JARED FORSYTH 177 E ANTELOPE DR, SUITE B LAYTON, UT 84041 PHONE: (801) 499-5054	OPE DR. STE.
SILVERPEAK ENGINEERING ATTN: JAYSON LOVE 177 E ANTELOPE DR, SUITE B LAYTON, UT 84041 PHONE: (801) 499-5054	177 E. ANTELOPE
PVE ENGINEERING ATTN: TODD HAIGHT 1040 N. 2200 W. SALT LAKE CITY, UT 84116 PHONE: (801) 359-3158	
CUNNING & ASSOCIATES MECHANICAL ENGINEERS MECHANICAL CONSULTING ENGINEERS ATTN: NORM CUNNING 4685 W. 11600 N. TREMONTON, UT 84337 PHONE: (801) 726-5047	DDEA
CURRENT CODES 2018 IBC 2018 IMC 2018 IFC NEC 2017 2018 IECC 2003 UPC 2018 IPC ICC/ANSI A117.1-2009	71 VE



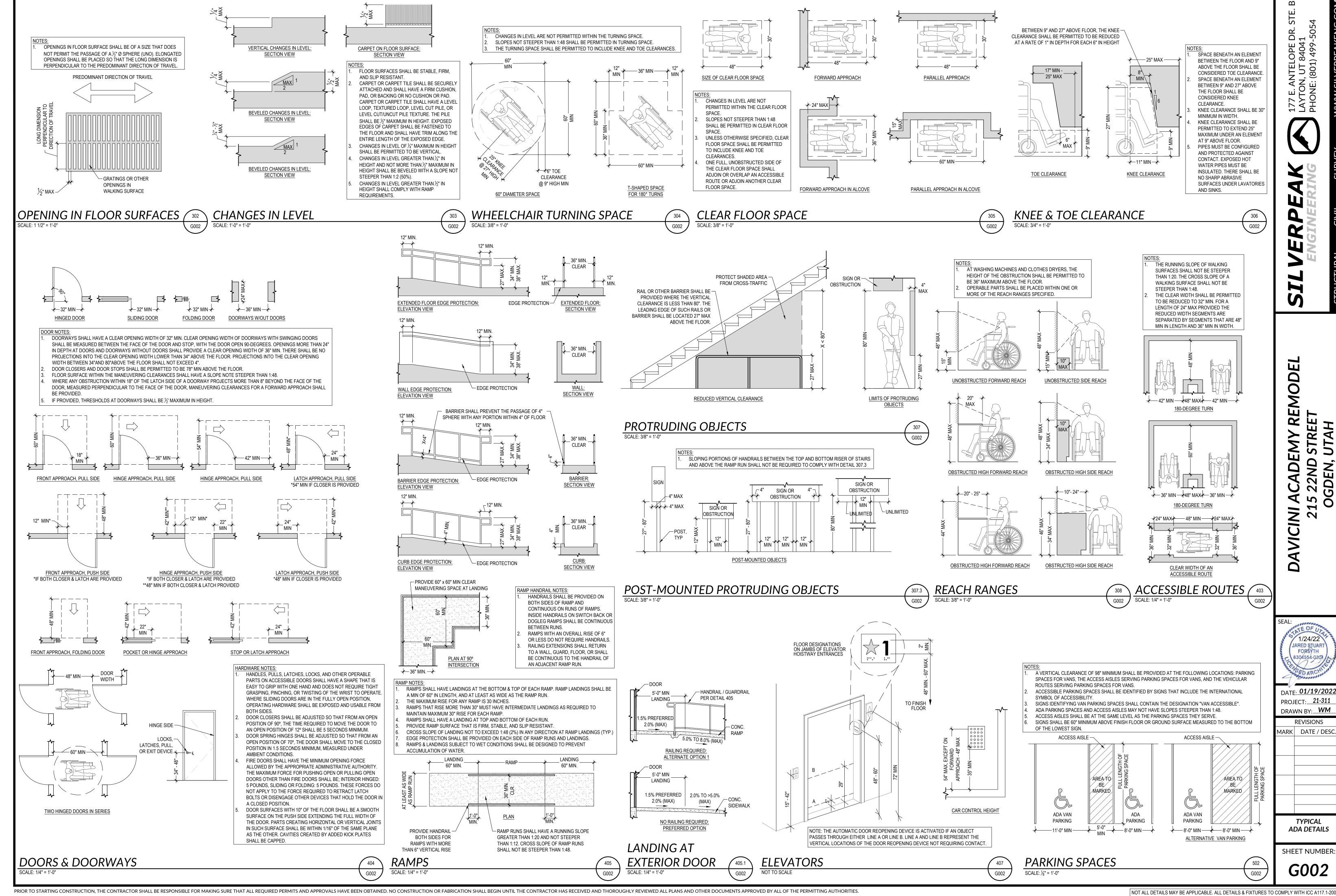
DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM REVISIONS

MARK DATE / DESC.

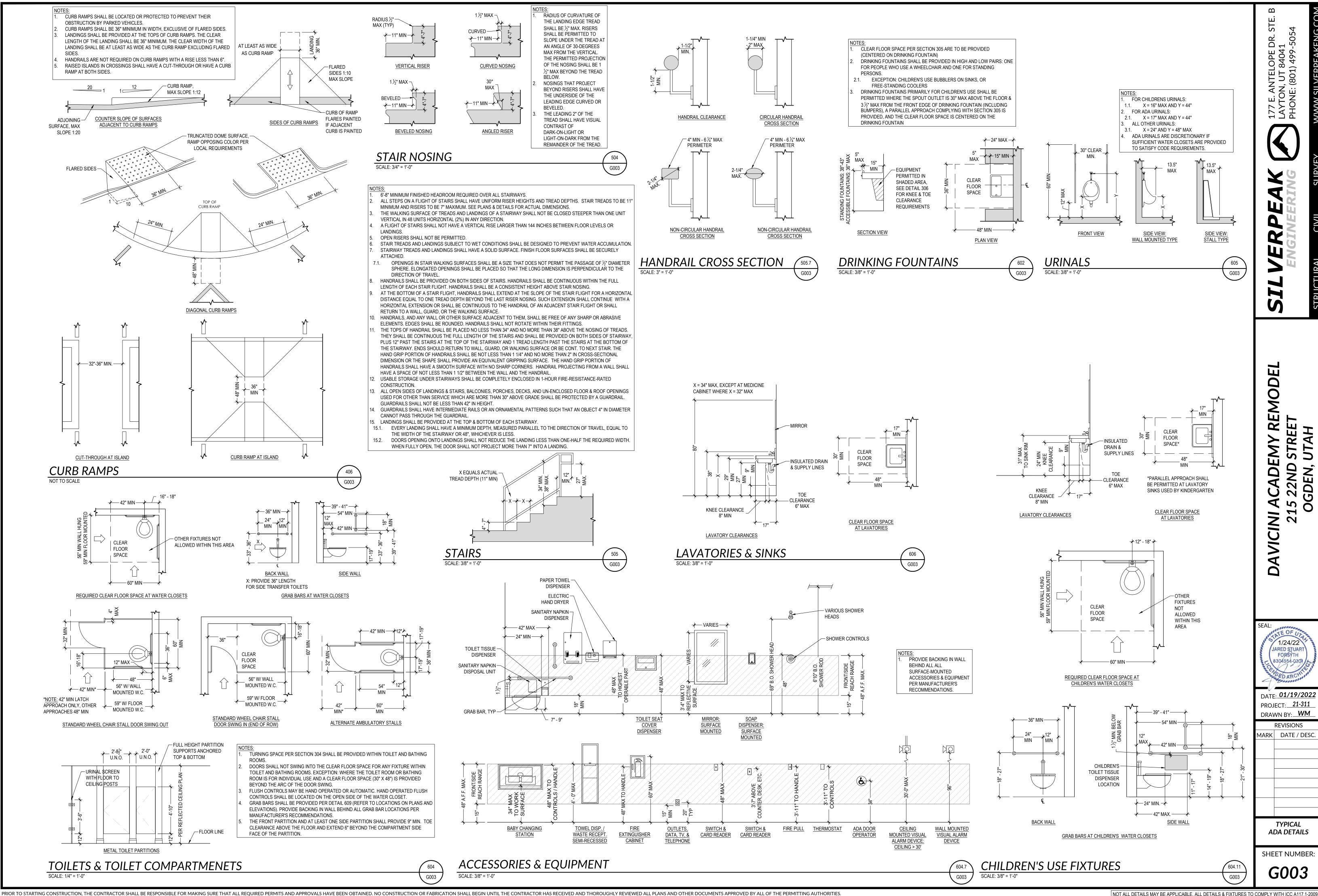
COVER SHEET & GENERAL **INFORMATION**

@ 1-800-662-4111 AT LEAST 48 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION

SHEET NUMBER:



NOT ALL DETAILS MAY BE APPLICABLE. ALL DETAILS & FIXTURES TO COMPLY WITH ICC A117.1-2009.



AD VICINI,

1/24/22 JARED STUART FORSYTH 8304554-0307 DATE: 01/19/2022

X

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REMO

EMY

V

PROJECT: 21-311 DRAWN BY: WM REVISIONS MARK DATE / DESC

TYPICAL

ADA DETAILS

-SEE PLANS FOR

DESIGN DETAILS

GUARDRAIL

— 4" Ø SPHERE

-FLOOR LINE

— 21" Ø SPHERE

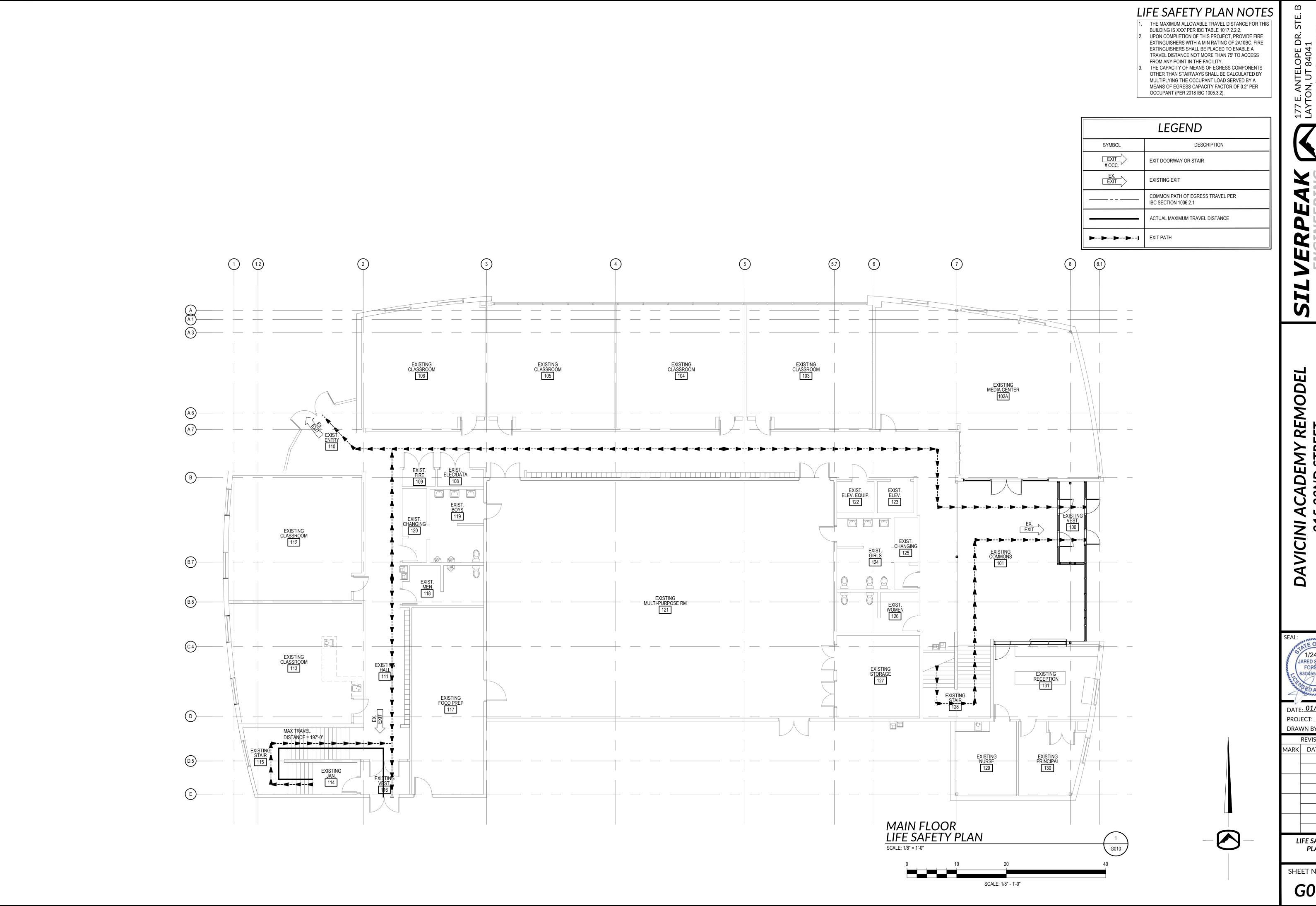
-FLOOR LINE

FROM A HEIGHT OF 36" - 42, GUARDS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A

THE TRIANGULAR OPENINGS AT THE OPEN SIDES OF A STAIR, FORMED BY THE RISER, TREAD & 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

SHEET NUMBER



DAVICINI ACADEMY REMODA 215 22ND STREET OGDEN, UTAH

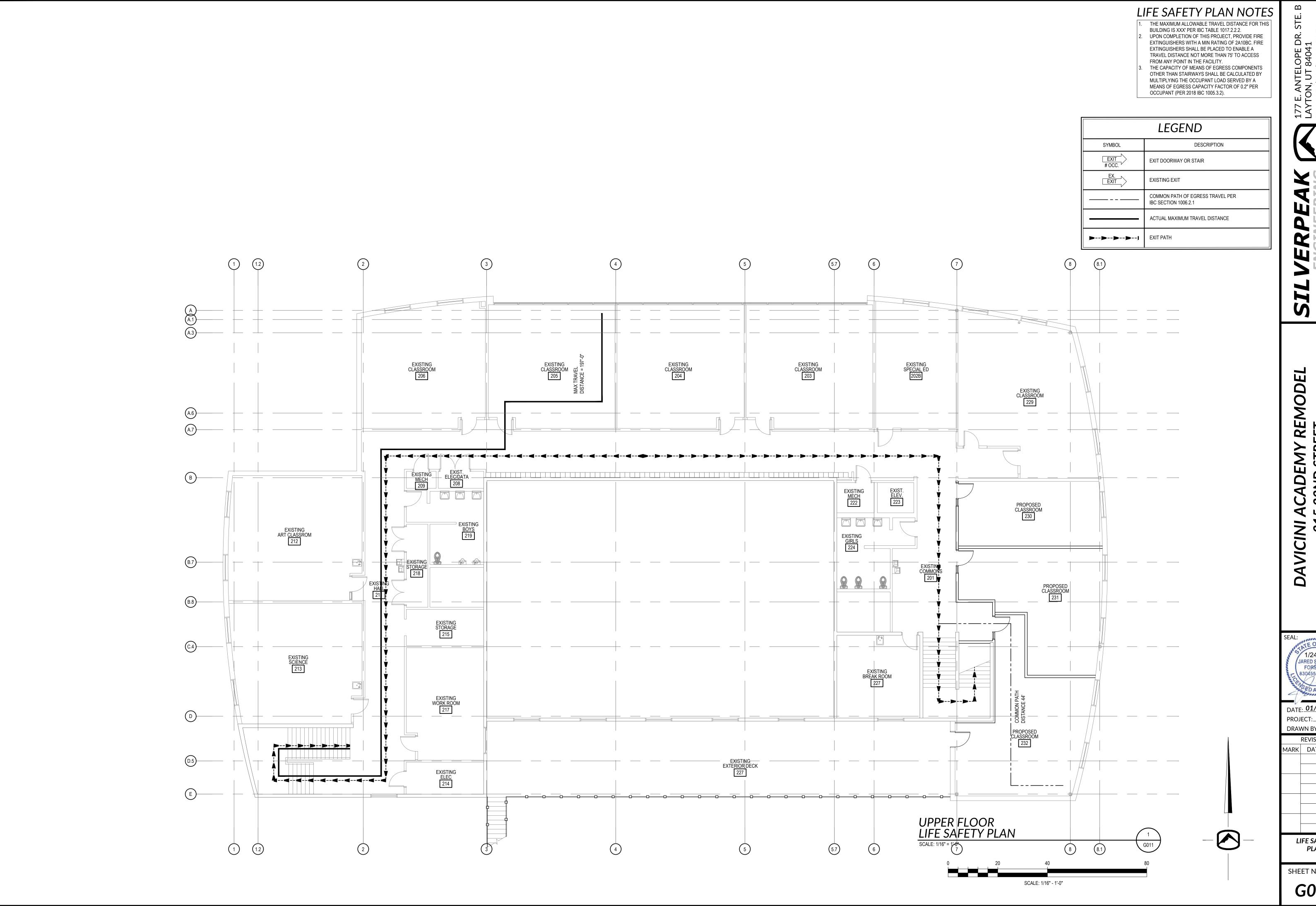
DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM

REVISIONS MARK DATE / DESC.

LIFE SAFETY

SHEET NUMBER:

G010



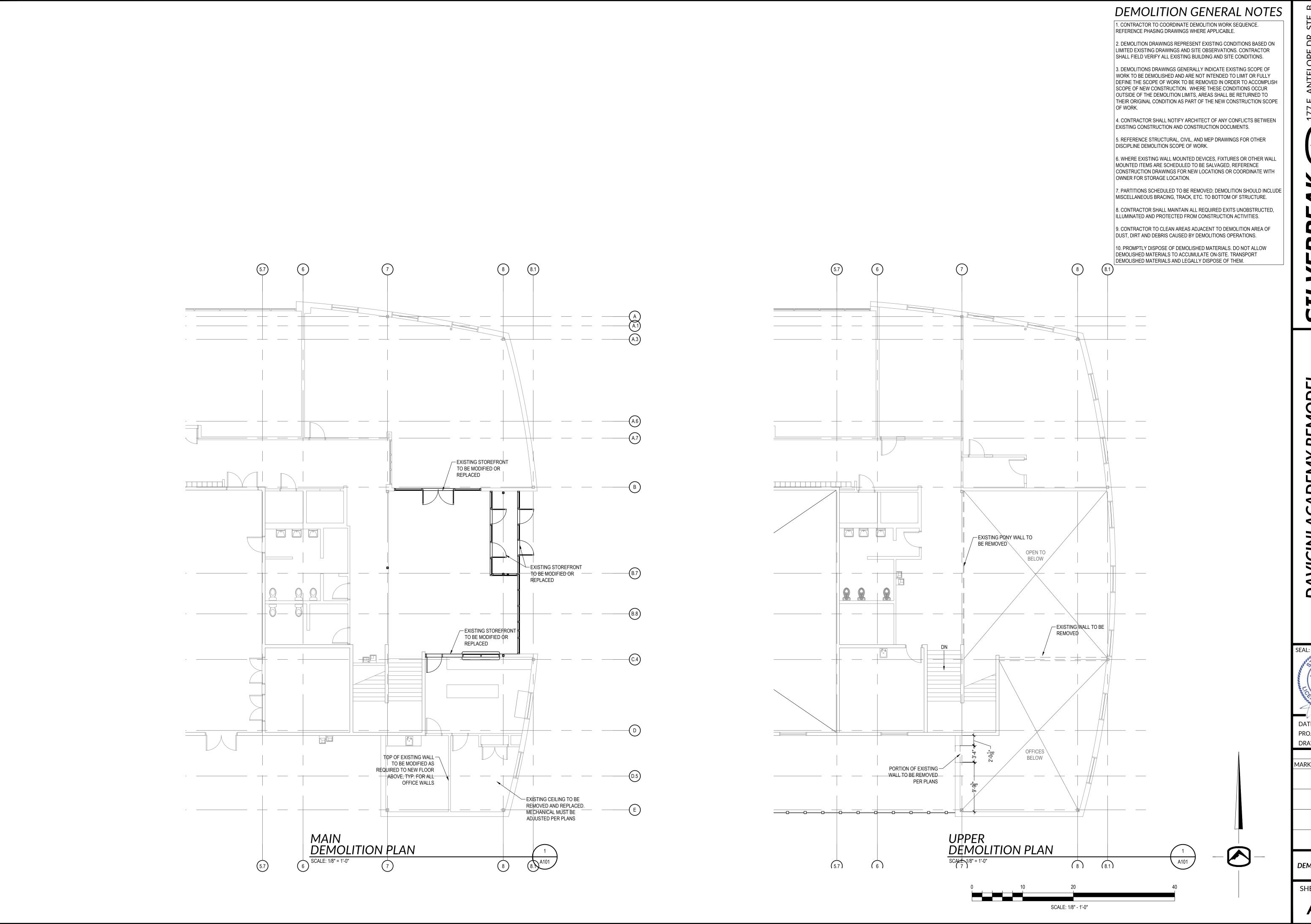
EMY REMODE D STREET I, UTAH DAVICINI ACADEI 215 22ND S OGDEN, L

DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM

REVISIONS MARK DATE / DESC.

LIFE SAFETY

SHEET NUMBER: G011



EMY REMOI STREET , UTAH DAVICINI ACADE 215 22ND 9 OGDEN, U

DATE: 01/19/2022

PROJECT: 21-311 DRAWN BY: WM

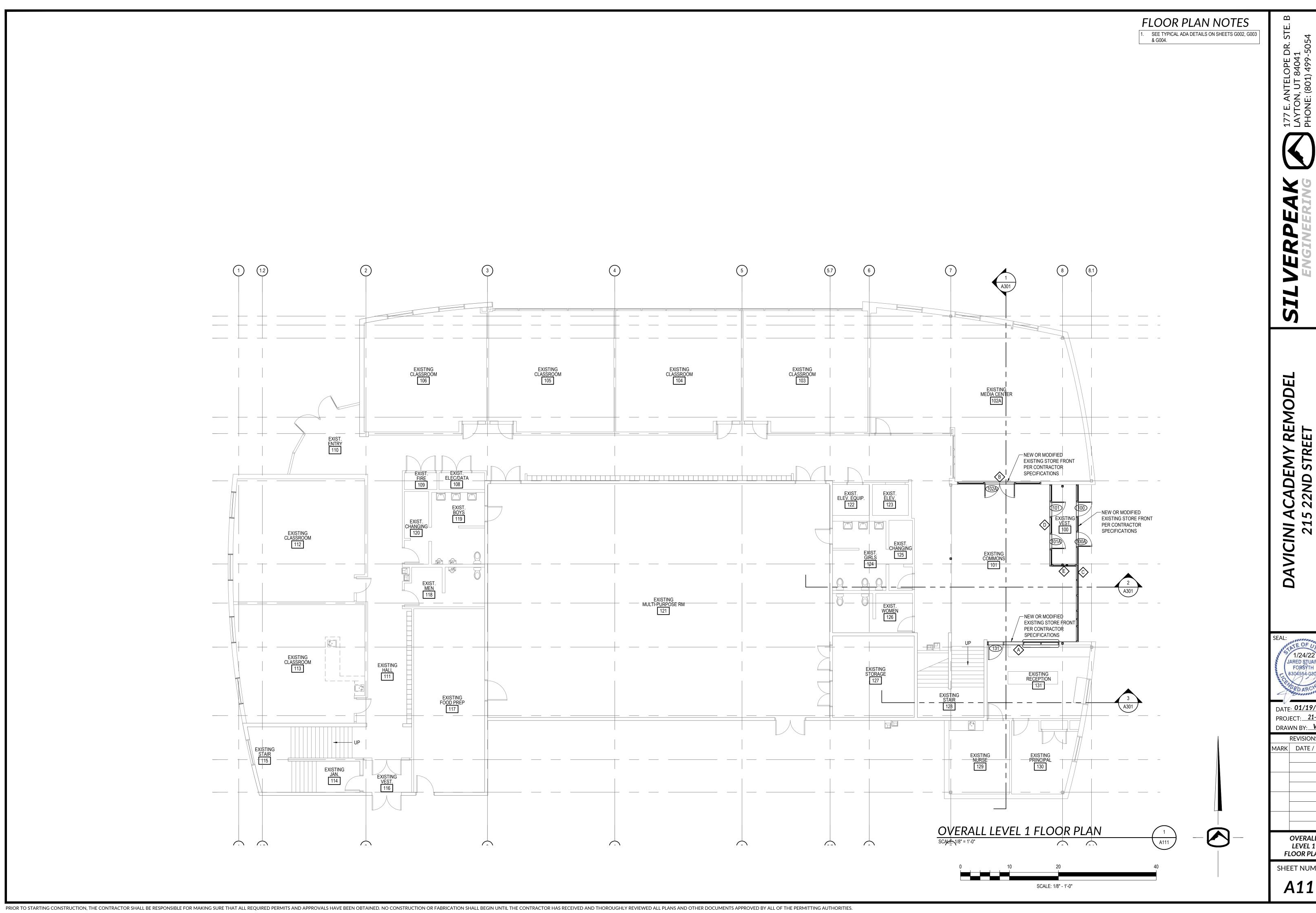
REVISIONS

MARK DATE / DESC.

DEMOLITION PLAN

SHEET NUMBER:

A101



DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM **REVISIONS** MARK DATE / DESC.

OVERALL LEVEL 1 **FLOOR PLAN**

SHEET NUMBER: A111

WWW.SILVERPEAKENG.

DATE: 01/19/2022

REVISIONS

PROJECT: 21-311 DRAWN BY: CJ MARK DATE / DESC.

LEVEL 1 FLOOR PLAN AREA A

SHEET NUMBER: A112





DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM

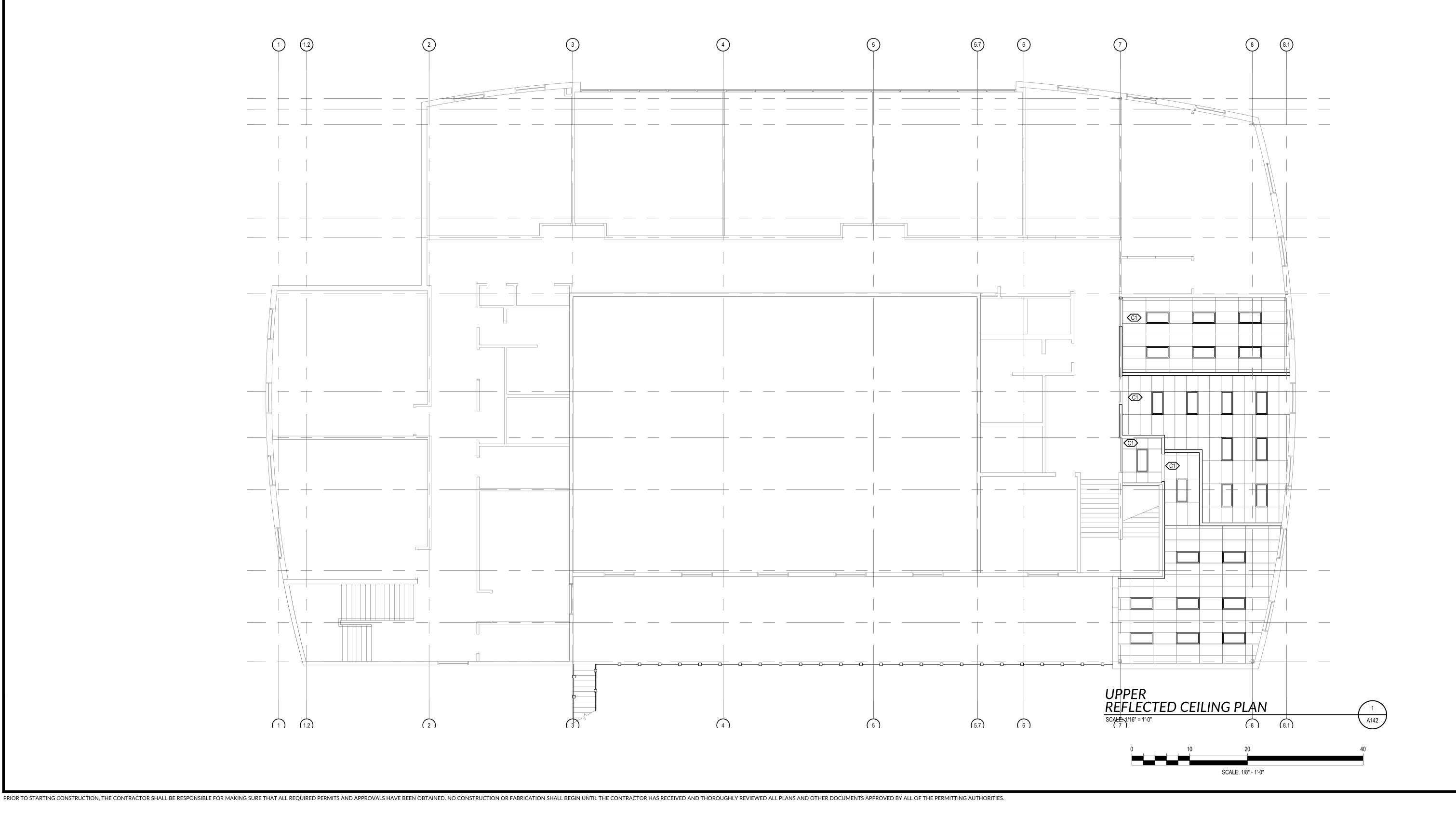
REVISIONS

MARK DATE / DESC.

REFLECTED **CEILING PLANS**

SHEET NUMBER:

A141



DATE: 01/19/2022 PROJECT: 21-311

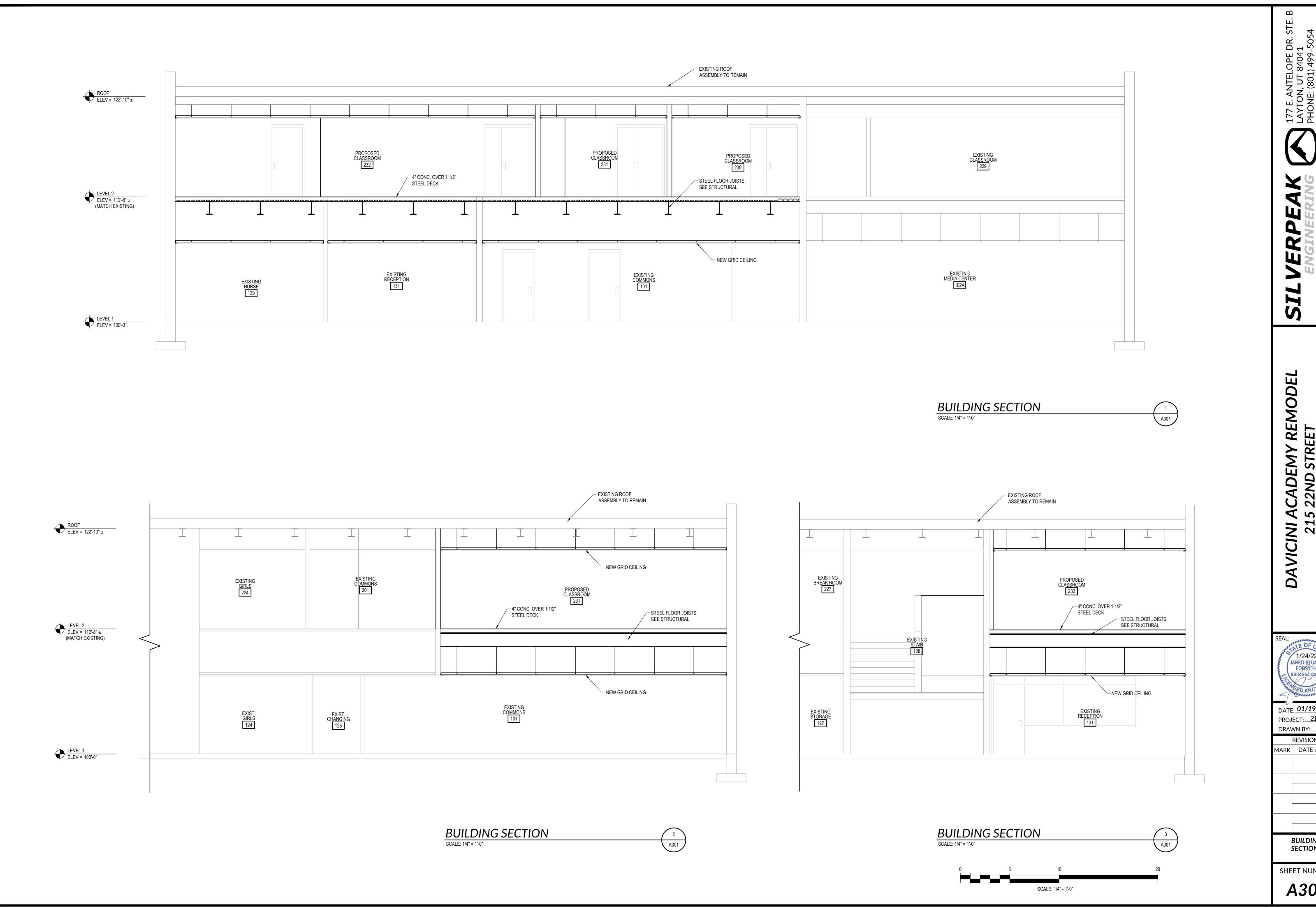
REVISIONS

DRAWN BY: WM MARK DATE / DESC.

> REFLECTED **CELING DETAILS** & NOTES

SHEET NUMBER:

A142



DAVICINI ACADEMY REMODEL 215 22ND STREET OGDEN, UTAH

1/24/22 JARED STUART FORSYTH 8304554-0300

DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM **REVISIONS**

MARK DATE / DESC.

BUILDING SECTIONS

SHEET NUMBER: A301

SILVERPEAK
ENGINEERING
PHONE: (801) 499-505

DAVICINI ACADEMY REMODEL 215 22ND STREET OGDEN, UTAH

SEAL:

1/24/22

JARED STUART
FORSYTH
8304554-030

DATE: 01/19/2022

DATE: 01/19/2022
PROJECT: 21-311
DRAWN BY: WM
REVISIONS

REVISIONS

MARK DATE / DESC.

ARK DATE / DESC.

WALL SECTIONS

SHEET NUMBER:

A311

EMY REMODE D STREET I, UTAH DAVICINI ACADEI 215 22ND S OGDEN, U

JARED STUART FORSYTH DATE: 01/19/2022

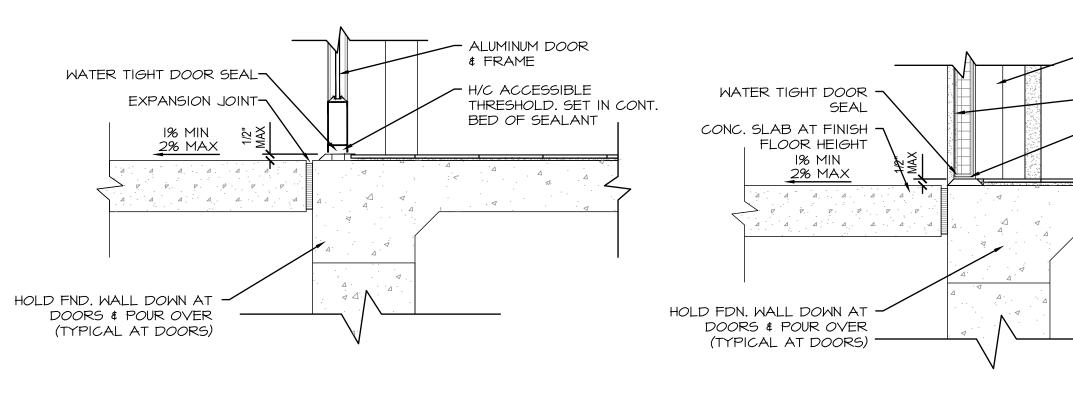
PROJECT: 21-311 DRAWN BY: WM REVISIONS

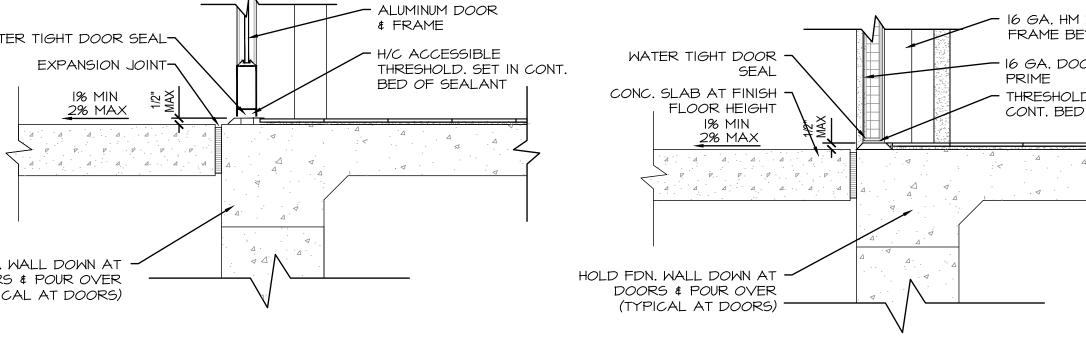
MARK DATE / DESC.

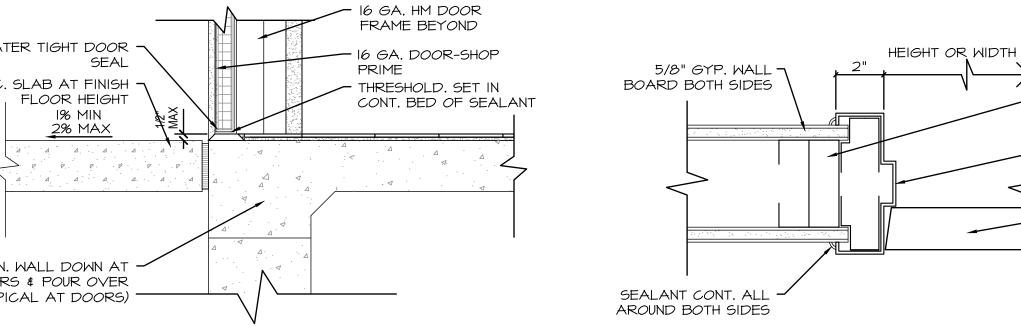
ARCHITECTURAL **DETAILS**

SHEET NUMBER:

A501



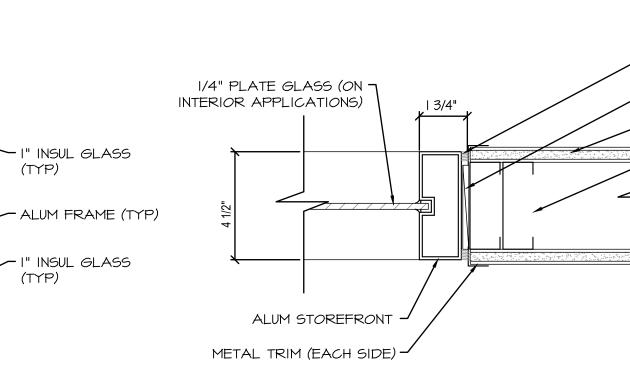




(TYP)



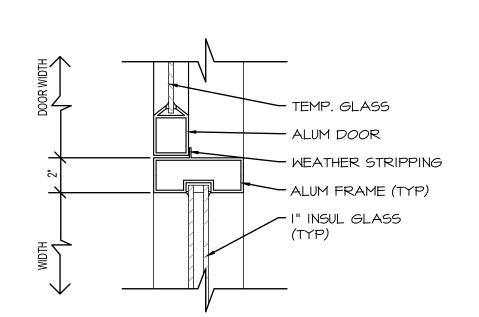


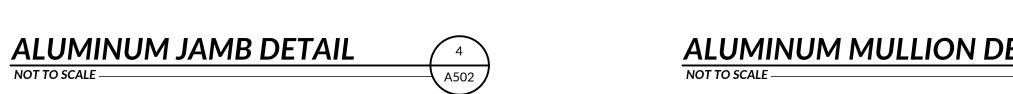


NOT TO SCALE -

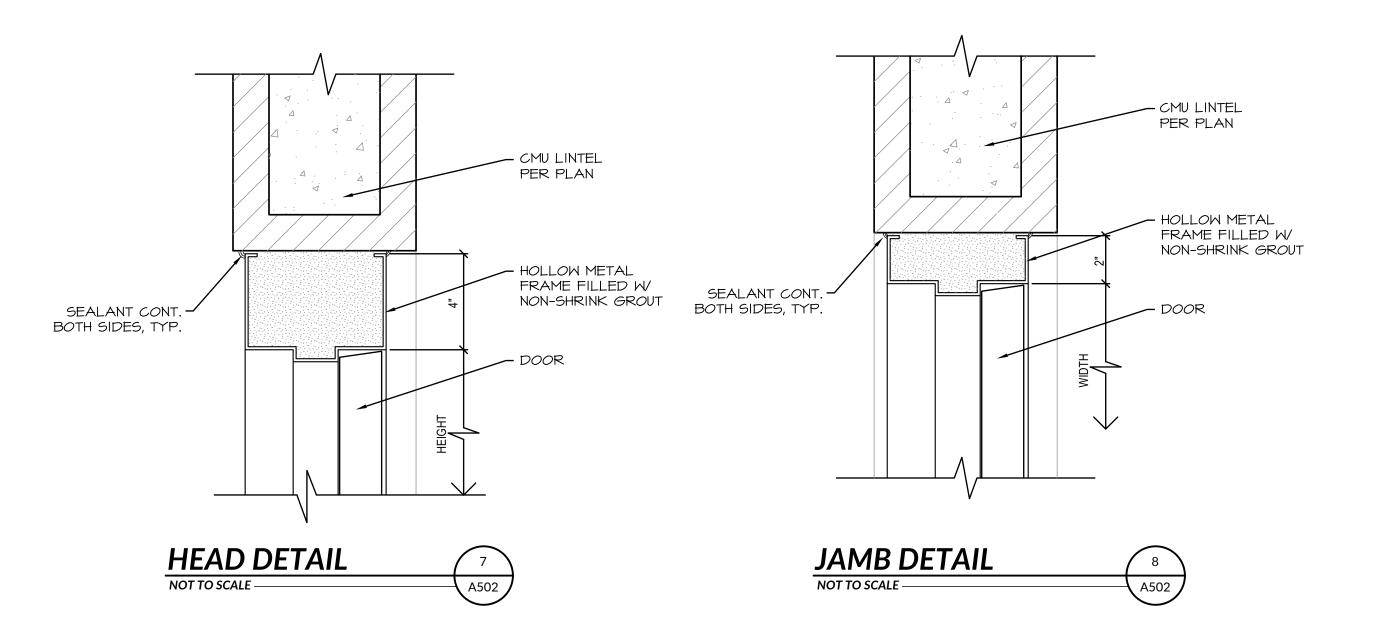
HEAD DETAIL (JAMB SIM.)

JAMB, SILL & HEAD (SIM)









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.

DOOR NOTES:

GYPSUM BOARD (WITH PAPER ON BOTH SIDES)

CONCRETE BLOCK

ACOUSTICAL CEILING TILE

NORTHERN PINE (TREATED)

SOUTHERN PINE (UNTREATED)

CARPETING

CONCRETE

VCT FLOORING

WOOD DOOR

CERAMIC TILE

RUBBER BASE

WINDOW NOTES:

FRP

-PORTION OF EXISTING

SEE WINDOW NOTE 5

STOREFRONT TO BE REMOVED,

METAL STUDS AT ALL HOLLOW METAL DOOR FRAMES

ALL DOOR HARDWARE TO OPERATE IN COMPLIANCE

FLAME SPREAD

10 TO 25

10 TO 600

10 TO 25

20

130 TO 190

25

100

25 OR LESS

25

150

QUANTITIES ARE APPROXIMATE, SUPPLIER TO FIELD

LONG INTERIOR STOREFRONT WINDOWS SHALL HAVE

SEE SHEET A501 FOR WINDOW HEAD, JAMB, SILL AND

ALL WINDOWS SHALL MATCH EXISTING CONDITIONS

CONTRACTOR TO DETERMINE IF STORE FRONTS CAN BE MODIFIED. IF THEY CANNOT, THEN REPLACE THE STORE FRONT PER CONTRACTOR RECOMMENDATION.

WOOD BEHIND THE TRIMMERS, AND HEADERS AS

VERIFY QUANTITIES AND ROUGH OPENING

REQUIRED FOR EXTRA SUPPORT

MULLION DETAILS

WITH 2018 IBC AND CURRENT ADA STANDARDS.

FIELD VERIFY ROUGH OPENING DIMENSIONS

SEE SHEET A501 FOR DOOR HEAD, JAMB &

MATCH FINISHED OF EXISTING DOORS

FLAME SPREAD REQUIREMENTS

MUST BE MIN. 16 GA. STUDS

THRESHOLD DETAILS

0

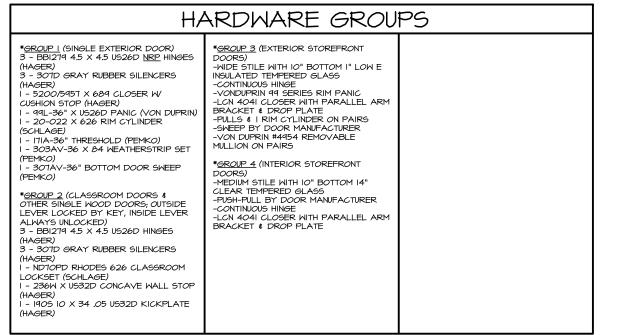
PROJECT: 21-311 DRAWN BY: WM REVISIONS

DATE: 01/19/2022

DOOR AND WINDOW **SCHEDULES**

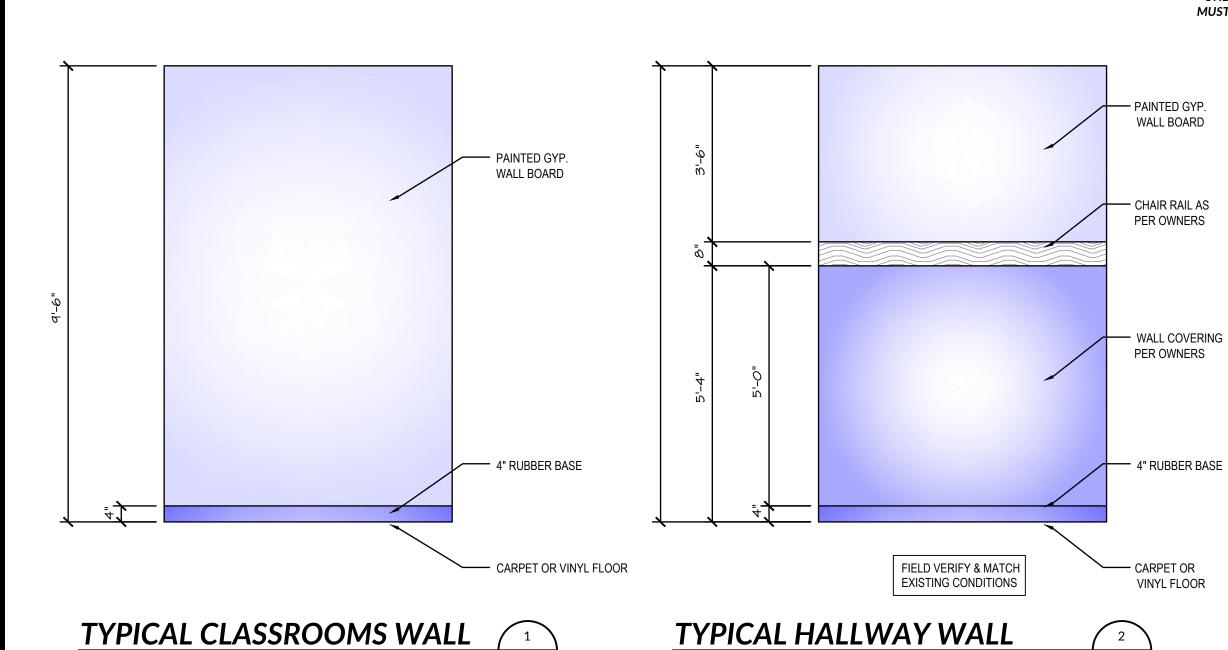
DOOR SCHEDULE - MAIN FLOOR									
DOOR			DOOR			FRAME	HARDWARE		
NO.	WIDTH	HEIGHT	THICK	TYPE	MATL.	MATERIAL	GROUP	T REMARKS	REMARKS
* 100	3'-0"	7'-0"	1 3/4"	С	ALUM	ALUM	3	PANIC HARDWARE/ AUTO CLOSER	
* 100A	3'-0"	7'-0"	1 3/4"	С	ALUM	ALUM	3	PANIC HARDWARE/ AUTO CLOSER	
* (101)	3'-0"	7'-0"	1 3/4"	С	ALUM	ALUM	4		
* 101A	3'-0"	7'-0"	1 3/4"	С	ALUM	ALUM	4		
* 102A	(2) 3'-0"	7'-0"	1 3/4"	D	ALUM	ALUM	4		
* (131)	3'-0"	7'-0"	1 3/4"	С	ALUM	ALUM	4		

DOOR SCHEDULE - UPPER FLOOR								
DOOR	DOOR FRAME HARDS					HARDWARE	DEL 44 DIVO	
NO.	WIDTH	HEIGHT	THICK	TYPE	MATL.	MATERIAL	GROUP	REMARKS
230	3'-0"	7'-0"	1 3/4"	А	WOOD	H.M.	2	GLASS SIDELIGHT
231)	3'-0"	7'-0"	1 3/4"	Α	WOOD	H.M.	2	GLASS SIDELIGHT
232	3'-0"	7'-0"	1 3/4"	Α	WOOD	H.M.	2	GLASS SIDELIGHT
232A	3'-0"	7'-0"	1 3/4"	В	H.M.	H.M.	1	PANIC HARDWARE/ AUTO CLOSER



OOR			DOOR			FRAME	HARDWARE	F
NO.	WIDTH	HEIGHT	THICK	TYPE	MATL.	MATERIAL	GROUP REMARKS	
230	3'-0"	7'-0"	1 3/4"	А	WOOD	H.M.	2	GLASS SIDELIGHT
231)	3'-0"	7'-0"	1 3/4"	Α	WOOD	H.M.	2	GLASS SIDELIGHT
232	3'-0"	7'-0"	1 3/4"	Α	WOOD	H.M.	2	GLASS SIDELIGHT
232A	3'-0"	7'-0"	1 3/4"	В	H.M.	H.M.	1	PANIC HARDWARE/ AUTO CLOSER

* ONLY PROVIDE THESE DOORS IF EXISTING STOREFRONT SYSTEM CAN'T BE MODIFIED & MUST BE REPLACED. SEE WINDOW NOTES.



NOTE: ALL WALLS ADJACENT TO SOURCES OF MOISTURE SHALL BE FINISHED WITH TILE OR

ROOM NAME AND NUMBER

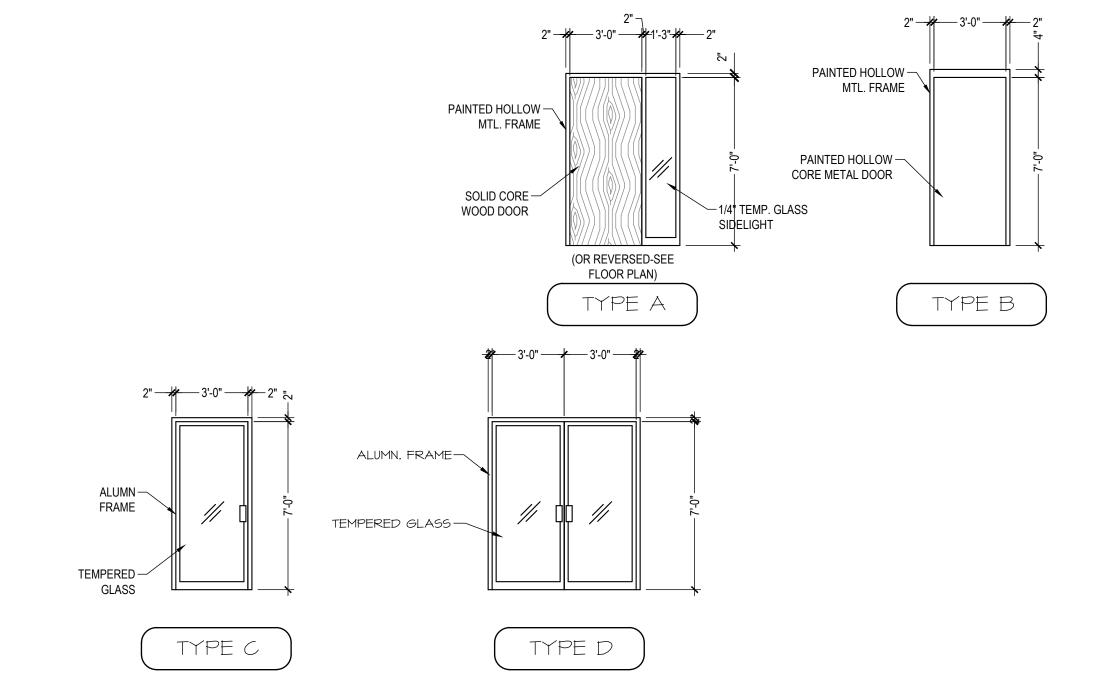
201 EXISTING COMMONS

230 PROPOSED CLASSROOM

PROPOSED CLASSROOM

PROPOSED CLASSROOM

FRP AS NOTED IN THE FINISH SCHEDULE



MILLWORK NOTES:

ALL MILLWORK TO CONFORM TO AWI CUSTOM GRADE CONSTRUCTION. ALL CABINETS AND COUNTERS TO BE ANCHORED AND SCRIBED TO ADJACENT SURFACES.

NOT TO SCALE -

- 2. ALL COUNTER CORE MATERIAL TO BE 3/4" PARTICLE BOARD OR HARDWOOD PLYWOOD.
- 3. ALL CONSTRUCTION TO BE FLUSH OVERLAY, SELF-EDGE TOPS UNLESS NOTED OTHERWISE.
- HARDWARE: FULLY EXTENDED DRAWER GLIDERS; FULLY CONCEALED HINGES; FULLY RECESSED STANDARDS FOR ALL ADJUSTABLE SHELVES; 3-INCH DRAWER/CABINET PULLS W/ BUILDING STANDARD FINISH.
- 5. ALL EXTERIOR SURFACES SHALL BE PLASTIC LAMINATE. ALL INTERIOR SURFACES TO BE WHITE MELAMINE.

NOT TO SCALE -

FINISH SCHEDULE - UPPER FLOOR

BASE

0

0

0

WALLS

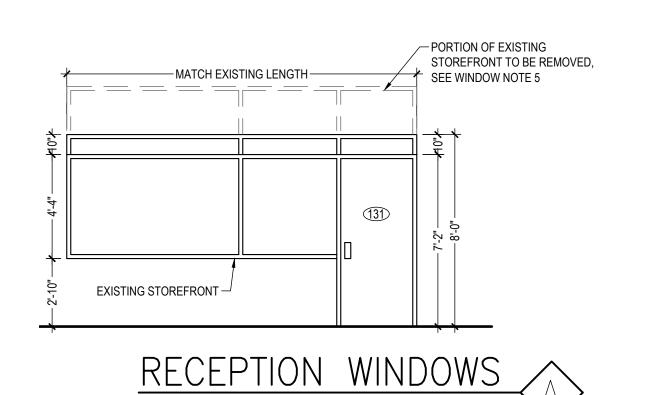
CEILING

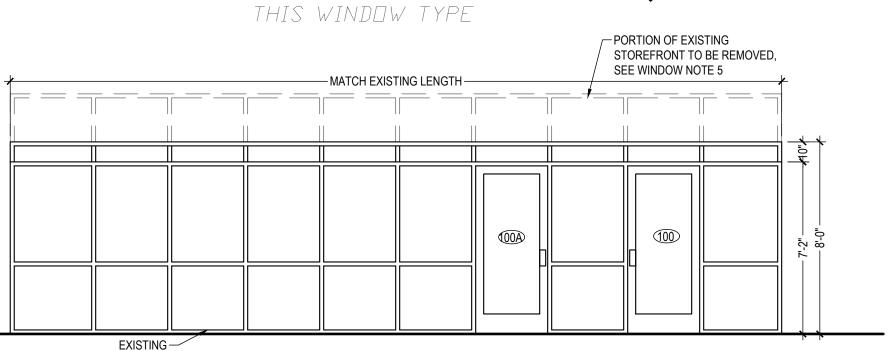
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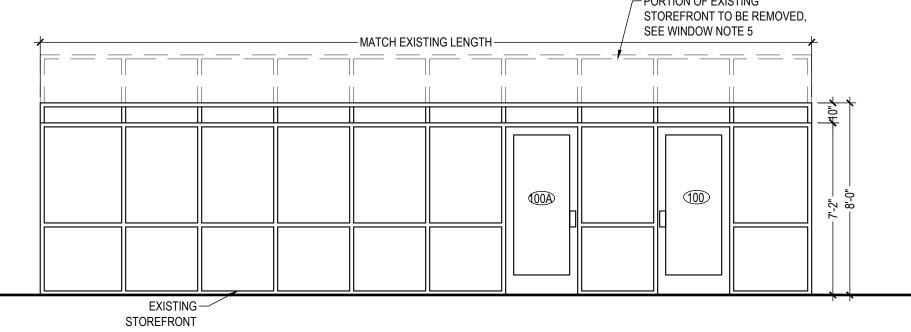
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FLOOR

6. ALL MILLWORK SHALL PROVIDE ADA ACCESSIBILITY AND BE CONSTRUCTED TO COMPLY WITH THE APPLICABLE CODES AND REGULATIONS.



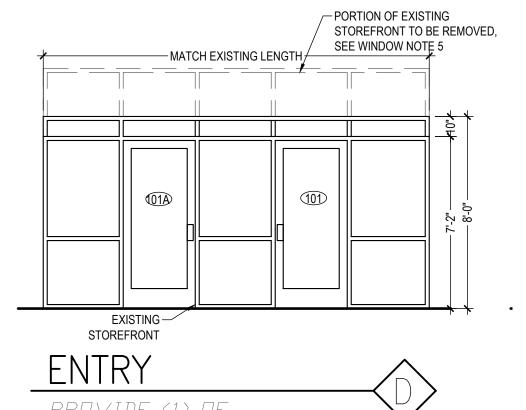




PROVIDE (1) OF

PROVIDE (1) OF THIS WINDOW TYPE

ENTRY WINDOWS



MATCH EXISTING LENGTH —

_ — — — — — —

EXISTING -STOREFRONT

102A

LIBRARY WINDOWS

PROVIDE (1) OF

THIS WINDOW TYPE

PROVIDE (1) OF THIS WINDOW TYPE

TYPICAL ROOM SIGNS

LETTERS: MIN. 5/8" HIGH RAISED MIN. 1/32"

SAN-SERIF UPPERCASE

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

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.

A601

1/24/22

PORTION OF EXISTING

MATCH EXISTING SEE WINDOW NOTE 5

____LENGTH___/_

EXISTING —

STOREFRONT

ENTRY

PROVIDE (1) OF

THIS WINDOW TYPE

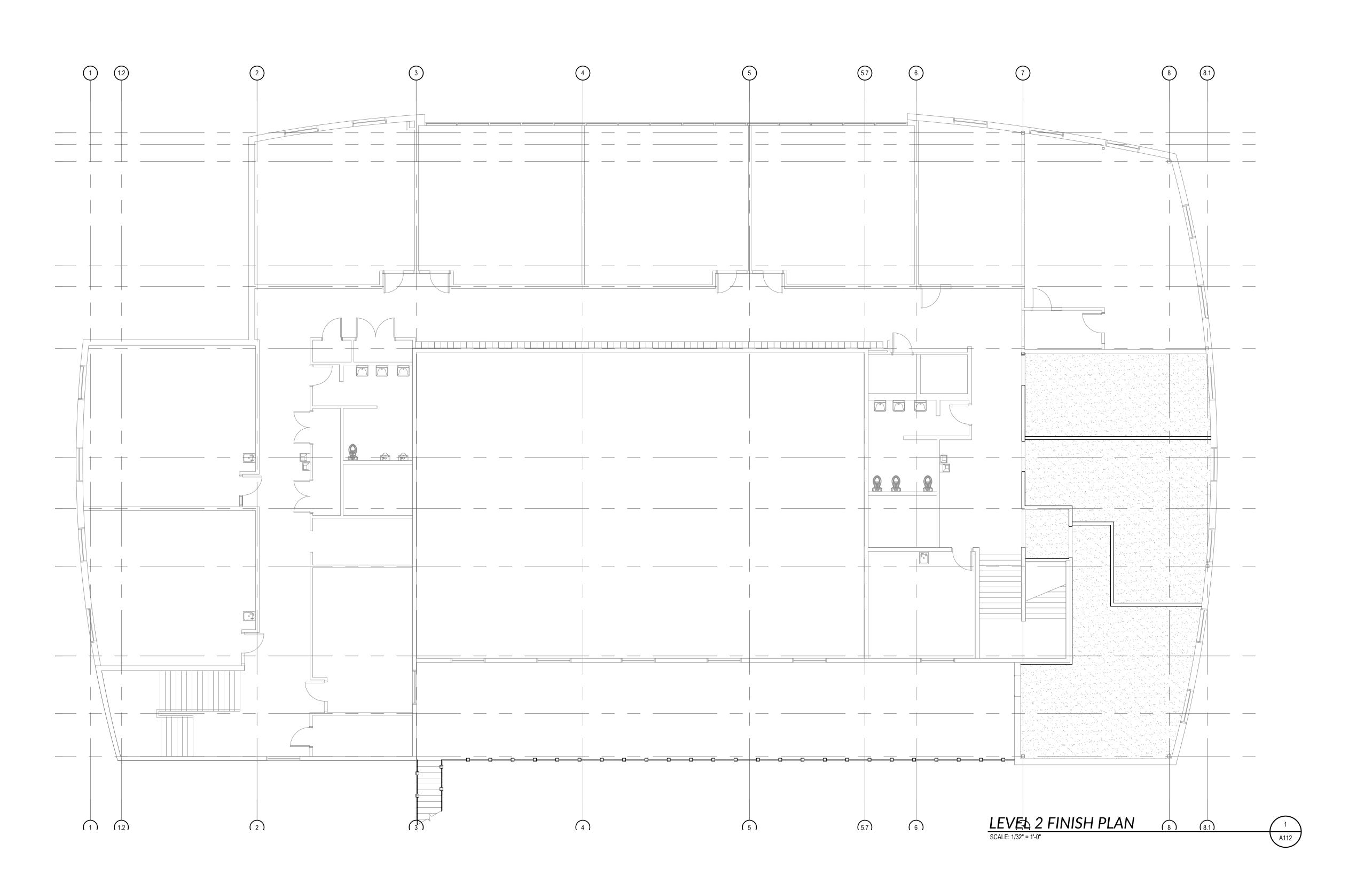
STOREFRONT TO BE REMOVED,

JARED STUART FORSYTH \8304554-030A

MARK DATE / DESC.

SHEET NUMBER: A601

FLOOR FINISH NOTE: NUMBERS ARE APPROXIMATE, SUPPLIER TO FIELD VERIFY NOTE: ALL THRESHOLDS TO BE A MAXIMUM OF 1/2" SEE DETAILS 1 & 2 ON SHEET A501



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.

DAVICINI ACADEI 215 22ND S OGDEN, L

EMY REMODEL D STREET I, UTAH

DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY: WM

REVISIONS

MARK DATE / DESC.

FINISH SCHEDULE

CONTRACTOR SHALL NOTIFY ENGINEER/ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN ALL CASES, UNLESS OTHERWISE DIRECTED, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED.

CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ETC., AT THE SITE AND SHALL COORDINATE WORK PERFORMED BY ALL TRADES. DO NOT SCALE DRAWINGS.

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

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.

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.

CONTRACTOR AND ALL SUBCONTRACTORS SHALL PERFORM THEIR TRADES AND DUTIES IN A MANNER CONFORMING TO THE PROCEDURES AND REQUIREMENTS AS STATED IN THE CURRENTLY ADOPTED INTERNATIONAL BUILDING CODE. (OR LATEST ACCEPTED CODE ADOPTED BY THE LOCAL BUILDING

ANY SPECIAL INSPECTIONS REQUIRED BY THE BUILDING OFFICIAL OR THE BUILDING CODE ARE THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY AND PROTECTION WITHIN AND ADJACENT TO THE

FOUNDATION AND EARTHWORK NOTES

SOILS INFORMATION

1.1. SOIL BEARING CAPACITY (PSF) 2,500, ON COMPACTED FILL 1.2. FROST PROTECTION (TO BOTTOM OF FOOTING) 30 INCHES MINIMUM CONTRACTOR SHALL ENSURE THAT THE FOOTING ELEVATIONS WILL PROVIDE MINIMUM FROST PROTECTION BELOW THE FINAL GRADES.

1.3. LATERAL SOIL PRESSURES (EQUIVALENT FLUID DENSITY

1.3.1. ACTIVE (RETAINING WALLS) 35 PCF 1.3.2. AT REST (RIGID FOUNDATION WALLS) 55 PCF 1.3.3. PASSIVE 300 PCF

1.4. COEFFICIENT OF FRICTION 0.40

ANY SOIL CONDITION ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THOSE USED 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.

NO FOOTINGS SHALL BE PLACED IN WATER, SNOW, FROZEN GROUND, OR UNSTABLE SOILS.

ALL EXCAVATIONS ADJACENT TO AND BELOW FOOTING ELEVATION FOR OTHER TRADES SHALL BE ACCOMPLISHED PRIOR TO POURING ANY FOOTINGS.

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.

ALL REINFORCEMENTS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE.

PROVIDE DOWELS IN FOOTING AND FOUNDATIONS TO MATCH ALL VERTICAL BARS IN WALLS AND COLUMNS ABOVE, UNLESS NOTED OTHERWISE.

CONSULT THE PROJECT SPECIFICATIONS AND SOILS REPORT FOR FURTHER EARTHWORK REQUIREMENTS.

CONCRETE NOTES

CONCRETE MATERIALS

1.1. CEMENT TYPE - ASTM C-150 CEMENT SOURCE SHALL REMAIN THE SAME FOR THE ENTIRE JOB.

1.2. FLY ASH - ASTM C618 CLASS F, 25% MAX CEMENT. CONTENT

1.3. ADMIXTURES:

1.3.1. AIR-ENTRAINING - ASTM C260

1.3.2. WATER-REDUCING ADMIXTURE - ASTM C494, TYPE A 1.3.3. RETARDING ADMIXTURE - ASTM C494, TYPE B

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

1.3.5. HIGH-RANGE, WATER-REDUCING AND RETARDING ADMIXTURE - ASTM 494, TYPE G 1.3.6. 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 1.4. 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 (1" 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. 1.4.2.1. THE PERCENT RETAINED ON TWO ADJACENT SIEVES SHALL NOT FALL BELOW 5%

1.4.2.2. THE PERCENT RETAINED ON THREE ADJACENT SIEVES THAT NOT FALL BELOW 8% 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 1.4.3. 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 (Fy = 60 ksi) USE GRADE 40 (Fy = 40 ksi) FOR FIELD BENT DOWELS WITH SPACINGS REDUCED BY 1/3 FROM

THAT INDICATED IN THE DRAWINGS. 1.6. HEADED REINFORCING BARS ASTM A970

1.7. ANCHOR RODS (TYPICAL)

ASTM F1554, GRADE 36

ASTM A563

1.7.1. HEAVY HEX NUTS AND HARDENED WASHERS

1.8. WATER CEMENT RATIO SHALL MEET THE REQUIREMENTS OF ACI 318 1.9. 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) 1.10. ITEMS NOT PERMITTED TO BE DIRECTLY EMBEDED IN CONCRETE ARE ALUMINUM CONDUIT, PRODUCTS CONTAINING ALUMINUM, OR OTHER SUCH NON-COMPATIBLE MATERIALS.

CONCRETE COMPRESSIVE STRENGTHS OF CONCRETE AT 28 DAYS AND ACI 318 CLASSIFICATIONS SHALL BE AS FOLLOWS (OR AS OTHERWISE INDICATED)

F0, S0, W0, C0

2.1. INTERIOR FOOTINGS & INTERIOR FOUNDATION WALLS STRENGTH

CLASSIFICATION

2.2. INTERIOR SLABS ON GRADE STRENGTH

4,000 PSI CLASSIFICATION F0, S0, W0, C0 2.3. NORMAL WEIGHT CONCRETE OVER STEEL DECK STRENGTH

CLASSIFICATION 2.4. ALL SITE CONCRETE WITH REINFORCEMENT STRENGTH CLASSIFICATION

F3, S0, W1, C2 2.5. ALL SITE CONCRETE WITHOUT REINFORCEMENT 4,500 PSI STRENGTH CLASSIFICATION F3, S0, W1, C2

REINFORCEMENT COVER 3.1. CAST-IN-PLACE CONCRETE

CLEAR COVER 3.1.1. PERMANENTLY CAST AGAINST EARTH 3.1.2. FORMED CONCRETE EXPOSED TO WEATHER #5 BARS AND SMALLER #6 THROUGH #18 BARS

3.1.3. CONCRETE NOT EXPOSED TO WEATHER OR AGAINST EARTH SLABS. WALLS AND THEIR PIERS BEAMS, COLUMNS: 1 1/2" 3.1.4. SUSPENDED SLABS

#11 BARS AND SMALLER (TOP) #11 BARS AND SMALLER (BOTTOM) 3.1.5. BEAMS: TIES, STIRRUPS, SPIRALS (TOP)

4. CONCRETE OVER METAL DECK

4.1. 2 1/2" THICK (4" OVERALL MIN) NORMAL WEIGHT CONCRETE

TIES, STIRRUPS, SPIRALS (BOTTOM)

4.1.1. REINFORCE SLAB WITH FIBRILLATED MACRO-SYNTHETIC FIBER REINFORCING (ASTM C 1116, TYPE III). MACRO-SYNTHETIC FIBER SHALL BE MINIMUM OF 2 INCHES IN LENGTH, AND ASPECT RATIO OF 50 TO 90. PROVIDE 4 POUNDS MINIMUM PER CUBIC YARD. FIBER

MANUFACTURER SHALL PROVIDE 2 HOUR FIRE RESISTANCE CERTIFICATION FROM UL.

1 1/2"

4.000 PSI

5,000 PSI

F0, S0, W0, C0

5. ONLY ONE GRADE OR TYPE OF CONCRETE SHALL BE POURED ON THE SITE AT ANY GIVEN TIME. 5.1. ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE ACI STANDARDS AND PRACTICES

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND FORMWORK. 6.1. 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. 7. CONSTRUCTION JOINTS, CONTROL JOINTS

7.1. 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. 7.2. 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. 7.2.1. 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.

8. CONSTRUCTION AND DETAILING

8.1. 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. 8.2. ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED WITH 2 #5 BARS EXTENDING 2'0" MIN BEYOND THE EDGE OF THE OPENING AT EACH FACE OF OPENING (UNLESS NOTED OTHERWISE).

8.3. BEFORE CONCRETE IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT. OF ALL OPENINGS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, ETC. RELATIVE TO WORK.

8.4. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS. GROOVES, ORNAMENT, CLIPS OR GROUNDS. REQUIRED TO BE ENCASED IN CONCRETE AND FLOOR LOCATION OF FLOOR FINISHES AND SLAB 8.5. 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 CONCRET PLACEMENT. PENETRATIONS THROUGH WALLS WHEN APPROVED SHALL BE BUILT INTO THE WALL PRIOR TO CONCRETE PLACEMENT.

8.6. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE CURRENT VERSION OF ACI-318.

8.7. 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 OR DECK DURING PLACEMENT IS NOT PERMITTED.

8.8. FOR STEPS IN FOUNDATION GREATER THAN 2 FEET, WRAP CORNER W/2- #4 BARS EXTENDING 18" EACH DIRECTION.

8.9. REINFORCING BARS SHALL NOT BE WELDED UNLESS SPECIFICALLY NOTED ON DRAWINGS.

POST INSTALLED ANCHOR NOTES

ADHESIVE ANCHORS (EPOXY ANCHORS)

1.1. FOR CONCRETE, THE ADHESIVE SHALL BE HIT RE 500-SD BY HILTI INC., HIT-HY 200 WITH SAFE SET TECHNOLOGY BY HILTI, PURE 110 + BY POWERS FASTENERS, SET-XP BY SIMPSON STRONG-TIE OR AT-XP BY SIMPSON STRING-TIE, SIKA ANCHORFIX-3001 BY SIKA CORPORATION.

1.2. FOR GROUTED MASONRY, THE ADHESIVE SHALL BE HIT-HY 70 BY HILTI, SET-XP BY SIMPSON STRING-TIE OR AT-XP BY SIMPSON STRONG-TIE, AC100 + BY POWERS FASTENERS, OR CIA GEL BY

MECHANICAL ANCHORS

2.1. FOR CONCRETE, THE MECHANICAL ANCHOR SHALL BE KWIK BOLT TZ BY HILTI, STRONG-BOLT 2 BY

SIMPSON STRONG-TIE, OR POWER-STUD + SD2 BY POWERS FASTENERS 2.2. FOR GROUTED MASONRY, THE MECHANICAL ANCHOR SHALL BE KWIK BOLT 3 BY HILTI, WEDGE ALL BY SIMPSON STRONG-TIE OR STRONG-BOLT 2 BY SIMPSON STRONG-TIE, OR POWER-STUD +

SD1 BY POWERS FASTENERS SCREW ANCHORS

3.1. FOR CONCRETE AND GROUTED MASONRY, THE SCREW ANCHOR SHALL BE TITEN HD FOR CONCRETE ONLY BY SIMPSON STRONG-TIE, SCREW BOLT + BY DeWALT, WEDGE-BOLT + BY POWERS FASTENERS OR KWIK HUS-EZ FOR CONCRETE ONLY BY HILTI.

4. POWDER ACTUATED FASTENERS (PAF) 4.1. FOR FASTENERS DRIVEN INTO STEEL, THE FASTENER SHALL BE X-U P8 TH UNIVERSAL KNURLED

SHANK FASTENER BY HILIT., PDPA BY SIMPSON STRONG-TIE, OR 8mm HEAD SPIRAL CSI DRIVE PIN

4.2. FOR FASTENERS DRIVEN INTO CONCRETE, THE FASTENER SHALL BE X-U UNIVERSAL KNURLED SHANK FASTENER BY HILTI, PDP OR PDPA BY SIMPSON STRONG-TIE OR 8mm HEAD SPIRAL CSI DRIVE PIN BY POWERS FASTENERS.

5. INSTALL ALL ANCHORS PER MANUFACTURER'S REQUIREMENTS. THESE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO, HOLE PREPARATION, EPOXY PROPORTIONS AND QUANTITIES, INSTALLATION TEMPERATURE, AND CURE TIMES.

6. FOLLOW THE MANUFACTURER'S RECOMMENDATIONS AND CERTIFICATION TESTING REPORTS FOR INSTALLATION.

7. ALTERNATIVE ANCHORS MAY BE USED IF AN ICC-ES ESR OR IAPMO-UES ER APPROVAL FOR USE IN CRACKED CONCRETE IS SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO USE.

8. WHERE A SPECIFIC ANCHOR IS CALLED OUT ON THE PLAN, THAT ANCHOR SHALL BE USED UNLESS IT CAN BE DEMONSTRATED THAT AN ALTERNATIVE ANCHOR WILL MEET OR EXCEED THE CAPACITY OF THE SPECIFIED ANCHOR FOR THE SPECIFIC APPLICATION FOR WHICH IT IS BEING SPECIFIED.

STEEL NOTES

 STEEL MATERIALS 1.1. WIDE FLANGE SECTIONS ASTM A992 (Fy = 50 ksi) 1.2. SQUARE OR RECTANGULAR SECTIONS (HSS) ASTM A500, GRADE B (Fy = 46 ksi) 1.3. ANGLES, CHANNELS, OTHER SHAPES AND PLATES ASTM A36 (Fy = 36 ksi) 1.4. NON-METALLIC NON-SHRINK GROUT ASTM C1107

ASTM F1554, GRADE 36 1.5. ANCHOR RODS (TYPICAL) 1.5.1. HEAVY HEX NUTS AND HARDNED WASHERS ASTM A563 / ASTM F436 GRADE A ASTM F3125 GRADE A325 1.6. BOLTED CONNECTIONS ASTM A563 / ASTM F436 1.6.1. NUTS AND HARDENED WASHERS

2. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:

2.1. AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", WITH "COMMENTARY".

2.2. AISC "CODE OF STANDARD PRACTICE" EXCLUDING THE FOLLOWING SECTIONS: 1.5.1, 3.3 (FIRST SENTENCE), 4.2, 4.2.1, 4.2.2, 7.5.4, 7.11.5. 2.3. AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS"

2.4. AWS STRUCTURAL WELDING CODE (SPECIFIC ITEMS DO NOT APPLY WHEN THEY CONFLICT WITH THE AISC REQUIREMENTS). 2.5. AISC "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS" (AISC 341)

3.1. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN

ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION). 3.2. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE. E-60XX MAY BE USED FOR WELDING

STEEL DECKS. 3.3. ALL INTERSECTING STEEL SHAPES WHICH ARE NOT CONNECTED WITH BOLTS SHALL BE WELDED TOGETHER WITH A FILLET WELD ALL AROUND UNLESS NOTED OTHERWISE. WHERE WELD SIZES ARE NOT SHOWN USE THE FOLLOWING: 1) WHERE ALL CONNECTED PARTS ARE THICKER THAN 1/4", WELD IS 1/16" LESS THAN THE THICKNESS OF THE THINNEST PART. 2) WHERE ANY OF THE

CONNECTED PARTS IS LESS THAN 1/4" THICK, WELD IS SAME AS THE THICKNESS OF THE

3.4. REINFORCING BARS SHALL NOT BE WELDED UNLESS SPECIFICALLY DETAILED. IN SUCH CASES USE ONLY AWS STANDARDS. DO NOT SUBSTITUTE REINFORCING BARS FOR DEFORMED BAR

3.5. DO NOT TACK WELD ANCHOR BOLTS.

3.6. WHEREVER POSSIBLE, WELDS SHALL BE SHOP WELDS. SPECIAL CONSIDERATIONS, SUCH AS ITEMS WHICH MAY NEED ADJUSTMENT AT THE SITE, REQUIRE THAT SOME WELDS BE FIELD WELDS. WHERE QUESTIONS OR DISCREPANCIES OCCUR THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN THE SHOP FABRICATOR AND THE STEEL ERECTOR. FIELD WELD FLAGS THAT HAVE BEEN SHOWN ON THE DRAWINGS ARE FOR SUGGESTION ONLY. THE CONTRACTOR HAS THE OPTION OT SUBSTITUTE SHOP WELDS FOR FIELD WELDS.

3.7. STEEL FABRICATORS SHALL INDICATE THE SHOP WELDS THAT ARE EXCLUDED FROM THEIR BIDS STEEL ERECTORS SHALL INDICATED FIELD WELDS THAT ARE EXCLUDED FROM THEIR BIDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE FIELD AND SHOP WELDS WITH THE VARIOUS SUB CONTRACTORS.

BOLTED CONNECTIONS:

4.1. USE ASTM A325N BOLTS FOR STEEL TO STEEL CONNECTIONS OR AS NOTED ON THE DRAWINGS. TIGHTEN BOLTS TO A SNUG TIGHT CONDITION.

4.2. USE HARDENED WASHERS BENEATH THE TURNED ELEMENT OF ALL BOLTS OR NUTS. AT OVERSIZED HOLES, HARNEDED WASHERS OR PLATES SHALL CONFORM WITH ASTM F436 AND SMALL COMPLETELY COVER THE SLOT AFTER INSTALLATION.

4.3. WHERE A STEEL TO STEEL BEAM CONNECTION IS NOT SHOWN, PROVIDE A STANDARD AISC FRAMED CONNECTION FOR ONE HALF THE TOTAL UNIFORM LOAD CAPACITY OF THE BEAM FOR THE GIVEN SPAN.

4.4. PROVIDE FULL-DEPTH WEB-STIFFENER PLATES EACH SIDE OF ALL BEAMS AT ALL BEARING POINTS. STIFFENER PLATES SHALL BE THE THICKNESS CALLED OUT BELOW UNLESS NOTED OTHERWISE AND SHALL BE WELDED BOTH SIDES WITH FILLET WELDS ALL AROUND.

STIFFENER THICKNESS / WELD SIZE FLANGE WIDTH LESS THAN 8-1/4" 1/4" - 3/16" 8-1/4" TO 12-1/4" 3/8" - 1/4" 12-1/4" TO 16-1/2" 1/2" - 5/16" 16-1/2" TO 20-3/4" 5/8" - 3/8"

CONNECTIONS SHALL COMPLY WITH THE STRUCTURAL DRAWINGS UNLESS WRITTEN APPROVAL TO CHANGE IS GIVEN BY THE STRUCTURAL ENGINEER.

6. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS. 7. CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SITE SAFETY DURING ERECTION OF STEEL FRAMING

& SHALL ENSURE THAT BRIDGING HAS BEEN INSTALLED PRIOR TO SLACKENING HOISTING CABLES FOR

8. ROLLED / CURVED MEMBERS

8.1. WALL THICKNESS OF ROLLED HSS MEMBERS SHOWN ON PLANS IS THE MINIMUM THICKNESS FOR STRUCTURAL PURPOSES. CONTRACTOR SHALL INCREASE WALL THICKNESS OR EMPLOY OTHER CONSTRUCTION MEANS AS REQUIRED TO PREVENT DISTORTION, WARPING, OR OIL-CANNING OF

STEEL DECK NOTES

1. STEEL DECK SHALL COMPLY WITH THE LATEST REQUIREMENTS OF THE STEEL DECK INSTITUTE

2. ALL DECK SHALL BE CONTINUOUS OVER 3-SPANS. WHERE NOT POSSIBLE, THE DECK SUPPLIER/CONTRACTOR SHALL PROVIDE HEAVIER GAUGE DECK AS NEEDED TO PROVIDE THE EQUIVALENT PERFORMANCE OF THE SPECIFIED DECK WITH 3-SPAN CONTINUITY.

STEEL ROOF DECK SHALL NOT BE USED TO SUPPORT LOADS FROM PLUMBING, HVAC DUCTS, LIGHT FIXTURES, ARCHITECTURAL ELEMENTS OR EQUIPMENT OF ANY KIND, UNLESS SPECIFICALLY NOTED. LIGHT WEIGHT SUSPENDED ACOUSTICAL CEILINGS WITH A TOTAL WEIGHT OF 50 POUNDS PER ATTACHMENT MAY BE HUNG FROM ROOF DECK. THE HANGERS SHALL BE STAGGERED TO DISTRIBUTE THE LOADS OVER MULTIPLE DECK FLUTES.

4. CONDUITS ARE PERMITTED IN COMPOSITE DECK SLABS SUBJECT TO LOCAL CODE REQUIREMENTS AND FIRE RATING CONSIDERATIONS, CONDUITS OTHER THAN ELECTRICAL OR COMMUNICATION CONDUITS SHALL NOT BE PERMITTED. ALL CONDUIT PLACED WITHIN THE SLAB SHALL BE MADE OUT

4.1. WHEN CONDUITS ARE INSTALLED IN THE SLAB, THE DIAMETER SHALL BE THE LESSER OF 1-INCH OR 1/3 TIMES THE DEPTH OF CONCRETE OVER METAL DECK.

4.2. NO CROSSOVER OF CONDUITS SHALL OCCUR 4.3. CONDUIT SHALL BE SPACED A MINIMUM OF 18-INCHES APART.

4.3.1. CONDUITS MAY BE SPACED CLOSER TOGETHER AT ELECTRICAL JUNCTION BOXES / GUTTER BOXES / BLOCKS. IN SUCH CASES, THE CONDUIT BOX SHALL BE LOCATED ADJACENT TO A STRUCTURAL SUPPORT SUCH AS A BEAM OR WALL. THE CONDUITS SHALL SPLAY OUT IN THE DECK TO A MINIMUM OF 18" APART AS QUICKLY AS POSSIBLE. BLOCKS OF CONDUITS SHALL BE SPACED AT A MINIMUM OF 6'-0" APART AND SHALL NOT EXCEED 6 CONDUITS IN

4.4. THE MINIMUM CONCRETE COVER OF 1" AND IT SHALL BE PLACED ABOVE THE TOP FLUTE OF THE DECK. CLEARANCE BETWEEN THE CONDUIT AND THE METAL DECK SHALL BE 1 INCH.

5. ALL DECK SUPPORTING MEMBERS SHALL BE DRY BEFORE WELDING.

CLINCH SEAMS BEFORE WELDING INTERLOCKING SEAMS

STEEL FLOOR DECK 7.1. STEEL FLOOR DECK SHALL BE 1.1/2" DEEP X 22 GAGE MINIMUM PHOSPHATIZED/PAINTED STEEL COMPOSITE TYPE 'W' WIDE RIB DECK WITH INTERLOCKING SIDE SEAMS WITH THE FOLLOWING

22 GA MINIMUM S $(IN^3/FT) =$ 22 GA MINIMUM I $(IN^4/FT) =$ 0.192 7.2. CONCRETE THICKNESS OVER STEEL DECK SHALL BE 2.1/2" (4" OVERALL, FIELD VERIFY) NORMAL

SPACINGS (CLOSER SPACINGS MAY BE USED TO DEVELOP MIN SHEAR VALUES):

WEIGHT CONCRETE. 7.3. SEE TYPICAL DETAILS FOR SUPPORT OF DECK AT OPENINGS. WELD STEEL ROOF DECK TO SUPPORTING FRAMING MEMBERS WITH 3/4" DIAMETER PUDDLE WELDS AT THE FOLLOWING

9.6.2. 6" O.C. TO THE FOLLOWING SUPPORTS PARALLEL TO DECK CORRUGATIONS: ALL

9.6.1. 6" O.C. TO ALL SUPPORTS PERPENDICULAR TO DECK CORRUGATIONS (7 WELDS PER 36"

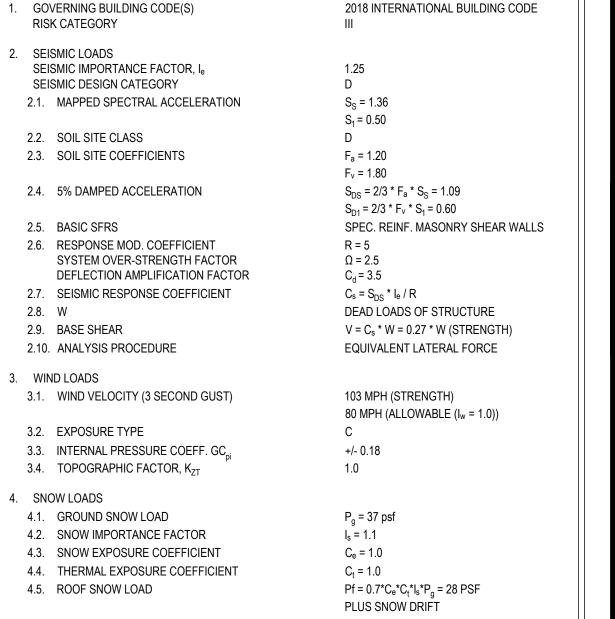
PERIMETER SUPPORTS 9.6.3. 12" O.C. TO ALL OTHER SUPPORTS PARALLEL TO DECK CORRUGATIONS. 9.6.4. ATTACH INTERLOCKING SEAMS WITH VERCO PUNCHLOCK II SYSTEM @ 12" O.C. MIN.

BETWEEN ADJACENT PIECES OF DECKING. CRIMP SIDES BEFORE WELDING.

PROVIDE A 2" MIN BEARING AND 4" LAP AT THE SPLICE POINTS OF ALL PIECES OF DECK.

LEGENDS OF MARKS AND ABBREVIATIONS

	LINDS OF INTAKKS	MINDIN	DDILL VII (110145
AB	ANCHOR BOLT(S)	JST	JOIST
ABV	ABOVE		
ALT	ALTERNATE	k	KIPS (1000 POUNDS)
APPROX	APPROXIMATE	KLF	KIPS PER LINEAR FOOT
ARCH	ARCHITECT(URAL)	KSF	KIPS PER SQUARE FOOT
BF-X	BRACED FRAME	LBS	POUNDS
BLDG	BUILDING	LLH	LONG LEG HORIZONTAL
BLW	BELOW	LLV	LONG LEG VERTICAL
BOT	BOTTOM	LSH	LONG SIDE HORIZONTAL
BRG	BEARING	LSV	LONG SIDE VERTICAL
BTWN	BETWEEN	LVL	LAMINATED VENEER LUMBER
CMU	CONCRETE MASONRY UNIT	MAS	MASONRY
COL	COLUMN	MAX	MAXIMUM
CONC	CONCRETE	MC-X	MASONRY COLUMN
CONST	CONSTRUCT(ION)	MCJ	MASONRY CONTROL JOINT
CJ	CONTROL JOINT	MECH	MECHANICAL
CP-X	CONCRETE PIER	MF	MOMENT FRAME
CW-X	CONCRETE WALL	MIN	MINIMUM
		MISC	MISCELLANEOUS
D	DEPTH	ML-X	MASONRY LINTEL
db	BAR DIAMETER	MP-X	MASONRY PIER
DBA	DEFORMED BAR ANCHOR	MW-X	MASONRY WALL
DBE	DECK BEARING ELEVATION		
DBL	DOUBLE	(N)	NEW
DET	DETAIL	NTS	NOT TO SCALE
DIA	DIAMETER	1110	NOT TO COME
DIM	DIMENSION	O.C.	ON CENTER
DIST	DISTANCE	0.5. 0.F.	OUTSIDE FACE
DIGT	DISTANCE	OPP	OPPOSITE
/E\	EXISTING	OWSJ	OPEN WEB STEEL JOIST
(E) EA	EACH	04433	OF LIN WEB 31 EEE 30131
E.A.	EACH FACE	PAF	POWDER-ACTUATED FASTENER
E.A. E.J.	EXPANSION JOINT	PAR	POWDER-ACTUATED PASTENER PARALLEL
E.J. ELEC	ELECTRICAL	PCF	PARALLEL POUNDS PER CUBIC FOOT
ELEV	ELECTRICAL	PERP	PERPENDICULAR
		PL PL	
E.O.D.	EDGE OF DECK		PLATE
E.O.S.	EDGE OF SLAB	PLF	POUNDS PER LINEAR FOOT
EQUIP	EQUIPMENT	PNL	PANEL
EQ.	EQUAL	PSF	POUNDS PER SQUARE FOOT
E.W.	EACH WAY	PSI	POUNDS PER SQUARE INCH
EX EXT	EXISTING EXTERIOR	PT #	POST TENSION POUNDS (LBS)
			,
FC-X	CONTINUOUS FOOTING	REINF	REINFORCEMENT
F.D.	FLOOR DRAIN	REQD	REQUIRED
FDN	FOUNDATION	R.D.	ROOF DRAIN
FFE	FINISHED FLOOR ELEVATION	RTU	ROOF TOP UNIT
FS-X	SPOT FOOTING		
FT	FOOT	SBP	STEEL BASE PLATE
FTG	FOOTING	SC-X	STEEL COLUMN
FTS-X	THICKENED SLAB FOOTING	SCP	STEEL CAP PLATE
		SIM	SIMILAR
GA	GAUGE	STR	STRUCTURAL
GALV	GALVANIZED	STRUCT	STRUCTURAL
GLB	GLU-LAM BEAM	STS	SELF TAPPING SCREWS
GSN	GENERAL STRUCTURAL NOTES		
		T&B	TOP AND BOTTOM
HORIZ	HORIZONTAL	TOC	TOP OF CONCRETE
HSA	HEADED STUD ANCHOR	TOF	TOP OF FOOTING
HT	HEIGHT	TOS	TOP OF SLAB
		TOW	TOP OF WALL
ICC	INTERNATIONAL CODE COUNCIL	TYP	TYPICAL
IBC	INTERNATIONAL BUILDING CODE		
I.F.	INSIDE FACE	UNO	UNLESS NOTES OTHERWISE
IN	INCH		
INT	INTERIOR	VERT	VERTICAL
IRC	INTERNATIONAL RESIDENTIAL CODE		
		W/	WITH
J.B.E.	JOIST BEARING ELEVATION	WT	WALL THICKNESS
		WWF	WELDED WIRE FABRIC



50 PSF + 20 PSF PARTITION

40 PSF

100 PSF

d < 0.02h

L/600 (0.35" MAX)

5. FLOOR LIVE LOADS

5.2. CLASSROOMS

6. SERVICEABILITY CRITERIA

INTERIOR

PERIMETER

6.2. INTERSTORY SEISMIC DRIFT

5.3. EXIT FACILITIES AND CORRIDORS

6.1. BEAM NON-COMPOSITE SUPERIMPOSED LOAD DEFLECTION

5.1. OFFICE

DESIGN CRITERIA



01/24/2022 DATE: 01/19/2022 PROJECT: 21-311 DRAWN BY:__**WM** REVISIONS MARK DATE / DESC

GENERAL **STRUCTURAL**

SHEET NUMBER

NOTES

COLD-FORMED STEEL DECK (1705.2.2)

INSPECTION TASKS PRIOR TO DECK PLACEMENT (SDI QA/QC TABLE 1.1)

INSPECTION TASKS AFTER DECK PLACEMENT (SDI QA/QC TABLE 1.2)

COMPLY WITH THE CONSTRUCTION DOCUMENTS

MATERIAL IDENTIFICATION (TYPE/GRADE)

CHECK WELDING EQUIPMENT

USE OF QUALIFIED WELDERS

WPS FOLLOWED

PERIMETER WELDS

INSTRUCTIONS

FASTENERS

RESOLVED.

CONCRETE

VERIFY REPAIR ACTIVITIES

VERIFY REPAIR ACTIVITIES

INSPECTION TASKS PRIOR TO WELDING (SDI QA/QC TABLE 1.3)

WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE

INSPECTION TASKS DURING WELDING (SDI QA/QC TABLE 1.4)

CONTROL AND HANDLING OF WELDING CONSUMABLES

INSPECTION TASKS AFTER WELDING (SDI QA/QC TABLE 1.5)

WELDS MEET VISUAL ACCEPTANCE CRITERIA

DOCUMENT ACCEPTANCE OR REJECTION OF WELDS

PROPER STORAGE FOR MECHANICAL FASTENERS

FASTENERS ARE POSITIONED AS REQUIRED

FOOTINGS AND CONCRETE FOUNDATION WALLS

CONCRETE OVER METAL DECK

FLOOR FRAMING

ROOF FRAMING

MASONRY WALLS

ROOF DECK

MASONRY

PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION

BASE METAL THICKNESS)

CONSTRUCTION DOCUMENTS

VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH

DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES

CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND

VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH

VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT

DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK

MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE

ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)

VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND

INSPECTION TASKS PRIOR TO MECHANICAL FASTENING (SDI QA/QC TABLE 1.6)

INSPECTION TASKS DURING MECHANICAL FASTENING (SDI QA/QC TABLE 1.7)

FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S

INSPECTION TASKS AFTER MECHANICAL FASTENING (SDI QA/QC TABLE 1.8)

DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS

CHECK SPACING, TYPE AND INSTALLATION OF SUPPORT, SIDELAP, AND PERIMETER

STRUCTURAL OBSERVATIONS (1704.6)

PROFESSIONAL AS APPROVED BY THE ENGINEER OF RECORD. STRUCTURAL OBSERVATIONS DO NOT INCLUDE OR WAIVE THE

RESPONSIBILITY FOR SPECIAL INSPECTIONS AS NOTED IN THESE DRAWINGS. THE FOLLOWING SECTIONS INDICATE STAGES OF

IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN

CONSTRUCTION THAT THE STRUCTURAL OBSERVER SHALL BE NOTIFIED. AT THE CONCLUSION OF THE PROJECT, THE STRUCTURAL OBSERVER SHALL SUBMIT A WRITTEN STATEMENT TO THE BUILDING OFFICIAL INDICATING THAT SITE VISITS HAVE BEEN MADE AND

CONTRACTOR TO NOTIFY ENGINEER OF RECORD AT THE FOLLOWING STAGES:

DEFERRED SUBMITTALS

DEFERRED SUBMITTALS LISTED BELOW SHALL BE SUBMITTED TO THE ENGINEER OF RECORD, ARCHITECT, AND BUILDING OFFICIAL FOR

DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE:

THEIR REVIEW AND APPROVAL TO ENSURE CONFORMANCE TO THE DESIGN AND SPECIFICATIONS OF THE BUILDING.

PRIOR TO POURING CONCRETE

PRIOR TO POURING CONCRETE

PRIOR TO POURING GROUT

PRIOR TO COVERING UP WITH ROOFING

AFTER SUBSTANTIAL PORTION OF FRAMING IS COMPLETED

AFTER SUBSTANTIAL PORTION OF FRAMING IS COMPLETED

MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL

INSPECTION

FREQUENCY CONT. PERIODIC

Χ

Χ

Χ

Χ

REMARKS

VICINI,

MARK DATE / DESC.

STRUCTURAL SPECIAL **INSPECTIONS**

SHEET NUMBER:

	NONE

STRUCTURAL HIGH-STRENGTH BOLTING (1705.2)							
ТҮРЕ		ECIAL ECTION QUENCY	REMARKS				
	CONT.	PERIODIC					
SPECTION TASKS PRIOR TO BOLTING (AISC 360-10 TABLE N5.6-1 AND AISC 341-10 TABLE J7-1)							
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	-	Х					
FASTENERS MARKED IN ACCORDANCE WITH ASTM		Х					

	CONT.	PERIODIC	
NSPECTION TASKS PRIOR TO BOLTING (AISC 360-10 TABLE N5.	6-1 AND	AISC 341-10	TABLE J7-1)
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	1	Х	
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	1	Х	
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL		Х	INCLUDING GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	-	Х	
CONNECTING ELEMENTS MEET APPLICABLE REQUIREMENTS		Х	INCLUDING APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED
			BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER

ASSEMBLIES AND METHODS USED (NOT

REMARKS

INSTALLATION RESTRAINT/BRACING IS INSTALLED IN ACCORDANCE

WITH THE APPROVED TRUSS SUBMITTAL PACKAGE

INCLUDING PACKAGING AND EXPOSURE CONTROLS

CONTINUING WELDING

TEMPERATURE

VERIFY CRACKED TACK WELDS ARE REMOVED PRIOR TO

INCLUDING WIND SPEED WITHIN LIMITS AND PRECIPITATION AND

SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, SELECTED

APPLIED, INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.),

WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT

REQUIRED FOR SNUG-TIGHT JOINTS - AISC

			360-10 SECTION No.6(1))
PROPER STORAGE PROVIDED		Х	FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS
INSPECTION TASKS DURING BOLTING (AISC 360-10 TABLE N5.6-2 AND AISC 341-10 TABLE J7-2)			
			VERIFY FASTENERS PLACED IN ALL HOLES

PRE-INSTALLATION VERIFICATION TESTING

FASTENER ASSEMBLIES, OF SUITABLE CONDITION		Х	AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	1	Х	
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	1	Х	
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	1	Х	NOT REQUIRED FOR SNUG-TIGHT JOINTS - AISC 360-10 SECTION N5.6(1). NOT REQUIRED FOR PRETENSIONED JOINTS USING THE TURN-OF-THE NUT METHOD WITH MATCHMARKING TECHNIQUES, DIRECT-TENSION-INDICATOR METHOD, OR THE TWIST-OFF-TYPE TENSION CONTROL BOLT METHOD

INSPECTION TASKS AFTER BOLTING (AISC 360-10 TABLE N5.6-3 AND AISC 341-10 TABLE J7-3) DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED

STRUCTURAL WELDING (1705.2)

INSPECTION

FREQUENCY

	CONT.	PERIODIC	
INSPECTION TASKS PRIOR TO WELDING (AISC 360-	10 TABLE N5	5.4-1 AND AISC 341-10 TABLE J6-1)
WELDING PROCEDURE SPECIFICATIONS AVAILABLE	х		
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	х		
MATERIAL IDENTIFICATION (TYPE/GRADE)		Х	
WELDER IDENTIFICATION SYSTEM		Х	VERIFY THERE IS A SYSTEM IN PLACE TO IDENTIFY THE WELDS WHO HAS WELDED A JOINT OR MEMBER.
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)		х	VERIFY: JOINT PREPARATION, DIMENSIONS (ALIGNMENT, ROOT OPENIN ROOT FACE, BEVEL), CLEANLINESS (CONDITION OF STEEL SURFACES), TACKING (TACK WELD QUALITY AND LOCATION), BACKING TYPE AND FIT (IF APPLICABLE)
CONFIGURATION AND FINISH OF ACCESS HOLES		Х	
FIT-UP OF FILLET WELDS		Х	VERIFY: DIMENSIONS (ALIGNMENT, GAPS AT ROOT), CLEANLINESS (CONDITION OF STEEL SURFACES), TACKING (TACK WELD QUA AND LOCATION)
CHECK WELDING EQUIPMENT		Х	
INSPECTION TASKS DURING WELDING (A	ISC 360-1	O TABLE N5.	4-2 AND AISC 341-10 TABLE J6-2)
			VERIFY DURING CONSTRUCTION THAT THE TEMPORARY

PASTE OR MORTAR

	CONT,	PERIODIC	
GENERAL INSPECTION TASKS (AISC 360-10	SECTION	l N5.7)	
COMPLIANCE WITH THE DETAILS SHOWN ON THE SHOP DRAWINGS	Χ	1	VERIFY PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION; ERECTION OF STEEL FRAME AND DETAILS SUCH AS BRACES, STIFFENERS AND MEMBER LOCATIONS
PLACEMENT OF ANCHOR RODS AND OTHER STEEL SUPPORTING EMBEDDED ITEMS	Х		VERIFY THE DIAMETER, GRADE, TYPE AND LENGTH OF ANCHOR RODS OR EMBEDED ITEMS, AND THE EXTENT OF EMBEDMENT INTO THE CONCRETE

CONCRETE CONSTRUCTION (1705.3)

REMARKS

VERIFY REINFORCING IS OF SPECIFIED TYPE, GRADE, AND SIZE; REQUIRED EMBEDMENT LENGTHS, LAP LENGTHS, AND SPLICES ARE ACHIEVED AND STAGGERED, OFFSET OR SPACED AS INDICATED; REINFORCEMENT IS FREE OF ICE,

MUD, OIL, EXCESSIVE RUST OR OTHER

VERIFY MILL TEST REPORT OF MATERIAL

PROPERTIES FOR A706 BAR THAT DEMONSTRATE

VERIFY PLACEMENT PRIOR TO AND DURING CONCRETE PLACEMENT. INSPECTION SHALL OCCUR FOR CONDITIONS THAT INCLUDE, BUT ARE

NOT LIMITED TO, BRACED FRAMES, MOMENT

INSPECTOR SHALL BE QUALIFIED AND SHALL

RECOMMENDATIONS

RECOMMENDATIONS

REFERENCED STANDARDS

FRAMES, TENSION HOLDDOWNS, CANTILEVERED

VERIFY EMBEDMENT DEPTHS AND INSTALLATION

PROCEDURES CONFORM TO MANUFACTURERS

VERIFY EMBEDMENT DEPTHS AND INSTALLATION

VERIFY MIX DESIGN MEETS SPECIFIED STRENGTH

FABRICATE SPECIMENS IN ACCORDANCE WITH

VERIFY DEBRIS AND ICE IS REMOVED FROM

ORK TIMES AND TO AVOID SEGREGATION OR

ACHIEVE PROPER CONSOLIDATION ARE USED.

VERIFY CONCRETE MAINTAIN A TEMPERATURE OF

HIGH-EARLY-STRENGTH OR ACCELERATED CURING

S USED; FORMS, FILLERS, AND GROUND IS FREE

ROM FROST AND ICE AND CONCRETE MATERIALS

ARE PROTECTED FROM FREEZING AT TIME OF

TEMPERATURES AND EVAPORATION DURING HOT

ORMWORK SHALL NOT BE REMOVED FROM BEAMS

OGETHER TO MAINTAIN POSITION AND SHAPE AND

DEEMED UNACCEPTABLE REGARDLESS OF SIZE OR LOCATION

ILTRASONIC TESTING (UT) OR RADIOGRAPHIC TESTING (RT) SHALL

E PERFORMED. REDUCTION IN THE RATE OF UT IS PROHIBITED

S SUFFICIENTLY TIGHT TO INHIBIT LEAKAGE OF

OR SLABS UNTIL AN ESTIMATE OF IN-PLACE

CONCRETE STRENGTH HAS BEEN VERIFIED BY

PLACEMENT AND CURING; ADEQUATE

PROCEDURES ARE TAKEN TO LIMIT

WEATHER CONCRETE PLACEMENT.

TESTING OR OTHER PROCEDURES

VERIFY FORMWORK IS BRACED OR TIED

AT LEAST 50°F FOR THE FIRST 7 DAYS UNLESS

OSS OF MATERIAL. VERIFY SUITABLE MEANS TO

PLACEMENT IS AT A RATE TO PROVIDE SUFFICIENT | 1908.7, 1908.8

SPACES TO BE OCCUPIED BY CONCRETE:

AND EXPOSURE CLASS REQUIREMENTS

PROCEDURES CONFORM TO MANUFACTURERS

CONFORMANCE TO THE REQUIREMENTS OF AWS

TOLERANCES ARE ACHIEVED.

DELETERIOUS MATERIAL; REINFORCING SPLICES ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS OR THE MANUFACTURES

RECOMMENDATIONS (FOR MECHANICAL SPLICES); TIES, HOOKS, BENDS, AND SUPPLEMENTAL REINFORCING IS PROPERLY PLACED AND COVER

STANDARD

1BC1908.4

26.6.1-26.6.3

ACI 318:

ACI 318:

17.8.2

ACI 318:

17.8.2.4

ACI 318:

17.8.2

IBC 1904.1,

1908.2, 1908.3

ACI 318: CH.

19, 26.4.3, 26.4.4

IBC 1908.10

ASTM C172

ASTM C31,

ACI 318: 26.5,

26.12

IBC 1908.6,

ACI 318: 26.5

IBC 1908.9

ACI 318:

26.5.3-26.5.5

26.11.2

26.11.1.2(b)

INSPECTION

FREQUENCY

CONT. PERIODIC

TYPE

NSPECT REINFORCEMENT, INCLUDING

PRESTRESSING TENDONS, AND VERIFY

REINFORCING BAR WELDING:

MAXIMUM $\frac{5}{16}$ "

VERIFY WELDABILITY OF

INSPECT ALL OTHER WELDS

INSPECT ANCHORS CAST IN CONCRETE

INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS

ADHESIVE ANCHORS INSTALLED IN

INCLINED ORIENTATIONS TO RESIST

ADHESIVE ANCHORS NOT DEFINED

HORIZONTALLY OR UPWARDLY

SUSTAINED TENSION LOADS.

MECHANICAL ANCHORS AND

VERIFY USE OF REQUIRED DESIGN MIX

PRIOR TO CONCRETE PLACEMENT,

OF THE CONCRETE.

TECHNIQUES.

FABRICATE SPECIMENS FOR STRENGTH

INSPECT CONCRETE AND SHOTCRETE

VERIFY MAINTENANCE OF SPECIFIED

VERIFY IN-SITU CONCRETE STRENGTH,

PRIOR TO STRESSING OF TENDONS IN

BEAMS AND STRUCTURAL SLABS.

INSPECT FORMWORK FOR SHAPE,

SOILS CONSTRUCTION (1705.6)

DRAWINGS.

FILL MATERIAL TYPE

ACCORDANCE WITH ASTM D1557

REMARKS

VERIFY STRUCTURAL FILL IS PLACED (INCLUDING DEPTH AND

LIFTS) IN CONFORMANCE WITH THE CONTRACT DRAWINGS (IF

ASSUMPTIONS OF THE GEOTECHNICAL REPORT AND CONTRACT

VERIFY FROST DEPTH IS A ACHIEVED AND FOOTING AND SLAB

DEPTHS MEET THE REQUIREMENTS OF THE CONTRACT DRAWINGS

VERIFY FILL MATERIAL IS IN CONFORMANCE WITH THE SPECIFIED

VERIFY FILL MATERIAL PLACED AND COMPACTED IN ACCORDANCE WITH THE SPECIFIED REQUIREMENTS; THE MAXIMUM LIFT

THICKNESS AND THE IN-PLACE DRY DENSITY CONFORMS WITH THE

REPORT IS NOT PRESENT, IN-PLACE DRY DENSITY OF COMPACTED

FILL SHALL BE NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY

DRAWINGS AND SPECIFICATIONS. WHEN A GEOTECHNICAL

DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN

VERIFY SITE PREPARATION MEETS SPECIFIED REQUIREMENTS,

REQUIREMENTS DEEMED NECESSARY BY THE SOILS ENGINEER.

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 S

INCLUDING PROPER EXCAVATION DEPTH, REMOVAL OF ALL

DELETERIOUS MATERIALS, AND ANY OTHER SPECIFIC

REQUIRED) OR THAT THE NATIVE GROUND MEETS THE

WHERE INDICATED, INCLUDING FOOTING STEPS.

INSPECTION

FREQUENCY

CONT. PERIODIC

VERIFY MATERIALS BELOW SHALLOW

THE DESIGN BEARING CAPACITY

FOUNDATIONS ARE ADEQUATE TO ACHIEVE

VERIFY EXCAVATIONS ARE EXTENDED TO

PERFORM CLASSIFICATION AND TESTING OF

DENSITIES AND LIFT THICKNESSES DURING

PRIOR TO PLACEMENT OF COMPACTED FILL

INSPECT SUBGRADE AND VERIFY THAT SITE

PROPER DEPTH AND HAVE REACHED

VERIFY USE OF PROPER MATERIALS.

PLACEMENT AND COMPACTION OF

HAS BEEN PREPARED PROPERLY.

COMPACTED FILL MATERIALS

PROPER MATERIAL

COMPACTED FILL.

OCATION AND DIMENSIONS OF THE

CONCRETE MEMBER BEING FORMED.

POST-TENSIONED CONCRETE AND PRIOR

TO REMOVAL OF SHORES AND FORMS FROM

WELDED JOINTS SUBJECTED TO

FATIGUE

CURING TEMPERATURE AND TECHNIQUES.

PLACEMENT FOR PROPER APPLICATION

TESTS, PERFORM SLUMP AND AIR CONTENT

TESTS, AND DETERMINE THE TEMPERATURE

REINFORCING BARS OTHER THAN

INSPECT SINGLE-PASS FILLET WELDS,

EMBEDDED ITEMS	Χ		THE CONCRETE								
STEEL TESTING (1705.2)											
TYPE	SPECIAL INSPECTION FREQUENCY		REMARKS								
	CONT.	PERIODIC									
NONDESTRUCTIVE TESTING (AISC 360-10 S	SECTION	N5)									
COMPLETE JOINT PENETRATION (CJP) GROOVE WELDS	RISK CATEG ORY III AND IV STRUC TURES	RISK CATEGOR Y II STRUCTU RES	ULTRASONIC TESTING (UT) SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16" THICK OR GREATER. INCREASE TESTING RATE TO 100% FOR UNACCEPTABLE WELDS GREATER THAN 5% FOR A SAMPLING OF 20 WELDS. FOR RISK CATEGORY III OR IV STRUCTURES, UT SHALL BE PERFORMED ON ALL CJP WELDS.								
ACCESS HOLES (THERMALLY CUT)	Х		MAGNETIC PARTICLE TESTING (MT) OR PENETRANT TESTING (PT) SHALL BE PERFORMED WHEN THE FLANGE THICKNESS EXCEEDS 2 INCHES FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS EXCEEDS 2 INCHES FOR BUILT-UP SHAPES. ANY CRACK SHALL BE								

CRITERIA	Х	 CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, POROSITY					
ARC STRIKES	Х						
K-AREA	Х	 WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 INCHES OF TH WELD					

BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLET

WELDS ADDED (IF REQUIRED)			
REPAIR ACTIVITIES	Х	-	
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBERS	Х		

	CONTROL AND HANDLING OF WELDING CONSUMABLES
	NO WELDING OVER CRACKED TACK WELDS
	ENVIRONMENTAL CONDITIONS
EACH AILS SUCH AS	WELDING PROCEDURE
OF ANCHOR BEDMENT INTO	SPECIFICATIONS FOLLOWED
	WELDING TECHNIQUES
	INSPECTION TASKS AFTER WELDING (AI
	WELDS CLEANED
	SIZE, LENGTH AND LOCATION OF WELDS
N 10% OF CJP JBJECT TO ERIALS 5/16"	WELDS MEET VISUAL ACCEPTANCE CRITERIA
00% FOR	ARC STRIKES
AMPLING OF 20	

USE OF QUALIFIED WELDERS

PROPER POSITION (F, V, H, OH), INTERMIX OF FILLER METALS AVOIDED UNLESS APPROVED INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE **TECHNIQUES** LIMITATIONS, EACH PASS MEETS QUALITY REQUIREMENTS SKS AFTER WELDING (AISC 360-10 TABLE N5.4-3 AND AISC 341-10 TABLE J6-3) TH AND LOCATION OF INCLUDING CRACK PROHIBITION, WELD/BASE-METAL FUSION,

CON	ISTRU	JCTION (1705.2)
INSP	ECTION	REMARKS
CONT,	PERIODIC	
O SECTION	N N5.7)	
Х		VERIFY PROPER APPLICATION OF JOINT DETAILS AT EAC CONNECTION; ERECTION OF STEEL FRAME AND DETAILS BRACES, STIFFENERS AND MEMBER LOCATIONS
Х		VERIFY THE DIAMETER, GRADE, TYPE AND LENGTH OF AIRODS OR EMBEDDITEMS, AND THE EXTENT OF EMBEDITHE CONCRETE
EEL	TESTI	NG (1705.2)
INSP	ECTION	REMARKS
CONT.	PERIODIC	
SECTION	N5)	
RISK CATEG ORY III AND IV STRUC TURES	RISK CATEGOR Y II STRUCTU RES	ULTRASONIC TESTING (UT) SHALL BE PERFORMED ON 10 GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJE TRANSVERSELY APPLIED TENSION LOADING IN MATERIA THICK OR GREATER. INCREASE TESTING RATE TO 100% I UNACCEPTABLE WELDS GREATER THAN 5% FOR A SAMP WELDS. FOR RISK CATEGORY III OR IV STRUCTURES, UT PERFORMED ON ALL CJP WELDS.
	SP INSP FREC CONT. SECTION X X EEL SP INSP FREC CONT. SECTION RISK CATEG ORY III AND IV STRUC	SPECIAL INSPECTION FREQUENCY CONT, PERIODIC D SECTION N5.7) X X X SPECIAL INSPECTION FREQUENCY CONT. PERIODIC SECTION N5) RISK CATEG ORY III AND IV STRUCTU PES

2. SEE FOUNDATION AND EARTHWORK NOTES ON SHEET SOOI FOR MINIMUM

3. ALL SPOT FOOTINGS SHALL BE CENTERED UNDER WALLS AND COLUMNS

4. CARRY ALL COLUMN LOADS DOWN TO FOOTING OR FOUNDATION WALL.

─ EXISTING COLUMN

SCALE: 1/8" - 1'-0"

FILL REQUIRED BENEATH FOOTINGS.

DATE: 01/19/2022 REVISIONS

DRAWN BY: WM

PROJECT: 21-311

VICINI

MARK DATE / DESC.

FOUNDATION AND FLOOR FRAMING PLAN

SHEET NUMBER: **S101**

NOTES AND SYMBOLS LEGEND

INDICATES DETAIL REFERENCE NUMBER - INDICATES SHEET REFERENCE NUMBER

VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

SEE DETAILS 1/S511 AND 2/S511 FOR FRAMING AND AROUND OPENINGS.

FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES

FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.

FLOOR FRAMING NOTES

WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION,

ALL WIDE FLANGE TO WIDE FLANGE CONNECTIONS TO BE INSTALLED PER 3/S511, U.N.O.

STEEL COLUMN SCHEDULE FJ-1 W14X22 STEEL BASE STEEL BASE REMARKS PLATE SIZE PLATE TYPE PLATE FJ-2 W12X19 10"X0'-10"X1" UNO 1/4" U.N.O. FJ-3 W16X26 10"X0'-8"X1" UNO

NOTES:

MARK

SC-4A

SC-4B

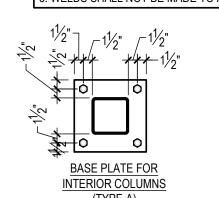
1. UNLESS NOTED OTHERWISE, ALL COLUMNS SHALL BE INSTALLED W/ (4) $\frac{3}{4}$ " DIAMETER A.B. W/ 3" (MIN.) HOOKS. PROJECT ANCHOR BOLTS 3" (MIN.) ABOVE THE TOP OF THE BASE PLATE. EMBEDMENT SHALL BE 9" (MIN.) ALL BOLTS SHALL BE INSTALLED W/ HARDENED WASHERS BENEATH THE NUT. ANY BOLT HOLES LARGER THAN THE BOLT DIAMETER PLUS $\frac{5}{16}$ " SHALL HAVE $\frac{5}{16}$ " PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.

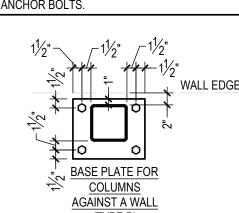
2. ALL BOLTS IN CAP PLATES SHALL BE $\frac{3}{4}$ " DIA. A325N BOLTS, TYPICAL UNO.

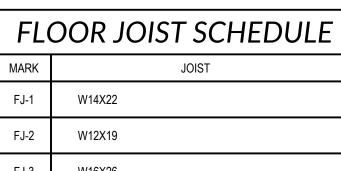
3. WELDS SHALL NOT BE MADE TO ANCHOR BOLTS.

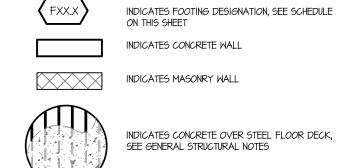
HSS4X4X3/16

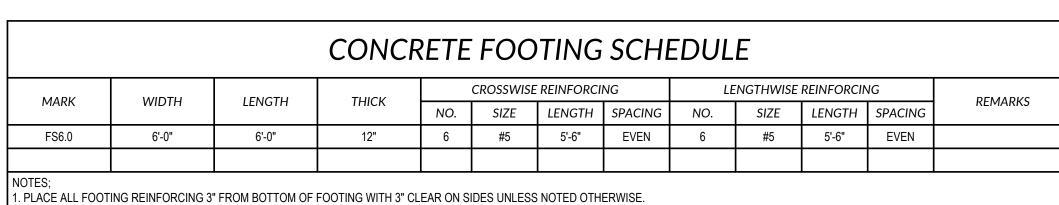
HSS4X4X3/16

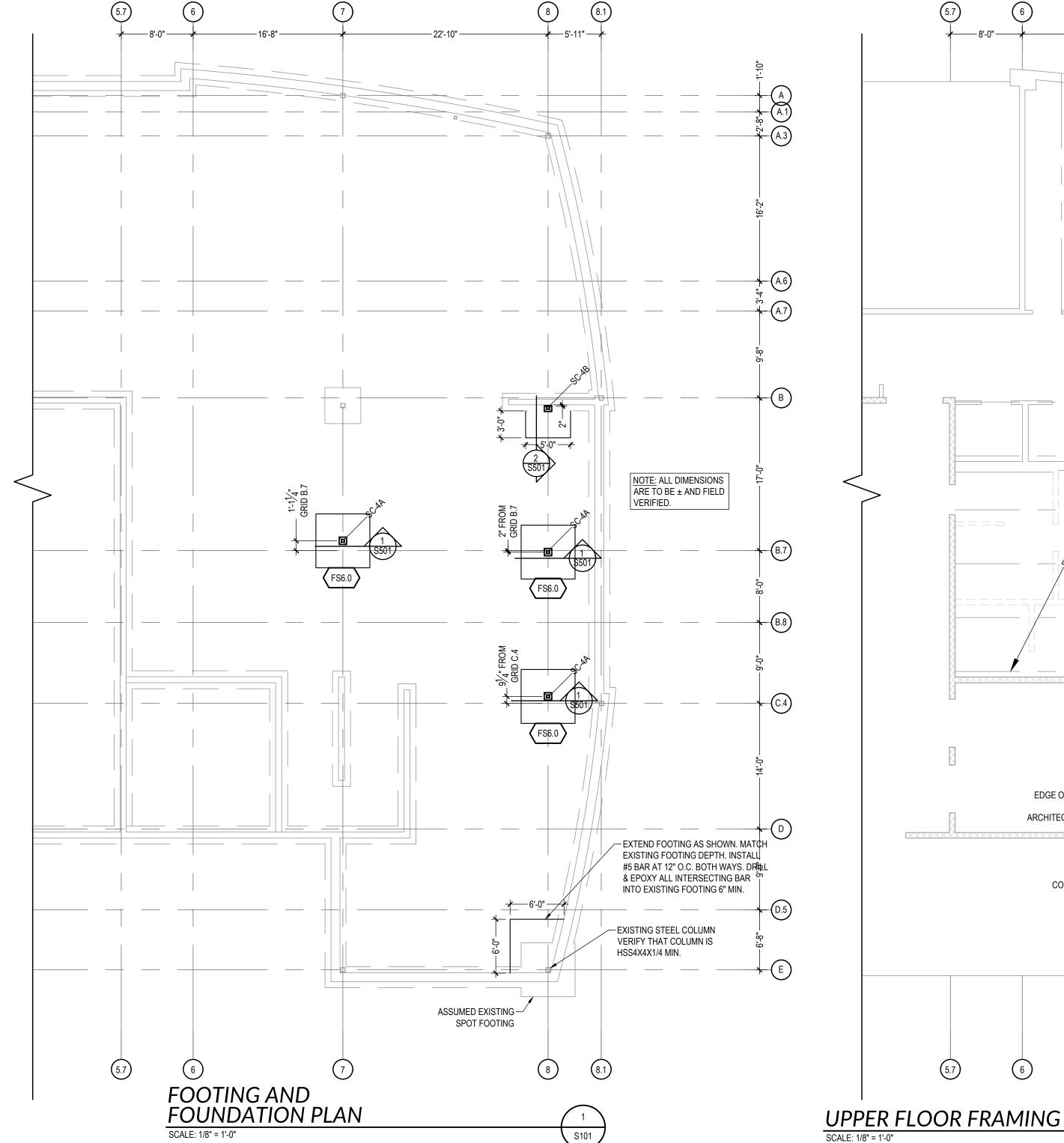












← CONTINUOUS LEDGER. REFER

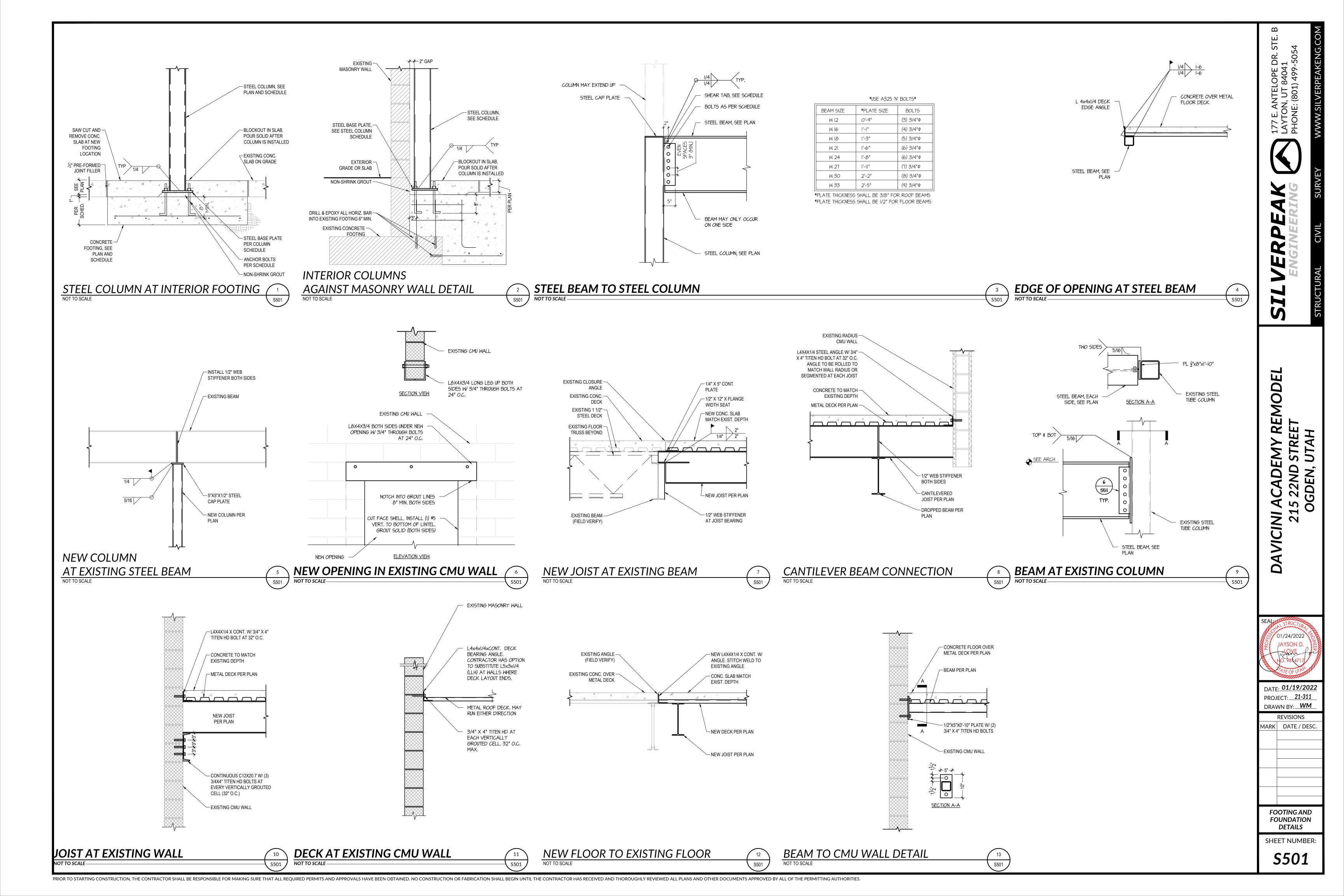
EDGE OF BEAM = EDGE OF -FLOOR. REFER TO

CONTINUOUS LEDGER.

REFER TO 10/S501

EXISTING COLUMN-

ARCHITECTURAL DRAWINGS



ELECTRICAL SYMBOLS

ABBREVIATIONS	3
CND	CDOLIND

AFF ABOVE FINISHED FLOOR (D) DEMOLISH/DELETE AFP ARC FAULT PROTECTOR E EMERGENCY AIC AMP INTERRUPTING CURRENT (SYMMETRICAL) (EX) EXISTING ALUMINUM EPO EMERGENCY POWER OFF BG BELOW GRADE EWC ELECTRIC WATER COOLER EWH ELECTRIC WATER HEATER CONDUIT

CKT CIRCUIT

CU COPPER

CO CONDUIT ONLY

CFCI CONTRACTOR FURNISHED CONTRACTOR INSTALLED (F) FUTURE FA FIRE ALARM FLA FULL LOAD AMPS GFI GROUND FAULT INTERRUPTER GFP GROUND FAULT PROTECTOR

GND GROUND GRC GALVANIZED RIGID CONDUIT

IG ISOLATED GROUND MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER MH MANHOLE

MLO MAIN LUGS ONLY (N) NEW NIC NOT IN CONTRACT NL NIGHT LIGHT

OFCI OWNER FURNISHED CONTRACTOR INSTALLED

OFOI OWNER FURNISHED OWNER INSTALLED

PNL PANEL (R) RELOCATE (RM) REMOVE AND RETURN TO OWNER

TR TAMPER RESISTANT TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR

TYP TYPICAL UNO UNLESS NOTED OTHERWISE

WP WEATHER PROOF

XMR TRANSFORMER

/W COMPLETE WITH THIS IS A TYPICAL ABBREVIATION LIST. NOT ALL ABBREVIATIONS ARE USED ON THIS PROJECT **GENERAL NOTES**

THE ELECTRICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND OTHER DRAWINGS PRIOR TO BID.

SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE SPECIFICATIONS IN A NEAT AND ORDERLY MANNER WITH TYPE AND MODEL NUMBERS INDICATED. SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO: LIGHTING FIXTURES, LAMPS, WIRING DEVICES. OCCUPANCY SENSORS. CONTACTORS. TIME CLOCKS. PHOTOCELLS. RELAYS. SWITCHBOARDS. PANELBOARDS, MOTOR CONTROL CENTERS, SAFETY SWITCHES, MOTOR STARTERS, OVERCURRENT PROTECTION DEVICES, TRANSFORMERS, CONDUCTORS OVER 600 VOLTS AND ALL SPECIAL SYSTEMS SUCH AS FIRE ALARM, LIGHTING CONTROLS, SECURITY SYSTEMS, SOUND SYSTEMS ETC.

IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. MANUFACTURES CATALOG NUMBERS ARE LISTED AS A BASIS OF DESIGN. ELECTRICAL CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION THAT DEVIATES FROM ORIGINAL DESIGN AND SPECIFICATION.

CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY BUILDING PERMITS AND INSPECTION FEES.

ALL IMPACT FEES ASSOCIATED WITH CITY, UTILITY OR SERVICE COMPANIES FOR BUT NOT LIMITED TO POWER, TELEPHONE, FIBER OPTIC & INTERNET SHALL BE THE RESPONSIBILITY OF THE OWNER.

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE AND INSTALL TEMPORARY POWER FOR PROJECT CONSTRUCTION AS REQUIRED. ALL ENERGY COSTS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

DO NOT SCALE DRAWINGS VERIFY DIMENSIONS IN FIELD PRIOR TO MAKING ANY ROUGH-INS.

ELECTRICAL CONTRACTOR SHALL REVIEW ALL ARCHITECTS ELEVATIONS, SECTIONS AND FLOOR PLANS PRIOR TO ROUGH IN OF ELECTRICAL DEVICE JUNCTION BOXES.

CONSULT ARCHITECTS REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF LIGHTING FIXTURES, SPEAKERS,

ELECTRICAL CONTRACTOR SHALL MEET WITH THE CEILING AND MECHANICAL CONTRACTORS TO COORDINATE LOCATIONS, CLEARANCES, CEILING TYPES AND ROUGH-IN REQUIREMENTS OF ALL LIGHTING FIXTURES PRIOR TO DUCT. PIPING AND CEILING INSTALLATIONS.

. VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.

ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH-INS. CONSULT CONTRACT DOCUMENT DRAWINGS AND SHOP DRAWINGS TO VERIFY AND MAINTAIN REQUIRED CLEARANCES.

ELECTRICAL ROOM DRAWINGS ARE FOR REFERENCE ONLY OF EQUIPMENT QUANTITIES. ELECTRICAL CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ELECTRICAL ROOM SHOWING DIMENSIONS AND CLEARANCES OF ALL EQUIPMENT AND ELECTRICAL GEAR PROVIDED. COORDINATE LAYOUT WITH ONE-LINE

14. CONTRACTOR SHALL VERIFY ACTUAL ELECTRICAL LOADS FROM NAMEPLATE RATINGS OF EACH PIECE OF EQUIPMENT REQUIRING POWER. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE PROJECT ENGINEER.

5. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER, PER INDUSTRY STANDARD AND TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.

6. WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE AND

NATIONAL CODES, STANDARDS AND ORDINANCES,

FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND APPROVED WIRING DIAGRAMS AND DETAILS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE

ALL MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED. 18. ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A 200LB RATED PULL CORD INSTALLED AND SHALL BE IDENTIFIED AT EACH JUNCTION, PULL AND TERMINATION POINT, USING PERMANENT MARKER IN THE BOX, ID SHALL INDICATE INTENDED USE OF CONDUIT, ORIGINATION AND TERMINATION POINTS OF EACH INDIVIDUAL

19. ALL PENETRATIONS OF FIRE RATED FLOORS, CEILING AND WALLS SHALL BE SEALED WITH UL LISTED AND RATED FIRE STOP MATERIAL TO MAINTAIN FIRE RATING OF ASSEMBLY.

. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY OR CONCRETE COLUMNS, BOND BEAMS OR GROUTED CELLS OF MASONRY WALLS ADJACENT TO OPENINGS WITHOUT COORDINATION WITH THE MASONRY

WIRE FOR GENERAL USE SHALL BE COPPER 75° C RATED. WIRING FOR HID FIXTURES WITHIN 3" OF FLUORESCENT BALLAST SHALL BE COPPER, MINIMUM 90° C RATED. CONDUCTOR SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30° C AMBIENT TEMPERATURE ENVIRONMENT, CONDUCTOR AMPACITY SHALL BE DERATED FOR HIGHER AMBIENT INSTALLATIONS.

CONDUCTORS HAVE BEEN SIZED FOR VOLTAGE DROP AS PER PLANS AND DIRECT ROUTING. ANY DEVIATION IN CONDUIT ROUTING MAY INCREASE THE WIRE AND CONDUIT SIZE. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO INSURE PROPER OPERATING VOLTAGE ON ALL CIRCUITS BOTH INTERIOR AND EXTERIOR. THE VOLTAGE TOGETHER OF BRANCH AND FEEDER CIRCUITS TO THE FARTHEST OUTLET.

3. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL UTILITY METERING EQUIPMENT TO COMPLY WITH THE STANDARDS OF THE LOCAL OR PROJECT SPECIFIC POWER COMPANY.

. VERIFY EXACT LOCATIONS OF ALL NEW AND EXISTING UNDERGROUND SITE UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. A UTILITY LOCATING COMPANY SUCH AS "BLUE STAKE" OR EQUAL SHALL BE USED TO VERIFY AND MARK UTILITIES BEFORE TRENCHING. PROVIDE NECESSARY TRENCHING. BACKFILL EXCAVATION, SUPPORTS, SERVICE FEEDERS, (CONDUIT AND/OR WIRE), PULL BOXES, TRANSFORMER PADS, SAW CUTTING AND PATCHING, CONCRETE PAVING ETC. REQUIRED. BACKFILL TRENCHES TO 90% COMPACTION. PATCHING SHALL MATCH EXISTING SURROUNDING SURFACES. CONTRACTOR SHALL OBTAIN AND VERIFY UTILITY COMPANY DRAWINGS AND REQUIREMENTS FOR ALL SITE UTILITIES. ELECTRICAL CONTRACTOR SHALL ALSO COORDINATE ELECTRICAL RELATED UTILITIES WITH THE CIVIL, MECHANICAL, AND SITE EXCAVATION

25. PULLBOXES, CABINETS, ETC. MOUNTED ON THE EXTERIOR OF THE BUILDING SHALL BE WEATHERPROOF TYPE WITH HINGED GASKETED LOCKABLE COVERS SECURED WITH TAMPERPROOF SCREWS.

26. SPLICES IN EXTERIOR PULLBOXES AND MANHOLES SHALL BE MADE WATERPROOF USING "SCOTCAST" SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS ENTERING BOXES WITH "DUCTSEAL" OR

. ELECTRICAL CONTRACTOR SHALL TEST AND VERIFY ALL SYSTEMS WITH PROJECT ENGINEER DURING FINAL INSPECTION TO INSURE PROPER OPERATION. IF TESTS RESULT IN DEFECT THE CONTRACTOR SHALL MAKE ANY CORRECTIONS NECESSARY AT NO ADDITIONAL COSTS TO THE OWNER.

28. PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

29. THE CONTRACTOR SHALL GUARANTEE THE INSTALLATION AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP, WHICH MAY OCCUR UNDER NORMAL USAGE FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION. DEFECTS SHALL BE PROMPTLY CORRECTED.

DRAWING INDEX

ELECTRICAL SYMBOLS & NOTES DEMOLITION ELECTRICAL PLANS LEVEL 1 NEW ELECTRICAL PLAN

LEVEL 2 NEW ELECTRICAL PLAN

ELECTRICAL SCHEDULES

ELECTRICAL DETAILS

ELECTRICAL SPECIFICATIONS

SECTION 16000 - GENERAL PROVISIONS

WORK CONSISTS OF FURNISHING LABOR, MATERIALS, FOUIPMENT AND SERVICES REQUIRED FOR THE COMPLETE INSTALLATION OF ELECTRICAL WORK SHOWN IN THE CONTRACT DOCUMENTS AND SPECIFIED IN DIVISION 16.

INCLUDE ALL PARTS AND LABOR, WHICH ARE INCIDENTAL AND NECESSARY FOR A COMPLETE AND OPERABLE INSTALLATION EVEN THOUGH NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS SUCH ITEMS. INCLUDE NUTS, BOLTS, ANCHORS, BRACKETS, SLEEVES, OFFSETS IN CONDUIT, FITTINGS, RELAYS, ETC.

REQUEST INSPECTIONS AS REQUIRED BY REGULATING AGENCIES AND/OR REGULATIONS. PAY ALL CHARGES FOR INSPECTIONS BY REGULATING AGENCIES OF INSTALLATIONS OF PLANS AND SPECIFICATIONS.

INCLUDE STATE AND LOCAL SALES TAXES IN THE BID, KEEP ACCURATE RECORDS OF THESE TAXES AND FURNISH SUCH RECORDS TO THE OWNER

MEET OR EXCEED ALL CURRENT APPLICABLE CODES, ORDINANCES AND REGULATIONS FOR ALL INSTALLATIONS, PROMPTLY NOTIFY THE ENGINEER IN WRITING, IF THE CONTRACT DOCUMENTS APPEAR TO CONFLICT WITH GOVERNING CODES AND REGULATIONS. CONTRACTOR ASSUMES ALL RESPONSIBILITY AND COSTS FOR CORRECTING NON-COMPLYING WORK INSTALLED WITHOUT NOTIFYING THE ENGINEER.

HIGHER QUALITY OF WORKMANSHIP AND MATERIALS INDICATED IN THE CONTRACT DOCUMENTS TAKES PRECEDENCE OVER THAT ALLOWED IN REFERENCED CODES AND STANDARDS.

THE TERMS DEFINED BELOW APPLY TO ALL WORK INCLUDED IN DIVISION 16. a. THE WORK - AS DEFINED IN THE 1997 AIA DOCUMENT A201: "THE TERM "WORK" MEANS THE CONSTRUCTION AND SERVICES REQUIRED BY THE CONTRACT DOCUMENTS WHETHER COMPLETED OR PARTIALLY COMPLETED, AND INCLUDES ALL OTHER LABOR, MATERIALS EQUIPMENT AND SERVICES PROVIDED OR TO BE PROVIDED BY THE CONTRACTOR TO FULFILL THE CONTRACTORS OBLIGATIONS. THE WORK

MAY CONSTITUTE THE WHOLE OR A PART OF THE PROJECT". b. FURNISH - TO OBTAIN IN NEW CONDITION READY FOR INSTALLATION

INTO THE WORK,

c. INSTALL - TO STORE, SET IN PLACE, CONNECT AND PLACE INTO OPERATION INTO THE WORK.

TERMINATIONS, ETC

INSTALLATION.

SUBMITTING A BID.

d. PROVIDE - TO FURNISH AND INSTALL e. CONNECT - TO BRING SERVICE TO THE EQUIPMENT AND MAKE FINAL

f. CONDUIT - INCLUDES IN ADDITION TO CONDUIT, ALL FITTINGS, PULL BOXES, HANGERS AND OTHER SUPPORTS AND ACCESSORIES RELATED

ATTACHMENT INCLUDING NECESSARY SWITCHES, OUTLETS, BOXES,

g. CONCEALED - HIDDEN FROM SIGHT IN CHASES, FURRED SPACES,

SHAFTS, HUNG CEILINGS, EMBEDDED IN CONSTRUCTION, IN CRAWL

SPACES OR BURIED. h. EXPOSED - NOT INSTALLED UNDERGROUND NOR CONCEALED AS

THE DRAWINGS AND SPECIFICATIONS CONSTITUTE THE CONTRACT DOCUMENTS, ANY ITEM NOTED IN THE SPECIFICATION OR SHOWN ON THE DRAWINGS IS INCLUDED IN THE CONTRACT DOCUMENTS.

ALL ELECTRICAL DETAILS AND DRAWINGS ARE DIAGRAMMATIC. UNLESS SPECIFICALLY NOTED. FIELD VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES, IN WRITING, PRIOR TO

INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY PRECAUTIONS REQUIRED WITH THIS WORK IN ACCORDANCE WITH THE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND OTHER

DO NOT REMOVE OR DISTURB ANY ASBESTOS CONTAINING MATERIALS. FROM THE PROJECT. IMMEDIATELY STOP WORK AND NOTIFY THE TENANT IF ASBESTOS CONTAINING MATERIALS ARE SUSPECTED.

BEFORE SUBMITTING A PROPOSAL ON THE WORK CONTEMPLATED, EXAMINE THE SITE OF THE PROPOSED WORK AND BECOME THOROUGHLY FAMILIAR WITH EXISTING CONDITIONS AND LIMITATIONS NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF MISUNDERSTANDING AS TO THE AMOUNT OF WORK INVOLVED NOR BIDDERS LACK OF KNOWLEDGE OF EXISTING CONDITIONS WHICH COULD HAVE BEEN DISCOVERED OR REASONABLY ANTICIPATED PRIOR TO BIDDING.

CONDUITS, PIPES, DUCTS, LIGHTS, DEVICES, SPEAKERS, ETC., SHOWN ON THE DRAWINGS AS EXISTING HAVE BEEN BASED ON THE EXISTING PLANS AND MAY NOT BE INSTALLED AS ORIGINALLY SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO VISIT THE SITE AND MAKE EXACT DETERMINATION OF THE EXISTENCE, LOCATION AND CONDITION OF SUCH FACILITIES PRIOR TO

CONSULT THE DRAWINGS AND SPECIFICATIONS OF MECHANICAL AND OTHER TRADES FOR CORRELATING INFORMATION AND LAY OUT WORK SO THAT IT WILL COORDINATE WITH OTHER TRADES. VERIFY DIMENSIONS AND CONDITIONS (I.E., FINISHED CEILING HEIGHTS, FOOTING AND FOUNDATION ELEVATIONS, BEAM DEPTHS, ETC). WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS THAT CANNOT BE RESOLVED, IN THE FIELD, BY AFFECTED TRADES. REPLACEMENT OF WORK DUE TO LACK OF COORDINATION AND FAILURE TO VERIFY EXISTING CONDITIONS WILL BE COMPLETED AT NO COST TO THE OWNER.

INSTALL ALL CONDUIT, CABLE TRAY, BUSDUCT, EQUIPMENT, ETC. ALLOWING PROPER CODE AND MAINTENANCE CLEARANCES AND TO AVOID BLOCKING PASSAGEWAYS AND ACCESS PANELS.

WHERE WORK MUST BE REPLACED DUE TO FAILURE OF THE CONTRACTOR TO VERIFY THE CONDITIONS EXISTING ON THE JOB, SUCH REPLACEMENT MUST BE ACCOMPLISHED AT NO COST TO THE OWNER, THIS APPLIES TO SHOP FABRICATED WORK AS WELL AS TO WORK FABRICATED IN PLACE.

THROUGHOUT THE COURSE OF THE WORK, MINOR CHANGES AND ADJUSTMENTS TO THE INSTALLATION MAY BE REQUESTED BY THE ENGINEER. THE CONTRACTOR SHALL MAKE ADJUSTMENTS WITHOUT ADDITIONAL COST TO THE OWNER, WHERE SUCH ADJUSTMENTS ARE NECESSARY TO THE PROPER INSTALLATION AND OPERATION WITHIN THE INTENT OF THE CONTRACT DOCUMENTS. THIS DOES NOT INCLUDE WORK ALREADY

OBTAIN EXACT LOCATION OF CONNECTION TO EQUIPMENT, FURNISHED BY OTHERS, FROM THE PERSON FURNISHING THE EQUIPMENT. DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN EITHER ONE IS AS BINDING AS IF CALLED FOR IN BOTH.

INCLUDE THE BETTER QUALITY, GREATER QUANTITY OR HIGHER COST FOR AN ITEM OR ARRANGEMENT WHERE A DISAGREEMENT EXISTS IN THE DRAWINGS AND SPECIFICATIONS.

GUARANTEE AND MAINTAIN THE STABILITY OF WORK AND MATERIALS AND KEEP SAME IN PERFECT REPAIR AND CONDITION FOR THE PERIOD OF ONE (1) YEAR AFTER THE FINAL COMPLETION OF THE WORK AS EVIDENCED BY ISSUANCE OF THE FINAL CERTIFICATE BY THE OWNER.

DEFECTS OF ANY KIND DUE TO FAULTY WORK OR MATERIALS APPEARING DURING THE ABOVE MENTIONED PERIOD MUST BE IMMEDIATELY MADE GOOD BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE ENTIRE SATISFACTION OF THE OWNER. INCLUDE DAMAGE TO THE FINISH OR THE

BUILDING RESULTING FROM THE ORIGINAL DEFECT OR REPAIRS. REPLACE ALL RECEPTACLES, SWITCHES, COVERPLATES, ETC. DAMAGED BY ANY CONTRACTOR DURING THE COURSE OF CONSTRUCTION.

MATERIALS FURNISHED FOR THE TEMPORARY LIGHT AND POWER SYSTEM REMAIN CONTRACTORS PROPERTY. REMOVE WHEN THERE IS NO LONGER ANY NEED FOR TEMPORARY LIGHT AND POWER.

COORDINATE/SCHEDULE ALL WORK WITH THE OWNER TO MINIMIZE ANY DISRUPTIONS. CONFINE ALL INTERRUPTIONS TO THE SMALLEST POSSIBLE AREA. PROVIDE TEMPORARY CONNECTIONS IF REQUIRED TO PROVIDE CONTINUITY OF SERVICE.

INSPECT ALL AREAS AFFECTED BY THE INTERPLIPTIONS AND RETURN ALL AUTOMATICALLY CONTROLLED FOUIPMENT, ELECTRICALLY OPERATED.

EQUIPMENT TO THE SAME OPERATING CONDITION PRIOR TO THE DO NOT DISTURB NORMAL USE OF THE FACILITY, EXCEPT WITHIN THE IMMEDIATE CONSTRUCTION AREA. KEEP WALKS, DRIVEWAYS, ENTRANCES, ETC. FREE AND CLEAR OF EQUIPMENT, MATERIAL AND DEBRIS.

MINIMIZES CONGESTION AND IS APPROVED BY THE OWNER. PROVIDE NEW MATERIAL AND EQUIPMENT, UNLESS NOTED OTHERWISE PROTECT EQUIPMENT AND MATERIAL FROM DAMAGE, DIRT AND THE

STORE ALL EQUIPMENT AND MATERIAL IN A PLACE AND MANNER THAT

PROVIDE THE HIGHEST QUALITY WORKMANSHIP AND PERFORM ALL WORK ONLY BY SKILLED MECHANICS, INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, INSTRUCTIONS AND CURRENT NECA STANDARDS.

THE OWNER RESERVES THE RIGHT TO REJECT MATERIAL OR WORKMANSHIP NOT IN ACCORDANCE WITH THE SPECIFICATIONS, BEFORE OR AFTER

PERFORM ALL CUTTING AND PATCHING NECESSARY TO WORK, UNLESS SPECIFICALLY DELEGATED TO THE GENERAL CONTRACTOR, OBTAIN SPECIAL PERMISSION FROM THE LANDLORD BEFORE CUTTING STRUCTURAL MEMBERS OR FINISHED MATERIAL. PERFORM ALL PATCHING IN SUCH A MANNER AS TO LEAVE NO VISIBLE TRACE AND RETURN THE AREA AFFECTED TO THE CONDITION OF UNDISTURBED WORK. PERFORM ALL PATCHING BY WORKERS EXPERIENCED, SKILLED, AND LICENSED FOR THE PARTICULAR TYPE OF WORK INVOLVED. INFERIOR WORK WILL NOT BE

PATCH ALL HOLES LEFT AS A RESULT OF DEMOLITION OF ELECTRICAL EQUIPMENT AND DEVICES.

PREVENT THE SPREAD OF DUST, DEBRIS, AND OTHER MATERIAL INTO ADJACENT AREAS.

REFINISH ALL ELECTRICAL EQUIPMENT DAMAGED DURING SHIPPING AND/OR INSTALLATION TO ITS ORIGINAL CONDITION, REMOVE ALL RUST; PRIME, AND PAINT PER MANUFACTURERS RECOMMENDATIONS FOR FINISH EQUAL TO

AFTER TESTS HAVE BEEN MADE AND ACCEPTED, CLEAN LIGHT FIXTURES, PANELS AND OTHER EQUIPMENT INSTALLED BY THE CONTRACTOR, LEAVING THE ENTIRE WORK AREA IN A CLEAN AND COMPLETE WORKING ORDER.

VERIFY PROPER OPERATION, PRIOR TO FINAL INSPECTION AND OWNER INSTRUCTIONS. NOTIFY THE ENGINEER, IN WRITING, THAT ALL SYSTEMS HAVE BEEN TESTED AND ARE FUNCTIONING AND OPERATING PROPERLY.

OPERATE FOUIPMENT AND SYSTEMS IN ALL THEIR OPERATING MODES. TO

CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ELECTRICAL EQUIPMENT OR MATERIALS UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER.

PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS, INCLUDING TELEPHONE AND DATA SYSTEMS, IN SERVICE DURING CONSTRUCTION, WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.

EXISTING ELECTRICAL SERVICE: MAINTAIN EXISTING SYSTEM IN SERVICE DISABLE SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS, NOTIFY AND OBTAIN PERMISSION FROM OWNER/ENGINEER AT LEAST 24 HOURS BEFORE PARTIALLY OR DISABLING SYSTEM. MINIMIZE OUTAGE DURATION. MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA.

EXISTING TELEPHONE, DATA, CCTV & SECURITY SYSTEM MAINTAIN EXISTING SYSTEMS IN SERVICE. DEMOLISH AND EXTEND EXISTING ELECTRICAL WORK UNDER AND THIS

SECTION, AND AS INDICATED ON THE DRAWINGS. REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.

PROVIDE SUPPORTS FOR ALL EXISTING ELECTRICAL EQUIPMENT THAT WAS

SUPPORTED PREVIOUSLY BY DEMOLISHED WALLS, FLOORS, CEILING OR

OTHER STRUCTURES. PROVIDE NEW SUPPORTS FROM STRUCTURAL MEMBERS NOT SLATED FOR DEMOLITION, PRIOR TO ANY DEMOLITION. OWNER RESERVES THE RIGHT OF FIRST REFUSAL TO OBTAIN MATERIAL SHOWN TO BE REMOVED UNDER THIS CONTRACT. ITEMS NOT RETAINED BY

THE OWNER BECOME THE PROPERTY OF THE CONTRACTOR AND MUST BE REMOVED FROM THE PREMISES. EXTEND EXISTING INSTALLATIONS LISING MATERIALS AND METHODS COMPATIBLE WITH EXISTING ELECTRICAL INSTALLATIONS, OR AS SPECIFIED RELOCATE AND REROUTE CONDUIT AND WIRING AS REQUIRED FOR CONDUIT CONCEALED IN WALLS OR STRUCTURE BEING ALTERED AS PART OF THE

REMODELING, MAINTAIN CONTINUITY TO ALL DEVICES IN AND DOWNSTREAM

OF REMODELED WORK. REROUTE EXISTING RACEWAY AND WIRING, WHICH IS EXPOSED DUE TO REMOVAL OF EXISTING CONSTRUCTION. CONCEAL NEW RACEWAY AND

WIRING AND MAINTAIN OPERATION.

SECTION 16050 - BASIC MATERIALS AND METHODS ENCASE ALL CONDUCTORS IN A CONTINUOUS RACEWAY SYSTEM, PROVIDE PULL AND JUNCTION BOXES AS REQUIRED BY THE NEC. SIZE ALL RACEWAY PER THE NEC WITH OVERSIZED CONDUITS AS INDICATED.

PROVIDE JUNCTION BOXES OR GUTTER AT BRANCH PANEL AND ROUTE EMT CONDUIT INTO PANELBOARD.

PROVIDE EXPANSION FITTINGS WHERE RACEWAY CROSSES BUILDING EXPANSION JOINTS.

RUN ALL EXPOSED CONDUIT IN A NEAT, WORKMANLIKE MANNER PARALLEL TO THE BUILDING LINES. TIGHT TO THE WALL AND CEILING SURFACES. AND FIRMLY SUPPORT WITH CONDUIT CLAMPS OR HANGERS, PROVIDE TWO (2) HOLE MOUNTING STRAPS, MINIMUM THREE (3) FEET ON CENTER, FOR ALL SURFACE CONDUIT MOUNTED ON WALLS LESS THAN SIX (6) FEET ABOVE FINISHED FLOOR. PLACE CONDUITS AT LEAST 8" AWAY FROM ALL HOT PIPING AND SURFACES INCLUDING DOMESTIC HOT WATER LINES.

PROVIDE GALVANIZED CODE GAUGE STEEL JUNCTION AND PULL BOXES WITH SCREW ON COVERS OF TYPE, SHAPE AND SIZE REQUIRED TO SUIT EACH INSTALLATION, PROVIDE GASKETING IN DAMP AND DUSTY LOCATIONS.

PROVIDE 4" BOXES THROUGHOUT. PROVIDE 3-1/2" DEEP BOXES WHERE INSTALLED IN MASONRY, 2-1/2" MINIMUM ELSEWHERE. VAPOR TIGHT GANG MUD OR TILE RING FOR SINGLE DEVICES.

COORDINATE THE LOCATION OF ALL OUTLETS WITH MECHANICAL DRAWINGS BEFORE INSTALLATION.

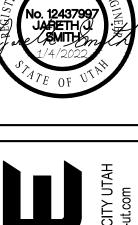
PROVIDE WIRE AND CABLE WITH INSULATION VOLTAGE RATING EQUAL TO OR GREATER THAN THE APPLIED SYSTEM VOLTAGE, PROVIDE SOLID OR STRANDED COPPER CONDUCTORS WITH TYPE THWN. THHN. OR XHHW INSULATION FOR NO. 12 AWG AND NO. 10 AWG CONDUCTORS, PROVIDE MINIMUM NO. 12 AWG CONDUCTOR SIZE, UNLESS NOTED OTHERWISE. USE THE MINIMUM CONDUCTOR SIZE WHEN NO SIZE IS INDICATED. ALL CONDUCTORS TO BE COLOR-CODED.

SECTION 16501 - BUILDING LIGHTING

PROVIDE LIGHTING FIXTURES AS SCHEDULED C/W HOUSING LAMPS, LAMP HOLDERS, REFLECTORS, BALLASTS & WIRING. FLUORESCENT LAMP BALLAST FOR T8 & T5 LAMPS SHALL BE ELECTRONIC CBM

CERTIFIED W/ THD LESS THAN 20% RAPID START. SUPPORT ALL RECESSED LIGHTING FIXTURES W/ 4 # 12GA. WIRES INDEPENDENT FROM CEILING SUPPORT SYSTEM.









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REVISIONS:	DESCRIPTION					
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						_

SEE DWG. SCALE.. J.SMITH DRAWN.. J.SMITH CHECKED. 21275.01 JOB NO.

1/4/2022

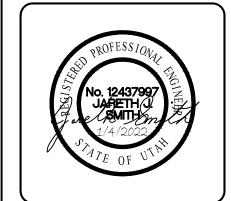
SHEET TITLE **ELECTRICAL** SYMBOLS &

SHEET NO.

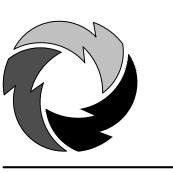
KEYED NOTES ((#)):

3-LAMP 48" 32-WATT T8 FLUORESCENT, 18-CELL
PARACUBE TROFFER. RE-LAMP AND RE-BALLAST TO
LIKE-NEW CONDITIONS PRIOR TO RE-USING. ANY
LUMINAIRES NOT RE-USED SHALL BE RETURNED TO

ONALES.

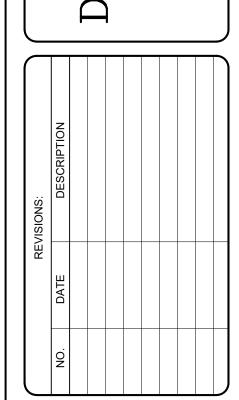






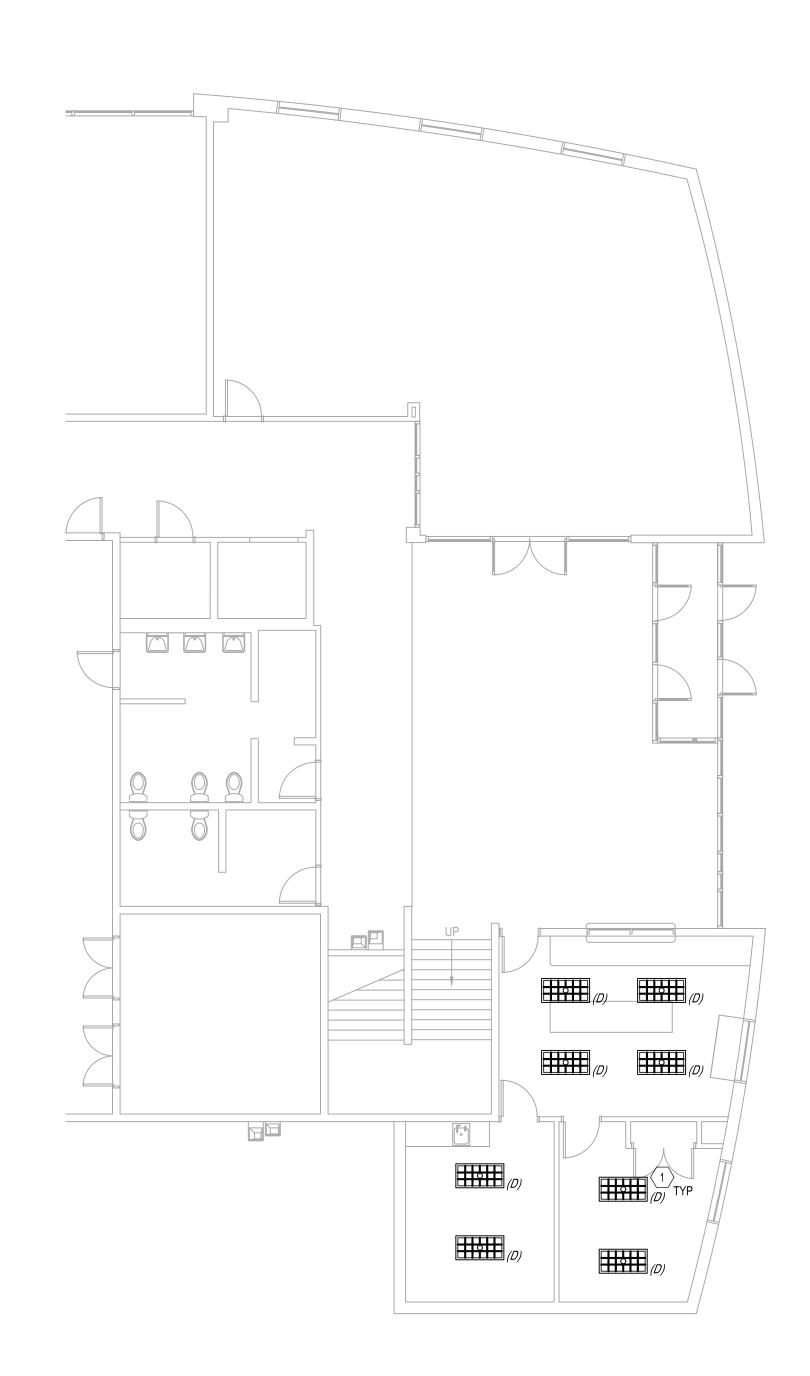
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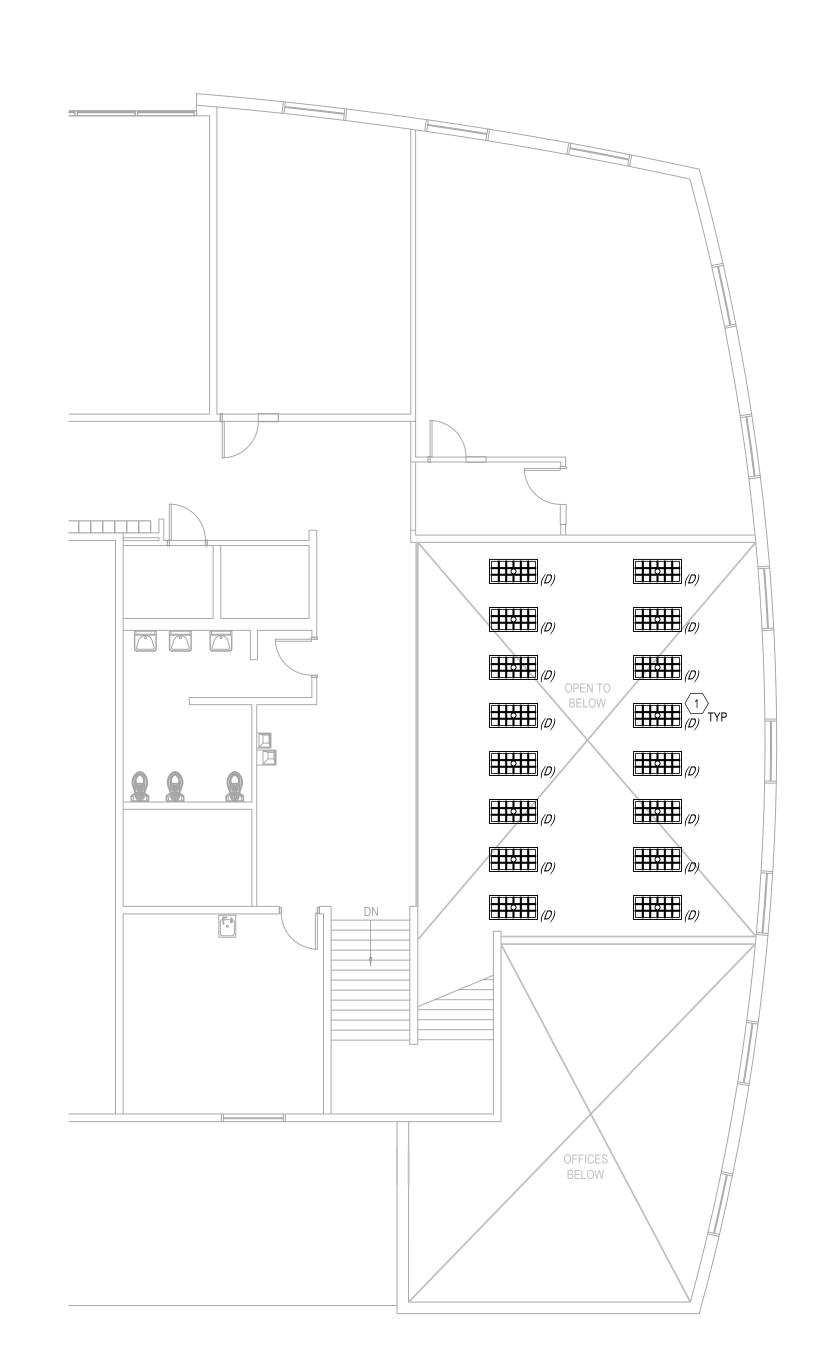
ACADEMY \mathcal{O}



SHEET TITLE

DEMOLITION ELECTRICAL PLANS



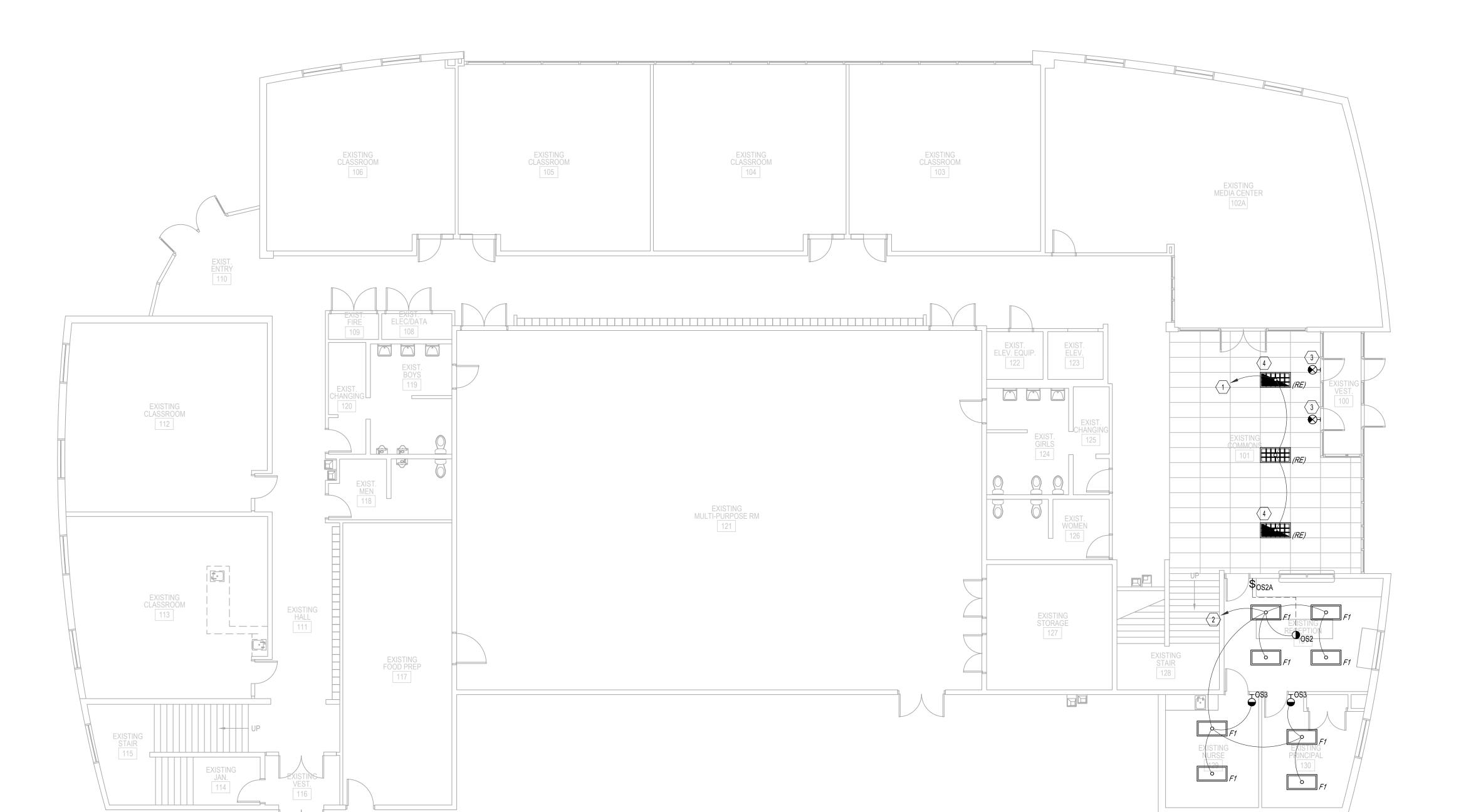


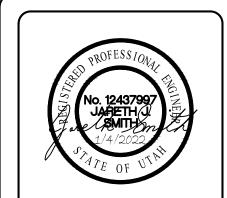
GENERAL NOTES:

- A. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING ELECTRICAL DEVICES AND LUMINAIRES WITHIN SCOPE OF WORK PRIOR TO BEGINNING NEW WORK. RE-CONNECT ALL CIRCUITS AS NEEDED AND ENSURE DESIGN INTEGRITY OF SPACES WHICH ARE EXISTING-TO-REMAIN.
- B. LIGHTING IN ALL SPACES HAS BEEN DESIGNED IN ACCORDANCE WITH THE STATE HEALTH DEPARTMENT CODE R392-200-8 TABLE 1.

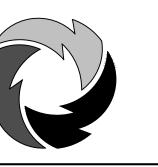
KEYED NOTES (#):

- CONNECT RELOCATED COMMONS LIGHTING TO EXISTING 277-VOLT CORRIDOR CIRCUIT.
- 2. CONNECT NEW RECEPTION & OFFICES LIGHTING TO EXISTING CIRCUIT.
- NEW EXIT SIGN TO MATCH EXISTING. TIE INTO EXISTING UN-SWITCHED EMERGENCY LIGHTING CIRCUIT.
- 4. PROVIDE POWER SENTRY #PS1400QD-MVOLT EMERGENCY FLUORESCENT BATTERY PACK WITH POWER SENTRY #ELA-TSPLP REMOTE TEST SWITCH PILOT LIGHT FOR RELOCATED PARABOLIC TROFFER. SEE DETAIL D ON E401 FOR WIRING.









ACADEMY REMOD
15 22ND STREET

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REVISIONS:	DESCRIPTION				
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SHEET TITLE

LEVEL 1 NEW ELECTRICAL PLAN

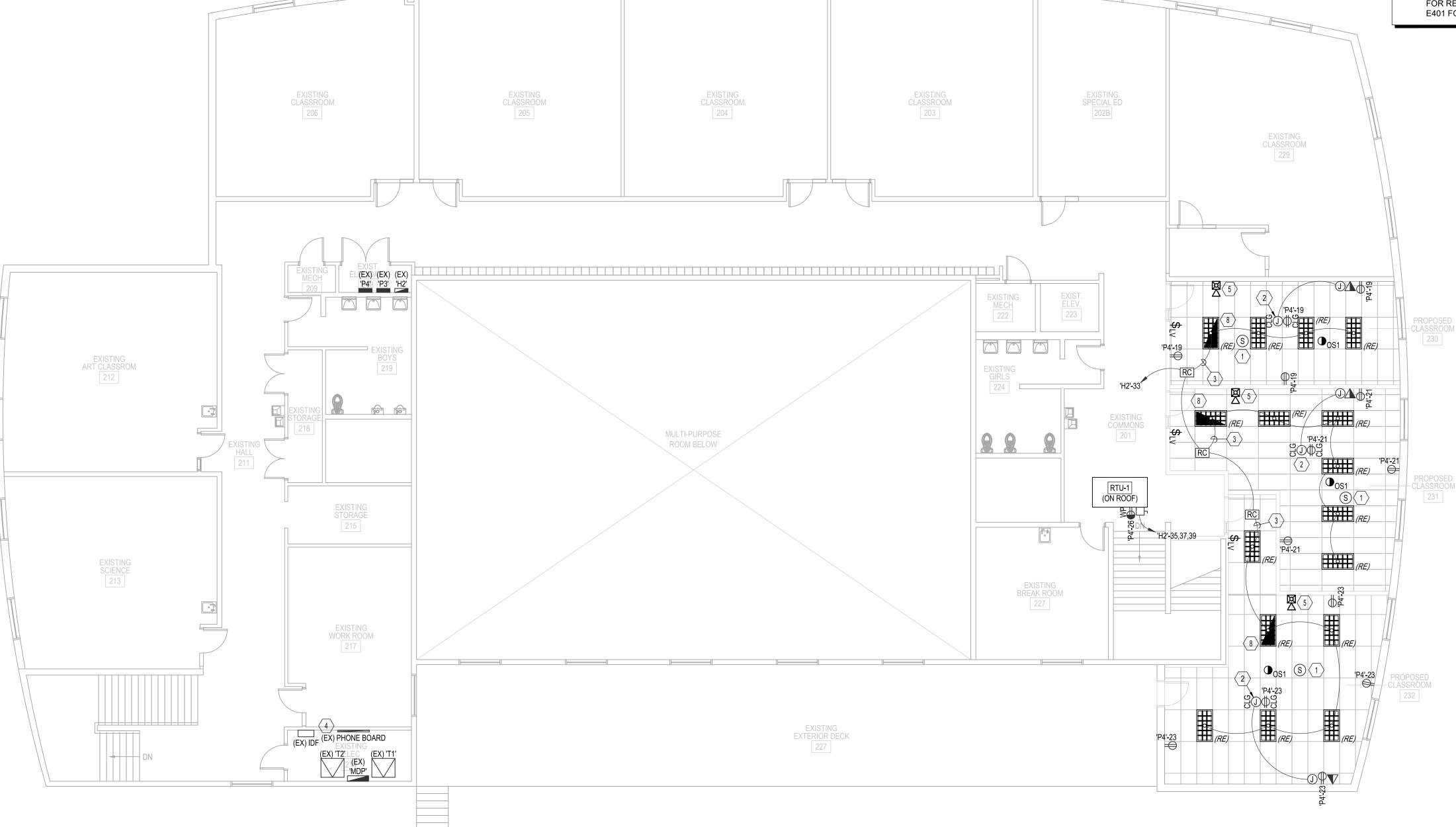
SHEET NO.

GENERAL NOTES:

- A. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING ELECTRICAL DEVICES AND LUMINAIRES WITHIN SCOPE OF WORK PRIOR TO BEGINNING NEW WORK. RE-CONNECT ALL CIRCUITS AS NEEDED AND ENSURE DESIGN INTEGRITY OF SPACES WHICH ARE EXISTING-TO-REMAIN.
- B. ALL NEW RECEPTACLES SHALL BE TAMPER-RESISTANT TYPE PER NEC 210.
- C. ALL FLUORESCENT LUMINAIRES IN CLASSROOMS SHALL BE WIRED FOR BI-LEVEL SWITCHING. SEE DETAIL E ON E401.
- D. LIGHTING IN ALL SPACES HAS BEEN DESIGNED IN ACCORDANCE WITH THE STATE HEALTH DEPARTMENT CODE R392-200-8 TABLE 1.

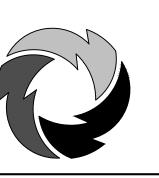
KEYED NOTES (#):

- NEW SPEAKER TO MATCH SPEAKERS IN EXISTING
 CLASSROOMS. CONNECT AS REQUIRED TO EXISTING
 BUILDING SYSTEM. COORDINATE WITH OWNER.
- CEILING-MOUNTED RECEPTACLE WITH J-BOX TO WALL STATION FOR VGA OR HDMI CABLE. PROVIDE 1" CONDUIT BETWEEN CLG AND WALL BOX FOR CABLING BY OTHERS.
- 3. CONTROLLED LINES OUT FROM ROOM CONTROLLER FOR BI-LEVEL SWITCHING.
- 4. EXISTING INTERMEDIATE DISTRIBUTION FRAME (IDF) AND PHONE BOARD. COORDINATE WITH OWNER I.T. REPRESENTATIVE.
- 5. NEW FIRE ALARM DEVICE TO BE TIED INTO EXISTING BUILDING SYSTEM. CONTACT LOCAL MANUFACTURER'S REPRESENTATIVE FOR ADDITION REQUIREMENTS.
- 6. NOT USED.
- PROVIDE UN-SWITCHED HOT TO NEW EMERGENCY LUMINAIRE.
- 8. PROVIDE POWER SENTRY #PS1400QD-MVOLT
 EMERGENCY FLUORESCENT BATTERY PACK WITH POWER
 SENTRY #ELA-TSPLP REMOTE TEST SWITCH PILOT LIGHT
 FOR RELOCATED PARABOLIC TROFFER. SEE DETAIL D ON
 E401 FOR WIRING.



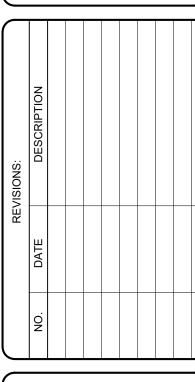






ADEMY REMOSEND STREET

215 22ND 0GDEN.



SHEET TITLE

LEVEL 2 NEW ELECTRICAL PLAN

SHEET NO.

EQUIPMENT SCHEDULE													
			ELECTRICAL REFERENCE NOTES OCPD						PD				
UNIT #	ГОАБ	LOAD UNITS	VOLTS	PHASE	FULL LOAD AMPS (FLA)	DISCONNECTING MEANS	DISCONNECT RATING (AMPS)	STARTER SIZE	ENCLOSURE TYPE	FUSE SIZE (AMPS)	BREAKER SIZE (AMPS)	REMARKS	
RTU-1	ROOFTOP UNIT (5.0 TON)	18.5	MCA	480	3	14.8	1A	30	-	18	-	25	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17.	REFERENCE NOTES: NON-FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH BREAKER IN ENCLOSURE FUSED DISCONNECT SWITCH WITH SHUNT TRIP MANUAL STARTER WITH THERMAL OVERLOAD MANUAL STARTER MAGNETIC STARTER/NON-FUSED DISCONNECT COMBINAT MAGNETIC STARTER/FUSED DISCONNECT COMBINATION MAGNETIC STARTER/MOTOR CIRCUIT PROTECTOR COMBIN VARIABLE SPEED DRIVE REDUCED VOLTAGE STARTER DIRECT CONNECTION RECEPTACLE/SPECIAL PURPOSE OUTLET ETC. TWO-SPEED STARTER, COORDINATE WITH MOTOR TYPE MAXIMUM CIRCUIT AMPS (MCA) FULL LOAD CURRENT PROVIDE WITH NEMA 1 ENCLOSURE PROVIDE WITH NEMA 3R ENCLOSURE					A. B. C. D.	ELECTRI FURNISH FINAL CO FURNISH FINAL CO FURNISH	IED, INSTALL CAL CONTRA IED AND INS DINNECTION IED UNDER A DINNECTION IED, INSTALL R DIVISION.	ACTOR. TALLED U BY THE EL ANOTHER BY THE EL	NDER AN LECTRICA DIVISION LECTRICA	OTHER DIV L CONTRA , INSTALLE L CONTRA	/ISION, .CTOR. ED AND .CTOR.	
1. 2.	GENERAL NOTES: VERIFY ALL EQUIPMENT LOCATIONS AND CONNECTION RE DRAWINGS/SUBMITTALS PRIOR TO STARTING ROUGH IN. ALL FUSES SHALL BE DUAL ELEMENT, TIME DELAY. FINAL MANUFACTURER'S RECOMMENDATION FOR ACTUAL EQUIF	BREAKER/FU	JSE & DISC			·							

ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND EXTERIOR

CONDUCTORS SHALL BE THHW.

			LUMINAIF	RE SCHEDU	LE				
LUMINAIRE NUMBER	LUMINAIRE MANUFACTURER	LUMINAIRE CATALOG #	DESCRIPTION	LAMPS TYPE	ССТ	VOLTS	LUMI WATTS	NAIRE MOUNTING	- REMARKS
F1	LITHONIA LIGHTING	CPX 2X4 AL08 SWW7 M2	2x4 SWITCHABLE FLAT PANEL STANDARD 0-10V DIMMING TO 10%	3800-6200 LUMEN LED	3500K / 4000K / 5000K	UNV	28- 50	l	DEFAULT TO MAXIMUM LUMENS AND 4000K, VERIFY IN-FIELD WITH OWNER AND SWITCH IF NEEDED.

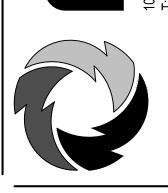
TAG	DESCRIPTION	FUNCTION	LOCATION	REMARKS
LV	LOW-VOLTAGE SWITCH FOR ROOM CONTROLLER 'RC'	ON / OFF BI-LEVEL CONTROL + OVERALL TOGGLE CONTROL	CLASSROOMS	
OS1	OCCUPANCY / VACANCY CEILING SENSOR	MANUAL-ON / AUTO-OFF 20-MINUTE VACANCY TIMEOUT	CLASSROOMS	
RC	DUAL-RELAY SWITCHING ROOM CONTROLLER	ON / OFF	CLASSROOMS	
OS2	OCCUPANCY / VACANCY CEILING SENSOR	MANUAL-ON / AUTO-OFF 20-MINUTE VACANCY TIMEOUT	RECEPTION	PROVIDE WITH 0-10V DIMMING POWER PACK
OS2A	LOW-VOLTAGE SWITCH FOR 'OS2' WITH DIMMING CONTROLS	ON / OFF / RAISE / LOWER	RECEPTION	
OS3	OCCUPANCY / VACANCY DIMMABLE WALL SWITCH SENSOR	MANUAL-ON / AUTO-OFF / RAISE / LOWER 20-MINUTE VACANCY TIMEOUT 0-10V DIMMING	OFFICES	

MAIN CONTINUE MAIN CONTINU								9	SCHED	ULE: E	XISTIN	IG PAN	IEL 'H2)I							
MAPS POLE Type	MOUN [*] ENCLC LOCAT	TING: SURE: ION:	SURFACI NEMA 1	E	WIRE: 4		MAIN OV MAIN OV	PS: 'ERCUR 'ERCUR	RENT DEVIC	Ξ:		250 LUGS N/A					E = Equipment Load M = Motor Load L = Lighting Load K = Kitchen Equipment				
Maria Pole Prime Mile GRD Mile Mile GRD Mile Mile GRD Mile M		ВІ	REAKER			FEE	DER	Ck	T. LOAD	L	DAD/PHASE (√A)	CKT. LO	DAD	FEE	DER			BREAK	ŒR	
S 20 1	No.	AMPS	POLE	TYPE	CIRCUIT NAME	WIRE	GRD	USE	WATTS	ØA	ØB	ØС	WATTS	USE	GRD	WIRE	CIRCUIT NAME	TYPE	POLE	AMPS	No.
5 20 1	1	20	1		(EX) LIGHTING												(EX) LIGHTING		1	20	2
Total Color No. Total Colo	3	20	1		(EX) SPACE												(EX) LIGHTING		1	20	4
9 20 1 (EX) SPACE	5	20	1		. ,												, ,		1	20	6
11	7	20	1		, ,												(EX) RTU-15 / RTU-14		3	20	
13			1		, ,																10
15			1		, ,																
17		20	3		(EX) RTU-17 / RTU-1						*						(EX) RTU / RTU-15		3	20	_
19																					_
27													ļ								_
23			+		, ,												, ,				+
25			1										<u> </u>								
27 15 3 (EX) SPARE			4																		
29			2		\ /								<u> </u>				, ,				+
31			<u> </u>		, ,								-								
33 20 1 (N) LTG - CLASSROOMS 230,231,232 #12 #12 L 1,600 1,600 1,600 3 1,600 3 1,600 3 1,600 3 1,600 3 1,600 3 1,600 3 1,600 3 1,600 3 1,600			1																		_
35 25 3 (N) RTU-1			1			#12	#12	+	1 600		1 600		 				` '				
37		+	3			+		<u>-</u>			1,000	5 125	-								+
39		1			• • •		1			5.125		0,120									
A						+		+		-,	5,125						` /				_
LIGHTING LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 210.20 (VA) RECEPTACLE LOAD PER NEC 220.14 (VA) EQUIPMENT LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 220.14 (VA) EQUIPMENT LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 220.14 (VA) EQUIPMENT LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 210.20 (VA) EQUIPMENT LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 210.20 (VA) EQUIPMENT LOAD (VA) LIGHTING CONTINOUS LOAD PER NEC 210.20 (VA) LIGHTING CONTINUES AND EXCHANGE PER NECTOR WITH A					(EX) SPACE				,		Ÿ						\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				42
TOTALLOAD (AMPS):	LIGHTI RECEF EQUIPI 25% LA KITCHI C TOTAL	NG CONTI TACLE LC MENT LOA .RGEST M :N EQUIPM UNITS @ LOAD (VA	NOUS LOA AD PER NE D (VA) OTOR (VA) MENT LOAD 100% (PE	EC 220.14 (V D (VA)	(A)					0 0 5,125 0	0 5,125	0 0 5,125	1,600 400 0 15,374 0	1. A IN 2. P L 3. P	ALL INSULAT NSULATION PANEL COVE PERMANENT ABEL SHALL PANELBOARI	ON ON CON ON ALL UND R SHALL BE LABEL AS R . READ AS I OS IN OTHEF	ERGROUND CONDUCTORS SHALL BE THHW. FIELD MARKED FOR FLASH PROTECTION WITH A EQUIRED BY THE NATIONAL ELECTRICAL CODE ARTICLE 1 FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD" R THAN DWELLING UNITS SHALL BE LEGIBLY FIELD MARKE				
		•	•							19	24	19	21	†							

VOLTAGE: 208 / 120 MOUNTING: SURFACE ENCLOSURE: NEMA 1 LOCATION: ELECTRICAL ROOM REMARKS:		E	PHASE: 3 WIRE: 4 POLE SPACES: 42		MAIN OVI	ERCURF ERCURF	RENT DEVIC RENT AMPS: MENT RATIN	:		225 LUGS N/A 10,000	AMPS				USE: E = Equipment Load					
	BF	REAKER			FEE	DER	CK.	T. LOAD	LO	OAD/PHASE ((VA)	CKT. LO	AD	FEE	DER			BREAK	ER	
No.	AMPS	POLE	TYPE	CIRCUIT NAME	WIRE	GRD	USE	WATTS	ØA	ØВ	ØС	WATTS	USE	GRD	WIRE	CIRCUIT NAME	TYPE	POLE	AMPS	No
1	20	1		(EX) DRINKING FOUNTAIN, BATH GFCI												(EX) BREAKROOM		1	20	2
3	20	1		(EX) OUTLETS												(EX) BREAKROOM		1	20	4
5	20	1		(EX) BATHROOM GFCI												(EX) BREAKROOM		1	20	6
7	20	1		(EX) HAND DRYER WEST							**					(EX) BREAKROOM		1	20	8
9	20	1		(EX) HAND DRYER WEST												(EX) BREAKROOM		1	20	10
11	20	1		(EX) HAND DRYER WEST												(EX) PHONE DATA		1	20	12
13	20	1		(EX) S/W HALL COPIER												(EX) SERVER ROOM TWIST-LOCK		1	20	14
15	20	1		(EX) SERVER ROOM TWIST-LOCK						**************************************						(EX) SERVER ROOM A/C WEST		1	20	16
17	20	1		(EX) SERVER ROOM TWIST-LOCK												(EX) SERVER ROOM A/C EAST		1	20	18
19	20	1		(N) RCPT - CLASSROOM 230	#12	#12	R	720	720							(EX) COMP RM POWER POLE		1	20	20
21	20	1		(N) RCPT - CLASSROOM 231	#12	#12	R	720		720						(EX) COMP RM POWER POLE		1	20	22
23	20	1		(N) RCPT - CLASSROOM 232	#12	#12	R	900			900					(EX) COMP RM POWER POLE		1	20	24
25	20	1		(EX) SPACE					180			180	T R	#12	#12	(N) RCPT - ROOF MAINTENANCE		1	20	26
27	20	1		(EX) SPACE												(EX) GFCI BELOW PANEL		1	20	28
29	20	1		(EX) SPACE												(EX) GFCI BELOW PANEL		1	20	30
31	50	3		(EX) SPACE												(EX) SPACE		3	50	32
33																				34
35										**										36
37	50	3		(EX) SPACE					***************************************							(EX) TVSS		3	20	38
39																				40
41																				42
GHTII ECEP QUIPN 5% LA ITCHE 0 OTAL	TACLE LOA IENT LOAI RGEST MO N EQUIPM	NOUS LOA AD PER NI D (VA) OTOR (VA) MENT LOAL 100% (PE							900 0 900 0	ØB 0 720 0 720 6	900 0 900 0 900 8	DEMAND 0 0 2,520 0 0 0 2,520 7	1. Al IN 2. P/ PI L/	ISULATION C ANEL COVEF ERMANENT L ABEL SHALL ANELBOARD	ON ON CONI ON ALL UNDE R SHALL BE LABEL AS RE READ AS F S IN OTHER	DUCTORS TO BE THHN UNLESS NOTED OTHERWISE. ERGROUND CONDUCTORS SHALL BE THHW. FIELD MARKED FOR FLASH PROTECTION WITH A EQUIRED BY THE NATIONAL ELECTRICAL CODE ARTICLE 'OLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD" THAN DWELLING UNITS SHALL BE LEGIBLY FIELD MARKE VAILABLE FAULT CURRENT PER NEC 110.24(A).				







ACADEMY REMODEL
15 22ND STREET
OGDEN, UTAH

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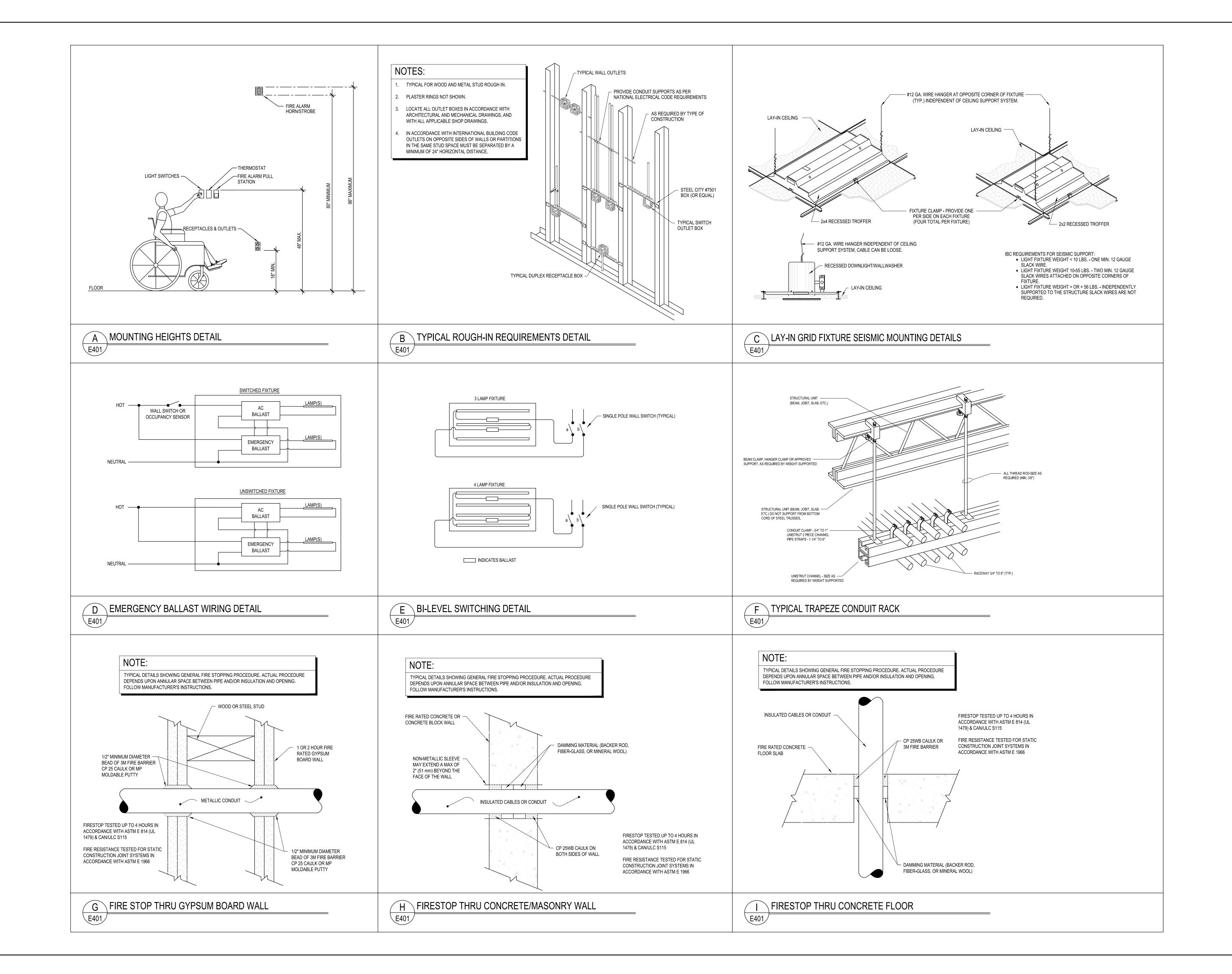
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SHEET TITLE

ELECTRICAL SCHEDULES

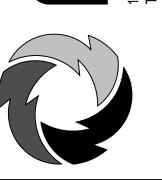
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CI ACADEMY REMOD
215 22ND STREET

NO. DATE DESCRIPTION

DESCRIPTION

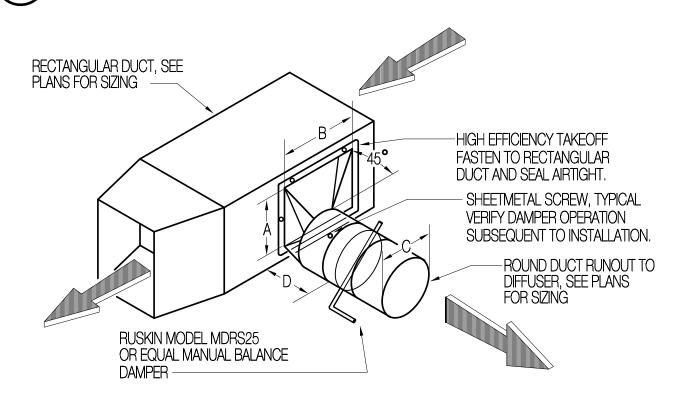
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ELECTRICAL DETAILS

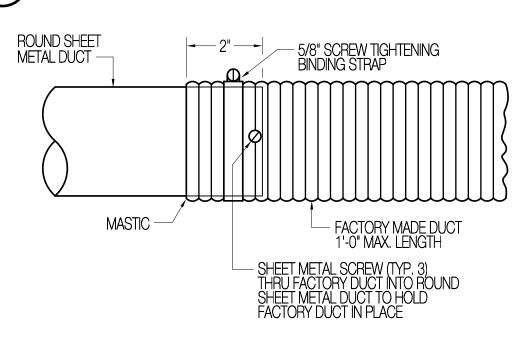
SHEET NO.

RND. DUCT HANGER DETAIL SCALE: NONE

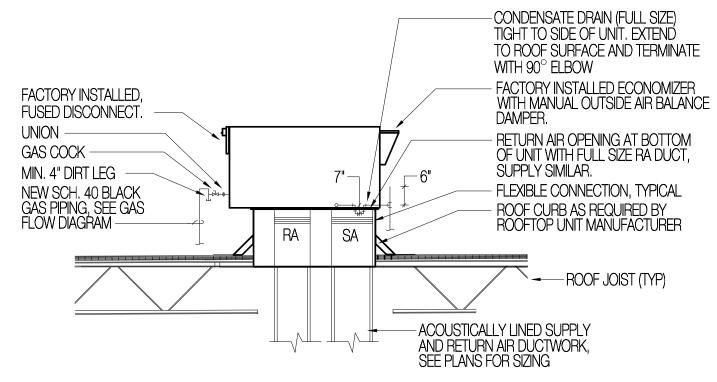


HE	$T \Gamma$)IM	ENSIONS								
BRANCH SIZE (C)	THROA	T DIM.	MIN. AREA AXB								
6"	8-1/4"	12"	3.5 X AREA OF C								
8"	10-1/4"	14"	2.8 X AREA OF C								
10"	12"	15"	2.3 X AREA OF C								
12" 14" 17" 2.1 X AREA OF C											
LENGTH D S	LENGTH D SHALL BE A MINIMUM OF 11"										

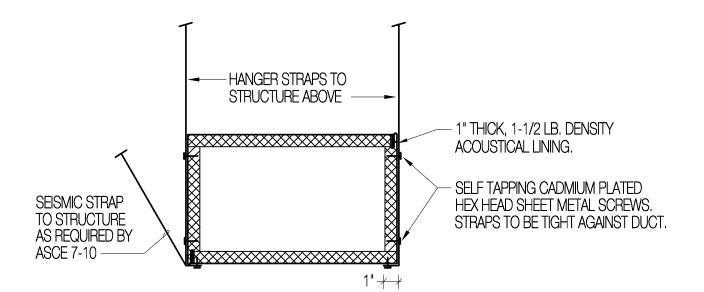
ROUND DUCT RUNOUT DETAIL SCALE: NONE



9 FACTORY DUCT DETAIL MO00 SCALE: NONE

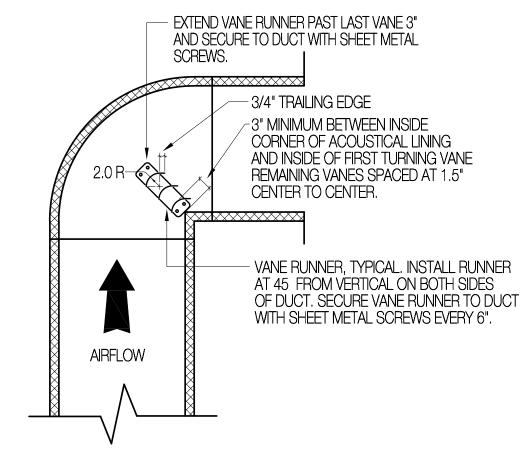


RTU INSTALLATION DETAIL

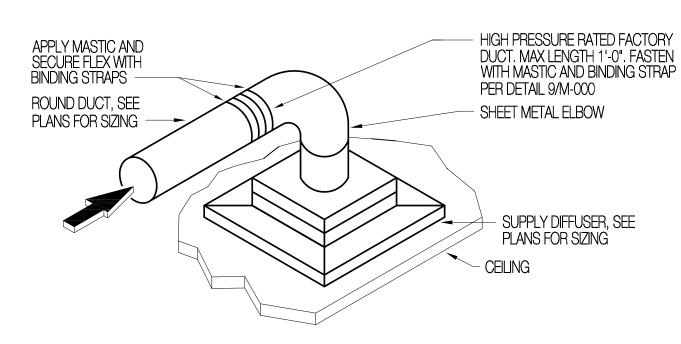


HANGER STRAP GAUGE, WIDTH AND SPACING FOR RECTANGULAR DUCTS PER SMACNA HVAC DUCT CONSTRUCTION STANDARDS.

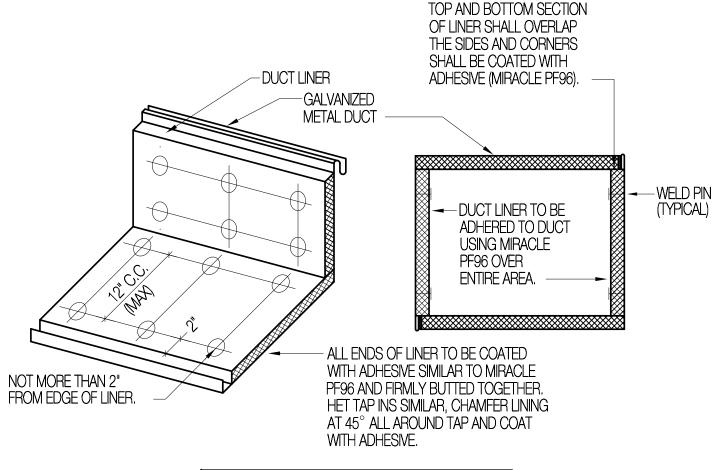
RECT. DUCT HANGER DETAIL SCALE: NONE



TURNING VANE DETAIL MO00 SCALE: NONE



DIFFUSER CONNECTION DETAIL



LINING FASTENERS:
DURA DYNE MODEL CP WELD TYPE FASTENERS
OR EQUIVALENT. ADHESIVE TYPE STICK CLIPS
OR GRIP NAILS NOT ALLOWED.

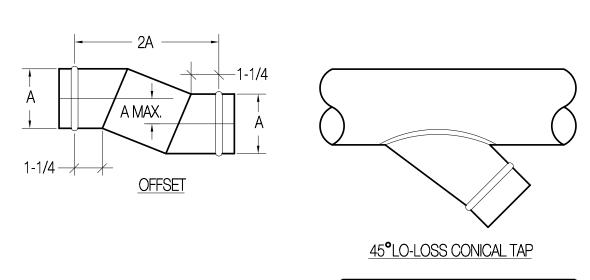
6 ACOUSTICAL LINER DETAIL
MOOD SCALE: NONE

	SYMBOL LEGEND											
	SUPPLY AIR DIFFUSER	- 10	RISE OR DROP IN DUCT	— — H.D.	HAND DAMPER, SEE DETAIL 8/M-000							
_ N	RETURN OR EXHAUST GRILLE	T	THERMOSTAT	A.L.	ACOUSTICAL LINING							
24" x 12"	ACOUSTICALLY LINED DUCTWORK (INSIDE CLEAR DIMENSION)		SUPPLY AIR DIRECTION	S.A.	SUPPLY AIR							
	RECTANGULAR SUPPLY AIR DUCT CROSS SECTION	→	RETURN AIR DIRECTION	R.A.	RETURN AIR							
•	ROUND SUPPLY AIR DUCT CROSS SECTION	A.F.F.	ABOVE FINISHED FLOOR	NK.	NECK							

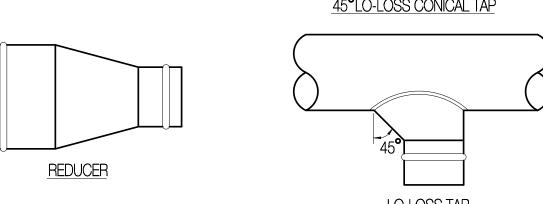
	HEATING/COOLING ROOFTOP UNIT (RTU)																	
	HEATING SECTION COOLING SECTION		F	AN SECTION	V	COND.	COND.	AMB.		UNIT	ELEC.	REQUI	REMENT	rs I	VODIC			
SYMBOL	HEATING INPUT (BTUH)	HEATING OUTPUT (BTUH)	TOTAL CAP. (BTUH)	SENS. CAP. (BTUH)	CFM	E.S.P. (IN. WC.)	MOTOR HP	COIL AREA (SQ. FT.)	COIL CFM	AIR TEMP.	MIN. EER	VOLTS			T	MOCP	YORK MODEL	REMARKS
RTU-1	125,000	100,000	54,900	54,900	1,950	1.0	2.0	16.3	4,200	95 ° F	10.8	460	3	60	18.5	25	ZF060	1234567
1 CAPACITY REQUIRED AT SITE ELEVATION AND CONDITIONS. 2 PROVIDE UNIT WITH 120 V CONVENIENCE OUTLET. 5 BALANCE OUTSIDE AIR								O 385 CFM.		(7	') НОТ	GAS BYP	ASS (Z	ONE C	ONTRO	L)		
(3) FACT	FACTORY INSTALLED ECONOMIZER W/ BARO. RELIEF. 6 HI / LOW LIMIT SWITCH							S (ZONE CO	NTROL)									

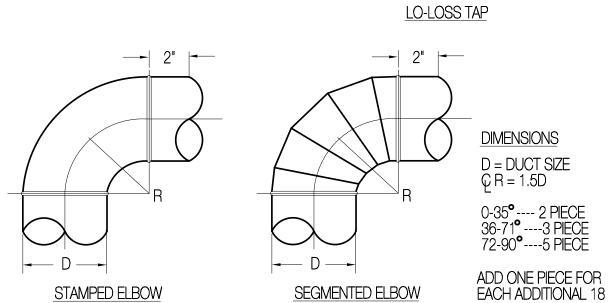
	GRILLES AND DIFFUSERS											
SYMBOL	CFM	NECK SIZE	FACE SIZE	KRUEGER MODEL	REMARKS							
S-1	AS NOTED	AS NOTED	AS NOTED	1400A	-							
R-1	AS NOTED	AS NOTED	AS NOTED	6490	-							

ROOM	AREA	CFM /SQ. FT.	PEOPLE / 1,000 SQ. FT.	# PEOPLE	CFM / PEOPLE	CFM	SERVED BY
EXISTING COMMONS	735	0.12	-	-	-	90	RTU-1
PROPOSED CLASSROOM 230	371	0.06	25	10	5	75	
PROPOSED CLASSROOM 231	535	0.06	25	13	5	110	
PROPOSED CLASSROOM 232	535	0.06	25	13	5	110	
	-					<u>385</u>	<u>TOTAL</u>



RTU-1: 570 LBS.

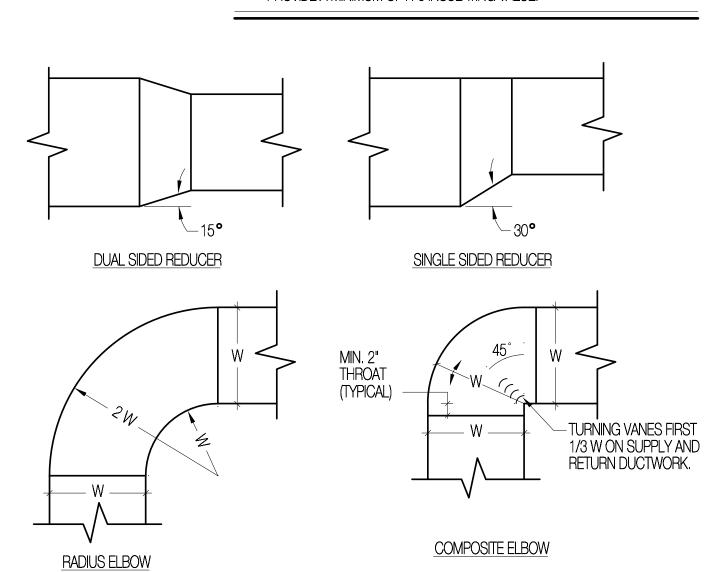






GENERAL NOTES

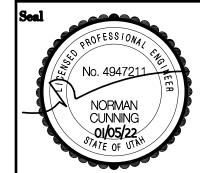
- 1. ALL DRAWINGS SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL ASPECTS OF THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING PRICING. ANY AND ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO TO ANY INSTALLATION SUCH THAT CLARIFICATIONS CAN BE ISSUED.
- 2. ANY WORK PERFORMED OR MATERIAL USED WHICH IS SHOWN TO BE IN CONFLICT WITH THE CONTRACT DRAWINGS, SPECIFICATIONS OR ANY APPLICABLE CODE OR GOVERNING REGULATION SHALL BE REMOVED AND REPLACED OR CORRECTED AT THE CONTRACTOR'S EXPENSE.
- 3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE CONTRACT DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK.
- 4. <u>DO NOT SCALE THE DRAWINGS</u>: ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO FABRICATION OF MATERIALS OR ERECTION OF ASSEMBLIES. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
- 5. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT, TRANSPORTATION AND SERVICES REQUIRED FOR COMPLETION OF THE WORK. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE DONE IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND GOVERNING REGULATIONS.
- 6. ALL PERMITS AND FEES WHICH ARE REQUIRED FOR THIS WORK SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR.
- 7. ALL PLUMBING AND MECHANICAL INSTALLATIONS SHALL ADHERE TO THE 2018 IECC INCLUDING: MINIMUM R-6 INSULATION ON ALL NON-ACOUSTICALLY LINED DUCTWORK; ACOUSTICAL LINER SHALL PROVIDE A MINIMUM OF R-6 INSULATING VALUE.



RECTANGULAR DUCT FITTINGS

SCALE: NONE

Revisions Date





Cunning & Associates
4685 W. 11600 N. Tremonton, UT 84337
Email: norm@cunning-eng.com
Ph: (801) 726-5047

DAVINCI ACADEMY REMODE 215 22ND. STREET OGDEN, UT

Project Issue Date

5221 01/05/21

Drawing Title

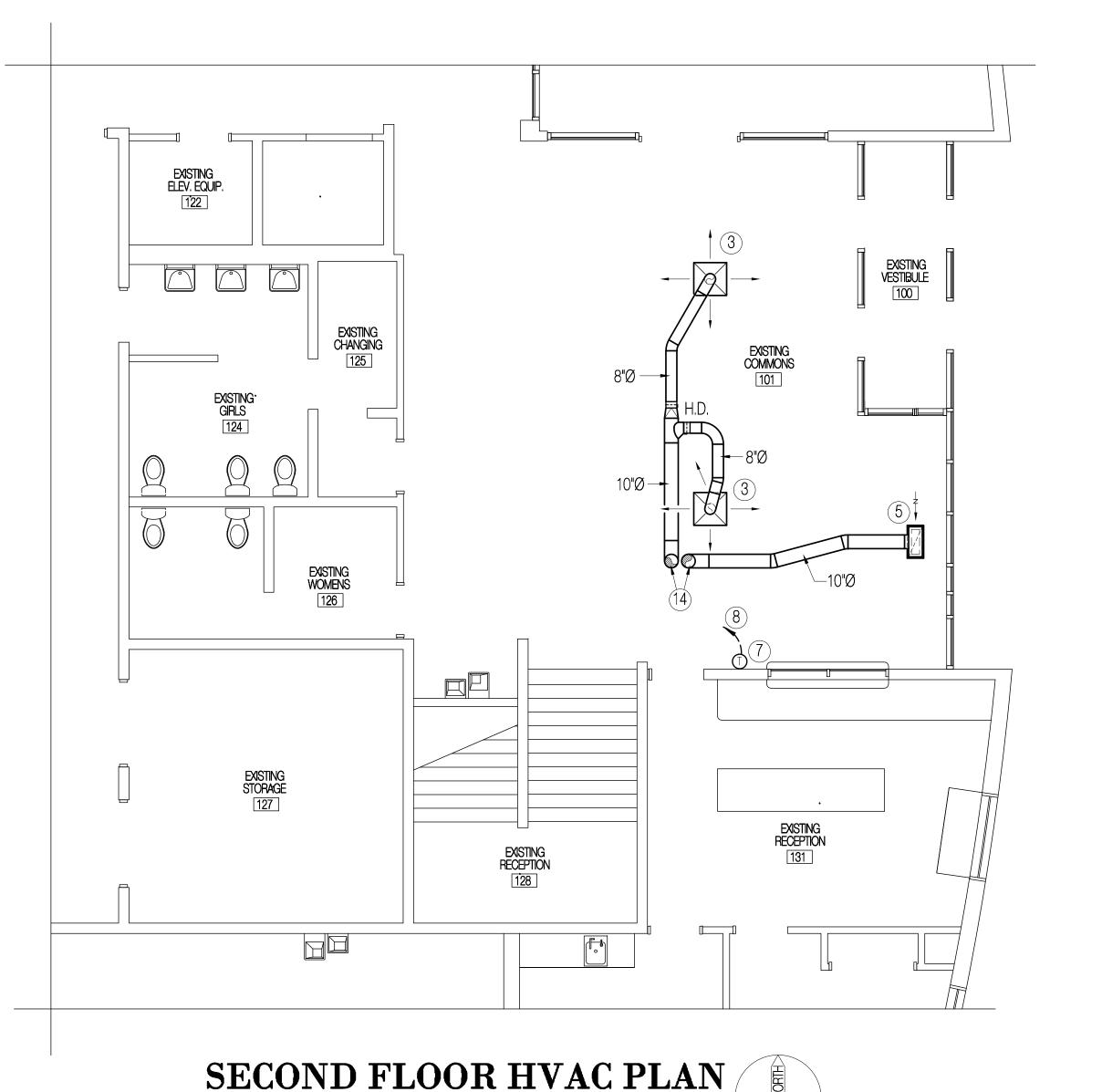
MECH. SYMBOL

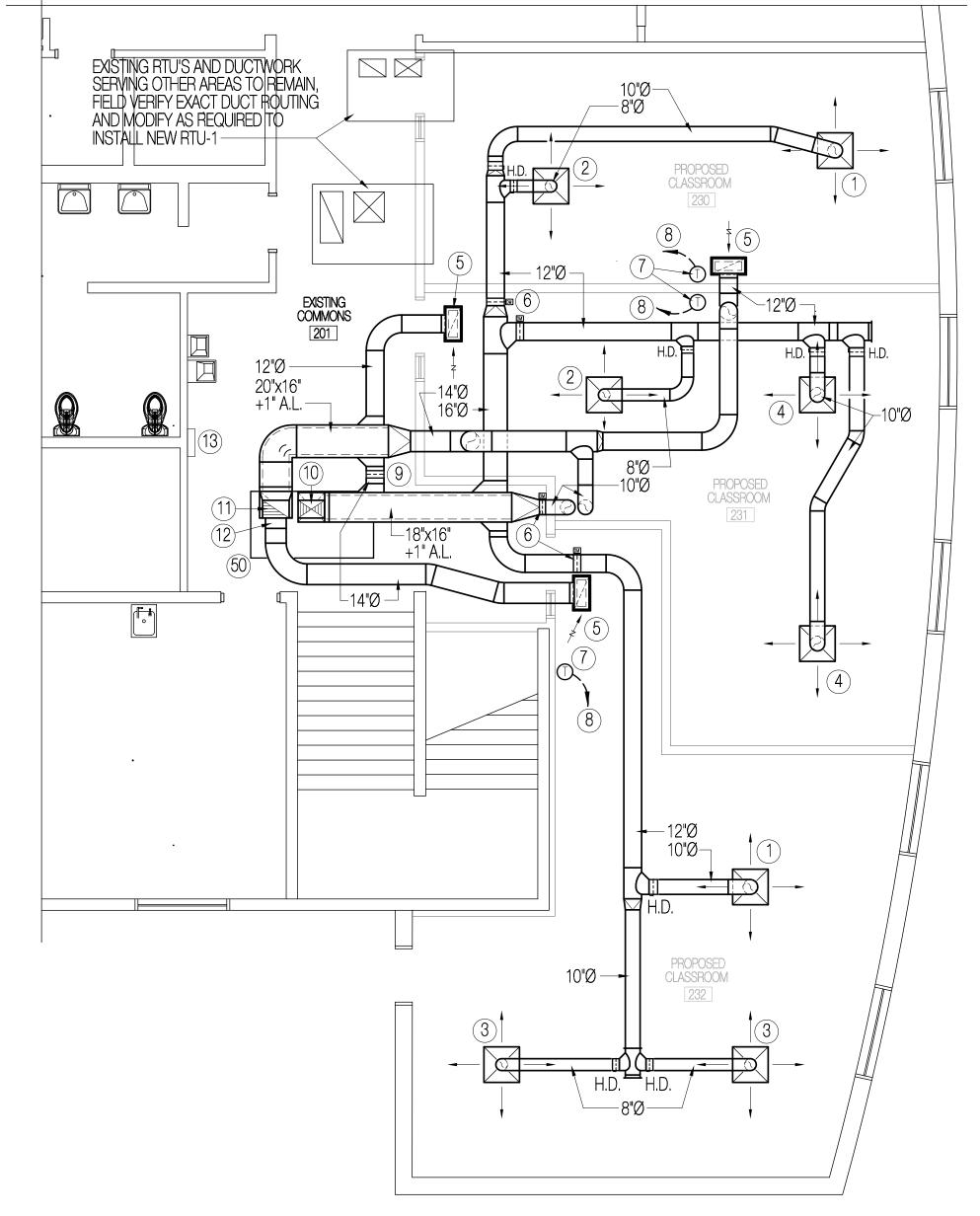
LEGEND, SCHED.

AND DETAILS

Sheet Number

M-000





DRAWING NOTES

- 1) S-1 250 CFM, 10"Ø NK. S.A. DIFFUSER.
- (2) S-1 150 CFM, 8"Ø NK. S.A. DIFFUSER.
- (3) S-1 175 CFM, 8"Ø NK. S.A. DIFFUSER.
- (4) S-1 225 CFM, 10"Ø NK. S.A. DIFFUSER.
- (5) R-1 10"x22" NK. R.A. GRILLE WITH ACOUSTICALLY LINED PLENUM.
- (6) ZONE CONTROL DAMPER, SEE CONTROL DRAWINGS SHEET M-700 FOR ADDITIONAL INFORMATION.
- 7 PROVIDE AND INSTALL NEW THERMOSTAT, MOUNT THERMOSTAT AT 48" A.F.F. SEE CONTROL DIAGRAMS SHEET MP-700 FOR ADDITIONAL INFORMATION.
- (8) CONTROL WIRING FROM THERMOSTATS TO ZONE CONTROLLER. SEE CONTROL DRAWINGS SHEET MP-700 FOR ADDITIONAL INFORMATION.
- (9) BYPASS DUCTWORK WITH STATIC PRESSURE DAMPER, SEE MP-700 FOR ADDITIONAL INFORMATION.
- 10) 18"x16"+1"A.L. SUPPLY AIR DUCTWORK ON BOTTOM OF ROOFTOP UNIT. TRANSITION DUCTWORK TO OUTLET COLLAR SIZE AND CONNECT WITH FLEXIBLE CONNECTION PER DETAIL 10/M-100.
- (1) 20"x16"+1"A.L. RETURN AIR DUCTWORK ON BOTTOM OF ROOFTOP UNIT. TRANSITION DUCTWORK TO INLET COLLAR SIZE AND CONNECT WITH FLEXIBLE CONNECTION PER DETAIL 10/M-100.
- (12) HIGH EFFICENCY TAKEOFF, TYPICAL.
- (13) ROOFTOP UNIT ZONE CONTROLLER, SEE CONTROL DRAWINGS SHEET MP-700 FOR ADDITIONAL INFORMATION.
- 14) 10"Ø SUPPLY AND RETURN DUCTWORK RISE TO SECOND FLOOR. SEE SECOND FLOOR HVAC PLAN THIS SHEET FOR CONTINUATION.

EQUIPMENT NOTES

- UNIT INSULATION

- UNIT FRAME

- UNIT CASING



UNIT BASE FRAME

FOR ADDITIONAL REQUIREMENTS

CLOSED CELL NEOPRENE GASKET FURNISHED WITH UNIT

MAIN FLOOR HVAC PLAN

- 2) GAS PIPING CONNECTION TO APPLIANCE, SEE GAS FLOW DIAGRAM. THIS SHEET FOR ADDITIONAL INFORMATION. CONNECT EACH APPLIANCE TO BRANCH WITH 6" DIRT LEG, GAS PRESSURE REGULATOR AND CORRUGATED STAINLESS STEEL TUBE FLEXIBLE
- VERIFY EXACT MAIN LOCATION AND CONNECT NEW TO EXISTING UTILIZING LIKE MATERIALS.
- (4) MIRO MODEL 3-R-2 GAS PIPING SUPPORT, TYPICAL ONE SUPPORT EVERY

DRAWING NOTES

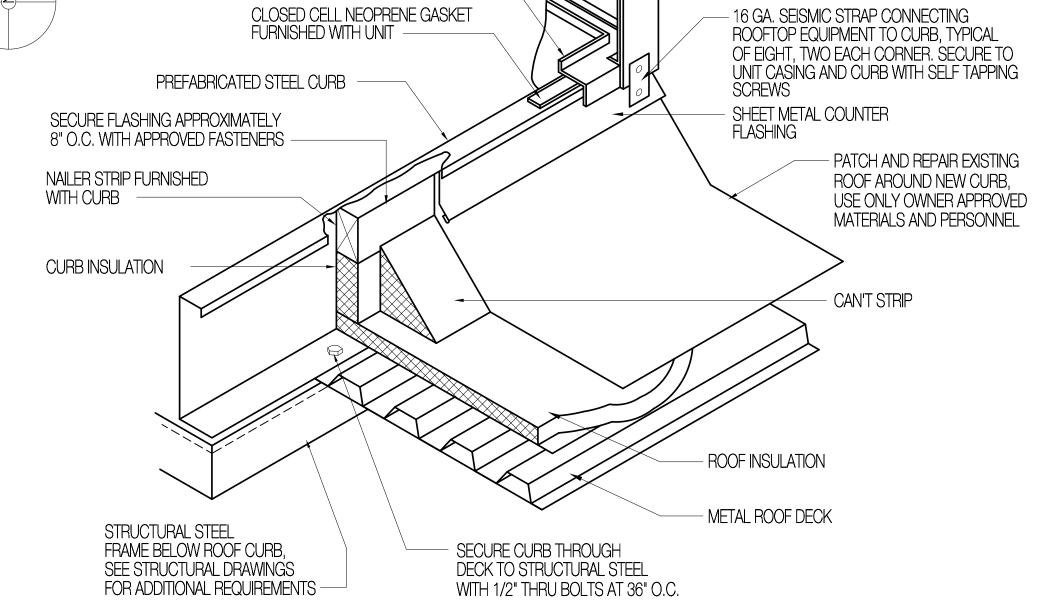
SCALE 3/16" =1'-0" -

- 1) LINE SIZE PVC CONDENSATE DRAIN PIPING, EXTEND TO ROOF SURFACE PER DETAIL 2/M-000.
- CONNECTION.
- (3) 1/2" 2# GAS PIPING TO 1-1/2" MAIN APPROXIMATELY 100'-0" AWAY. FIELD
- 7'-0" ON CENTER.

GENERAL NOTES UTILITY CONNECTION LOCATIONS ARE APPROXIMATE AND ARE BASED ON SCHEDULED EQUIPMENT. PLUMBING AND HVAC CONTRACTORS SHALL FIELD VERIFY FINAL UTILITY CONNECTION LOCATIONS PRIOR TO FABRICATION OF GAS PIPING.

— TYPICAL , ROOFTOP UNIT

TYPICAL HVAC / PLUMBING ROOF PLAN



ROOFTOP EQUIPMENT FLASHING DETAIL

Mechanical Consulting Engineers

Cunning & Associates
4685 W. 11600 N. Tremonton, UT 84337
Email: norm@cunning-eng.com

RE

I ACADEM.
). STREET
UT DAVINCI 215 22ND. OGDEN, U

Project Number Issue Date 5221

01/05/21 Drawing Title

MECH. FLOOR PLANS / ROOF PLAN & DIAG. Sheet Number

> **MP** 100

– APPROX. 100'-0" (FIELD VERIFY) RTU\ <u>ROOFTOP</u> 141 CFH

-(E) 1-1/2" G (2#) (FIELD VERIFY)

DIAGRAM NOTES

PRESSURE REGULATING STATION WITH TEST PORTS AND DIRT LEG, SEE DETAIL 1/MP-700.

CONNECT EACH APPLIANCE WITH 6" DIRT LEG, PRESSURE REGULATOR, AND CORRUGATED STAINLESS STEEL TUBE (CSST) FLEXIBLE CONNECTION.

GAS FLOW DIAGRAM

SCALE: NONE -

DESIGN NOTES SERVICE PRESSURE = 2 LB. NEW CFH = 141 CFH DEVELOPED LENGTH = 260 FT. CFH = BTUH/890

SCALE: NTS -

MECHANICAL SPECIFICATIONS

American Gas Association

ASTM B31.1 Piping

GENERAL CONDITIONS

<u>DESCRIPTION OF PROJECT</u>: The mechanical work described in these mechanical specifications is for a project located in Ogden, Utah. Design weather conditions are: 95° db, 65° wb, and winter 8°F. Altitude readings, unless otherwise noted, are for an elevation of 4,450 feet above sea level. Make adjustment to manufacturer's performance data as needed.

CODES AND PERMITS, AUTHORITIES HAVING JURISDICTION: 2018 International Mechanical Code - (with Utah amendments) 2018 International Building Code – (with Utah amendments) 2018 International Plumbing Code – (with Utah amendments) 2018 International Energy Conservation Code – (with Utah amendments) SMACNA Duct Design Standards Locally enforced NFPA Codes Local Fuel Utility Regulations Local Power Utility Regulations

<u>DEFINITION OF PLANS AND SPECIFICATIONS</u>: The mechanical drawings at reduced scale show the general arrangement of piping, ductwork, equipment, etc., and shall be followed as closely as the actual building construction and the work of other trades will permit. The architectural and structural drawings shall be considered as part of the work insofar as these drawings furnish the Contractor with information relating to design and construction of the building. Architectural drawings shall take precedence over mechanical drawings. Request clarification and participate in resolution in the event of conflict.

- A. Because of the small scale of the mechanical drawings, it is not possible to indicate all offsets, fittings and accessories which may be required. Investigate the structural and finish conditions affecting the work and arrange the work accordingly, providing such extensions, fittings, valves and accessories to meet the conditions as may be required. Some small scale work is not shown such as control conduit and piping, incidental piping, specialties. Provide as directed by note or specification.
- Examine the actual construction site prior to bidding and obtain an understanding of the conditions under which the work will be performed. No allowances will be made for failure to make such examination.
- During construction, verify the dimensions governing the mechanical work at the building. No extra compensation shall be claimed or allowed because of differences between actual dimensions and those indicated on the drawings. Examine adjoining work on which mechanical work is dependent for perfect efficiency, and report any work of other trades which must be corrected. No waiver of responsibility for defective work shall be claimed nor allowed due to failure to report unfavorable conditions affecting the mechanical work.

ALTERNATIVE CONSTRUCTION/SUBSTITUTION: The contract documents outline a way in which the Owner may be delivered a functional and reliable facility. Drawings and specifications describe reasonable engineering practice for the Contractor to follow.

- A. Coordination between trades may result in periodic needs to adjust the installation from that indicated, but in no case shall the intended function be compromised.
- The Contractor may perceive some work methods which differ from those specified which could save time and effort. These may be presented to the Architect with a breakdown of possible cost savings for review. Implement only with authorization.
- Materials substitutions will generally be covered in a review process prior to bidding. After bidding, substitutions shall be proposed only on the basis of definitive cost accounting and implemented only with authorization.

QUALITY OF MATERIALS AND EQUIPMENT:

- All equipment and materials shall be new, and shall be the standard products of manufacturers regularly engaged in the production of plumbing, heating, ventilating and air conditioning
 - Fabricate ductwork with duct liner in each section of duct where indicated. Laminate liner to internal surfaces of duct in accordance with instructions by manufacturers of lining and adhesive, and fasten with weld type fasteners.
 - Offset, transition, adapt ductwork to structural obstacles and work of other trades in a coordinated effort. Layout work to avoid conflict with piping, etc. With review of conditions, teardrop around conflicting piping, lights, etc., all at no added cost to the

LOW PRESSURE ROUND DUCTWORK:

- A. Round type ductwork for use on low velocity supply systems (1200 fpm maximum), low pressure (0.75" maximum duct pressure), shall be fabricated on 26 gauge galvanized steel sheets with snap-lock longitudinal seams and crimped and beaded joints.
- All end joints shall have at least three screw fasteners and joints shall be sealed airtight with Hardcast TA tape or water based duct sealer. Snap lock longitudinal seams shall be seal with water based duct sealer NO EXCEPTIONS. Elbows and fittings shall provide smooth air flow patterns and have a neat appearance.

MEDIUM PRESSURE DUCTWORK: (3" SMACNA Pressure Class) General: At Installer's option, provide factory-fabricated duct and fittings, in lieu of shop-

- fabricated duct and fittings.
- B. Round Ductwork: Construct of galvanized sheet steel complying with ASTM A 527 by the following methods and in minimum gauges listed.

<u>Diameter</u>	Minimum Gauge	Method of <u>Manufacture</u>
3" to 14"	26	Spiral Lockseam
15" to 26"	24	Spiral Lockseam

Provide locked seams for spiral duct; fusion-welded butt seam for longitudinal seam duct.

C. Round Duct Fittings and Couplings: Construct of minimum gauges listed. Provide continuous welds along seams. Mitered elbows shall be of at least 5 piece construction with R/D ratio of 1.5.

<u>Diameter</u>	Minimum Gauge
3" to 36"	20

LOW PRESSURE RECTANGULAR DUCTWORK

- Rectangular ductwork for use on supply systems up to 2" maximum duct static pressure and 2000 fpm maximum duct velocity shall be constructed of galvanized steel using construction for nominal 3" SMACNA rated systems. Seal all transverse and longitudinal joints with water based duct sealer NO EXCEPTIONS
- Use radiused elbows, or square inside radiused outside elbows with single thickness turning vanes in the first 1/3 where space restrictions prohibit fully radiused elbows. Use 45° high efficiency tapping takeoffs with separate downstream balance dampers.
- C. Duct dimensions are inside clear. Increase for acoustical lining.

MISCELLANEOUS DUCTWORK MATERIALS:

- A. General: Provide miscellaneous materials and products of types and sizes indicated and, where not otherwise indicated, provide type and size required to comply with ductwork system requirements including proper connection of ductwork and equipment.
- Runout Fittings: Runout fittings shall be used to make round to rectangular duct connections. Use 45° time and a half square to round fittings. Provide with locking quadrant dampers where balance is involved. Provide with insulation guard where insulated duct is involved.
- Duct Sealing Compound: Duct sealing compound shall be 3M brand number EC-750 or Duro-Dyne S-2. This material shall be used in making up duct joints or in water

- equipment, and shall be the manufacturer's latest design. Specific equipment shown in schedules on drawings and specified herein is to be the basis for the Contractor's bid. Provisions for substitute equipment are outlined in the General Conditions. All materials shall be produced by manufacturing plants located in the United States of America.
- Furnish and install all major items of equipment specified in the equipment schedules on the drawings complete with all accessories normally supplied with catalog items listed, and all other accessories necessary for a complete and satisfactory installation.

MANUFACTURER'S DIRECTIONS: Install all equipment in strict accordance with directions and recommendations furnished by the manufacturer. Where such directions are in conflict with the plans and specifications, report such conflicts to the Architect who shall direct adjustments as deemed necessary and

EQUIPMENT: Per manufacturer and model numbers indicated on mechanical schedules.

NATURAL GAS PIPING:

B. Gas Cocks:

A. Building Distribution Piping:

- 1. Pipe Size 2" and Smaller: Black steel pipe; Schedule 40; malleable-iron threaded fittings (exposed), welded fittings and joints (concealed).
- 1. Gas Cocks 2" and Smaller: 150 psi non-shock WOG, bronze straightway cock, flat or square head, threaded
- 2. Manufacturer: Subject to compliance with requirements, provide gas cocks of one of the following:
 - DeZurik Corp. Jenkins Bros.
 - Lukenheimer Co.
 - NIBCO, Inc. Powell (The Wm.) Co.
 - Rockwell International; Flow Control Div.
 - Stockham Valves and Fittings. Walworth Co.

Pressure Regulating Valves:

General: Provide single stage, steel jacketed, corrosion-resistant gas pressure regulators; with atmospheric vent, elevation compensator; with threaded ends for 2" and smaller, flanged ends for 2-1/2" and larger; for inlet and outlet gas pressures, specific gravity, and volume flow indicated.

DUCTWORK - GENERAL:

- Standards: All duct fabrications shall comply with standards and techniques detailed by SMACNA "Duct Construction Manuals" for the appropriate pressure class, with the ASHRAE
- Handbook, 1988 edition, Chapter 1, Duct Construction, and with the contract drawing details. Sheet Metal: Except as otherwise indicated, fabricate ductwork from galvanized sheet steel complying with ASTM A 527, lockforming quality, with G 90 zinc coating in accordance with ASTM A 525; mill phosphatized for exposed locations.

FITTINGS AND FABRICATION:

- Fittings: Fabricate duct fittings to match adjoining ducts, and to comply with duct requirements as applicable to fittings. Fabricate elbows utilizing inside and outside radiuses with a center-line radius equal to associated duct width; or where fully radiused elbows are not possible, fabricate elbows with an inside square and outside radius and include turning vanes in the first 1/3 of elbow. Maintain duct width throughout turn on inside square and outside radiused elbows. Limit angular tapers to 30° for contracting tapers and 20° for expanding tapers.
- Fabricate ductwork with accessories installed during fabrication to the greatest extent possible. Refer to Division-15 section "Duct Accessories' for accessory requirements.
- proofing, caulking plenums, etc. Acoustical Lining: Acoustical lining in ducts shall be 1" thick, 1-1/2 pound density, coated, flexible glass fiber type, set in adhesive and impaled on weld studs spaced not more than 12" on centers and secured with lock washers. Airstream surface faced with
- fire and smoke hazard rating not exceeding 20-50-50. Owens-Corning, Johns-Manville, Certainteed. All joints, edges and/or surface breaks in the coating of the acoustical lining

black coated matte. Acoustical lining shall completely line the ducts. Lining shall have a

- shall be pointed up to a smooth surface with adhesive. Duct Liner Adhesive: Comply with ASTM C 916 "Specifications for Adhesives and
- Duct Thermal Insulation". Duct Liner Fasteners: Comply with SMACNA HVAC Duct Construction Standards,
- Article S2.11. Ductwork Support Materials: Except as otherwise indicated, provide hot-dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.

GRILLES AND DIFFUSERS:

- 1. Ceiling Supply Diffuser (S-1): Krueger series 1400A with adjustable tabs for directional air flow control, square face, round neck, four-way deflection, anti-smudge design, removable inner core, all steel construction, appropriate mounting frame, white baked enamel finish, sponge rubber gasket, size as indicated on drawings.
- Perforated Return Register / square neck (R-1): Krueger series 6490. Concealed hinge frame, sponge rubber gasket, white baked-on enamel, filter holding frame, color as selected by architect, size as indicated on drawing.

MECHANICAL CONTROLS:

CONDUCTORS:

- Color coded and No. 16 and No. 12 AWG Type TWN, TFN, or THHN, stranded.
- Thermostat Cable 12 conductor or 8 conductor, 18AWG solid copper wire, insulated with high density polyethylene. Conductors parallel enclosed in brown PVC jacket (No 22 AWG cable

AUXILIARY RELAYS:

Light Duty - as required.

- Heavy Duty Square D, Class 8501, Type X.
- <u>THERMOSTAT</u>: (Typical of all Rooftop Units utilizing zone controllers RTU-1)
- A. Programmable low voltage type provided with automatic change over feature for both heating and cooling stages, seven day program with two starts and stops per day, and provisions for damper operators. Thermostat and subbase compatible with heat pump operation.
- Battery Mallory AA 1.5 volt alkaline type or equal as approved by Engineer.
- Approved Manufacturer & Model -Honeywell TH8320.

ZONE CONTROLLER

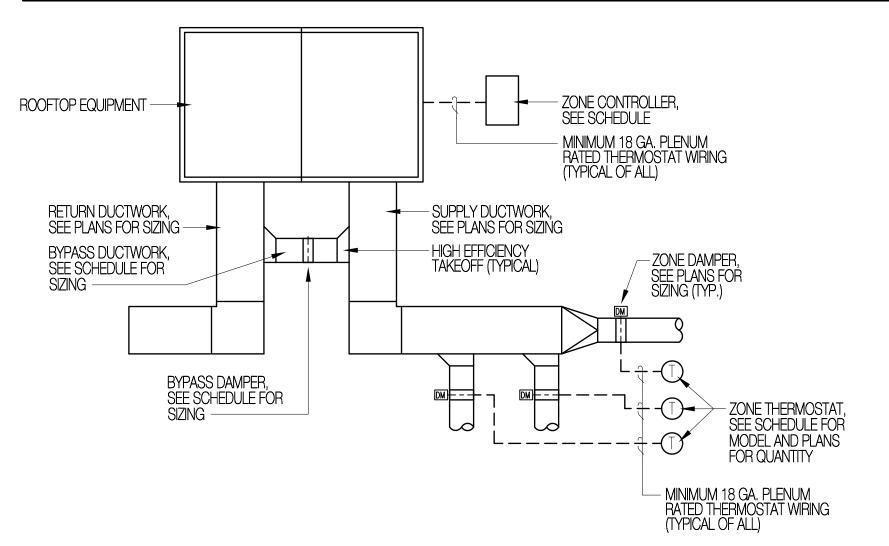
- Microprocessor controller with LED indicator display, 4 stage heat / 3 stage cooling capacity, smoke detector input terminals, LCD display, 365 day per year clock.
- Approved Manufacturer -
 - Zonefirst. MZP4, field verify number of zones provide expansion as required.

DAMPER ACTUATORS

- Electric type equipped for Class I wiring.
- Shall not consume power during UNOCCUPIED cycle or use chemicals or expandable media.
- Have built in spring return. Approved Manufacturer & Model -

ZONE CONTROLLER SCHEDULE

ZOILL GOILLIGHELL SGILLD CLL										
ZONE	EQUIP. SERVED	NO. OF ZONES	BYPASS DAMPER SIZE	BYPASS DAMPER MFG. / MOD.	BYPASS DAMPER PRESS. SETTING	BYPASS CFM	ZONE DAMPER MANUF. / MODEL	ZONE THERMOSTAT MANUF. / MODEL	ZONEFIRST CONTROLLER MODEL	REMARKS
Z-1	RTU-1	4	14"Ø	ZONEFIRST / SPAD	0.30" - 0.60"	1,600	ZONEFIRST / RDP	VENSTAR / T2900	MZP4	WITH SPS PROBE - SET AT 0.3" PRESSURE



ZONE CONTROLLER SCHEMATIC

Provide control systems to manage and manipulate mechanical equipment in a functional and energy

Locate control panels in the furnace rooms with terminal block connections for interface of

ROOFTOP UNIT CONTROL: The zone controller energizes the fan section of the rooftop unit

whenever the building is occupied based on a schedule dictated by the owner. Upon a drop in the

average space temperature to below setpoint the zone controller energizes the rooftop equipment

burner section and provides heat to the spaces. As the zone temperature reaches setpoint the zone

controlled disengages the burner section while the fan section continues to run. Upon a rise in the

average space temperature to above setpoint the zone controller energizes the rooftop equipment

condensing section and provides cooling to the spaces. As the zone temperature reaches setpoint the

SPACE CONTROL: Each individual space is equipped with a zone damper and zone thermostat.

The zone thermostat shall open or close the zone damper depending on the heating or cooling

setpoint and room temperature. As room temperatures drop below setpoint the zone controller

energizes the burner section of the zone RTU and the space zone damper opens to allow heat into

the space. In the event that an adjacent space is satisfied, and does not require additional heating, that zone damper shall remain closed and excess air shall be recirculated back to the rooftop unit

through the bypass damper system. As room temperatures rises above setpoint the zone controller energizes the condensing section of the zone RTU and the space zone damper opens to allow cooling

into the space. In the event that an adjacent space is satisfied, and does not require additional cooling,

that zone damper shall remain closed and excess air shall be recirculated back to the rooftop unit

through the bypass damper system. Once all zones are satisfied the zone controller disengages either

the heating or cooling section while the fan continues to run.

zone controlled disengages the condensing section while the fan section continues to run.

1. Honeywell ML6175C1009

furnace/condensing system, etc.

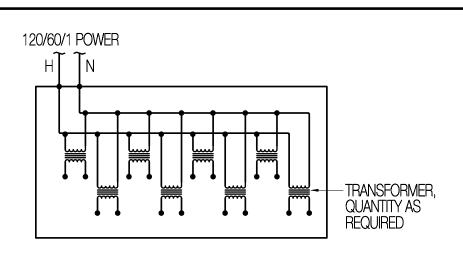
ROOFTOP UNIT (RTU-1, and 2)

Belimo

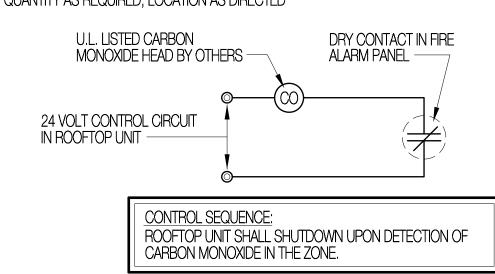
CONTROL SEQUENCES

GENERAL NOTES

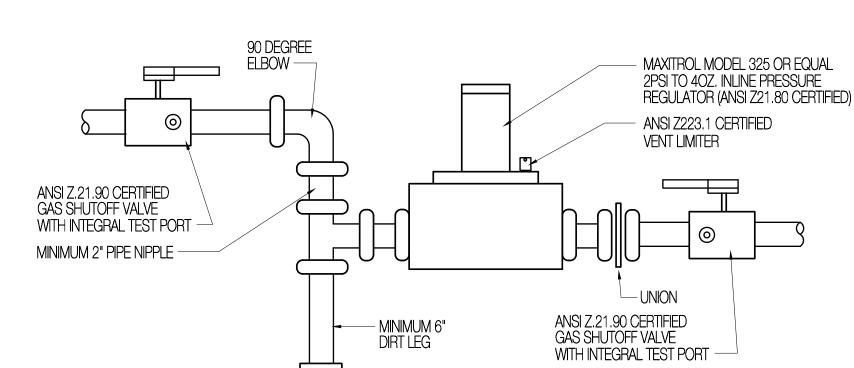
- 120 VAC ELECTRICAL POWER TO ZONE CONTROLLERS AND LOW VOLTAGE TRANSFORMER PANELS BY DIVISION 16000, DIVISION 15000 TO COORDINATE LOCATION AND QUANTITY
- $^{
 m 2}$, THE CONTROLS CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR CONTROL SYSTEM CIRCUITS.
- 3, ANY QUESTION OF RESPONSIBILITY SHALL BE CLARIFIED BY THE GENERAL CONTRACTOR 4. ALL WIRING SHALL BE 18 GA. MULTI CONDUCTOR WITH PLENUM RATED JACKET AND SHALL TERMINATE AT LABELED TERMINAL STRIPS.



LOW VOLTAGE TRANSFORMER PANEL LVTP QUANTITY AS REQUIRED, LOCATION AS DIRECTED



SAFETY CIRCUIT CO DETECTION



GAS PRESSURE REGULATOR DETAIL

Engineers Cunning & Associates 4685 W. 11600 N. Tremonton, UT 84337 Email: norm@cunning-eng.com Ph: (801) 726-5047

NORMAN

01/05/22

Mechanical

Consulting

REMODE M CADE CI > 2 O A ro n Q210

Project Number

01/05/21 Drawing Title MECH. / PLUMB. CONTROLS &

SPECS / DET. Sheet Number