

1 CODE PLAN
 SCALE 1/4" = 1'-0"

CODE PLAN SYMBOLS LEGEND

- NET SQUARE FOOTAGE OF ROOM
- OCCUPANT LOAD FACTOR
- ROOM OCCUPANT LOAD
- MAX. EXIT OCCUPANT LOAD
- # EGRESS WIDTH REQUIRED
- # ACTUAL EGRESS WIDTH PROVIDED
- X-X → EGRESS DIRECTION OF TRAVEL AND DISTANCE
- EXIT ILLUMINATED EXIT SIGN - SEE ELECTRICAL
- FE FIRE EXTINGUISHER

CODE ANALYSIS INFORMATION

1. TYPE OF CONSTRUCTION (IBC CHP. 6): V-B (UNCHANGED)
2. OCCUPANCY CLASSIFICATION (IBC CHP. 3 & 5):
 PREVIOUS: GROUP 'S-1' - MOTOR VEHICLE REPAIR GARAGE
 PROPOSED: GROUP 'B' - TRAINING & SKILLS DEVELOPMENT NOT IN A SCHOOL OR ACADEMIC PROGRAM
3. ACTUAL/ALLOWABLE AREA (IBC CHP. 5):
 ALLOWABLE: 9,000 S.F.
 ACTUAL: 2,400 S.F. (UNCHANGED)
4. ACTUAL/ALLOWABLE HEIGHT (IBC CHP. 5):
 ALLOWABLE: 40'-0"
 ACTUAL: 20'-2" (UNCHANGED)
5. ACTUAL/ALLOWABLE STORIES (IBC CHP. 5):
 ALLOWABLE: 2
 ACTUAL: 1 (UNCHANGED)
6. OCCUPANT LOAD (PER USE) (IBC CHP. 10):
 TOTAL: 19 OCCUPANTS
7. EXITS REQ'D/PROVIDED (IBC CHP. 10):
 REQUIRED: 1
 PROVIDED: 3
8. REQUIRED FIRE RESISTANCE OF EXT. WALLS (IBC CHP. 6): 0 HOURS
9. REQUIRED OPENING PROTECTION (IBC CHP. 7): NONE
10. FIRE RESISTIVE CONSTRUCTION REQUIREMENTS (IBC CHP. 6):

BUILDING ELEMENT	HOURS
STRUCTURAL FRAME	0
BEARING WALLS (INT./EXT.)	0
NON-BEARING WALLS/PARTITIONS (EXT.)	0
NON-BEARING WALLS (INT.)	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0
11. SPECIAL INSPECTION(S) REQUIRED (IBC CHP. 17): NONE
12. ADOPTED CODES:
 - BUILDING CODES:
 - 2015 INTERNATIONAL BUILDING CODE (IBC)
 - 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
 - 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) IDAPA 07.03.01 - RULES OF BUILDING SAFETY
 - PLUMBING CODE:
 - IDAHO STATE PLUMBING CODE (BASED ON THE 2015 UPC) RULES GOVERNING PLUMBING SAFETY IDAPA 07.02.02
 - ELECTRICAL CODE:
 - 2017 NATIONAL ELECTRIC CODE (NEC) INCLUDING AMENDMENTS AS LISTED IN IDAPA 07.01.06.
 - IDAHO ELECTRICAL ADMINISTRATIVE RULES - 07.01.01
 - MECHANICAL CODES:
 - 2012 INTERNATIONAL MECHANICAL CODE (IMC) - IDAPA RULE 07.07.01.004
 - 2012 INTERNATIONAL FUEL GAS CODE (IFGC) - IDAPA RULE 07.07.01.005
 - FIRE CODE (ADMINISTERED BY THE STATE FIRE MARSHAL):
 - 2015 INTERNATIONAL FIRE CODE (IFC)

LICENSED ARCHITECT
 ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE ARCHITECTURAL BOARD OF THE STATE OF IDAHO
 ORIGINAL SIGNED BY CRAIG A. SLOVICM
 ORIGINAL DATE SIGNED: 7/23/19

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ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
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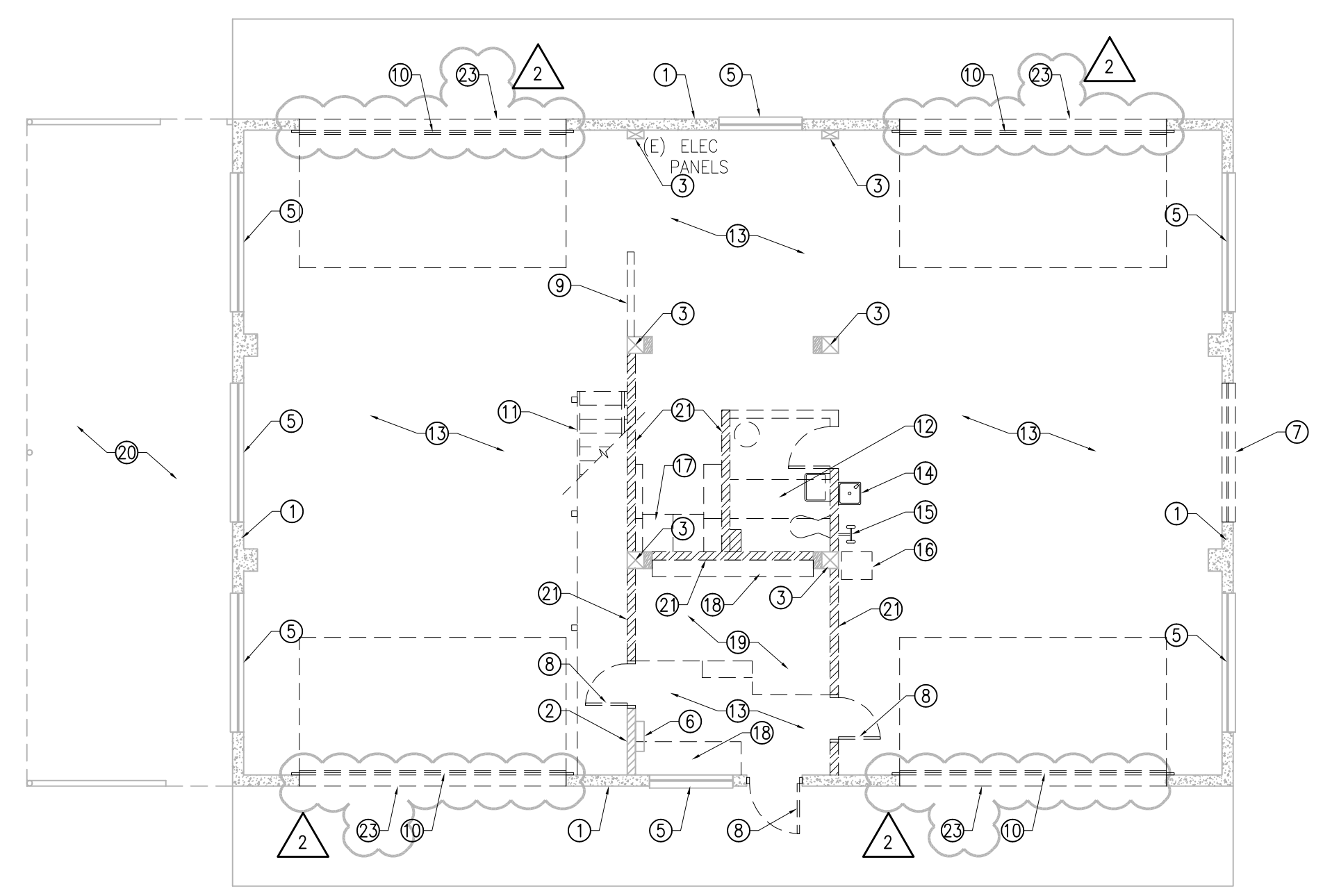
FOR CONSTRUCTION
 9/24/19

PROJECT	DATE
19004	7/23/19
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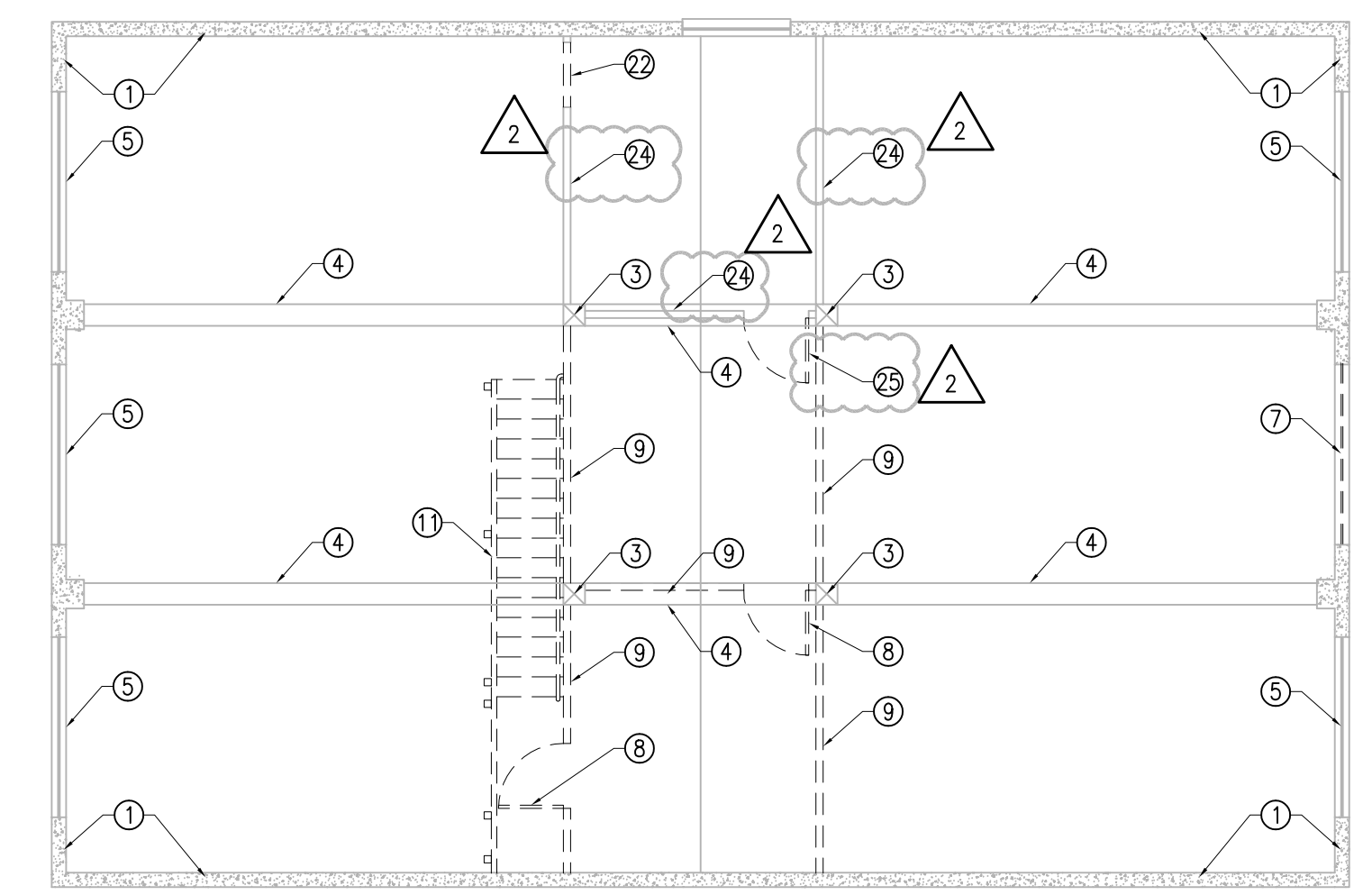
REVISED

SHEET TITLE
CODE PLAN

SHEET
G10
 ORIGINAL SHEET SIZE
 24" x 36"



1 DEMOLITION PLAN - LEVEL 1
SCALE 1/8" = 1'-0"



2 DEMOLITION PLAN - LEVEL 2
SCALE 1/8" = 1'-0"

LEGEND

	EXISTING TO REMAIN
	EXISTING TO BE REMOVED

SHEET NOTES:

1. EXISTING CONCRETE WALL TO REMAIN. PROTECT FROM DAMAGE.
2. EXISTING CMU WALL TO REMAIN. PROTECT FROM DAMAGE.
3. EXISTING STRUCTURAL COLUMN TO REMAIN. PROTECT FROM DAMAGE.
4. EXISTING ROOF BEAM TO REMAIN. PROTECT FROM DAMAGE.
5. EXISTING WINDOW TO REMAIN. PROTECT FROM DAMAGE.
6. EXISTING FUEL SYSTEM CONTROLS TO REMAIN. PROTECT FROM DAMAGE.
7. WINDOW ASSEMBLY TO BE REMOVED.
8. DOOR AND FRAME ASSEMBLY TO BE REMOVED.
9. FRAME WALL ASSEMBLY TO BE REMOVED.
10. ROLL-UP DOOR ASSEMBLY TO BE REMOVED.
11. STAIR ASSEMBLY TO BE REMOVED.
12. RESTROOM (IN ITS ENTIRETY) TO BE REMOVED.
13. ENTIRE CONCRETE SLAB FLOOR TO BE REMOVED.
14. DRINKING FOUNTAIN AND PLUMBING TO BE REMOVED. SEE PLUMBING FOR ADDITIONAL INFORMATION.
15. EYE WASH STATION AND PLUMBING TO BE REMOVED. SEE PLUMBING FOR ADDITIONAL INFORMATION.
16. ICE MACHINE AND PLUMBING TO BE REMOVED. SEE PLUMBING FOR ADDITIONAL INFORMATION.
17. HVAC SYSTEM TO BE REMOVED. SEE MECHANICAL FOR ADDITIONAL INFORMATION.
18. MILLWORK TO BE REMOVED.
19. RAISED FLOOR TO BE REMOVED.
20. EXISTING SHED ROOF STRUCTURE TO REMAIN. PROTECT FROM DAMAGE.
21. EXISTING CMU PARTITION WALL TO BE REMOVED.
22. CUT 3'-0" X 7'-0" OPENING IN WALL FOR ACCESS FROM LADDER TO MECHANICAL SPACE.
23. SAW-CUT AND REMOVE EXISTING SLAB FOR NEW CMU INFILL FOOTING. SEE DETAIL A81-8 FOR ADDITIONAL INFORMATION.
24. EXISTING WALL TO REMAIN.
25. REMOVE DOOR AND FRAME AND FILL IN OPENING TO MATCH WALL.

GENERAL NOTES:

- A. MAINTAIN THE INTEGRITY OF ALL REMAINING BUILDING SYSTEMS AND RATINGS. REPAIR ANY DAMAGE DONE TO SURROUNDING AREAS DURING DEMOLITION.
- B. PATCH AND REPAIR ANY DAMAGE OR PENETRATIONS AT ALL ELEMENTS TO REMAIN (INCLUDING BUT NOT LIMITED TO WALLS, CEILING, FLOORS, ETC.) CAUSED BY DEMOLITION ACTIVITIES OR REMOVAL OF ELECTRICAL, MECHANICAL, AND ARCHITECTURAL ELEMENTS, AND EQUIPMENT. REPLACE ITEMS NOT REPAIRABLE TO ORIGINAL STATE. EXISTING FINISH MATERIALS, INCLUDING CEILING, TRIM, ETC. SHALL BE PROTECTED AND RETAINED UNLESS OTHERWISE NOTED.
- C. EXISTING EQUIPMENT, WALLS, CEILING, ETC. ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, FINISHES, AND LOCATIONS.
- D. CLEAN CONSTRUCTION DEBRIS AND DUST DAILY BEYOND CONSTRUCTION LIMITS.
- E. AT ALL LOCATIONS WHERE A WALL TO BE REMOVED INTERSECTS A WALL TO REMAIN, PATCH AND REPAIR WALL TO REMAIN. ALIGN FINISH FACE OF PATCH WITH ADJACENT FINISH FACE.
- F. COORDINATE ALL DEMOLITION WITH FLOOR PLAN. WHERE NEW WORK IS INDICATED, SUCH WORK SHALL INCLUDE ALL REQUIRED DEMOLITION OR REMOVAL OF EXISTING FINISHES, SYSTEMS, AND ALL RELATED ITEMS FOR THAT WORK.
- G. FIELD VERIFY ANY EXISTING PIPING LOCATIONS TO DETERMINE EXTENT OF ANY TRENCHING THAT MAY BE REQUIRED FOR MODIFICATIONS. FOR NEW PATCHES, DOWEL A 12" LONG #3 BAR AT 48" O.C. (6" MIN. EMBEDMENT) INTO THE EXISTING SLAB TO TIE THE NEW SLAB WITH THE EXISTING. A MINIMUM OF (2) DOWELS ARE REQUIRED FOR SMALLER PATCHES.
- H. UPON COMPLETION OF DEMOLITION THOROUGHLY CLEAN ALL SURFACES INDICATED TO REMAIN OF DUST, DIRT, AND DEBRIS IN PREPARATION FOR NEW CONSTRUCTION.
- I. CONTRACTOR TO COORDINATE WITH OWNER PRIOR TO COMMENCING WITH WORK TO CONFIRM ANY ITEMS TO BE SALVAGED AND RETAINED BY OWNER.
- J. THIS PLAN SHOWS GENERAL DEMOLITION WORK TO BE PERFORMED AND DOES NOT RELIEVE THE CONTRACTOR FROM OTHER DEMOLITION WORK REQUIRED TO PRODUCE THE BUILDING MODIFICATIONS SHOWN ON THE REMAINING CONTRACT DOCUMENTS.
- K. CONTRACTOR SALVAGE ITEMS SHALL BE DISPOSED OF PROPERLY OFF SITE AND IN AN EXPEDITIOUS MANNER.

LICENSED ARCHITECT ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE STATE OF IDAHO
 ORIGINAL SIGNED BY CRAIG A. SLOCUM
 ORIGINAL DATE SIGNED: 10/9/19

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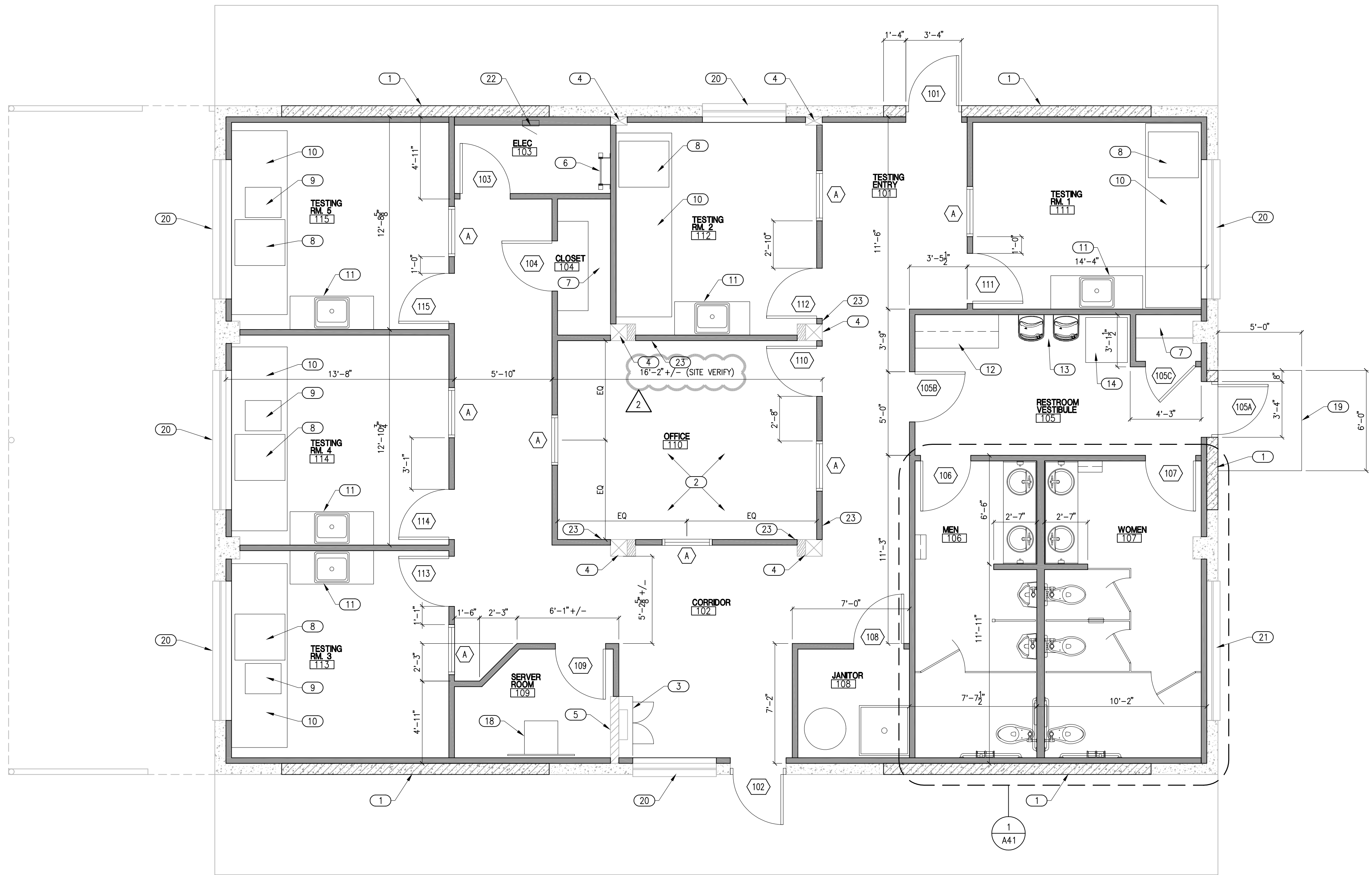
ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
5800 COFFEY STREET
CSHOA

PROJECT	DATE
19004	7/23/19
DRAWN	CHECKED
LGB	CAS

REVISED	BIDDING REVISIONS
2	9/25/19 LB

SHEET TITLE
DEMOLITION PLANS

SHEET
A11
ORIGINAL SHEET SIZE
24" x 36"



1 FLOOR PLAN
SCALE 1/4" = 1'-0"

LEGEND

- EXISTING CONCRETE WALL
- NEW PARTITION WALL - 3 5/8"x18Gx12"H AT 24" O.C. (USE 6" STUDS AT RESTROOM PLUMBING WALL AND WALL AT ELEC PANEL), 5/8" GYP. BD. EA. SIDE. INSULATE ALL WALLS WITH BATT INSULATION. PROVIDE VAPOR BARRIER ON INTERIOR-MOST SIDE OF PERIMETER WALLS.
- NEW CMU
- DOOR NUMBER
- WINDOW TYPE
- SHEET NOTE

- ### # SHEET NOTES:
- FILL IN WALL OPENING WITH 8" CMU PER DETAILS A81-7 & 8.
 - NEW CONCRETE SLAB IN ENTIRE BUILDING. SLAB TO BE MIN. 4" THK. W/ 6X6-10X10 W.W.F. PROVIDE SAW-CUT CRACK CONTROL JOINTS AT MAX. 10'-0" O.C. EA. WAY. FILL JOINTS WITH SEALANT.
 - NEW CABINET WITH LOCKING DOORS AROUND (E) FUEL MONITORING EQUIPMENT. SITE-VERIFY SIZE. LAMINATE CABINET AND DOORS WITH L1. DO NOT DISTURB FUEL MONITORING EQUIPMENT.
 - (E) STRUCTURAL COLUMN TO REMAIN. PROTECT DURING WORK.
 - (E) CMU WALL BEHIND FUEL MONITORING EQUIPMENT TO REMAIN. PROTECT DURING WORK.
 - (N) FIXED LADDER TO MECHANICAL MEZZANINE. CONSTRUCT PER DETAIL A81-6.
 - PAINTED WOOD SHELVES. PAINT COLOR P1.
 - DRYING OVEN PROVIDED AND INSTALLED BY ITD. CONTRACTOR TO COORDINATE INSTALLATION WITH ITD.
 - IGNITION OVEN PROVIDED AND INSTALLED BY ITD. CONTRACTOR TO COORDINATE INSTALLATION WITH ITD.
 - WORK COUNTER, RE: A41-6.
 - COUNTER WITH SINK, RE: A41-7.
 - COUNTER AND CABINETS, RE: A41-5.
 - HI/LOW DRINKING FOUNTAIN, RE: PLUMBING.
 - ICE MAKER, RE: PLUMBING.
 - WATER HEATER, RE: PLUMBING.
 - SERVICE SINK, RE: PLUMBING.
 - MOP/BROOM HANGER.
 - SERVER RACK, RE: TELECOM PLANS.
 - CONCRETE LANDING, MIN. 4" THK. W/ BROOM FINISH. TOP OF LANDING TO BE FLUSH WITH BUILDING FLOOR. SLOPE SLAB AWAY FROM BUILDING AT 1/4" PER FT. DOWEL LANDING TO BUILDING WITH #4 DOWELS AT 24" O.C. EMBED DOWELS INTO BUILDING MIN. 4".
 - (E) WINDOW TO REMAIN. PROTECT DURING WORK.
 - (E) WINDOW TO REMAIN. PROTECT DURING WORK. BLACK OUT GLAZING TO MATCH (E).
 - ELECTRIC PANEL, RE: ELECTRICAL.
 - ALIGN FACE OF STUDS WITH FACE OF EXISTING COLUMN.

- ### INTERIOR FINISHES:
- A. ALL FLOORS TO BE EXPOSED CONCRETE F1.
 - B. OFFICE 110 TO HAVE CARPET TILE F2.
 - C. ALL WALLS (EXCEPT RESTROOMS) TO HAVE WALL BASE B1.
 - D. ALL RESTROOM WALLS TO BE TILED WITH T1 TO 6'-0" ABOVE FLR.
 - E. RESTROOM WALLS ABOVE TILE TO BE PAINTED P2.
 - F. ALL WALLS (EXCEPT RESTROOMS) TO BE PAINTED P1.
 - G. ALL INTERIOR DOOR FRAMES TO BE PAINTED P1.
 - H. ALL INTERIOR DOORS TO BE FINISHED WITH CLEAR STAIN/SEALER.
 - I. RESTROOM CEILINGS TO BE PAINTED P2.
 - J. WALLS AT MOP SINK AND WATER HEATER TO HAVE FRP 'L3' TO 4' HIGH.
 - K. PAINT INTERIOR SIDE OF EXISTING WINDOW FRAMES AND INFILL PANELS 'P1'.
- ### FLOORING
- F1 - EXPOSED SEALED CONCRETE WITH SMOOTH TROWEL FINISH
 - F2 - CARPET TILE - MANNINGTON COMMERCIAL, SCRIPT MODULAR BOROUGH 15217, INSTALLATION - HORIZONTAL BRICK ASHLAR
- ### WALL BASE
- B1 - JOHNSONITE, 4" RUBBER BASE #48 GREY WG
- ### PAINT
- P1 - SHERWIN WILLIAMS #SW 7050 - USEFUL GREY
 - P2 - SHERWIN WILLIAMS #SW 6965 - HYPER BLUE
- ### TILE
- T1 - DAL TILE VOLUME 1.0, AURAL SAND VL77 (12x24)
- ### LAMINATE/WALL FINISHES
- L1 - WILSONART, PORTICO TEAK #8210K-28
 - L2 - WILSONART, ORGANIC COTTON #4945-38
 - L3 - MARLITE, STANDARD FRP #P151 LIGHT GREY

- ### GENERAL NOTES:
- A. ALL WALL DIMENSIONS ARE TO FACE OF CONCRETE AND/OR FACE OF STUD UNLESS NOTED OTHERWISE.
 - B. VERIFY DIMENSIONS OF ALL FIXTURES AND EQUIPMENT PROVIDED BY OWNER AND OWNER'S OUTSIDE CONTRACTORS.
 - C. PROVIDE BLOCKING AS REQUIRED FOR ALL WALL MOUNTED ITEMS.
 - D. WHERE NEW WORK IS CALLED FOR, SUCH WORK SHALL INCLUDE REQUIRED DEMOLITION OR REMOVAL OF EXISTING FINISHES, SYSTEMS AND ALL RELATED ITEMS.

ITD D3 BUILDING CONVERSION
5800 COFFEY STREET
GARDEN CITY, ID

CSHOA

PROJECT 19004 DATE 7/23/19
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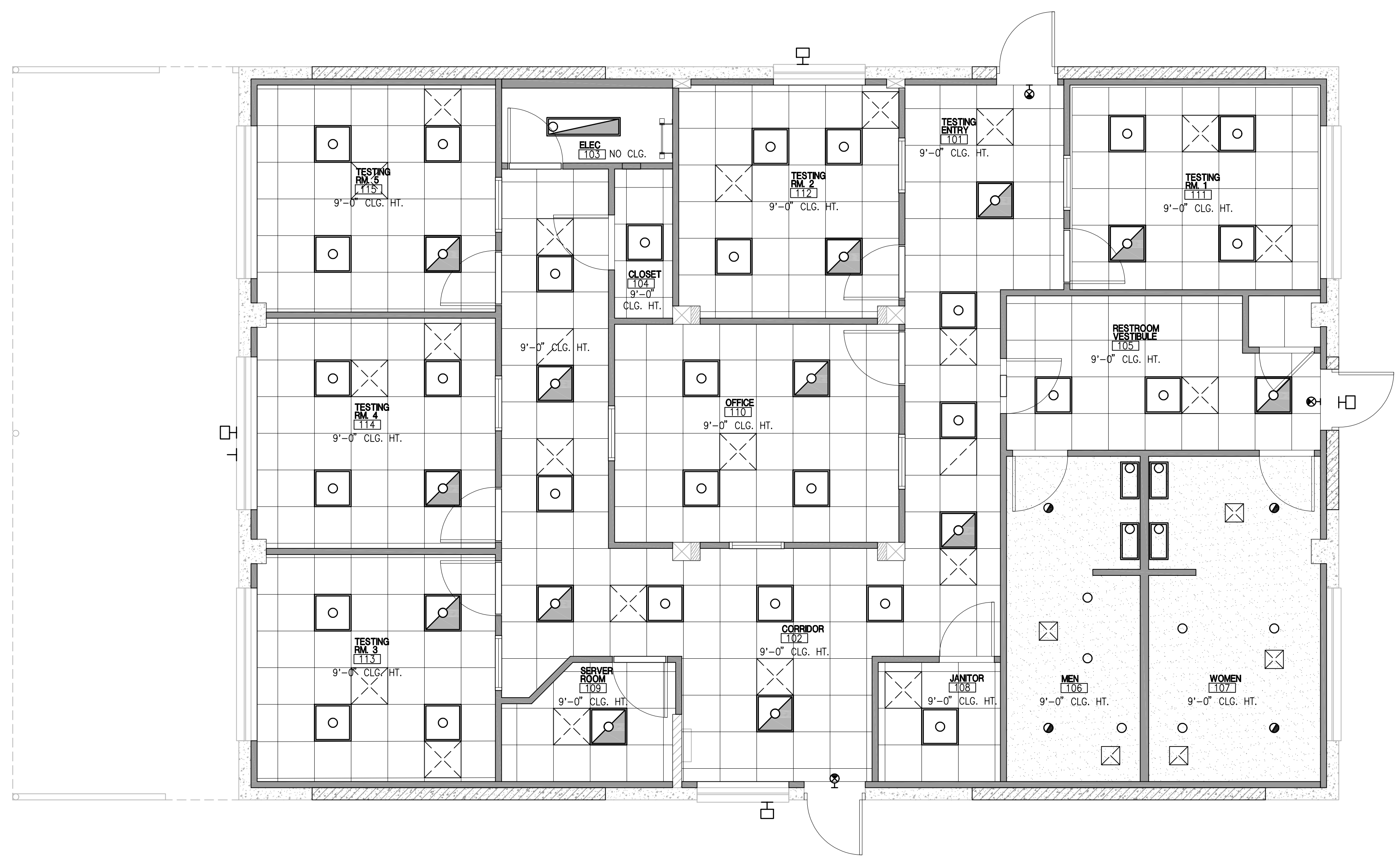
SHEET TITLE **FLOOR PLANS**

SHEET **A21**
ORIGINAL SHEET SIZE 24" x 36"

CRAIG A. SLOCUM, ARCHITECT
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LICENSED ARCHITECT ARCHITECT ON FILE WITH THE ARCHITECT BOARD OF IDAHO
OWNER CRAIG A. SLOCUM
ORIGINAL DATE SIGNED: 10/9/19



1 REFLECTED CEILING PLAN
 SCALE 1/8" = 1'-0"

LEGEND

① SHEET NOTE

24" x 24" ACOUSTICAL CEILING TILE, ARMSTRONG 'CORTEGA', MINERAL FIBER, COLOR: WHITE

5/8" GYP. BRD. CEILING

HVAC DIFFUSERS (SEE MECH)

ELECTRICAL FIXTURES (SEE ELEC)

GENERAL NOTES:

A. FOR MECHANICAL EQUIPMENT/WORK SEE MECHANICAL PLANS.
 B. FOR ELECTRICAL FIXTURES/WORK SEE ELECTRICAL PLANS.

LICENSED ORIGINAL DOCUMENT SIGNED BY ARCHITECT ON FILE WITH THE ARCHITECT ORIGINAL SIGNED BY CRAIG A. SLOCUM ORIGINAL DATE SIGNED: 10/31/19

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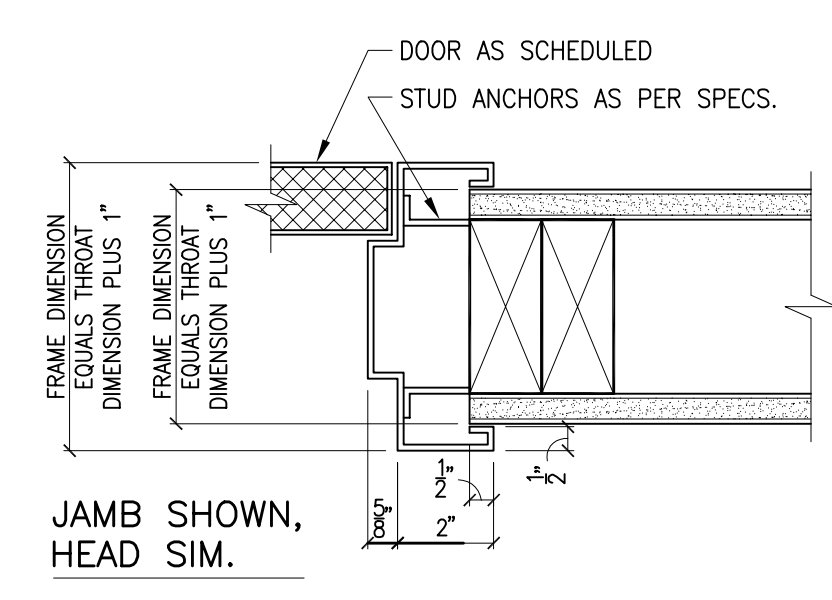
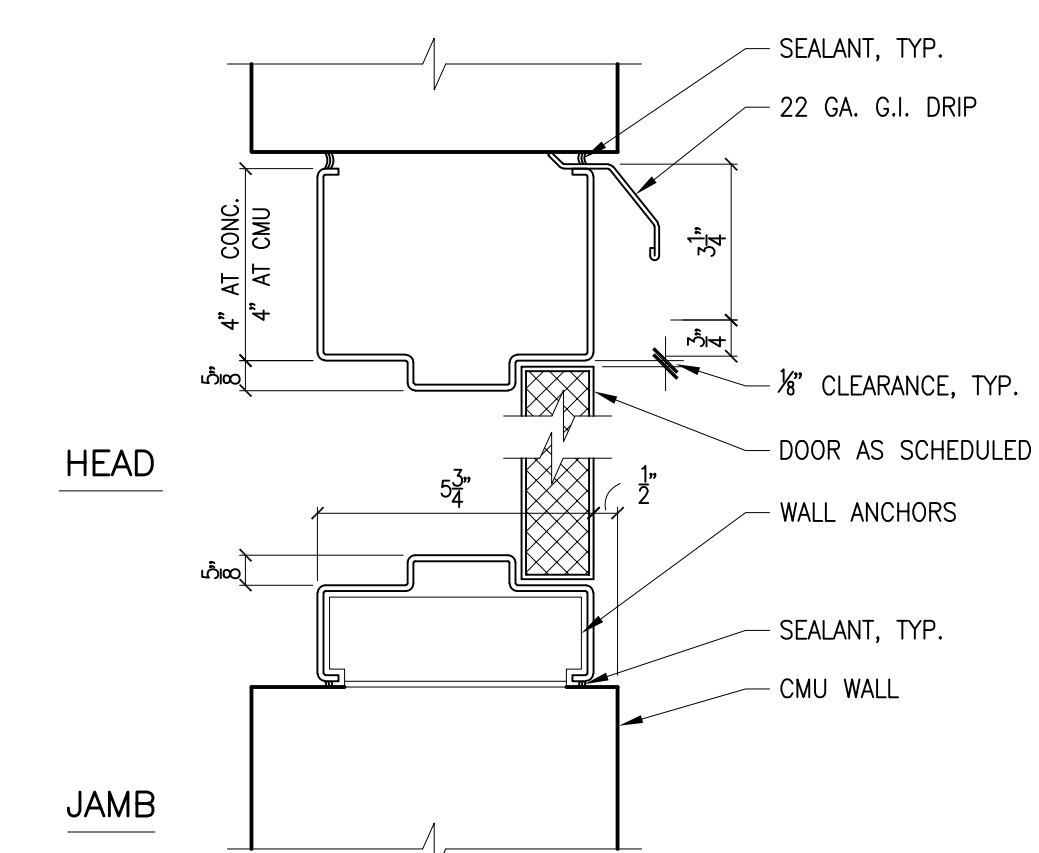
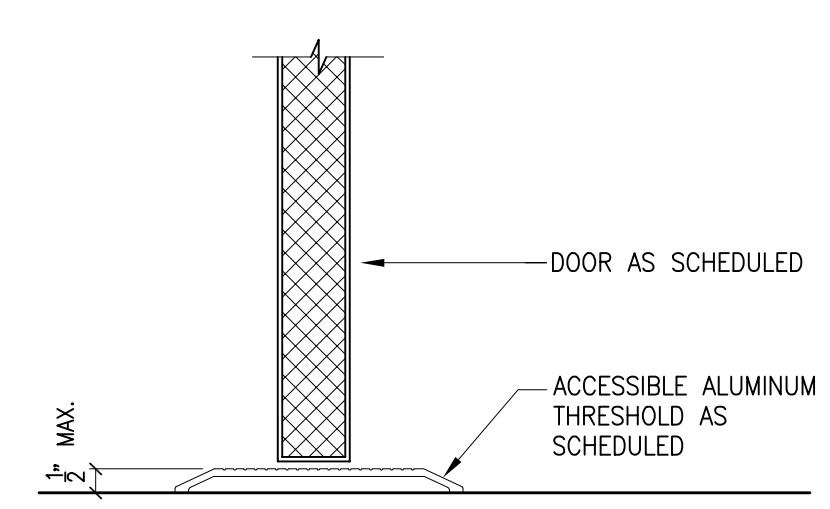
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PROJECT 19004 DATE 7/23/19
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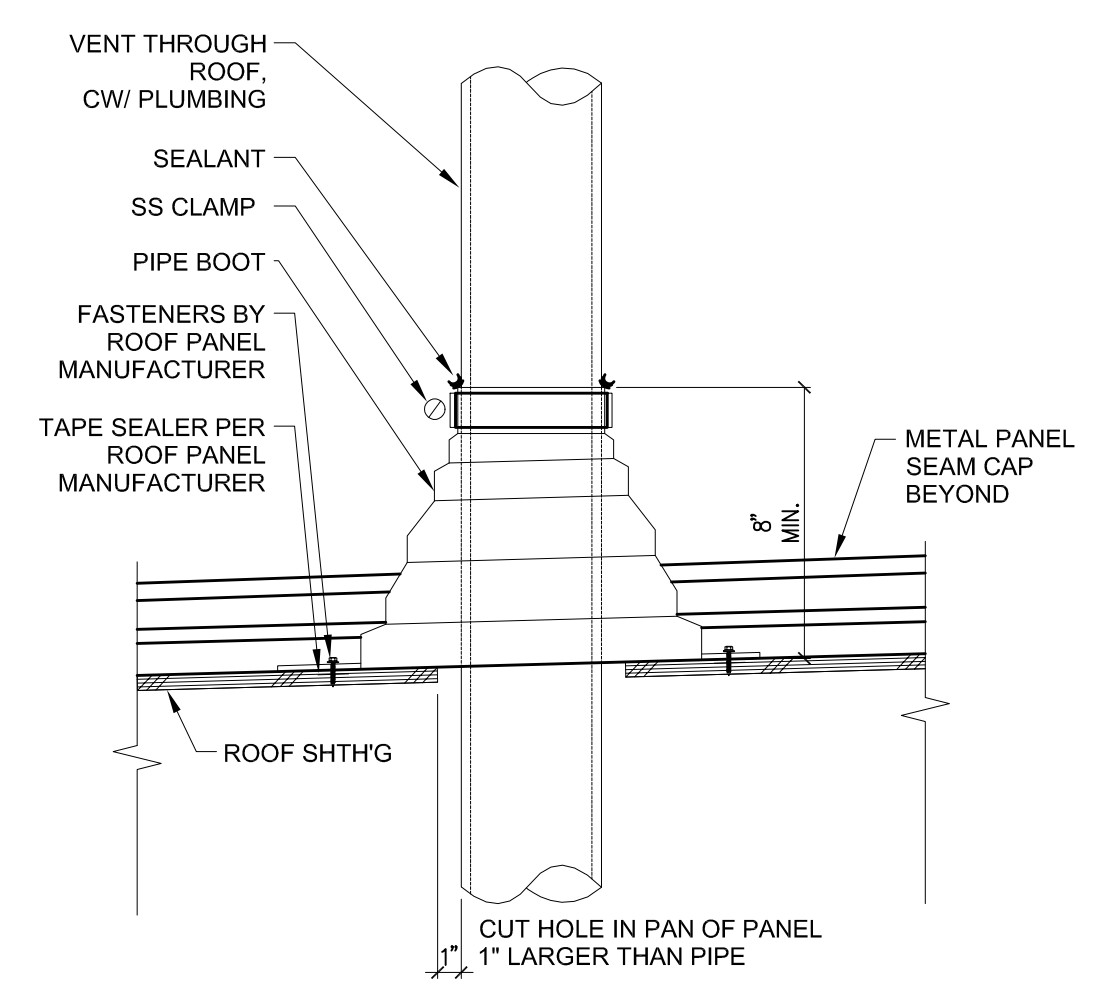
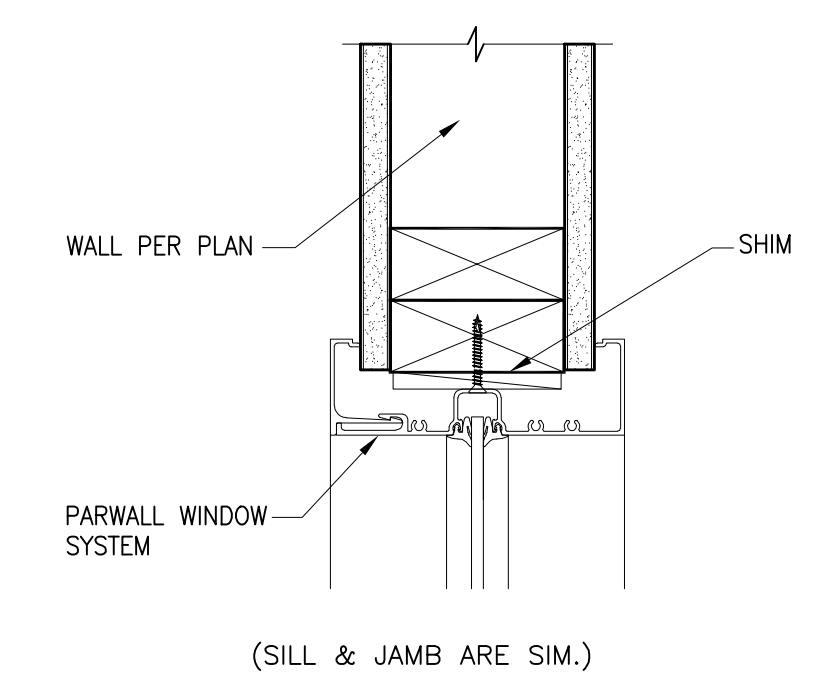
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 2 9/25/19 LB

SHEET TITLE
REFLECTED CEILING PLAN

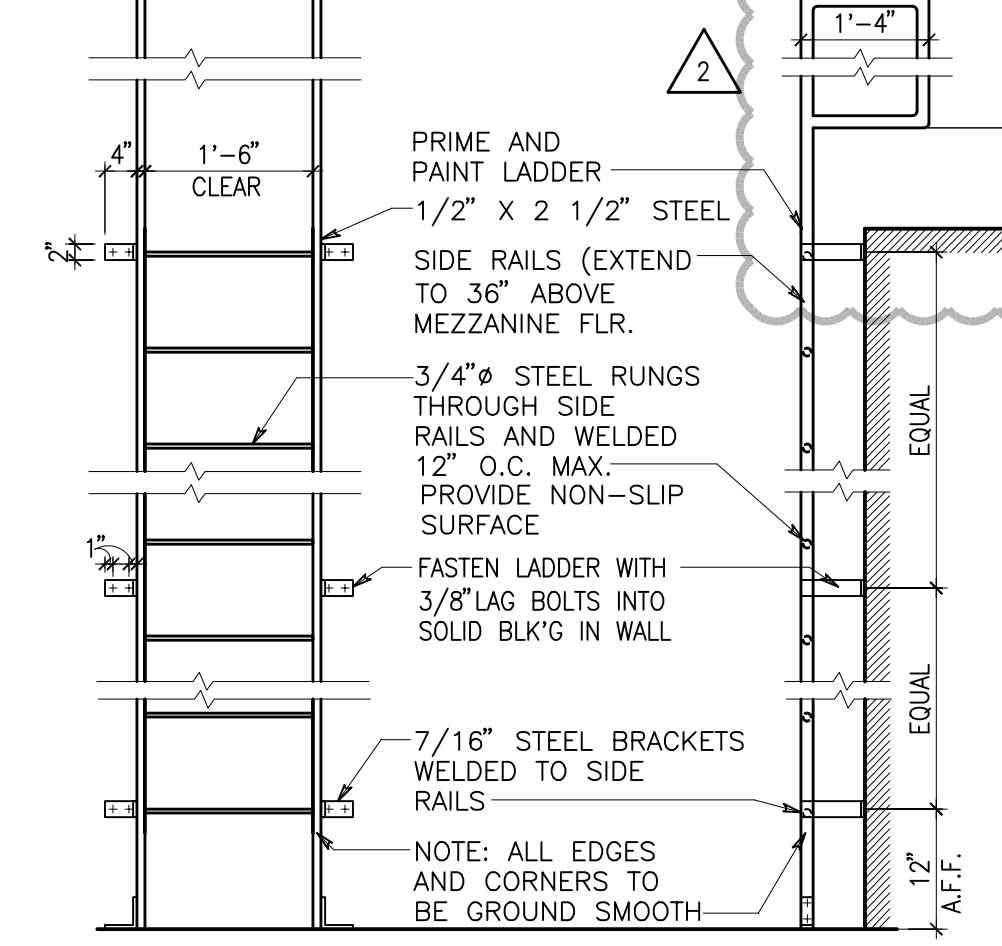
SHEET
A31
 ORIGINAL SHEET SIZE 24" x 36"



NOTE: FINISHED WALL THICKNESS: ACTUAL STUD SIZE PLUS WALL MATERIAL THICKNESS. VERIFY TOTAL THICKNESS FROM FLOOR PLAN.

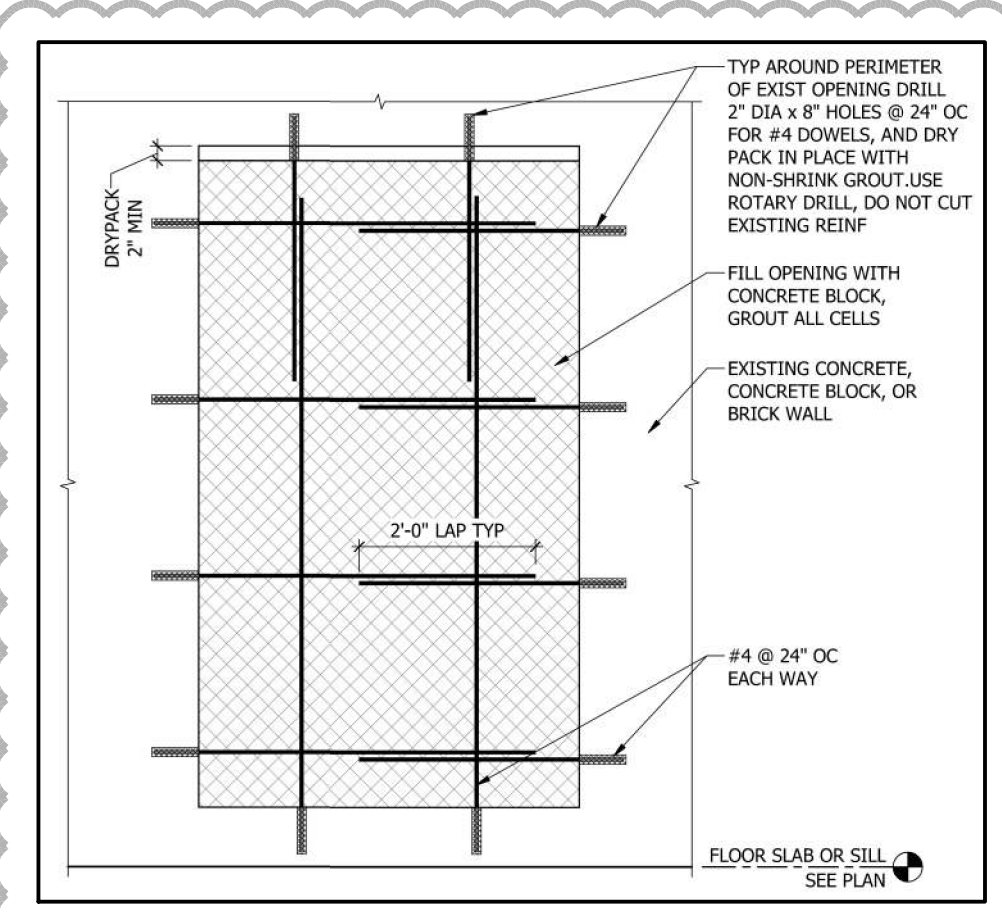


1 THRESHOLD
SCALE 3" = 1'-0"



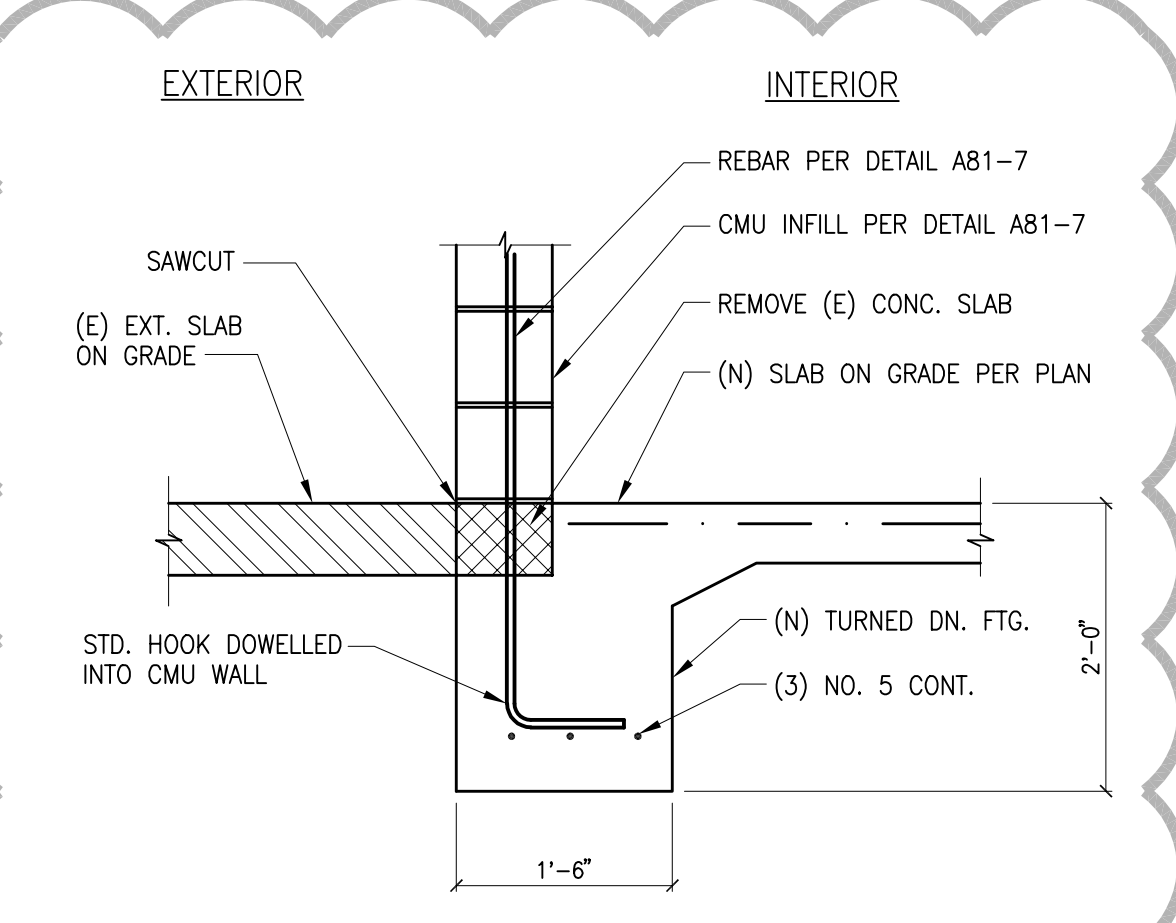
6 FIXED LADDER
SCALE 1/2"=1'-0"

2 HM FRAME - CMU
SCALE 3" = 1'-0"



7 CMU INFILL
SCALE NTS

3 HM FRAME - DRYWALL
SCALE 3" = 1'-0"



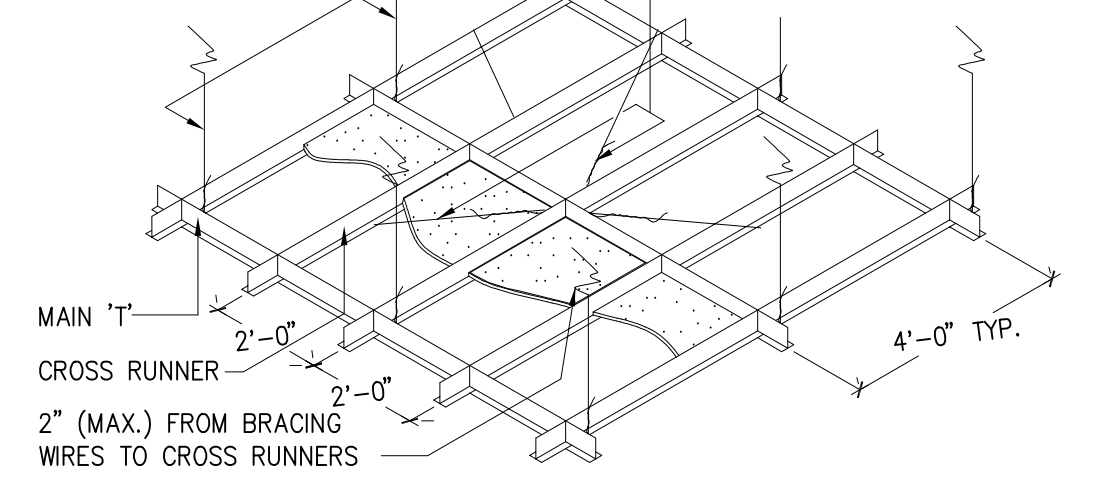
8 CMU INFILL FTG.
SCALE 3/4"=1'-0"

4 PARAWALL WINDOW HEAD
SCALE 3"=1'

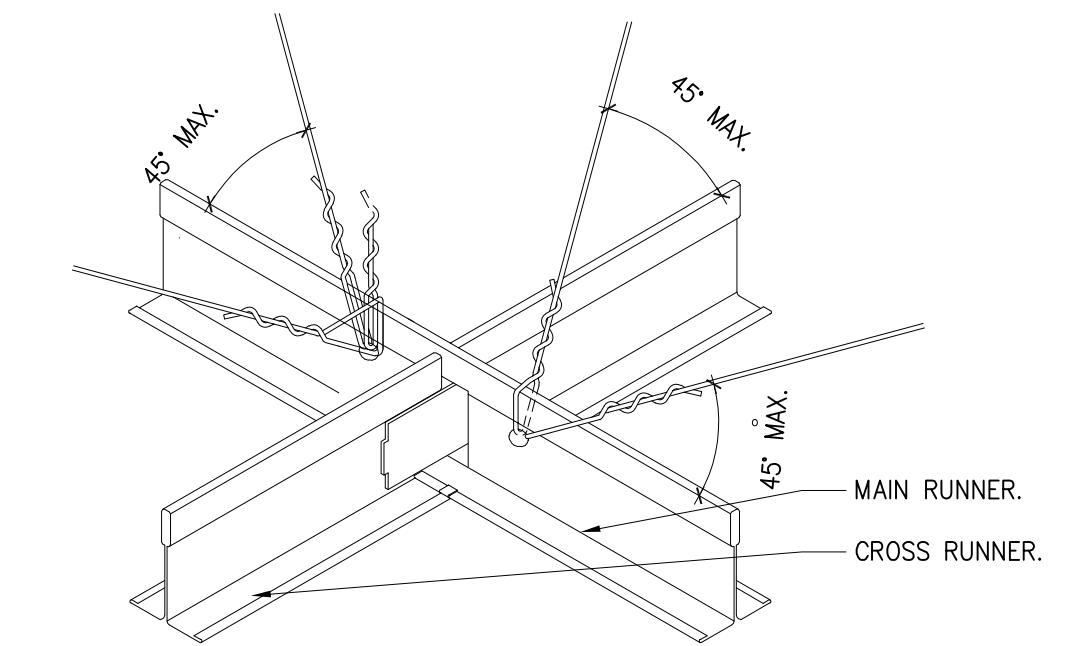
5 VENT PIPE THRU ROOF
SCALE 1 1/2" = 1'-0"

NOTES

- ALL LIGHT FIXTURES & HVAC AIR REGISTERS SHALL BE SUPPORTED BY 12 GA. HANGER WIRES WITHIN 3" OF EACH CORNER AND TWO (2) HANGER WIRES (SLACK) AT DIAGONAL CORNERS. CEILING SYSTEM SHALL NOT SUPPORT OTHER ITEMS.
- WIRES TO PENDANT MOUNTED FIXTURES SHALL BE 9 GAUGE AND FIXTURES SHALL BE INDEPENDANTLY SUPPORTED BY BUILDING STRUCTURES.



15 SUSPENDED CEILING
SCALE NTS



LICENSED ORIGINAL DOCUMENT SIGNED BY ARCHITECT ORIGINAL SIGNED BY: CRAIG A. SLOCUM ORIGINAL DATE SIGNED: 10/9/19

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REVISED BIDDING REVISIONS
2 9/25/19 LB

SHEET TITLE
DETAILS

SHEET
A81
ORIGINAL SHEET SIZE 24" x 36"



PLUMBING ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MHT	MALE HOSE THREAD
AG	AIR GAP	MIN	MINIMUM
ALT	ALTERNATIVE, ALTERNATE	MISC	MISCELLANEOUS
AP	ACCESS PANEL	MPG	MEDIUM PRESSURE NATURAL GAS
ARCH	ARCHITECT, ARCHITECTURAL	MTD	MOUNTED
BFP	BACKFLOW PREVENTER	MV	MIXING VALVE
BHP	BRAKE HORSEPOWER	(N)	NEW
BLDG	BUILDING	NC	NORMALLY CLOSED
CD	CONDENSATE DRAIN	NG	NATURAL GAS
CGW	CAST IRON GREASE WASTE	NIC	NOT IN CONTRACT
CO	CLEANOUT	NO/#	NUMBER
CW	COLD WATER	NPW	NON-POTABLE WATER
C/W	COORDINATE WITH	NTS	NOT TO SCALE
(D)	DEMOLISH	OC	ON CENTER
DF	DRINKING FOUNTAIN	OD	OUTSIDE DIAMETER, OVERFLOW DRAIN
DIA/Ø	DIAMETER	OFL	OVERFLOW LEADER
DS	DOWNSPOUT	PRV	PRESSURE REDUCING VALVE
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
(E)	EXISTING	PSI	POUNDS PER SQUARE INCH
EFF	EFFICIENCY	PVC	POLYVINYL CHLORIDE
ELEC	ELECTRIC, ELECTRICAL	R/RAD	RADIUS
EQUIP	EQUIPMENT	RD	ROOF DRAIN
ET	EXPANSION TANK	RE	REFERENCE
EW	EYE WASH	RO	REVERSE OSMOSIS
EWC	ELECTRIC WATER COOLER	RP	RECIRCULATION PUMP
EWS	EYE WASH SHOWER	RPM	REVOLUTIONS PER MINUTE
F	FAHRENHEIT	RWL	RAINWATER LEADER
FCO	FLOOR CLEANOUT	SA	SHOCK ARRESTER
FD	FLOOR DRAIN	SCHED	SCHEDULE
FIN FL/FF	FINISHED FLOOR	SCW	SOFT COLD WATER
FP	FIRE PROTECTION	SH	SHOWER
FPM	FEET PER MINUTE	SHT	SHEET
FS	FLOOR SINK	SK	SINK
FT	FEET	SPEC(S)	SPECIFICATION(S)
FT HD	FEET OF HEAD	SS	SANITARY SEWER
GA	GAUGE	STD	STANDARD
GAL	GALLON	TD	TRENCH DRAIN
GCO	GRADE CLEANOUT	TDL	TOTAL DEVELOPED LENGTH
GI	GREASE INTERCEPTOR	TEMP	TEMPERATURE
GPM	GALLONS PER MINUTE	TP	TRAP PRIMER
GW	GREASE WASTE	TYP	TYPICAL
HB	HOSE BIBB	UR	URINAL
HP	HORSEPOWER	UBC	UNIFORM BUILDING CODE
HW	HOT WATER	UFC	UNIFORM FIRE CODE
HWR	HOT WATER RETURN	UMC	UNIFORM MECHANICAL CODE
IBC	INTERNATIONAL BUILDING CODE	UON	UNLESS OTHERWISE NOTED
ID	INSIDE DIAMETER	UPC	UNIFORM PLUMBING CODE
IE	INVERT ELEVATION	V	VENT
IECC	INTERNATIONAL ENERGY CONSERVATION CODE	VTR	VENT THROUGH ROOF
IFGC	INTERNATIONAL FUEL GAS CODE	W	WIDE, WIDTH
IMC	INTERNATIONAL MECHANICAL CODE	WB	WATER BOX
IPC	INTERNATIONAL PLUMBING CODE	WC	WATER CLOSET
IN WC	INCHES OF WATER COLUMN	WCO	WALL CLEANOUT
INV	INVERT	WG	WATER GAUGE
ISPC	IDAHO STATE PLUMBING CODE	WH	WATER HEATER
KW	KILOWATT	WPD	WATER PRESSURE DROP
LAV	LAVATORY	WS	WATER SOFTENER
LPG	LIQUID PETROLEUM GAS	W/	WITH
MAX	MAXIMUM	W/O	WITHOUT
MECH	MECHANICAL		
MFR	MANUFACTURER		

PLUMBING PIPING SYMBOLS

PIPE ELBOW UP		PIPE ELBOW DOWN	
PIPE TEE BRANCH UP (WITH ELBOW)		PIPE TEE BRANCH DOWN (WITH ELBOW)	
INDICATES DIRECTION OF DOWNWARD PITCH		FLOW DIRECTION INDICATOR	
FLEXIBLE CONNECTION, BRAIDED		UNION	
STRAINER		PIPE CAP	
BALL VALVE		CHECK VALVE	
DOUBLE CHECK BACK FLOW PREVENTER		REDUCED PRESSURE BACK FLOW PREVENTER	
CIRCUIT SETTER		HOSE BIBB, EXPOSED	

PLUMBING LINETYPE LEGEND

NOTE: SUFFIX (E) IN CONJUNCTION WITH LIGHTER SHADING INDICATES EXISTING PIPE OR EQUIPMENT. (TYPICAL OF ALL EQUIPMENT AND PIPING).

	NEW	EXISTING	TO BE DEMOLISHED	
DOMESTIC COLD WATER	----	----	////	
SOFT COLD WATER	----	----	////	
NON-POTABLE WATER	----	----	////	
DOMESTIC HOT WATER	----	----	////	
DOMESTIC HOT WATER RETURN	----	----	////	
PLUMBING EQUIPMENT	----	----	////	
PLUMBING EQUIPMENT ON ROOF	----	----	////	
NATURAL GAS	----	----	////	
MEDIUM PRESSURE NATURAL GAS	----	----	////	
OVERFLOW LEADER	----	----	////	
RAINWATER LEADER	----	----	////	
CONDENSATE DRAIN	----	----	////	
SANITARY SEWER (BELOW GRADE)	----	----	////	
SANITARY SEWER (ABOVE GRADE)	----	----	////	
GREASE WASTE LINE (BELOW GRADE)	----	----	////	
SANITARY VENT	----	----	////	

PLUMBING SHEET INDEX

P01	PLUMBING COVER SHEET
P11	PLUMBING DEMO PLAN
P21	WASTE AND VENT PLAN - LEVEL 1
P22	WASTE AND VENT PLAN - LEVEL 2
P23	WATER AND GAS PLAN - LEVEL 1
P24	WATER AND GAS PLAN - LEVEL 2
P41	PLUMBING SCHEDULES
P42	PLUMBING DETAILS

PLUMBING GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE CODES, LOCAL CODES, LOCAL STANDARDS, IBC, IPC, NFPA, AND THE LANDLORD'S AND TENANT'S REQUIREMENTS INCLUDING SUPPLEMENTS AND DETAILS.
- PROVIDE SEAL BETWEEN WALLS AND PLUMBING FIXTURES PER HEALTH DISTRICT REQUIREMENTS.
- COLD AND HOT WATER SUPPLY PIPING SIZES FOR FIXTURE CONNECTIONS ARE NOT SHOWN ON PLANS. SEE FIXTURE SCHEDULE FOR CONNECTION SIZES.
- INSTALL ALL OVERHEAD PIPING AS CLOSE TO STRUCTURE AS POSSIBLE, OR AS DETAILED OTHERWISE.
- LOCATE AND LABEL ALL VALVES FOR SERVICE ACCESSIBILITY. VALVES INSTALLED ABOVE CEILINGS SHALL BE ACCESSIBLE THRU CEILING. SEE DRAWINGS FOR LOCATIONS.
- COORDINATE INSTALLATION WITH THE WORK OF OTHER TRADES PRIOR TO STARTING. IN THE EVENT THAT CONFLICTS ARE FOUND WITH THE WORK OF THE OTHER TRADES, BRING ALL SUCH CONFLICTS TO THE ARCHITECT'S ATTENTION FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK IN THAT AREA. DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATIONS SHALL BE CORRECTED AT NO ADDITIONAL EXPENSE TO OWNER. IMMEDIATELY NOTIFY ARCHITECT OF CONDITIONS IN CONFLICT WITH THE PLANS.
- PROVIDE PIPING EQUIPMENT AND MATERIALS IN ACCORDANCE WITH APPLICABLE PLUMBING CODE REGULATIONS AND STANDARDS, AUTHORITIES HAVING JURISDICTION, OR AS OTHERWISE RECOMMENDED OR DIRECTED BY MANUFACTURERS.
- COORDINATE INSTALLATION OF PIPING BELOW AND ABOVE GRADE WITH STRUCTURAL COMPONENTS AND OTHER SYSTEM INSTALLATIONS.
- COORDINATE ALL FIXTURES, EQUIPMENT AND ROUGH-IN CONNECTION LOCATIONS AND SIZES WITH ARCHITECTURAL DRAWINGS, OWNER AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- COORDINATE ALL FURRING REQUIREMENTS AND WALL THICKNESS WITH PIPE AND ACCESS PANEL INSTALLATIONS. COORDINATE ACCESS PANEL LOCATIONS WITH INTERIOR ELEVATIONS TO AVOID CONFLICTS WITH EQUIPMENT, GRAB BARS OR DECORATIVE ELEMENTS.
- PROVIDE SEISMIC RESTRAINTS FOR ALL PIPE AND EQUIPMENT AS RECOMMENDED IN SMACNA "SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL EQUIPMENT", LATEST EDITION.
- ALL PIPING SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. ALL WALLS IN WHICH WATER OR WASTE LINES ARE INSTALLED MUST BE PATCHED TO MATCH EXISTING AFTER LINES ARE INSTALLED.
- PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOB SITE, TAKE NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. NO ALLOWANCES WILL BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.
- PIPING PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRESTOPPED IN ACCORDANCE WITH APPLICABLE CODES.
- ALL WORK ON THE PLUMBING DRAWINGS SHALL BE COMPLETED BY THE PLUMBING CONTRACTOR UNLESS SPECIFIED OTHERWISE.
- ANY DISCREPANCIES OR INADEQUACIES BETWEEN THE PLUMBING DRAWINGS AND OTHER DISCIPLINES SHALL BE BROUGHT TO THE ATTENTION OF OWNER'S REPRESENTATIVE.
- INSTALL ALL PIPING RUNS AS HIGH AS POSSIBLE THROUGHOUT ENTIRE BUILDING. INSTALL LONG RUNS WITHIN JOIST SPACE AND OTHER PIPING TIGHT TO BOTTOM OF STEEL. COORDINATE WITH OTHER TRADES - DUCTWORK, FIRE PROTECTION, PIPING, LIGHTING SYSTEMS, ETC.
- FINAL CONNECTION TO ALL GAS FIRED APPLIANCES TO BE BY PLUMBING CONTRACTOR REGARDLESS OF WHO PROVIDES APPLIANCES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO HVAC EQUIPMENT, COOKING EQUIPMENT, EMERGENCY GENERATORS, DOMESTIC WATER HEATERS, ETC.
- ALL PLUMBING FIXTURES SHALL HAVE THEIR OWN INDEPENDENT SHUT OFF BALL VALVES, INSTALLED IN AN EASILY ACCESSIBLE LOCATION.
- COORDINATE ALL FURRING REQUIREMENTS AND WALL THICKNESS WITH PIPE AND ACCESS PANEL INSTALLATIONS. COORDINATE ACCESS PANEL LOCATIONS WITH INTERIOR ELEVATIONS TO AVOID CONFLICTS WITH EQUIPMENT, GRAB BARS, AND DECORATIVE ELEMENTS.
- REFER TO SPECIFICATIONS FOR ALL PIPING MATERIALS AND SERVICES.
- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.

PLUMBING ANNOTATION SYMBOLS

- FIXTURE OR EQUIPMENT CALLOUT
- KEY NOTES
- REVISION
- CONNECT NEW TO EXISTING (SHADED SIDE IS NEW WORK)

Water Main Sizing Calculation - 2012 Uniform Plumbing Code

Project Name: **IDT Testing Building** Date: **6/20/2016**
 Project #: **19004** Designer: **KMH**

Pressure available at Street Main	60	PSIG	
Pressure loss through water meter	5	PSIG	
Pressure loss through backflow device (building supply)	13	PSIG	
Pressure loss (Static) due to system height	System Height = 25 FT	10.75	PSIG
Pressure required to operate remote fixture (20 PSI - Flush Tank)	(25 PSI - Flush Valve)	25	PSIG
Actual length of pipe, service tap to remote fixture	200	Feet	
Fitting Factor multiplier (0 to 50% of actual length)	50	%	
Equivalent length of piping system	300	Feet (equiv.)	
Remaining Pressure = 6 PSIG			
Maximum allowable pressure loss/100ft = 2.1 PSIG			

FIXTURE	SERVICE	WFU	FIX QTY	TOTAL WFU
Drinking Fountain or Water cooler	Either	0.5	1	0.5
Hose Bibb	Either	2.5	1	2.5
Hose Bibb, each additional	Either	1		
Lavatory	Either	1	4	4
Sinks - Testing Sink	Private	1	6	6
Service or Mop Basin	Private	1.5	1	1.5
Urinal, 1.0 GPF flushometer valve	Private	3	2	6
Water Closet, 1.6 GPF Flushometer Valve	Either	8	4	32
System Total WFU:				52.5
WFU conversion to GPM:				52
Water Main Service Size (inches) =				2-1/2"

2 PSI LOSS / 100 FT						
CW VELOCITY = 8 FPS, HW VELOCITY = 5 FPS						
BRANCH PIPING SIZE	CW	HW	CW	HW	CW	HW
1/2"	2	2	1	1	-	-
3/4"	4	4	4	4	-	-
1"	7.5	7.5	9	9	-	-
1-1/4"	16	16	23	23	-	-
1-1/2"	24	24	39	39	7	-
2"	46	46	111	111	39	-
2-1/2"	72	72	236	236	116	-
3"	130	112	533	443	430	-
4"	260	190	1418	874	1418	-

Notes: 1. The plumbing fixture water fixture units were selected from Tables A2.1.
 2. The branch pipe chart sizes were selected from Tables A2.1(1) and A4.1.
 3. WFU refers to water fixture units.

PLUMBING PIPING INSULATION SCHEDULE SECTION 22 07 00

System Or Service	Avg. Pipe Temp (°F)	Insulation Type	Pipe Location		Jacket (c)		Insulation Thickness			
			Indoor	Outdoor	All Svc.	Metal	0.5-1.25	1.5-4	5-8	10-30
Horizontal and Vertical Rainwater Conductors and Roof Drain Bodies	55	Mineral Fiber	X		X		1	1	1	1
		OR Flexible Cellular	X	X(a)			0.5	0.5	0.5	0.5
Condensate Drains for Air-Conditioning Equipment	60	Mineral Fiber	X				0.5	-	-	-
		OR Flexible Cellular	X	X(a)			0.5	-	-	-
Hot and Recirculated Hot Water	105 to 140	FOR MAINS: Mineral Fiber	X		X		1	1.5	1.5	1.5
		FOR BRANCHES, DROPS, AND RUNOUTS: Mineral Fiber	X		X		1	-	-	-
Handicapped Fixture Trap and Supply	40 to 140	OR Flexible Cellular	X				1	-	-	-
		Mineral Fiber	X		X(b)		0.5	-	-	-
Domestic Cold, Soft Cold Water, Humidification Water, Trap Primer Water	40 to 50	FOR MAINS: Mineral Fiber	X		X		0.5	1	1	1
		FOR BRANCHES, DROPS, AND RUNOUTS: Mineral Fiber	X		X		1	-	-	-
Heat-Traced Lines	40	OR Flexible Cellular	X				1	-	-	-
		Mineral Fiber	X		X		2	2	2	2

a = Jacket required on outdoor piping
 b = Polyvinyl chloride (PVC) jacket required.
 c = Protective jackets consisting of 0.016 inches 316 stainless steel shall be used for exposed (exterior) insulation systems and where exposed in interior mechanical equipment rooms, or other high traffic areas (up to 10 feet above finished floor). As an alternative, PVC jacket and fittings covers may be used in these interior spaces.

INSULATION SPECIFICATION:
 Flexible Cellular: ASTM C 534, 5 pcf density, k = 0.27 Btu-in/h-ft² at 75 °F
 Mineral Fiber: ASTM C 547, 4 pcf density, k = 0.23 Btu-in/h-ft² at 75 °F

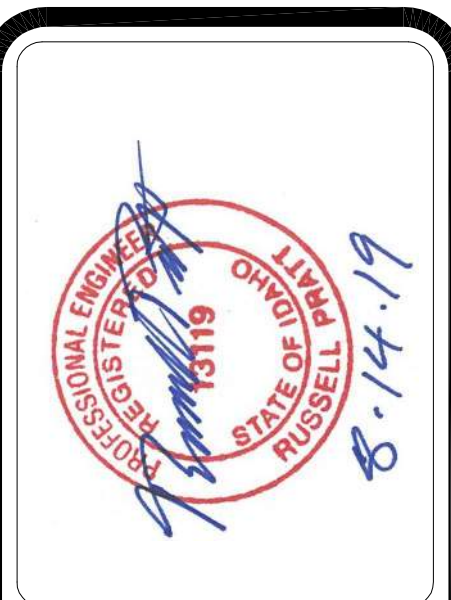
GAS CALCULATIONS

JOB NAME: **IDT Supply Building Remodel, Garden City, ID** DATE: **8/14/2019**

JOB NUMBER: **19004** BY: **KMH**

TOTAL BLDG LOAD (mbh): 333	MAIN SIZE (inches): 1 1/2	DIST. TO LAST FIXTURE (feet): 110
CODE: IFGC	DELIVERY PRESS.: 7" WC	

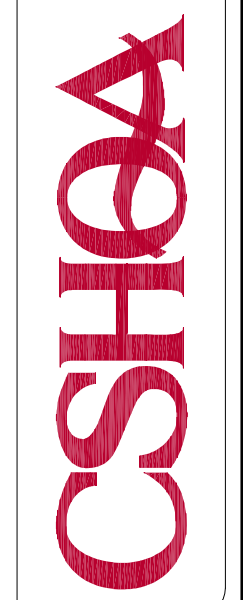
EQUIP	MBH	DIST. METER TO EQUIP. (feet)	LINE SIZE (inches)
WH-1	120	110	1
F-1	80	65	3/4
F-2	40	75	1/2
F-3	93	80	3/4
333			



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GARDEN CITY, ID
 5800 COFFEY STREET

200 BROAD STREET
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FOR CONSTRUCTION
 9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN KMH	CHECKED RCP

REVISED 1 08/14/2019, KMH
 BLDG DEPT COMMENTS

SHEET TITLE
PLUMBING COVER SHEET

SHEET
P01
 ORIGINAL SHEET SIZE 24" x 36"



WASTE & VENT PLAN - LEVEL 1
SCALE 1/4" = 1'-0"

LEGEND:			
NEW	EXISTING	TO BE DEMOLISHED	
---	---	////	DOMESTIC COLD WATER
---	---	////	DOMESTIC HOT WATER
---	---	////	DOMESTIC HOT WATER RETURN
---	---	////	PLUMBING EQUIPMENT
---	---	////	PLUMBING EQUIPMENT ON ROOF
---	---	////	GAS
---CD---	---CD---	////	CONDENSATE DRAIN
---SS---	---SS---	////	SANITARY SEWER (BELOW GRADE)
---	---	////	SANITARY VENT
FIXTURE OR EQUIPMENT TAG (RE: FIXTURE AND EQUIPMENT SCHEDULES)			

- GENERAL NOTES:**
- PRIOR TO INSTALLING ANY PIPING, VERIFY EXISTING CONDITIONS AND INVERTS. NOTIFY GC/ARCHITECT OF ANY CONDITIONS THAT WILL NOT ALLOW FOR INVERTS NOTED.
 - SLOPE ALL DRAINAGE PIPING AS FOLLOWS:
 - SANITARY SEWER BRANCH PIPING AT 1/4" PER FOOT.
 - INDIRECT WASTE PIPING AT 1/4" PER FOOT.
 - PROVIDE INDIRECT WASTE PIPING TO RECEPTORS FROM ALL EQUIPMENT AS REQUIRED. REFER TO FIXTURE SCHEDULES FOR FURTHER INFORMATION. PIPING SHALL BE TYPE DWV OR TYPE M COPPER INSTALLED A MINIMUM OF 1/2" OFF ADJACENT FLOOR AND WALL SURFACES.
 - COORDINATE ALL FURRING REQUIREMENTS AND WALL THICKNESS WITH REGARDS TO PIPE AND WALL CLEANOUT INSTALLATIONS.
 - COORDINATE ACCESS PANEL LOCATIONS WITH INTERIOR ELEVATIONS TO AVOID CONFLICTS WITH EQUIPMENT, GRAB BARS OR DECORATIVE ELEMENTS.
 - RECORD DRAWINGS USED FOR DESIGN MAY NOT REFLECT CURRENT LAYOUT OF STORE. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPING AND FIXTURE LOCATIONS PRIOR TO START OF WORK.
 - WASTE AND VENT PIPING FROM DEMOLISHED FIXTURES/EQUIPMENT SHALL BE CAPPED AT MAIN ABOVE CEILING, BELOW FLOOR AND AT WALL AS REQUIRED. ALL ABANDONED PIPING SHALL BE REMOVED FROM THE BUILDING AND DISPOSED OF PROPERLY. PATCH FLOOR AND WALLS AS REQUIRED.
 - PLUMBER SHALL COORDINATE REMOVAL OF FIXTURES/EQUIPMENT/PIPING WITH ALL OTHER DISCIPLINES.

- # SHEET NOTES:**
- ROUTE VENT UP IN WALL TO +6" ABOVE FLOOD RIM OF FIXTURE. ROUTE HORIZONTALLY IN WALL TO VENT RISER.
 - ROUTE VENT PIPING UP IN WALL AND ROUTE OVERHEAD AS HIGH AS POSSIBLE IN STRUCTURE.
 - ROUTE PIPING OVERHEAD. COORDINATE ROUTING WITH STRUCTURE AND DUCTWORK LAYOUT.
 - ROUTE PIPING BELOW FLOOR. VERIFY EXACT INSTALLATION CONDITIONS AND REQUIREMENTS IN FIELD PRIOR TO START OF WORK.
 - ROUTE PIPING UP TO ABOVE. RE:1/P22.
 - INSTALL TRAP PRIMER PIPING ON FLOOR SINK/DRAIN OUTLET TO THE TRAP PRIMER. RE: WATER PLAN FOR WATER CONNECTION AND TRAP PRIMER LOCATION.
 - SANITARY PIPING DOWN IN WALL FROM ABOVE WITH WCO AT +18". RE:1/P22.



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**ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
5800 COFFEY STREET**

CSHOA

PROJECT 19004 DATE 7/23/19
DRAWN KMH CHECKED RCP

REVISED
2 09/25/2019, KMH BIDDING REVISION
1 08/14/2019, KMH BLDG DEPT COMMENTS

SHEET TITLE
WASTE & VENT PLAN LEVEL 1

SHEET
P21
ORIGINAL SHEET SIZE 24" x 36"



PLUMBING FIXTURE SCHEDULE SECTION 22 40 00												
FIXTURE		BASIS OF DESIGN		TRIM			CONNECTIONS, IN				REMARKS	
MARK	ITEM	MFR	MODEL	ITEM	MFR	MODEL	CW	HW	W	V		
EW-1	EMERGENCY EYEWASH/DRENCH HOSE	GUARDIAN	G5022BP-FSH-HG	THERMOSTATIC MIXING VALVE	GUARDIAN	G3600LF	1/2	1/2	-	-	EYEWASH/DRENCH HOSE UNIT MOUNTED IN SK-1. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FURNISH WITH STAINLESS STEEL HOSE, HOSE GUIDE AND THERMOSTATIC MIXING VALVE. SET OUTLET TEMPERATURE TO 80°F.	
EW-1	ADA ELECTRIC WATER COOLER (LOW)	ELKAY	LZS8WSLK	ACCESSORY	ELKAY	LKAPREZL	1/2	-	2	1-1/2	SINGLE WALL MOUNTED DRINKING FOUNTAIN/BOTTLE FILLER WITH STAINLESS STEEL TOP AND 8 GPH CHILLED WATER CAPACITY. FURNISH WITH MOUNTING HANGER, ACCESSORY APRON, AND FLEXIBLE SAFETY BUBBLER HEADS. ELECTRICAL LOAD 4.0 FLA AT 120 VOLTS. 5 YEAR WARRANTY. MOUNT AT ADA ACCESSIBLE HEIGHT ADA COMPLIANT (BARRIER-FREE).	
EW-2	ADA ELECTRIC WATER COOLER WITH GLASS FILLER (H)	ELKAY	LZS8LF	ACCESSORY GLASS FILLER	ELKAY	LKAPREZL LK1110	1/2	-	2	1-1/2	SINGLE WALL MOUNTED DRINKING FOUNTAIN WITH STAINLESS STEEL TOP, GLASS FILLER AND 8 GPH CHILLED WATER CAPACITY. FURNISH WITH MOUNTING HANGER, ACCESSORY APRON, AND FLEXIBLE SAFETY BUBBLER HEADS. ELECTRICAL LOAD 4.0 FLA AT 120 VOLTS. 5 YEAR WARRANTY.	
FD-1	FLOOR DRAIN (ROUND)	J.R. SMITH	2005YA-P050	-	-	-	-	-	2	1-1/2	CAST IRON BODY WITH ADJUSTABLE STRAINER HEAD. FURNISH WITH ROUND TOP, AND 1/2" CW TRAP PRIMER CONNECTION.	
FS-1	FLOOR SINK (DEEP BODY - 1/2 GRATE)	J.R. SMITH	3160Y-12	-	-	-	1/2	-	IND		AIR COOLED MODULAR CUBED ICE MACHINE AND ICE BIN.	
HD-1	HUB DRAIN	-	-	-	-	-	-	-	2	1-1/2		
IM-1	ICE MACHINE AND STORAGE BIN	CORNELIUS	CNM0522AF5A	ICE BIN	CORNELIUS	B530SS	-	-	3	2	FURNISH 12"x12"x10" DEEP FLOOR SINK WITH CAST IRON BODY AND ACID RESISTANT ENAMEL FINISH. FURNISH WITH 1/2 TOP GRATE AND BOTTOM DOME STRAINER.	
LAV-1	ADA LAVATORY (ROUND COUNTER-MTD)	ZURN	Z5114	FAUCET	ZURN	Z6915-XL-F	1/2	1/2	2	1-1/2	COUNTER MOUNTED VITREOUS CHINA LAVATORY. FURNISH WITH FAUCET (4" CENTERS) WITH BATTERY POWERED SENSOR OPERATED VALVE, VANDAL PROOF STRAINER, MIXING VALVE (NO. P6900-TMV-1), AND 0.5 GPM FLOW RESTRICTOR. INSULATE CW, HW, AND SS LINES FOR ADA COMPLIANCE. ADA COMPLIANT (BARRIER-FREE). SET MIXING VALVE OUTLET TO 105°F.	
MV-1	MIXING VALVE (LAVATORIES, HAND SINKS)	WATTS	LFUSG-B	-	-	-	3/8	3/8	-	-	INSTALL VALVE UNDER FIXTURE AND SIZE ACCORDING TO FIXTURE WATER SUPPLY. SET FOR 105°F.	
SA-1	SHOCK ARRESTER	J.R. SMITH	5005 THRU 5050	-	-	-	-	-	-	-	STAINLESS STEEL PRECHARGED HYDROTROL WATER HAMMER ARRESTER. SIZE ARRESTER FOR THE FIXTURES SERVED AND INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.	
SK-1	SINK (COUNTER-MTD)	ELKAY	DLP1R252212	FAUCET	ELKAY	LK406LGN08TB	1/2	1/2	2	1-1/2	COUNTER MOUNTED, 18 GAUGE TYPE 304 STAINLESS STEEL SINGLE BOWL SINK WITH SELF-RIMMING EDGE, STRAINER, AND FOUR (4) HOLES 4" OC. FURNISH WITH ADA COMPLIANT DECK MOUNTED GOOSENECK FAUCET WITH WRIST BLADE HANDLES AND 2.2 GPM AERATOR.	
SS-1	SERVICE SINK (36" SQUARE)	FIAT	TSB-3002	FAUCET	ZURN	Z842M1	1/2	1/2	3	2	FLOOR MOUNTED PRECAST TERRAZZO SERVICE SINK. FURNISH WITH 1239BB BUMPER GUARD, STRAINER, 889-CC MOP BRACKET, 832-AA HOSE & BRACKET, WALL MOUNTED POLISHED CHROME FAUCET WITH TOP BRACE, STOPS, VACUUM BREAKER, 3/4" THREADED HOSE OUTLET, AND PAIL HOOK WITH WALL SUPPORT.	
TP-1	TRAP PRIMER (AUTO-PNEUMATIC)	PPP	P2-500	-	-	-	1/2	-	-	-	INSTALL TRAP PRIMER ABOVE CEILING IN WALL IN AN ACCESSIBLE LOCATION WITH ACCESS PANEL. FURNISH TRAP PRIMER WITH DISTRIBUTION UNIT (NO. DU-U) FOR PRIMING 3 FLOOR DRAIN TRAPS.	
TP-2	TRAP PRIMER (AUTO-PNEUMATIC)	PPP	P1-500	-	-	-	1/2	-	-	-	INSTALL TRAP PRIMER ABOVE CEILING IN WALL IN AN ACCESSIBLE LOCATION WITH ACCESS PANEL. FURNISH TRAP PRIMER WITH DISTRIBUTION UNIT (NO. DU-U) FOR PRIMING 2 FLOOR DRAIN TRAPS.	
UR-1	URINAL (WALL-MTD)	ZURN	Z5755	FLUSH VALVE	SLOAN	G2 OPTIMA PLUS 8186-1.0	3/4	-	2	1-1/2	VITREOUS CHINA WALL MOUNTED URINAL WITH WASHOUT FLUSH ACTION. FURNISH WITH 1.0 GPF BATTERY POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, STAINLESS STEEL STRAINER, AND J.R. SMITH 0637 CARRIER SUPPORT.	
UR-2	ADA URINAL (WALL-MTD)	ZURN	Z5755	FLUSH VALVE	SLOAN	G2 OPTIMA PLUS 8186-1.0	3/4	-	2	1-1/2	VITREOUS CHINA WALL MOUNTED URINAL WITH WASHOUT FLUSH ACTION. FURNISH WITH 1.0 GPF BATTERY POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, STAINLESS STEEL STRAINER, AND J.R. SMITH 0637 CARRIER SUPPORT. ADA COMPLIANT (BARRIER FREE)	
WC-1	WATER CLOSET (FLOOR-MTD)	ZURN	Z5655-BWL1	FLUSH VALVE TRAP PRIMER	SLOAN	G2 OPTIMA PLUS 8111-1.6 VBF-72-A1	1	-	3	2	VITREOUS CHINA, FLOOR MOUNTED, WATER CLOSET WITH SIPHON-JET ACTION. FURNISH WITH 1.6 GPF BATTERY POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, TRAP PRIMER DIVERTER, AND CHURCH NO. 9500CT SEAT. RE: TRAP PRIMER AT FLUSH VALVE DETAIL.	
WC-2	ADA WATER CLOSET (FLOOR-MTD)	ZURN	Z5665-BWL1	FLUSH VALVE TRAP PRIMER	SLOAN	G2 OPTIMA PLUS 8111-1.6 VBF-72-A1	1	-	3	2	VITREOUS CHINA, FLOOR MOUNTED, ADA WATER CLOSET WITH SIPHON-JET ACTION. FURNISH WITH 1.6 GPF BATTERY POWERED SENSOR OPERATED FLUSH VALVE WITH METAL VALVE COVER, TRAP PRIMER DIVERTER, AND CHURCH NO. 9500CT SEAT. ADA COMPLIANT (BARRIER FREE). RE: TRAP PRIMER AT FLUSH VALVE DETAIL.	

REMARKS:
1. RE: ARCHITECTURAL DRAWINGS FOR ADA ACCESSIBLE FIXTURE APPLICABILITY, BARRIER CLEARANCE, AND MOUNTING HEIGHT.

BACKFLOW PREVENTER SCHEDULE SECTION 22 10 06											
REFERENCE						CONNECTIONS		PERFORMANCE		REMARKS	
MARK	ITEM	BASIS OF DESIGN		TYPE	SERVICE	DETAIL REFERENCE	WATER IN	WASTE IN	FLOW RATE GPM		PRES. DROP PSI
		MFR	MODEL								
BFP-1	BACKFLOW PREVENTER	WATTS	LF009M2QT-S	REDUCED PRESSURE	BUILDING SUPPLY	-	2-1/2	1	6	13	1, 2, 3
BFP-2	BACKFLOW PREVENTER	WATTS	SS009M3QT-S	REDUCED PRESSURE	ICE MACHINE	-	1/2	1/2	2	13	1, 4, 3

REMARKS:
1. PROVIDE BRACKETS, SUPPORTS, AND PIPING REDUCERS AS NECESSARY.
2. FURNISH WITH QUARTER-TURN BALL VALVES AND STRAINER ON INLET.
3. FURNISH WITH AIR GAP. DRAIN INDIRECT TO APPROVED RECEPTOR.

WATER PUMP SCHEDULE SECTION 22 30 00															
REFERENCE						PERFORMANCE					ELECTRICAL				REMARKS
MARK	ITEM	BASIS OF DESIGN		TYPE	LOCATION	DETAIL REFERENCE	FLOW GPM	TDH FT	TEMP. °F	MOTOR HP	VOLTS	PHASE	MCA		
		MFR	MODEL												
RP-1	HOT WATER CIRCULATOR	GRUNDFOS	UP15-42FC	SYMPLEX	JANITOR - 108	11/P42	2	12	140	1/25	115	1	0.74	1, 2, 3, 4	

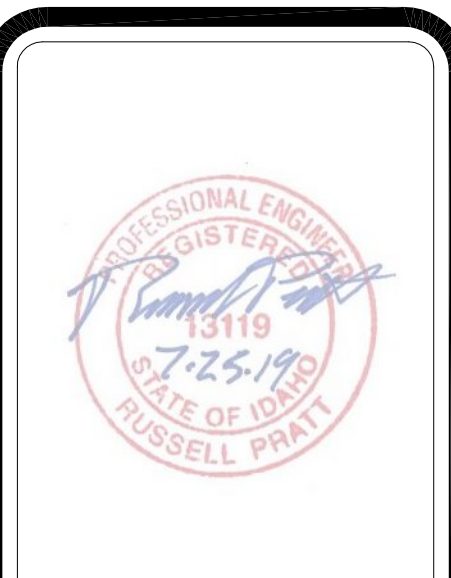
REMARKS:
1. PUMP MUST BE LISTED FOR POTABLE WATER USE.
2. PROVIDE PUMP WITH ALL BRONZE CONSTRUCTION DESIGNED FOR DOMESTIC SERVICE.
3. FURNISH PUMP WITH [AUTOMATIC TIME CLOCK][AND 5°F DIFFERENTIAL AQUASTAT] FOR PUMP CONTROL.
4. ALL PUMP CONTROL WIRING SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR.

EXPANSION TANK SCHEDULE SECTIONS 22 30 00											
REFERENCE					PERFORMANCE						
MARK	BASIS OF DESIGN		SERVICE	LOCATION	DETAIL REFERENCE	TYPE	TANK VOL GAL	ACCEPT. FACTOR	CONNECTION IN	WEIGHT LBS	REMARKS
	MFR	MODEL									
ET-1	AMTROL	ST-12	DOMESTIC HOT WATER	JANITOR - 108	11/P42	DIAPHRAGM	4.4	0.73	3/4	36	1, 2

REMARKS:
1. PROVIDE UNISTRUT BRACKET SECURED TO WALL WITH STRAP AROUND TANK.
2. PROVIDE ISOLATION VALVE (LESS HANDLE OR LOCK-SHIELD).

GAS FIRED WATER HEATER SCHEDULE SECTION 22 30 00																			
REFERENCE						PERFORMANCE						ELECTRICAL			CONNECTIONS				
MARK	ITEM	BASIS OF DESIGN		TYPE	LOCATION	DETAIL REFERENCE	FUEL TYPE	STORAGE GAL	INPUT MBH	EFF %	RECOVERY GPH	TEMP RISE °F	VOLTAGE	PHASE	MCA	CW IN	HW IN	OP. WEIGHT LBS	REMARKS
		MFR	MODEL																
WH-1	WATER HEATER	A.O. SMITH	BTH-120(A)	GAS FIRED, DIRECT VENT	JANITOR - 108	11/P42	NAT. GAS	60	120	95	138	100	120	1	-	1-1/4	1-1/4	960	1, 2, 3

REMARKS:
1. SET OPERATING TEMPERATURE AT 140°F.
2. INSTALL WITH HEAT TRAPS AT CW AND HW CONNECTIONS.
3. FURNISH WITH CONCENTRIC ROOF VENT KIT AND CONDENSATE NEUTRALIZATION KIT.



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ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
5800 COFFEY STREET

200 BROAD STREET
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FOR CONSTRUCTION
9/24/19

PROJECT 19004 DATE 7/23/19
DRAWN KWH CHECKED RCP

REVISED

SHEET TITLE
PLUMBING SCHEDULES

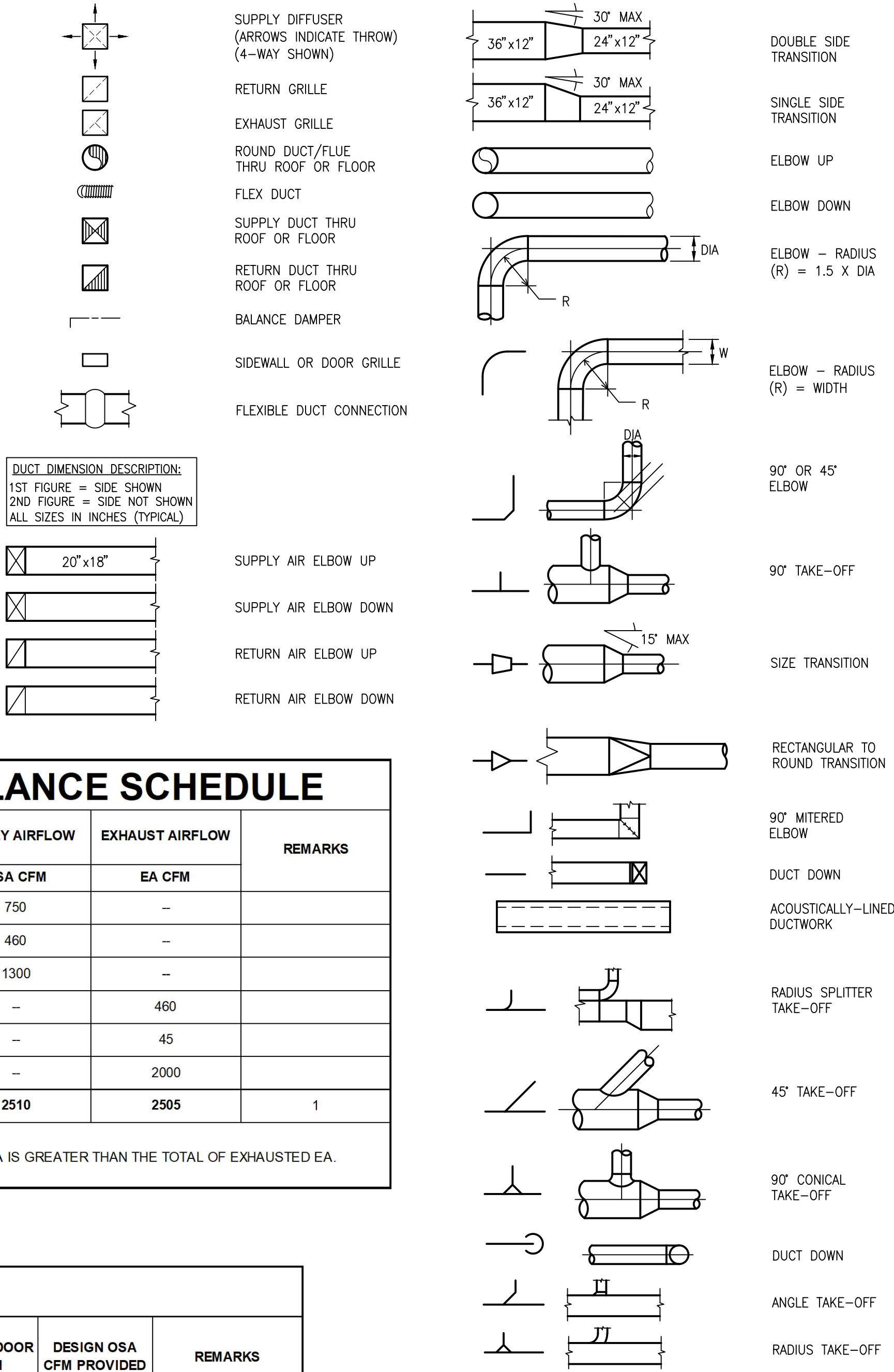
SHEET
P41
ORIGINAL SHEET SIZE 24" x 36"



HVAC ABBREVIATIONS

AC	AIR CONDITIONING	FP	FIRE PROTECTION	PSI	POUNDS PER SQUARE INCH
ACCU	AIR COOLED CONDENSING UNIT	FPM	FEET PER MINUTE	PVC	POLYVINYL CHLORIDE
ACU	AIR CONDITIONING UNIT	FSD	COMBINATION FIRE/SMOKE DAMPER	R/RAD	RADIUS
AFF	ABOVE FINISHED FLOOR	FT	FEET	RA	RETURN AIR
AFG	ABOVE FINISHED GRADE	FT HD	FEET OF HEAD	RE:	REFERENCE
AHU	AIR HANDLING UNIT	FUR	FURNACE	REG	REGISTER
AL	ALUMINUM	G	GAS	REQ'D	REQUIRED
APD	AIR PRESSURE DROP	GA	GAUGE	RG	RETURN AIR GRILLE
APPROX	APPROXIMATE	GAL	GALLON	RH	REHEAT
ARCH	ARCHITECT, ARCHITECTURAL	GALV	GALVANIZED	RM	ROOM
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS	GC	GENERAL CONTRACTOR	RPM	REVOLUTIONS PER MINUTE
AUTO	AUTOMATIC	GPM	GALLONS PER MINUTE	RR	RETURN REGISTER
BD	BAROMETRIC DAMPER	HP	HORSEPOWER	RS	REFRIGERANT SUCTION
BDD	BACK DRAFT DAMPER	HS	HUMIDITY SENSOR	RTU	ROOFTOP UNIT
BHP	BRAKE HORSE POWER	HT	HEIGHT/HIGH	SA	SUPPLY AIR
BLDG	BUILDING	HTR	HEATER	SCHED	SCHEDULE
BOD	BOTTOM OF DUCT	HVAC	HEATING/VENTILATION, AIR CONDITIONING	SD	SMOKE DETECTOR
BOT	BOTTOM	HW	HOT WATER (DOMESTIC)	SEER	SEASONAL ENERGY EFFICIENCY RATIO
BTU	BRITISH THERMAL UNIT	HX	HEAT EXCHANGER	SG	SUPPLY AIR GRILLE
C	COMMON	ID	INSIDE DIAMETER	SHT	SHEET
CAB	CABINET	IBC	INTERNATIONAL BUILDING CODE	SP	STATIC PRESSURE
CFM	CUBIC FEET PER MINUTE	ID	INSIDE DIAMETER	SP	STATIC PRESSURE
CL	CENTERLINE	IECC	INTERNATIONAL ENERGY CONSERVATION CODE	SPEC(S)	SPECIFICATION(S)
CLG	CEILING	IFGC	INTERNATIONAL FUEL GAS CODE	SQ. FT.	SQUARE FEET
CONC	CONCRETE	IMC	INTERNATIONAL MECHANICAL CODE	STD	STANDARD
CONT	CONTINUED	INSUL	INSULATION, INSULATE	TEMP	TEMPERATURE
C/W	COORDINATE WITH	IN WC	INCHES OF WATER COLUMN	TD	TEMPERATURE DIFFERENCE
(D)	DEMOLISH	KW	KILOWATT	TS	TEMPERATURE SENSOR
D	DEPTH, DEEP	LAT	LEAVING AIR TEMPERATURE	TXV	THERMAL EXPANSION VALVE
DB	DRY BULB TEMPERATURE	LBS	POUNDS	TYP	TYPICAL
DDC	DIRECT DIGITAL CONTROL	LVR	LOUVER	UBC	UNIFORM BUILDING CODE
DIA/φ	DIAMETER	MA	MILLIAMPS	UFC	UNIFORM FIRE CODE
DIFF	DIFFUSER	MAX	MAXIMUM	UMC	UNIFORM MECHANICAL CODE
DN	DOWN	MCA	MINIMUM CIRCUIT AMPACITY	UH	UNIT HEATER
DS	DEW POINT SENSOR	MECH	MECHANICAL	UV	UNIT VENTILATOR
DUC	DOOR UNDER CUT	MFR	MANUFACTURER	VAV	VARIABLE AIR VOLUME
DWG	DRAWING	MIN	MINIMUM	VD	VOLUME DAMPER
(E)	EXISTING	MISC	MISCELLANEOUS	VEL	VELOCITY
EA	EXHAUST AIR	MOCP	MAXIMUM OVER CURRENT PROTECTION	VFD	VARIABLE FREQUENCY DRIVE
EAT	ENTERING AIR TEMPERATURE	MTD	MOUNTED	VIF	VERIFY IN FIELD
EER	ENERGY EFFICIENCY RATIO	MJA	MAKE UP AIR UNIT	VVF	VARIABLE VOLUME--FAN POWERED
EF	EXHAUST FAN	(N)	NEW	VVR	VARIABLE VOLUME--REHEAT
EFF	EFFICIENCY	NC	NORMALLY CLOSED	W	WIDE, WIDTH
EG	EXHAUST GRILLE	NO	NORMALLY OPEN	W/	WITH
EL	ELEVATION	NIC	NOT IN CONTRACT	WB	WET BULB TEMPERATURE
ELEC	ELECTRIC, ELECTRICAL	NO	NORMALLY OPEN	WC	WATER COLUMN
ELEV	ELEVATOR	NO/#	NUMBER	W/O	WITHOUT
EQUIP	EQUIPMENT	NOM	NOMINAL		
ESP	EXTERNAL STATIC PRESSURE	NTS	NOT TO SCALE		
EXH	EXHAUST	OB	OPPOSED BLADE DAMPER		
EXT	EXTERIOR	OC	ON CENTER		
F	FAHRENHEIT	OD	OUTSIDE DIAMETER		
FCU	FAN COIL UNIT	OPNG	OPENING		
FD	FIRE DAMPER	OSA	OUTSIDE AIR		
FLA	FULL LOAD AMPS	PH	PREHEAT		
		PREFAB	PREFABRICATED		
		PSF	POUNDS PER SQUARE FOOT		

MECHANICAL DUCTWORK SYMBOLS



DUCT DIMENSION DESCRIPTION:
1ST FIGURE = SIDE SHOWN
2ND FIGURE = SIDE NOT SHOWN
ALL SIZES IN INCHES (TYPICAL)

BUILDING AIR BALANCE SCHEDULE

EQUIPMENT TAG	LOCATION	SUPPLY AIRFLOW	EXHAUST AIRFLOW	REMARKS
		OSA CFM	EA CFM	
F-1	LVL 2 MECH ROOM	750	--	
F-2	LVL 2 MECH ROOM	460	--	
MAU-1	LVL 2 MECH ROOM	1300	--	
EF-1	106 MENS'	--	460	
EF-2	108 JANITOR	--	45	
EF-3	110 OFFICE	--	2000	
TOTAL AIRFLOW:		2510	2505	1
REMARKS				
1. THE TOTAL OF SUPPLIED OSA IS GREATER THAN THE TOTAL OF EXHAUSTED EA.				

MECHANICAL SHEET INDEX

M01	MECHANICAL COVER SHEET
M02	ENERGY COMPLIANCE
M03	ENERGY CODE AND INSULATION SCHEDULES
M11	HVAC DEMO PLAN
M21	HVAC PLAN - LEVEL 1
M22	HVAC PLAN - LEVEL 2
M23	HVAC SECTIONS
M41	MECHANICAL SCHEDULES
M51	HVAC DETAILS
M52	HVAC DETAILS AND MECHANICAL SCHEDULES

MECHANICAL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE OWNERS REQUIREMENTS, AND WITH ALL APPLICABLE STATE AND LOCAL CODES, OR AUTHORITY HAVING JURISDICTION.
- COORDINATE INSTALLATION WITH THE WORK OF OTHER TRADES PRIOR TO STARTING. IN THE EVENT THAT CONFLICTS ARE FOUND WITH THE WORK OF OTHER TRADES, BRING ALL SUCH CONFLICTS TO THE ARCHITECT'S ATTENTION FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK. DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATIONS SHALL BE CORRECTED AT NO ADDITIONAL EXPENSE TO OWNER. IMMEDIATELY NOTIFY ARCHITECT OF CONDITIONS IN CONFLICT WITH THE PLANS.
- HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATING FINAL LOCATIONS OF DIFFUSERS, REGISTERS AND GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLANS. CONTRACTOR SHALL NOT DEVIATE FROM REFLECTED CEILING PLAN UNLESS THERE ARE EXTENUATING JOB SITE CONDITIONS.
- FOR LOW PRESSURE DUCTWORK, WHERE RECTANGULAR DUCT IS INDICATED ON PLANS, EQUIVALENT SIZE ROUND DUCT MAY BE USED. EQUIVALENT SIZE RECTANGULAR DUCT MAY BE USED IN PLACE OF ROUND DUCT, EXCEPT IN EXPOSED AREAS. EQUIVALENT RECTANGULAR SIZE MAY NOT BE USED ON DUCTS EXPOSED TO VIEW OR AS INDICATED OTHERWISE.
- PROVIDE SEISMIC RESTRAINTS FOR ALL PIPING EQUIPMENT, AND DUCTWORK AS RECOMMENDED IN SMARNA "SEISMIC RESTRAINT MANUAL" GUIDELINES FOR MECHANICAL EQUIPMENT", LATEST EDITION, CONSULT LOCAL SEISMIC CODES FOR THE SEISMIC RATING OF THE AREA IN WHICH THE PROJECT IS BEING BUILT.
- SUBSTITUTIONS OF EQUIPMENT OTHER THAN AS SPECIFIED SHALL BE THE COMPLETE RESPONSIBILITY OF THE HVAC CONTRACTOR. ANY ADDITIONAL ELECTRICAL, STRUCTURAL, MECHANICAL OR ARCHITECTURAL REQUIREMENTS SHALL BE PROVIDED AT NO ADDITIONAL EXPENSE TO OWNER.
- DEMOLITION: REMOVE ALL DUCTWORK, VAV UNITS AND AIR OUTLETS FROM THE FORMER TENANT SPACE, AND ELSEWHERE AS NECESSARY, AND DISPOSE OF OFF SITE.
- LOCATIONS OF POINTS OF CONNECTION TO EXISTING TENANT SUPPLY AIR DUCT ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS OF ALL POINTS OF CONNECTION IN FIELD.
- PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOB SITE, TAKE ALL NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. ALLOWANCES WILL NOT BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY TRANSITIONS TO AVOID CONFLICT WITH OTHER DUCTWORK, PIPING, STRUCTURE, ETC. AS PART OF THIS CONTRACT, WHEREVER AVAILABLE SPACE ALLOWS, OFFSETS SHALL BE MADE WITH 45 DEGREE ELBOWS WITH TURNING VANES.
- DUCTWORK SIZES NOTED ON DRAWINGS ARE FREE AREA SIZES. HVAC CONTRACTOR SHALL BE RESPONSIBLE TO COMPENSATE FOR INSULATION, ETC.
- ALL SQUARE SUPPLY DIFFUSERS SHALL BE 4-WAY THROW UNLESS INDICATED OTHERWISE ON PLAN.
- ALL ELBOWS ARE STANDARD RADIUS (R=3W/2) UNLESS NOTED OTHERWISE. DO NOT SUBSTITUTE MITERED ELBOWS FOR RADIUS ELBOWS UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- ALL WIRING, PIPING, AND EQUIPMENT INSTALLED IN PLENUMS SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.
- THERMOSTATS, TEMPERATURE SENSORS, AND CO2 SENSORS SHALL BE INSTALLED AT 48" AFF UNLESS NOTED OTHERWISE. COORDINATE JUNCTION BOX INSTALLATION WITH ELECTRICAL CONTRACTOR.
- OUTSIDE AIR INTAKES SHALL BE INSTALLED WITH A MINIMUM SEPARATION OF 10'-0" FROM ALL EXHAUST AIR DISCHARGE, GAS FLUES, AND PLUMBING VENTS.
- MATERIALS UTILIZED WITHIN RETURN PLENUMS SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- ALL EXPOSED DUCTWORK SHALL BE PAINTED PER ARCHITECTURAL CEILING PLANS. COORDINATE WITH CONSTRUCTION MANAGER.
- SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.

CODE REQUIRED OUTSIDE AIR VENTILATION RATES (2015 IMC) SECTION 23 05 93

ZONE & AREA	OCCUPANCY CATEGORY	NET AREA SQ. FT.	AREA OUTDOOR AIR RATE CFM/SQ. FT.	CODE REQ'D CFM BASED ON FLOOR AREA	NO. OF PEOPLE	PEOPLE OUTDOOR AIR RATE CFM/PERSON	CODE REQ'D CFM BASED ON PEOPLE	TOTAL OSA CFM REQUIRED BY CODE	ZONE AIR DIST. EFF. (2015 IMC)	SPACE OUTDOOR AIR CFM	DESIGN OSA CFM PROVIDED	REMARKS
101 TESTING ENTRY	PUBLIC SPACES - CORRIDOR	209	0.06	13	0	0	0	13	0.8	16	46	2
102 CORRIDOR	PUBLIC SPACES - CORRIDOR	317	0.06	20	0	0	0	20	0.8	25	69	2
103 ELECTRICAL ROOM	WORKROOMS - COMPUTER (WITHOUT PRINTING)	38	0.06	3	0	5	0	3	0.8	4	69	2
104 CLOSET	NON-OCCUPIABLE STORAGE	26	0	0	0	0	0	0	N/A	0	0	--
105 RESTROOM VESTIBULE	PUBLIC SPACES - CORRIDOR	131	0.06	8	0	0	0	8	0.8	10	35	2
LVL1 VEST. STG CLOSET	NON-OCCUPIABLE STORAGE	11	0	0	0	0	0	0	N/A	0	0	--
106 MENS'	TOILET ROOM - PUBLIC	129	0	0	0	0	0	0	1	0	14	2,3
107 WOMENS'	TOILET ROOM - PUBLIC	165	0	0	0	0	0	0	1	0	58	2,3
108 JANITOR	OCCUPIABLE STORAGE - LIQUID	44	0.12	6	0	5	0	6	N/A	0	6	2,3
109 SERVER ROOM	WORKROOMS - COMPUTER (WITHOUT PRINTING)	55	0.06	4	0	5	0	4	0.8	5	100	2
110 OFFICE	OFFICES - OFFICE SPACE	185	0.06	12	4	5	20	32	0.8	40	45	2
111 TESTING ROOM 1	EDUCATION - SCIENCE LAB	153	0.18	28	3	10	30	58	0.8	73	109	1,3
112 TESTING ROOM 2	EDUCATION - SCIENCE LAB	151	0.18	28	3	10	30	58	0.8	73	79	1,3
113 TESTING ROOM 3	EDUCATION - SCIENCE LAB	161	0.18	29	3	10	30	59	0.8	74	188	1,3
114 TESTING ROOM 4	EDUCATION - SCIENCE LAB	163	0.18	30	3	10	30	60	0.8	75	188	1,3
115 TESTING ROOM 5	EDUCATION - SCIENCE LAB	161	0.18	29	3	10	30	59	0.8	74	188	1,3
LVL2 MECH ROOM	OCCUPIABLE STORAGE - DRY	144	0.06	9	0	5	0	9	0.8	11	22	2

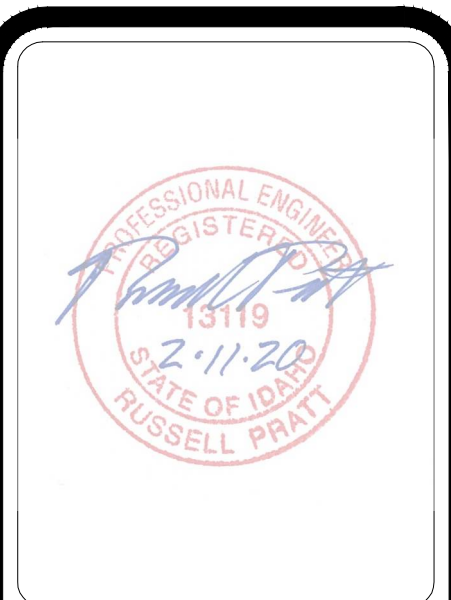
REMARKS

- F-1/CLU-1 SET TO 38% OSA
- F-2/CLU-2 SET TO 38% OSA
- EXHAUST

e hani al lan e ie
t the time o inal nspe tion an air balan e
report indi ating the measured amount o e haust air
and ma eup air to all rooms ontaining the e haust
hoods shall be pro ided to the nspe tor to eri
omplian e ith e tion o the
inal appro al shall be based upon inspe tion
or adheren e to the dah
tatute Title hapter stamped appro ed plans
and manu a turers installation instru tions

MECHANICAL LINETYPE AND ANNOTATION LEGEND

NEW	EXISTING	TO BE DEMOLISHED	
---	---	////	REFRIGERANT LIQUID
---	---	----	REFRIGERANT SUCTION
---	---	----	REFRIGERANT HOT GAS
---CD---	---CD---	---CD---	CONDENSATE DRAIN
---	---	----	DUCTWORK
---	---	----	MECHANICAL EQUIPMENT
---	---	----	ROOFTOP MECHANICAL EQUIPMENT (E)
(E)	(N)		CONNECT NEW TO EXISTING SHADED SIDE IS NEW WORK
①			SHEET NOTES
EF 1			EQUIPMENT CALLOUT (STANDARD)
CD-1	(TYPE)		DIFFUSER CALLOUT (STANDARD)
000	(CFM)		
▲			REVISION
①			THERMOSTAT (ROOM OR UNIT#)
Ⓢ	(UNIT)		SWITCH



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ITD D3 BUILDING CONVERSION
GARDEN CITY, ID

5800 COFFEY STREET
CSHOA

PROJECT	DATE
19004	7/23/19
DRAWN	CHECKED
NBB	RCP

REVISED	BLDG DEPT COMMENTS
1	08/15/2019, NBB
3	CCD #1 02/11/2020, NBB

SHEET TITLE

MECHANICAL COVER SHEET

SHEET

M01
ORIGINAL SHEET SIZE
24" x 36"



COMcheck Software Version 4.1.1.0 Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title:
 Location: Garden City, Idaho
 Climate Zone: 5b
 Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:
 CSHQA
 200 W BROAD ST
 BOISE, ID 83702
 208-343-4635

Mechanical Systems List

Quantity	System Type & Description
1	F-1 / CU-1 (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 97 kBtu/h Proposed Efficiency = 96.10% Et, Required Efficiency: 80.00 % Et or 78% AFUE Cooling: 1 each - Split System, Capacity = 96 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: Low Capacity Residential Proposed Efficiency = 16.50 SEER, Required Efficiency: 13.00 SEER Fan System: F-1 / CU-1 TESTING ROOMS 111 - 115 -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 1 Supply, Constant Volume, 2000 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade
1	F-2 / CU-2 (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 58 kBtu/h Proposed Efficiency = 95.00% Et, Required Efficiency: 80.00 % Et or 78% AFUE Cooling: 1 each - Split System, Capacity = 33 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: Low Capacity Residential Proposed Efficiency = 17.00 SEER, Required Efficiency: 13.00 SEER Fan System: F-2 / CU-2 MISC. ROOMS -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 2 Supply, Constant Volume, 1200 CFM, 0.5 motor nameplate hp, 0.0 fan efficiency grade
1	MAU-1 (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 85 kBtu/h Proposed Efficiency = 92.00% Et, Required Efficiency: 80.00 % Et or 78% AFUE Fan System: MAU-1 TESTING ROOMS 111-115 -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 3 Supply, Constant Volume, 1300 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade
1	WH-1: Gas Storage Water Heater, Capacity: 60 gallons, Input Rating: 120 kBtu/h w/ Circulation Pump Proposed Efficiency: 95.00 % Et, Required Efficiency: 80.00 % Et

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
 Data filename: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Page 1 of 11

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.2.4.5, C403.2.4.6 [FO9]	Snow/ice melting system sensors for future connection to controls. Freeze protection systems have automatic controls installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
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Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Russell Pratt, P.E.

Name - Title

Signature

08/15/19
Date

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
 Data filename: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Page 2 of 11

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P01/WATER MAIN SIZING CALCULATION
C404.6.1, C404.6.2 [PL3]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met. Location on plans/spec: P41/WATER PUMP SCHEDULE
C404.6.3 [PL7]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C404.7 [PL8]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
 Data filename: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Page 5 of 11



COMcheck Software Version 4.1.1.0 Inspection Checklist

Energy Code: 2015 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C103.2 [PR3]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
 Data filename: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Page 3 of 11

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.7 [PL8]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8]	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input checked="" type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Report date: 08/12/19
 Data filename: Q:\2019\19004_0_ITD_D3_Supply\70 HVAC\05_Calcs\COMcheck\19004 COMcheck.cck Page 6 of 11



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FOR CONSTRUCTION
 9/24/19

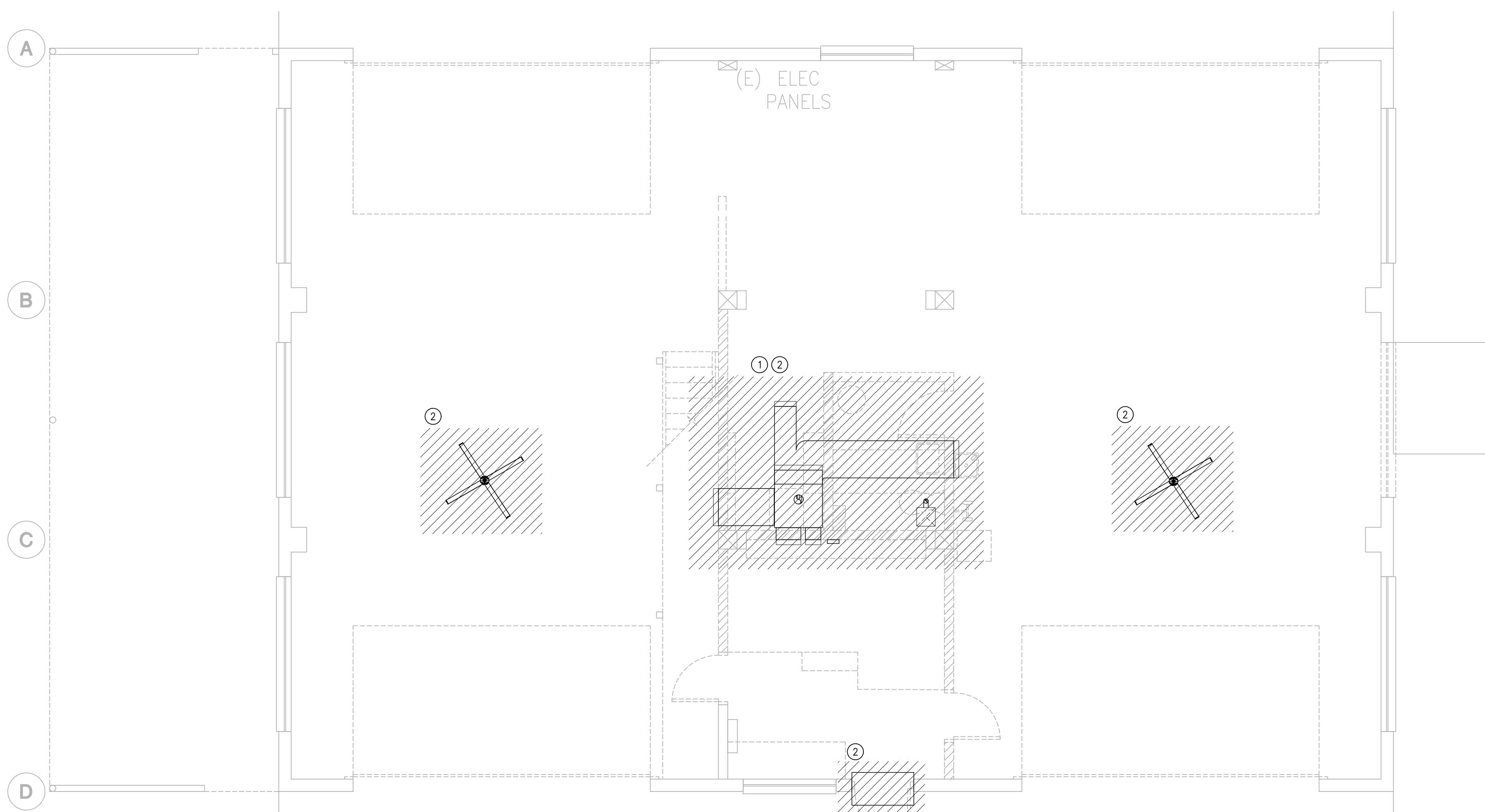
PROJECT: 19004 DATE: 7/23/19
 DRAWN: NBB CHECKED: RCP

REVISED: 1 08/15/2019, NBB

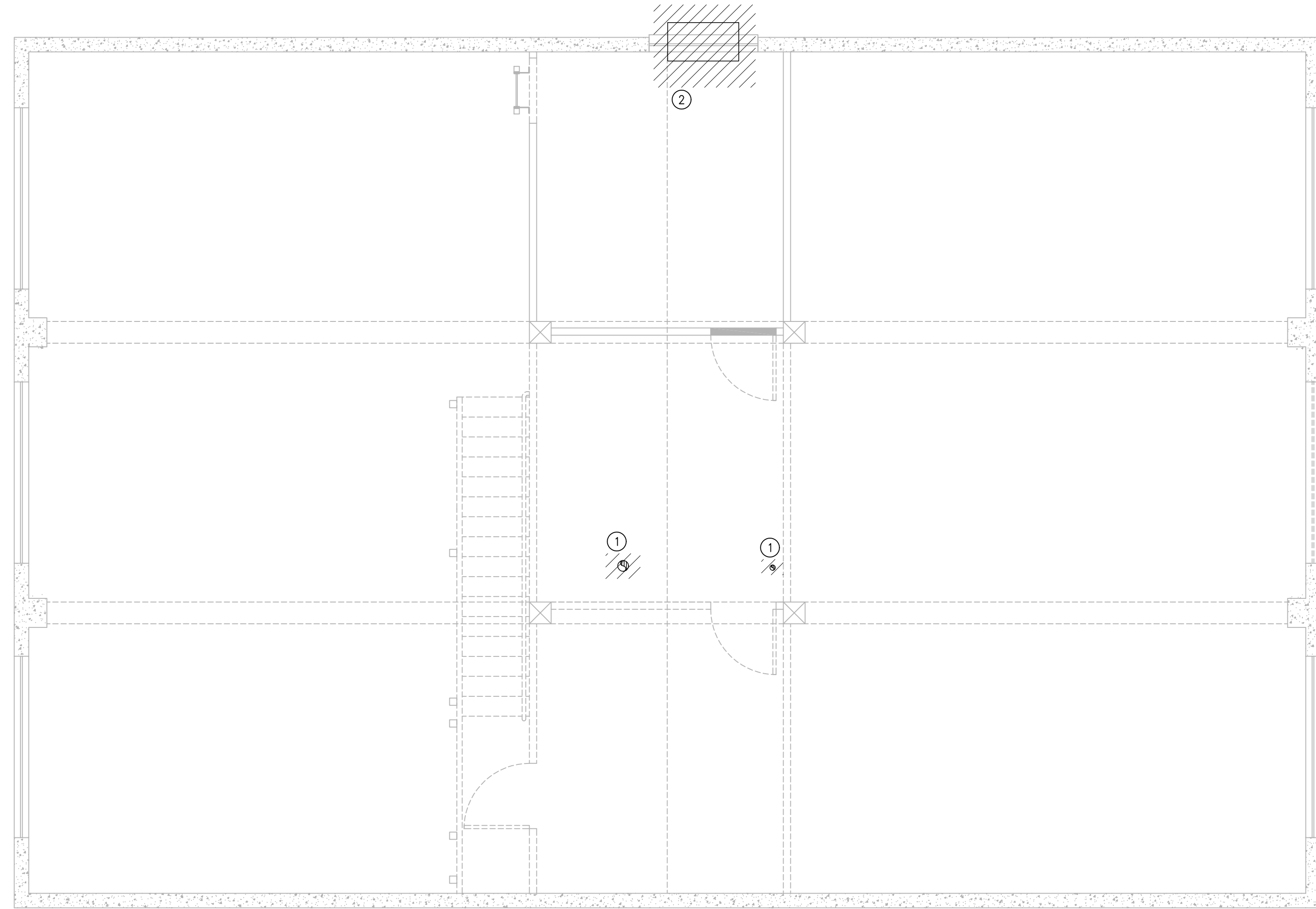
SHEET TITLE: ENERGY COMPLIANCE

SHEET: M02
 ORIGINAL SHEET SIZE 24" x 36"

Approved
 Statewide Safety
 Approved
 License No. 13119
 Russell C. Pratt, P.E.
 Statewide Safety
 License No. 13119
 Russell C. Pratt, P.E.
 Statewide Safety
 License No. 13119
 Russell C. Pratt, P.E.



1 HVAC DEMOLITION PLAN - LEVEL 1
 SCALE: 1/4" = 1'-0"



1 HVAC DEMOLITION PLAN - LEVEL 2
 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- A. DEMOLITION: REMOVE ALL DUCTWORK, VAV UNITS AND AIR OUTLETS FROM THE FORMER TENANT SPACE, AND ELSEWHERE AS NECESSARY, AND DISPOSE OF OFF SITE.
- B. LOCATIONS OF POINTS OF CONNECTION TO TENANT SUPPLY AIR DUCT ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS OF ALL POINTS OF CONNECTION IN FIELD.
- C. ALL WORK SHALL COMPLY WITH THE OWNERS REQUIREMENTS, AND WITH ALL APPLICABLE STATE AND LOCAL CODES, OR AUTHORITY HAVING JURISDICTION.
- D. PRIOR TO BIDDING, OBTAIN A COPY OF THE SPECIFICATIONS AND PLANS, VISIT THE JOBSITE, TAKE ALL NECESSARY MEASUREMENTS, NOTE EXISTING CONDITIONS, AND GATHER ALL OTHER INFORMATION NEEDED FOR AN ACCURATE BID. ALLOWANCES WILL NOT BE MADE FOR EXTRA COSTS RESULTING FROM FAILURE TO NOTE EXISTING CONDITIONS.
- E. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS.

SHEET NOTES:

- 1. ALL DUCTWORK IN BUILDING TO BE REMOVED. VERIFY EXACT LOCATION AND DEMOLITION REQUIREMENTS OF EXISTING DUCTWORK LAYOUT IN FIELD PRIOR TO START OF WORK. REMOVE ALL DEMOLISHED DUCTWORK OFFSITE AND DISPOSE OF PROPERLY. SEAL WATERTIGHT ANY REMAINING, UNUSED ROOF PENETRATIONS.
- 2. ALL HVAC EQUIPMENT TO BE REMOVED. VERIFY EXACT LOCATION AND DEMOLITION REQUIREMENTS OF EXISTING EQUIPMENT IN FIELD PRIOR TO START OF WORK. REMOVE ALL EQUIPMENT OFFSITE AND DISPOSE OF PROPERLY. SEAL WATERTIGHT ANY REMAINING, UNUSED ROOF PENETRATIONS.

LEGEND:

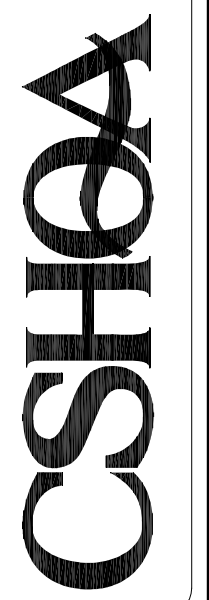
(RE: M01 FOR ADDITIONAL INFORMATION)

NEW	EXISTING	TO BE DEMOLISHED	
---	---	////	HOT WATER SUPPLY
---	---	////	HOT WATER RETURN
---	---	////	CHILLED WATER SUPPLY
---	---	////	CHILLED WATER RETURN
---	---	////	CONDENSER WATER SUPPLY
---	---	////	CONDENSER WATER RETURN
---	---	////	REFRIGERANT LIQUID
---	---	////	REFRIGERANT SUCTION
---	---	////	REFRIGERANT HOT GAS
---CD---	---CD---	---CD---	CONDENSATE DRAIN
---	---	////	DUCTWORK
---	---	////	MECHANICAL EQUIPMENT
---	---	////	ROOFTOP MECHANICAL EQUIPMENT (E)



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FOR
 CONSTRUCTION
 9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN NBB	CHECKED RCP

SHEET TITLE
**HVAC
 DEMO PLAN
 LEVEL 1**

SHEET
M11
 ORIGINAL SHEET SIZE
 24" x 36"



GENERAL NOTES:

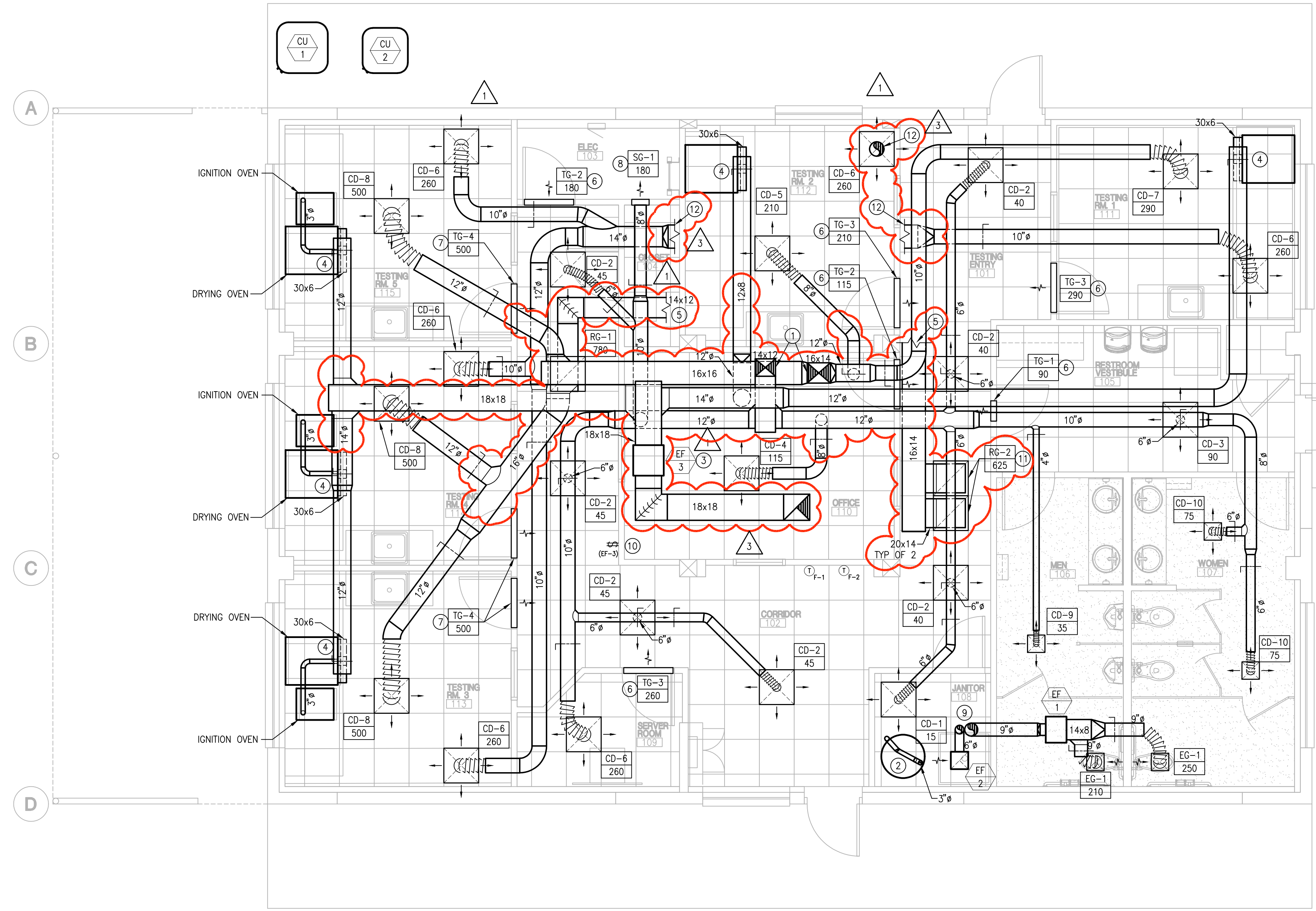
- A. FOR LOW PRESSURE DUCTWORK, WHERE RECTANGULAR DUCT IS INDICATED ON PLANS, EQUIVALENT SIZE ROUND DUCT MAY BE USED. EQUIVALENT SIZE RECTANGULAR DUCT MAY BE USED IN PLACE OF ROUND DUCT, EXCEPT IN EXPOSED AREAS. EQUIVALENT RECTANGULAR SIZE MAY NOT BE USED ON DUCTS EXPOSED TO VIEW OR AS INDICATED OTHERWISE.
- B. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRANSITIONS TO AVOID CONFLICT WITH OTHER DUCTWORK, PIPING, STRUCTURE, ETC. AS PART OF THIS CONTRACT. WHEREVER AVAILABLE SPACE ALLOWS, OFFSETS SHALL BE MADE WITH 45 DEGREE ELBOWS WITH TURNING VANES.
- C. DUCTWORK SIZES NOTED ON DRAWINGS ARE FREE AREA SIZES. HVAC CONTRACTOR SHALL BE RESPONSIBLE TO COMPENSATE FOR INSULATION, ETC.
- D. ALL SQUARE SUPPLY DIFFUSERS SHALL BE 4-WAY THROW UNLESS INDICATED OTHERWISE ON PLAN.
- E. ALL ELBOWS ARE STANDARD RADIUS (R=3W/2) UNLESS NOTED OTHERWISE. DO NOT SUBSTITUTE MITERED ELBOWS FOR RADIUS ELBOWS UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- F. ALL WIRING, PIPING, AND EQUIPMENT INSTALLED IN PLENUMS SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.
- G. THERMOSTATS, TEMPERATURE SENSORS, AND CO2 SENSORS SHALL BE INSTALLED AT 48" AFF UNLESS NOTED OTHERWISE. COORDINATE JUNCTION BOX INSTALLATION WITH ELECTRICAL CONTRACTOR.
- H. PIPING PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRESTOPPED IN ACCORDANCE WITH 2015 IBC SECTION 713.
- I. OUTSIDE AIR INTAKES SHALL BE INSTALLED WITH A MINIMUM SEPARATION OF 10'-0" FROM ALL EXHAUST AIR DISCHARGE, GAS FLUES, AND PLUMBING VENTS.
- J. MATERIALS UTILIZED WITHIN RETURN PLENUMS SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- K. ALL EXPOSED DUCTWORK SHALL BE PAINTED PER ARCHITECTURAL CEILING PLANS. COORDINATE WITH CONSTRUCTION MANAGER.

SHEET NOTES:

- 1. SUPPLY DUCT FROM LEVEL ABOVE. RE: M22-1 FOR CONTINUATION.
- 2. WATER HEATER CONCENTRIC VENT KIT THROUGH CEILING. RE: M22-1 FOR CONTINUATION. COORDINATE WITH PLUMBING CONTRACTOR FOR REQUIREMENTS. RE: M51 CONCENTRIC VENT/COMBUSTION AIR INSTALLATION DETAIL.
- 3. INSTALL EF-3 AND ALL ASSOCIATED DUCTWORK ABOVE ALL OTHER DUCTWORK. ROUTE EXHAUST DUCT THROUGH EXISTING ROOF OPENING. RE: M22-1 FOR EXHAUST DUCT CONTINUATION.
- 4. INSTALL DRYING HOOD 0'-6" ABOVE TOP OF OVEN. INSTALL REAR END OF HOOD IN THE SAME PLANE AS FRONT END OF OVEN. BALANCE EACH HOOD TO 400 CFM. RE: DRYING OVEN HOOD DETAIL.
- 5. FURNACE RA DUCT FROM LEVEL ABOVE. ROUTE AS SHOWN. RE: M22-1 FOR CONTINUATION.
- 6. INSTALL TRANSFER GRILLE CENTERED ABOVE DOOR AT 8'-6" AFF TO CENTERLINE OF GRILLE.
- 7. INSTALL TRANSFER GRILLE CENTERED ABOVE DOOR AT 8'-0" AFF TO CENTERLINE OF GRILLE.
- 8. INSTALL HIGH WALL SUPPLY GRILLE AT 10'-0" AFF TO BOTTOM OF GRILLE.
- 9. EXHAUST FAN FLUES THROUGH ROOF. RE: M22-1 FOR CONTINUATION.
- 10. MANUAL SINGLE POLE ROCKER SWITCH TO CONTROL ALL DRYING OVEN HOODS. MECHANICAL CONTRACTOR TO PROVIDE SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR FOR REQUIREMENTS.
- 11. INSTALL A 20x20x1 FILTER IN RG-2 THEN TRANSITION TO 16x14 AS SHOWN.
- 12. MAKE UP AIR DUCT FROM LEVEL ABOVE. RE: M22-1 FOR CONTINUATION.

LEGEND:

	SUPPLY DIFFUSER		SUPPLY DUCT THRU ROOF OR FLOOR
	RETURN GRILLE		RETURN DUCT THRU ROOF OR FLOOR
	EXHAUST GRILLE		EXHAUST DUCT THRU ROOF OR FLOOR
	SIDEWALL OR DOOR GRILLE		OUTSIDE AIR DUCT THRU ROOF OR FLOOR
	FIRE DAMPER		ROUND DUCT/FLUE THRU ROOF OR FLOOR
	SMOKE DETECTOR (ROOM OR UNIT#)		THERMOSTAT (ROOM OR UNIT#)
	OPPOSED BLADE DAMPER (ROOM OR UNIT#)		WALL-MOUNT TEMPERATURE SENSOR (ROOM OR UNIT#)
	PARALLEL BLADE DAMPER (ROOM OR UNIT#)		SWITCH (ROOM OR UNIT#)
	FLEX DUCT		EQUIPMENT CALLOUT (STANDARD)
	BALANCE DAMPER		SHEET NOTES
	CONNECT NEW TO EXISTING		
	SHADED SIDE IS NEW WORK		

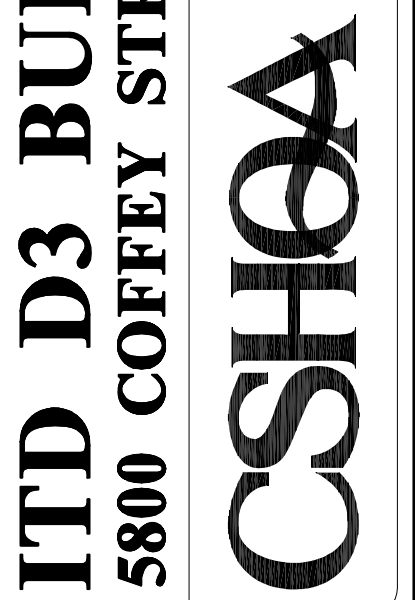


HVAC PLAN - LEVEL 1
SCALE: 1/4" = 1'-0"



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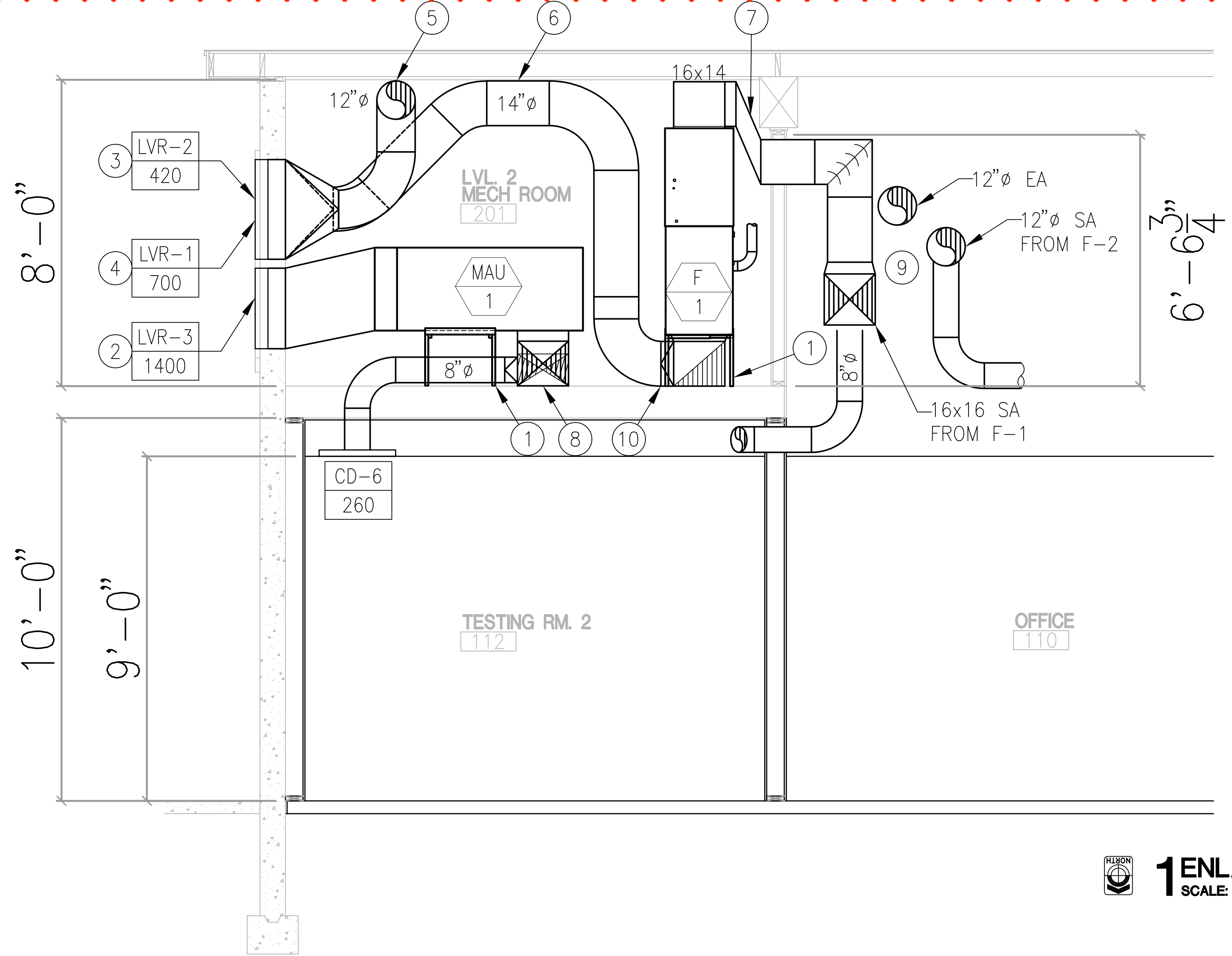
PROJECT 19004	DATE 7/23/19
DRAWN NBB	CHECKED RCP

REVISED	BLDG DEPT COMMENTS
1	08/15/2019, NBB
3	CCD #1 02/11/2020, NBB

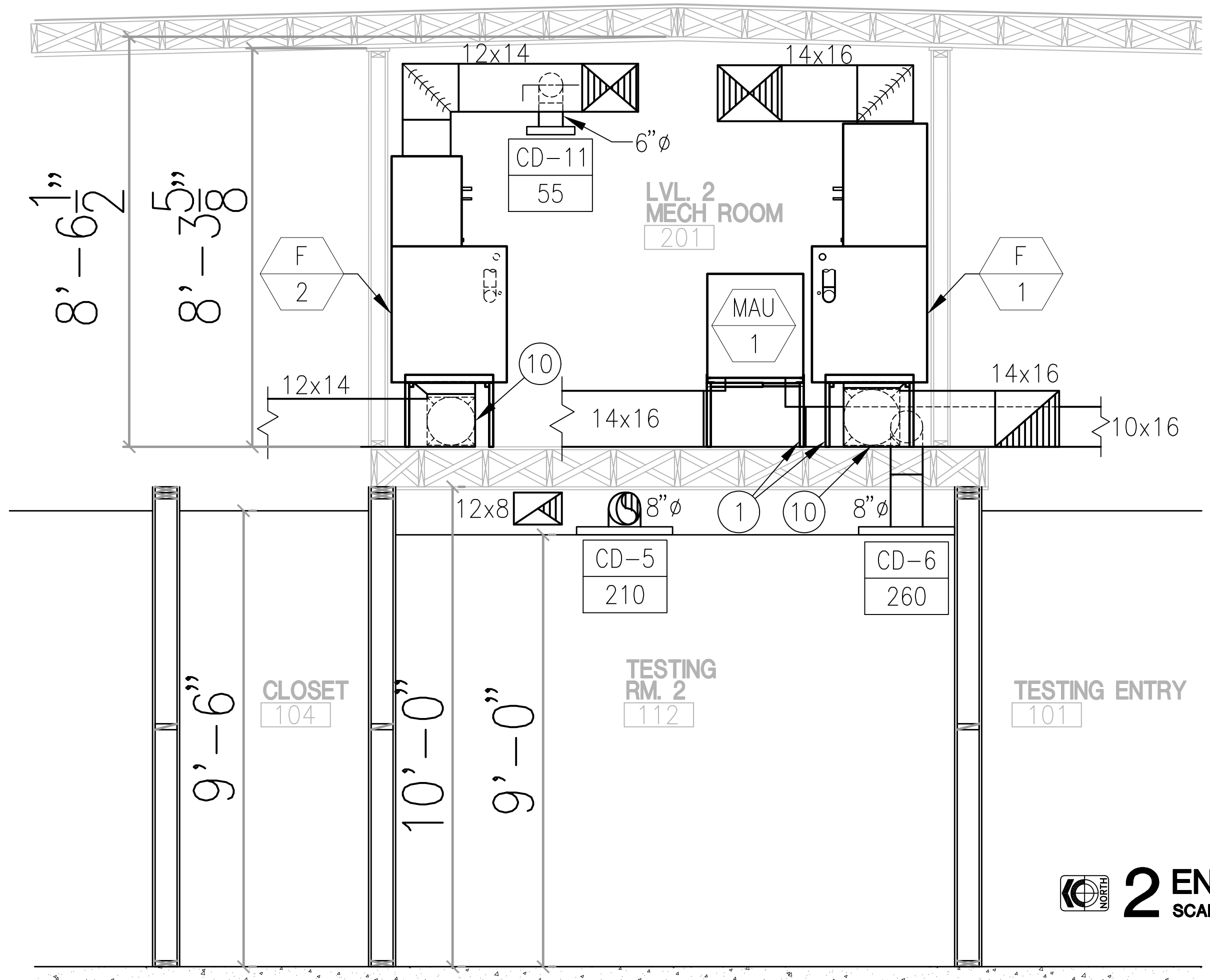
SHEET TITLE
HVAC PLAN LEVEL 1

SHEET
M21
ORIGINAL SHEET SIZE
24" x 36"

Approved for Construction
 Russell C. Pratt, P.E.
 Professional Engineer
 License No. 13119
 State of Idaho
 Russell Pratt



1 ENLARGED HVAC PLAN
 SCALE: 1/2" = 1'-0"



2 ENLARGED HVAC PLAN
 SCALE: 1/2" = 1'-0"

GENERAL NOTES:

- A. FOR LOW PRESSURE DUCTWORK, WHERE RECTANGULAR DUCT IS INDICATED ON PLANS, EQUIVALENT SIZE ROUND DUCT MAY BE USED. EQUIVALENT SIZE RECTANGULAR DUCT MAY BE USED IN PLACE OF ROUND DUCT, EXCEPT IN EXPOSED AREAS. EQUIVALENT RECTANGULAR SIZE MAY NOT BE USED ON DUCTS EXPOSED TO VIEW OR AS INDICATED OTHERWISE.
- B. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRANSITIONS TO AVOID CONFLICT WITH OTHER DUCTWORK, PIPING, STRUCTURE, ETC. AS PART OF THIS CONTRACT. WHEREVER AVAILABLE SPACE ALLOWS, OFFSETS SHALL BE MADE WITH 45 DEGREE ELBOWS WITH TURNING VANES.
- C. DUCTWORK SIZES NOTED ON DRAWINGS ARE FREE AREA SIZES. HVAC CONTRACTOR SHALL BE RESPONSIBLE TO COMPENSATE FOR INSULATION, ETC.
- D. ALL SQUARE SUPPLY DIFFUSERS SHALL BE 4-WAY THROW UNLESS INDICATED OTHERWISE ON PLAN.
- E. ALL ELBOWS ARE STANDARD RADIUS (R=3W/2) UNLESS NOTED OTHERWISE. DO NOT SUBSTITUTE MITERED ELBOWS FOR RADIUS ELBOWS UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- F. ALL WIRING, PIPING, AND EQUIPMENT INSTALLED IN PLENUMS SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.
- G. PIPING PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE FIRESTOPPED IN ACCORDANCE WITH 2015 IBC SECTION 713.
- H. OUTSIDE AIR INTAKES SHALL BE INSTALLED WITH A MINIMUM SEPARATION OF 10'-0" FROM ALL EXHAUST AIR DISCHARGE, GAS FLUES, AND PLUMBING VENTS.
- I. MATERIALS UTILIZED WITHIN RETURN PLENUMS SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- J. ALL EXPOSED DUCTWORK SHALL BE PAINTED PER ARCHITECTURAL CEILING PLANS. COORDINATE WITH CONSTRUCTION MANAGER.

SHEET NOTES:

1. EQUIPMENT STAND TO BE SHOP FABRICATED BY MECHANICAL CONTRACTOR. STAND SHALL BE CAPABLE OF WITHSTANDING EQUIPMENT WEIGHT AND SHALL ALLOW SUFFICIENT DUCT CLEARANCES AS REQUIRED.
2. INSTALL LVR-3 AT 13'-10" AFG TO TOP OF LOUVER.
3. INSTALL LVR-2 AT 16'-9" AFG TO TOP OF LOUVER.
4. INSTALL LVR-1 AT 16'-9" AFG TO TOP OF LOUVER. LVR-1 IS BEYOND THE FIELD OF VIEW, DIRECTLY BEHIND LVR-2. RE: M22-1.
5. ROUTE OSA INTAKE FROM LVR-2 TIGHT TO UNDERSIDE OF STRUCTURE. RE: M22-1 FOR DUCT ROUTING TO F-2 RETURN AIR DUCT.
6. ROUTE OSA INTAKE DUCT FROM LVR-1 TIGHT TO UNDERSIDE OF STRUCTURE. DROP DUCT DOWN TO CONNECT TO THE RETURN AIR DUCT OF F-1. RE: M22-1 FOR DUCT ROUTING.
7. TRANSITION THE SA DUCT AS REQUIRED SO THAT THE WALL PENETRATION IS BELOW THE ROOF BEAM. RE: M22-1 FOR SA DUCT ROUTING.
8. 16x14 DUCT INTO PAGE. 16x10 DUCT OUT OF PAGE. RE: M22-1 FOR ROUTING.
9. ROUTE DUCTWORK SUCH THAT THE EXHAUST DUCTWORK SERVING EF-3 IS THE HIGHEST DUCTWORK, DUCTWORK SERVING F-2 IS NEXT HIGHEST, DUCTWORK SERVING F-1 IS NEXT HIGHEST, RETURN AIR DUCTWORK AND MAKEUP AIR DUCTWORK CAN BE RUN AT THE SAME ELEVATION UNDERNEATH ALL OTHER DUCTWORK.
10. CONNECT THE OSA INTAKE DUCT TO THE RA DUCT UNDER THE EQUIPMENT STAND AS SHOWN.

NOTE TO CONTRACTOR:

1. ALL ARCHITECTURAL AND STRUCTURAL ELEMENTS SHOWN ARE FOR REFERENCE ONLY. RE: ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.

LEGEND:

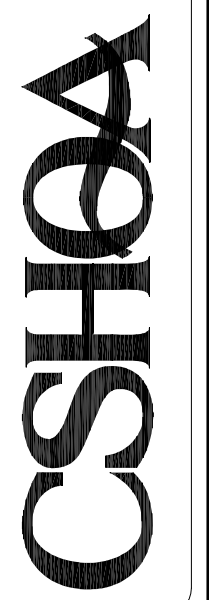
(RE: M01 FOR ADDITIONAL INFORMATION)

SUPPLY DIFFUSER	SUPPLY DUCT THRU ROOF OR FLOOR
RETURN GRILLE	RETURN DUCT THRU ROOF OR FLOOR
EXHAUST GRILLE	EXHAUST DUCT THRU ROOF OR FLOOR
SIDEWALL OR DOOR GRILLE	OUTSIDE AIR DUCT THRU ROOF OR FLOOR
FIRE DAMPER	ROUND DUCT/FLUE THRU ROOF OR FLOOR
SMOKE DETECTOR	THERMOSTAT (ROOM OR UNIT#)
OPPOSED BLADE DAMPER	WALL-MOUNT TEMPERATURE SENSOR (ROOM OR UNIT#)
PARALLEL BLADE DAMPER	SWITCH (ROOM OR UNIT#)
FLEX DUCT	EQUIPMENT CALLOUT (STANDARD)
BALANCE DAMPER	SHEET NOTES
CONNECT NEW TO EXISTING	
SHADED SIDE IS NEW WORK	



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 THESE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE. THE ARCHITECT ENGINEER WILL NOT BE RESPONSIBLE FOR ANY PERSON OR ENTITY'S USE OF THESE PROJECTS FOR ANY PURPOSES OTHER THAN THAT AUTHORIZED BY THE ARCHITECT ENGINEER. PROJECTS WHEN FINISHED WITHOUT THE WRITTEN CONSENT OF CSHQA OR ITS AFFILIATES. COMPANIES

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PROJECT 19004	DATE 7/23/19
DRAWN NBB	CHECKED RCP

REVISED
 3 CCD #1
 02/11/2020, NBB

SHEET TITLE

HVAC SECTIONS

SHEET

M23

ORIGINAL SHEET SIZE
 24" x 36"

Approved
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SPLIT SYSTEM AIR CONDITIONER GAS/ELECTRIC SCHEDULE

SECTION 23 81 26.13

MARK	MANUFACTURER	FURNACE MODEL NUMBER	BASIS OF DESIGN				INDOOR UNIT LOCATION	OUTDOOR UNIT LOCATION	AREA AND/OR BLDG SERVED	TYPE	TOTAL SUPPLY AIR FLOW			MIN. OUTSIDE AIR FLOW			EXT STATIC PRESSURE IN	COOLING CAPACITY			HEATING CAPACITY					AIR FILTER MARK NO.	ELECTRICAL DATA					REMARKS					
			INDOOR COOLING COIL MODEL NUMBER	OUTDOOR AIR CONDITIONER MODEL NUMBER	INDOOR OPERATING WEIGHT LBS	OUTDOOR OPERATING WEIGHT LBS					CFM	CFM	CFM	MIN TOTAL CAPACITY MBH	MIN SENS CAPACITY MBH	MIN SEER		EAT		OSA DESIGN TEMP °F	COMP KW	GAS MAX. INPUT MBH	MAX. NET OUTPUT MBH	EAT Db °F	LAT Db °F		AFUE %	INDOOR FAN			OUTDOOR UNIT FAN						
																		°F	°F									HP	MCA	MOCF	CONTROL		VOLT / PH	HP	MCA	MOCF	CONTROL
F-1 / CU-1	CARRIER	59TP6A100E21-20	CNPHP6024ACA	24ACB760A0030	247	316	202 MECH & IT ROOM	GRADE LEVEL - EAST ELEVATION	TESTING ROOMS	VERTICAL UPBLAST	2000	750	0.5	55.6	55.6	16.5	80	60	96	4.60	100	97	58	92	96.1	KGAWF1506UFR	1	14.8	20	DIRECT DRIVE	120 / 1	1/4	30.1	50	DIRECT DRIVE	208-230 / 1	1,2,3,5,6,8,9,10,11
F-2 / CU-2	CARRIER	59TP6A060E14-12	CNPHP3617ACA	24ACB736A0031	181	216	202 MECH & IT ROOM	GRADE LEVEL - EAST ELEVATION	MISC. SPACES	VERTICAL UPBLAST	1200	460	0.5	33.9	33.2	17	79	60	96	2.79	60	58	56	90	95.0	KGAWF1506UFR	1/2	7.6	15	DIRECT DRIVE	120 / 1	1/10	19.8	35	DIRECT DRIVE	208-230 / 1	1,2,3,4,5,6,7,9,10,11

- REMARKS
- SPLIT SYSTEM WAS DESIGNED TO PROVIDE INDICATED PERFORMANCE AT AN ELEVATION OF 2850 FT.
 - REFRIGERANT LINES SHALL BE SIZED AND INSTALLED PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS FOR DEVELOPED LINE LENGTH.
 - FURNISH FURNACE WITH CONDENSATE NEUTRALIZER KIT.
 - FURNISH CONDENSING UNIT WITH CRANKCASE HEATER.
 - FURNISH FURNACE WITH THROUGH THE CABINET VENT KIT AND 3" CONCENTRIC VENT TERMINAL.
 - FURNISH FURNACE WITH SINGLE OFFSET COIL ADAPTER KIT.
 - FURNISH FURNACE WITH 14" WIDE RETURN AIR BASE.
 - FURNISH FURNACE WITH 21" WIDE RETURN AIR BASE.
 - FURNISH WALL MOUNTED, HARD WIRED, REMOTE THERMOSTAT THAT IS CAPABLE OF PROVIDING 7-DAY PROGRAMMABLE CONTROL WITH 5 DEGREE DEADBAND, AUTO SETBACK, MANUAL OVERRIDE, AND AUTOMATIC (OPTIMUM) START.
 - MECHANICAL CONTRACTOR TO PROVIDE 115V DISCONNECT FOR FURNACE. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
 - MECHANICAL CONTRACTOR TO PROVIDE 208/230V SINGLE PHASE DISCONNECT FOR CONDENSING UNIT. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.

DIFFUSERS, REGISTERS, AND GRILLES SECTION 23 37 00

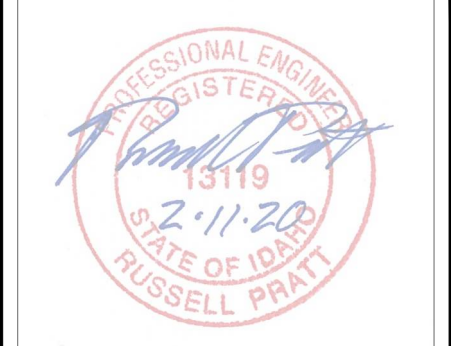
MARK	BASIS OF DESIGN		DESCRIPTION	TYPE	MATERIAL	AIR FLOW			MOUNTING	FRAME SIZE IN x IN	NECK SIZE IN x IN	DUCT SIZE IN	NC	DAMPER	FINISH	REMARKS
	MANUFACTURER	MODEL NUMBER				MIN CFM	MAX CFM	IN WG								
CD-1	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	15	75	0.036	LAY-IN	24 x 24	6 x 6	6 ø	<15	NONE	WHITE	1,2,3
CD-2	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	40	75	0.036	LAY-IN	24 x 24	6 x 6	6 ø	<15	NONE	WHITE	1,2,3
CD-3	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	75	100	0.065	LAY-IN	24 x 24	6 x 6	6 ø	<15	NONE	WHITE	1,2,3
CD-4	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	100	125	0.099	LAY-IN	24 x 24	6 x 6	8 ø	17	NONE	WHITE	1,2,3
CD-5	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	187	225	0.144	LAY-IN	24 x 24	9 x 6	8 ø	26	NONE	WHITE	1,2,3
CD-6	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	225	282	0.099	LAY-IN	24 x 24	9 x 9	10 ø	21	NONE	WHITE	1,2,3
CD-7	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	282	338	0.144	LAY-IN	24 x 24	9 x 9	10 ø	27	NONE	WHITE	1,2,3
CD-8	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	400	500	0.099	LAY-IN	24 x 24	12 x 12	12 ø	24	NONE	WHITE	1,2,3
CD-9	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	35	75	0.036	SURFACE	12 x 12	6 x 6	4 ø	<15	NONE	WHITE	1,2,3,4
CD-10	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	75	100	0.065	SURFACE	12 x 12	6 x 6	6 ø	<15	NONE	WHITE	1,2,3,4
CD-11	PRICE	SMD-4A	SUPPLY DIFFUSER	LOUVERED	STEEL	55	75	0.036	DUCT	12 x 12	6 x 6	6 ø	<15	NONE	WHITE	2,3
SG-1	PRICE	SCVD	SUPPLY DIFFUSER	VANE	STEEL	160	200	0.090	HIGH WALL	12 x 6	10 x 4	8 ø	25	NONE	WHITE	1,2,3,6
TG-1	PRICE	ATG1	TRANSFER GRILLE	LOUVERED	ALUMINUM	90	113	0.019	HIGH WALL	14 x 12	12 x 10	12 x 10	23	NONE	WHITE	1,2
TG-2	PRICE	ATG1	TRANSFER GRILLE	LOUVERED	ALUMINUM	115	200	0.012	HIGH WALL	34 x 12	32 x 10	32 x 10	19	NONE	WHITE	1,2
TG-3	PRICE	ATG1	TRANSFER GRILLE	LOUVERED	ALUMINUM	200	300	0.019	HIGH WALL	34 x 12	32 x 10	32 x 10	28	NONE	WHITE	1,2
TG-4	PRICE	ATG1	TRANSFER GRILLE	LOUVERED	ALUMINUM	400	600	0.019	HIGH WALL	34 x 22	32 x 20	32 x 20	31	NONE	WHITE	1,2
RG-1	PRICE	81	RETURN GRILLE	EGGCRATE	ALUMINUM	780	1083	0.013	LAY-IN	24 x 24	14 ø	14 ø	<15	NONE	WHITE	1,2
RG-2	TITUS	50FF	FILTER RETURN GRILLE	EGGCRATE	ALUMINUM	540	675	0.037	LAY-IN	24 x 24	20 x 20	20 X 20	<15	NONE	WHITE	1,2,7,8
EG-1	PRICE	85	EXHAUST GRILLE	EGGCRATE	ALUMINUM	210	270	0.013	SURFACE	12 x 12	9 ø	9 ø	<15	NONE	WHITE	1,2,5

- REMARKS
- VERIFY CEILING AND WALL CONSTRUCTION ON ARCHITECTURAL DRAWINGS. PROVIDE CORRECT FRAME TYPES.
 - SEE FLOOR PLAN FOR THROW PATTERN.
 - PROVIDE SQUARE TO ROUND ADAPTER. PRICE INDUSTRIES MODEL SR.
 - PROVIDE STEEL PLASTER FAME. PRICE INDUSTRIES MODEL SPF.
 - ORIENT GRILLE SO THAT THE SIGHT LINE IS TOWARDS BACK WALL.
 - ORDER 1-WAY AIRFLOW DIFFUSER AND ORIENT THE BLADES AT A 45° DOWNWARD ANGLE.
 - 1/2"x1/2"x1 ALUMINUM EGGCRATE CORE.
 - 20x20 FILTER BY OTHERS.

FAN SCHEDULE SECTION 23 34 00

MARK	BASIS OF DESIGN			LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	MOUNTING TYPE	AIR FLOW CFM	TSP IN	FAN		MOTOR ELECTRICAL						REMARKS
	MANUFACTURER	MODEL NUMBER	OPERATING WEIGHT LBS							TYPE	DRIVE	NOMINAL POWER W	FLA A	PHASE	VOLT	RPM	SPEED CONTROL	
EF-1	GREENHECK	CSP-A510	36	106 MEN	106 MEN, 107 WOMEN	INLINE TOILET EXHAUST	SUSPENDED FROM STRUCTURE	460	0.22	CENTRIFUGAL	DIRECT	183.2	3.11	1	120	1070	CONSTANT	1,2,4,5,9
EF-2	GREENHECK	SP-B70	9	108 JANITOR	108 JANITOR	GENERAL CEILING EXHAUST	CEILING	45	0.27	CENTRIFUGAL	DIRECT	14.6	0.16	1	120	675	CONSTANT	1,2,4,6,9
EF-3	GREENHECK	BSQ-130	103	110 OFFICE	TESTING ROOMS	INLINE OVEN FUME EXHAUST	SUSPENDED FROM STRUCTURE	2000	0.5	CENTRIFUGAL	BELT	454.9	13.8	1	120	1725	CONSTANT	1,3,4,7,8,9

- REMARKS
- EXHAUST FAN WAS DESIGNED TO PROVIDE INDICATED PERFORMANCE AT AN ALTITUDE OF 2850 FT.
 - FURNISH ROOF FLASHING FLANGE WITH INTEGRAL BIRDSCREEN, GREENHECK MODEL GRSF-16 OR EQUIVALENT. RE: EXHAUST FANS DETAIL TO TERMINATE TWO EXHAUST FLUES IN SINGLE ROOF CAP.
 - FURNISH ROOF FLASHING FLANGE WITH INTEGRAL BIRDSCREEN, GREENHECK MODEL GRSF-20 OR EQUIVALENT.
 - FURNISH WITH GRAVITY BACKDRAFT DAMPER.
 - EXHAUST FAN CONTROLLED FROM OCCUPANCY SWITCHES IN EACH RESTROOM. COORDINATE WITH ELECTRICAL CONTRACTOR FOR REQUIREMENTS.
 - EXHAUST FAN SHALL BE INTERLOCKED WITH LIGHT SWITCH. ELECTRICAL CONTRACTOR TO PROVIDE WIRING.
 - EXHAUST FAN SHALL BE CONTROLLED BY MANUAL SINGLE POLE ROCKER WALL MOUNTED SWITCH ASSEMBLY. MECHANICAL CONTRACTOR TO PROVIDE SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR FOR REQUIREMENTS.
 - FURNISH FACTORY MOUNTED DISCONNECT SWITCH.
 - EXHAUST FAN MOTOR TO BE MOUNTED ON VIBRATION ISOLATORS.



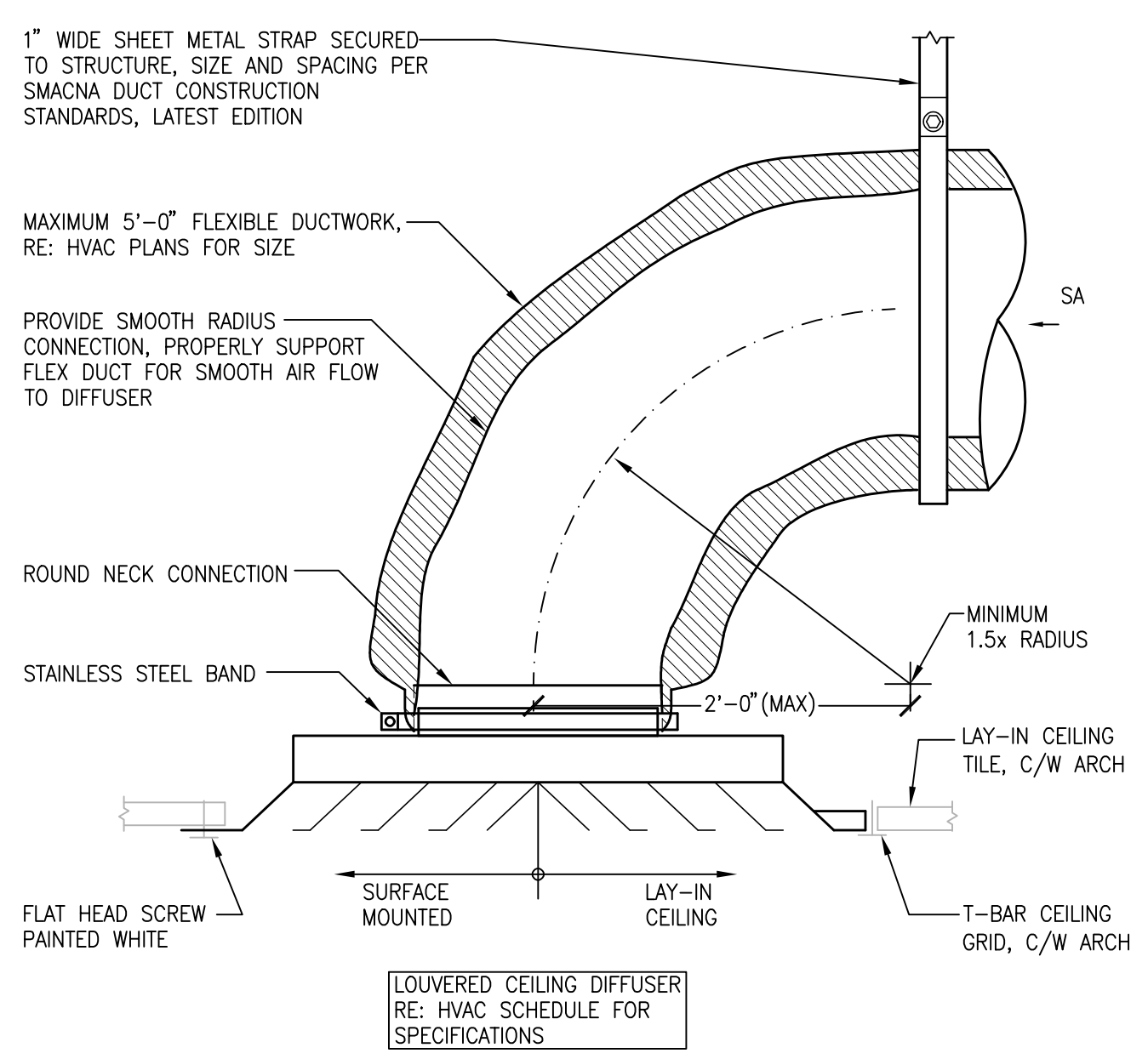
RUSSELL C. PRATI, P.E.
 200 BROAD STREET
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ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
5800 COFFEY STREET
CSHQ

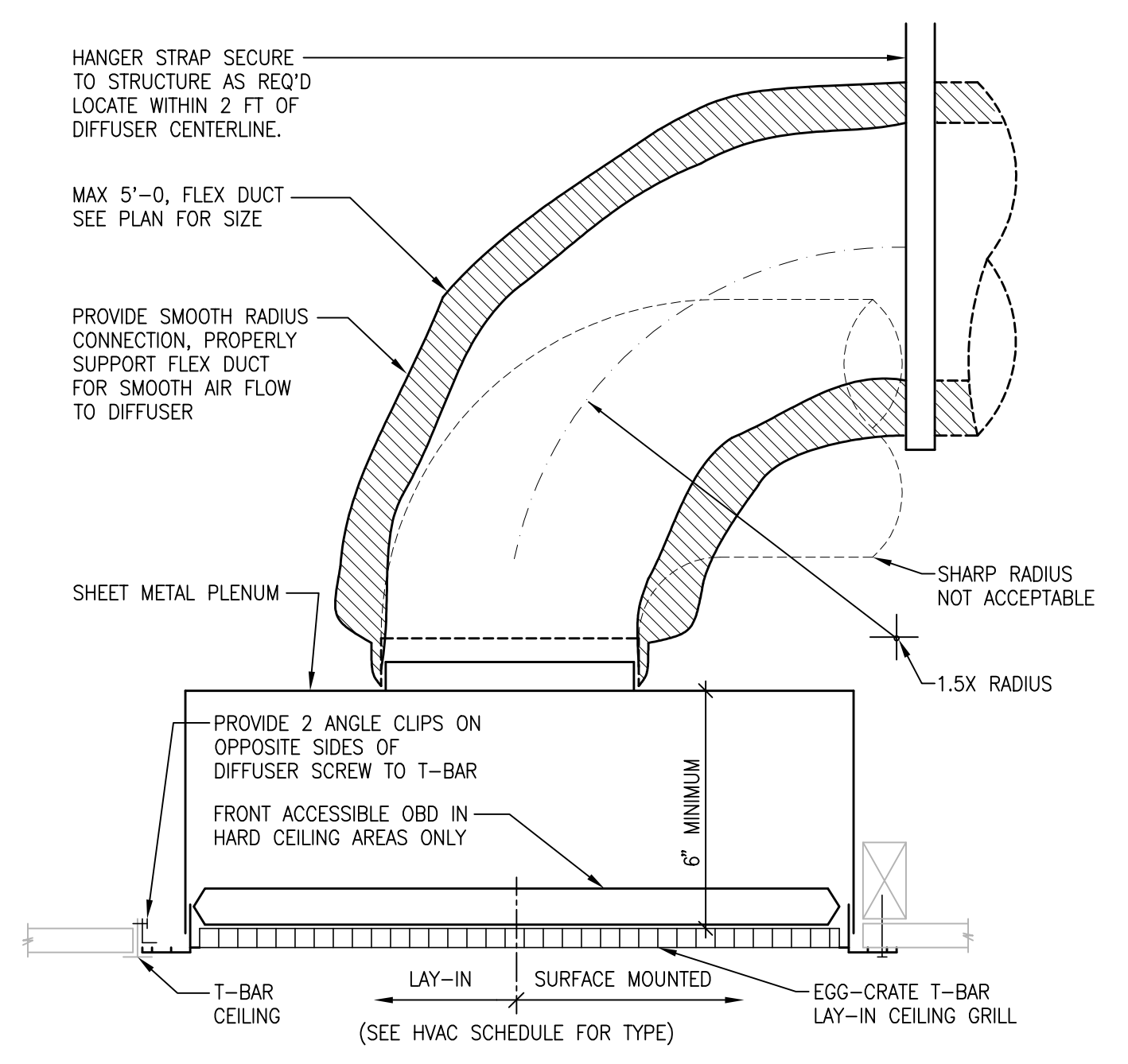
PROJECT 19004 DATE 7/23/19
 DRAWN NBB CHECKED RCP
 REVISED 1 08/15/2019, NBB
 3 CCD #1 02/11/2020, NBB

SHEET TITLE
MECHANICAL SCHEDULES

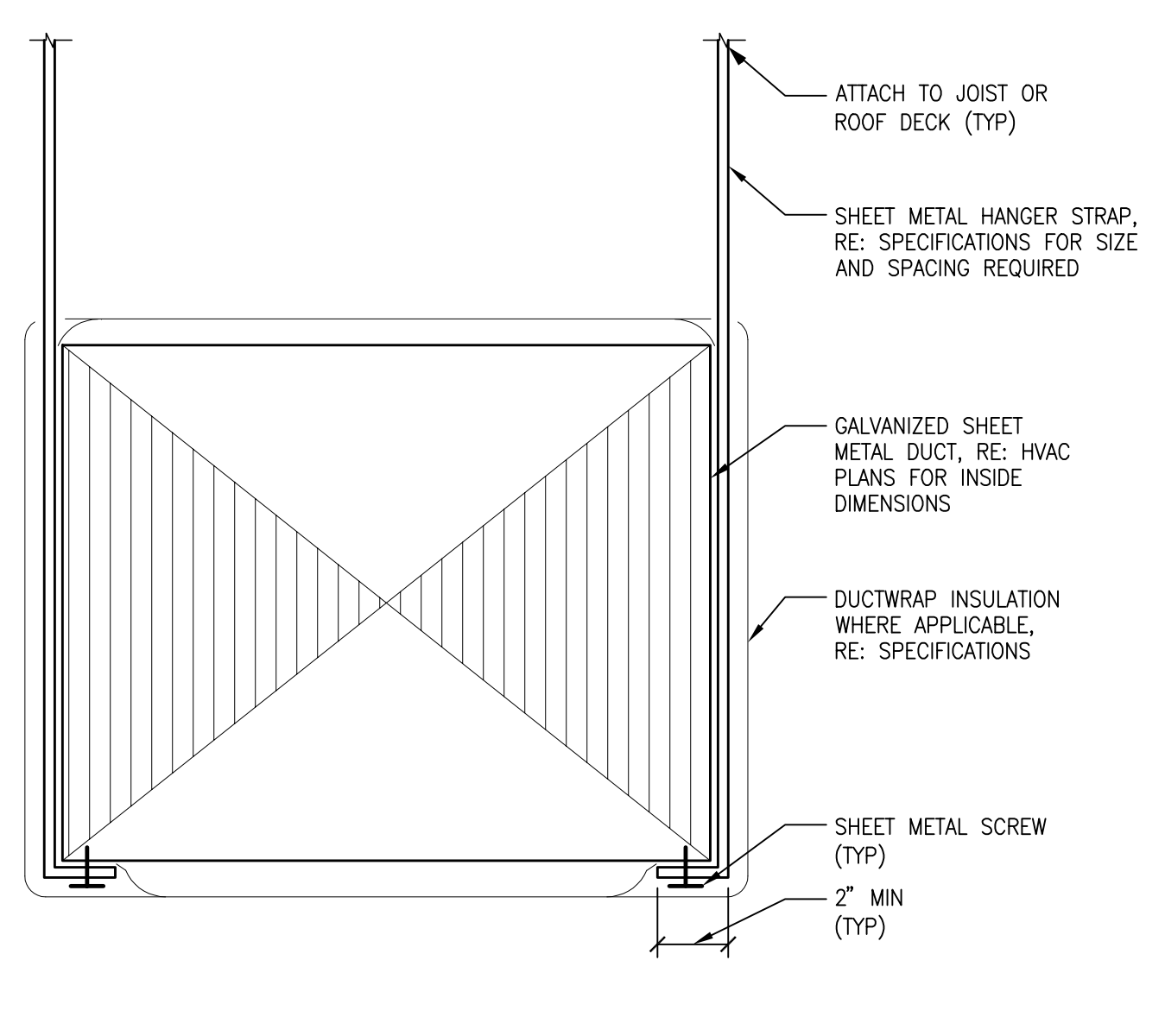
SHEET
M41
ORIGINAL SHEET SIZE 24" x 36"



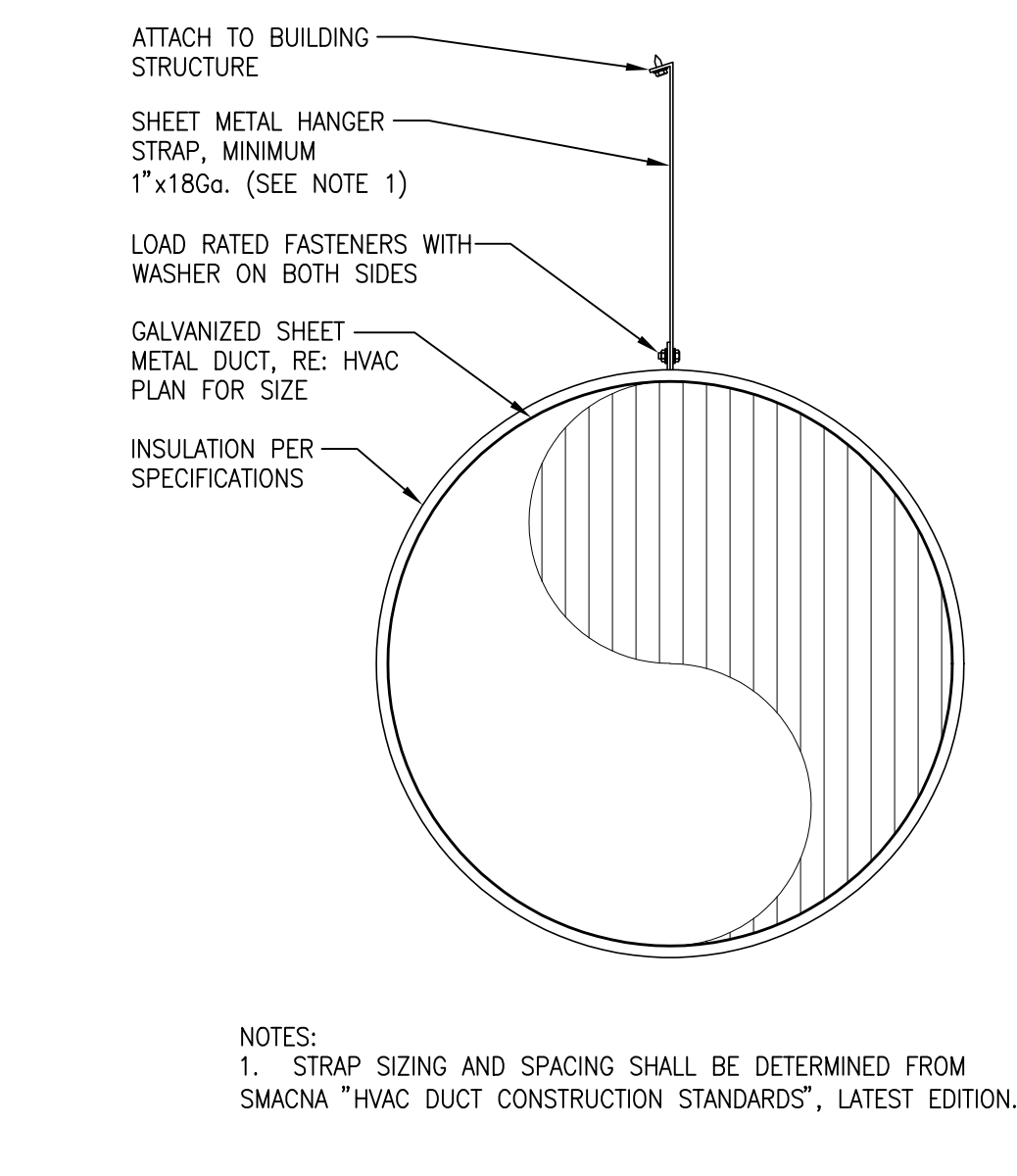
1 CEILING DIFFUSER CONNECTION DETAIL
SCALE: NTS



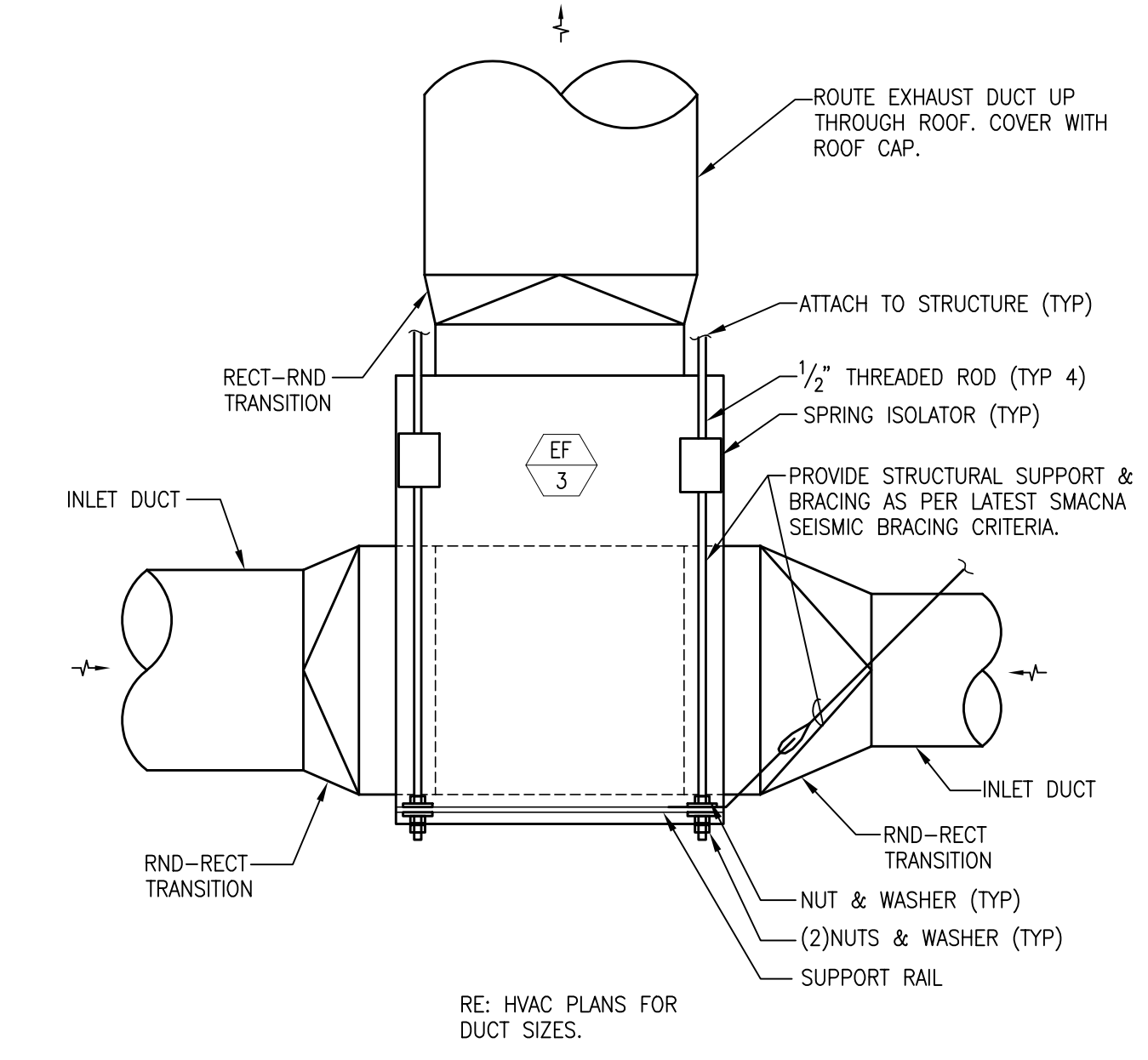
2 CEILING RETURN CONNECTION DETAIL
SCALE: NTS



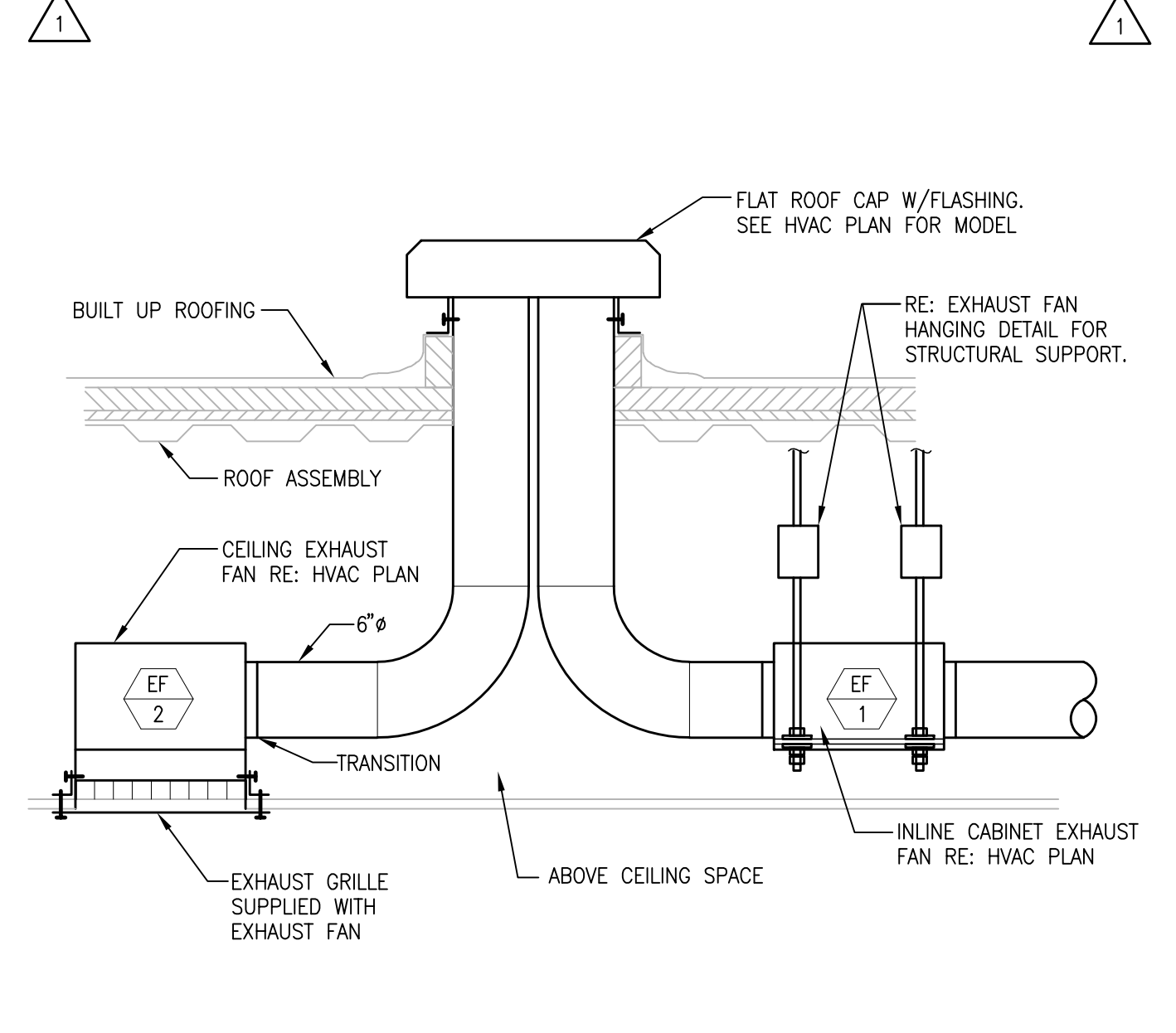
3 RECTANGULAR DUCT SUPPORT DETAIL
SCALE: NTS



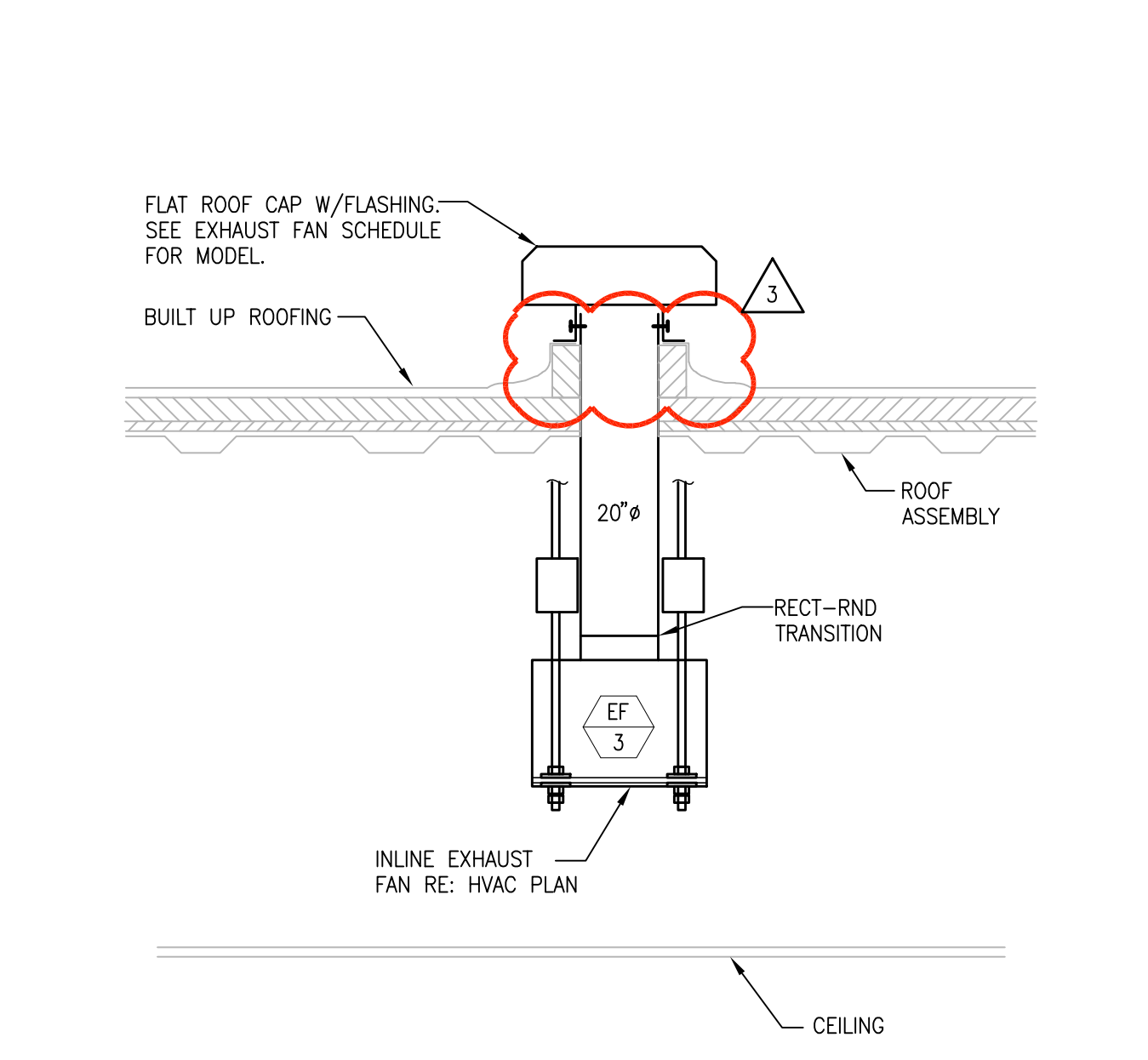
4 ROUND DUCT SUPPORT DETAIL
SCALE: NTS



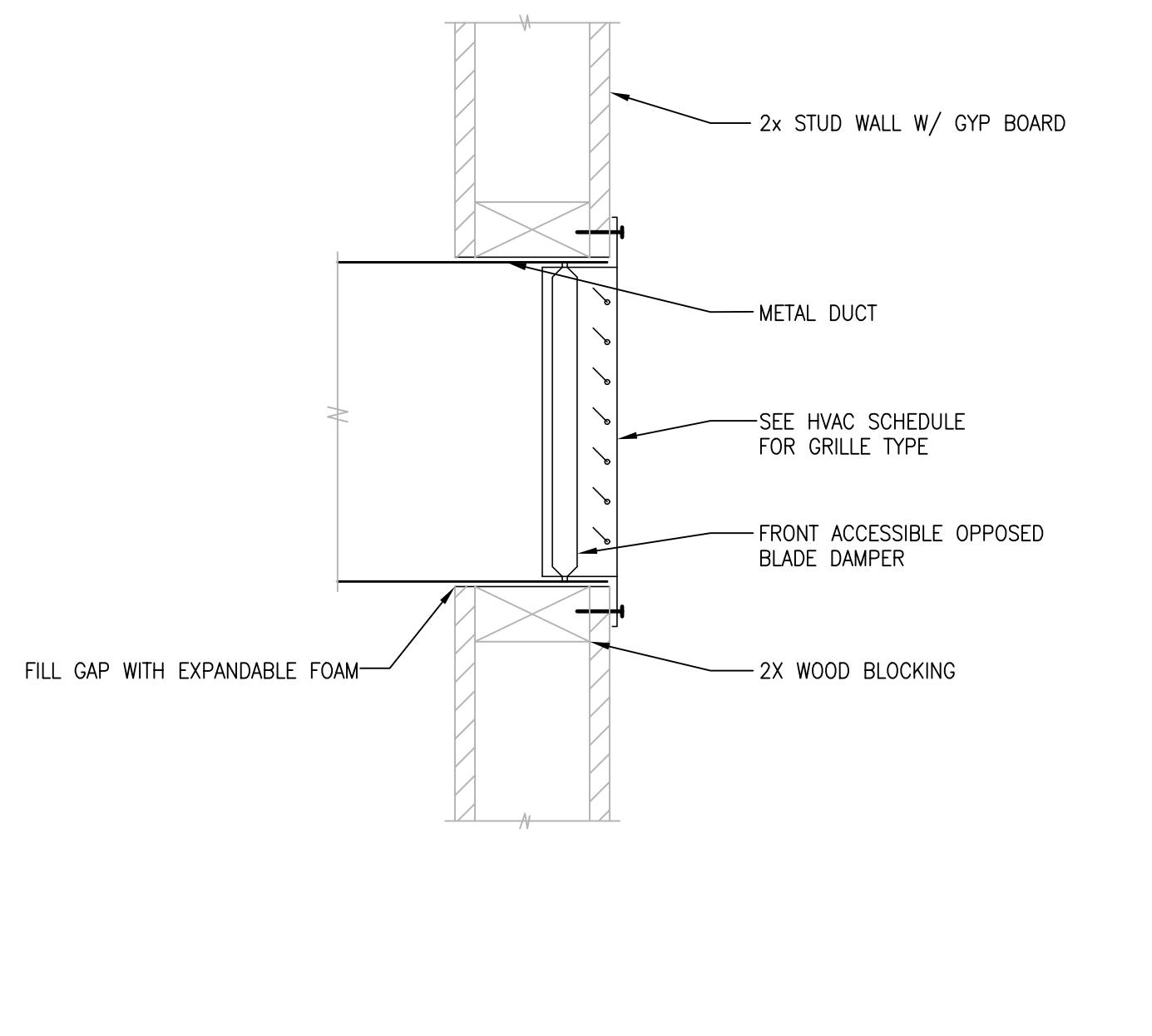
5 EXHAUST FAN HANGING DETAIL
SCALE: NTS



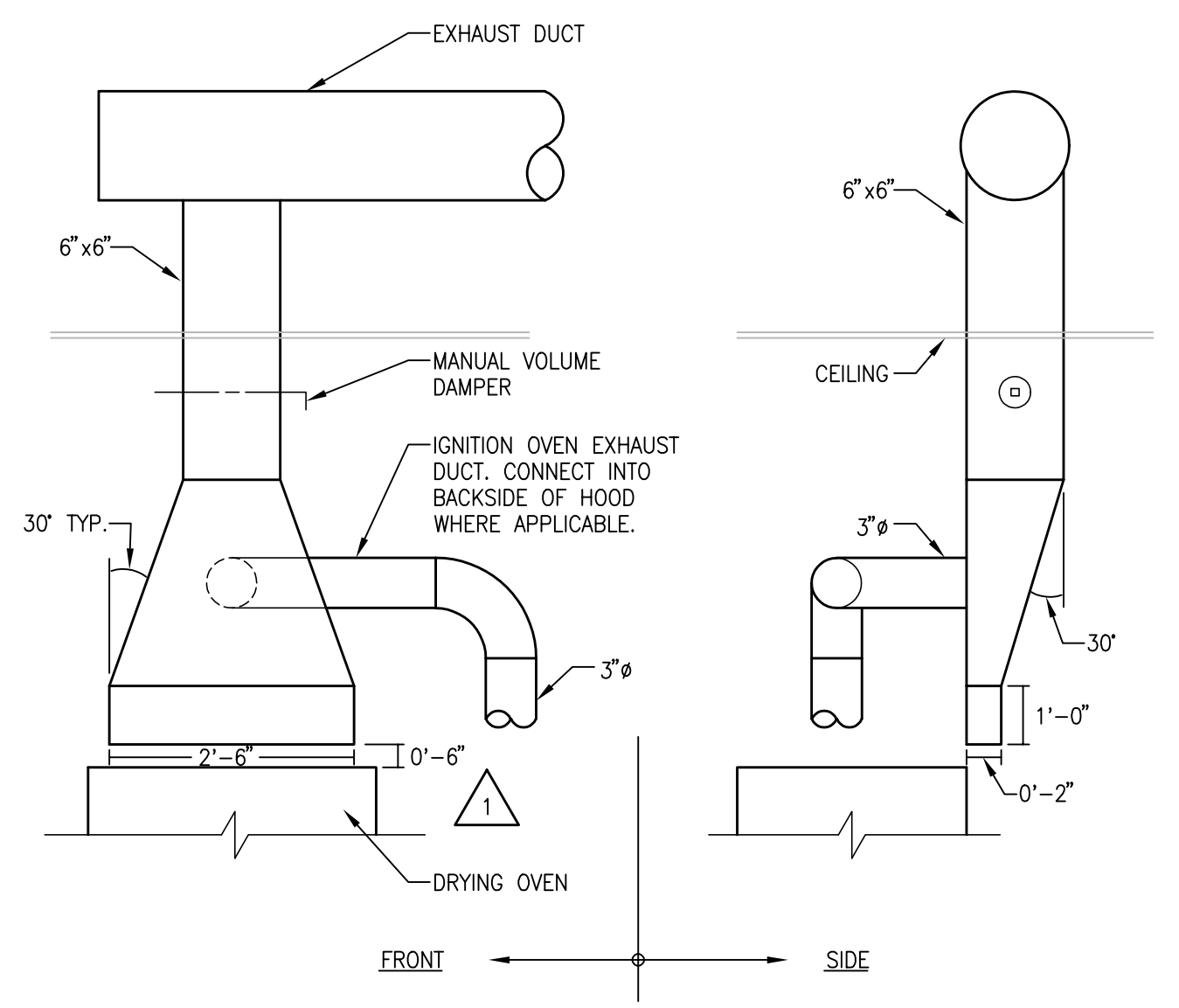
6 SINGLE ROOF CAP EXHAUST FAN DETAIL
SCALE: NTS



7 INLINE MOUNTED EXHAUST FAN DETAIL
SCALE: NTS

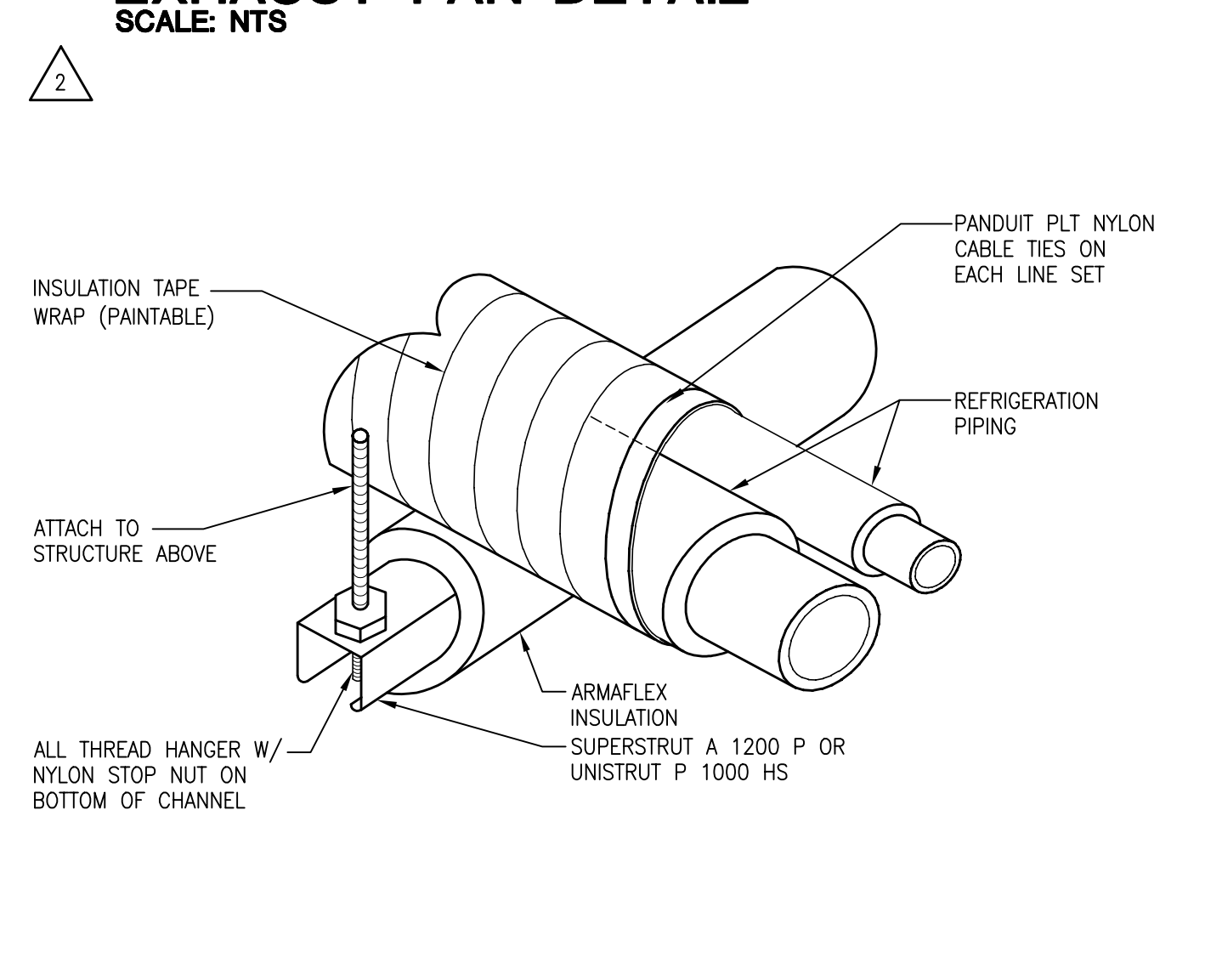


8 GRILLE ON WOOD STUD WALL DETAIL
SCALE: NTS

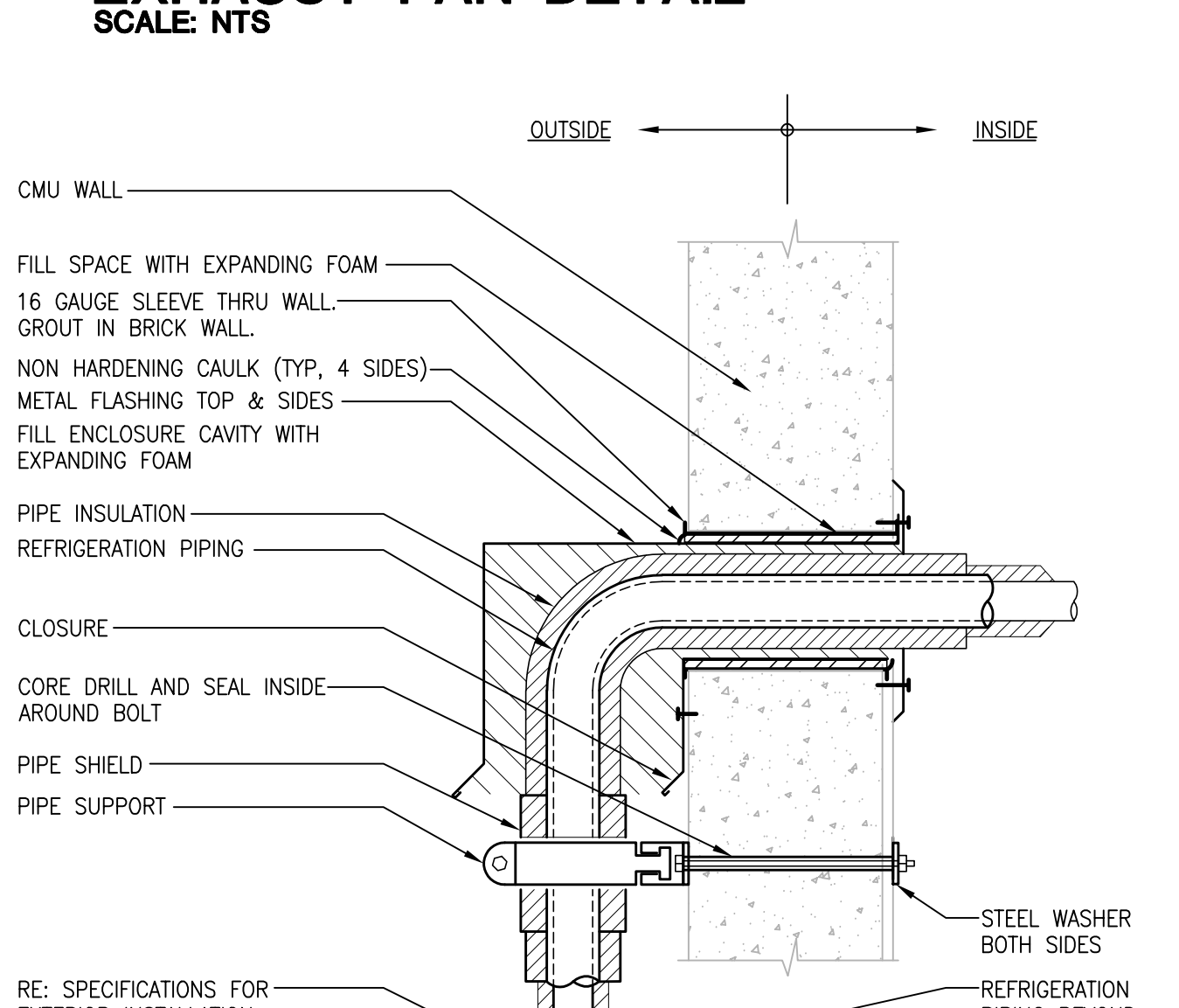


NOTES:
1. MECHANICAL CONTRACTOR RESPONSIBLE FOR SHOP FABRICATING DRYING OVEN HOODS. FABRICATE WITH 20 GAUGE STEEL.
2. RE: M21-1 FOR PLAN LAYOUT.

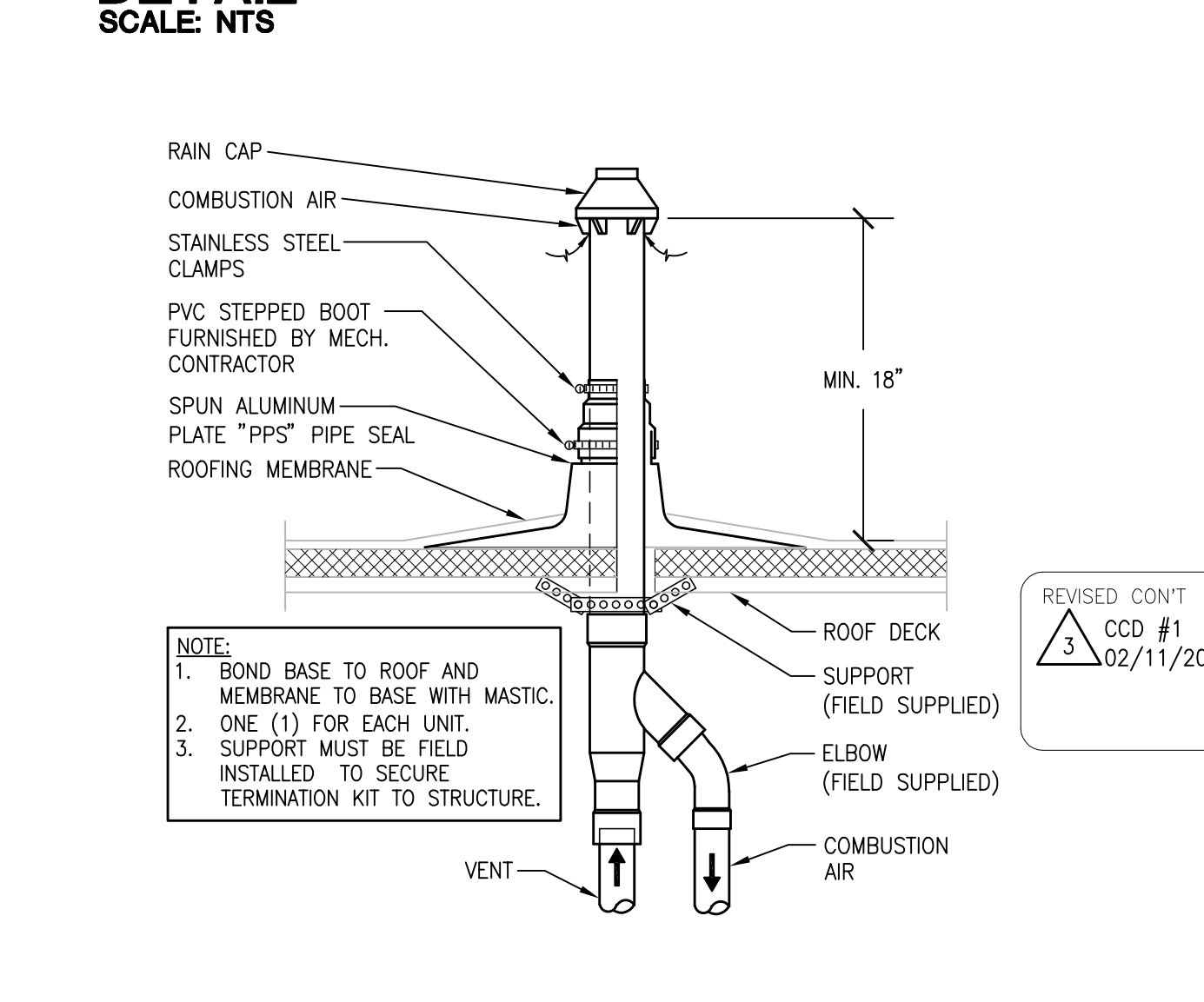
9 DRYING OVEN HOOD DETAIL
SCALE: NTS



10 REFRIGERANT PIPE MOUNTING AND INSULATION DETAIL
SCALE: NTS

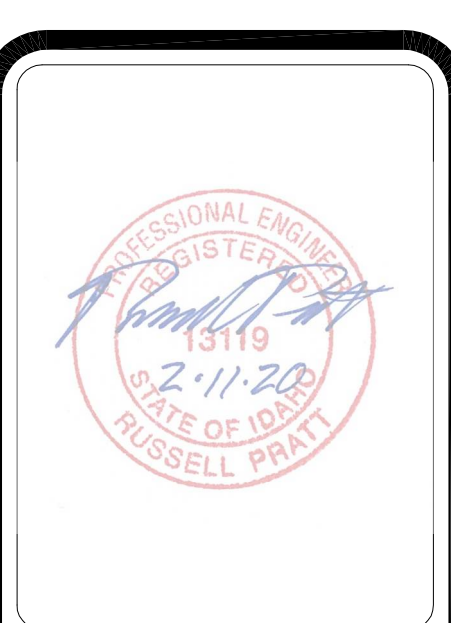


11 REFRIGERANT PIPING THRU CMU WALL DETAIL
SCALE: NTS



REVISD CON'T
3 CCD #1
02/11/2020, NBB

12 CONCENTRIC VENT/COMBUSTION AIR INSTALLATION DETAIL
SCALE: NTS



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THESE DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE THE PROPERTY OF RUSSELL C. PRATI, P.E. AND SHALL REMAIN HIS PROPERTY. NO PART OF THESE DRAWINGS OR SPECIFICATIONS SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF RUSSELL C. PRATI, P.E.

ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
5800 COFFEY STREET
CSHOA

PROJECT	DATE
19004	7/23/19
DRAWN	CHECKED
NBB	RCP

REVISED	BLDG DEPT COMMENTS
1	08/15/2019, NBB
2	SUPPORT (FIELD SUPPLIED)
3	09/25/2019, NBB
4	ELBOW (FIELD SUPPLIED)

SHEET TITLE
HVAC DETAILS

SHEET
M51
ORIGINAL SHEET SIZE
24" x 36"

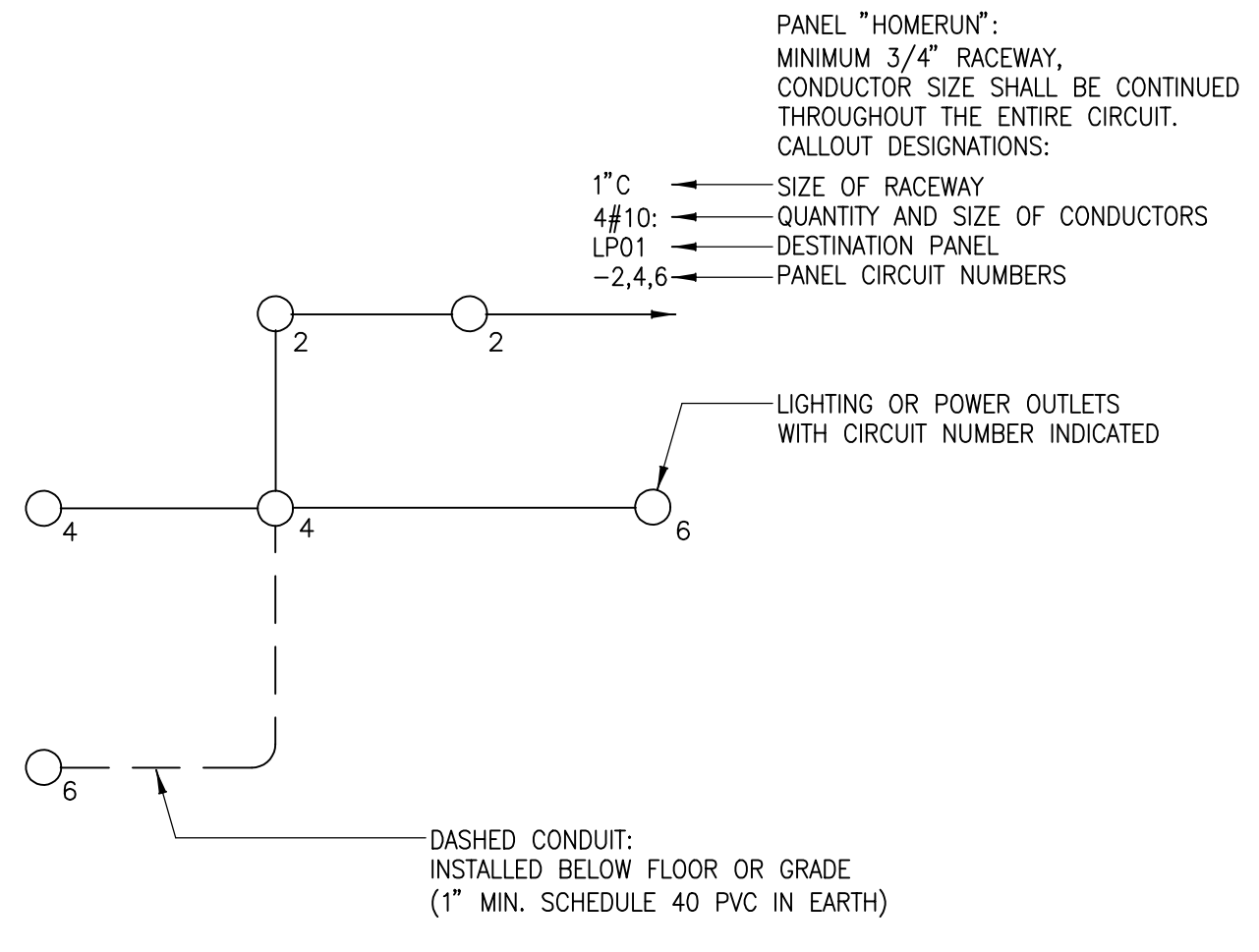


SYMBOLS

	CONDUIT CONTINUATION		EMERGENCY EXIT SIGN WITH BATTERY BACKUP: SHADED QUARTER OF SYMBOL INDICATES LIGHTED "EXIT" ON THAT FACE ARROWS INDICATE LIGHTED DIRECTIONAL ARROW ON THAT FACE. CONNECT TO UNSWITCHED LOCAL LIGHTING CIRCUIT
	CONDUIT CONCEALED IN WALL OR CEILING		LIGHT FIXTURE
	CONDUIT EXISTING		SWITCH 120/277 VOLT, 20 AMP
	CONDUIT CONCEALED UNDERGROUND		SWITCH 120/277 VOLT, 20 AMP X = 2 - DOUBLE POLE-DOUBLE THROW 3 - THREE-WAY 4 - FOUR-WAY D - DIMMER CONTROL OS - WALL MOUNT MOTION SENSOR SWITCH WITH BY-PASS. P - WITH NEON PILOT LIGHT T - SPRING WOUND 15 MINUTE COUNTDOWN TIMER WP - WEATHERPROOF LV - LOW VOLTAGE HP - HORSEPOWER RATED
	HOMERUN		CEILING OCCUPANCY SENSOR
	CONDUIT STUB DOWN		LIGHT FIXTURE CALLOUT
	STUB THROUGH		REVISION DELTA
	CONDUIT STUB UP		EXISTING DEVICE/EQUIPMENT - FOR CLARIFICATION
	JUNCTION BOX (NEW, EXISTING, DEMO)		NEW DEVICE/EQUIPMENT - FOR CLARIFICATION
	ELECTRICAL DISTRIBUTION PANELBOARD		RELOCATED DEVICE/EQUIPMENT - FOR CLARIFICATION
	EQUIPMENT ENCLOSURE AS NOTED		
	DUPLEX RECEPTACLE (NEW, EXISTING, DEMO)		
	DOUBLE DUPLEX RECEPTACLE		
	ALL RECEPTACLES: X = GFCI - GROUND FAULT CIRCUIT INTERRUPTER		
	SPECIAL ELECTRICAL CONNECTION: COORDINATE REQUIREMENTS WITH EQUIPMENT BEING SERVED		
	TELEPHONE-DATA OUTLET		

ABBREVIATIONS

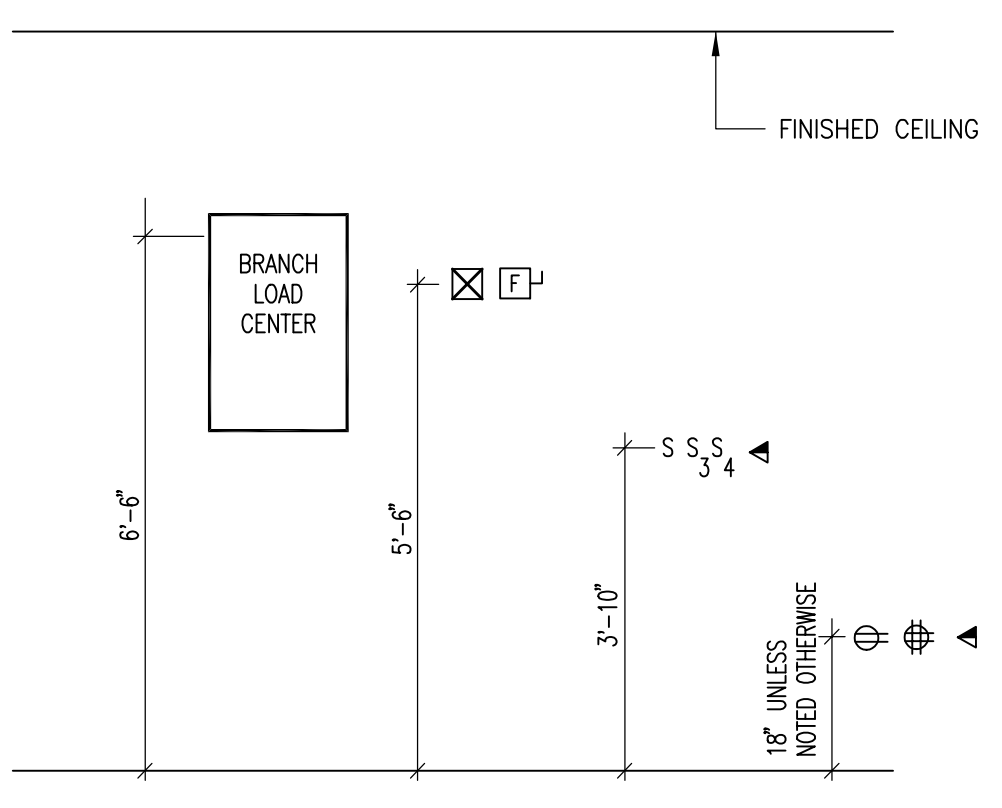
#C	SIZE OF TRADE SIZE CONDUIT. (1/2", 2", ETC.)	KO	KNOCK OUT
#P	NUMBER OF POLES. (1P, 2P, ETC.)	KV	KILOVOLT
#W	NUMBER OF WIRES. (3W, 4W, ETC.)	KVA	KILOVOLT AMPERE
A	AMPERE	KW	KILOWATT
AC	ALTERNATING CURRENT	KWH	KILOWATT HOUR
ADA	AMERICANS WITH DISABILITIES ACT	LV	LOW VOLTAGE
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISHED GRADE	MDSB	MAIN DISTRIBUTION SWITCHBOARD
AHJ	AUTHORITY HAVING JURISDICTION	MFR	MANUFACTURER
AIC	AMPERE INTERRUPTING CAPACITY	MLO	MAIN LUG ONLY
AL	ALUMINUM	N/A	NOT APPLICABLE
ANN	ANNUNCIATOR	NC	NORMALLY CLOSED
AUX	AUXILIARY	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GAUGE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CB	CIRCUIT BREAKER	NESC	NATIONAL ELECTRICAL SAFETY CODE
CLG	CEILING	NO	NORMALLY OPEN
C	CONDUIT	NO.	NUMBER
CD	CANDELLA	NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY - AS DEFINED BY OSHA
CT	CURRENT TRANSFORMER	OC	OVER COUNTER TOP BACKSPLASH - COORDINATE INSTALLATION
CU	COPPER	O.H.	OPPOSITE HAND - MIRRORRED OR ROTATED LAYOUT
DC	DIRECT CURRENT	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
DPDT	DOUBLE POLE, DOUBLE THROW	PF	POWER FACTOR
DPST	DOUBLE POLE, SINGLE THROW	PH	PHASE
EMT	ELECTRICAL METALLIC TUBING	REV	REVISION
EP	EXPLOSION PROOF	RTU	ROOF TOP UNIT
EWB	ELECTRIC WATER HEATER	SPD	SURGE PROTECTIVE DEVICE
F	FUSE	SPDT	SINGLE POLE, DOUBLE THROW
FACP	FIRE ALARM CONTROL PANEL	SPST	SINGLE POLE, SINGLE THROW
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SST	SOFT START/STOP MOTOR STARTER
GFI	GROUND FAULT INTERRUPTER	SYMM	SYMMETRICAL
GFPE	GROUND FAULT PROTECTION FOR EQUIPMENT	ITB	TELEPHONE TERMINAL BOARD
GND	GROUND	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
HOA	HAND-OFF-AUTO	TYP	TYPICAL
HP	HORSE POWER	UON	UNLESS OTHERWISE NOTED
HVAC	HEATING VENTILATION AND AIR CONDITIONING	UPS	UNINTERRUPTABLE POWER SUPPLY
I/O	INPUT / OUTPUT	V	VOLTAGE
IG	ISOLATED GROUND	VA	VOLT-AMPERE
INC	INCANDESCENT	VFD	VARIABLE FREQUENCY MOTOR DRIVE
J-BOX	JUNCTION BOX	WP	WEATHERPROOF
KCMIL	THOUSAND CIRCULAR MIL	XFMR	TRANSFORMER
		XFR	TRANSFER SWITCH



- NOTES:
 1. ALL HOMERUNS ARE TO BE 3/4" CONDUIT MINIMUM.
 2. ALL CONDUCTORS SHALL BE #12 UNLESS OTHERWISE NOTED.
 3. ALL CONDUITS SHALL CONTAIN A GROUND CONDUCTOR SIZED PER NEC.
 4. ALL CIRCUITS SHALL HAVE AN INDEPENDENT NEUTRAL CONDUCTOR.
 NO EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE ALLOWED.

1 CIRCUITING SYMBOLS

SCALE: NONE



- NOTES:
 1. VERIFY ALL MOUNTING HEIGHTS WITH CABO/ANSI A117.1, A.D.A. REQUIREMENTS AND OTHER APPLICABLE CODES.
 2. COORDINATE MOUNTING HEIGHTS WITH ALL ARCHITECTURAL ELEVATIONS, FLOOR PLANS AND DETAILS PRIOR TO ROUGH-IN. INFORM ARCHITECT OF ANY CONFLICTS.

2 STANDARD MOUNTING HEIGHTS

SCALE: NONE

GENERAL NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCALLY ADOPTED ELECTRICAL CODE, ALL LOCAL CODES, AND TO THE FULL ACCEPTANCE OF THE AUTHORITY HAVING JURISDICTION. WHENEVER THE REQUIREMENTS OF THE ELECTRICAL SPECIFICATIONS OR DRAWINGS EXCEED THOSE OF THE APPLICABLE CODES OR STANDARDS, THE REQUIREMENTS OF THE SPECIFICATIONS AND DRAWINGS SHALL GOVERN.
- OBTAIN ALL PERMITS, COORDINATE, FURNISH, INSTALL, CONNECT AND TEST ALL ELECTRICAL EQUIPMENT REQUIRED FOR ALL THE SYSTEMS INSTALLED UNDER THIS CONTRACT TO INSURE COMPLETE AND FULLY OPERATIONAL SYSTEMS.
- CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF AS-BUILT DRAWINGS. AS-BUILT SET OF DRAWINGS SHALL BE UPDATED DAILY AND SHALL DOCUMENT THE ACTUAL INSTALLED CONDITION OF THE ENTIRE ELECTRICAL INSTALLATION. AS-BUILT SET OF DRAWINGS SHALL BE AVAILABLE AT ALL TIMES ON THE SITE FOR INSPECTION BY CODE OFFICIALS, OWNER, ARCHITECT, AND ENGINEER.
- DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS THEY RELATE TO THE SCOPE OF WORK AS SHOWN ON THESE PLANS.
- COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES.
- ALL MATERIALS AND EQUIPMENT FURNISHED TO THE PROJECT SHALL BE NEW AND SHALL BEAR THE LISTING LABEL OF A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL), WHERE APPLICABLE.
- ALL EXTERIOR ELECTRICAL BOXES, FITTINGS AND CABINETS SHALL BE OF STEEL CONSTRUCTION, GALVANIZED OR POWDER COATED, NEMA 3R TYPE, UON.
- MINIMUM SIZE WIRE FOR POWER AND LIGHTING CIRCUITS SHALL BE #12 AWG, UON. CONDUCTOR SIZE SHALL BE CONTINUOUS THROUGHOUT THE ENTIRE LENGTH OF THE CIRCUIT.
- MOUNTING METHODS INDICATED AND REFERRED TO ARE MINIMUM CODE REQUIREMENTS. COMPLY WITH LOCAL CODES FOR ADDITIONAL SEISMIC RESTRAINTS.
- MAKE ALL CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS.
- ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC, MINIMUM 1", UNLESS OTHERWISE NOTED. BURY A CONTINUOUS, PRE-PRINTED, BRIGHT-COLORED PLASTIC RIBBON CABLE MARKER WITH ELECTRICAL TRACE WIRE IN EACH UNDERGROUND RUN. LOCATE RIBBON DIRECTLY OVER CONDUIT OR CABLES. INSTALL AT A DEPTH REQUIRED BY NEC FOR CONDITIONS OF INSTALLATION.
- ALL CONDUCTORS SHALL BE STRANDED COPPER, 600 VOLT RATED. INSULATION TYPE SHALL BE THHN/THWN, FULLY COLOR CODED WITH GAUGE, TYPE AND MANUFACTURER MARKED EVERY 24" ALONG.
- BIDDERS SHALL VIEW THE SITE AND SHALL INCLUDE ALL COSTS INCURRED BY EXISTING CONDITIONS IN THE BID PROPOSAL. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL RELEVANT BID DOCUMENTS, BID FORMS AND SPECIFICATIONS. ANY INCREASED COST INCURRED DUE TO FAILURE TO BECOME FAMILIAR WITH THESE DOCUMENTS SHALL BE BORNE BY THE CONTRACTOR. WORK SHALL INCLUDE ALL LABOR, EQUIPMENT, APPLIANCES, MATERIALS, TRANSPORTATION, FACILITIES AND SERVICES NECESSARY FOR AND/OR REASONABLY INCIDENTAL TO THE COMPLETION OF ALL ELECTRICAL WORK IN STRICT COMPLIANCE WITH THE DRAWINGS AND OTHER CONTRACT DOCUMENTS. WORK SHALL INCLUDE, BUT NOT BE NECESSARILY LIMITED TO, THE WORK SPECIFIED AND INDICATED ON DRAWINGS.
- PROPOSED MODIFICATIONS OF ENGINEERED ELECTRICAL DRAWINGS SHALL BE APPROVED BY ENGINEER OF RECORD PRIOR TO PROCEEDING WITH WORK. PROPOSED CHANGES SHALL COMPLY WITH ALL APPLICABLE CODES/JURISDICTION REQUIREMENTS. COST OF ANY ENGINEERING/REVIEW REQUIRED BY PROPOSED CHANGES SHALL BE BORNE BY ENTITY PROPOSING CHANGE.
- ALL ELECTRICAL DEVICES AND TERMINALS SHALL BE RATED 75°C MINIMUM.
- ALL CIRCUITS SHALL HAVE AN INDEPENDENT NEUTRAL CONDUCTOR. NO EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE ALLOWED.
- ALL CONDUITS SHALL CONTAIN A GROUND CONDUCTOR SIZED PER NEC.
- ALL CONDUCTORS IN ELECTRICAL PANELS, CABINETS AND EQUIPMENT SHALL BE NEATLY TRAINED AND LACED.
- THE CONTRACTOR SHALL PROVIDE TYPED CIRCUIT PANEL DIRECTORIES FOR ALL PANELS THAT CONTAIN CIRCUITS IMPACTED BY THIS PROJECT. OLD DIRECTORIES SHALL BE RETAINED BEHIND THE NEW.
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE GENERAL CONTRACTOR FOR APPROVAL BY ARCHITECT AND ENGINEER PRIOR TO ORDERING EQUIPMENT. SUBMITTALS SHALL CONSIST OF CATALOG CUT DESIGNATING PART NUMBERS TO BE SUPPLIED FOR EACH TYPE OF THE FOLLOWING: ELECTRICAL GEAR, LIGHT FIXTURES, BALLASTS, DRIVERS, LAMPS, DEVICES AND COVERPLATES.
- TEMPORARY POWER AND WIRING REQUIRED FOR SITE CONSTRUCTION SHALL BE PROVIDED BY THE SITE GENERAL CONTRACTOR.
- ALL UNDERGROUND RACEWAY INSTALLATIONS SHALL BE COORDINATED WITH OTHERS FOR SPACING, SIZE, TRENCHING AND BACKFILL REQUIREMENTS.
- JUNCTION BOXES, HANDHOLES AND CONDUIT SEALS SHALL BE PROVIDED AS NECESSARY TO FURNISH A COMPLETE WORKING ELECTRICAL SYSTEM. THE CONTRACTOR SHALL FOLLOW THE NEC FOR MINIMUM SIZING AND PERMISSIBLE LOCATION REQUIREMENTS.
- COORDINATE AND COMPLY WITH ALL UTILITY STANDARDS AND REQUIREMENTS.
- FURNISH AND INSTALL PULL CORDS IN EACH NEW CONDUIT.
- COORDINATE WITH SITE CONTRACTOR FOR FIXTURE TYPE AND MOUNTING REQUIREMENTS.



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ITD D3 BUILDING CONVERSION
 GARDEN CITY, ID
 5800 COFFEY STREET

CSHOA

FOR CONSTRUCTION
 9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN BL	CHECKED JLB

REVISED

SHEET TITLE
GENERAL SYMBOLS AND LEGEND

SHEET
E01
 ORIGINAL SHEET SIZE
 24" x 36"



COMcheck Software Version 4.1.1.0
Interior Lighting Compliance Certificate

Project Information
 Energy Code: 2015 IECC
 Project Title: ITD D3 Building Conversion
 Project Type: Addition
 Construction Site: 5800 Coffey Street, Garden City, IL 83702
 Owner/Agent: [Signature]
 Designer/Contractor: Bruno Loza, CSHQA, 200 Broad St, Boise, ID 83702, (208) 429-4026, bruno.loza@csgha.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
1-Training/Testing (Workshop)	2943	1.10	3236
		Total Allowed Watts =	3026

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Training/Testing (Workshop)				
LP1E: LP1E-4" Linear: Other:	1	2	13	26
2R1: 2R1: 2x2 Panel: LED Panel 19W:	1	42	20	823
RR1E: RR1E: Recessed Round: LED Other Fixture Unit 16W:	1	10	17	171
V1: V1: Vanity Light: Other:	1	4	10	40
		Total Proposed Watts =		1060

Interior Lighting PASSES: Design 65% better than code

Interior Lighting Compliance Statement
 Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Bruno Loza, 7/8/19
 Name - Title, Signature, Date

COMcheck Software Version 4.1.1.0
Exterior Lighting Compliance Certificate

Project Information
 Energy Code: 2015 IECC
 Project Title: ITD D3 Building Conversion
 Project Type: Addition
 Extender Lighting Zone: 3 (Other)
 Construction Site: 5800 Coffey Street, Garden City, IL 83702
 Owner/Agent: [Signature]
 Designer/Contractor: Bruno Loza, CSHQA, 200 Broad St, Boise, ID 83702, (208) 429-4026, bruno.loza@csgha.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Main Door (Main entry)	3 ft of door	30	Yes	90
Slide Doors (Other door (not main entry))	6 ft of door	20	Yes	120
		Total Tradable Watts (a) =		210
		Total Allowed Watts =		210
		Total Allowed Supplemental Watts (b) =		750

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Main Door (Main entry 3 ft of door width): Tradable Wattage				
WP1: WP1: Wall Pack: Other:	1	1	27	27
Slide Doors (Other door (not main entry) 6 ft of door width): Tradable Wattage				
WP1: WP1: Wall Pack: Other:	1	3	27	81
		Total Tradable Proposed Watts =		108

Exterior Lighting PASSES: Design 69% better than code

Exterior Lighting Compliance Statement
 Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Bruno Loza, 7/8/19
 Name - Title, Signature, Date

COMcheck Software Version 4.1.1.0
Inspection Checklist
 Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the COMcheck software
 Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req. ID	Plan Review	Complies?	Comments/Assumptions
C103.2 (PR4) ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C103.2 (PR8) ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C406 (PR9) ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

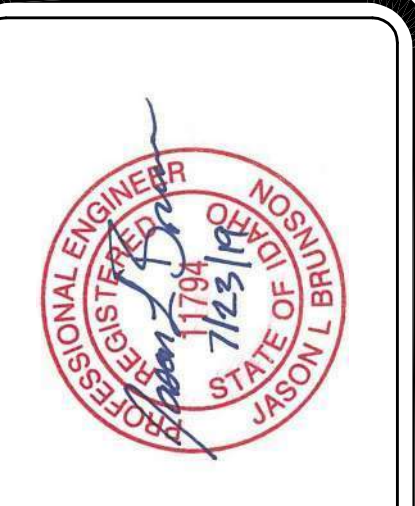
Project Title: ITD D3 Building Conversion Report date: 07/08/19
 Data filename: Q:\2019\19004.0_ITD_D3_Supply\80 Elec\05_Calcs\19004 COMcheck.cck Page 3 of 7

Section # & Req. ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 (EL15) ¹	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.1 (EL18) ¹	Occupancy sensors installed in required spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.1 (EL22) ¹	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.2 (EL22) ¹	Automatic controls to shut off all building lighting installed in all buildings.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.3 (EL16) ¹	Daylight zones provided with individual controls that control the lights independent of general area lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.3 (EL20) ¹	Primary sidelighted areas are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.3 (EL21) ¹	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.4 (EL4) ¹	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.4 (EL8) ¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.5 (EL25) ¹	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.3 (EL6) ¹	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

Project Title: ITD D3 Building Conversion Report date: 07/08/19
 Data filename: Q:\2019\19004.0_ITD_D3_Supply\80 Elec\05_Calcs\19004 COMcheck.cck Page 4 of 7



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 www.csgha.com

ITD D3 BUILDING CONVERSION
5800 COFFEY STREET
CSHQA

FOR CONSTRUCTION
 9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN BL	CHECKED JLB

REVISED

SHEET TITLE
LIGHTING COMPLIANCE

SHEET
E02
 ORIGINAL SHEET SIZE
 24" x 36"

Section # & Req. ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5 (F17) ¹	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.4.1 (F18) ¹	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
C405.5.1 (F19) ¹	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Exterior Lighting fixture schedule for values.
C408.2.5 (F16) ¹	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.3 (F13) ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

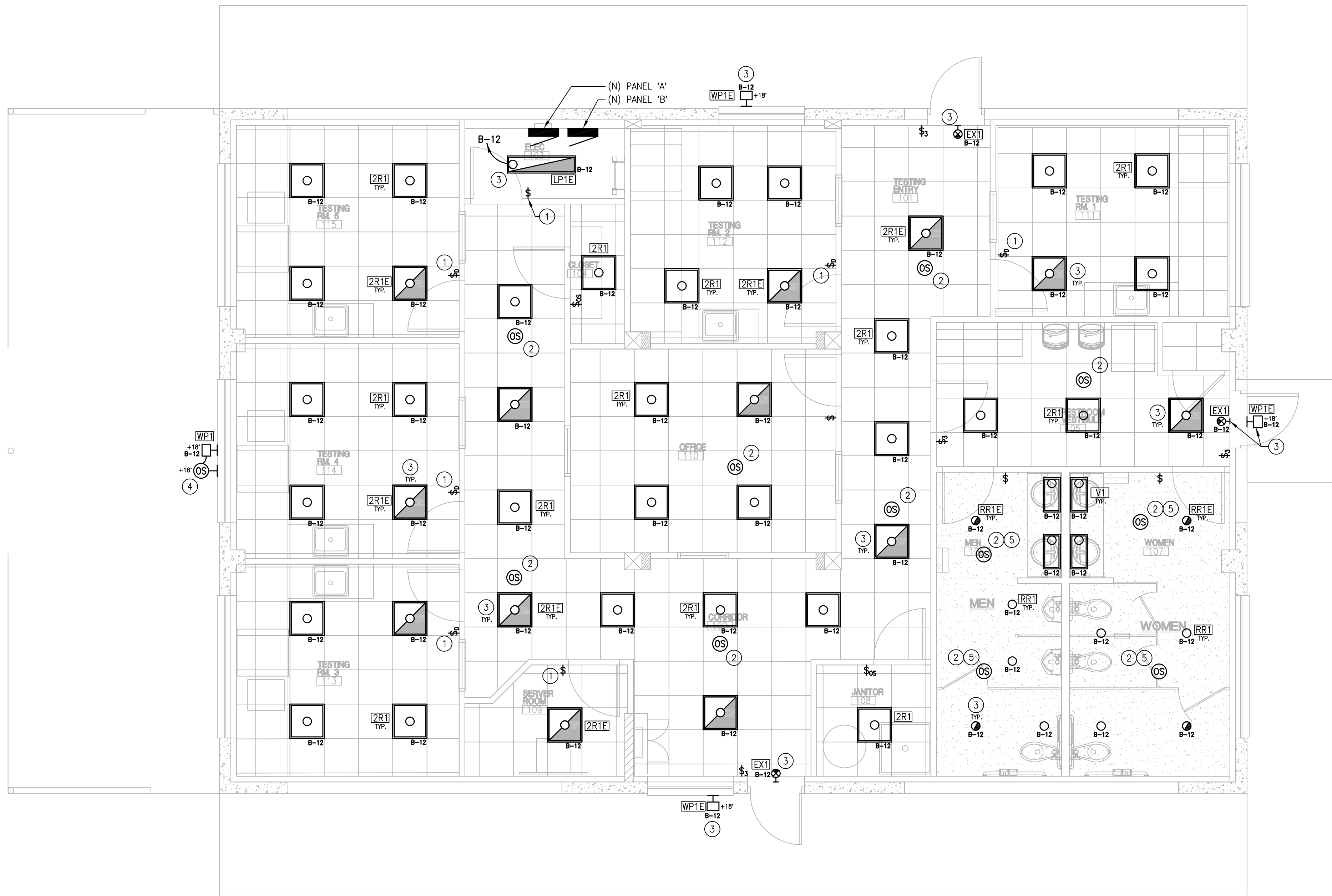
Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

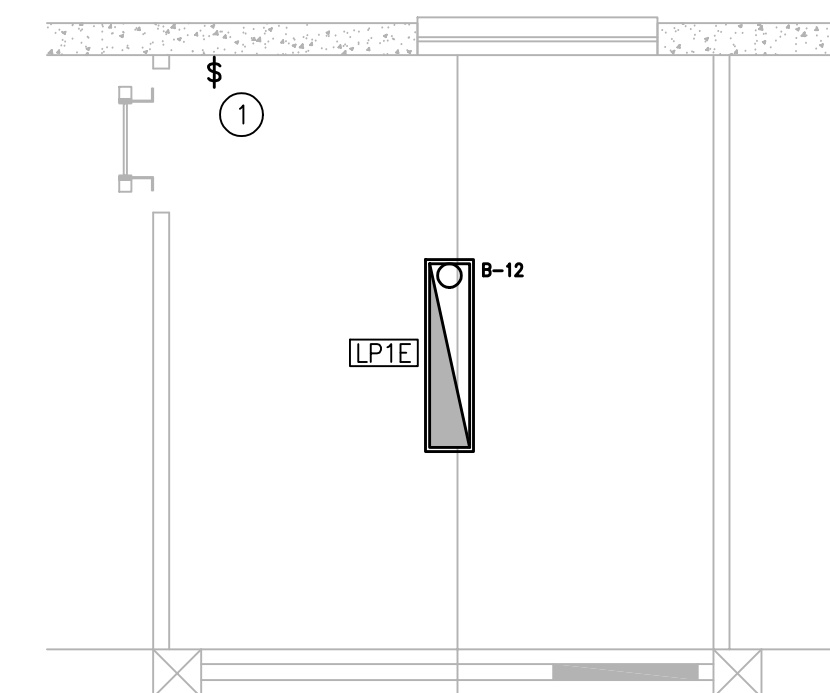
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Project Title: ITD D3 Building Conversion Report date: 07/08/19
 Data filename: Q:\2019\19004.0_ITD_D3_Supply\80 Elec\05_Calcs\19004 COMcheck.cck Page 7 of 7

Approved
 State of Idaho
 Professional Engineer
 License No. 112519
 Jason L. Brunson, P.E.
 THESE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE. THE ARCHITECT ENGINEER HAS REVIEWED THE PROJECT FOR CONFORMANCE WITH THE ARCHITECTURAL AND SPECIFICATIONS. THE ARCHITECT ENGINEER'S REVIEW IS LIMITED TO THE PROJECT'S COMPLIANCE WITH THE ARCHITECTURAL AND SPECIFICATIONS. THE ARCHITECT ENGINEER'S REVIEW DOES NOT CONSTITUTE A GUARANTEE OF THE PROJECT'S COMPLIANCE WITH THE ARCHITECTURAL AND SPECIFICATIONS. THE ARCHITECT ENGINEER'S REVIEW DOES NOT CONSTITUTE A GUARANTEE OF THE PROJECT'S COMPLIANCE WITH THE ARCHITECTURAL AND SPECIFICATIONS. THE ARCHITECT ENGINEER'S REVIEW DOES NOT CONSTITUTE A GUARANTEE OF THE PROJECT'S COMPLIANCE WITH THE ARCHITECTURAL AND SPECIFICATIONS.



1 LIGHTING PLAN - LEVEL 1
 SCALE 1/4" = 1'-0"



2 LIGHTING PLAN - MECHANICAL MEZZANINE
 SCALE 1/4" = 1'-0"

LOAD CONTROL SEQUENCE	
ZONE DESCRIPTION	ZONE CONTROL METHODS
TESTING ENTRY, RESTROOM VESTIBULE, CORRIDOR	<ul style="list-style-type: none"> LOCAL OCCUPANCY SENSORS TO PERFORM FULL AUTOMATIC-ON WHEN OCCUPANTS ENTER SPACE AND SHUTOFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE. LOCAL MANUAL ON/OFF CONTROL.
RESTROOMS	<ul style="list-style-type: none"> LOCAL OCCUPANCY SENSORS TO PERFORM FULL AUTOMATIC-ON WHEN OCCUPANTS ENTER SPACE AND SHUTOFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE. LOCAL MANUAL ON/OFF CONTROL. EXHAUST FAN "EF-3" ACTIVATED WHEN MEN'S OR WOMEN'S RESTROOM OCCUPANCY SENSOR PERFORMS AUTOMATIC-ON AND SHUT OFF WITHIN 20 MINUTES OF OCCUPANTS LEAVING BOTH SPACES.
OFFICE	<ul style="list-style-type: none"> LOCAL VACANCY SENSORS TO PERFORM AUTOMATIC SHUTOFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE, RESTRICTED TO MANUAL ON. LOCAL MANUAL ON/OFF DIMMING CONTROLS.
JANITOR, CLOSET	<ul style="list-style-type: none"> LOCAL WALL-MOUNTED, VACANCY SENSOR/MANUAL SWITCH TO PERFORM MANUAL ON/AUTOMATIC SHUTOFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.
TESTING ROOMS	<ul style="list-style-type: none"> LOCAL MANUAL ON/OFF DIMMING CONTROLS. ZONE EXEMPT FROM AUTOMATIC CONTROLS FOR OCCUPANT SAFETY. RE: IECC 2015 C405.2.2 EXCEPTION 3.
ELECTRICAL, SERVER ROOM, MECHANICAL MEZZANINE	<ul style="list-style-type: none"> LOCAL MANUAL ON/OFF CONTROLS. ZONE EXEMPT FROM AUTOMATIC CONTROLS FOR OCCUPANT SAFETY. RE: IECC 2015 C405.2.2 EXCEPTION 3. ZONE EXEMPT FROM LIGHT REDUCTION CONTROL. RE: IECC 2015 C405.2.2.1 EXCEPTION 2.3.
EXTERIOR ENTRY LIGHTING	<ul style="list-style-type: none"> INTEGRATED PHOTOCELL CONTROL. ZONE EXEMPT FROM AUTOMATIC SHUTOFF CONTROLS FOR SAFETY TO BUILDING ENTRANCES PER IECC 2015 C405.2.5 EXCEPTION.
EXTERIOR AREA LIGHTING	<ul style="list-style-type: none"> INTEGRATED PHOTOCELL CONTROL. EXTERNAL OCCUPANCY SENSOR CONTROLS TO PERFORM FULL SHUT-OFF WITHIN 15 MINUTES OF UNDETECTED ACTIVITY.

GENERAL NOTES:	
A. ALL ELECTRICAL WORK SHALL BE CLOSELY COORDINATED WITH THE CONTRACTORS PHASING OF THE PROJECT. COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES.	K. FURNISH AND INSTALL SAFETY WIRES AT ALL LIGHT FIXTURES INSTALLED IN A SUSPENDED CEILING.
B. MAKE ALL CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS.	L. MOUNTING METHODS INDICATED AND REFERRED TO ARE MINIMUM CODE REQUIREMENTS. COMPLY WITH LOCAL CODES FOR ADDITIONAL SEISMIC RESTRAINTS.
C. ROUTE ALL CONDUIT HOME RUNS TO PANELS OVERHEAD AND ABOVE ACCESSIBLE CEILINGS WHERE AVAILABLE.	M. COORDINATE HOMERUN CIRCUIT NUMBERS WITH PANEL SCHEDULES. RE: SHEET E81.
D. ALL LIGHT FIXTURES SHALL BE 120 VOLT, UNLESS OTHERWISE NOTED.	
E. ALL FINAL LOCATIONS AND ARRANGEMENTS OF CEILING LIGHTING FIXTURES SHALL BE COORDINATED WITH ALL OTHER TRADES.	
F. EACH SWITCH BOX SHALL HAVE A GROUND AND ASSOCIATED LIGHTING CIRCUIT NEUTRAL CONDUCTOR.	
G. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR FINAL LOCATION OF ALL CEILING MOUNTED ITEMS. REFER TO ARCHITECTURAL ELEVATIONS AND SECTIONS FOR MOUNTING HEIGHTS OF WALL OR COLUMN MOUNTED FIXTURES AND DEVICES.	
H. ALL CONDUITS WITH CIRCUIT CONDUCTORS SHALL HAVE A COPPER EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250.	
I. SEE SHEET E01 FOR DEVICE AND SYMBOL SCHEDULE.	
J. ALL LIGHTING CIRCUIT HOMERUNS ARE TO BE 3/4" CONDUIT MINIMUM WITH BRANCH CIRCUIT #12 AND GROUNDING CONDUCTOR #12 UNLESS OTHERWISE NOTED.	

#	SHEET NOTES:
1.	AREA EXEMPT FROM AUTOMATIC LIGHTING CONTROLS AND LIGHT REDUCTION CONTROL FOR OCCUPANT SAFETY. REFER TO IECC 2015 C405.2.2 EXCEPTION 3 AND C405.2.2.1 EXCEPTION 2.3.
2.	AREA LIGHTING TO BE CONTROLLED BY OCCUPANCY SENSOR(S) WITH LOCAL OVERRIDE. ROUTE POWER TO OCCUPANCY SENSOR, PRIOR TO SWITCH AND LINK MULTIPLE OCCUPANCY SENSORS IN AREA TO OPERATE ALL LIGHTING IN SPACE WHEN ANY OCCUPANCY SENSOR IS ACTIVE. FURNISH AND INSTALL OCCUPANCY SENSOR(S) WITH RANGE TO FULLY SENSE THE AREA BEING CONTROLLED.
3.	CONNECT EXIT SIGN AND EMERGENCY BATTERY PACKS TO CONTINUOUS POWER.
4.	FURNISH AND INSTALL EXTERIOR, WALL-MOUNTED OCCUPANCY SENSOR FOR EXTERIOR WALL PACK. ROUTE POWER TO WALL-MOUNTED FIXTURE VIA OCCUPANCY SENSOR.
5.	OCCUPANCY SENSORS IN RESTROOMS TO ALSO CONTROL EXHAUST FAN FOR BOTH RESTROOMS. REFER TO SHEET E21 FOR CONTROL WIRING AND EXHAUST FAN REQUIREMENTS.

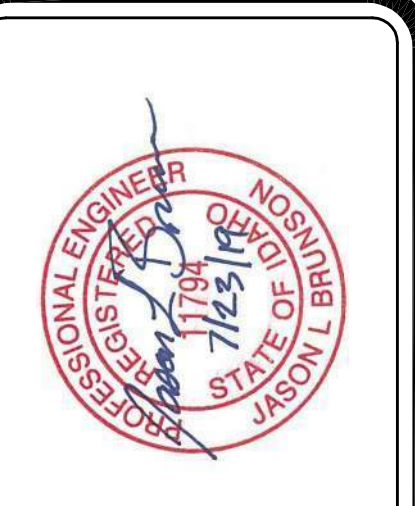
LIGHTING FIXTURE SCHEDULE						
FIXTURE	DESCRIPTION	MANUFACTURER & PART NUMBER	LOAD IN WATTS	VOLTAGE	LAMP TYPE	LOCATIONS
EX1	EXIT SIGN - ONE SIDED	EATON SURE-LITES APX-7-G	0.9	120V	GREEN LED	GENERAL
ZR1(E)	2X2 RECESSED	METALUX 22C2-LD5-24-UM-1840-CD-1 (-EL7W WHERE NOTED "E")	19.6	120V	4000K	GENERAL
LP1E	4' LINEAR	METALUX 4-SLED-LD5-19SL-SLN-UM-EL7W-1840-CD-1-U	13	120V	4000K	ELEC MECHANICAL MEZZANINE
RR1(E)	6" RECESSED ROUND	HALO P06-15-ED010-PM6A-840-61V-H (-REM WHERE NOTED "E")	17.1	120V	4000K	RESTROOMS
V1	VANITY	METALUX 2BCLED-LD4-RSL-F-UM-1840-CD-1-U	10	120V	4000K	RESTROOMS
WP1(E)	EXTERIOR WALL PACK	EATON LUMARK LD-WP-FC-3B-120V-FE120-(-EMLED-CD WHERE NOTED "E")	27	120V	4000K	EXTERIOR

CONTRACTOR MAY PROVIDE FIXTURES EQUAL TO THOSE SPECIFIED. SUBSTITUTED FIXTURES MUST MATCH SPECIFIED FIXTURE IN PERFORMANCE (LUMENS, DISTRIBUTION, AND WATTAGE), APPEARANCE, SIZE AND QUALITY. ALL FIXTURES SHALL BE SUBJECT TO REVIEW BY ENGINEER AT TIME OF LIGHTING FIXTURE SUBMITTAL. CONTRACTOR SHALL PROVIDE FIXTURES INDICATED ON SCHEDULE FOR ANY FIXTURES DEEMED NOT EQUAL BY THE ENGINEER.

A. VERIFY MATERIALS AND FINISHES WITH OWNER PRIOR TO ORDERING. VERIFY MOUNTING HEIGHTS WITH FINISHED DECK, JOIST HEIGHTS, CEILING HEIGHTS PRIOR TO ORDERING AND ALLOW 2 WEEKS FOR DELIVERY.

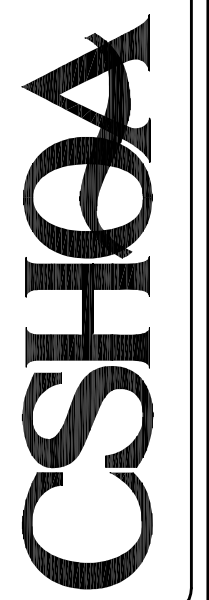
B. LIGHTING REPRESENTATIVE TO CONFIRM / VERIFY ALL ACCESSORIES TO ENSURE THE CONTRACTOR HAS COMPLETE LIGHTING SYSTEMS.

C. LIGHTING REPRESENTATIVE AND ELECTRICAL CONTRACTOR TO VERIFY DIMMING SYSTEM, OCCUPANCY AND DAYLIGHT SENSOR COMPATIBILITY WITH LIGHT FIXTURE.



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ITD D3 BUILDING CONVERSION
GARDEN CITY, ID
 5800 COFFEY STREET



FOR CONSTRUCTION
 9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN BL	CHECKED JLB

SHEET TITLE
LIGHTING PLANS

SHEET
E11
 ORIGINAL SHEET SIZE
 24" x 36"

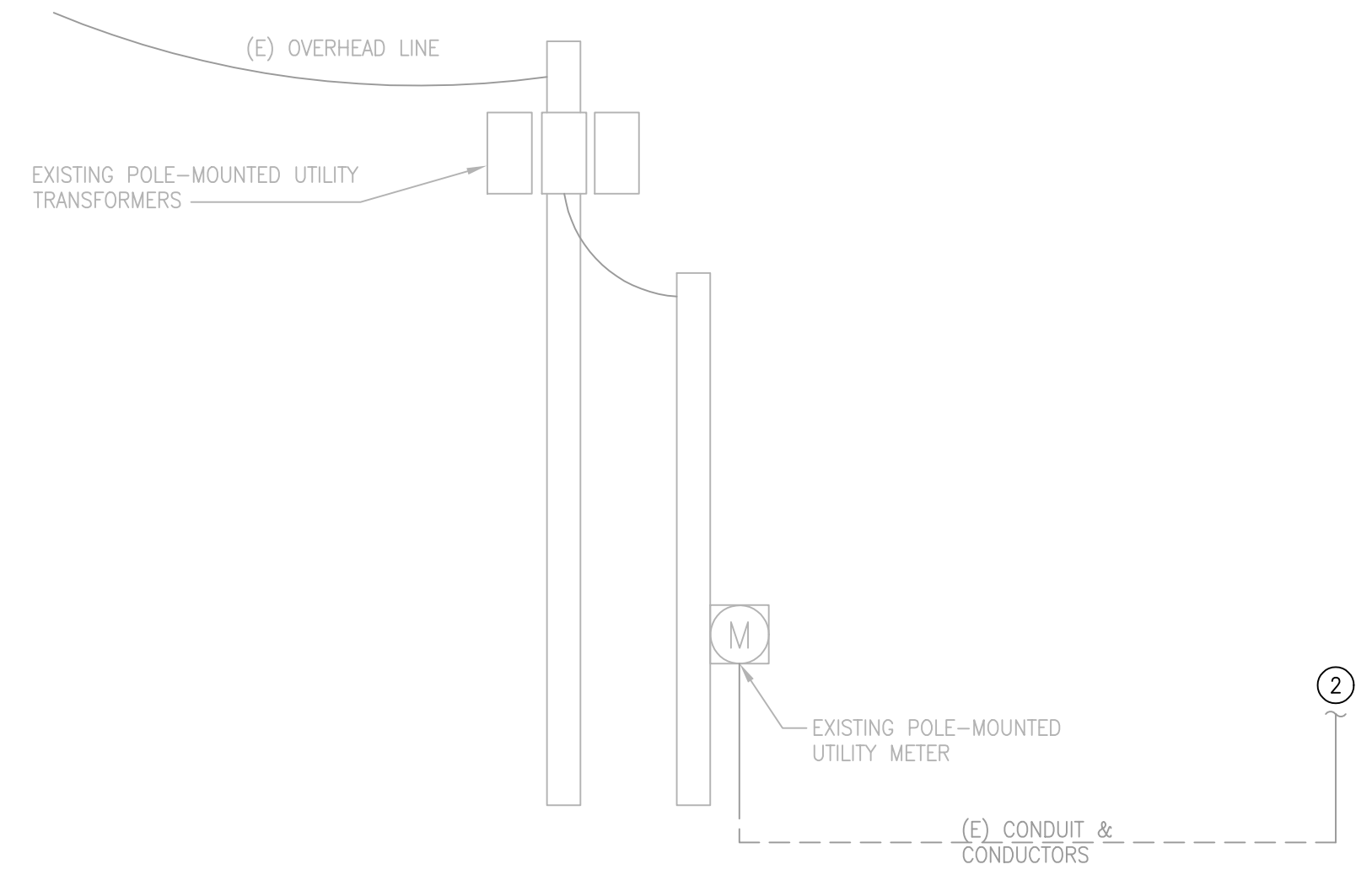


GENERAL NOTES:

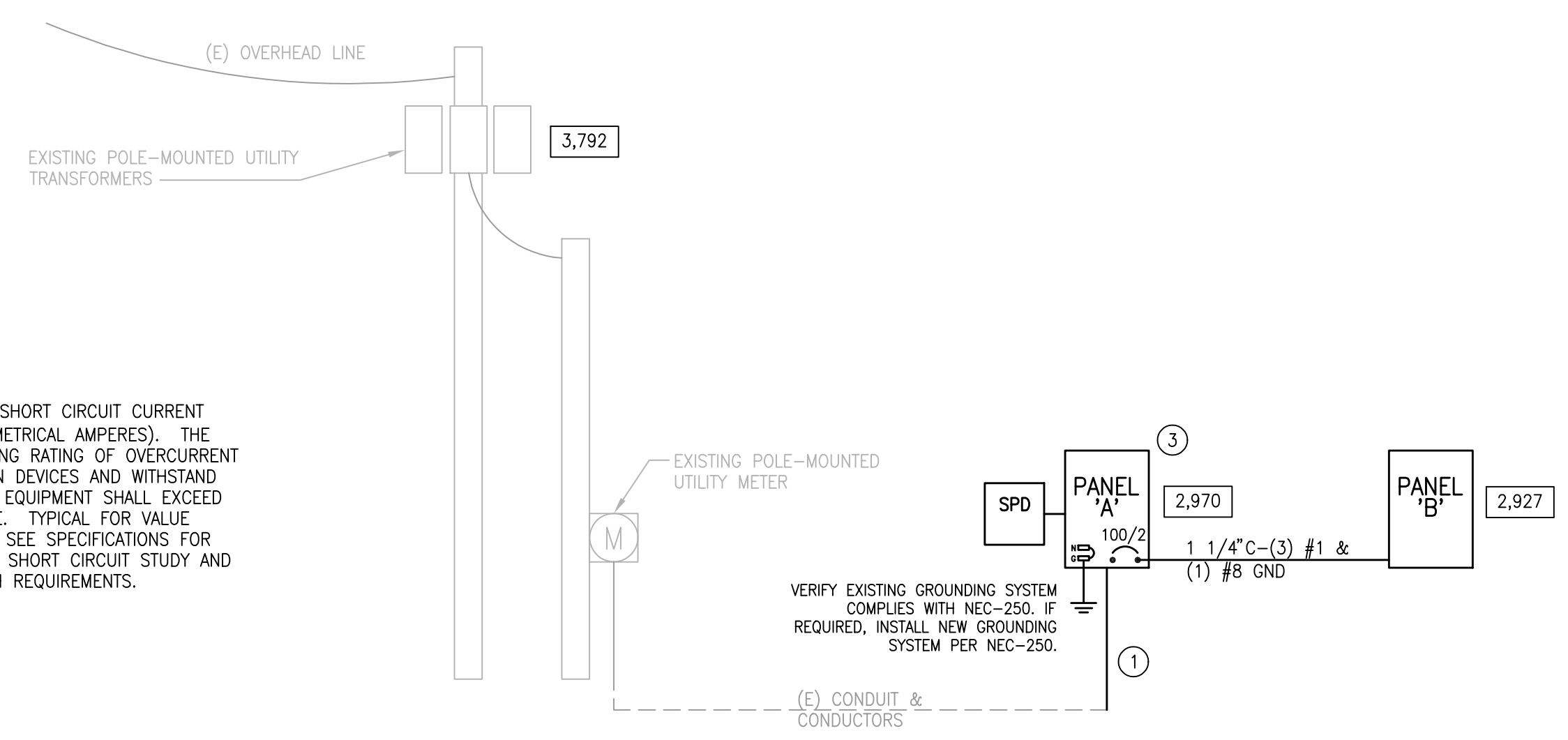
- A. COORDINATE ALL UTILITY CONNECTION REQUIREMENTS AND CONNECT.

SHEET NOTES:

- 1. VERIFY EXISTING SERVICE CONDUIT AND CONDUCTORS ARE RATED FOR NEW SERVICE EQUIPMENT. INTERCEPT AND EXTEND CONDUIT AND CONDUCTORS TO NEW SERVICE DISCONNECT. PROVIDE ADDITIONAL CONDUIT AND CONDUCTORS AS NEEDED.
- 2. EXISTING BUILDING PANELS TO BE REMOVED AND REPLACED WITH NEW.
- 3. PROVIDE HIGH-LEG MARKING AS REQUIRED BY NEC.



1 DEMOLITION SINGLE-LINE DIAGRAM
SCALE: NONE

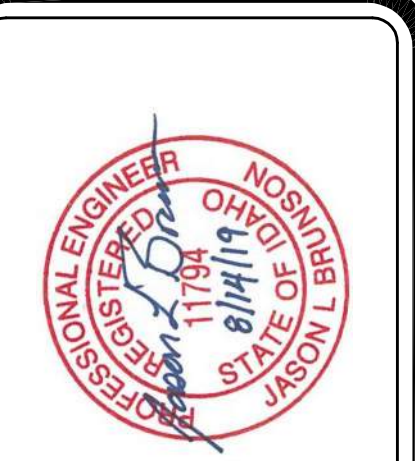


XX,XXX
AVAILABLE SHORT CIRCUIT CURRENT (RMS SYMMETRICAL AMPERES). THE INTERRUPTING RATINGS OF OVERCURRENT PROTECTION DEVICES AND WITHSTAND RATING OF EQUIPMENT SHALL EXCEED THIS VALUE. TYPICAL FOR VALUE CALL-OUT. SEE SPECIFICATIONS FOR ADDITIONAL SHORT CIRCUIT STUDY AND ARC-FLASH REQUIREMENTS.

2 SINGLE-LINE DIAGRAM
SCALE: NONE

PANEL 'A'		A.I.C. RATING:		10,000		NOTES: NEW SERVICE-RATED COMMERCIAL BOLT-ON CIRCUIT BREAKER PANELBOARD											
240/120-VOLT, 3-PHASE, 4-WIRE		MOUNTING:		SURFACE		1. CONNECT SERVICE HIGH-LEG PHASE TO PANEL PHASE B LUGS. PROVIDE HIGH-LEG MARKING PER NEC.											
CKT NO	LOAD DESCRIPTION	REF NO	BRKR TYPE	LOAD AMPS	P AMP	PHASE AMPS	A	B	C	BREAKER AMP	LOAD AMPS	BRKR TYPE	REF NO	LOAD DESCRIPTION	CKT NO		
1	REC - TESTING RM 5			6.0	1	20	9.0				20	1	3.0	REC - SERVER ROOM	2		
3	IGNITION OVEN - TESTING RM 5			23.0	2	30	23.0							BLANK - HIGH LEG	4		
5	**			23.0	*	**					28.0	1	5.0	TELECOM CABINET	6		
7	DRYING OVEN - TESTING RM 5			18.3	1	20	19.8				20	1	1.5	REC - OUTDOOR	8		
9	BLANK - HIGH LEG													BLANK - HIGH LEG	10		
11	REC - TESTING RM 5 COUNTER			1.5	1	20					3.0	20	1	1.5	REC - MECH MEZZANINE	12	
13	REC - TESTING RM 4			6.0	1	20	17.7				20	2	11.7	MAU-1 MAKE-UP AIR - TESTING ROOMS	14		
15	IGNITION OVEN - TESTING RM 4			23.0	2	30	34.7			**	11.7	MAU-1		**	16		
17	**			23.0	*	**					30.5	15	7.5	F-2 FURNACE - MISC SPACES	18		
19	DRYING OVEN - TESTING RM 4			18.3	1	20	33.0				20	1	14.7	F-1 FURNACE - TESTING ROOMS	20		
21	BLANK - HIGH LEG										50	2	30.1	CU-1 CONDENSING UNIT - TESTING ROOMS	22		
23	REC - TESTING RM 4 COUNTER			1.5	1	20				**	30.1	CU-1		**	24		
25	REC - TESTING RM 3			4.5	1	20	24.3				35	2	19.8	CU-2 CONDENSING UNIT - MISC SPACES	26		
27	IGNITION OVEN - TESTING RM 3			23.0	2	30	42.8			**	19.8	CU-2		**	28		
29	**			23.0	*	**					23.1	20	3	0.1	SPD	30	
31	DRYING OVEN - TESTING RM 3			18.3	1	20	18.4			**	0.1			**	32		
33	BLANK - HIGH LEG									**	0.1			**	34		
35	REC - TESTING RM 3 COUNTER			1.5	1	20					66.5	100	2	65.0	PANEL 'B'	36	
37	SPARE									**	49.0			**	38		
39	BLANK - HIGH LEG										0.0			BLANK - HIGH LEG	40		
41	REC - CORRIDOR, ELEC., SERVER			6.0	1	20					11.0	20	1	5.0	WATER HEATER, REDIRC. PUMP	42	
PROJECT #19004 Panel Schedule				TOTAL LOAD:		171	131	194								08/09/19	
				ACTUAL KVA		1.1	125%	1.4	Excludes track and show window lighting.								
				DEMAND FACTOR		0.0	N/A	0.0	Track length: 0 ft								
				DEMAND KVA		0.0	N/A	0.0	Show window length: 0 ft								
				LIGHTING AND OTHER CONTINUOUS LOAD:		0.0	N/A	0.0	Show window length: 0 ft								
				TRACK LIGHTING:		0.0	N/A	0.0	Show window length: 0 ft								
				SHOW WINDOWS:		0.0	N/A	0.0	Show window length: 0 ft								
				RECEPTACLE LOAD:		7.6	100%	7.6	100% of the first 10 kVA, plus 50% over 10 kVA.								
				KITCHEN EQUIPMENT LOAD:		0.0	100%	0.0	Based on 0 pieces of equipment.								
				HEATING (CONCIDENTAL) LOAD:		0.0	100%	0.0	Includes space heat in excess of cooling and other electric heat.								
				HEATING OR OTHER NON-COINCIDENTAL LOAD:		0.0	0%	0.0									
				WELDER LOAD:		0.0	0%	0.0									
				MOTORS AND OTHER NON-CONTINUOUS OR MISCELLANEOUS LOAD:		43.5	100%	43.5	All other loads excluding maximum motor load.								
				LARGEST MOTOR LOAD:		7.2	125%	9.0									
				TOTALS:		59.5	104%	61.6	MINIMUM FEEDER: 148-AMPS								

PANEL 'B'		A.I.C. RATING:		10,000		NOTES: NEW COMMERCIAL BOLT-ON CIRCUIT BREAKER PANELBOARD											
240/120-VOLT, 1-PHASE, 3-WIRE		MOUNTING:		SURFACE													
CKT NO	LOAD DESCRIPTION	REF NO	BRKR TYPE	LOAD AMPS	P AMP	PHASE AMPS	L1	L2	BREAKER AMP	LOAD AMPS	BRKR TYPE	REF NO	LOAD DESCRIPTION	CKT NO			
1	REC - TESTING RM 2			4.5	1	20	6.0				20	1	1.5	GFCI WC-1 FOUNTAIN - RR VESTIBULE	2		
3	DRYING OVEN - TESTING RM 2			18.3	1	20	19.3				19.8	20	1	1.5	GFCI WC-2 FOUNTAIN - RR VESTIBULE	4	
5	REC - TESTING RM 2 COUNTER			1.5	1	20					30	1	17.8	IM-1 ICE MAKER - RR VESTIBULE	6		
7	REC - TESTING RM 2 COUNTER			1.5	1	20					7.5	20	1	6.0	REC - RESTROOMS, VESTIBULE	8	
9	REC - OFFICE			6.0	1	20	6.0				20	1		SPARE	10		
11	SPARE										9.5	20	1	9.5	LTS - INTERIOR & EXTERIOR	12	
13	DRYING OVEN - TESTING RM 1			18.3	1	20	18.3				20	1		SPARE	14		
15	REC - TESTING RM 1			7.5	1	20					7.5	20	1		SPARE	16	
17	REC - TESTING RM 1 COUNTER			1.5	1	20	1.5				20	1		SPARE	18		
19	REC - TESTING RM 1 COUNTER			1.5	1	20					1.5	20	1		SPARE	20	
21	SPARE										20	1		SPARE	22		
23	SPARE										0.0	20	1		SPARE	24	
25	SPARE										0.0	20	1		SPARE	26	
27	EXHAUST FAN - RESTROOMS, JANITOR	EF-1/2		3.3	1	20	3.3				3.3	20	1		SPARE	28	
29	EXHAUST FAN - OVENS EXHAUST	EF-3		13.8	1	20	13.8				20	1		SPARE	30		
PROJECT #19004 Panel Schedule				TOTAL LOAD:		65		49								08/09/19	
				ACTUAL KVA		1.1	125%	1.4	Excludes track and show window lighting.								
				DEMAND FACTOR		0.0	N/A	0.0	Track length: 0 ft								
				DEMAND KVA		0.0	N/A	0.0	Show window length: 0 ft								
				LIGHTING AND OTHER CONTINUOUS LOAD:		0.0	N/A	0.0	Show window length: 0 ft								
				TRACK LIGHTING:		0.0	N/A	0.0	Show window length: 0 ft								
				SHOW WINDOWS:		0.0	N/A	0.0	Show window length: 0 ft								
				RECEPTACLE LOAD:		3.6	100%	3.6	100% of the first 10 kVA, plus 50% over 10 kVA.								
				KITCHEN EQUIPMENT LOAD:		0.0	100%	0.0	Based on 0 pieces of equipment.								
				HEATING (CONCIDENTAL) LOAD:		0.0	100%	0.0	Includes space heat in excess of cooling and other electric heat.								
				HEATING OR OTHER NON-COINCIDENTAL LOAD:		0.0	0%	0.0									
				WELDER LOAD:		0.0	0%	0.0									
				MOTORS AND OTHER NON-CONTINUOUS OR MISCELLANEOUS LOAD:		7.3	100%	7.3	All other loads excluding maximum motor load.								
				LARGEST MOTOR LOAD:		1.7	125%	2.1									
				TOTALS:		13.7	105%	14.4	MINIMUM FEEDER: 60-AMPS								



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FOR CONSTRUCTION
9/24/19

PROJECT 19004 DATE 7/23/19
DRAWN BL CHECKED JLB
REVISED 1 BLDG DEPT COMMENTS 8/15/19, BL

SHEET TITLE SINGLE-LINE & PANEL SCHEDULES

SHEET E81
ORIGINAL SHEET SIZE 24" x 36"



CABLING SCHEMATIC SYMBOLS

COPPER CABLING

	NEW CROSS-CONNECT FRAME
	NEW CABLE TERMINATION • XXX = CONNECTOR TYPE
	NEW SPLICE AND ENCLOSURE
	NEW PROTECTION HARDWARE • XXX = QUANTITY OF PAIRS
	NEW COPPER BACKBONE CABLE • XXX-XX = NUMBER OF PAIRS - CONDUCTOR GAUGE • XX/XX-X = CABLE ID AND LABEL INFORMATION • XXXX-XXXX = PAIR COUNT
	NEW COPPER HORIZONTAL CABLE(S) • CAT-X = CATEGORY RATING OF CABLE
	NEW OPTICAL FIBER CABLE • XXX' = CABLE LENGTH (IN FEET) • #MM/OMX = QUANTITY OF MULTIMODE STRANDS / PERFORMANCE LEVEL • XX/XX-X = TR1/TR2-CABLE SEQUENCE (CABLE ID AND LABEL INFORMATION)
	GROUND
	DEVICE AS NOTED

FLOOR PLAN SYMBOLS

PATHWAYS

	NEW WIRE-MESH CABLE TRAY • W/H = WIDTH / LEG HEIGHT OF TRAY (IN INCHES)
	NEW LADDER-STYLE CABLE TRAY • W = WIDTH OF TRAY (IN INCHES)
	NEW O-RINGS • W = WIDTH (IN INCHES)
	NEW J-HOOKS (TYPICALLY NOT SHOWN) • W = WIDTH (IN INCHES)
	NEW PENETRATION(S) THROUGH FLOOR • #C = CONDUIT SIZE (IN INCHES)
	NEW PENETRATION(S) THROUGH CEILING • #C = CONDUIT SIZE (IN INCHES)
	NEW CONDUIT(S) SLEEVE • #C = CONDUIT SIZE (IN INCHES)
	NEW CONDUIT(S) TURNED DOWN • #C = CONDUIT SIZE (IN INCHES)
	NEW CONDUIT(S) TURNED DOWN THROUGH FLOOR • #C = CONDUIT SIZE (IN INCHES)
	NEW CONDUIT(S) TURNED UP • #C = CONDUIT SIZE (IN INCHES)
	NEW WIREWAY WITH 90° ELBOW ON END • XXXX = SIZE/TYPE
	COMBINATION POWER/DATA POLE
	NEW PULL BOX • #x#x#x = SIZE (IN INCHES)
	TELECOMMUNICATIONS ROOM SERVING BOUNDARY
	DETAIL REFERENCE • TX.XX = SHEET NUMBER • X = DETAIL NUMBER
	ELEVATION DETAIL REFERENCE • TXx = SHEET NUMBER • X = DETAIL NUMBER
	GHOSTED LINE REPRESENTS EXISTING OR WORK BY OTHERS - UNLESS OTHERWISE NOTED
	SHEET NOTE REFERENCE
	DOOR HARDWARE SCHEDULE REFERENCE

TELECOMMUNICATION OUTLET LOCATIONS SYMBOLS

	3 TELECOMMUNICATION OUTLET LOCATION WITH (3) CAT-6.
	3 FLOOR OUTLET LOCATION WITH (3) CAT-6.
	3 CEILING OUTLET LOCATION WITH (3) CAT-6.
	1 SPECIAL SERVICES OUTLET (i.e. ELEVATOR EQUIPMENT, HVAC CONTROLLER, ATM, SECURITY ENCLOSURE, FIRE ALARM PANEL, PAY PHONE, ETC) (1) CAT-6.
	DOUBLE GANG BOX WITH SINGLE GANG MUD RING, BLANK FACEPLATE AND 1" CONDUIT STUB INTO ACCESSIBLE SPACE WITH END BUSHING AND PULL STRING. DOES NOT INCLUDE CABLE, TESTING, TERMINATION HARDWARE OR LABELING.
	DOUBLE GANG BOX IN CEILING WITH DOUBLE GANG MUD RING, BLANK FACEPLATE AND 3/4" CONDUIT STUB INTO ACCESSIBLE SPACE WITH END BUSHING AND PULL STRING. DOES NOT INCLUDE CABLE, TESTING, TERMINATION HARDWARE OR LABELING.
	COMBINATION POWER/TELECOMM OUTLET LOCATIONS IN COMMON FLOOR BOX.

TELECOMMUNICATION OUTLET LOCATION SYMBOLS TEXT LEGEND

####	OUTLET IDENTIFICATION NUMBER
W	WALL TELEPHONE
WAP	WIRELESS ACCESS POINT
WP	WEATHERPROOF OUTLET
OC	OUTLET MOUNTED OVER COUNTERTOP HEIGHT
P	PEDESTAL MOUNTED FLOOR OUTLET
F	FLUSH MOUNTED FLOOR OUTLET
#	NUMBER OF CABLES
+#	HEIGHT OF OUTLET (18" A.F.F TYPICAL)

PUBLIC SAFETY

	SPEAKER ON EMERGENCY NOTIFICATION SYSTEM (E) - EXISTING (N) - NEW
--	---

VIDEO SURVEILLANCE

	NETWORK VIDEO RECORDER
	FIXED CAMERA SEE SCHEDULE FOR DETAILS
	PTZ OR 360 DEGREE CAMERA SEE SCHEDULE FOR DETAILS

SECURITY SYSTEM

	DOOR CONTROLLER
	DOOR POSITION SWITCH
	ELECTRONIC LOCKING HARDWARE
	CARD READER, 13.56 GHZ
	KEY PAD
	MOTION SENSOR
	MAGNETIC LOCK
	REQUEST TO EXIT
	PUSH BUTTON
	ALARM SENSOR

AUDIO VISUAL

	CEILING MOUNTED SPEAKER
	SURFACE MOUNTED SPEAKER
	CEILING MOUNTED MICROPHONE
	DESKTOP MICROPHONE
	EXISTING SOUND CABINET
	NEW SOUND CABINET

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AWG	AMERICAN WIRE GAUGE
BET	BUILDING ENTRANCE TERMINAL CONDUIT
C	CONDUIT
CAT-6A	ANSI/TIA/EIA 568C CATEGORY 6A COMPLIANT
CATV	COMMUNITY ANTENNA TELEVISION (CABLE TV)
CCTV	CLOSED CIRCUIT TELEVISION
CO	CENTRAL OFFICE
D/L	DISTANCE LEARNING
(E)	EXISTING
EF	ENTRANCE FACILITY
EIA	ELECTRONIC INDUSTRIES ASSOCIATION
ELFEXT	EQUAL LEVEL FAR-END CROSSTALK
EMI	ELECTROMAGNETIC INTERFERENCE
EMT	ELECTRICAL METALLIC TUBING
ENS	EMERGENCY NOTIFICATION SYSTEM
ENT	ELECTRICAL NONMETALLIC TUBING
EP	ENTRANCE POINT
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FEXT	FAR-END CROSSTALK
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GND	GROUND
H	HORIZONTAL
HC	HORIZONTAL CROSS-CONNECT
HH	HANDHOLE
IDF	INTERMEDIATE DISTRIBUTION FRAME
IC	INTERMEDIATE CROSS-CONNECT
IG	ISOLATED GROUND
IW	INSIDE WIRING
KVA	THOUSAND VOLT AMPS
LAN	LOCAL AREA NETWORK
LEC	LOCAL EXCHANGE CARRIER
MC	MAIN CROSS-CONNECT
MDF	MAIN DISTRIBUTION FRAME
MH	MANHOLE
MM	MULTIMODE
MUTO	MULTI-USER TELECOM. OUTLET
MUTOA	MULTI-USER TELECOM. OUTLET ASSEMBLY
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
NEXT	NEAR-END CROSSTALK
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NSP	NETWORK SERVICE PROVIDER
NTS	NOT TO SCALE
NVR	NETWORK VIDEO RECORDER
(O)	BY OTHERS
OC	OVER COUNTER
OSP	OUTSIDE PLANT
OTDR	OPTICAL TIME DOMAIN REFLECTOMETER
PB	PULL BOX
PBX	PRIVATE BRANCH EXCHANGE
PE	POLYETHYLENE
POE	POWER OVER ETHERNET
PR	PAIR
PSELFEXT	POWER SUM EQUAL LEVEL FAR-END CROSSTALK
PSNEXT	POWER SUM NEAR-END CROSSTALK
PSIN	PUBLIC SWITCHED TELEPHONE NETWORK
PVC	POLYVINYL CHLORIDE
RCDD	REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
RIP	RETIRE IN PLACE
RM	ROOM
RMC	RIGID METALLIC CONDUIT
RMU	RACK MOUNTING UNIT
ScTP	SCREENED TWISTED PAIR
SL	SLEEVE
SM	SINGLEMODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TO	TELECOMMUNICATIONS OUTLET
TR	TELECOMMUNICATIONS ROOM
TRIA	TELECOMMUNICATIONS ROOM, 1ST LEVEL, SERVICE AREA A
TTB	TELEPHONE TERMINAL BOARD
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V/D	VOICE/DATA
WA	WORK AREA
WP	WEATHER PROOF (OUTDOOR RATED)
WW	WIREWAY
W/	WITH
W/O	WITHOUT

GENERAL NOTES

NOTES COVER ENTIRE PROJECT

- THE HORIZONTAL CABLING SHALL BE CAT-6 UTP INSTALLED IN NEW CABLE TRAY, J-HOOKS AND VACANT CONDUIT WITH PULL STRINGS.
- SERVICE PROVIDER CABLING AND CIRCUIT ACTIVATION IN NEW TELECOM ROOM SHALL BE PROVIDED BY OWNER.
- REFER TO ANSI/TIA STANDARDS REFERENCED IN PROJECT MANUAL FOR CABLING, PATHWAY, GROUNDING, LABELING AND TESTING OF TELECOM INFRASTRUCTURE.
- OWNER WILL FURNISH AND INSTALL AUDIO VISUAL EQUIPMENT TO INCLUDE MONITORS, MOUNTS, SWITCHERS, CONTROLLERS, CODEX, CAMERAS AND MICROPHONES.
- SCHEDULE UTILITY OUTAGE WITH OWNER AND PROVIDE ONE WEEK REMINDER TO OWNER PRIOR TO SCHEDULED OUTAGE.
- PRIOR TO INSTALLATION, CONTRACTOR SHALL COORDINATE WITH ALL OTHER DRAWINGS, SPECIFICATIONS, TRADES AND OWNER TO PREVENT INTERFERENCE WITH OTHER SYSTEMS. PREPARE COORDINATION DRAWINGS AS NEEDED TO PREVENT INTERFERENCES. COST FOR MODIFICATIONS TO WORK DUE TO LACK OF COORDINATION SHALL BE FULLY BORNE BY THE CONTRACTOR.
- CONTRACTOR SHALL MAINTAIN A SET OF RECORD DRAWINGS. RECORD DRAWINGS SHALL DOCUMENT THE ACTUAL INSTALLED CONDITION OF THE ENTIRE INSTALLATION. RECORD DRAWINGS SHALL BE AVAILABLE ON THE SITE FOR INSPECTION BY CODE OFFICIALS, OWNER, ARCHITECT, AND ENGINEER.
- WORK SHALL BE IN ACCORDANCE WITH THE ADOPTED EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE (NESC), LOCAL CODES, ANSI/TIA AND NECA IBCSI STANDARDS FOR TELECOMMUNICATIONS INFRASTRUCTURE IN COMMERCIAL BUILDINGS AND THE AUTHORITY HAVING JURISDICTION.
- PROTECT EXISTING WORK FROM DAMAGE DURING CONSTRUCTION. DAMAGED MATERIALS, SYSTEMS, COMPONENTS, FINISHES, AND THE LIKE, SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR TO THE ACCEPTANCE OF THE OWNER.
- DEVICES, FIXTURES, AND EQUIPMENT SHALL BE INSTALLED SYMMETRICALLY WHERE NOT SPECIFICALLY DIMENSIONED. EQUIPMENT SHALL BE INSTALLED PLUMB AND SQUARE WITH WALLS. CONDUITS SHALL BE RUN PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS, WHERE APPLICABLE. CABLES IN NETWORK ROOM, CABINETS AND EQUIPMENT RACKS SHALL BE NEATLY BUNDLED AND SPLAYED.
- CABLE, SUPPORTS, AND DEVICES SHALL BE RATED TO THE ENVIRONMENT IN WHICH THEY ARE INSTALLED (E.G., PLENUM OR RISER RATED). REFER TO MECHANICAL DRAWINGS.
- CONDUITS FOR TELECOMMUNICATIONS SHALL HAVE BUSHINGS TO PROTECT CABLE JACKET AT CONDUIT ENDS. DO NOT INSTALL CABLES IN CONDUITS THAT DO NOT HAVE BUSHINGS.
- CONTRACTOR IS RESPONSIBLE FOR SELECTING CABLE ROUTING AND PATHWAY ROUTING IN FIELD. PROVIDE ACCESS TO AND CLEARANCE FROM OTHER FACILITIES. PROVIDE AMPLE SPACE FOR FUTURE CABLE INSTALLATION WORK.
- CARE SHALL BE EXERCISED WHEN REMOVING AND REPLACING CEILING PANELS. DAMAGED PANELS SHALL BE REPLACED WITH NEW PANELS BY THE CONTRACTOR. CEILINGS SHALL BE RETURNED TO ORIGINAL OR BETTER CONDITION. CLEAN AND REPLACE CEILING PANELS AS NECESSARY.
- CONDUIT, RACEWAY, FITTINGS, BOXES, COVERS, SUPPORTS, AND ENCLOSURES EXPOSED TO PUBLIC'S VIEW SHALL BE PAINTED TO MATCH MOUNTING SURFACE UNLESS OTHERWISE INDICATED. PROTECT TELECOMMUNICATIONS CABLING FROM EXPOSURE TO PAINT.
- DRAWING NOTES WHICH DO NOT READ "N.I.C.", "EXISTING", "BY OWNER" OR "BY OTHERS" INDICATE NEW WORK WHICH SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED.
- NOT ALL EXISTING CONDITIONS ARE INDICATED ON THE DRAWINGS. CONTRACTOR SHALL CAREFULLY EXAMINE THE EXISTING INSTALLATION AND PROJECT DRAWINGS TO BECOME FAMILIAR WITH THE SCOPE OF WORK.
- DO NOT DAISY CHAINING CONDUITS. CONDUITS FOR HORIZONTAL CABLES TO OUTLET LOCATIONS SHALL BE DEDICATED TO ONE WORK STATION BOX.
- PATHWAYS IN SPACES WITH ACCESSIBLE DROP-IN CEILING TILES MAY USE J-HOOKS WITH CABLE RETAINING BALE TO SUPPORT CABLES ON 4' CENTERS.

DRAWING INDEX

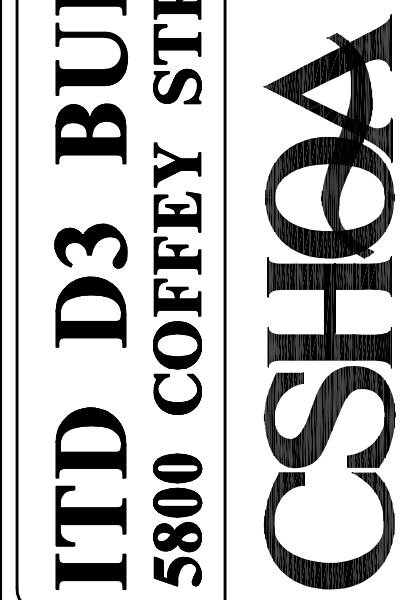
T01	TELECOM SYMBOLS & ABBREVIATIONS
T04	TELECOM SCHEMATICS AND DETAILS
T21	TELECOM PLANS



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FOR CONSTRUCTION
9/24/19

PROJECT 19004	DATE 7/23/19
DRAWN JCG	CHECKED JDR

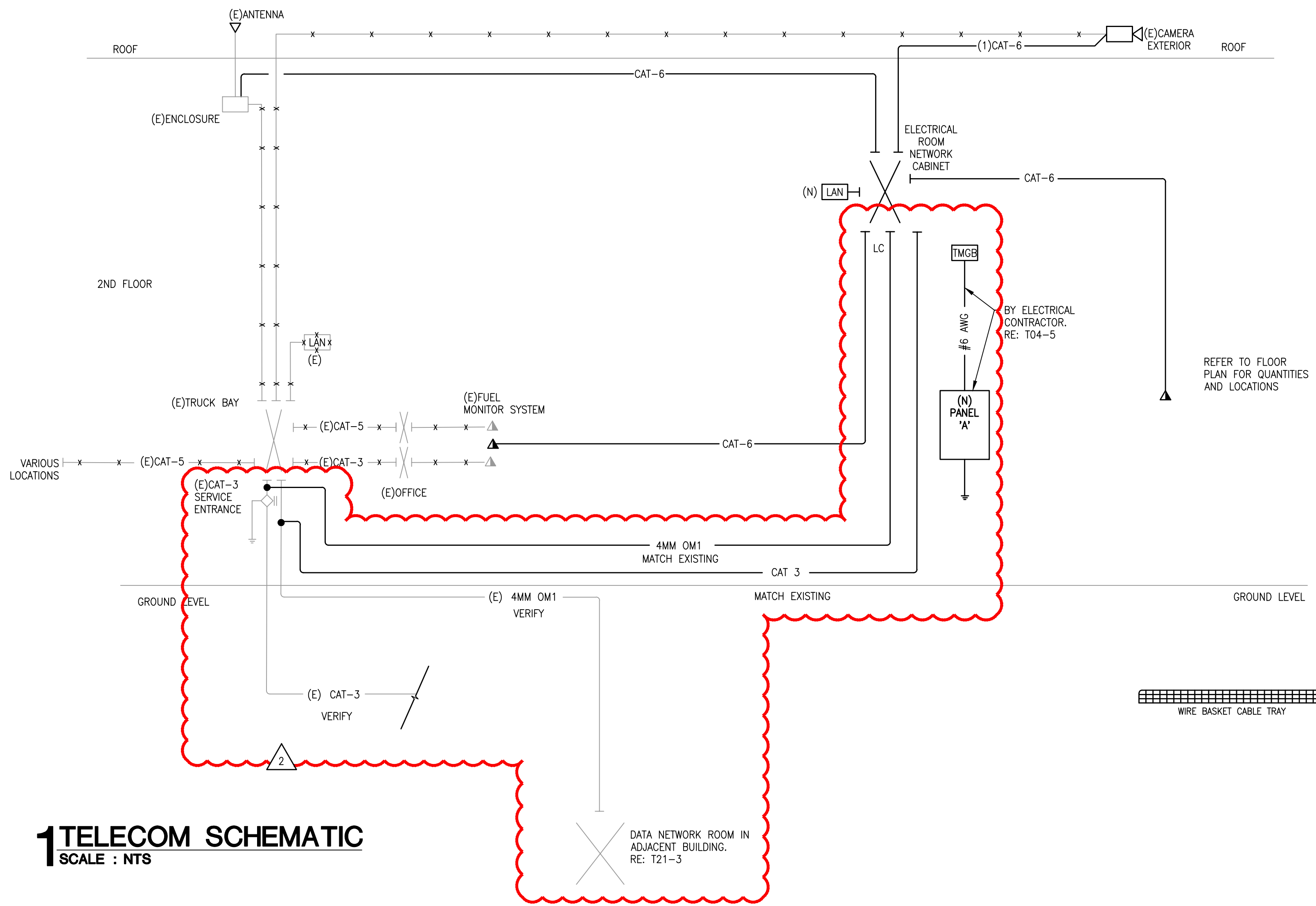
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SHEET TITLE
TELECOM SYMBOLS AND ABBREVIATIONS

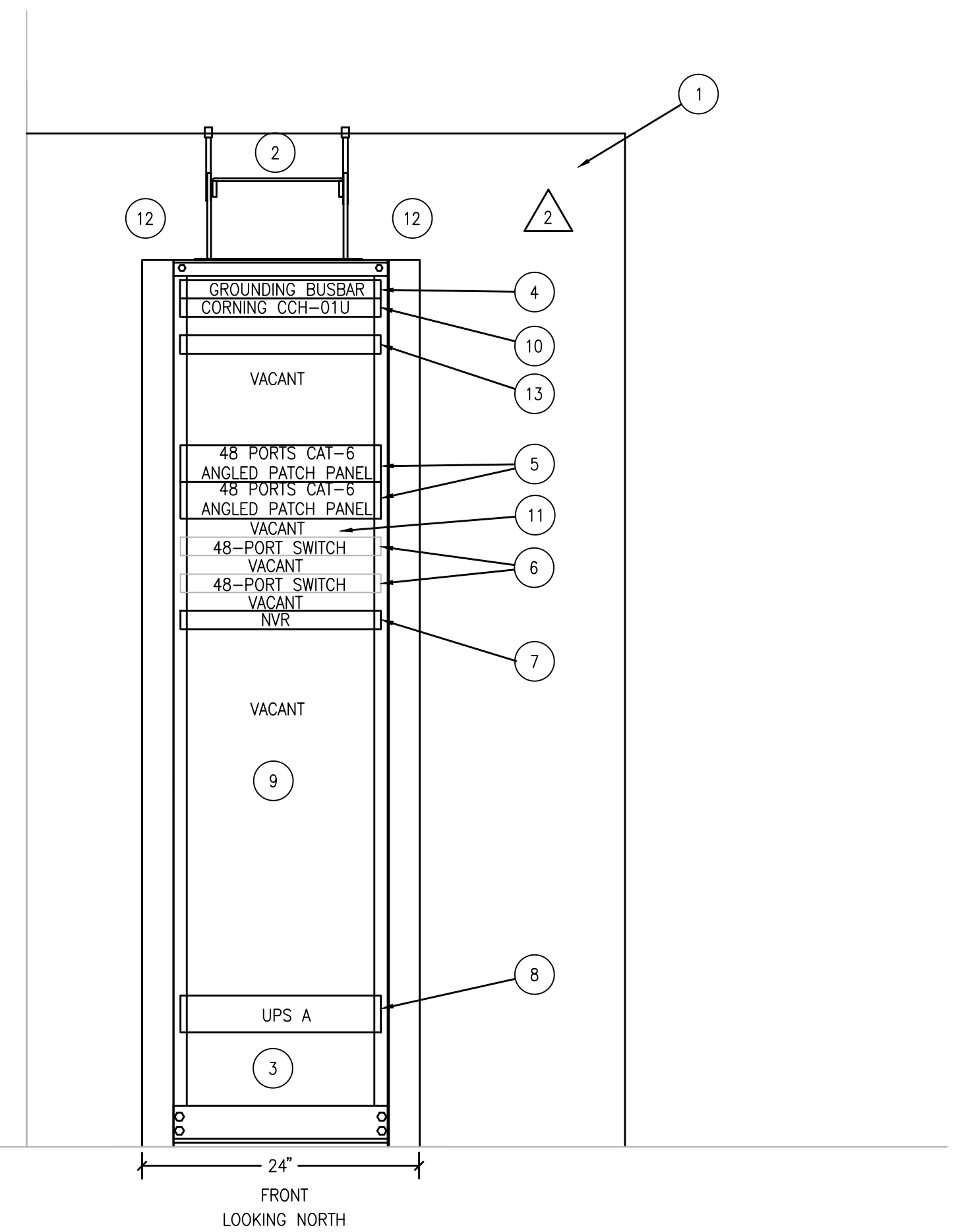
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T01
ORIGINAL SHEET SIZE
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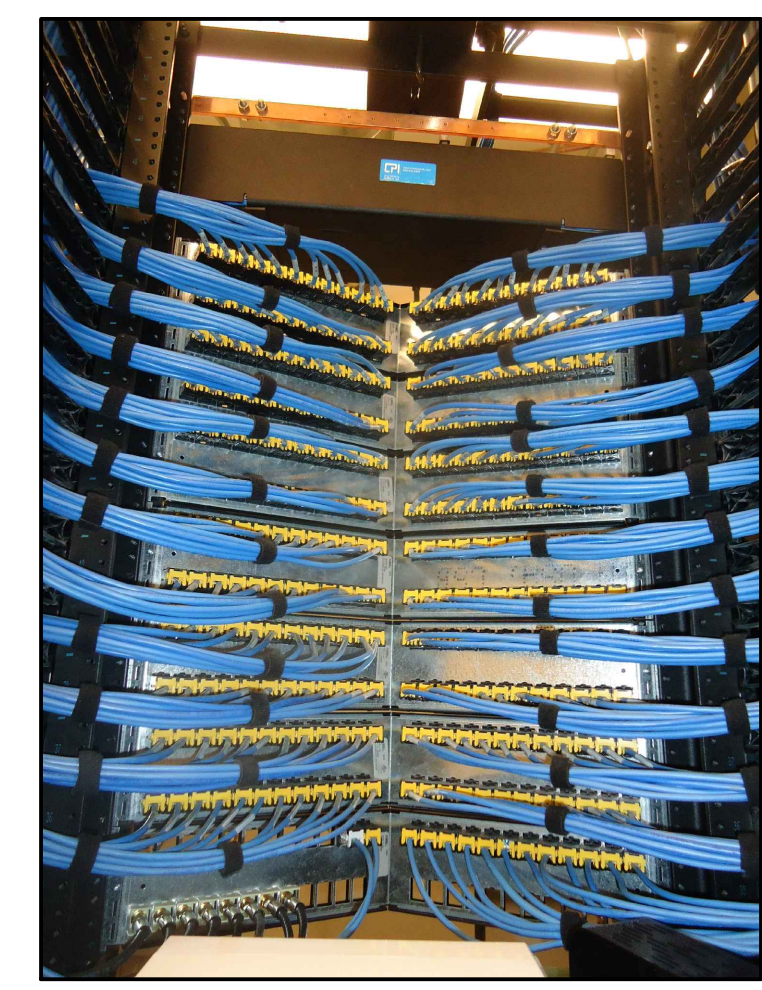
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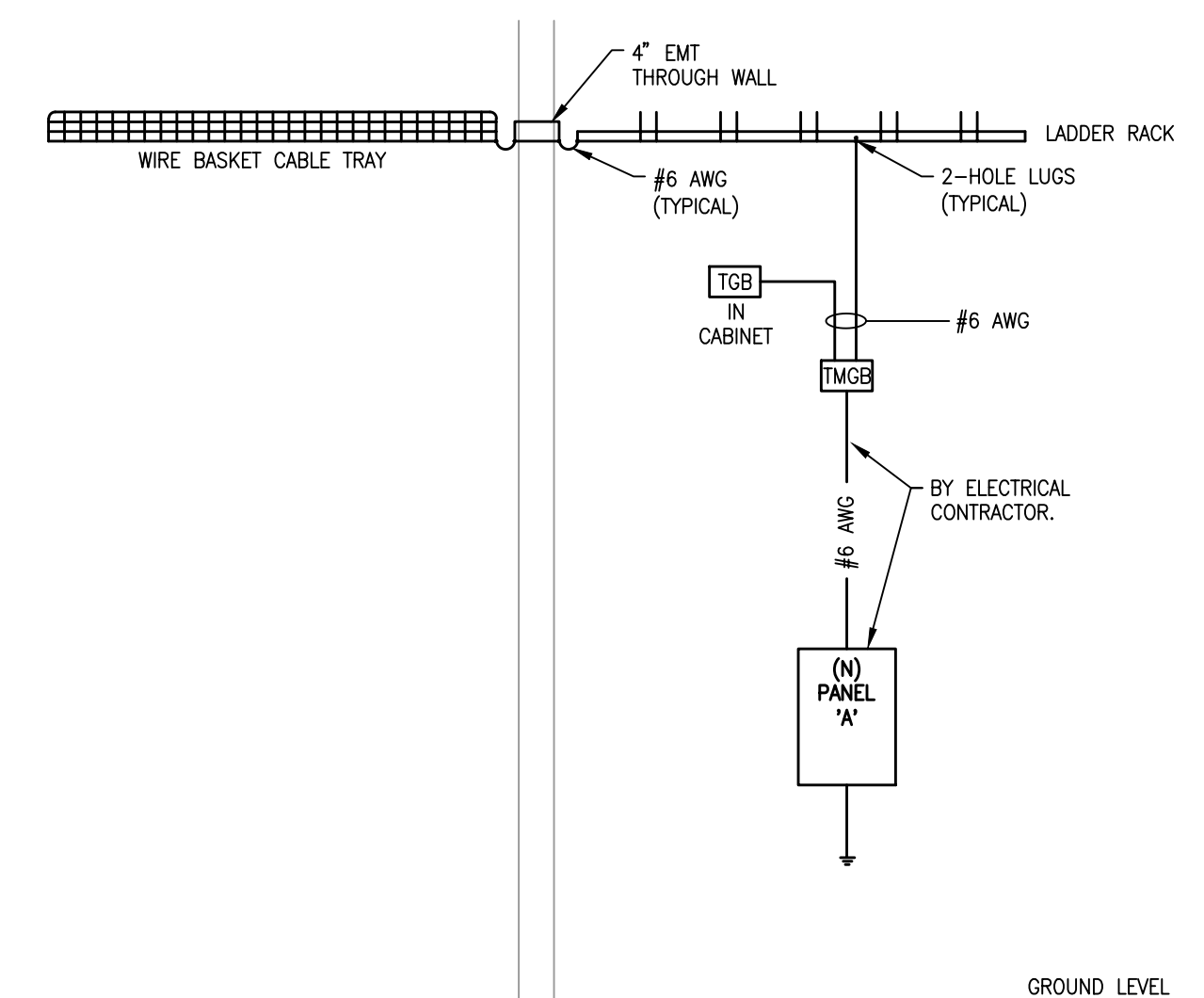
1 TELECOM SCHEMATIC
 SCALE: NTS



2 NETWORK CABINET ELEVATION
 SCALE: NTS



3 SAMPLE CABLE ROUTING
 SCALE: NTS



5 TELECOMMUNICATIONS GROUNDING
 SCALE: NTS



4 SAMPLE PATCH CORD ROUTING
 SCALE: NTS

GENERAL NOTES:

- A. HORIZONTAL CABLE SHALL BE CATEGORY-6 UTP TERMINATED ON MODULAR JACKS WITH T568A PINNING. TYPICAL OUTLET LOCATION SHALL HAVE (2) HORIZONTAL CABLES AND (2) TELECOMMUNICATION OUTLETS OR AS INDICATED AT OUTLET LOCATION SYMBOL ON PLAN DRAWINGS. RE: T21-1.
- B. REFER TO ANSI/TIA 568 FOR TELECOMMUNICATIONS CABLES, TERMINATION AND TESTING. PROVIDE PERMANENT LINK PERFORMANCE TESTING FOR HORIZONTAL CABLES.
- C. REFER TO ANSI/TIA 569 FOR QUESTIONS REGARDING PATHWAY AND SPACE DESIGN GUIDELINES.
- D. TELECOMMUNICATIONS GROUNDING SHALL COMPLY WITH NFPA-70 AND ANSI/TIA 607.
- E. LABEL CABLES AND TERMINATION HARDWARE PER ANSI/TIA 606 FOR BUILDING WITH SINGLE TELECOMMUNICATION SPACE.
- F. PROVIDE FIRE STOPPING FOR FLOOR PENETRATIONS.
- G. VERIFY EXISTING OPTICAL FIBER AND COPPER TWISTED PAIR ENTRANCE CABLES, MATCH SIZE AND PERFORMANCE LEVEL AND EXTEND TO NEW NETWORK CABINET.

KEY NOTES:

1. FURNISH AND INSTALL 3/4" A/C PLYWOOD WITH "A" FACE SHOWING. PRIOR TO FASTENING EQUIPMENT TO PLYWOOD, PAINT PLYWOOD WHITE, LEAVING FIRE RATING INFORMATION EXPOSED.
2. OVERHEAD 12" LADDER STYLE CABLE RACK WITH BOLT ON CABLE RETAINING POSTS ON BOTH SIDES AT EVERY OTHER RUNG. FASTEN TO WALLS WITH ANGLE BRACKET AND J-HOOK KIT. FASTEN TO RACKING EQUIPMENT AND BOND TO GROUNDING BUSBAR.
3. COORDINATE WITH ELECTRICAL FOR POWER REQUIREMENTS INSTALLED INSIDE CABINET AT BOTTOM. RE: E21.
4. RACK MOUNTED GROUNDING BUSBAR. BOND TO TMGB WITH #6 GREEN INSULATED BONDING CONDUCTOR. RE: T04-5.
5. RECESSED, ANGLED PATCH PANEL FOR HORIZONTAL CABLE TERMINATIONS. ROUTE CABLES TO BE TERMINATED ON LEFT SIDE OF ANGLED PATCH PANEL TO VERTICAL MANAGER ON LEFT SIDE OF CABINET AND ROUTE CABLE TO BE TERMINATED ON RIGHT SIDE OF PATCH PANEL TO VERTICAL MANAGER ON RIGHT SIDE. DO NOT INSTALL HORIZONTAL CABLE MANAGERS. SUPPORT CABLES ON BACK OF PATCH PANELS WITH CABLE SUPPORT HARDWARE INTEGRAL TO PATCH PANEL AND VELCRO-TYPE CABLE MANAGEMENT STRAPS. RE: DETAIL 4.
6. NETWORK SWITCH PROVIDED BY OWNER. COORDINATE FOR POE PORTS NEEDED FOR ACCESS CONTROL AND VIDEO SURVEILLANCE NETWORK DEVICES TO INCLUDE PORT ID AND IP ADDRESSES. ROUTE PATCH CORDS AS SHOWN IN DETAIL 4.
7. NETWORK VIDEO RECORDER FOR VIDEO SURVEILLANCE SYSTEM.
8. INSTALL OWNER FURNISHED UPS AND ENERGIZE FROM RECEPTACLE INSIDE CABINET AT BOTTOM.
9. 4-POST SERVER CABINET. RE: T21 PROVIDE HARDWARE KITS FOR THREADED FASTENERS, BOLT RACK TO FLOOR AND FASTEN TO OVERHEAD CABLE TRAY WITH MANUFACTURER'S FITTINGS. FURNISH CABLE MANAGEMENT FOR ROUTING CABLES AND PATCH CORDS ON BOTH SIDES. RE: T04-3 AND T04-4.
10. TERMINATE ALL STRANDS OF CORNING OPTICAL FIBER ON LC CONNECTORS, MATCHING PERFORMANCE LEVEL AND TYPE OF STRANDS TERMINATED. TEST AND LABEL THE INSTALLATION.
11. LEAVE VACANT RACK UNITS AS SHOWN FOR TECHNICIAN HAND ACCESS TO PATCH CORD CONNECTION TO NETWORK PORTS. DO NOT INSTALL HORIZONTAL MANAGERS, DRESS PATCH CORDS TO BOTH SIDES OF VERTICAL MANAGER FROM CENTER. RE:T04-4
12. ROUTE HORIZONTAL CABLES DOWN BOTH SIDES OF VERTICAL MANAGERS AND TERMINATE ON PATCH PANEL. RE:T04-3.
13. RACK MOUNTED 110 BLOCK WITH EXTENSION OF BUILDING ENTRANCE CABLE FROM BUILDING ENTRANCE TERMINAL. LABEL AS ENTRANCE CABLE PER ANSI/TIA 606.



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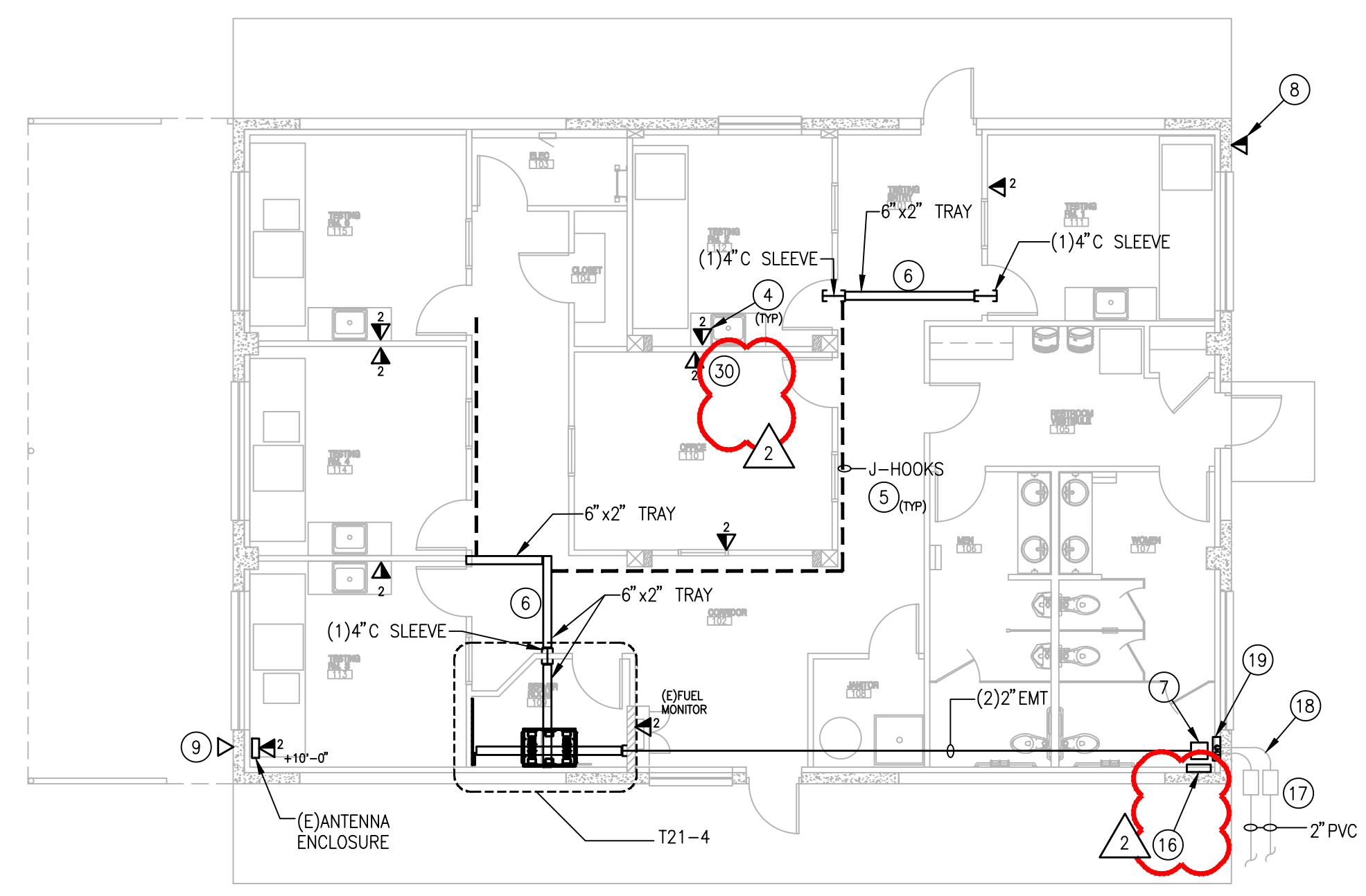
PROJECT 19004	DATE 7/23/19
DRAWN JCG	CHECKED JDR

REVISED 2	ADDENDUM 1 09/27/2019
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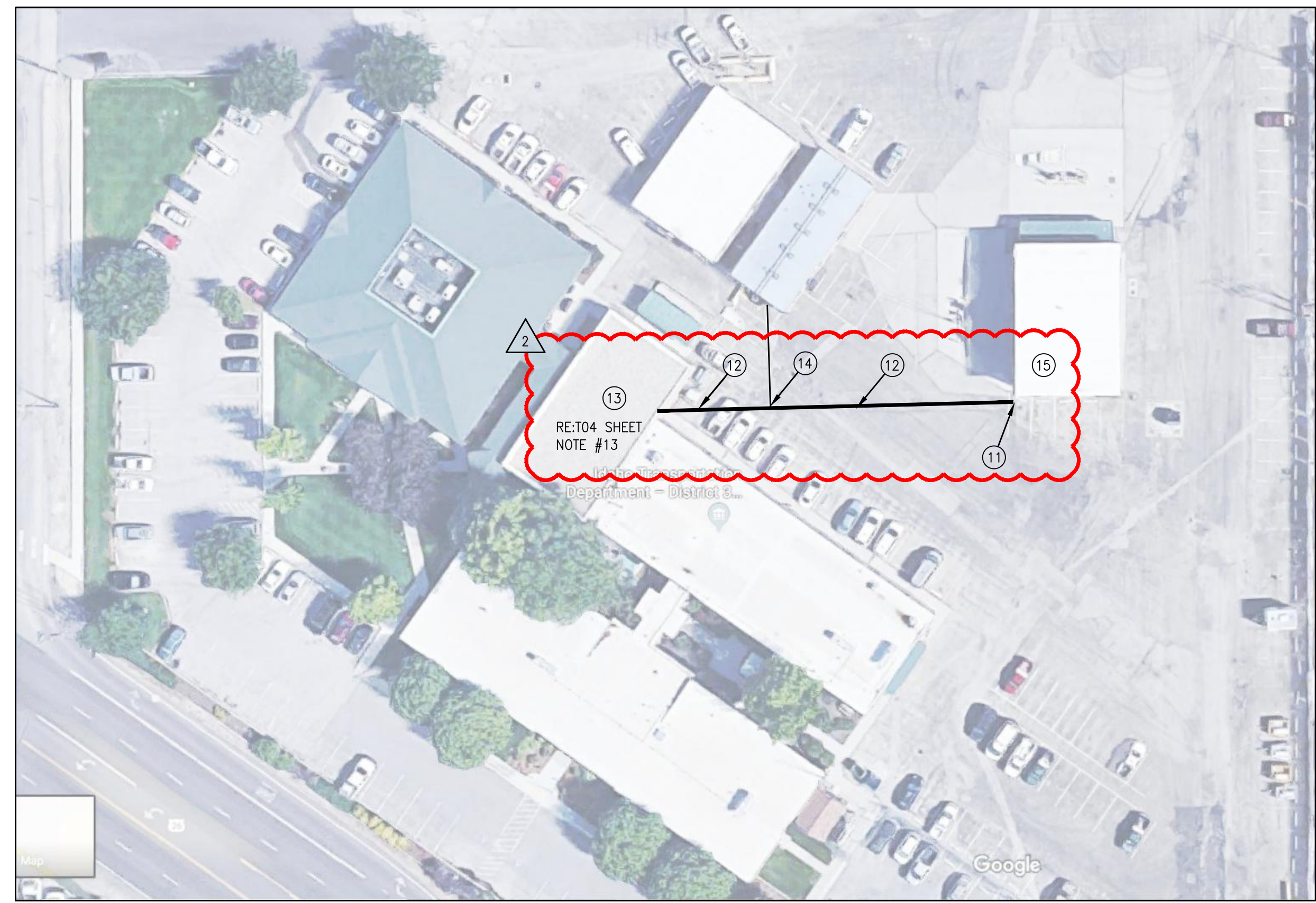
SHEET TITLE
TELECOM SCHEMATICS AND DETAILS

SHEET
T04
 ORIGINAL SHEET SIZE
 24" x 36"

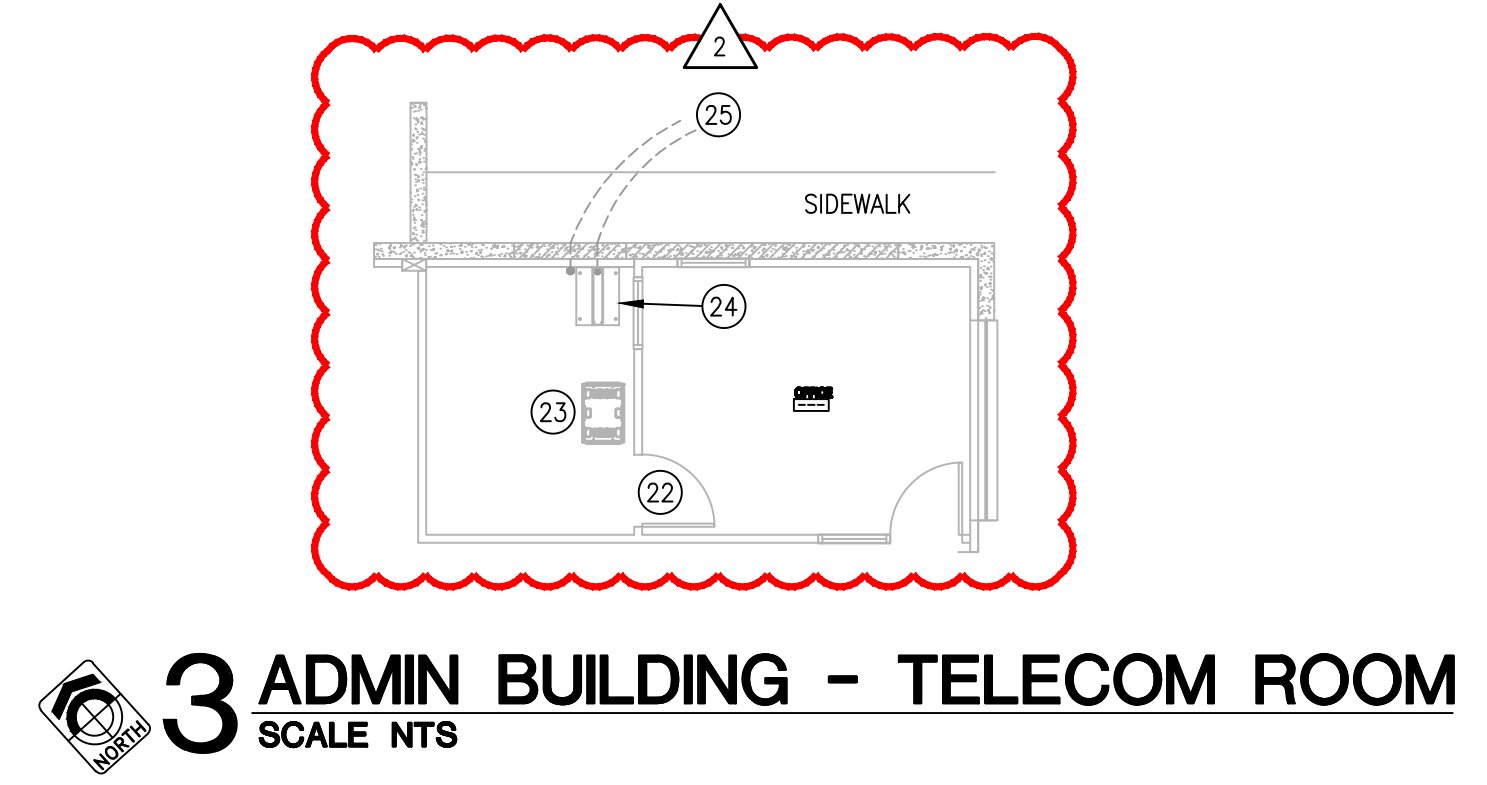
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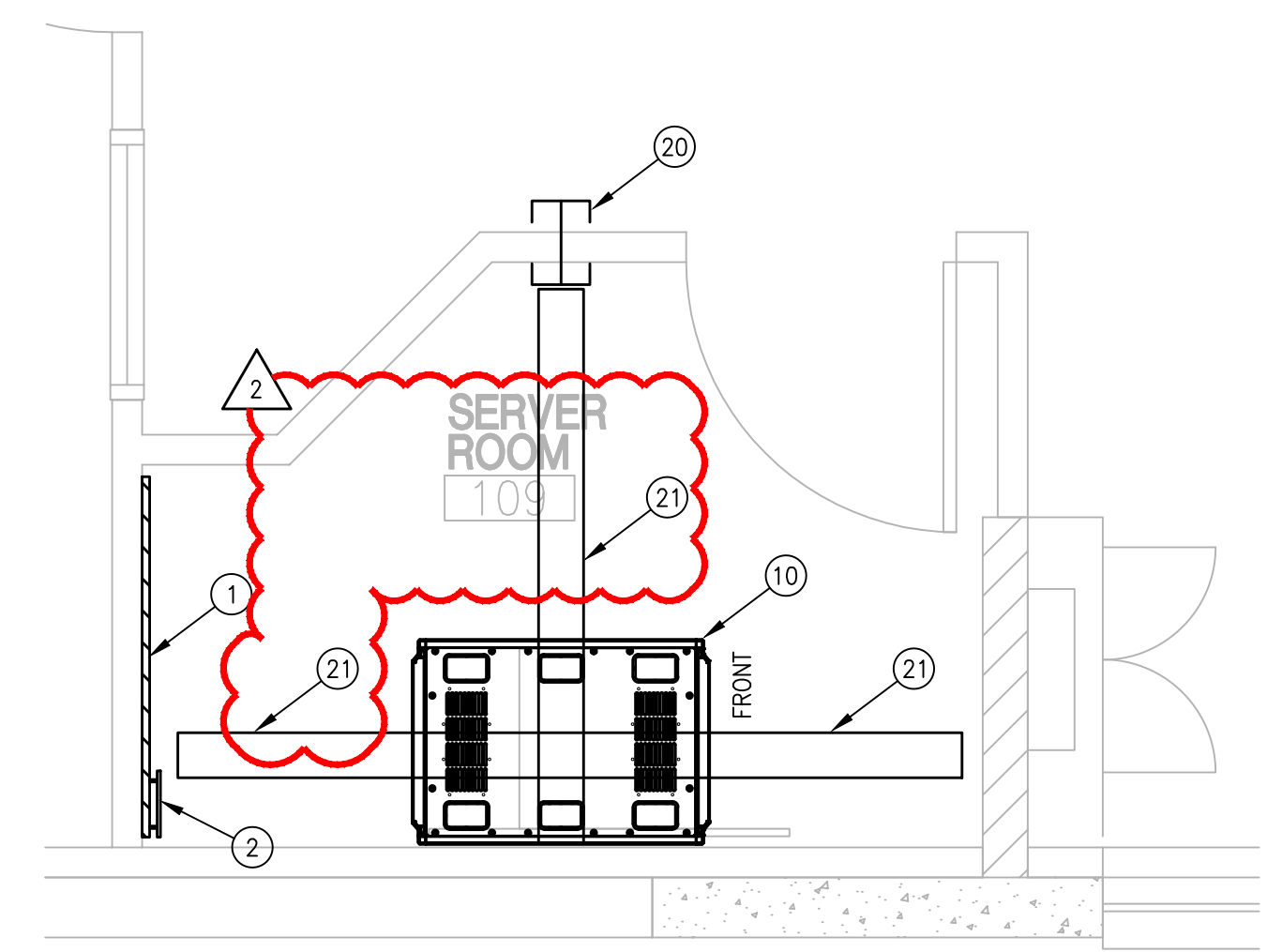
1 TELECOM PLAN - FIRST FLOOR
 SCALE 1/8" = 1'-0"



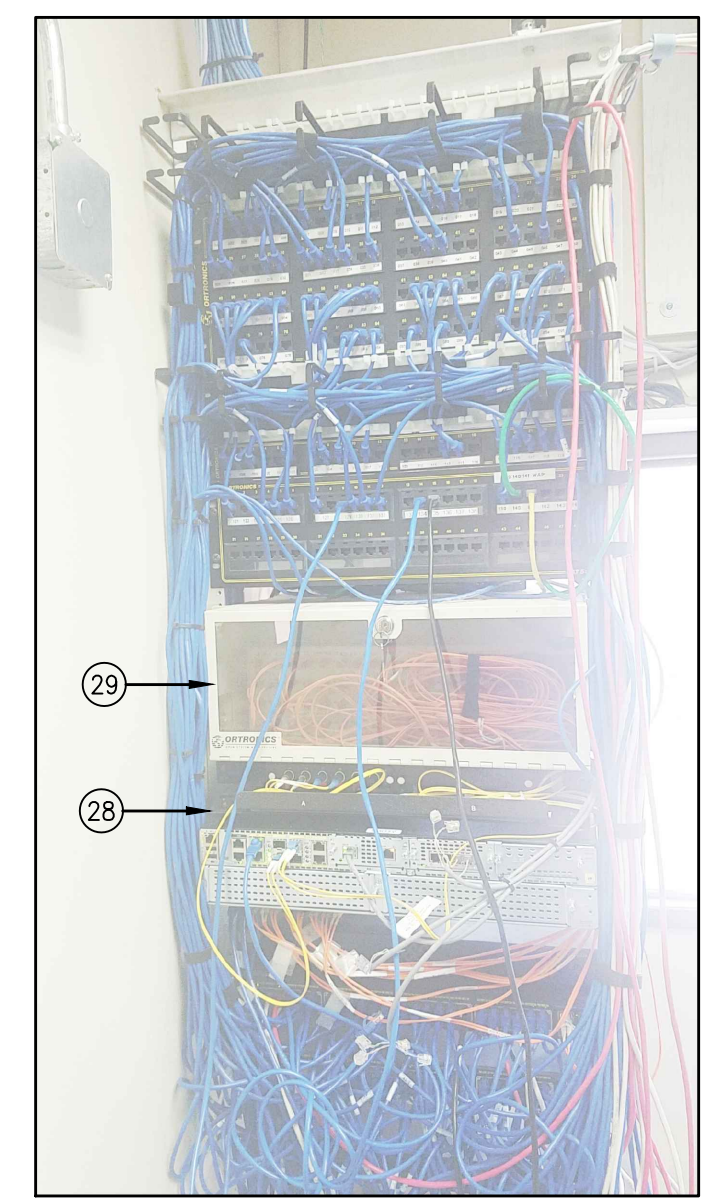
2 SITE PLAN
 SCALE 1/8" = 1'-0"



3 ADMIN BUILDING - TELECOM ROOM
 SCALE NTS



4 TELECOM ROOM
 SCALE 1/2" = 1'-0"



PHOTO#1 - RACK
 SCALE : NTS



PHOTO#2 - EXISTING
 SCALE : NTS

GENERAL NOTES:

- A. INSTALL HORIZONTAL CABLES PER ANSI/TIA 568, MATCH PAIR PINNING OF EXISTING TERMINATIONS. PROVIDE PERFORMANCE TESTING FOR EXISTING AND NEW CABLES TERMINATED IN NEW SECOND FLOOR TELECOM SPACE.
- B. LABEL CABLES PER ANSI/TIA 606 ON CABLE JACKET AND FACEPLATE OF OUTLET LOCATIONS. USE SELF-LAMINATING, WRAP AROUND, MACHINE PRINTED LABELS ON CABLE JACKETS. USE MACHINE PRINTED LABELS ON CLEAR MEDIA WITH BLACK INK ON FACEPLATES. LETTERING TO BE NO LESS THAN 1/4" HIGH.
- C. PROVIDE J-HOOKS TO SUPPORT CABLES ABOVE SUSPENDED CEILING ON 48" CENTERS. PROVIDE PATHWAYS PER ANSI/TIA 569.
- D. BOND CABLE RACKS TO GROUND PER ANIS/TIA 607. EXTEND TELECOMMUNICATIONS GROUNDING NETWORK UP TO SECOND FLOOR WITH 3/0 BONDING CONDUCTOR. RE: T21-2.
- E. COORDINATE WITH ELECTRICAL FOR OUTLET LOCATIONS ADJACENT TO POWER RECEPTACLES.
- F. VERIFY EXISTING OPTICAL FIBER AND TWISTED PAIR ENTRANCE CABLES, MATCH SIZE AND PERFORMANCE LEVEL AND EXTEND TO NEW NETWORK CABINET.

SHEET NOTES:

- 1. PROVIDE 3/4" PLYWOOD BACKBOARD FOR TELEPHONE TERMINAL BOARD. PAINT WHITE.
- 2. INSULATED WALL MOUNTED BONDING BUSBAR, PRE-DRILLED FOR 2-HOLE LUG CONNECTION. BOND TO ELECTRICAL SERVICE TO CREATE TELECOMMUNICATION MAIN GROUNDING BUSBAR (TMGB). BOND PER ANSI/TIA 607.
- 3. COORDINATE WITH ELECTRICAL CONTRACTOR. MATCH FINAL HEIGHT AND LOCATION.
- 4. NEW TELECOMMUNICATIONS OUTLET LOCATION. PROVIDE NEW HORIZONTAL CABLES FROM NEW TELECOM SPACE, TEST AND LABEL CABLES AND FACEPLATES.
- 5. FURNISH AND INSTALL J-HOOKS 6" ABOVE CEILING GRID. COORDINATE WITH ALL OTHER TRADES TO AVOID ROUTING CONFLICTS.
- 6. FURNISH AND INSTALL WIRE BASKET CABLE TRAY 12" ABOVE CEILING GRID. COORDINATE WITH ALL OTHER TRADES TO AVOID ROUTING CONFLICTS.
- 7. FURNISH AND INSTALL 12"x12"x4" NEMA-1 PULL BOX ABOVE ACCESSIBLE CEILING FOR TELECOM/DATA WIRING.
- 8. EXISTING SECURITY CAMERA TO REMAIN. FURNISH NEW OUTLET AND CABLE. SEE T04 FOR ADDITIONAL INFORMATION.
- 9. EXISTING ANTENNA TO REMAIN IN SERVICE.
- 10. CPI M-SERIES CABINET 84" HIGH, 19" EIA WIDTH, 36" DEEP, WITH TAP RAILS, TOP AND SIDE PANELS, BLACK IN COLOR, PERFORATED FRONT AND REAR METAL DOORS, ASSEMBLED.
- 11. EXISTING UNDERGROUND BUILDING ENTRANCE. VERIFY EXISTING CABLES AND EXTEND TO NEW NETWORK CABINET.
- 12. 2" PVC WITH EXISTING OPTICAL FIBER TO BE REUSED.
- 13. TELECOM ROOM IN ADMINISTRATION BUILDING. RE: T21-3.
- 14. JUNCTION BOX LOCATION.
- 15. LAB BUILDING.
- 16. EXISTING BUILDING ENTRANCE TERMINAL ON WALL AT 60" A.F.F. BEND PER T04-5. EXTEND EXISTING PAIRS TO NEW NETWORK CABINET AND TERMINATE ON RACK MOUNTED 110 BLOCK.
- 17. EXISTING UNDERGROUND BOX.
- 18. EXISTING 2" CONDUIT INTO BUILDING. REMOVE ABANDONED CABLES.
- 19. NEW BOX FLUSH IN FURRED OUT WALL WITH SCREW ON COVER AND (2) 2" CONDUITS TO NEW TELECOM/DATA ROOM.
- 20. (1)4" EMT WITH GROUNDING FITTING ON END BUSHING. BOND PER T04-5.
- 21. LADDER STYLE CABLE RACK. BOND PER T04-5.
- 22. CONTACT OWNER AND COORDINATE ACCESS TO ROOM AND PROTECTION METHOD FOR EXISTING ACTIVE TELECOM EQUIPMENT FROM CONSTRUCTION DEBRIS.
- 23. PROTECT CABINET AND MAINTAIN COOL AIR FLOW AND EXHAUST OF ACTIVE EQUIPMENT.
- 24. EXISTING 2-POST EQUIPMENT RACK WITH FIBER AND UTP TERMINATIONS. VERIFY SERVICE TO LAB BUILDING, TEST AND LABEL FINAL CONFIGURATION. SEE PHOTO #1.
- 25. EXISTING CONDUITS TO LAB BUILDING.
- 26. NOTE NOT USED.
- 27. NOTE NOT USED.
- 28. EXISTING 1RU FIBER ENCLOSURE WITH EXISTING CABLE TO LAB BUILDING. VERIFY SIZE AND PERFORMANCE LEVEL, TEST FINAL CONFIGURATION AND UPDATE LABELING.
- 29. EXISTING 4RU FIBER ENCLOSURE. DO NOT DISTURB ACTIVE CIRCUITS.
- 30. EXISTING FIBER TERMINATION. DISCONNECT AND REROUTE TO NEW NETWORK CABINET AND TERMINATE ON RACK MOUNTED ENCLOSURE. SEE PHOTO #2.



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ITD D3 BUILDING CONVERSION
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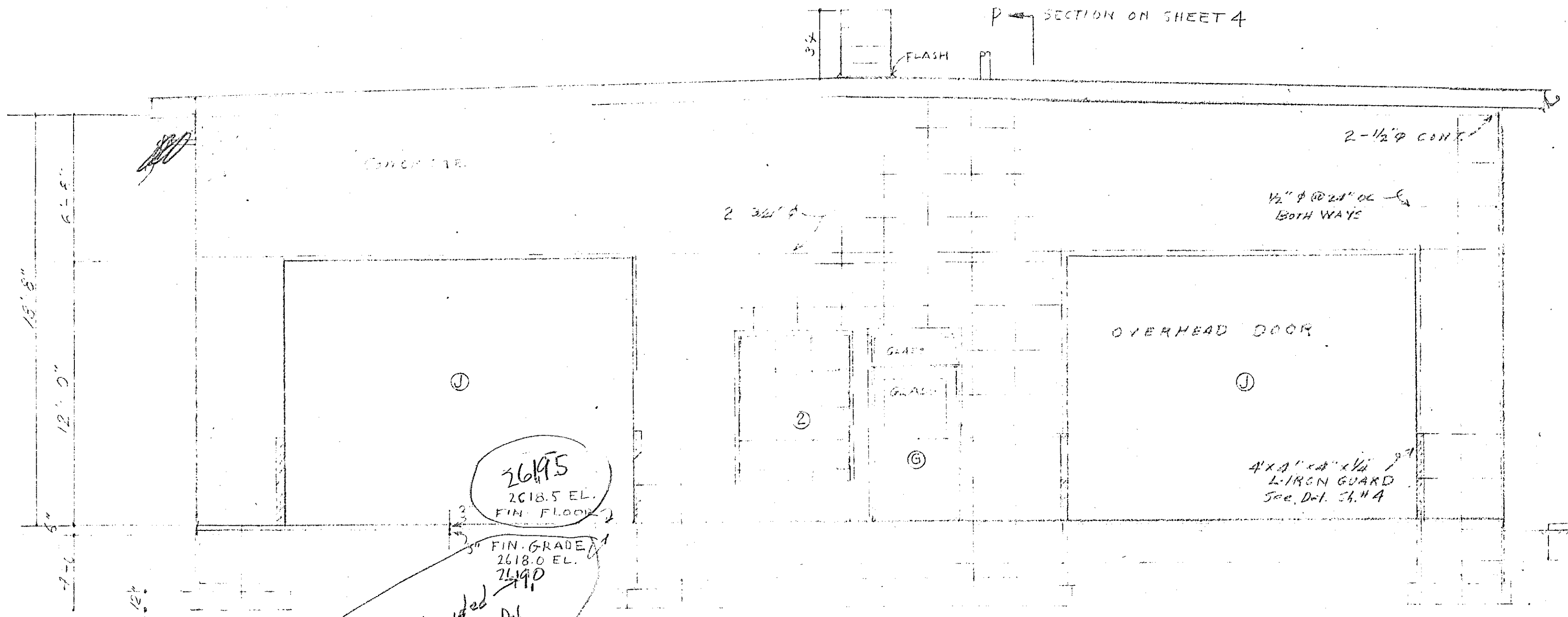
CSHQA

PROJECT 19004	DATE 7/23/19
DRAWN JCG	CHECKED JDR

REVISED 2	ADDENDUM 1 09/27/2019
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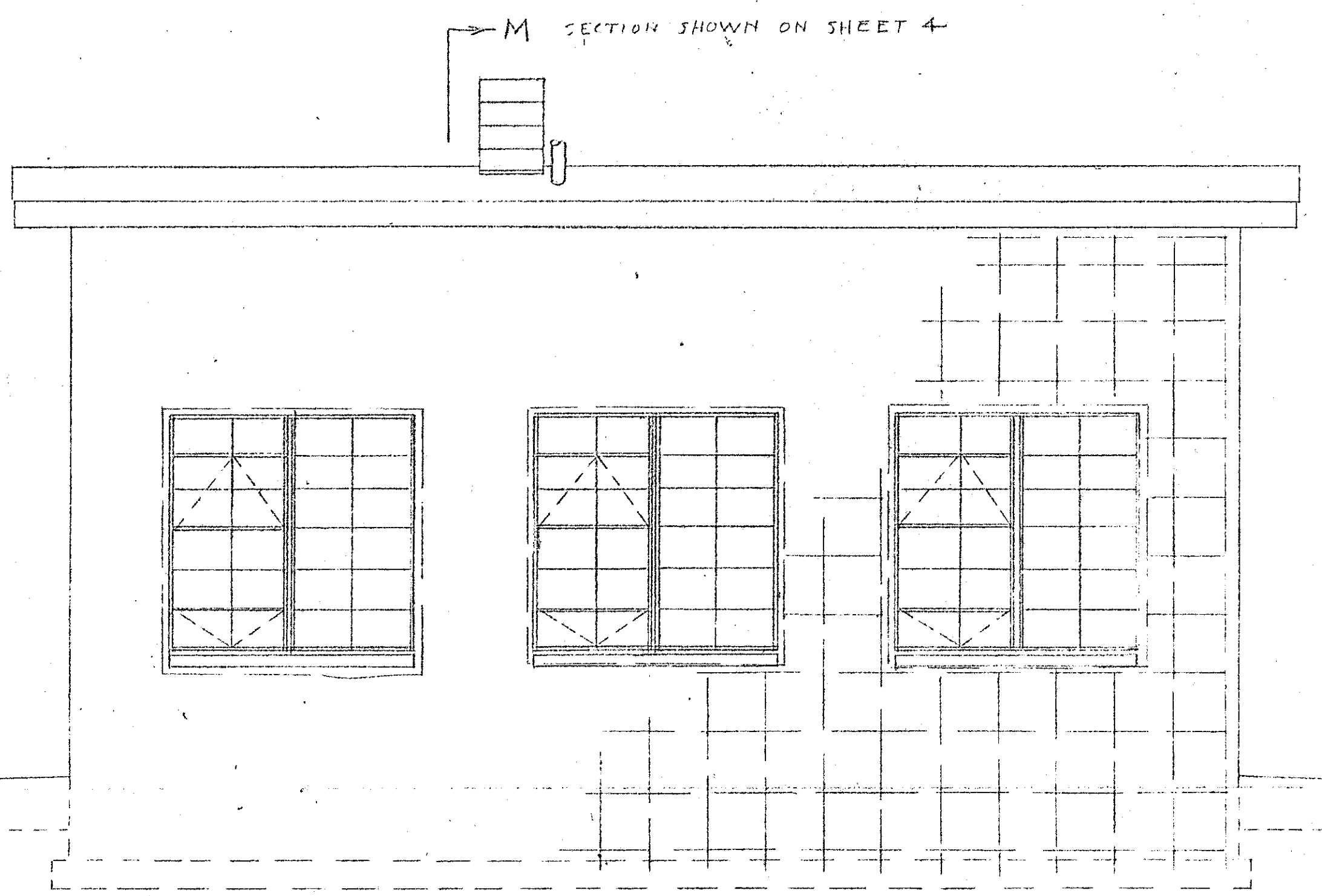
SHEET TITLE
TELECOM PLANS

SHEET
T21
 ORIGINAL SHEET SIZE
 24" x 36"

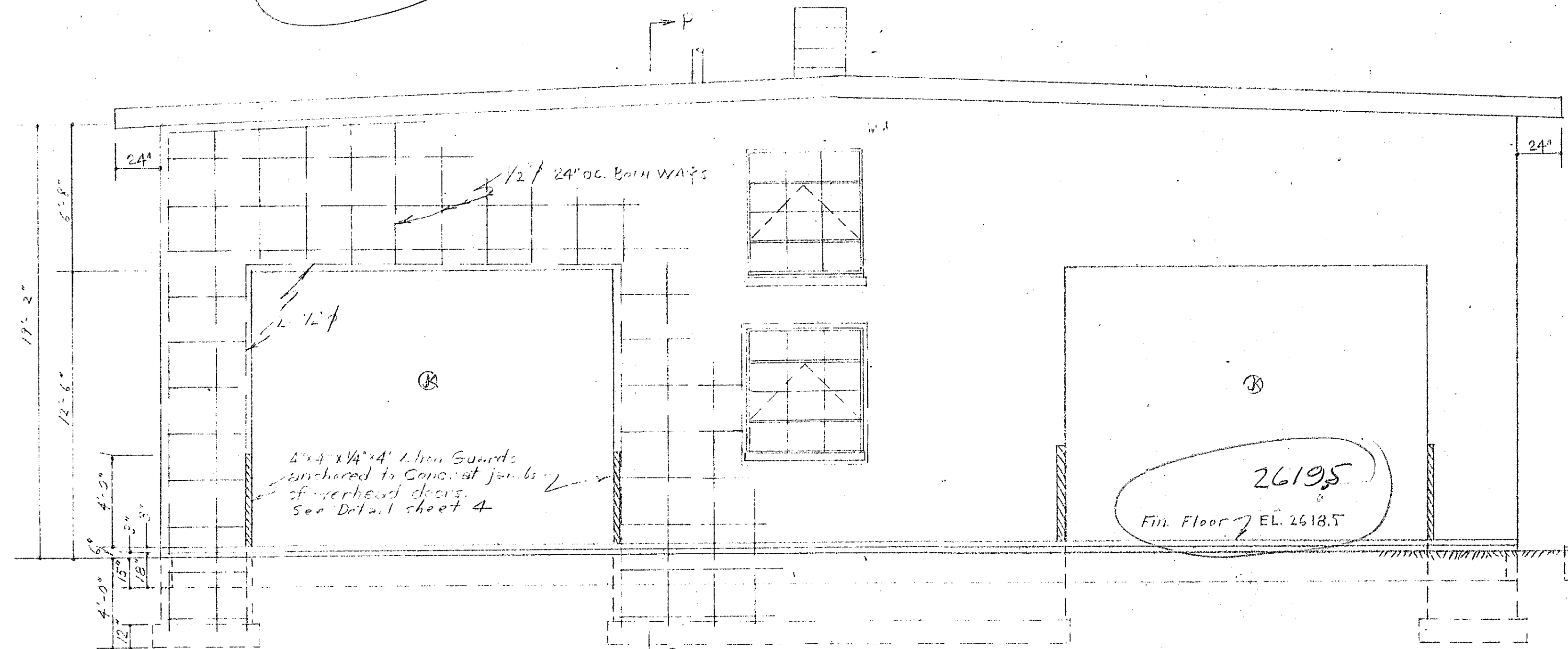


Think we decided on Elev. 2619.0 for F.H.

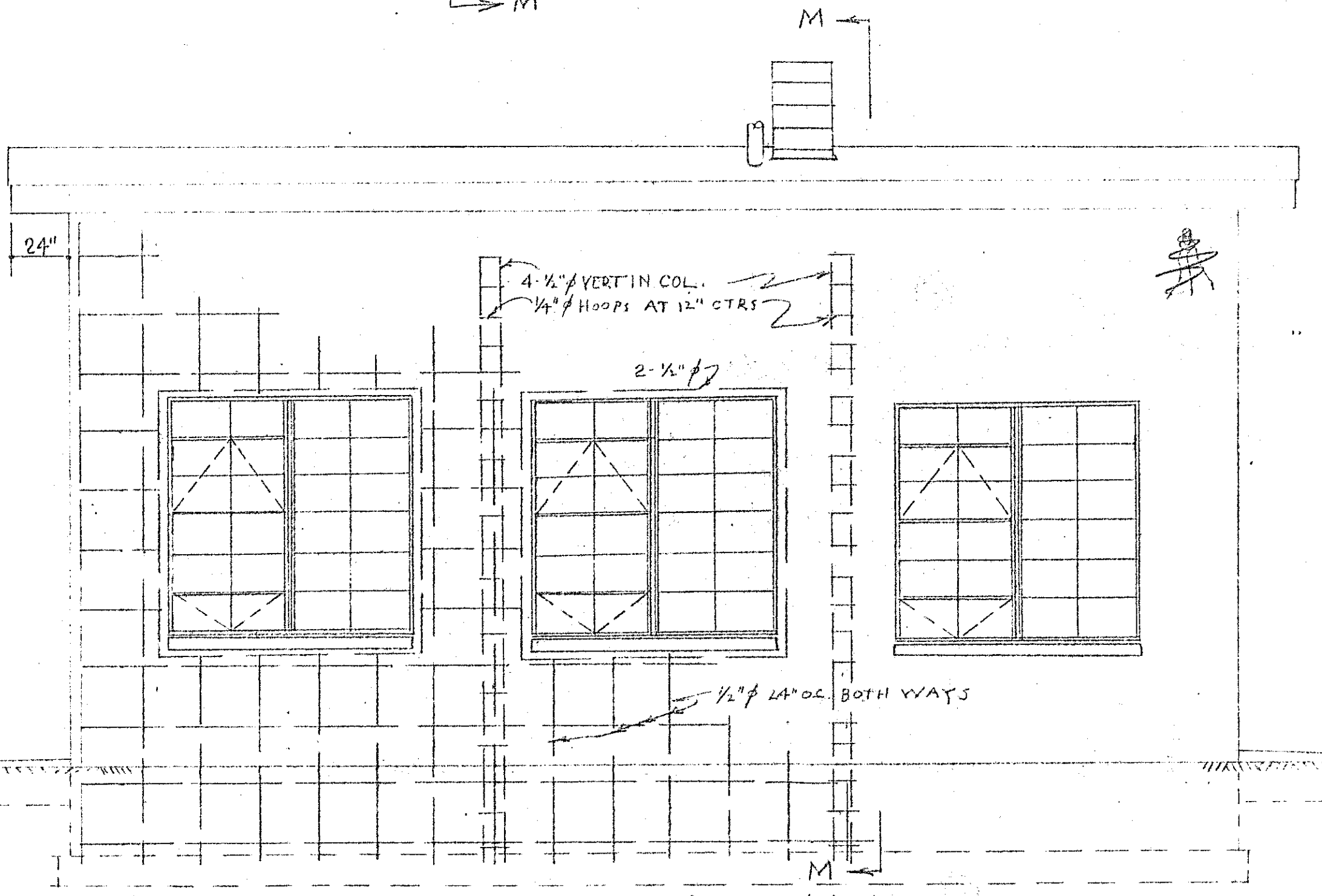
FRONT ELEVATION 1/4" = 1'-0"



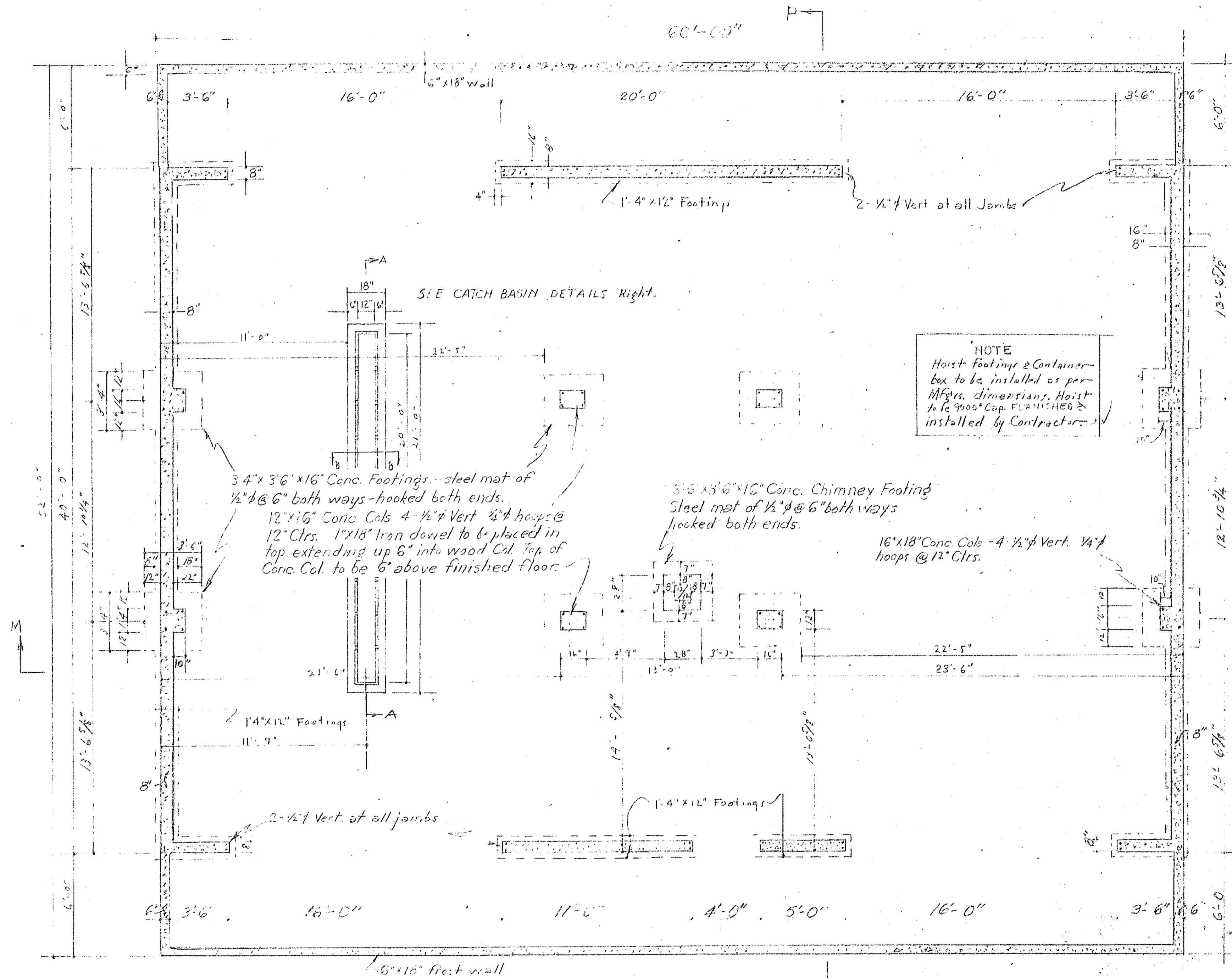
RIGHT SIDE ELEV. 1/4" = 1'-0"



BACK ELEVATION 1/4" = 1'-0"



LEFT SIDE ELEV. 1/4" = 1'-0"



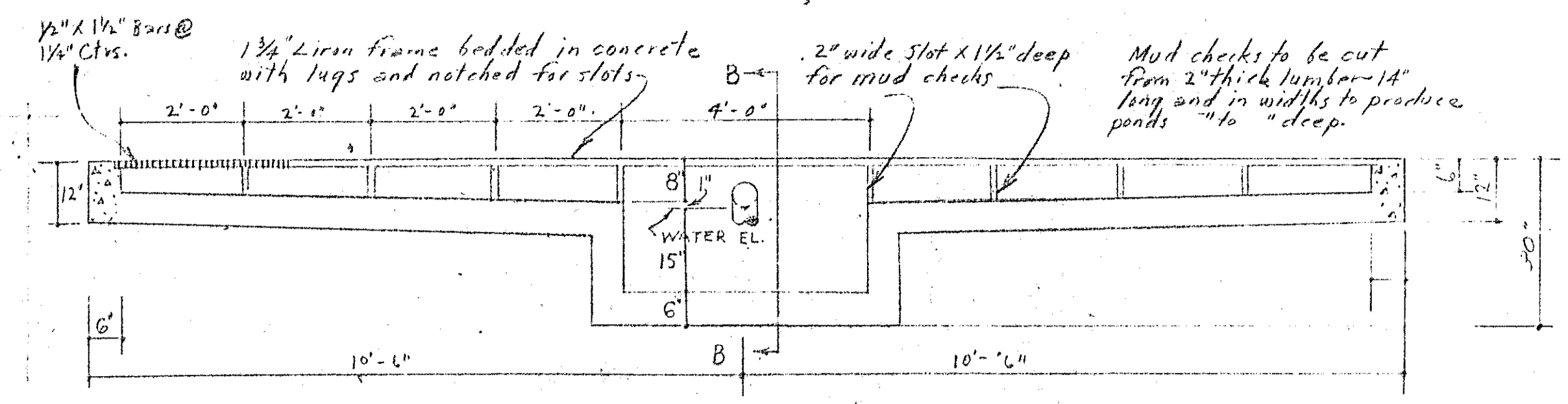
NOTE
 Hoist footings & Container box to be installed as per Mfrs. dimensions. Hoist to be 9000 Cap. FURNISHED & installed by Contractor.

3'4" x 3'6" x 16" Conc. Footings - steel mat of 1/2" φ @ 6" both ways - hooked both ends.
 12" x 16" Conc. Cols 4- 1/2" φ Vert. 1/4" φ hoops @ 12" Ctrs. 1" x 18" Iron dowel to be placed in top extending up 6" into wood Col. top of Conc. Col. to be 6" above finished floor.

3'6" x 3'6" x 16" Conc. Chimney Footing
 Steel mat of 1/2" φ @ 6" both ways hooked both ends.

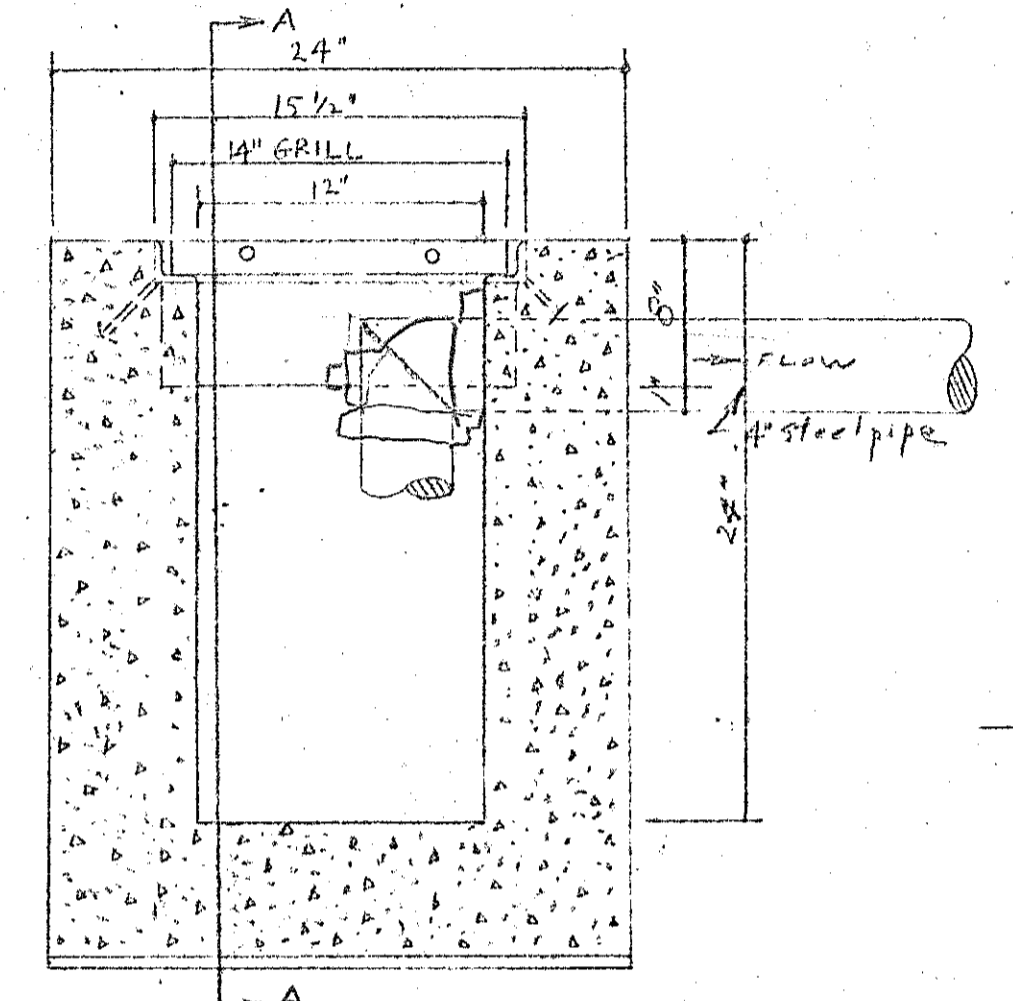
16" x 18" Conc. Cols - 4- 1/2" φ Vert. 1/4" φ hoops @ 12" Ctrs.

FOUNDATION PLAN
 SCALE 1/2" = 1'-0"

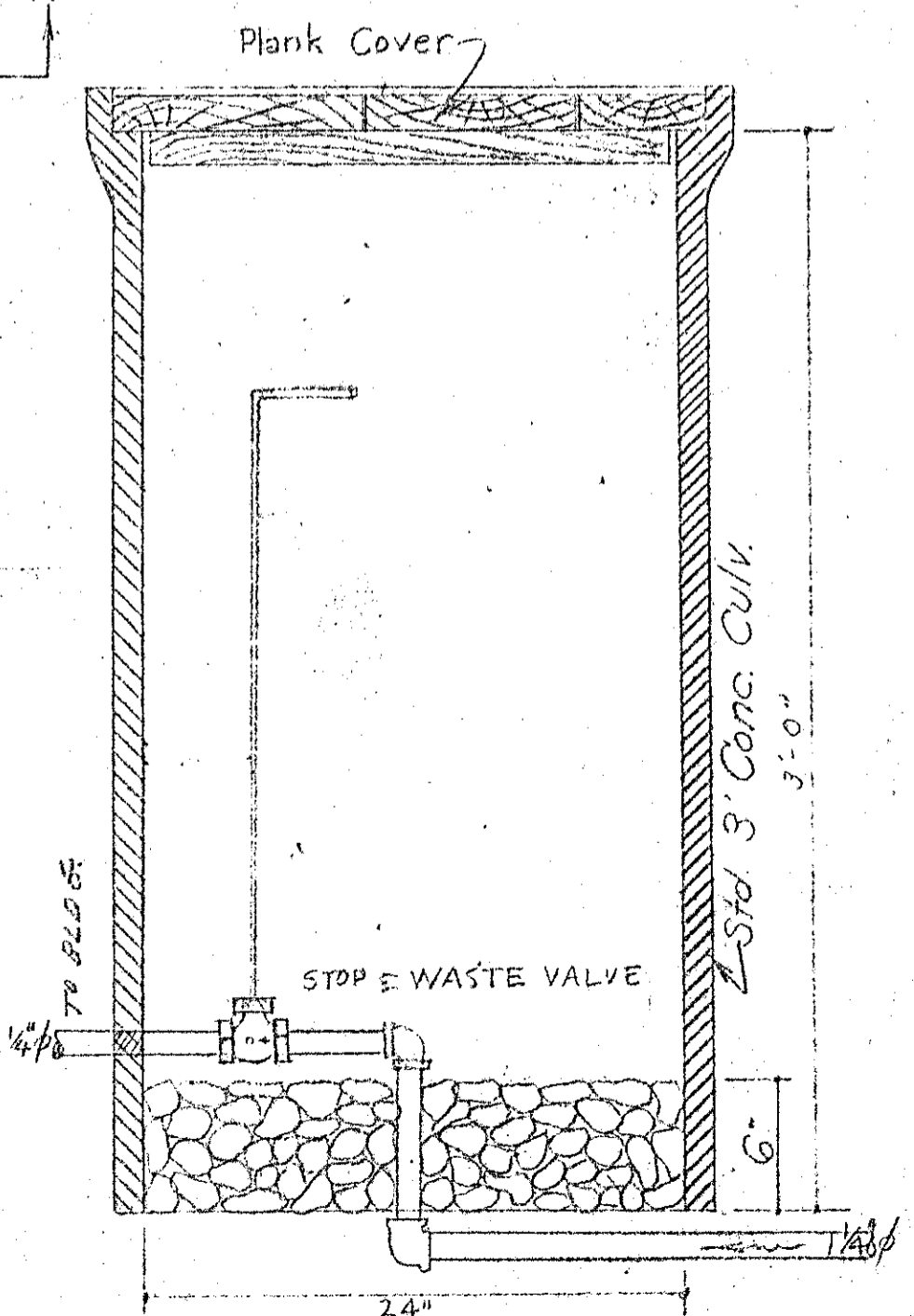


SECTION AT AA

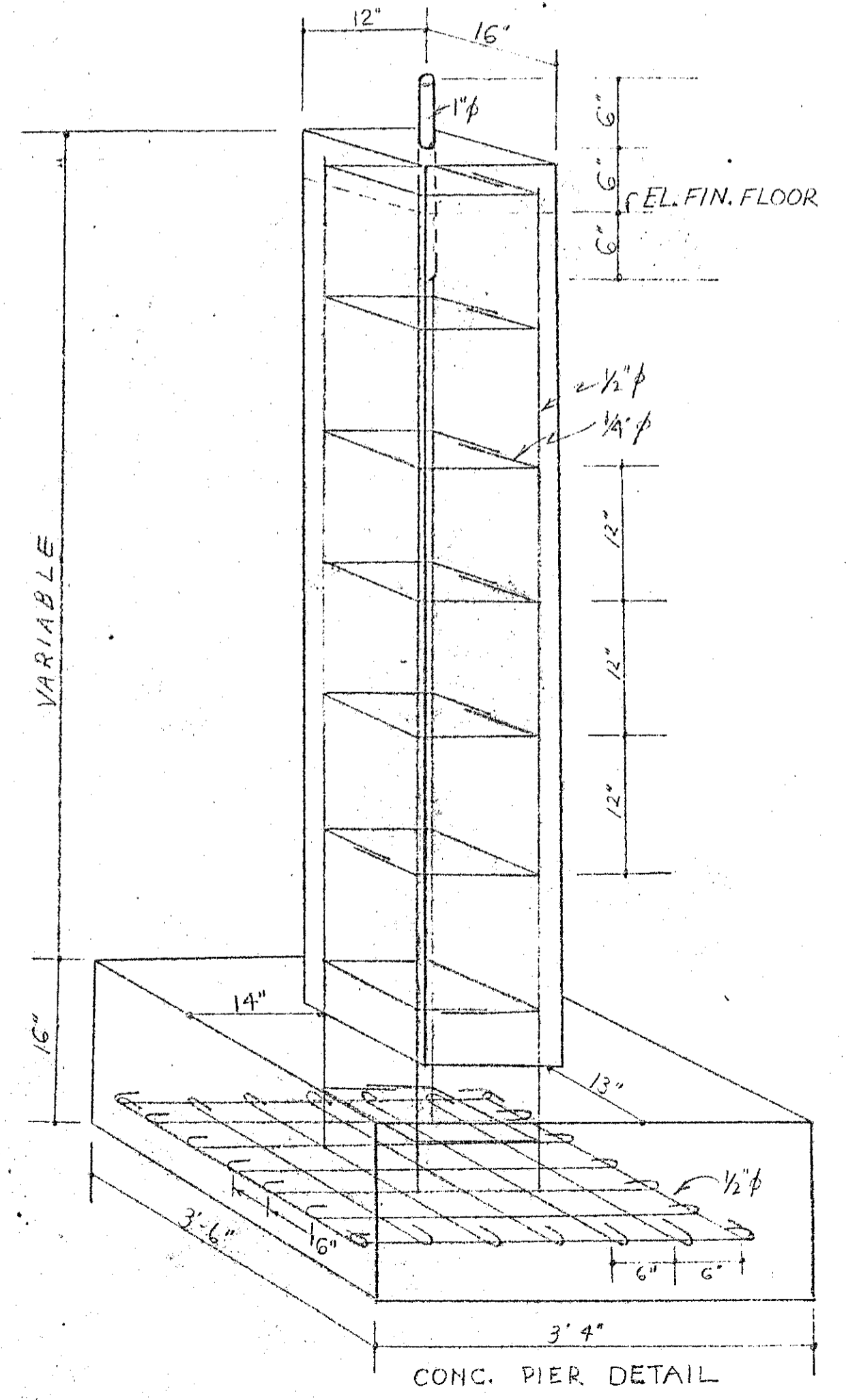
NOTE: IRON GRATING to be made in 4-5 foot Sections. 1/2" x 1/2" x 1/4" Bars 1/4" clvs. 2- 1/2" φ Spacers



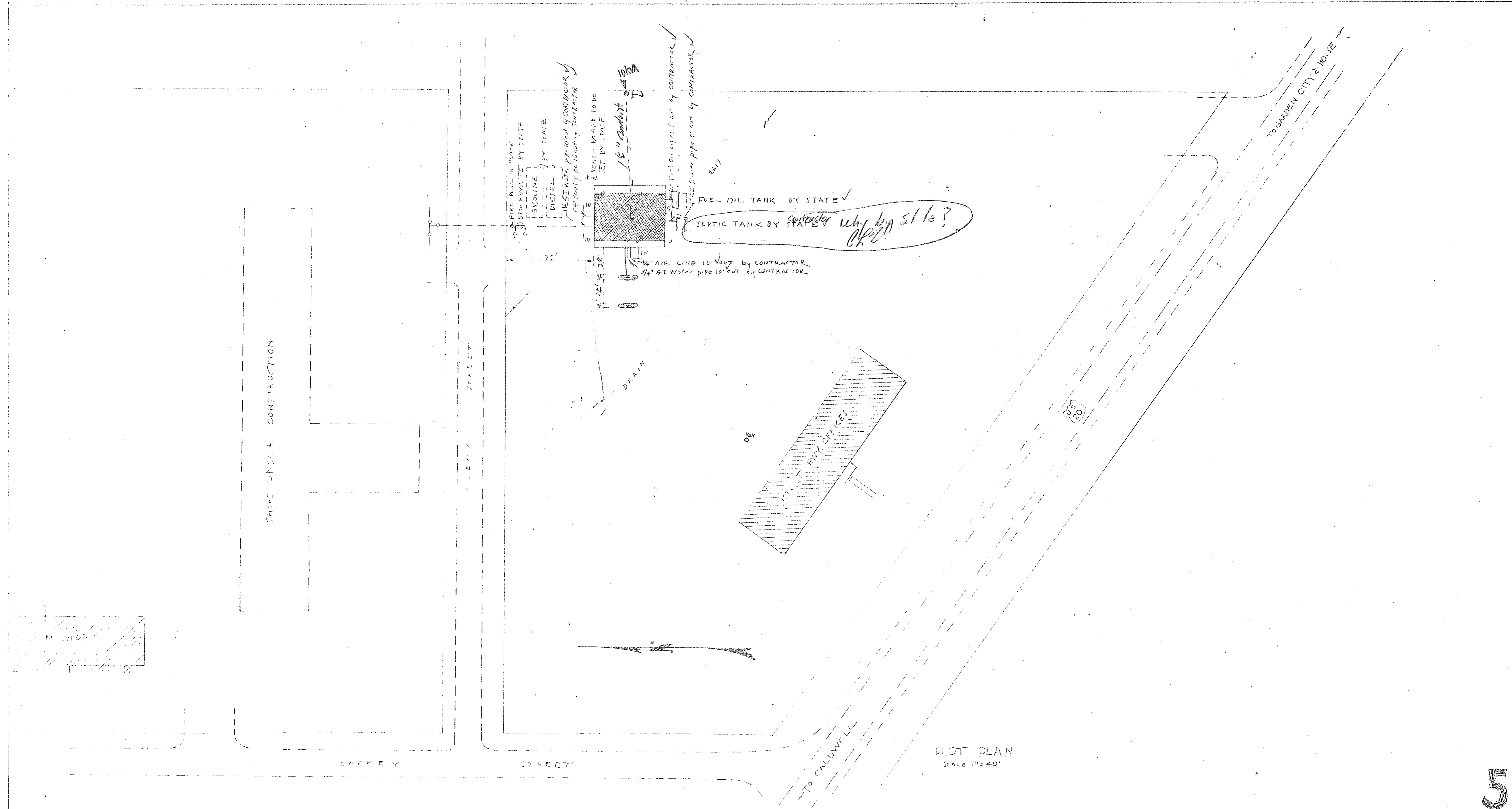
SECTION AT BB



SECTION AT CC



CONC. PIER DETAIL



FIRE PLUG IN PLACE
 STATE ELEVATE BY STATE
 SKOLINE
 DIESEL BY STATE
 1/2" SI WATER PIPE 10' OUT BY CONTRACTOR
 1/4" SI WATER PIPE 10' OUT BY CONTRACTOR
 BENCH MARK TO BE SET BY STATE
 1/2" COND. PIPE
 FUEL OIL TANK BY STATE
 SEPTIC TANK BY STATE *Contractor why by state?*
 1/4" AIR LINE 10' VENT BY CONTRACTOR
 1/4" SI WATER PIPE 10' OUT BY CONTRACTOR
 DRAIN
 2617

SHEDS UNDER CONSTRUCTION

7TH STREET

DISTRICT HWY OFFICE

TO CALDWELL

TO GARDEN CITY & BOULDER

PLOT PLAN
 SCALE 1"=40'

