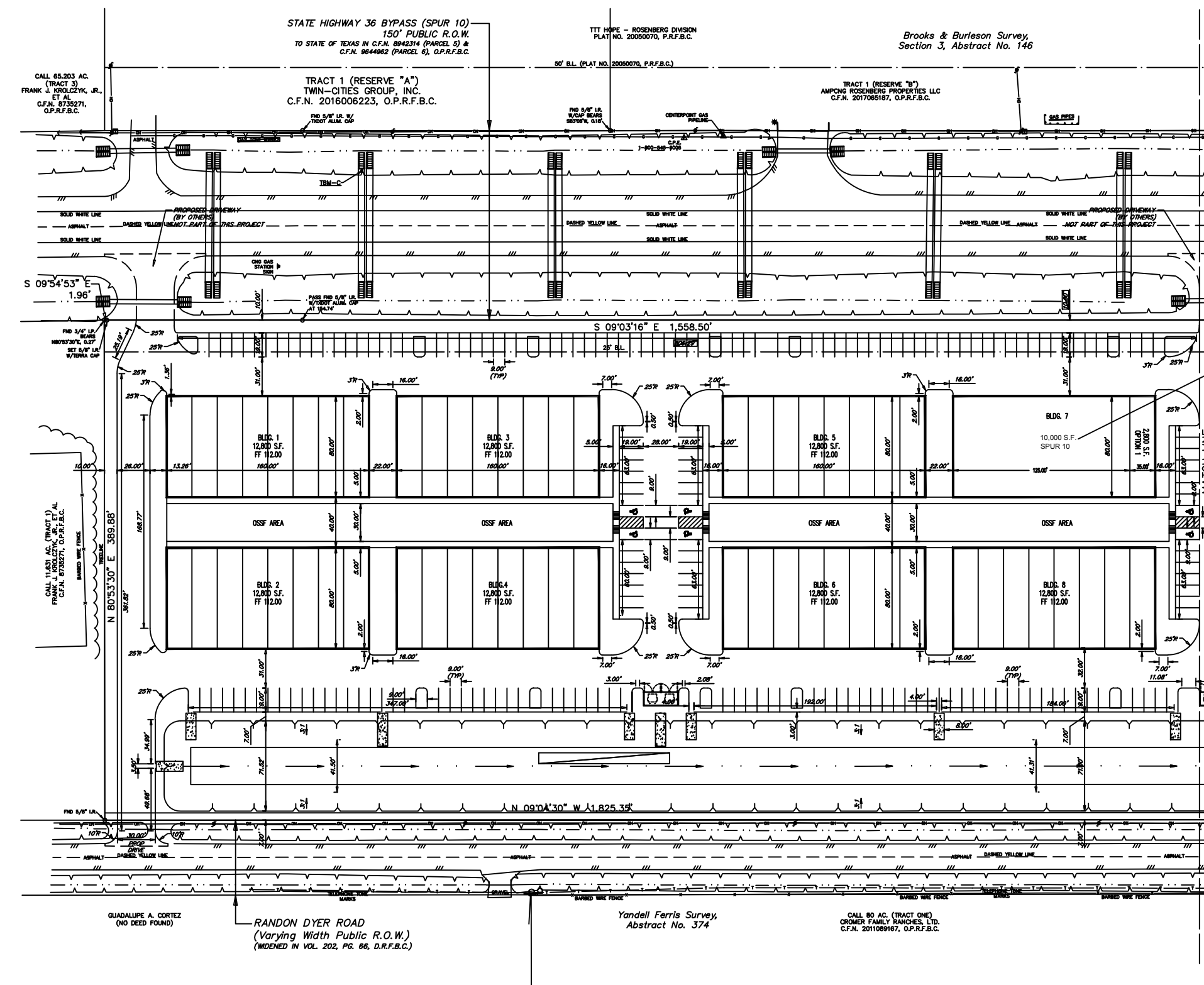


1. ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS AND DRAWINGS. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND INTERNATIONAL ORDINANCES AND REGULATIONS.
2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR ALL TRADES. FOR PROPER EXECUTION OF WORK UNDER THIS CONTRACT. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED FOR THIS PROJECT.
3. CONTRACTOR SHALL OBTAIN AND SUBMIT ALL REQUIRED CERTIFICATES OF INSURANCE TO THE OWNER'S AND LANDLORD'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF ANY WORK.
4. THE REQUIREMENTS OF THE TENANT'S CRITERIA FOR DESIGN AND CONSTRUCTION FOR THIS BUILDING SHALL BE MADE PART OF THIS CONTRACT.
5. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE JOB SITE CONDITIONS. OMISSION OF SPECIFIC DETAILS, DATA OR DRAWINGS SHALL NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITIES FOR A COMPLETE WORKING PROJECT AND SYSTEMS. THE CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CONSTRUCTION REQUIREMENTS AND DETAILS BEFORE SUBMITTING HIS BID, AS NO ALLOWANCES WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THE JOB SITE CONDITIONS AND PROJECT REQUIREMENTS.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND/OR UNUSUAL CONDITIONS NOT SHOWN OR ANTICIPATED TO THE OWNER'S REPRESENTATIVE PRIOR TO FINALIZING BIDS AND COMMENCEMENT OF ANY CONSTRUCTION.
7. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT WORKMAN LIKE MANNER. THE TENANT SHALL REQUIRE EXTENDED WARRANTIES ON SOME EQUIPMENT.
8. ALL PENETRATIONS MADE IN EXTERIOR WALLS OF BUILDING FOR CONDUIT, PIPING, WINDOWS AND DOORS SHALL BE SEALED WITH POLYSULFIDE.
9. NO PENETRATION SHALL OCCUR WITHIN 12" OF ANY OTHER ROOF PENETRATIONS, EXPANSION JOINT OR EDGE DETAIL.
10. ALL ROOF OPENINGS REQUIRED WATER TIGHT TEMPORARY CORER UNTIL THE UNIT IS COMPLETED.
11. ALL MATERIALS FOR PARTITIONS, WALLS, CEILINGS AND FINISHES SHALL BE APPROVED NON-COMBUSTIBLE MATERIALS.
12. ALL DEMISING WALLS SHALL BE FIRE CODE RATED TYPE "X" SHEET ROCK, TAPED, FLOATED AND SEALED AIR TIGHT TO ROOF DECK ABOVE. ANY PENETRATIONS IN FIRE WALLS TO BE PROPERLY SEALED. ALSO CAULK & SEAL ELECTRICAL TELEPHONE, OUTLETS.
13. THE CONTRACTOR SHALL CUT AND EXCAVATE ANY CONCRETE REQUIRED FOR ELECTRICAL, PLUMBING OR PIPING INSTALLATION REQUIRED BY VENDORS OR SHOWN ON DRAWINGS. BACK FILL WITH SAND COMPACTED TO 95 PROCTOR NEW REINFORCING INSTALLED AND REPOUR USING 3000 PSI CONCRETE TO MATCH WITH EXISTING SLAB.
14. COUNTER, SHELVES AND CABINETS BY G.C.
15. ANY ALTERATIONS TO THE ROOF MEMBRANE OF THE PREMISES SHALL BE MADE BY THE LANDLORD'S ROOFING CONTRACTOR FOR HIS ROOFING CONTRACTOR.
16. ALL CONTROL SWITCHES, THERMOSTATS, ETC. SHALL BE MOUNTED WITH THE HEIGHT NOT TO EXCEED 48" MAX. HEIGHT FOR FORWARD APPROACH & 54" MAX. FOR SIDE APPROACH.
17. PROVIDE LANDING AT EACH EXTERIOR EXIT DOOR. THE MAXIMUM IS 1/2" DROP FROM DOORWAY THRESHOLD TO LANDING.
18. TYPE 2B STRUCTURE. NO EXISTING OR PROPOSED WOOD STRUCTURE IN THIS LEASE SPACE OR THIS BUILDING.
19. 3-COMP. SINKS SHALL BE A MIN. OF 15(L)X 15(W)X12(D) W/ ROUNDED INTERNAL ANGLES.
20. SPRINKLER FIRE SYSTEM AND FIRE ALARM SYSTEM ARE BY SEPARATE PERMITS. GENERAL CONTRACTOR SHALL CONTRACT WITH FIRE SPRINKLER AND FIRE ALARM COMPANIES TO DESIGN AND TO GET PERMITTED AND ACTIVATED. ALL COST WILL BE INCLUDED IN THE G.C. CONTRACT.

GENERAL NOTES: N.T.S

1. CONTRACTOR SHALL PROTECT ALL EXISTING CONDITIONS TO REMAIN UNDER THIS CONTRACT AND REPAIR AND/OR REPLACE ANY WORK DAMAGED BY NEW CONSTRUCTION, AT NO COST TO THE OWNERS.
  2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY, PRIOR TO PROCEEDING.
  3. ALL MATERIALS AND EQUIPMENT SHALL BE CONSIDERED PART OF THE CONTRACT UNLESS NOTED OTHERWISE.
  4. CONTRACTOR SHALL PROVIDE AND INSTALL ALL THE MATERIALS AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
  5. AREAS OF DEMOLITION AND/OR PATCHING SHALL BE MADE "LIKE NEW" TO BE CONSISTENT AND HARMONIOUS WITH THE WHOLE.
  6. CONTRACTOR SHALL PROVIDE MATERIALS AND EQUIPMENT AS SPECIFIED. SUBSTITUTIONS ARE NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE OWNER AND ARCHITECT. ALL REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED PRIOR TO EXECUTION OF CONSTRUCTION CONTRACT. ANY REQUEST FOR SUBSTITUTIONS WILL ONLY BE CONSIDERED IF IT RESULTS IN BETTER QUALITY THAN THAT SPECIFIED, OR IS MORE ADVANTAGEOUS WITH RESPECT TO A CRITICAL DELIVERY DATE AND DOES NOT RESULT IN A COST INCREASE TO THE OWNER.
  8. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVING A PROPOSED SUBSTITUTION ITEM IS EQUAL OR BETTER THAN THAT IS SPECIFIED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTIONS AND ACTIVITIES OF HIS SUBCONTRACTORS EMPLOYEES AS IT PERTAINS TO THIS PROJECT.
9. ALIGN" AS USED IN THESE DOCUMENTS SHALL MEAN TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.
  10. "TYPICAL" AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS THE SAME OR REPRESENTATIVE FOR ALL SIMILAR CONDITIONS THROUGHOUT, UNLESS NOTED OTHERWISE.
  11. ALL INTERIOR GROUND CONCRETE TO BE NEATLY CUT. NO JACK HAMMERING. ALL TILT-UP WALL PENETRATION MUST BE CORE DRILLED. NO HAMMER DRILLING.

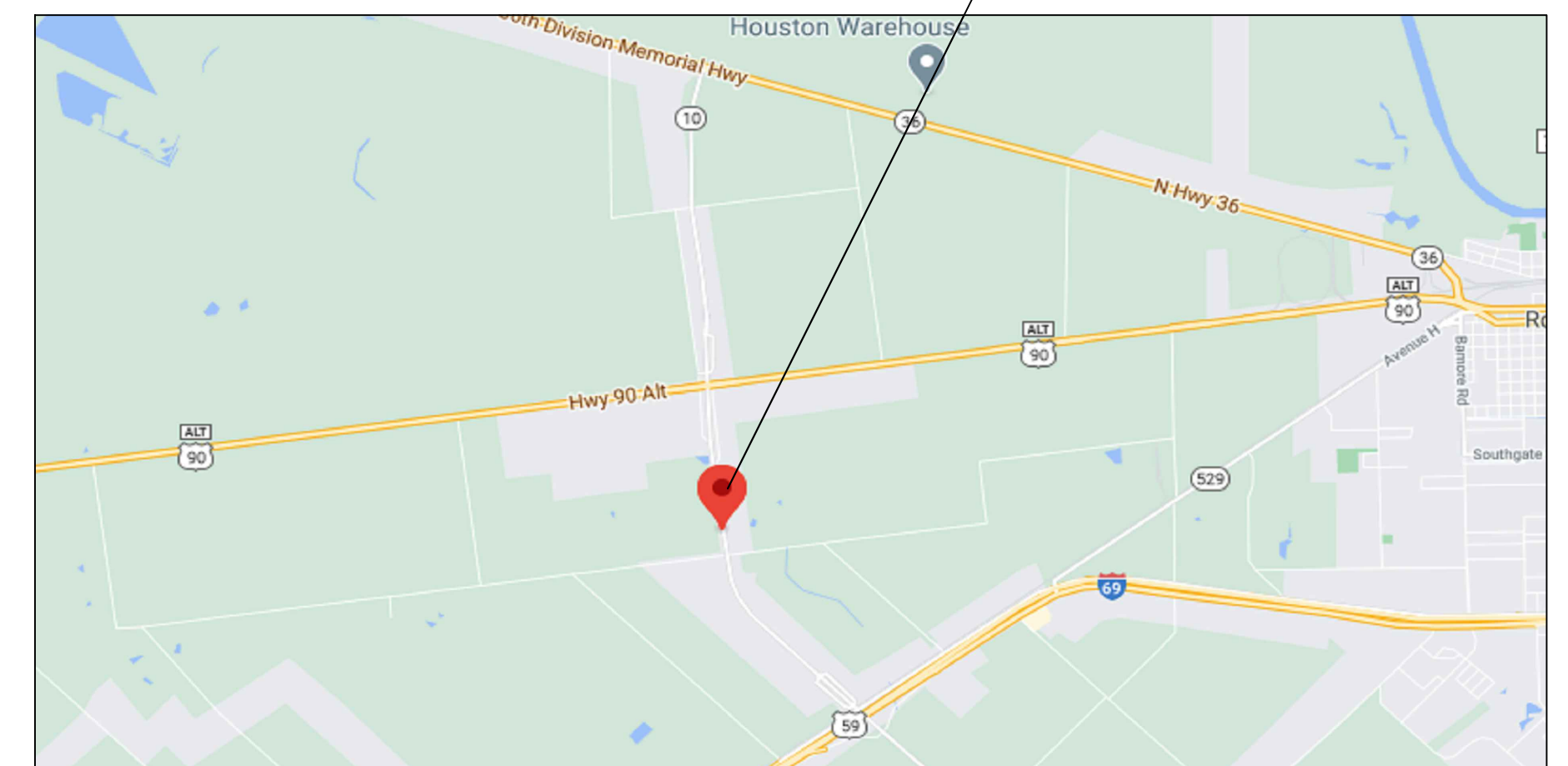
GENERAL NOTES: N.T.S



**SITE PLAN**  
NTS

**SPUR 10**  
(10,000 S.F.)

**SPUR 10**



**VICINITY MAP**  
NTS

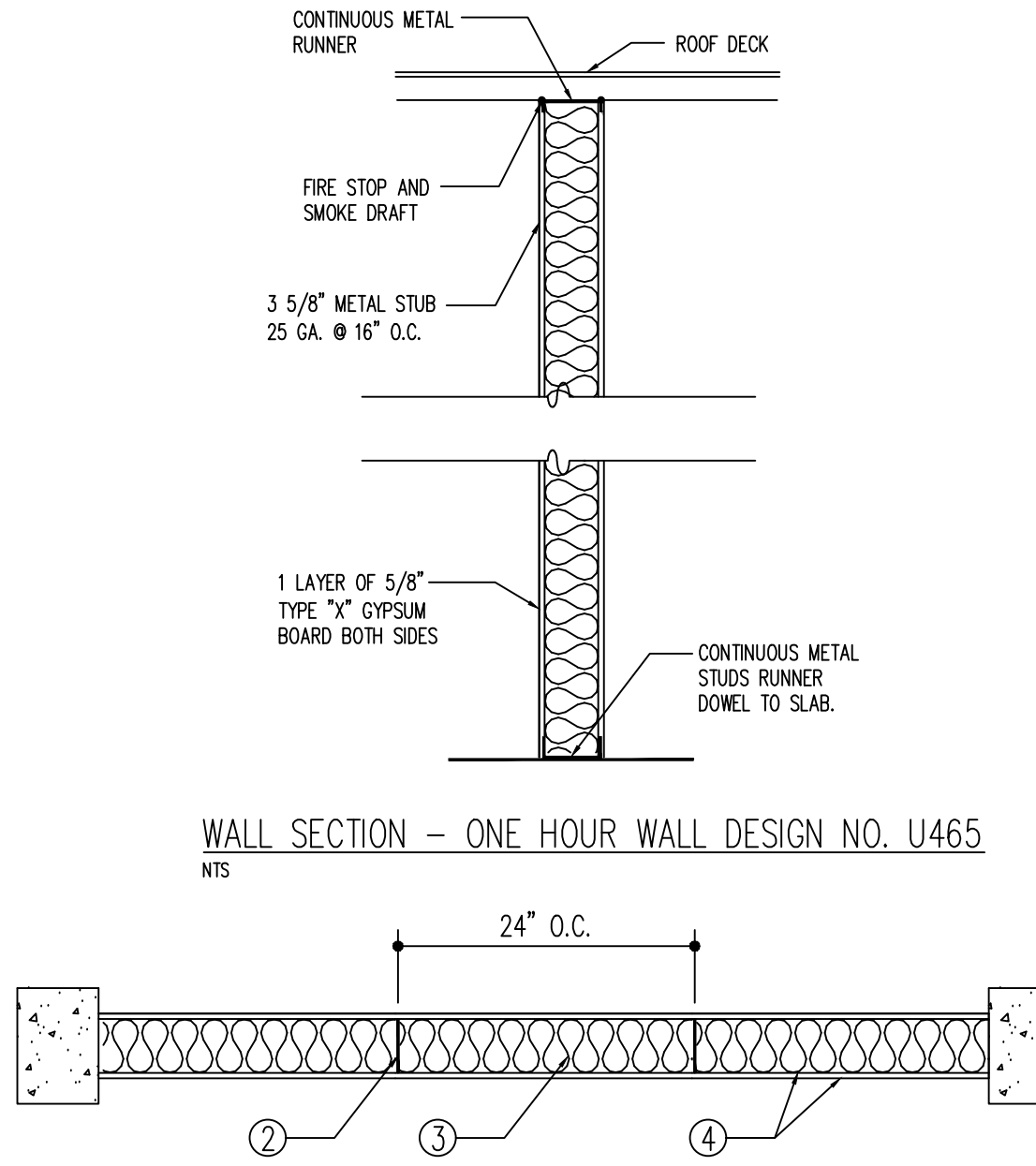
**SPUR 10**

**LEASE SPACE BUILD-OUT  
10,000 SQ.FT WAREHOUSE**

**2445 PATTON RD. STE #100  
ROSENBERG, TEXAS 77471**

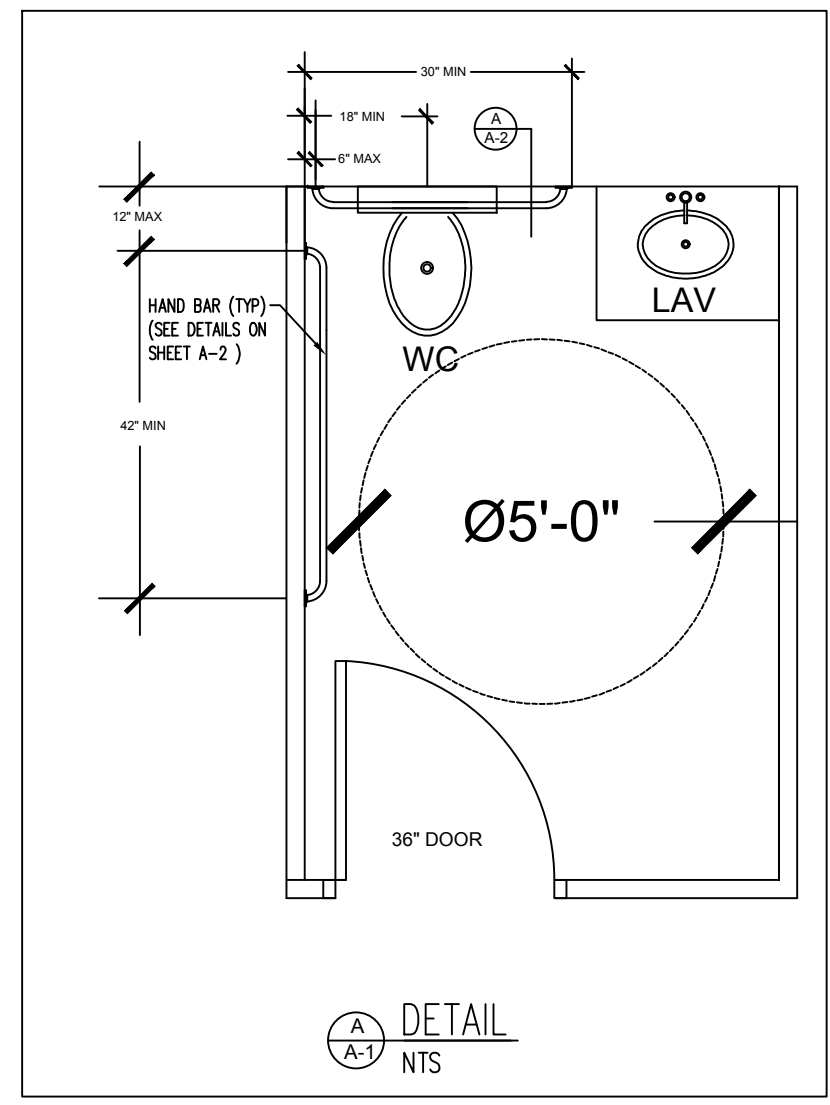
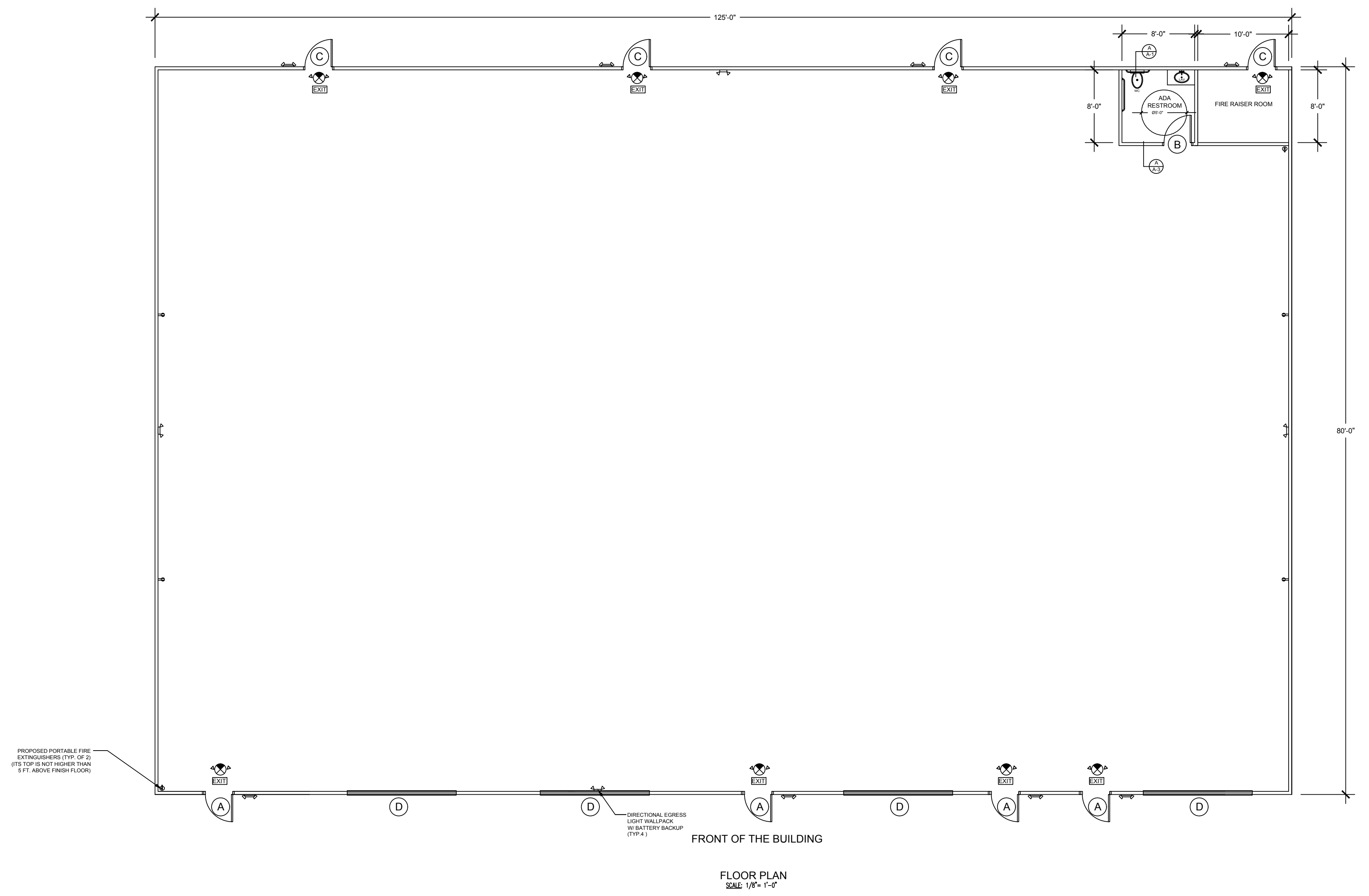
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- ① FLOOR AND CEILING RUNNER, 25 MSG MIN. GALVANIZED STEEL 1" HIGH, RETURN LEGS 3 5/8" WIDE MIN. ATTACHED TO FLOOR AND CEILING WITH FASTENERS @ 24" ON CENTERS.
- ② STEEL STUDS - 3 5/8" WIDE MIN. 1 1/4" LEGS, 3/8" RETURN, FORMED OF 25 MSG MIN. GALVANIZED STEEL MAX. STUD SPACING 24" ON CENTER. STUDS TO BE CUT 3/4" LESS THAN ASSEMBLY HEIGHT.
- ③ INSULATION: PROVIDE R-19 BATT INSULATION IN 1 HOUR RATED WALLS. MINERAL WALL OF FIBER BATTS PARTIALLY OR COMPLETELY FILLING STUD CAVITY. FASTENED EACH BATT TO WALL BOARD BASE LAYER WITH A MINIMUM 6/16" LONG STAPLES. USE FIVE STAPLES FOR EACH 4 FOOT PIECE. DRIVE ONE STAPLE IN THE CENTER OF EACH PIECE AND A STAPLE AT EACH CORNER, APPROXIMATELY 3" FROM EDGES.
- ④ WALLBOARD GYPSUM: 5/8" THICK OUTER LAYER OR VINYL SURFACED. WALLBOARD APPLIED VERTICALLY IN TWO LAYERS. INNER LAYER OR VINYL SURFACED. WALLBOARD APPLIED VERTICALLY IN TWO LAYERS. INNER LAYER ATTACHED TO STUDS WITH 1" LONG TYPE S STEEL SCREWS, SPACED @ 8" ON CENTERS ALONG VERTICAL EDGES, AND 12" ON CENTER IN THE FIELD AND OUTER LAYER LAMINATED TO INTER LAYER WITH JOINT COMPOUND, APPLIED WITH A NOTCHED SPREADER PRODUCING CONTINUOUS BEADS OF COMPOUND ABOUT 3/8" IN A DIAMETER, SPACED NOT GREATER THAN 2" ON CENTER. JOINT OF LAMINATED OUTER LAYER OFFSET 12" FROM INNER LAYER JOINTS. OTHER LAYER WALLBOARD ATTACHED TO FLOOR AND CEILING RUNNER TRACK WITH 1 5/8" LONG TYPE S STEEL SCREWS SPACED 12" ON CENTER.  
 BORAL GYPSUM INC. TYPES DDN1, DDG2, OR DDDG3.  
 CANADIAN GYPSUM CO., LTD., TYPES C, SCX, SHX, OR WRX.  
 CELOTEX CORP., TYPE 1 OR FRP.  
 DOMTAR GYPSUM, TYPES C, 4 OR 9.  
 GEORGIA-PACIFIC, TYPES C, GPFS-3.  
 GOLD BOND BUILDING PRODUCTS AN NATIONAL GYPSUM DIV., TYPES FSW OR FSW-G.  
 JAMES HARDIE GYPSUM CORP., TYPE FIRE X.  
 PABCO GYPSUM CO., TYPES C, PG-3, PG-9 OR PG-C.  
 STANDARD GYPSUM CORP., TYPE SGC OR SGC-G.  
 TEMPLE-INLAND FOREST PRODUCTS CORP., TYPES T, VPB-TYPE T.  
 UNITED STATES GYPSUM CO., TYPES C, FCV, IP-X1, IP-X2, SCX, SHX, WRC OR WRX.
- ⑤ JOINT TAPE AND COMPOUND - VINYL, DRY OR PREMIXED JOINT COMPOUND, APPLIED IN TWO CASTS TO JOINT AND SCREW HEADS; PAPER TAP, 2" WIDE EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS. AS AN ALTERNATE, NORMAL 3/32" THICK GYPSUM VENEER PLASTER MAY BE APPLIED TO THE ENTIRE SURFACE OF CLASSIFIED VENEER BASEBOARD. JOINTS REINFORCED.
- ⑥ FURRING CHANNEL - (OPTIONAL NOT SHOWN) RESILIENT 25 MSG GALVANIZED STEEL FURRING CHANNELS SPACED VERTICALLY MAX. 24" O.C., FLANGE PORTION A ATTACHED TO EACH INTERSECTING STUD WITH 1/2" LONG TYPE S-12 PAN- HEAD STEEL SCREW.  
 \*\* BEARING THE UL CLASSIFICATION MARKING

ONE HOUR WALL DESIGN NO. U 465  
NTS



SPUR 10

2445 PATTON RD. STE #100  
ROSENBERG, TEXAS 77471

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PROJECT:

DRAWN BY:  
**MAN TRAN**  
DATE: MAY/21/2021

CHECK BY:  
**LOC NGUYEN**  
DATE: MAY/21/2021

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SHEET TITLE:  
**FLOOR PLAN**

SHEET:  
**A-1 OF 6**

SCALE 1/8" = 1'-0"



**NOTES**

- DOOR LATCH SHALL RELEASE WHEN SUBJECTED TO A 5-POUNDS FORCE FOR INTERIOR DOOR AND A 8.5-POUNDS FORCE FOR EXTERIOR DOOR FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL FORCE.
- THE LATCH SHALL HAVE THE LEVER AND SHALL BE MOUNTED AT 40 INCHES ABOVE FINISH FLOOR (A.F.F.); EXCEPT AT ACCESSIBLE STALLS WHICH SHALL BE MOUNTED BETWEEN 34 TO 36 INCHES A.F.F.
- ELECT. SWITCHES SHALL BE MOUNTED AT 42 INCHES A.F.F.
- RECEPTACLES ON WALL SHALL BE MOUNTED A MIN. OF 15 INCHES A.F.F.
- PROVIDE SELF-CLOSER FOR RESTROOM & VESTIBULE DOORS.

**HEALTH DEPARTMENT NOTES:**

**FLOOR:** SMOOTH, DURABLE MATERIAL, NON ABSORBENT - EASILY CLEANABLE - NO PIPES OR CONDUITS EXPOSED ON FLOOR.  
**WALL & CEILING:** IN FOOD STORAGE AREA, TOILET ROOM, VESTIBULE SHOULD BE SMOOTH, NON ABSORBENT, EASILY CLEANABLE & LIGHT WHITE COLOR - NO PIPES, CONDUITS, ELECT. PANELS, STUDS, JOISTS OR RAFTER, OR INSULATION EXPOSED IN PACKAGE FOOD AREA. NON PERFORATED CEILING ON FOOD PREPARATION AND FOOD STORAGE AREA, RESTROOM & VESTIBULE  
**TOILET ROOM:** COMPLETELY ENCLOSED, WELL LIGHTED WITH OUTSIDE VENTILATION, SELF CLOSER, TIGHT FITTING SOLID DOOR SHALL NOT OPEN DIRECTLY INTO ANY ROOM IN WHICH FOOD STORED OR HANDLES - MARLITE ON GYP. BOARD UP TO 4' - 0" BEHIND PLUMBING FIXTURES.  
**VESTIBULE:** 16 SQ.FT.. (MIN) WELL LIGHTED WITH OUTSIDE VENT, SELF CLOSER VEST, DOOR OPENS OUT TOILET DOOR OPENING MUST BE IN SUCH DIMENSION AS TO PREVENT BOTH DOORS FROM OPENING SIMULTANEOUSLY BY THE SAME PERSON  
**VENTILATION:** ALL ROOM SHALL HAVE SUFFICIENT VENTILATION.  
**GARBAGE & REFUSE CONTAINERS:** SHALL BE LOCATED OUTSIDE ON CONCRETE PAVEMENT  
**EQUIPMENTS:** SHALL BE LOCATED IN A WAY THAT FACILITATES CLEANING OF THE ESTABLISHMENT & PREVENT FOOD CONTAMINATION.  
**PROTECTIVE SHIELDING:** PROVIDE SHIELDING FOR ALL ARTIFICIAL LIGHTING FIXTURES LOCATED OVER, BY OR WITHIN FOOD STORAGE SERVICE OR DISPLAY FACILITIES.  
**POISONOUS & TOXINS MATERIALS:** EACH OF THE THREE CATEGORIES OF POISONOUS & TOXINS MATERIALS SHALL BE STORED SEPARATELY IN CABINET ABOVE MOP SINK IN UTILITY ROOM.  
**LIGHTING:** AT LAST 50 FOOT-CANDLES OF LIGHT SHALL BE PROVIDED TO ALL WORKING SPACES  
 AT LAST 30 FOOT-CANDLES SHALL BE PROVIDED TO ALL OTHER SURFACES AND EQUIPMENT IN FOOD PREPARATION, UTENSIL-WASHING, HAND-WASHING AREAS, AND IN THE TOILETS.  
 AT LAST 20 FOOT-CANDLES AT A DISTANCE OF 30 INCHES FROM THE FLOOR SHALL BE PROVIDED IN ALL OTHER AREAS.

**NOTES:**

- ALL INTERIOR WALLS OF RESTROOMS SHALL BE COVERED WITH WHITE FIBERGLASS REINFORCED PLASTIC 4'-0" MIN. IN HEIGHT.
- 6" VINYL BASE IN RESTROOMS IS AN ADHERED DECORATIVE FINISH IN FRONT OF FIBER REINFORCED PLASTIC (FRP).

**NOTES:**  
 3-COMPARTMENT SINK SHALL HAVE ALL ROUNDED INTERNAL CORNERS AND ANGLES. THE SIZE IS AT LEAST 15" W x 15" L x 12" D FOR EACH COMPARTMENT.  
**NOTE FOR INTERIOR FINISHES:**  
 INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD AND SMOKING-DEVELOPED INDEX AS FOLLOWS:  
 GROUP A-2:  
 - VERTICAL EXIT AND EXIT PASSAGEWAYS: CLASS A WITH FLAME SPREAD 0-25; SMOKE-DEVELOPED 0 - 450.  
 - EXIT ACCESS CORRIDORS AND OTHER EXIT WAYS: CLASS A WITH FLAME SPREAD 26 - 75 AND SMOKE-DEVELOPED 0 - 450.  
 - ROOMS AND ENCLOSED SPACES: CLASS B WITH FLAME SPREAD 76 - 200 AND SMOKE-DEVELOPED 0 - 450.

**NOTES FOR PANIC & FIRE EXIT HARDWARE:**

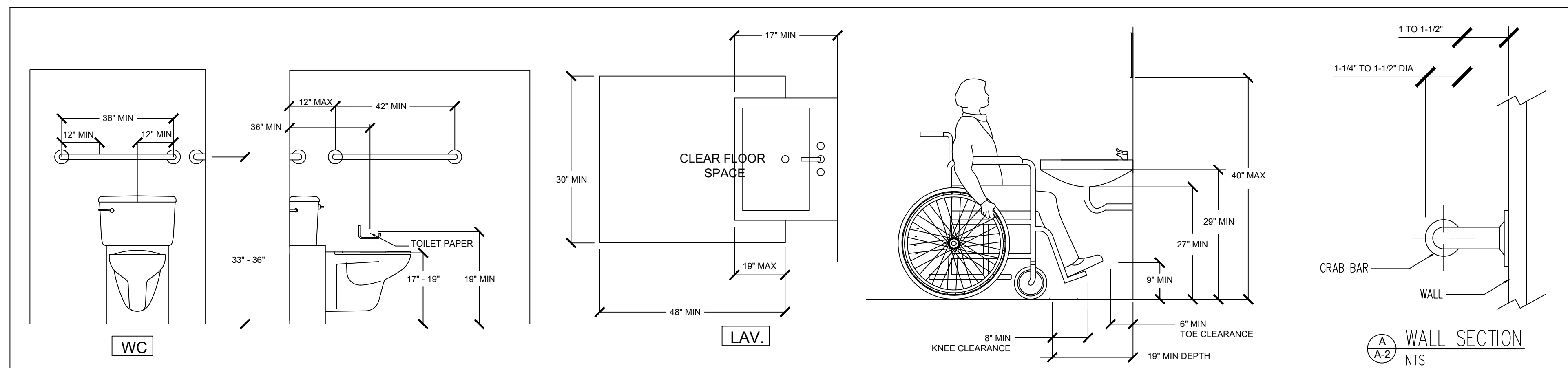
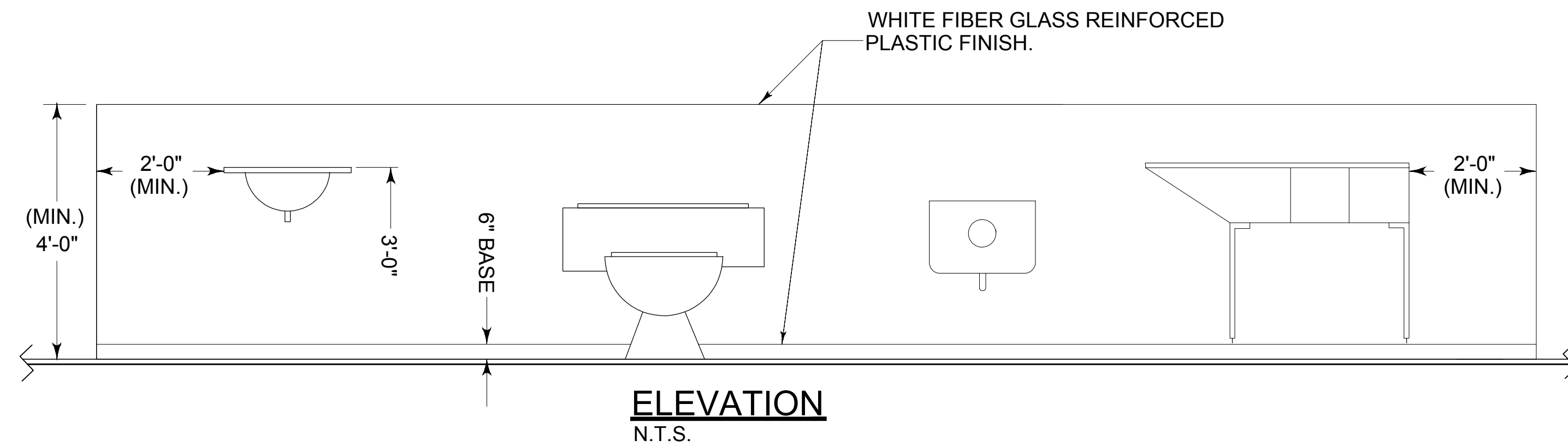
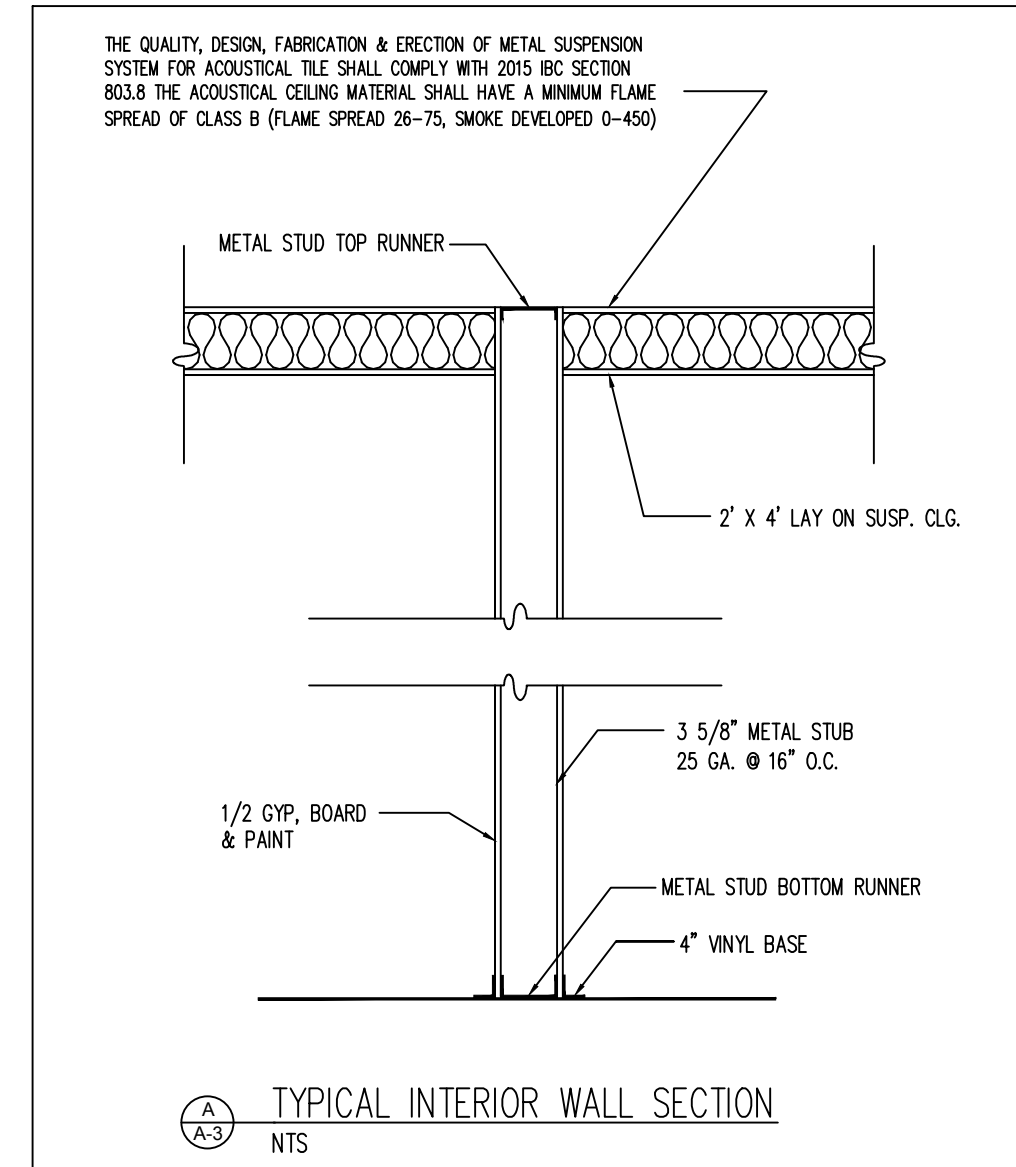
- THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
- THE MAXIMUM UNLATCHING FORCE SHALL NOT EXCEED 15 POUNDS APPLIED IN THE DIRECTION OF TRAVEL.

**NOTE FOR INTERIOR FINISH:**

INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD AND SMOKING-DEVELOPED INDEX AS FOLLOWS:  
 GROUP A-2:  
 - VERTICAL EXIT AND EXIT PASSAGEWAYS: CLASS A WITH FLAME SPREAD 0-25; SMOKE-DEVELOPED 0-450.  
 - EXIT ACCESS CORRIDORS AND OTHER EXIT WAYS: CLASS A WITH FLAME SPREAD 26-75 AND SMOKE-DEVELOPED 0-450.  
 - ROOMS AND ENCLOSED SPACES: CLASS B WITH FLAME SPREAD 76-200 AND SMOKE-DEVELOPED 0-450.

DOOR SCHEDULE						
TYPE	QTY	SIZE	DESCRIPTION	THICKNESS	FRAME	REMARKS & HARDWARES
A	4	36"x84"	GLASS/METAL	1 3/4"	METAL	TEMP. GLASS DOOR WITH PANIC HARDWARE & SIGN (SEE NOTES BELOW.)
B	1	36"x84"	WOOD	1 3/4"	WOOD	HOLLOW CORE DOOR WITH LATCH (SEE NOTES BELOW)
C	4	36" x84"	METAL	1 3/4"	METAL	METAL CORE DOOR WITH PANIC HARDWARE (SEE NOTES BELOW)
D	4	12'x 10'	METAL	4 1/4"	METAL	Opening Height: 10 ft, Opening Width: 12 ft,

FINISH SCHEDULE						
AREA	FLOOR	BASE	WALL	CEILING	H	REMARKS
WAREHOUSE FLOOR	●	●	●	●		OPEN
REST ROOMS	●	●	●	●	10"	



**HANDICAP RESTROOM DETAILS**  
 N.T.S.

SPUR 10

2445 PATTON RD. STE # 00  
 ROSENBERG, TEXAS 77471

PROJECT:

DRAWN BY:

MAN TRAN  
 DATE: MAY/21/2021

CHECK BY:

LOC NGUYEN  
 DATE: MAY/21/2021

SHEET TITLE:

CONSTRUCTION  
 DETAILS

SHEET:

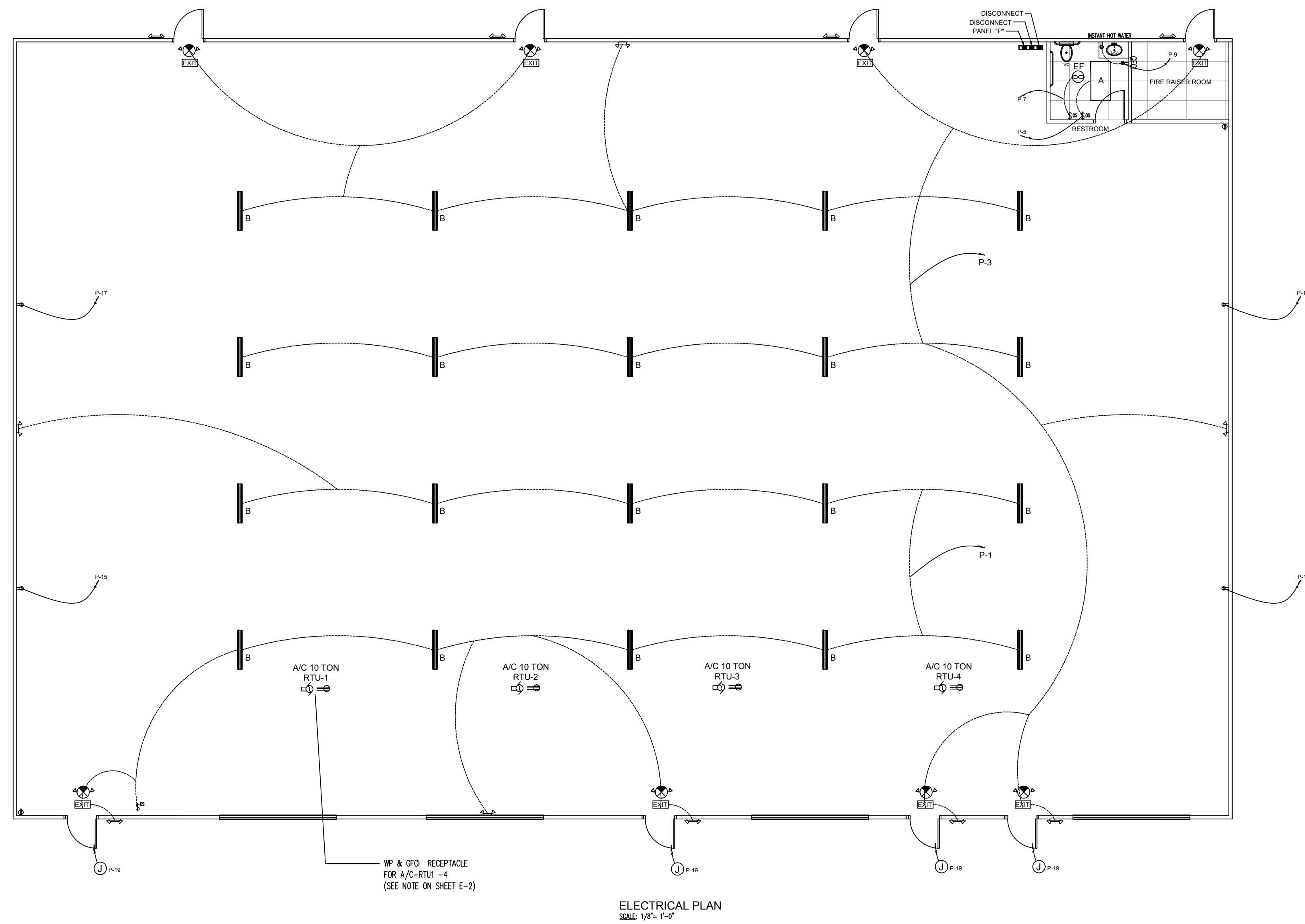
A-2 OF 6

SCALE 1/8" = 1'-0"

LIGHT FIXTURE SCHEDULE			
TYPE	MANUFACTURE & MODEL	NO. SIZE & TYPE OF LAMP	REMARKS
A	METALUX 2 GC - 332 A	(3) 32 W F 32 18 - 120 V	2' x 4' RECESSED GRID TRIGGER
B	#H450502200-10	50 W - 120 V	4' COMMERCIAL WAREHOUSE LIGHT
	EXIST LIGHT LITHONIA 120/277 EL	5 W - 120/277 V	EXIST LIGHT ABOVE DOOR LEVEL WITH BATTERY BACK-UP SHALL BE MAINTAINED THE LOAD FOR A PERIOD OF 1-1/2 HOURS MINIMUM
	EMERGENCY LIGHT LITHONIA W/28 120/277 EL	5 W - 120 V	EMERGENCY LIGHT WITH BATTERY BACK-UP SHALL BE MAINTAINED THE LOAD FOR A PERIOD OF 1-1/2 HOURS MINIMUM

ELECTRICAL LEGEND	
	RECESSED DOWN LIGHT
	110V RECEPTACLE OUTLET
	DUPLEX RECEPTACLE CEILING OUTLET
	SINGLE POLE SWITCH
	SINGLE POLE SWITCH WITH OCCUPANCY SENSOR
	3-WAY SWITCH
	240V RECEPTACLE OUTLET
	SMOKE DETECTOR (CARBON MONOXIDE ALARM) W/BATTERY BACKUP
	TV OUTLET
	EXHAUST FAN
	EMERGENCY LIGHT WITH BATTERY BACK UP
	EXIT LIGHT WITH BATTERY BACK UP
	DIRECTIONAL EXIT LIGHT W/ EGRESS LIGHTS AND BATTERY BACKUP
	DIRECTIONAL EGRESS LIGHT WALLPACK W/ BATTERY BACKUP

\*\*\* ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE OUTLETS WILL INSTALLED IN THIS ROOM WILL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER (AFCI)



ELECTRICAL PLAN  
SCALE: 1/8" = 1'-0"

PROJECT: SPUR 10  
2445 PATTON RD. STE #100  
ROSENBERG, TEXAS 77471

DRAWN BY:  
MAN TRAN  
DATE: MAY/21/2021

CHECK BY:  
LOC NGUYEN  
DATE: MAY/21/2021

SHEET TITLE:  
ELECTRICAL PLAN

SHEET:  
E-1 OF 6

SCALE 1/8" = 1'-0"

**NOTES:**

- 1- MOUNT RECEPTACLES 15" ABOVE FLOOR UNLESS NOTED OTHERWISE.
- 2- EQUAL FIXTURES MAY BE SUBSTITUTED.
- 3- SERVICE RUNS TO BE 5'-0" MINIMUM FROM EDGE OF ROOF.
- 4- CLEARLY LABEL EACH CIRCUIT BREAKER WITH TYPE WRITTEN IND. CARD PERMANENTLY AFFIXED INSIDE PANEL AND EACH DISC. SWITCH WITH PERMANENT PRINTED TAGS.
- 5- ALL WIRING TO BE COPPER.
- 6- ALL ROOF TOP ELECTRICAL CONDUIT LARGER THAN 1" TO BE SUPPORTED ON 4x4 BLOCKING STYROFOAM.
- 7- ALL LIGHTING FIXTURES TYPE "A" U.N.O.
- 8- VERIFY EXACT LOCATION OF ROOF TOP A/C UNIT AND "T" STAT WITH MECHANICAL CONTRACTOR.
- 9- VERIFY ELECTRICAL REQUIREMENTS FOR A/C UNITS AND ELECTRICAL HEATER WITH MECHANICAL CONTRACTOR.
- 10- PROJECT ELECTRICAL CONTRACTOR VERIFY LOAD ANALYSIS AND RISER DIAGRAMS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES ERRONEOUS CALCULATIONS OR CODE VIOLATIONS PRIOR OF BIDDING.

**NOTES FOR EXIT SIGN & EXIT ILLUMINATION:**

- 700 E 09 D EXIT SIGNS CHAPTER 10 I.B.C.  
WHEN TWO OR MORE EXITS ARE REQUIRED FROM A ROOM OR AREA, EXIT SIGNS SHALL BE INSTALLED AT THE REQUIRED EXITS FROM THE ROOM OR AREA AND WHERE OTHERWISE NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS. SIGN SHALL BE INTERNALLY ILLUMINATED BY TWO ELECTRIC LAMPS OR SHALL BE OF AN APPROVED SELF-LUMINOUS TYPE. WHEN LUMINANCE ON THE FACE OF AN EXIT SIGN IS FROM AN EXTERNAL SOURCE, IT SHALL BE HAVE AN INTENSITY OF NOT LESS THAN 5" FOOT CANDLES FROM EITHER LAMP. INTERNALLY ILLUMINATED SIGNS SHALL PROVIDED EQUIVALENT EXIT ILLUMINATION. POWER SUPPLY FOR EXIT SIGNS SHALL NORMALLY BE PROVIDED BY PREMISE WIRING SYSTEM. IN THE EVENT OF NORMAL POWER FAILURE ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY POWER: BATTERY BACK UP OR FROM AN ON SITE EMERGENCY GENERATION SET. FOR ALL GROUP 1 DIV. 1.1 & 1.2 OCCUPANCIES, AND ALL OTHER OCCUPANCIES WHERE THE EXITING SYSTEM SERVE AN OCCUPANT LOAD OF 100 OR MORE.  
- 700 E 09 E EXIT ILLUMINATION.  
CHAPTER 10: EXIT ILLUMINATION SHALL BE WITH LIGHT HAVING INTENSITY NOT LESS THAN ONE (1) FOOT-CANDLE AT FLOOR LEVEL. THE POWER SUPPLY FOR EXIT ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES WIRING SYSTEM. IN THE EVENT OF ITS FAILURE, ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY SYSTEM. EMERGENCY SYSTEMS SHALL BE SUPPLIED FROM STORAGE BATTERIES OR AN ON-SITE GENERATOR SET, FOR ALL GROUP 1 DIV. 1.1 AND 1.2 OCCUPANCIES, ALL OTHER OCCUPANCIES WHERE EXISTING SYSTEM SERVE AN OCCUPANT LOAD OF 100 OR MORE. CHAPTER 10 I.B.C. LIGHTING LAYOUT MUST SHOW LIGHT FIXTURES THAT ARE TO BE DESIGNATED FOR EGRESS ILLUMINATION. IN MULTI STORY BUILDINGS WITH ENCLOSED STAIRWAYS, THERE MUST BE EXIT ILLUMINATION IN THE STAIRWAYS. EXIT ILLUMINATION IS A CONTINUOUS AND UNOBSTRUCTED MEANS OF EGRESS TO A PUBLIC WAY.

**NOTES FOR OUTLET REQUIRED AT A/C UNIT & HEATING UNIT:**

- 1- ARTICLE 210.63 OF THE N.E.C. REQUIRES A 125 VOLT, SINGLE PHASE, 15 OR 20 AMPERES-RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVING OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL WITHIN 25 FT. OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT.
- 2- ARTICLE 210.8 REQUIRES A RECEPTACLE TO BE GFCI PROTECTED.
- 3- ARTICLE 440.11 & 440.14 REQUIRE A DISCONNECTING MEANS.

**NOTES FOR ENERGY CONSERVATION:**

SPACE CONTROL  
EACH SPACE ENCLOSED BY CEILING-HIGHT PARTITION SHALL HAVE AT LEAST ONE CONTROL DEVICE TO INDEPENDENTLY CONTROL THE GENERAL LIGHTING WITH THE SPACE. EACH MANUAL DEVICE SHALL BE READILY ACCESSIBLE AND LOCATED SO THE OCCUPANTS CAN SEE THE CONTROLLED LIGHTING.  
(A) A CONTROL DEVICE SHALL BE INSTALLED THAT AUTOMATICALLY TURNS LIGHTING OFF WITHIN 30 MINUTES OF ALL OCCUPANTS LEAVING A SPACE.  
EXCEPTION TO 9.4.1.2(A): CLASSROOMS, CONFERENCE/MEETING ROOMS, AND EMPLOYEE LUNCH AND BREAKROOMS WITH BI-LEVEL SWITCHING.  
(B) EACH CONTROL DEVICE SHALL BE ACTIVATED EITHER MANUALLY BY AN OCCUPANT OR AUTOMATICALLY BY SENSING AN OCCUPANT. EACH CONTROL DEVICE SHALL CONTROL A MAXIMUM OF 25,000 SQUARE FEET AREA FOR A SPACE 10,000 SQUARE FEET OR LESS AND A MAXIMUM OF 10,000 SQUARE FEET AND BE CAPABLE OF OVERRIDING AN TIME-OF-DAY SCHEDULE SHUT OFF CONTROL FOR NO MORE THAN FOUR HOURS.  
EXCEPTION TO 9.4.1.2 (B): REMOTE LOCATION SHALL BE PERMITTED FOR REASONS OF SAFETY OR SECURITY WHEN THE REMOTE CONTROL DEVICE HAS AN INDICATOR PILOT LIGHT AS PART OF OR NEXT TO CONTROL DEVICE AND THE LIGHT IS CLEARLY LABELED TO IDENTIFY THE CONTROLLED LIGHTING.

**NOTES FOR 2015 ENERGY CONSERVATION:**

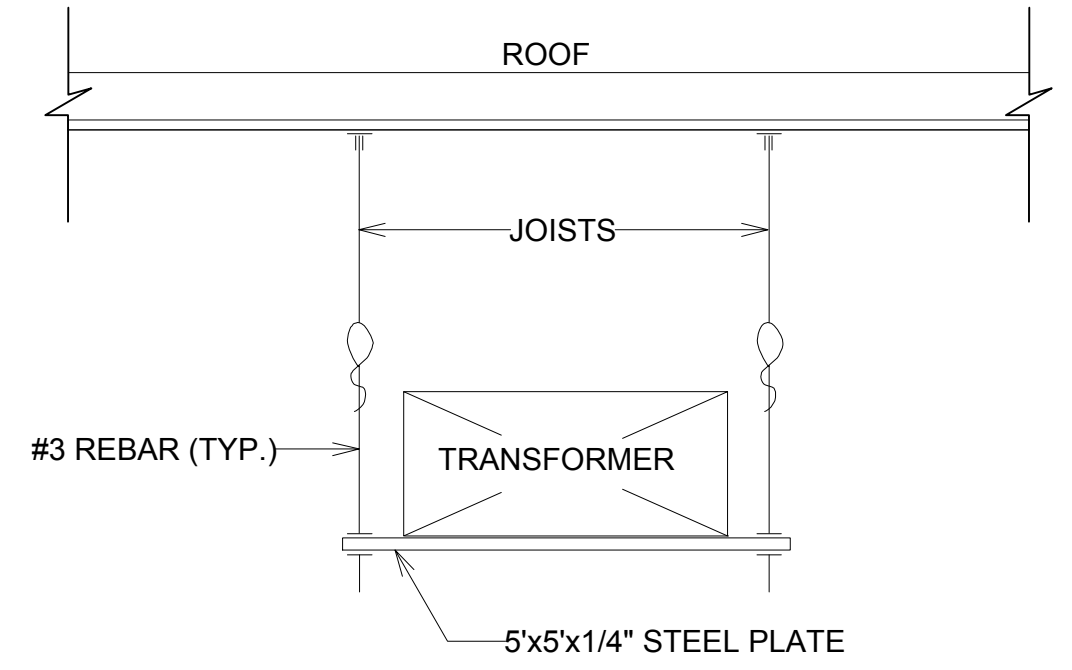
EACH SPACE ENCLOSED BY CEILING-HIGHT PARTITION SHALL HAVE AT LEAST ONE CONTROL DEVICE TO INDEPENDENTLY CONTROL THE GENERAL LIGHTING WITH THE SPACE. EACH MANUAL DEVICE SHALL BE READILY ACCESSIBLE AND LOCATED SO THE OCCUPANTS CAN SEE THE CONTROLLED LIGHTING.  
(A) A CONTROL DEVICE SHALL BE INSTALLED THAT AUTOMATICALLY TURNS LIGHTING OFF WITHIN 30 MINUTES OF ALL OCCUPANTS LEAVING A SPACE. EXCEPTION TO 9.4.1.2(A): CLASSROOMS, CONFERENCE/MEETING ROOMS, AND EMPLOYEE LUNCH AND BREAKROOMS WITH BI-LEVEL SWITCHING.  
(B) EACH CONTROL DEVICE SHALL BE ACTIVATED EITHER MANUALLY BY AN OCCUPANT OR AUTOMATICALLY BY SENSING AN OCCUPANT. EACH CONTROL DEVICE SHALL CONTROL A MAXIMUM OF 25,000 SQUARE FEET AREA FOR A SPACE 10,000 SQUARE FEET OR LESS AND A MAXIMUM OF 10,000 SQUARE FEET AND BE CAPABLE OF OVERRIDING ANY TIME-OF-DAY SCHEDULE SHUT OFF CONTROL FOR NO MORE THAN FOUR HOURS.  
EXCEPTION TO 9.4.1.2 (B): REMOTE LOCATION SHALL BE PERMITTED FOR REASONS OF SAFETY OR SECURITY WHEN THE REMOTE CONTROL DEVICE HAS AN INDICATOR PILOT LIGHT AS PART OF OR NEXT TO CONTROL DEVICE  
(C) AND THE LIGHT IS CLEARLY LABELED TO IDENTIFY THE CONTROLLED LIGHTING.

**EMERGENCY POWER SUPPLY:**

POWER SUPPLY FOR EXIT SIGN AND EMERGENCY LIGHTS SHALL BE PROVIDED BY PREMISES WIRING SYSTEM. IN THE EVENT OF NORMAL POWER FAILURE ILLUMINATION SHALL BE AUTOMATICALLY PROVIDE FROM AN EMERGENCY POWER - BATTERY BACK UP OR FROM AN ON SITE EMERGENCY GENERATION SET, TO ENSURE CONTINUED ILLUMINATION FOR A DURATION OF NOT LESS THAN 90 MINUTES. PER SECTION 1003.2.10.5, IBC 2012 EDITION.

**NOTE FOR LIGHT REDUCTION CONTROL - WORK AREA:**

EACH AREA THAT IS REQUIRED TO HAVE A MANUAL CONTROL SHALL ALSO ALLOW THE OCCUPANT TO REDUCE THE CONNECTED LIGHTING LOAD IN A REASONABLY UNIFORM ILLUMINATED PATTERN BY AT LEAST 50% LIGHTING REDUCTION SHALL BE ACHIEVED BY ONE OF THE FOLLOWING METHODS:  
1 - CONTROLLING ALL LAMPS OR LUMINAIRES.  
2 - DUAL SWITCHING OF ALTERNATE ROWS OF LUMINAIRES, ALTERNATE LUMINAIRES OR ALTERNATE LAMPS.  
3 - SWITCHING THE MIDDLE LAMP LUMINAIRES INDEPENDENTLY OF THE OUTER LAMPS.  
4 - SWITCHING EACH LUMINAIRE OR EACH LAMP.



**TRANSFORMER ABOVE CEILING DETAIL**

**PANEL "P"**  
ISC = 10,000 AMPS - RMS

SERVICE : 120V / 208V - 3PH - 4W  
MAIN : 100 AMPS - MCB  
CABINET : SURFACE MOUNTED

LOAD	VA	WIRE BRK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
LIGHTING	8,400	12	20																														
4" WAREHOUSE LIGHT																																	
2" x 4" RECESSED																																	
EXHAUST FANS (1 UNITS) 180																																	
RECEPTACLES	900																																
SIGN	1,200																																
SIGN	SPARE																																
TOTAL LOAD:		10,680 KVA																															

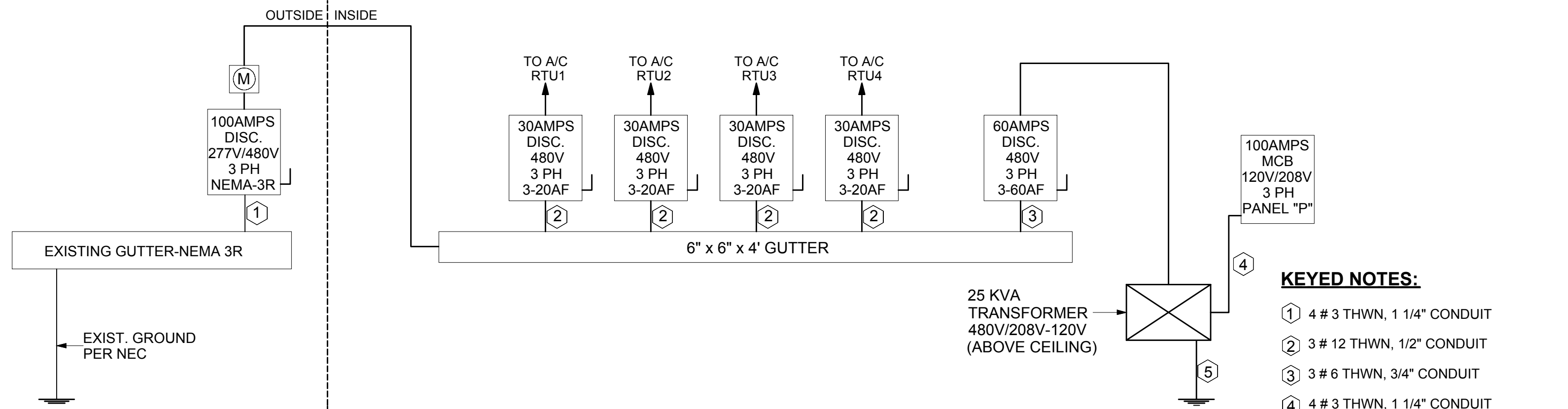
**SERVICE:**

	A	B	C	N
4 A/C (OMT) HEATER = 4 x 10 KW @ 480 V - 3PH 4 x 10,000 VA -- 480√3 V = 48.4	48.40	48.40	48.40	-
TRANSFORMER = 25 KVA @ 480 V - 3 PH 25 VA -- 480√3 V	30.10	30.10	30.10	-
TOTAL:	78.50	78.50	78.50	-

**TRANSFORMER CALCULATIONS:**

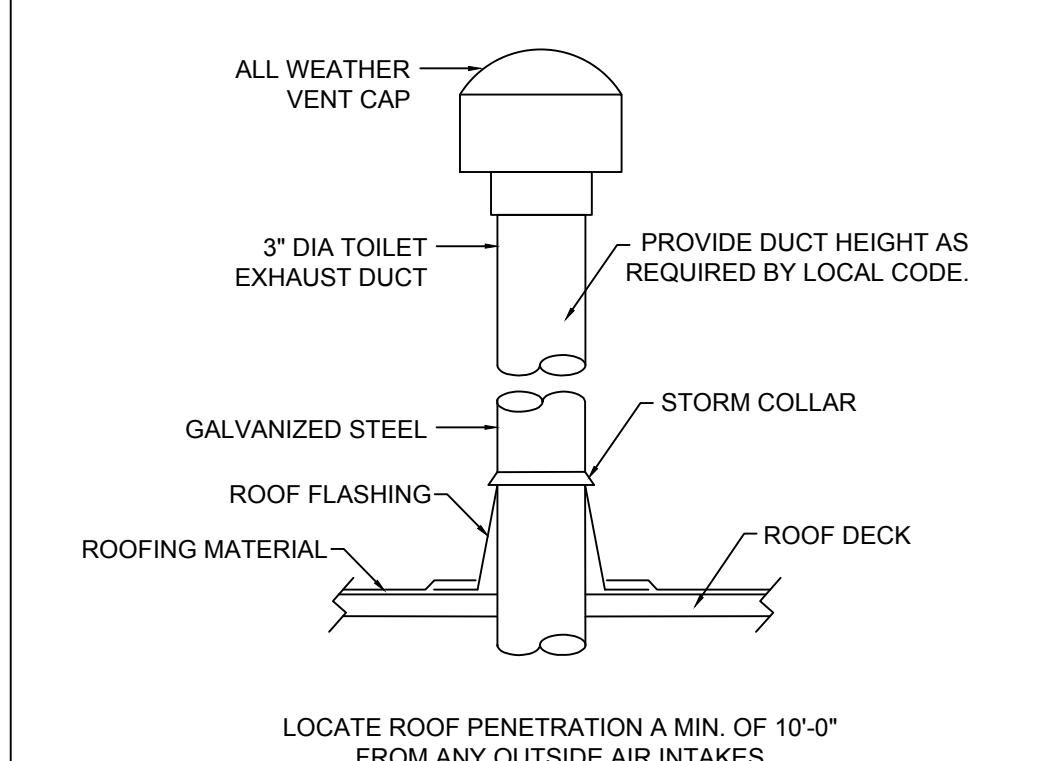
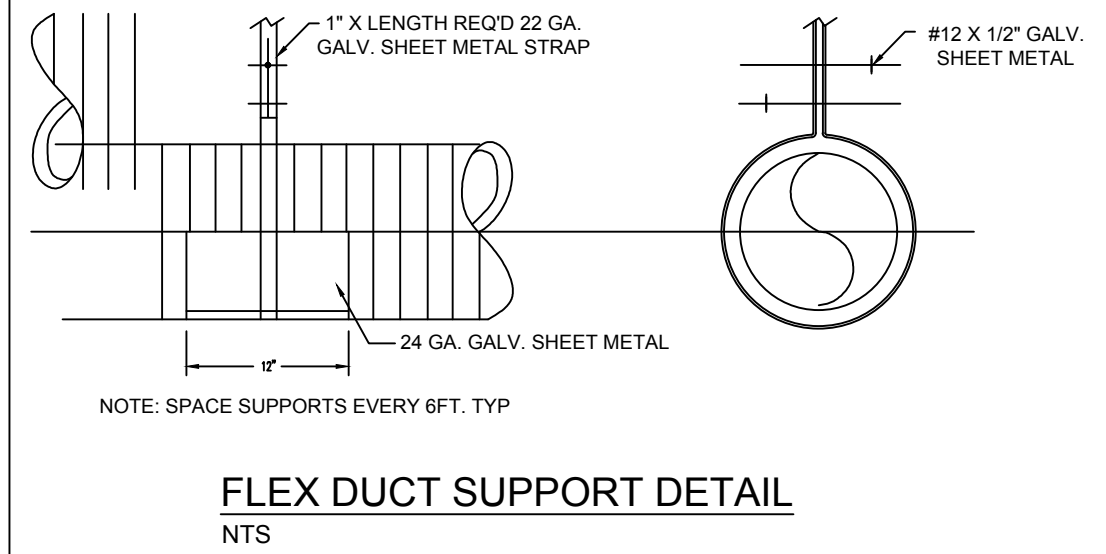
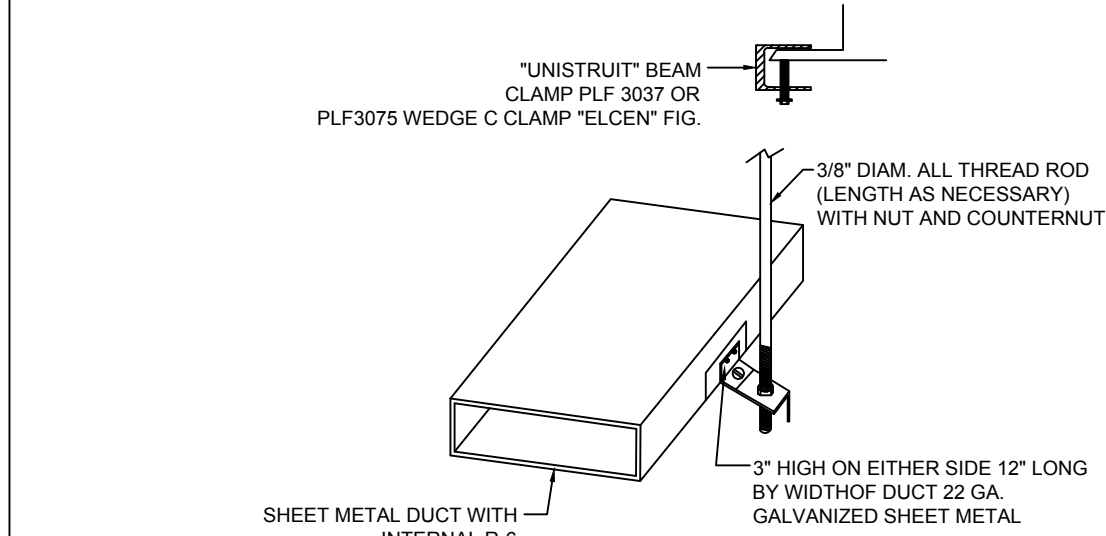
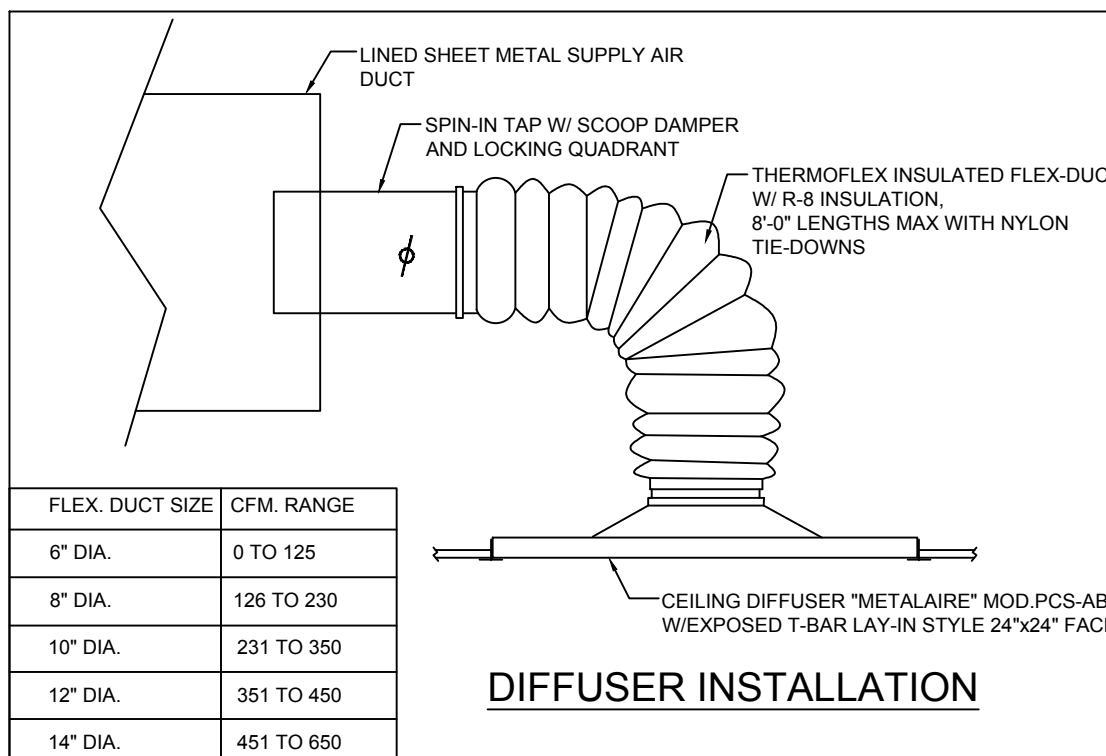
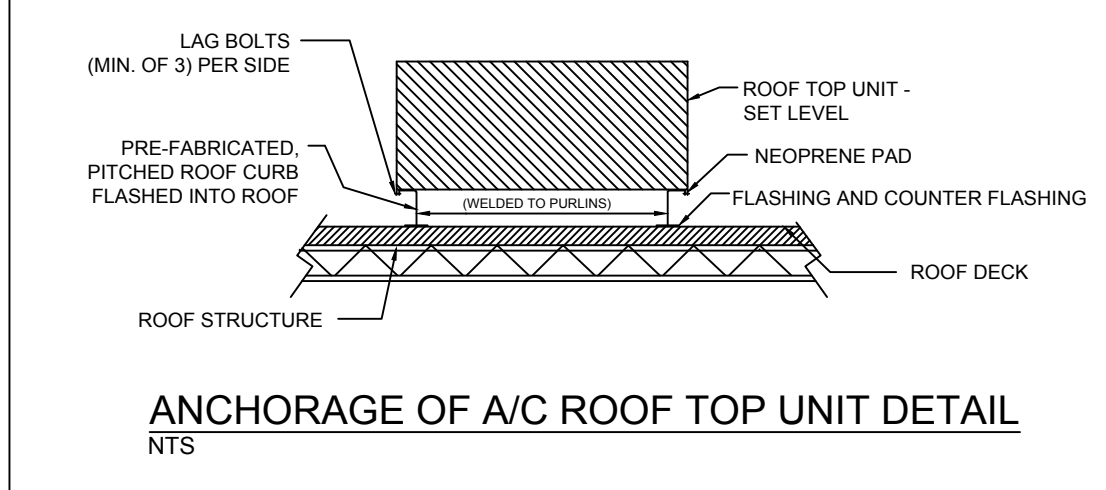
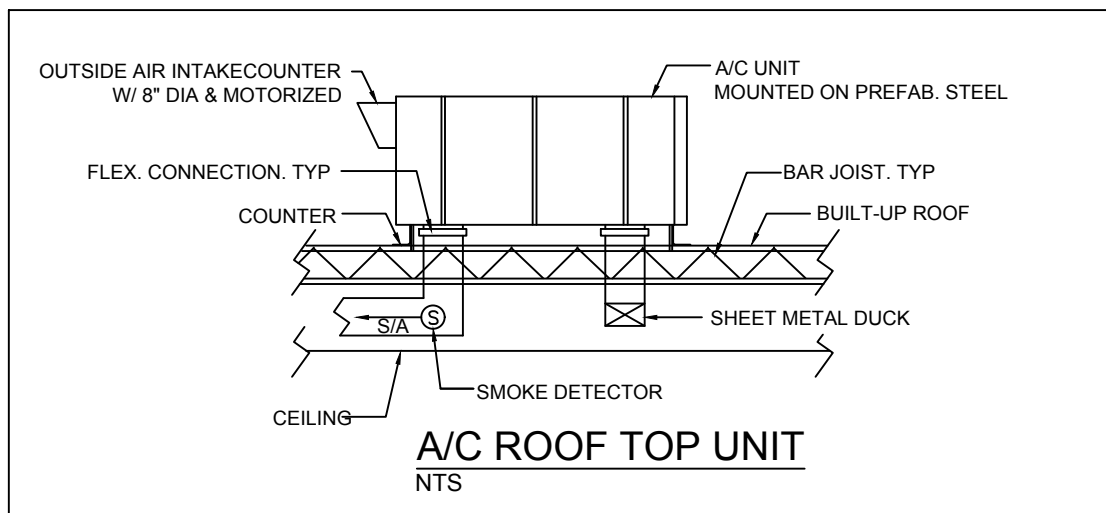
GENE LIGHTING = 8,400 VA  
SIGN = 1,200 VA  
RECEPTACLES = 5 x 180 VA = 900 VA  
EXHAUST FAN (R/R) 1.50 x 120 v = 180 VA  
TOTAL = 10,680 VA

TRANSFORMER SIZE : 25 KVA @ 480 V - 3 PH. PRL  
@ 120V / 208 V - 3 PH. SEC.



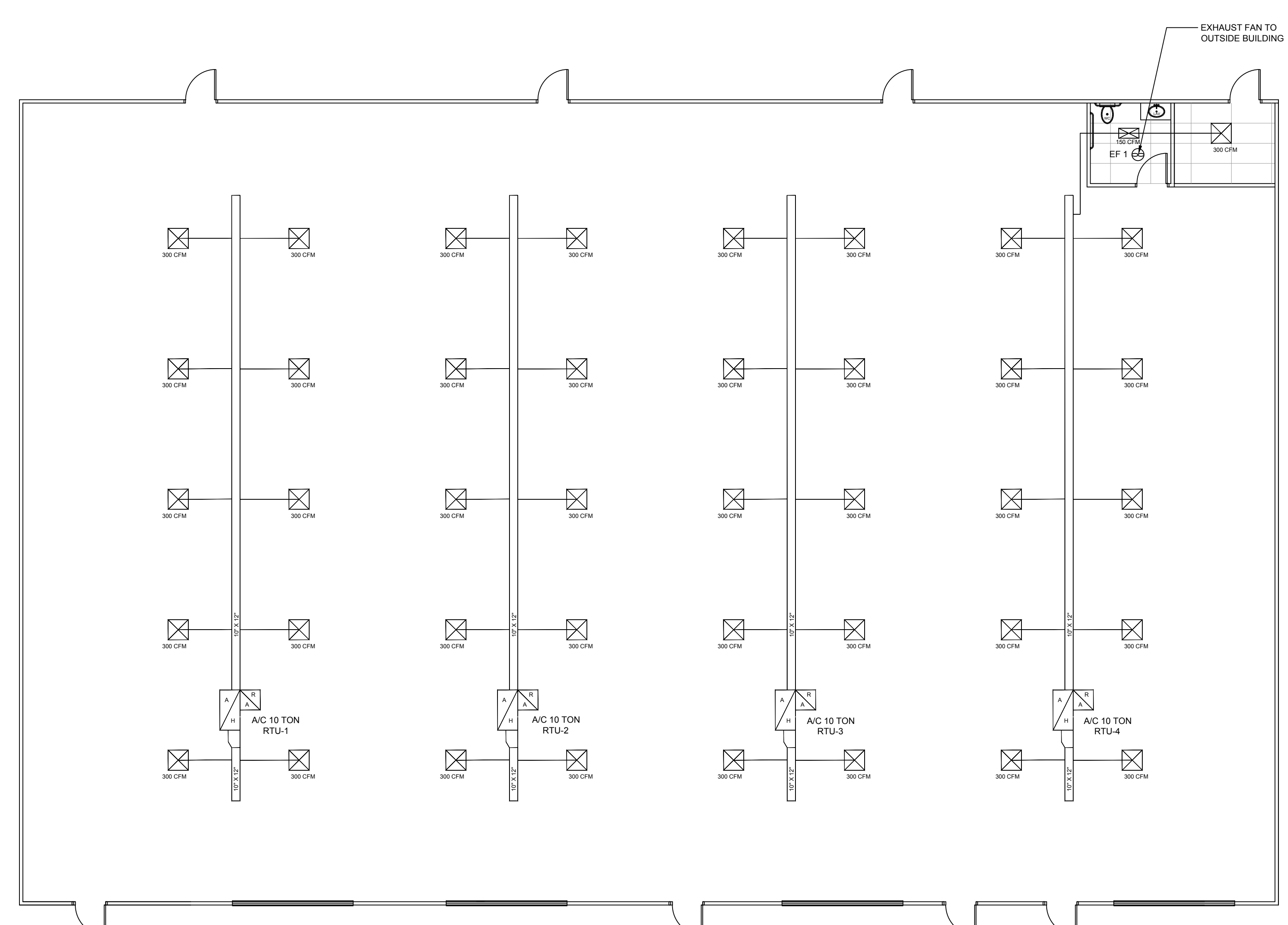
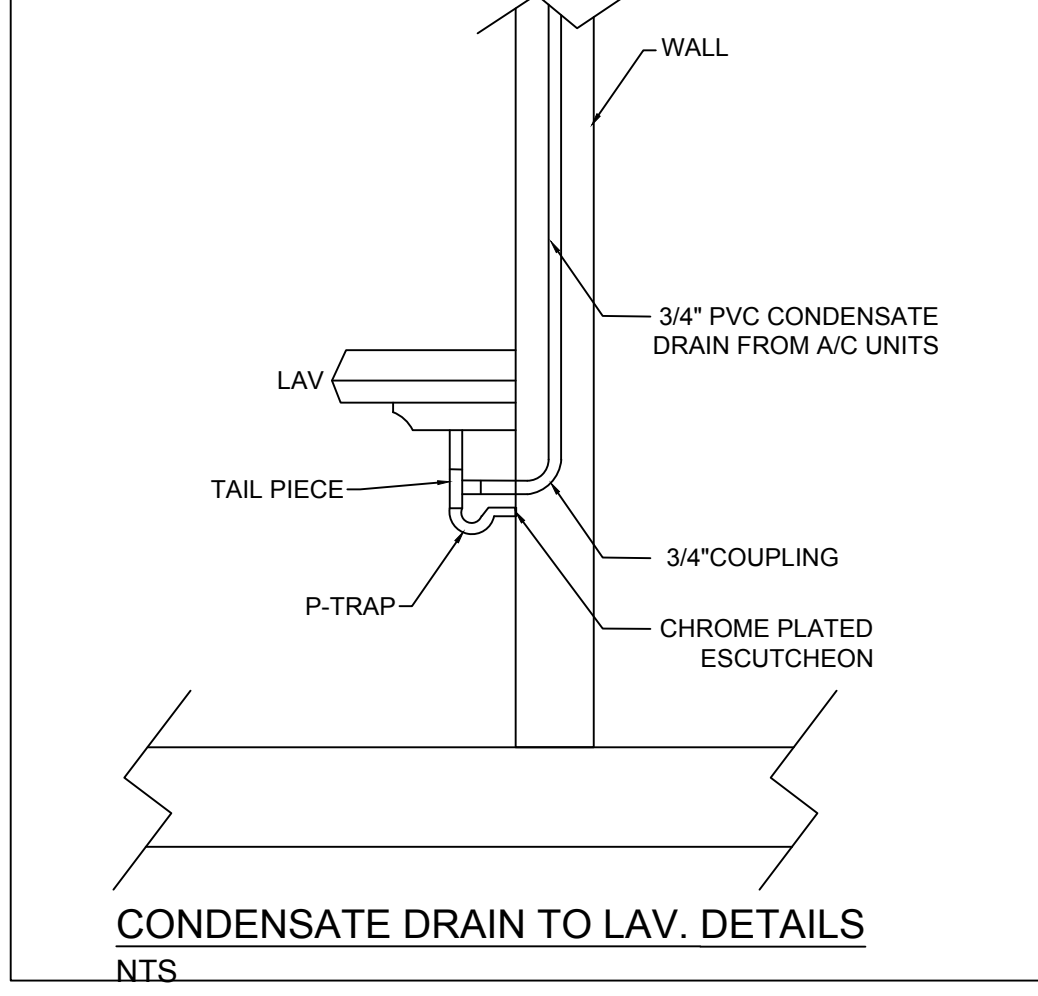
**ELECTRICAL ONE - LINE DIAGRAM**  
NTS

- KEYED NOTES:**
- 1 4 # 3 THWN, 1 1/4" CONDUIT
  - 2 3 # 12 THWN, 1/2" CONDUIT
  - 3 3 # 6 THWN, 3/4" CONDUIT
  - 4 4 # 3 THWN, 1 1/4" CONDUIT
  - 5 1 # 8 CU TO GROUNDING ROD & WATER PIPE & BUILDING STRUCTURE.



LOCATE ROOF PENETRATION A MIN. OF 10'-0" FROM ANY OUTSIDE AIR INTAKES

**TOILETE E.F. DETAILS**  
NTS



MECHANICAL PLAN  
SCALE: 1/8" = 1'-0"

HVAC EQUIPMENT SCHEDULE								
EQUIP. (DIA.)	MODEL	COOL (BTU)	HEAT (KVA)	TON	ELECTRICAL	CFM	REMARKS	OUTDOOR AIR INTAKE
A/C RTU-1	CARRIER OR EQUIV.	120,000	20	10	240V/3PH	4,000	1000 CFM OUT DOOR AIR	8"
A/C RTU-2	CARRIER OR EQUIV.	120,000	20	10	240V/3PH	4,000	1000 CFM OUT DOOR AIR	8"
A/C RTU-3	CARRIER OR EQUIV.	120,000	20	10	240V/3PH	4,000	1000 CFM OUT DOOR AIR	8"
A/C RTU-4	CARRIER OR EQUIV.	120,000	20	10	240V/3PH	4,000	1000 CFM OUT DOOR AIR	8"
EF-1	GREENHECK-SP-850				120V/1PH	50EA		3"

**COMPLETION REQUIREMENTS:**

6.7.2.1 DRAWINGS, CONSTRUCTION DOCUMENTS SHALL BE REVIEWED THAT WITHIN 90 DAYS AFTER THE DAY OF SYSTEM ACCEPTANCE RECORD DRAWINGS OF THE ACTUAL INSTALLATION BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. RECORD DRAWINGS SHALL INCLUDE AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIPE DISTRIBUTION SYSTEM INCLUDING SIZES, AND THE TERMINAL AIR OR WATER DESIGN FLOW RATES.

6.7.2.2 MANUALS, CONSTRUCTION DOCUMENTS SHALL BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DAY OF SYSTEM ACCEPTANCE. THESE MANUALS SHALL BE IN ACCORDANCE WITH INDUSTRY-ACCEPTED STANDARDS (SEE APPENDIX E) AND SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:

(A) SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.

(B) OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.

(C) NAMES AND ADDRESSES OF AT LEAST ONE "SERVICE AGENCY".

(D) HVAC CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT CONTROL DEVICES OR FOR DIGITAL CONTROL SYSTEMS IN PROGRAMMING COMMENTS.

(E) A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING SUGGESTED SETPOINTS.

**SPECIFICATIONS:**

DUCT WORK SHALL BE CONSTRUCTED AND STALLED ACCORDING TO SMACNA STANDARD FOR LOW VELOCITY DUCT WORK - INSULATE ALL SUPPLY, RETURN AND OUTSIDE AIR DUCT WITH 1/2" THICK - FLEXIBLE DUCT SHALL BE INSULATED AND MAXIMUM LENGTH 4'-0". WHERE LONGER RUNS ARE REQUIRED COMBINE FLEXIBLE DUCT WITH RIGID ROUND DUCT. SEAL ALL TRANSVERSE JOINTS, SEAMS AND FITTINGS WITH FOSTER "32-50" WATER BASE HIGH VELOCITY DUCT SEALANT IN ACCORDANCE WITH SMACNA STANDARD.

- CONDENSATE LINES SHALL BE COPPER.

- PROVIDE COMPLETE HVAC CONTROL SYSTEM INCLUDING ELECTRONIC PROGRAMMABLE THERMOSTAT WITH TAMPER-ROOF LOCKING COVER, CONTROL WIRING'S CONDUITS, INTERLOCK WIRING AND CONTROL DEVICES.

- SUPPLY AIR DIFFUSER SHALL BE TITUS MODEL TDC, UNLESS OTHERWISE NOTED.

- 24" X 24" FACE, ROUND NECK WITH VOLUME DAMPER.

- FILTER RETURN AIR GRILL SHALL BE TITUS MODEL 4E7 OR EQUAL.

- CONTRACTOR SHALL INSTALL ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

**HVAC NOTES:**

1- ALL AIR CONDITIONING AND HEAT EQUIPMENTS MUST BE DISPLAYED APPROVED TESTING AGENCY ACCEPT TABLE SINGLE.

2- ALL DUCT WORKS TO BE INSULATED FULLY.

3- LOCATION OF GRILLE AND DIFFUSER ARE APPROXIMATE.

4- FRESH AIR INTAKE TO BE 15 FEET AWAY FROM ANY PLUMBING VENT OR HEATING FUELE.

**PREPARATION AND HOISTING PROCEDURES FOR SETTING ROOFTOP PACKAGED UNITS**

- INSTALL SUPPLY/RETURN PLENUMS BEFORE SETTING UNIT ON CURB.
- DRIVE SCREW TOP OF BOTH SUPPLY AND RETURN PLENUMS TO CURB. THIS WILL PREVENT AIR LEAKS BETWEEN PLENUMS AND CEILING SPACE.
- MAKE SURE ALL BEARING SURFACES ON CURB ARE FULLY GASKETED, AS SHOWN IN HEAVY BLACK ON THE HOISTING DETAILS. THIS WILL PREVENT AIR AND WATER LEAKS.
- HOOK RIGGING SHACKLES THROUGH HOLES IN LIFTING LUGS OR BRACKETS AS SHOWN IN DETAILS.
- USE SPREADER BARS ACROSS THE TOP OF THE UNIT TO PREVENT CRUSHING THE UNIT FRAME AND PANELS.
- REMOVE DUCT COVERS IN BOTTOM OF UNIT FOR DOWN DISCHARGE/RETURN DUCT CONNECTIONS BEFORE SETTING UNIT ON CURB.
- AFTER UNIT HAS BEEN SET, CHECK ALIGNMENT OF UNIT AND GASKETING TO INSURE AIRTIGHT SEALS.
- HVAC INSTALLER TO DEPLOY ECONOMIZER RAIN HOOD AND INSTALL COMBUSTION AIR INLET AND VENT AIR OUTLET HOODS ON THE UNIT. INLET & OUTLET HOODS WILL BE SHIPPED IN THE BLOWER COMPARTMENT ALONG WITH GAS PIPING KIT. ECONOMIZER HOOD IS SHIPPED SEPARATELY IN A WOODEN CRATE. A CARDBOARD COVER WHICH PROTECTS THE CONDENSER SHOULD ONLY BE REMOVED BY THE HVAC SUPPLIER START UP TECHNICIAN.
- ELECTRICAL & PLUMBING CONTRACTORS ARE RESPONSIBLE FOR PROVIDING WATER-TIGHT SEAL AROUND ALL CONDUIT AND PIPING PENETRATIONS THROUGH BOTTOM OF HVAC UNITS.

HOISTING NOTES: N.T.S

- VERIFY ALL DIMENSIONS AND CONDITIONS AT JOB SITE AND FROM ARCHITECTURAL PLANS.
- CONTRACTOR AND SUB-CONTRACTOR SHALL PAY FOR ALL PERMITS AND CHARGES REQUIRED AND COMPLY WITH ALL GOVERNING CODES AND ORDINANCES.
- VISITING THE SITE: EACH BIDDER SHALL VISIT THE SITE OF THE PROPOSED WORK AND SHALL FULLY INFORM HIMSELF REGARDING THE FACILITIES. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK OR MATERIALS OMITTED FROM BIDDER'S CONTRACT PROPOSAL DUE TO HIS FAILURE TO SO INFORM HIMSELF BY SUCH INVESTIGATION.
- CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND STRUCTURE ENGINEER PRIOR TO THE PLACEMENT OF EQUIPMENT ON THE ROOF AND THE CUTTING OF THE ROOF OPENINGS.
- REFER TO THE REFLECTIVE CEILING PLAN FOR THE EXACT LOCATIONS OF ALL CEILING AIR DEVICES.
- FURNISH AND INSTALL COMPLETE, AND OPERATIONAL MECHANICAL SYSTEMS AS SHOWN ON PLANS AND SPECIFIED HEREIN.
- DUCTWORK SHALL BE AS FOLLOWING:
  - RIGID FIBERGLASS DUCT SHALL BE 1.5" THICK FIBERGLASS DUCT BOARD WITH ALUMINUM VAPOR BARRIER ON THE EXTERIOR COMPLIANT WITH U.L. STANDARD NO. 181, AIR DUCT.
  - FURNISH AND INSTALL AIR SCOOPS, EXTRACTORS, SPIN-IN FITTINGS WITH VOLUME DAMPERS AND SPLIT DAMPERS WITH OPERATORS AND LOCKING QUADRANTS AT ALL SPLITS, BRANCH AND CONNECTIONS AND REGISTER OR DIFFUSER CONNECTIONS TO DUCTWORK AND AS OTHERWISE INDICATED ON PLANS.
  - INSULATE ALL GALVANIZED SHEETMETAL SUPPLY, RETURN AND OUTSIDE AIR DUCT WITH 1" THICK, MATFACED INTERNAL DUCT LINER WITH SCREW SUPPORT AT 12" ON CENTER.
  - DIMENSIONS SHOWN ON PLANS SHALL BE FREE AIR FLOW AREA.
  - FLEXIBLE DUCT SHALL BE INSULATED WHERE LONGER RUNS ARE REQUIRED COMBINE FLEX. DUCT WITH RIGID ROUND DUCT (INSULATED).
  - SEAL ALL TRANSVERSE JOINTS, SEAMS AND FITTINGS WITH FOSTER "32-50" WATER BASE HIGH VELOCITY DUCT SEALANT IN ACCORDANCE WITH SMACNA STANDARD.
  - ALL SUPPLY & RETURN AIR DUCTS LOCATED OUTSIDE THE BUILDING SHALL BE INSULATED USING R-8 INSULATION. EXTERNALLY INSULATED DUCT SHALL BE R-8.
  - ALL SUPPLY & RETURN AIR DUCTS LOCATED INSIDE THE BUILDING SHALL BE INSULATED USING R-6 INSULATION. EXTERNALLY INSULATED DUCT SHALL BE R-6.
  - CONDENSATE LINES SHALL BE FULL SIZE, DRAIN TO FLOOR DRAIN.
  - PROVIDE COMPLETE HVAC CONTROL SYSTEMS INCLUDING ELECTRONICS PROGRAMMABLE THERMOSTAT WITH TAMPER-PROOF LOCKING COVER, CONTROL WIRING CONDUITS, INTERLOCK WIRING AND CONTROL DEVICES.
  - SUPPLY AIR DIFFUSER SHALL BE TITUS MODEL, TDC, UNLESS NOTED OTHERWISE, 24" X 24" FACE, ROUND NECK WITH VOLUME DAMPER.
  - RETURN AND EXHAUST AIR GRILLES SHALL BE TITUS MODEL OF 50F OR EQUAL.
  - CONTRACTOR SHALL INSTALL ALL MECHANICAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - BALANCE AIR DISTRIBUTION SYSTEMS PER ABC STANDARDS. CONTRACTOR SHALL SUBMIT FINAL BALANCING REPORT SIGNED BY ABC CERTIFIED ENGINEER.
  - CEILING EXHAUST GRILLE AND TRANSFER AIR GRILLE SHALL BE TITUS MODEL 50F OR EQUAL.

MECHANICAL NOTES: N.T.S

PROJECT: **SPUR 10**

2445 PATTON RD. STE # 00  
ROSENBERG, TEXAS 77471

DRAWN BY:  
**MAN TRAN**  
DATE: ~~1/11/23~~ 1/23/2023

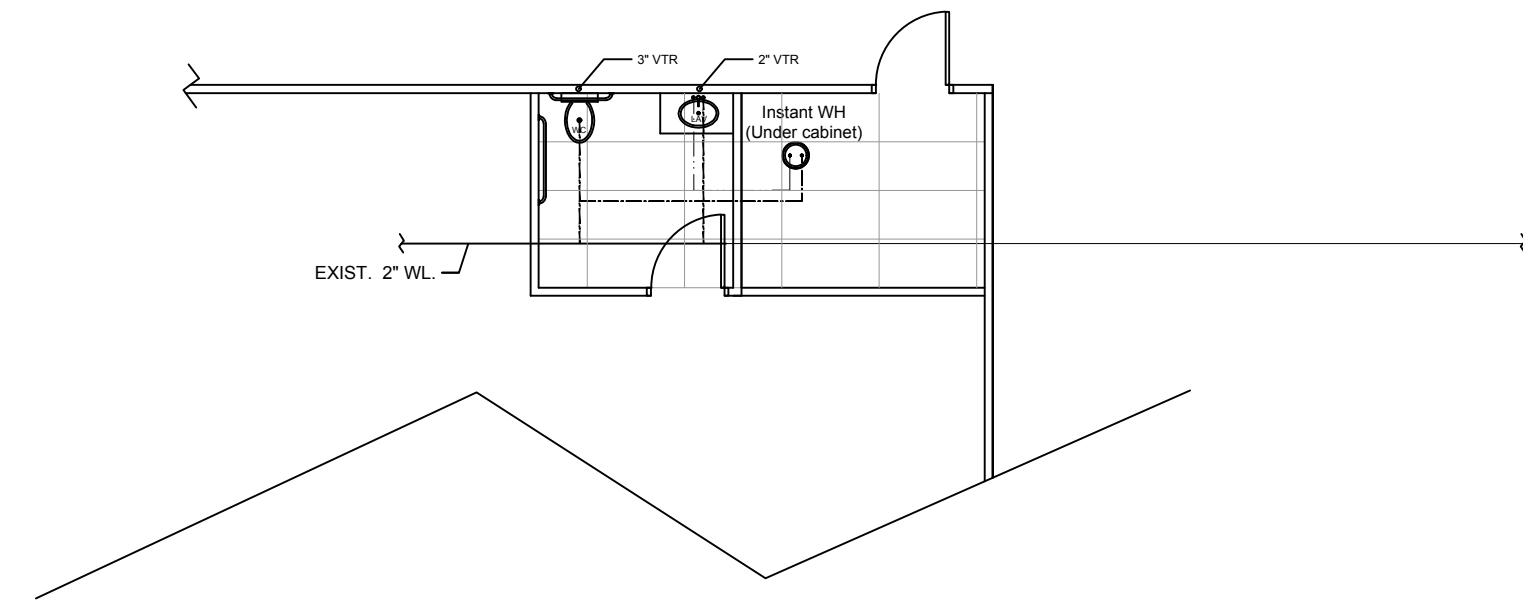
CHECK BY:  
**LOC NGUYEN**  
DATE: ~~1/11/23~~ 1/23/2023

SHEET TITLE:  
**MECHANICAL PLAN**

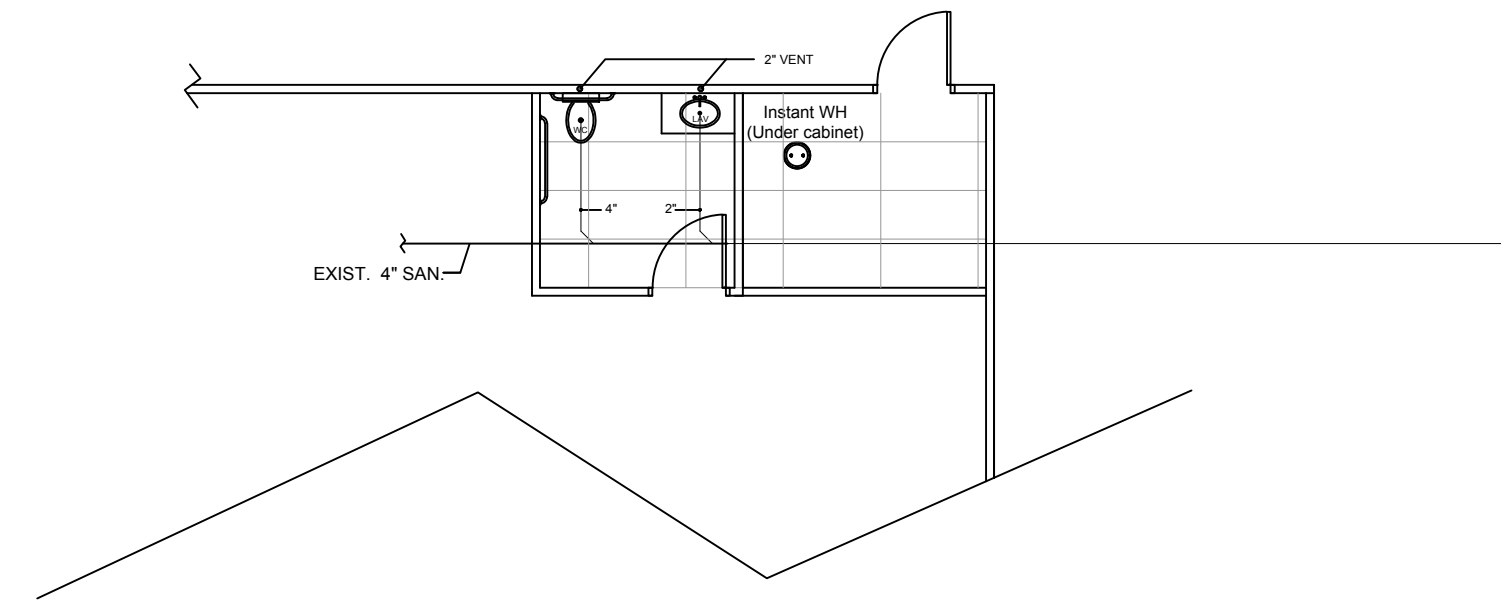
SHEET:  
**M-1 OF 6**

SCALE 1/8" = 1'-0"





PLUMBING PLAN  
SCALE 1/8" = 1'-0"



SANITARY SEWER PLAN  
SCALE 1/8" = 1'-0"

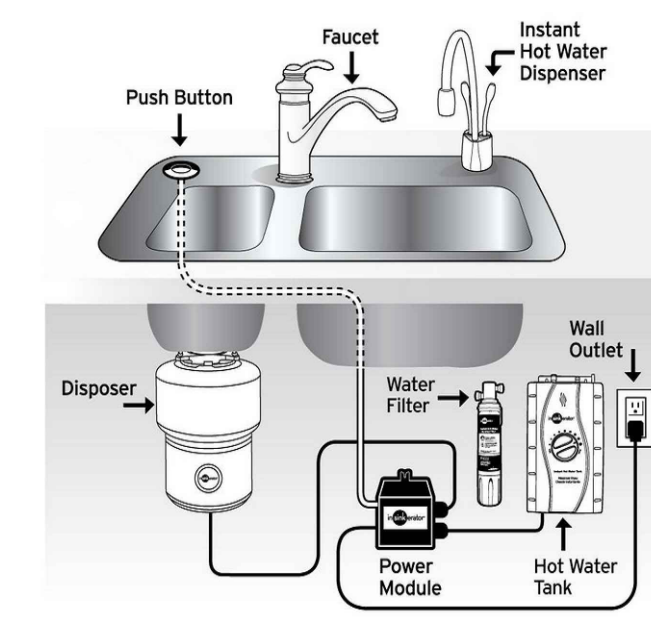
PLUMBING FIXTURE SCHEDULE	
MANUFACTURE	CATALOG NO.
WC	AMERICAN STANDARD MODEL NO. 2168.100 VITREOUS CHINA 18" HIGH BOWL AND TO BE DUAL FLUSH TYPE.
LAV	AMERICAN STANDARD MODEL NO. 0476.028 WALL HUNG 0124.024 WITH 5502.170 FAUCET, SUPPLES, TRAP, TAILPIECE AND SUPPORT.
WATER HEATER	InSinkErator MODEL NO. HWT-00 / INSTANT HOT WATER TANK FOR HOT WATER DISPENSERS

THE INSTANT HOT WATER TANK FEATURES A 2 1/2 GAL. STAINLESS STEEL TANK WITH 750-WATT HEATING ELEMENT, RE-ENGINEERED FOR LONGER LIFE AND IMPROVED PERFORMANCE. THIS TANK PROVIDES UP TO 200 NEAR BOILING WATER AT UP TO 60 CUPS PER HOUR, TOOL-FREE CONNECTIONS TO EASE INSTALLATION, AND DRY-START PROTECTION FOR PEACE OF MIND.

PLUMBING SYMBOLS & ROUGH-IN SCHEDULE						
SYMBOL	DESCRIPTION	OW	HW	SAN	VENT	REMARKS
WC	WATER CLOSET	1/2"	-	4"	2"	
LAV	LAVATORY	1/2"	1/2"	2"	2"	

PLUMBING PLAN NOTES

- OWNER AND/OR HIS CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- THE OWNER OR HIS CONTRACTOR SHALL CONTACT MDS BUILDER SERVICES DEPARTMENT AT 281.290.6503 OPTION 2 OR VIA EMAIL AT [BLDRSERVICES@MDSBUILDER.COM](mailto:BLDRSERVICES@MDSBUILDER.COM) PRIOR TO CONSTRUCTION, TO OBTAIN TAP FEES AND TO REQUEST ALL REQUIRED INSPECTIONS. SANITARY SEWER CONNECTION AND GREASE LINES SHALL BE INSPECTED BY MDS PRIOR TO BACKFILL.
- THE OWNER OR HIS CONTRACTOR SHALL INSTALL APPROPRIATE BACKFLOW PREVENTION DEVICES IN ACCORDANCE WITH STATE PLUMBING CODES OR AS REQUIRED BY THE DISTRICT'S OPERATOR. BACKFLOW TEST REPORTS MUST BE AVAILABLE AT THE TIME OF INSPECTION. COPIES OF ANNUAL TEST REPORTS MUST BE FORWARDED TO THE DISTRICT.
- THE CUSTOMER SERVICE INSPECTION MUST BE COMPLETED BY MDS ONCE CONSTRUCTION IS COMPLETE AND PRIOR TO OCCUPANCY OF EACH BUILDING. PROVIDE ACCESS TO ALL AREAS OF THE SITE AND STRUCTURES - 48 HOUR NOTICE REQUIRED TO SCHEDULE INSPECTION
- INTERCEPTORS AND SAMPLE WELLS SHALL BE LOCATED OUTSIDE AND BEDDED/BACKFILLED WITH CEMENT STABILIZED SAND



PLUMBING RISER DIAGRAM  
NTS.

PROJECT:  
**SPUR 10**  
2445 PATTON RD. STE #100  
ROSENBERG, TEXAS 77471

DRAWN BY:  
**MAN TRAN**  
DATE: MAY/21/2021

CHECK BY:  
**LOC NGUYEN**  
DATE: MAY/21/2021

SHEET TITLE:  
**PLUMBING PLAN**

SHEET:  
**P-1 OF 6**

SCALE 1/8" = 1'-0"