



KALAJIAN ARCHITECTURE & DESIGN LLC. ARCHITECTS

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PROPOSED REMODELING OF AN EXISTING BUILDING

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RENO. EXIST. GAS STATION 8233 N. VIA PASEO DEL NORTE SCOTTSDALE, ARIZ. 85258

DESCRIPTION: SPECS

DRAWN BY Author

CHECKED BY Checker

DATE 10.26.23

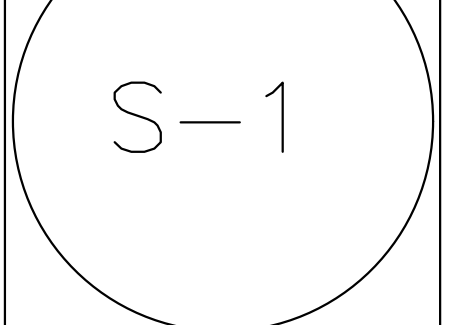
PROJECT # 008-23-03-16

SCALE

SEAL:

Table with 3 columns: Date, No., Issued by

SHEET NO.



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MASONRY NOTES

CONTRACTOR & ALL SUB-TRADES ARE RESPONSIBLE FOR REVIEWING & COMPLYING WITH ALL APPLICABLE SPECIFICATIONS CONTAINED HEREIN. WHERE DISCREPANCIES OCCUR BETWEEN DESIGN DRAWINGS AND THESE NOTES, DESIGN DRAWING SPECIFICATIONS ARE TO SUPERCEDE.

GENERAL WORKMANSHIP

- A. ALL WORK SHALL BE IN COMPLIANCE WITH THE LATEST BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, MICHIGAN BUILDING CODE, ACI 530/ASCE 5/TMS402 AND SPECIFICATIONS FOR MASONRY STRUCTURES ACI 530.1/ASCE 6/TMS 602 AND N.C.M.A. SPECIFICATIONS.
B. THE MASONRY CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PLACEMENT OF ALL TEMPORARY SHORING NECESSARY FOR THE STABILITY OF MASONRY STRUCTURES DURING CONSTRUCTION AND PRIOR TO THE COMPLETION OF THE PROJECT AS SHOWN IN ITS ENTIRETY IN THE CONSTRUCTION DOCUMENTS.
C. ALL MASONRY BELOW GRADE OR FIN. SLAB ON GRADE SHALL BE SOLID OR HAVE CORES GROUTED SOLID.
D. INTERIOR WALLS TO BE TIED TO THE BUILDINGS' STRUCTURAL STEEL AT THE TOP OF THE WALL @ 48" O.C. MAX. WITH A CONNECTION CAPABLE OF MIN. 1" VERT. DEFLECTION. VERIFY CONNECTION DETAIL WITH ENGINEER.

MATERIALS

- A. ALL MORTAR SHALL BE TYPE "M" or "S".
B. ALL CONCRETE MASONRY UNITS SHALL CONFORM TO THE LATEST VERSION OF THE FOLLOWING:
ASTM C 90 FOR LOAD BEARING OR REINFORCED CONCRETE UNITS.
ASTM C 744 FOR PREFACED CONCRETE AND CALCIUM SILICATE UNITS.
ASTM C 55 GRADE N FOR CONCRETE BRICK, I.e. SPLIT FACE.
ASTM C 73 FOR CALCIUM SILICATE FACE BRICK.
C. ALL CLAY OR SHALE FACING BRICK SHALL CONFORM TO ASTM C 216. ALL CLAY OR SHALE HOLLOW BRICK SHALL CONFORM TO ASTM C 652.
D. ALL MASONRY SHALL DEVELOP A 28 DAY MINIMUM PRISM STRENGTH fm = 1500 psi.
E. ALL REINFORCING BARS, DOWELS, AND TIES SHALL CONFORM TO ASTM A 615 GRADE 60. REINFORCING STEEL SHALL BE CONTINUOUS AND HAVE A MINIMUM 50 BAR DIAMETER LAP AND BE PLACED IN ACCORDANCE WITH ACI 530/ASCE 5/TMS402.

SPECIAL INSPECTION

WORK CONSTRUCTED SHALL BE INSPECTED BY AN INDEPENDENT TESTING AGENCY TO ENSURE COMPLIANCE WITH THE REQUIREMENTS SHOWN ON THE DRAWINGS. INSPECTIONS REQUIRED BY CHAPTER 17 OF THE MICHIGAN BUILDING CODE; LOCAL BUILDING DEPARTMENTS AND THE CONTRACT DOCUMENTS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AGENCY. SITE VISITS BY THE DESIGN ENGINEER DO NOT CONSTITUTE OR REPLACE INSPECTION.

THE FOLLOWING ITEMS SHALL BE INSPECTED IN ACCORDANCE WITH MBC SEC. 1704 BY A CERTIFIED SPECIAL INSPECTOR UNLESS NOTED OTHERWISE IN REMARKS COLUMNS. ALL INSPECTION SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED. ALL PRODUCTS WITH ICBO APPROVALS SHALL BE INSTALLED PER THE APPROVAL AND PER MANUFACTURER'S RECOMMENDATIONS. FOR MATERIAL TESTING REQUIREMENTS, SEE SPECIFICATIONS AND/OR GENERAL NOTES. TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT.

FABRICATOR'S SHOP (SEC. 1704.2.5)

STEEL FABRICATION
INSPECTION AGENCY TO SUBMIT CERTIFICATE OF APPROVAL
*SPECIAL INSPECTION IS NOT REQUIRED FOR FABRICATOR SHOP IF CERTIFICATE OF APPROVAL SUBMITTED BY FABRICATOR'S INSPECTION AGENCY PER 1704.2.1 EXCEPTION AND 1704.2.2

STEEL CONSTRUCTION (SEC. 1705.2 & TABLE 1705.2.2)

WELDS (TABLE 1705.2.2 #2)
INSPECTION MUST MEET ALL SECTION 1705 REQUIREMENTS

MASONRY CONSTRUCTION (1705.4)

MASONRY CONSTRUCTION MUST BE INSPECTED ACCORDING TO 1705.4 REQUIREMENTS

SOIL(1803)

SPECIAL INSPECTIONS FOR EXISTING SITE SOIL CONDITION, FILL PLACEMENT AND LOAD-BEARING REQUIREMENTS SHALL BE AS REQUIRED BY THE SECTION AND TABLE 1806.2

GENERAL NOTES

IF ANY GENERAL NOTE CONFLICTS WITH ANY DETAIL OR NOTE ON THE PLANS OR IN THE SPECIFICATIONS, THE STRICTEST PROVISION SHALL GOVERN
THE STRUCTURAL DRAWINGS ARE FOR THE PLACEMENT AND SIZE OF STRUCTURAL COMPONENTS ONLY. REQUIREMENTS MADE BY OSHA, DNR, AND ALL APPLICABLE SAFETY CODES ARE TO BE DETERMINED AND PROVIDED BY THE CONTRACTOR

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. IT IS CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION/ERECTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES PROVIDING TEMPORARY BRACING, SHORING GUYS OR TIE-DOWNS, THESE TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL COMPONENTS ARE IN PLACE AND COMPLETED AS THE STRUCTURAL MEMBERS OR SYSTEMS ARE NOT SELF-BRACING UNTIL PERMANENTLY CONNECTED TO THE STRUCTURE

THE ARCHITECT AND STRUCTURAL ENGINEER ASSUME NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION, AS SUCH, THE MEANS, AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY ON THE CONTRACTOR(S)

EXISTING CONSTRUCTION AND GENERAL - UNLESS OTHERWISE NOTED

VERIFY ALL CONDITIONS COVERING OR AFFECTING THE STRUCTURAL WORK OBTAIN AND VERIFY ALL DIMENSIONS TO ENSURE THE PROPER STRENGTH, FIT AND LOCATION OF THE STRUCTURAL WORK; REPORT TO THE ENGINEER ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK

THIS CONTRACTOR SHALL MAKE ALL NECESSARY FIELD MEASUREMENTS AS REQUIRED FOR CONNECTIONS TO ADJOINING WORK. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS SHOWN ON THE DRAWING BEFORE COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S AUTHORIZED RESIDENT REPRESENTATIVE

ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF NATIONAL OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS AND MIOSHA, THE LOCAL GOVERNING CODE, LATEST EDITION, AND ALL REQUIREMENTS SPECIFIED IN THE CODE SHALL BE ADHERED TO AS IF THEY ARE CALLED FOR OR SHOWN ON THE DRAWINGS. THIS SHALL NOT BE CONSTRUED TO MEAN THAT ANY REQUIREMENTS SET FORTH ON THE DRAWING MAY BE MODIFIED BECAUSE THEY ARE MORE STRINGENT THAN THE CODE REQUIREMENTS OR BECAUSE THEY ARE NOT SPECIFICALLY REQUIRED BY DOE

ALL WORK SHOWN ON THESE DRAWINGS MAY BE CHECKED BY AN INDEPENDENT TESTING AGENCY RETAINED BY OWNER OR PRIME CONTRACTOR TO ENSURE COMPLIANCE WITH THE REQUIREMENTS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ACCESS AS REQUIRED FOR TESTING PURPOSES

DO NOT SCALE DRAWINGS. USE DIMENSIONS ONLY

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MICHIGAN BUILDING CODE MBC-2012

WELDING

- 1. WELDING SHALL BE IN ACCORDANCE WITH "STRUCTURAL WELDING CODE-STEEL" D1.1 AMERICAN WELDING SOCIETY OF LATEST ADOPTION. ELECTRODES FOR WELDING SHALL BE IN ACCORDANCE WITH AWS 5.1 OR 5.5, E70XX
2. ALL WELDED JOINTS SHALL BE MADE USING THOSE PRE-QUALIFIED OR QUALIFIED PER CHAPTER 5 OF THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS). ALL PRE-QUALIFIED JOINTS ARE LIMITED TO THOSE MADE BY THE FOLLOWING WELDING PROCEDURES:
1) MANUAL SHIELDED METAL ARC
2) SUBMERGED ARC
3) GAS METAL ARC (EXCEPT SHORT CIRCUITING TRANSFER)
4) FLUX-COLORED ARC
3. WELDS SHALL BE MADE ONLY BY WELDERS AND WELDING OPERATORS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TESTS AS PRESCRIBED BY THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY AND ARE CURRENTLY CERTIFIED FOR THE TYPE OF JOINT TO BE WELDED
4. CONTRACTOR TO SUBMIT CURRENT WELDER QUALIFICATION CERTIFICATION TO THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING INSTALLATION
5. THE MINIMUM SIZE FILLET WELD SHALL BE 3/16 INCH U.N.D. THE SIZE AND LENGTH OF ALL FILLETS SHALL BE PROPORTIONED NOT TO LOCALLY OVERSTRESS THE CONNECTED MEMBERS
6. BEFORE WELDING MEMBERS TO EXISTING BEAMS OR COLUMNS, THOROUGHLY CLEAN ALL SURFACES TO REMOVE RUST, PAINT, DIRT OR OTHER FOREIGN MATTER IN THE AREA OF WELD

STRUCTURAL STEEL PAINTING

- 1. GENERAL - BEFORE ANY PRIME PAINT IS APPLIED ALL SURFACES OF STEEL MEMBERS SHALL BE THOROUGHLY CLEANED IN THE FABRICATING SHOP TO REMOVE LOOSE AND TIGHT MILL SCALE, RUST PACKS, DIRT AND OTHER FOREIGN MATTER. BURRS SHALL BE REMOVED BY GRINDING. ALL GREASE AND OIL SHALL BE REMOVED BY SOLVENTS. REMOVE COMPLETELY WELD-SPATTER METAL. SLAG AND OTHER WELD DEPOSIT PRODUCTS ADHERING TO THE STEEL. SURFACES SHALL BE THOROUGHLY DRY BEFORE PAINTING.
2. SURFACES OF STEEL, PRIOR TO PAINTING, SHALL BE AUTOMATICALLY OR MANUALLY CLEANED BY POWER TOOLS IN ACCORDANCE WITH SSPC-SP3 OR BRUSH-OFF BLAST CLEANED IN ACCORDANCE WITH SSPC-SP7
3. STEEL SURFACES THAT ARE TO BE SHOP-PAINTED BY THE CONTRACTOR SHALL BE DRY AND CLEANED OF LOOSE MILL SCALE, RUST, DIRT, OIL AND FOREIGN MATTER THAT WOULD BE DELETERIOUS TO THE PAINT. NO PAINT SHALL BE APPLIED WHEN THE TEMPERATURE IS BELOW 40° FAHRENHEIT
4. ALL AREAS AT CONTACT SURFACES OF JOINTS SHALL BE FREE OF OIL, PAINT, LOOSE SCALE AND BURRS
5. CONTACT SURFACES IN THE SLIP CRITICAL CONNECTIONS MADE WITH HIGH STRENGTH BOLTS WILL NOT BE PAINTED AS NOTED ON THE DRAWINGS
6. SHOP COATS SHALL BE FREE OF SKIPS AND RUNS, AND SHALL BE THOROUGHLY DRY BEFORE THE STEEL IS HANDLED OR SHIPPED
7. SHOP PAINT:
SHOP PRIME PAINT ALL STRUCTURAL STEEL WITH ONE COAT OF STANDARD PRIMER, LEAD AND CHROMATE FREE. (2.5 MIL DRY FILM THICKNESS)

CONCRETE NOTES

CONTRACTOR & ALL SUB-TRADES ARE RESPONSIBLE FOR REVIEWING & COMPLYING WITH ALL APPLICABLE SPECIFICATIONS CONTAINED HEREIN. WHERE DISCREPANCIES OCCUR BETWEEN DESIGN DRAWINGS AND THESE NOTES, DESIGN DRAWING SPECIFICATIONS ARE TO SUPERCEDE.

- A. MEASURING, MIXING AND PLACING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 304.
B. PROTECTION AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 305, 306 AND 308.
C. ALL PERTINENT SECTIONS OF ACI 318 SHALL APPLY.
D. REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH THE ACI 315.
E. ALL REINFORCING STEEL SHALL BE ASTM A 615 GRADE 60, DEFORMED IN ACCORDANCE WITH ASTM 305, UNLESS OTHERWISE NOTED.
F. STEP ALL FOOTINGS AT A RATIO OF (2) HORIZONTAL TO (1) VERTICAL.
G. ALL FOOTINGS TO REST ON UNDISTURBED SOIL.
H. ALL COLUMNS AND BASE PLATES ARE TO BE FULLY INCASED IN CONCRETE FROM FIRST FLOOR TO TOP OF FOOTING. PROVIDE ISOLATION JOINT ENCOMPASSING ENTIRETY OF BASE PLATE BETWEEN COLUMN POUR & FIN. FLOOR SLAB.
I. WELDED WIRE FABRIC SHALL BE FURNISHED IN FLAT SHEETS AND SHALL CONFORM TO ASTM A-185 HAVE A MINIMUM SIDE LAP OF 8 INCHES.

BACKFILLING:

- 1. BACKFILL MATERIAL SHALL CONSIST OF CLEAN, WELL GRADE GRANULAR SOILS, FREE OF ORGANIC MATERIAL, SILT AND CLAY, OR AS SPECIFIED IN SECTION 2 OF THE PROJECT SPECIFICATIONS
2. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY, AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557), IN LIFTS NOT EXCEEDING 6 INCHES

STRUCTURAL STEEL NOTES:

- 1. STEEL DESIGN, FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH THE LATEST A.I.S.C. SPECIFICATIONS FOR STRUCTURAL STEEL FOR BUILDINGS.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE LATEST A.S.T.M. SERIAL DESIGNATION A36 OR A.S.T.M. A572, FR50; STEEL TUBING TO BE A.S.T.M. A500; STEEL PIPE A.S.T.M. A-53 GRADE B. (BEAMS, STEEL JOIST 50 KSI AND ANGLES, BASE PLATE 36 KSI)
3. ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST AWS SPECIFICATIONS, E70XX ELECTRODES, WITH WELDING PERFORMED BY CERTIFIED WELDERS.
4. BOLTED CONNECTIONS SHALL BE MADE WITH A-325 OR A-490 BOLTS. ALL BOLTS ARE TO BE INSTALLED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS FOR "STRUCTURAL JOINTS USING A-325 OR A-490 BOLTS."
5. DESIGN CONNECTIONS FOR MINIMUM ONE-HALF THE TOTAL ALLOWABLE UNIFORM LOAD PER A.I.S.C. BEAM LOAD TABLES.
6. THE DESIGN OF ALL STRUCTURAL STEEL CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE STRUCTURAL STEEL FABRICATOR. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER SHALL NOT CONSTITUTE APPROVAL OF THE ADEQUACY OR ERECTION SAFETY OF ANY STRUCTURAL STEEL CONNECTION.
7. TEMPORARY ERECTION SEATS SHALL BE PROVIDED AS RECOMMENDED ON PAGE 3-59 OF THE A.I.S.C. PUBLICATION "ENGINEERING FOR STEEL CONSTRUCTION."
8. STEEL JOISTS OR JOIST GIRDERS ARE TO BE FABRICATED BY A MEMBER OF THE STEEL JOIST INSTITUTE AND BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE STEEL JOIST INSTITUTE.
9. ALL PROVISIONS OF THE RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS AS ADOPTED BY THE STEEL JOIST INSTITUTE SHALL BE ADHERED TO.

DESIGN LOADS

THE STRUCTURE IS DESIGNED FOR THE FOLLOWING LIVE LOADS, IN ADDITION TO THE LATERAL LOADS AND SUPERIMPOSED DEAD LOADS AND SELF-WEIGHT OF THE STRUCTURE.

BUILDING OCCUPANCY CATEGORY: 11

LIVE LOADS

- 1. ROOF SNOW LOAD:
a. GROUND SNOW LOAD: 25.0 PSF
b. FLAT ROOF SNOW LOAD (P): (MINIMUM ROOF LOAD): 20 PSF
c. SNOW EXPOSURE FACTOR (Ce): 1.0
d. SNOW LOAD IMPORTANCE FACTOR (I): 1.0
e. THERMAL FACTOR (Ct): 1.0
f. ADDITIONAL LOADING DUE TO DRIFTING AT CHANGES IN ROOF ELEVATIONS AND ICE AT OVERHANGS PER APPLICABLE CODE.
DESIGN DEAD LOAD: 15 PSF
TOTAL DESIGN ROOF LOAD: 35 PSF

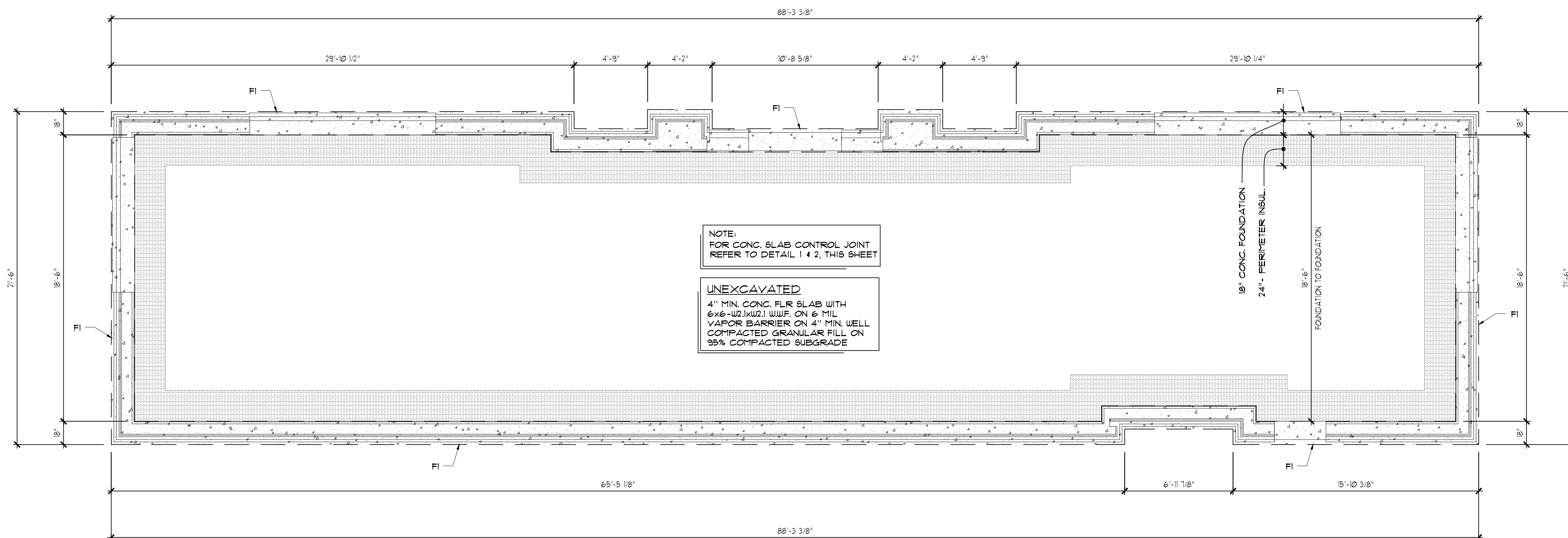
WIND LOAD

- 1. BASIC WIND SPEED (3-SECOND GUST): 115.0 MPH
2. WIND IMPORTANCE FACTOR: 1.0
3. EXPOSURE CATEGORY: B
4. INTERNAL PRESSURE COEFFICIENT: +/- 0.18
5. MAIN FORCE RESISTING STRUCTURAL SYSTEM (EQUIVALENT STATIC FORCE):
a. MINIMUM UNIFORM: 16.0 PSF

EARTHQUAKE DESIGN DATA

- 1. OCCUPANCY CATEGORY II
2. MAPPED SPECTRAL RESPONSE ACCELERATION Ss=0.111g & S1=0.043g
3. SITE CLASS D
4. SPECTRAL RESPONSE COEFFICIENTS Sds=0.118g & SD1=0.067g
5. SEISMIC DESIGN CATEGORY A
6. SECTION 11.7 (ASCE7-05) DESIGN REQUIREMENT FOR SDC A
7. DESIGN BASE SHEER Fx = 0.01Wx
8. Cs=SDs / (R/1)
9. RESPONSE MODIFICATION FACTOR R=5
10. SECTION 11.7 (ASCE7-05) DESIGN REQUIREMENT FOR SDC A

- 10. STEEL JOIST BEARING ON STEEL BEAMS OR PLATES TO BE WELDED TO STEEL WITH 2" LONG BEAD EACH SIDE OF BEARING. EXTEND BOTTOM CHORDS OF JOISTS AT COLUMNS AND CONNECT. IF NO JOIST OCCURS AT COLUMNS, EXTEND BOTTOM CHORDS OF EACH ADJACENT JOIST AND CONNECT.
11. METAL DECK SHALL CONFORM TO ALL REQUIREMENTS OF "BASIC DESIGN SPECIFICATION" AS ADOPTED BY THE STEEL DECK INSTITUTE (S.D.I.).
12. METAL ROOF DECK SHALL BE WIDE RIB WITH NESTING SIDE SEAMS OF DEPTH AND GAGE INDICATED ON THE DRAWINGS. DECK SHALL BE WELDED TO ALL SUPPORTING STEEL WITH PUDDLE WELDS (5/8" DIAMETER MINIMUM). AT 12" ON CENTER PER SHEET MINIMUM). SIDE LAP CONNECTIONS SHALL BE MADE AT MAXIMUM 3'-0" CENTERS. REFER TO SPECIFICATIONS FOR ADDITIONAL ERECTION PROCEDURES.
13. UNLESS OTHERWISE NOTED, ALL ROOF OPENINGS SHALL BE FRAMED 4/5" x 3 1/2" x 5/16" L.L.V.
14. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ANGLES, PLATES, BARS, CLIPS, ETC., ATTACHED TO STRUCTURAL STEEL. VERIFY EXACT SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS WITH CONTRACTOR INVOLVED.
15. PROVIDE TEMPORARY BRACING AS REQUIRED TO ENSURE THE STABILITY OF THE STRUCTURE UNTIL THE PERMANENT FRAMING IS IN PLACE.
16. STEEL JOIST MUST BEAR WITH MINIMUM 6" ON MASONRY.
17. STRUCTURAL STEEL SHALL HAVE ONE SHOP COAT OF RUST INHIBITED PRIMER.
18. FINAL STRUCTURAL ENGINEERING ON PRE-ENGINEERED ROOF JOISTS TO BE PREPARED BY TRUSS MANUFACTURER.
19. FOOTING DESIGN BASED ON MINIMUM 2500 PSF SOIL BEARING PRESSURE.
20. FOOTING DESIGN BASED ON MINIMUM 3,000 PSI CONCERT COMPRESSIVE STRENGTH (ACI 318).

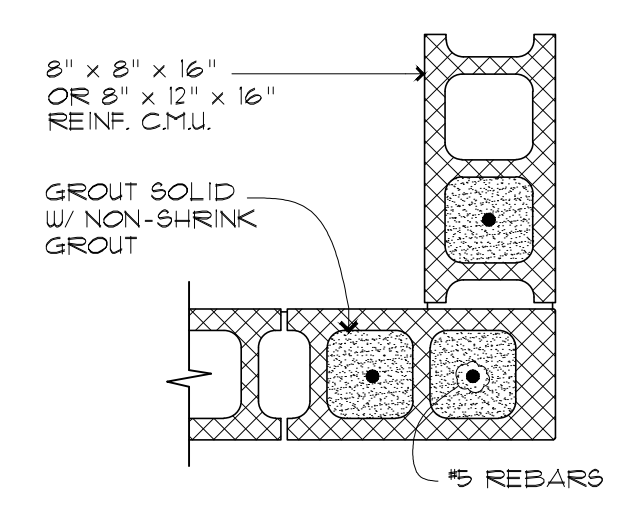


FOUNDATION PLAN

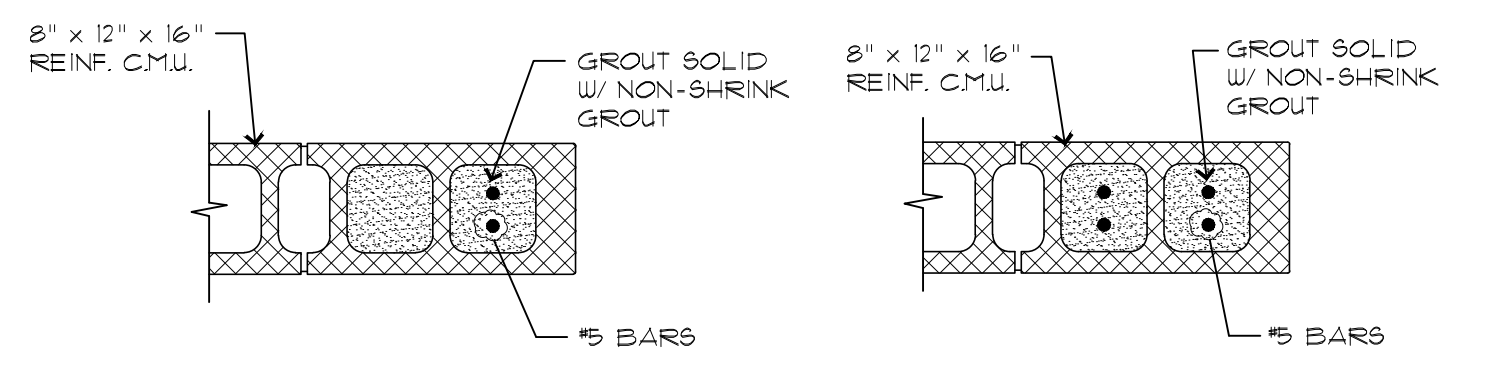
SCALE: 1/4"=1'-0"

FOUNDATION SCHEDULE		
FOUNDATION	SIZE	REINFORCEMENT
FI	18" W x 18" D CONC. TRENCH FOOTING	2- #5 TOP & BOTTOM #5 @ 48" O.C. DOUELS (2' INTO FOOTING & 3' ABOVE)

NOTE: OVERLAP BAR REINFORCEMENT 2 FEET AT FOOTING CORNERS TOP & BOTTOM

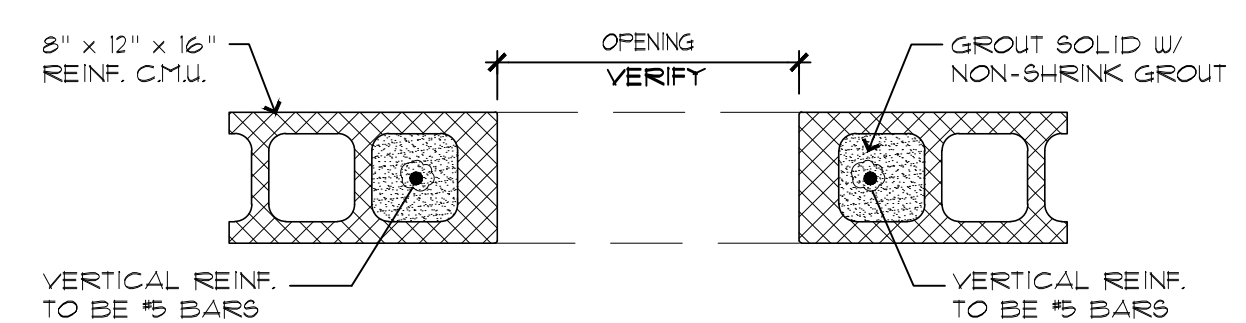


3 WALL CORNER



4 END OF WALL

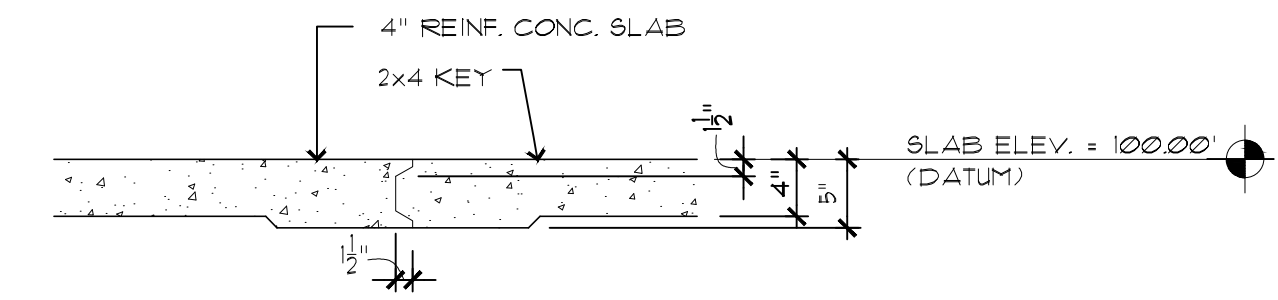
5 BEAM BEARING



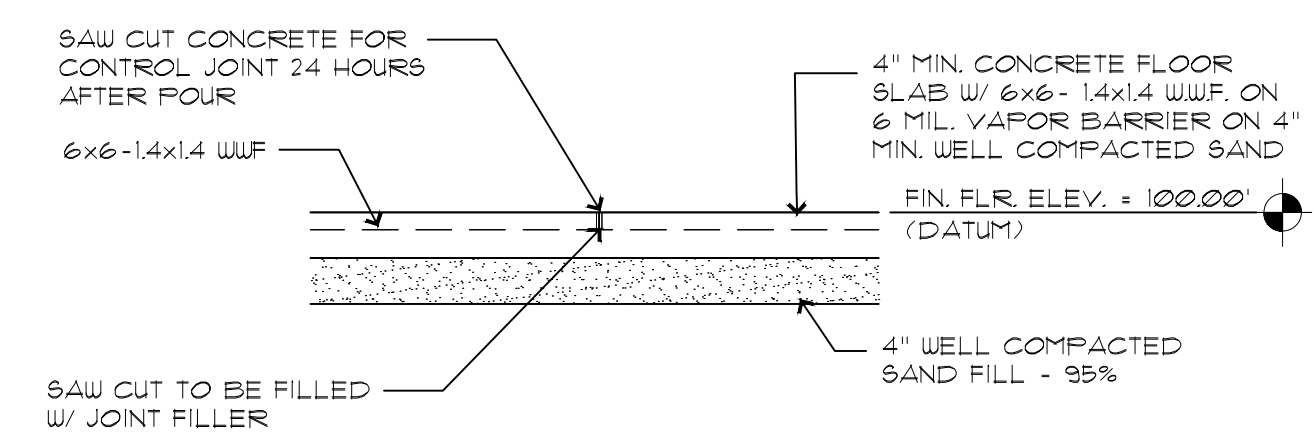
6 LINTEL OVER C.M.U. WALL OPENING

TYPICAL C.M.U. WALL REINF. DETAILS

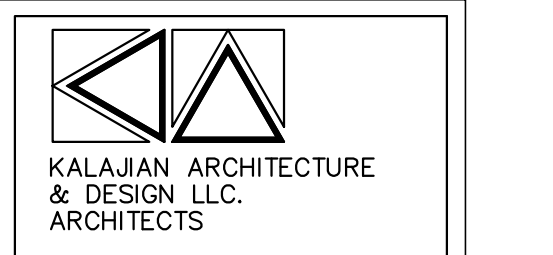
NOTE: VERTICAL REINF. TO BE #5 BARS UNO.



1 CONSTRUCTION JOINT DETAIL
SCALE: 3/4"=1'-0"



2 CONC. SLAB CONTROL JOINT
SCALE: 3/4"=1'-0"



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PROPOSED REMODELING OF AN EXISTING BUILDING

CONTACT PERSON OWNER

Rafid Jamil

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CELL: (480) 580-6007

RENO. EXIST. GAS STATION
8233 N. VIA PASCO DEL NORTE
SCOTTSDALE, ARIZ. 85258

DESCRIPTION: FOUNDATION PLAN
DRAWN BY: Author
CHECKED BY: Checker
DATE: 10.26.23
PROJECT #: 008-23-03-16

SCALE: 3/4"=1'-0"

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3/6/2024



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DESCRIPTION: POWER PLAN

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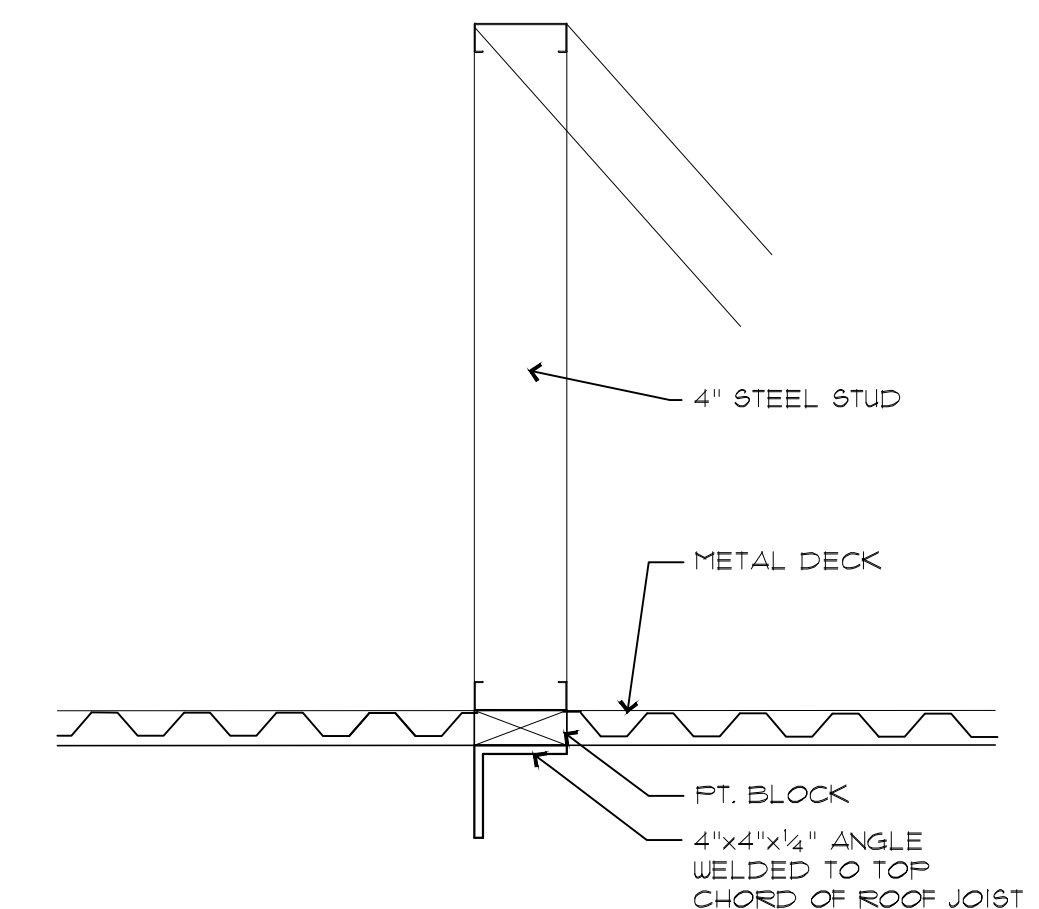
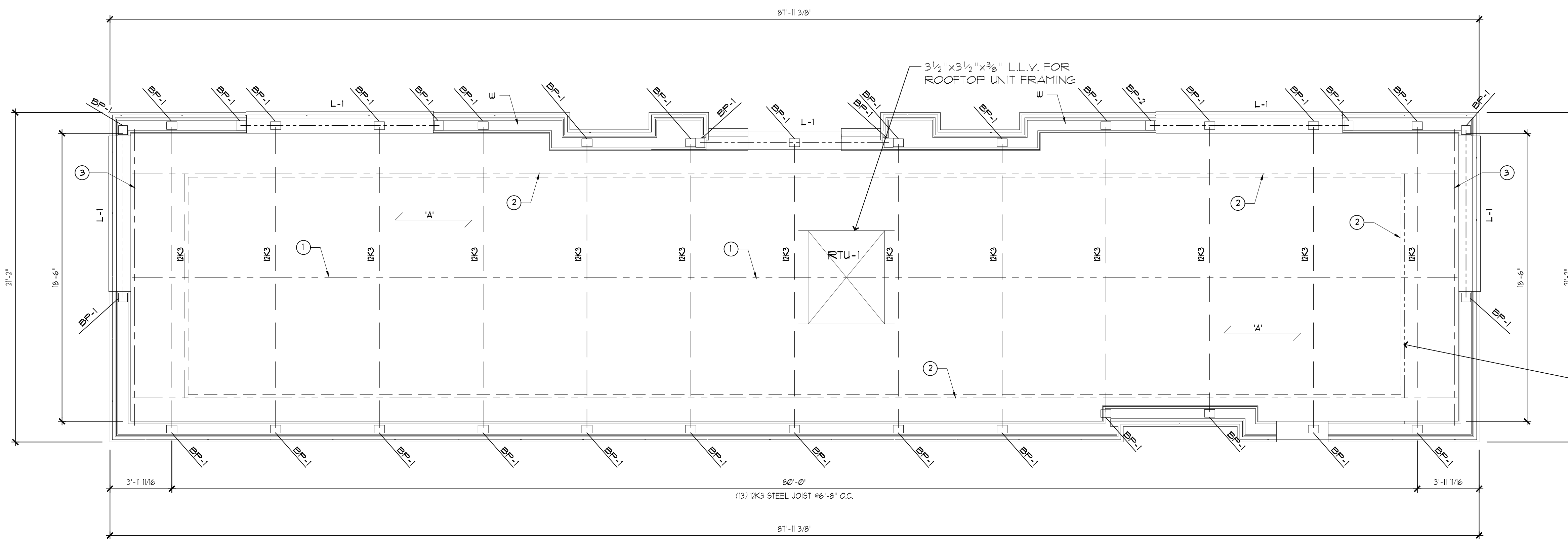
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WALL DETAIL SCALE: 1/2" = 1'-0"

ADD STEEL ANGLE BELOW VERTICAL WALL

ROOF FRAMING PLAN

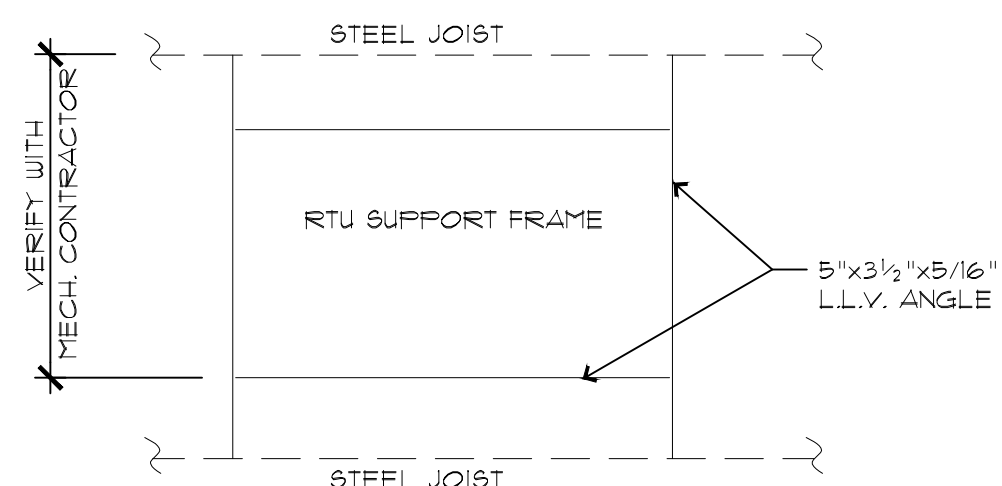
SCALE: 1/4" = 1'-0"

BEAMS, LINTELS & BASE IR SCHEDULE	
L-1:	W8 x 10 W/ 1/4" STL. IR WELDED TO BOTTOM OF FLANGE & 3/8" x 8" @ 48" O.C. STEEL STUDS WELDED ON TOP OF FLANGE
L-2:	W8 x 15 W/ 1/4" STL. IR WELDED TO BOTTOM OF FLANGE & 3/8" x 8" @ 48" O.C. STEEL STUDS WELDED ON TOP OF FLANGE
BP-1:	6" x 3/8" x 8" LONG STEEL BRG. IR W/ (2) - 1/2" @ 8" LONG STEEL STUDS

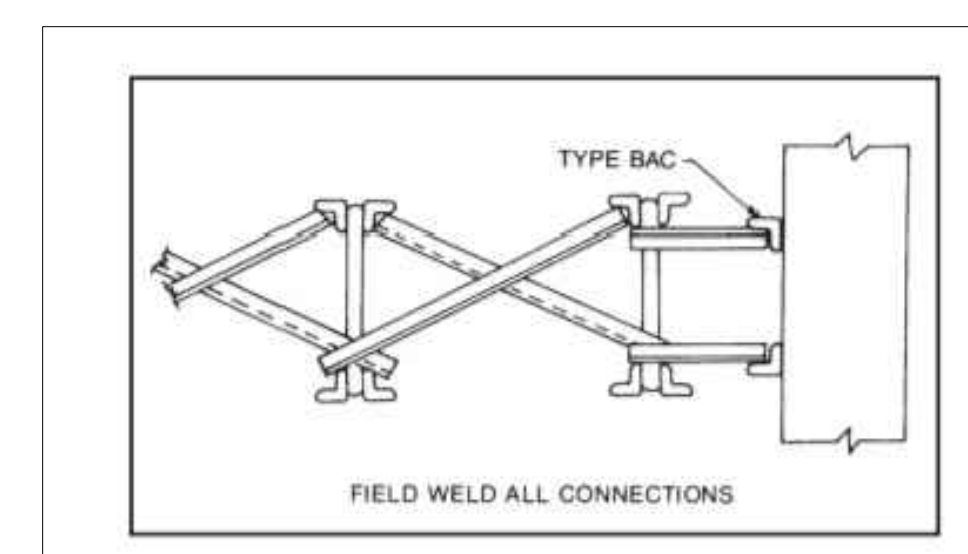
W: 8" MASONRY BLOCK WALL W/ 15 @ 48" O.C., FILLED SOLID W/ CEMENT GROUT.

A: DECKING: 15B22 METAL DECKING (MIN. 3 SPANS) SUPPORT: 36/3 SUPPORT FASTENERS: 3/8" PUDDLE WELD SIDE LAP FASTENERS: 3 - #10 TEK SCREW

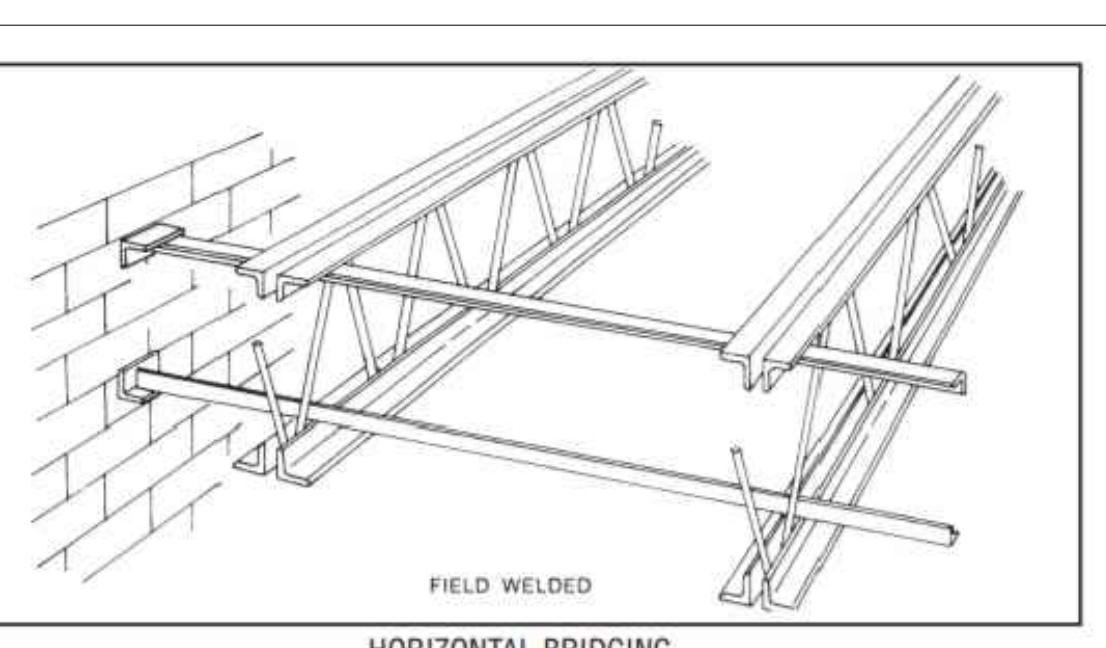
- REFERENCE NOTES:
- HORIZONTAL BRIDGING (L 1 1/2" x 1 1/2" x 1/4").
 - SINGLE OF BOTTOM CHORD BRIDGING NEAR THE FIRST BOTTOM CHORD PANEL POINT (NET UPLIFT PRESSURE 12 PSF), PLACE BRIDGING BELOW VERTICAL WALL SLOPPED ROOF.
 - 3"x3"x1/4" STEEL ANGLE W/ 1/2"x3" TITEN HD SCREWS @ 16" O.C.



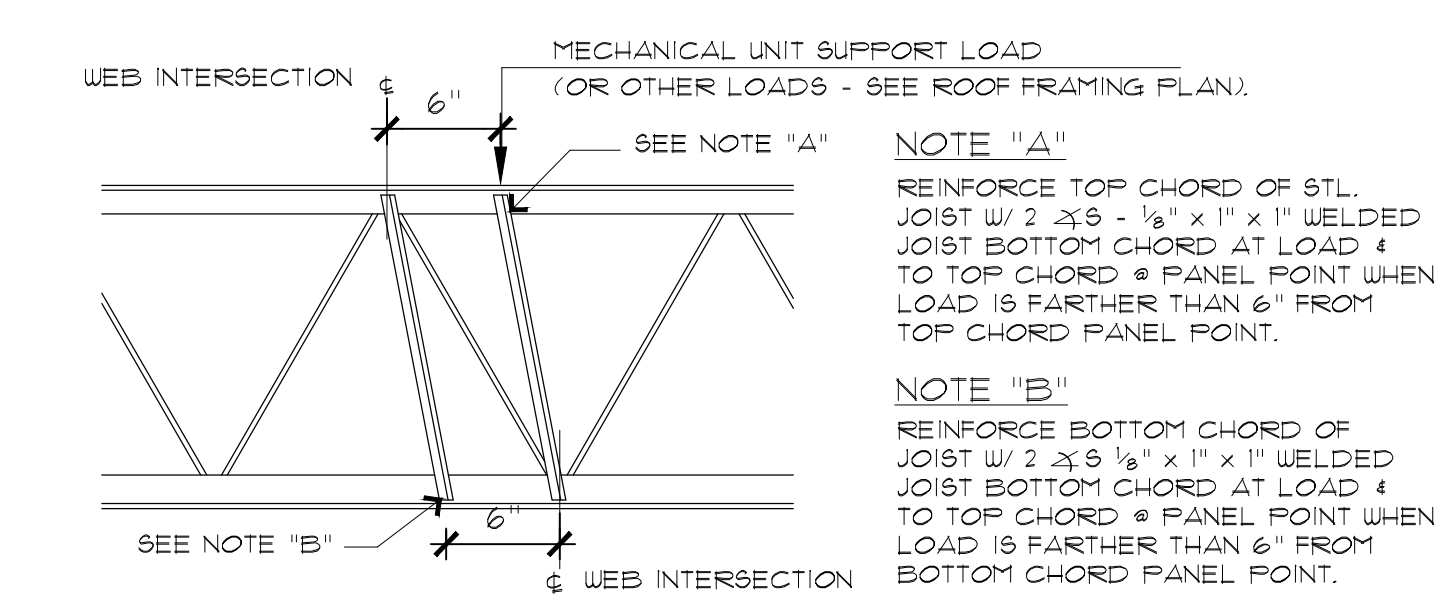
MECHANICAL LOAD DIAGRAM NOT TO SCALE



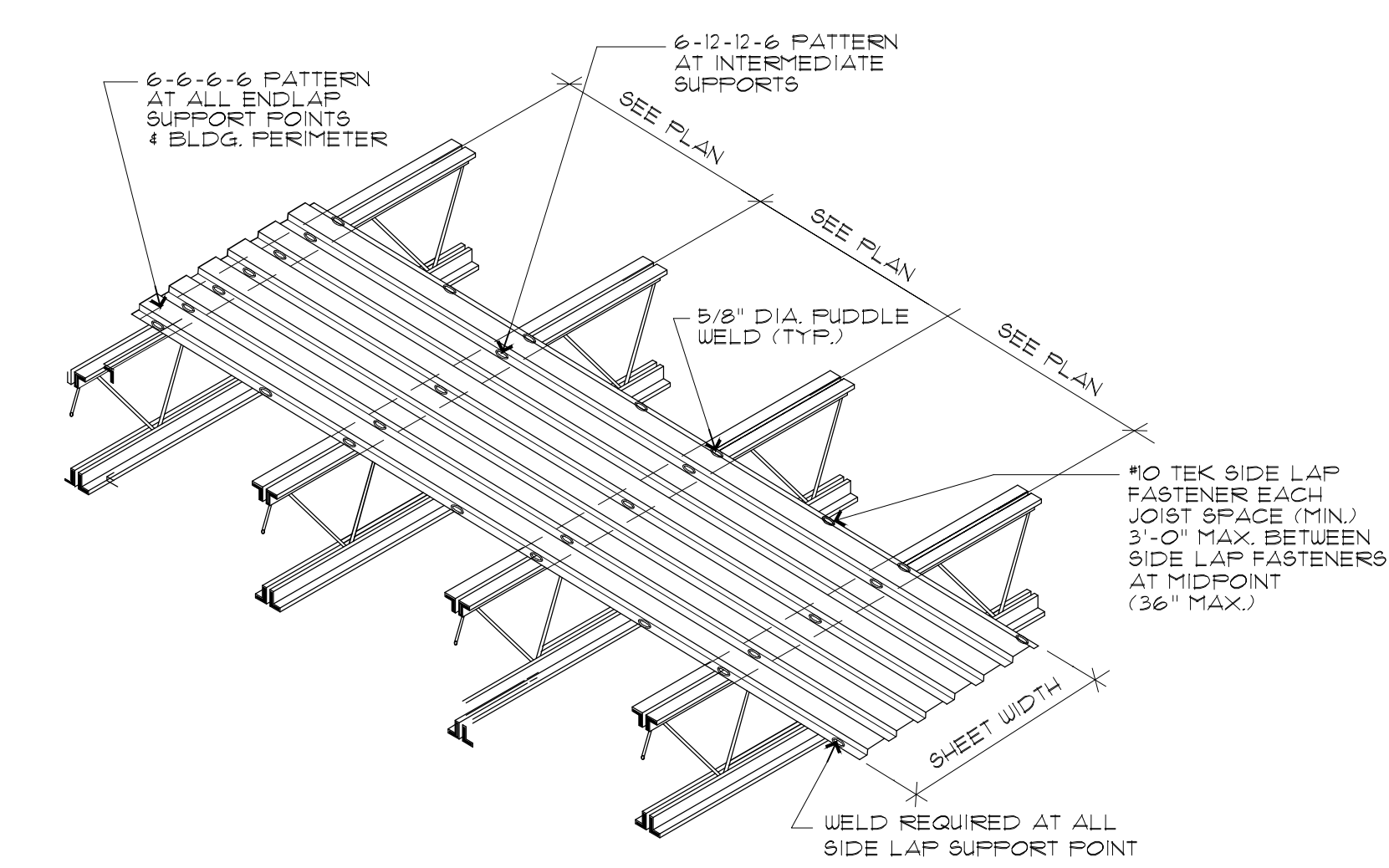
CROSS BRIDGING DETAIL NO SCALE



HORIZONTAL BRIDGING DETAIL NO SCALE

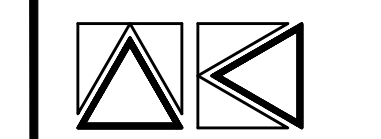


STEEL JOIST REINFORCEMENT NOT TO SCALE

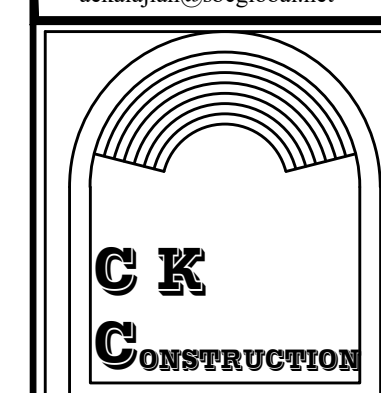


TYPICAL ROOF WELDING PATTERN NOT TO SCALE

HORIZONTAL BRIDGING DETAIL NO SCALE



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REVISIONS:		
1-	PERMITS	03/20/24
2-		
3-		
4-		

**RENOVATION TO EXISTING
GAS STATION**
 8233 N. VIA PASEO DEL NORTE
 SCOTTSDALE, AZ 85258

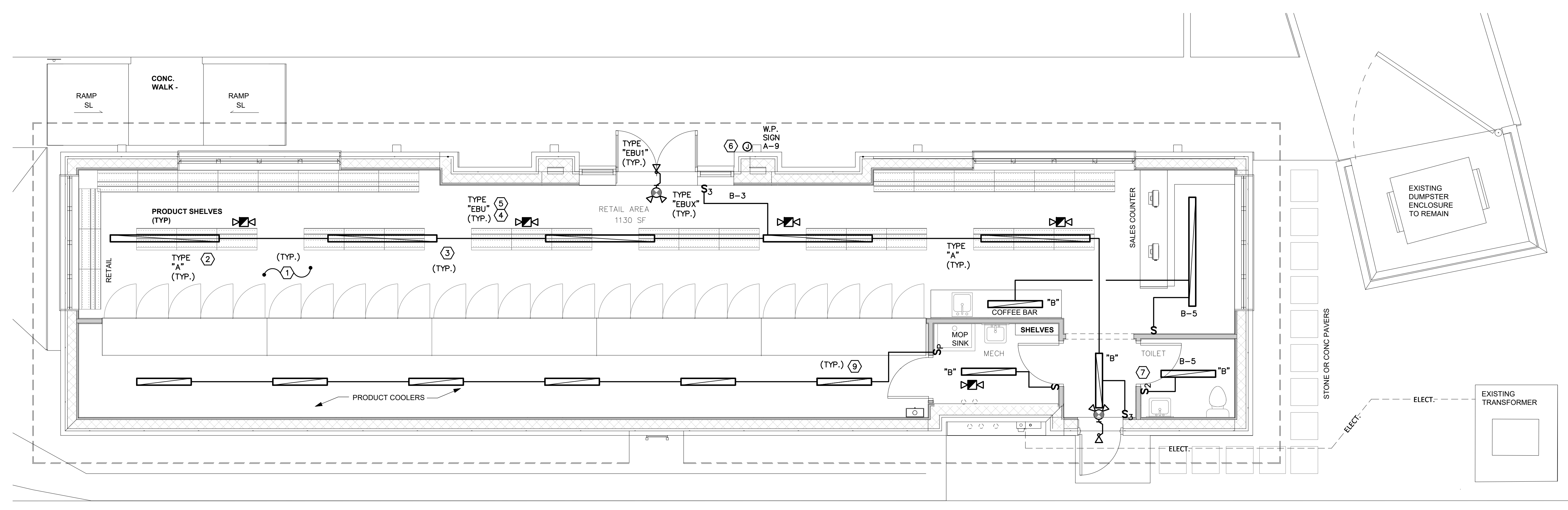
REAL / SIGNATURE

DATE

LIGHTING FLOOR PLAN
 DRAWING TITLE:
 PROJECT NO.: 026-02
 FILE NAME: Scottsdale

DRAWN BY: S.D.
CHECKED BY: S.D.
DATE: 03/30/24

SHEET NO:
E-1



GENERAL NOTES:

1. ALL CIRCUITS INDICATED SHALL CONTAIN DEDICATED GROUND AND NEUTRAL CONDUCTORS.
2. ALL TIME CLOCKS SHALL BE DIGITAL, (7) DAY PROGRAMMABLE.
3. ALL 120V BRANCH CIRCUITS SHALL BE COPPER #12AWG WIRING UNLESS NOTED OTHERWISE.
4. PROVIDE "TYPED" PANEL DIRECTORY PER PANEL SCHEDULE AND PER LOADS BEING SERVED.
5. ALL EXTERIOR CONDUIT AT ROOF SHALL BE RIGID GALVANIZED STEEL, OUTLET BOXES SHALL BE CAST METAL WEATHER- PROOF TYPE.
6. EXPOSED CONDUITS AT PANELBOARD SHALL BE PAINTED TO MATCH WALL FINISH TO 10'-0" A.F.F.

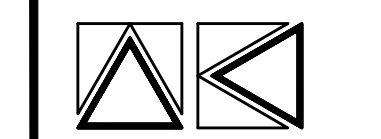
KEY NOTES:

- ① SUPPORT ALL ELECTRICAL EQUIPMENT AND WIRING (INCLUDING LOW VOLTAGE) IN ACCORDANCE WITH NEC ARTICLE 300-11, 725 THROUGH 830.
- ② PROVIDE CONTINUOUS UNISTRUT TO SUPPORT SALES AREA LIGHTING, SUPPORT UNISTRUT FROM BOTH WALL AND STRUCTURE ABOVE, PAINT TO MATCH CEILING COLOR.
- ③ SUPPORT LIGHTING FIXTURE INDEPENDENTLY FROM BUILDING STRUCTURE, DO NOT SUPPORT FROM CEILING GRID.
- ④ EMERGENCY WALL MOUNTED BATTERY UNITS TO BE MOUNTED AT APPROXIMATELY 7'-6" AFF AND TO BOTTOM OF JOIST (OPEN CEILING AREAS), MOUNT EXIT SIGNS AT 12" ABOVE DOOR OPENING.
- ⑤ EMERGENCY LIGHTING UNITS SHALL BE WIRED TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING DEVICES.
- ⑥ BUILDING AND ENTRANCE SIGN CIRCUIT, ROUTE VIA DIGITAL (7) DAY PROGRAMMABLE TIME CLOCK. VERIFY EXACT LOCATION WITH OWNER. VERIFY ADDITIONAL QUANTITY WITH OWNER, PROVIDE UNIT PRICE IN ADVANCE.
- ⑦ COMMON SWITCH FOR TOILET ROOM FAN/LIGHT
- ⑧ ROUTE ALL BUILDING MOUNTED LIGHTING VIA PHOTO CELL ON AND TIME CLOCK OFF OPERATION. TIME CLOCK SHALL BE ELECTRONIC BY TORQUE OR EQUAL. VERIFY ADDITIONAL QUANTITY WITH OWNER, PROVIDE UNIT PRICE IN ADVANCE.
- ⑨ BASE BID: COOLER LIGHTING PROVIDED BY SUPPLIER AND INSTALLED BY ELECTRICAL CONTRACTOR.
ALTERNATE BID: COOLER LIGHTING PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.

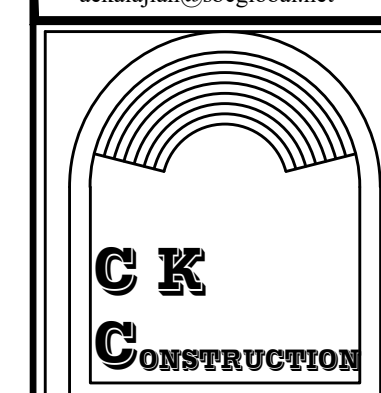
FLOOR PLAN - LIGHTING

0' 1' 2' 4' SCALE: 1/4"=1'-0"

ELECTRICAL SHEET INDEX	
SHEET NUMBER	DESCRIPTION
E-1	LIGHTING FLOOR PLAN
E-2	POWER AND SYSTEMS FLOOR PLAN
E-3	ONE LINE DIAGRAM, SCHEDULES, SPECS
E-4	ELECTRICAL SCHEDULES



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REVISIONS:		
1-	PERMITS	03/20/24
2-		
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4-		

RENOVATION TO EXISTING
GAS STATION
8233 N. VIA PASO DEL NORTE
SCOTTSDALE, AZ 85258

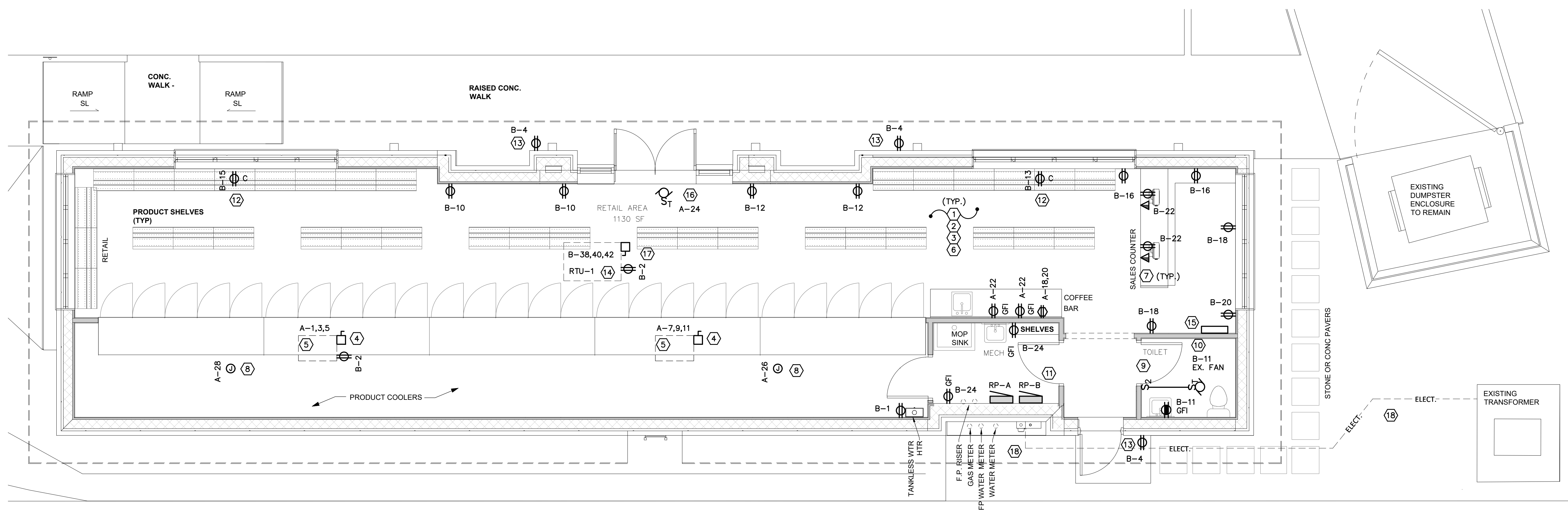
SEAL / SIGNATURE

DATE

DRAWING TITLE:
**POWER AND SYSTEMS
FLOOR PLAN**
PROJECT NO.: 026-02 FILE NAME: Scottsdale

DRAWN BY: S.D.
CHECKED BY: S.D.
DATE: 03/30/24

SHEET NO:
E-2



GENERAL NOTES:

- ALL CIRCUITS INDICATED SHALL CONTAIN DEDICATED GROUND AND NEUTRAL CONDUCTORS.
- ALL TIME CLOCKS SHALL BE DIGITAL, (7) DAY PROGRAMMABLE.
- ALL 120V BRANCH CIRCUITS SHALL BE COPPER #12AWG WIRING UNLESS NOTED OTHERWISE.
- PROVIDE "TYPED" PANEL DIRECTORY PER PANEL SCHEDULE AND PER LOADS BEING SERVED.
- RECEPTACLES SHALL BE MOUNTED AT 18" ABOVE FIN. FLOOR TO CENTERLINE OF OUTLET BOX UNLESS OTHERWISE NOTED.
- ALL EXTERIOR CONDUIT AT ROOF SHALL BE RIGID GALVANIZED STEEL. OUTLET BOXES SHALL BE CAST METAL WEATHER- PROOF TYPE.
- EXPOSED CONDUITS AT PANELBOARD SHALL BE PAINTED TO MATCH WALL FINISH TO 10'-0" A.F.F.

KEY NOTES:

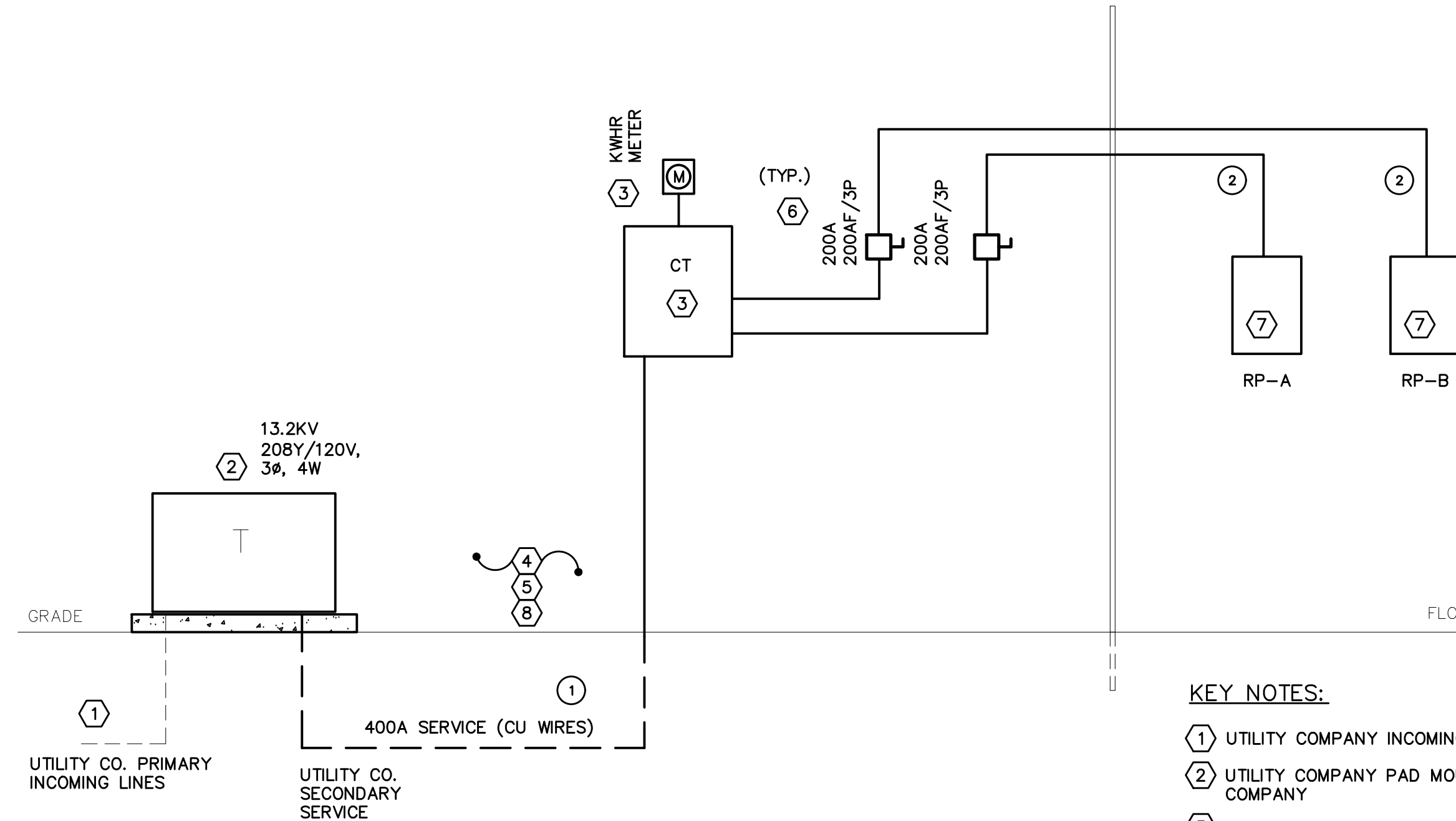
- SUPPORT ALL ELECTRICAL EQUIPMENT AND WIRING (INCLUDING LOW VOLTAGE) IN ACCORDANCE WITH NEC ARTICLE 300-11, 725 THROUGH 830.
- ALL RECEPTACLES SHALL BE BARRIER FREE ACCESSIBLE IN ACCORDANCE WITH SECTION 308 & 309 OF THE ICC A117.1, 2009 STANDARD WITH THE EXCEPTION OF "WINDOW RECEPTACLES AND UTILITY ROOM AND FOOD PREP RECEPTACLES"
- INSTALL RECEPTACLE AND DATA OUTLETS 18" (MINIMUM) ABOVE FINISHED FLOOR TO CENTER OF THE OUTLET BOX AND INSTALL LIGHTING SWITCHES AT 42" ABOVE FINISHED FLOOR TO TOP OF DEVICE (DO NOT EXCEED 48" TO TOP OF DEVICE)
- PROVIDE WEATHER PROOF AND NAME 3R SAFETY SWITCH BY SQUARE-D OR CUTLER HAMMER
- CONDENSER ON ROOF FOR "COOLER", COORDINATE WITH SUPPLIER AND TENANT.
- GFCI RECEPTACLES ARE REQUIRED IN TOILET ROOMS, IN FOOD PREP AREA AND WITH 6'-0" OF WATER SOURCE PER ARTICLE 210-63 AND 210.8 (b).
- VERIFY QUANTITIES OF DATA/TELEPHONE OUTLETS WITH OWNER, PROVIDE UNIT PRICE. ROUTE 3/4" CONDUIT UP TO CEILING SPACE WITH PULL STRING AND GROMMETED END.
- COOLER FANS, COORDINATE ACTUAL REQUIREMENTS WITH SUPPLIER
- COMMON SWITCH FOR TOILET ROOM FAN/LIGHT
- TOILET ROOM EXHAUST FAN, 120V, 80W
- ELECTRICAL PANEL BOARDS, REFER TO ONE LINE DIAGRAM, PROVIDE TYPED DIRECTORY
- RECEPTACLE ABOVE WINDOW FOR WINDOW SIGN
- WEATHER PROOF AND GFI RECEPTACLE OUTLET WITH "HEAVY DUTY" IN-USE COVER PLATE
- PROVIDE WEATHER PROOF AND GFI RECEPTACLE OUTLET ON ROOF WITH "HEAVY DUTY" IN-USE COVER PLATE
- GAS PUMPS CONTROL PANELS, COORDINATE SIZE AND LOCATION WITH OWNER.
- BASE BID: MANUAL DOOR, ALTERNATE BID: MOTORIZED BID, COORDINATE ACTUAL WITH OWNER.
- ROOF TOP UNIT, 208/230V, 3ø, PROVIDE WEATHER PROOF AND NEMA 3R SAFETY SWITCH BY SQUARE D OR CUTLER HAMMER, PROVIDE RIGID GALVANIZED STEEL UNISTRUT FOR SUPPORT. ROUTE FEEDER TO ELECTRICAL PANEL AS INDICATED. VERIFY ACTUAL REQUIREMENTS WITH MECHANICAL TRADES AND ADJUST FEEDER ACCORDINGLY.
- ROUTE (2) 4"C. BELOW FROST LINE, ONE SPARE AND SECOND ONE FOR 400A SERVICE. PROVIDE PULL STRING IN SPARE CONDUIT, CAP BOTH ENDS.

FLOOR PLAN – POWER & SYSTEMS

SCALE: 1/4"=1'-0"

ELECTRICAL SPECIFICATIONS (AS APPLICABLE):

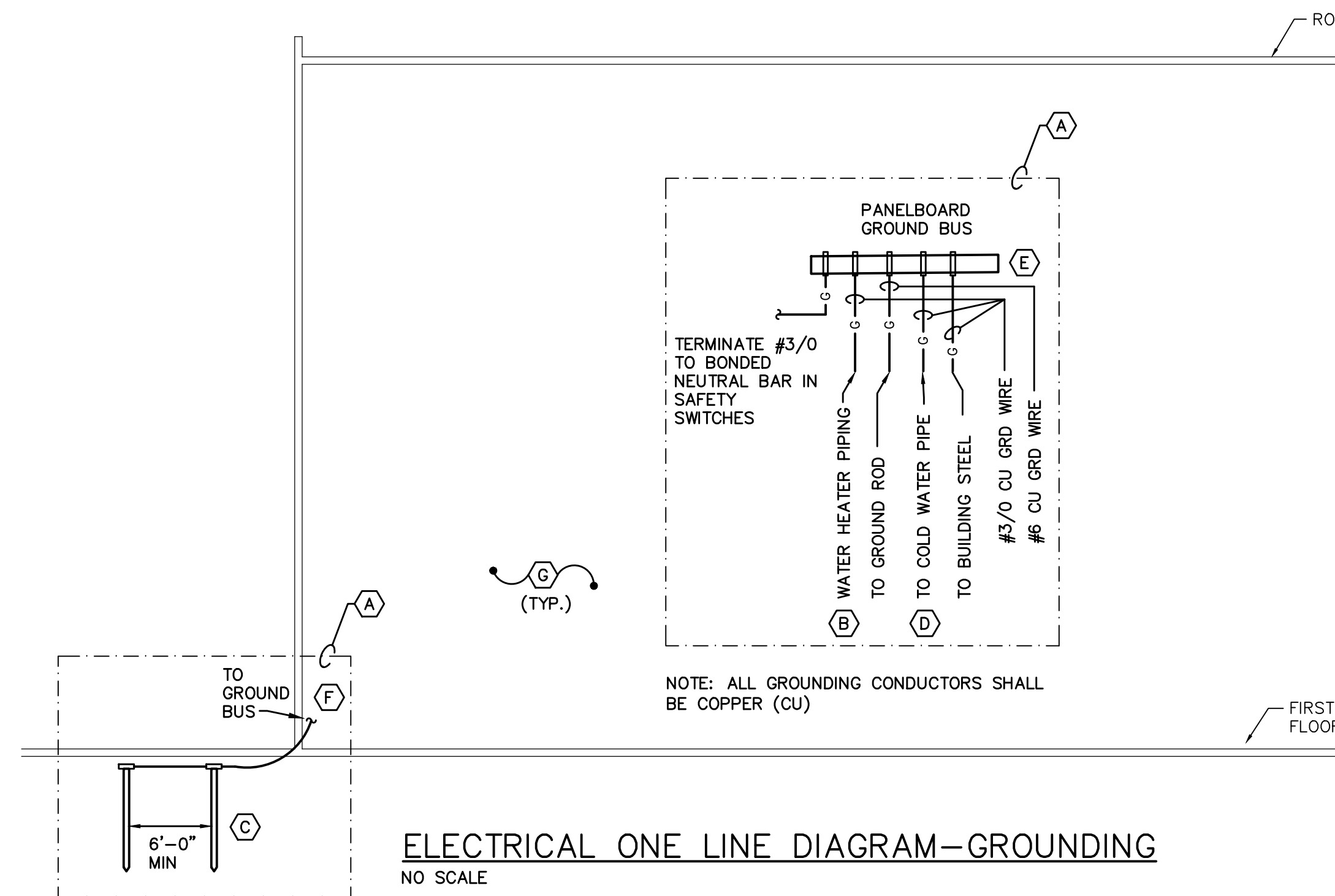
- Extent Of Work** - Provide all labor, materials and services required for a complete electrical installation in the building as indicated, including, but not limited to complete installation of new service, panels, lighting fixtures, receptacles, switches, devices, etc., as indicated on the drawings and as specified herein.
- Compliance's** - All work shall be done in accordance with all local and state laws, rules and regulations applicable to the work and to the rules and regulations of the National Board of Underwriters and the National Electrical Code. All fees in connection therewith shall be paid by the Electrical Contractor.
- Grounding** - System grounding shall meet all requirements of the National Electrical Code Article 250.
- Site Visits** - The electrical contractor shall visit the site prior to submitting a bid to ascertain at first hand the extent or the existing electrical installation, site conditions and job peculiarities. Claims for extra payments based on lack of knowledge of existing circumstances will not be allowed.
- Field Measurements** - The electrical contractor shall make all necessary field measurements to insure the ability to execute the electrical work in accordance with the contract documents.
- Temporary Power** - The Electrical Contractor shall install and maintain temporary lighting and power throughout the project. Temporary lighting shall be equipped with proper lamp protection. Temporary electrical installation shall be removed from each area as soon as permanent installation is completed and operational.
- Raceways**
 - All interior wiring shall be in EMT conduit except where prohibited by the NEC and/or local authority. Flexible metal conduit (Greenfield) shall be used for final connections to recessed lighting fixtures and indoor equipment.
 - All conduits in finished areas shall be concealed in walls or be run above suspended ceilings.
- Coordination**
 - Drawings and Specifications are intended to include all work and materials for the entire completion of the work. Any item of material, labor or detail required for proper execution and completion of the work and omitted from either the plans and specifications or both, but obviously understood and or required to make all systems complete and operable, shall be furnished as part of the contract without additional cost even though not specified or shown.
 - Before any work is installed, and before any equipment is fabricated or purchased, the Contractor shall consult all Contract Documents, insofar as they may affect work or affect the location of equipment, piping or duct work; and shall be held to be thoroughly conversant with the construction problems insofar as they affect his/her work and to coordinate with the other trades in doing their work and locating equipment.
- Conductors**
 - All conductors shall be copper, 600 volt insulation, type THHN/THWN.
 - All conductors #8 AWG. and larger shall be stranded. All conductors in wet locations shall be 600 volt insulation type XHHW.
 - Minimum conductor size shall be #12 AWG.
- Lighting and Receptacle Panels** - Panels shall be surface or recessed mounted (per floor plan), "bolt on" circuit breaker type. AIC ratings as shown on panel schedule and/or one line diagram, and shall be rated as shown on plan schedule. Panels shall be Square D type NQOD or equal as manufactured by Cuttler Hammer.
- Wiring Devices**
 - Toggle switches shall be specification grade, 20 ampere, 277 volt AC grounded type, ivory with plastic handle and shall be manufactured by Arrow Hart, Hubbell, or by Sierra.
 - General use receptacles shall be duplex grounding type, 20 ampere, 120 volt, specification grade type 5-20R, and shall be manufactured by Arrow Hart, Hubbell, or by Sierra.
 - GFCI Receptacles shall be duplex convenience receptacles with integral ground fault interrupter.
- Wiring Devices**
 - Toggle switches shall be specification grade, 20 ampere, 277 volt AC grounded type, ivory with plastic handle and shall be manufactured by Arrow Hart, Hubbell, or by Sierra.
 - General use receptacles shall be duplex grounding type, 20 ampere, 120 volt, specification grade type 5-20R, and shall be manufactured by Arrow Hart, Hubbell, or by Sierra.
 - GFCI Receptacles shall be duplex convenience receptacles with integral ground fault interrupter.
- Plates** shall match the device installed and shall be satin stainless steel in all finished areas.
- Lighting Fixtures** - Shall be as shown by the lighting fixture schedule. Fixtures shall be installed neatly, parallel to building lines, and shall be complete with lamps. All pendant linear lighting shall be mounted on continuous unistrut supported from walls and building structure, unistrut shall be painted to match ceiling color. Exit and emergency lighting shall be as specified on plan.
- Installation and methods of execution**
 - All wiring shall be in conduit. No Romex or BX, etc., will be permitted unless plainly excepted on the drawings. Flexible conduit shall be used for short connection to motors, recessed lighting fixtures, vibrating equipment, etc., but never longer than six feet.
 - Install support systems sized and fastened to accommodate weight of equipment, conduit and wiring.
 - Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using beam clamps.
 - Use toggle bolts or hollow wall fasteners in hollow masonry, plaster, or gypsum board partitions and walls; sheet metal screws in sheet metal studs; and wood screws in wood construction.
 - Do not fasten supports to piping, ceiling support wires, duct work, mechanical equipment, or conduit.
 - Do not use powder-actuated anchors.
 - Do not drill, nail or puncture structural steel members.
 - Fabricate supports from structural steel or steel channel, rigidly welded or bolted
 - Install surface-mounted cabinets and panelboards with minimum of four anchors.
 - Provide typed directory for panelboard. Indicate circuit breaker number, type of load (Lighting, Receptacle, Fan, Equipment, etc. and location of load).
- Testing** - Electrical Contractor shall perform the required testing of all electrical equipment, lighting, devices, etc., upon completion of his work. The system shall be in perfect working condition. Any defects shall be rectified at no extra cost.
- Guarantee** - The Electrical Contractor shall provide to the owner a written guarantee covering material and workmanship for one year from the date of acceptance of the building by the owner.



ELECTRICAL ONE LINE DIAGRAM
NO SCALE

KEY NOTES:

- UTILITY COMPANY INCOMING ELECTRICAL SERVICE
- UTILITY COMPANY PAD MOUNTED TRANSFORMER, 208Y/120V, 3Ø SECONDARY, COORDINATE WITH UTILITY COMPANY
- PROVIDE CT CABINET AND METER SOCKET AS INDICATED, COORDINATE WITH UTILITY COMPANY
- CONNECT GROUND WIRE TO ELECTRICAL PANELBOARDS, BUILDING STEEL, AND WATER METER AHEAD OF METER (WITHIN 5'-0" ENTRANCE TO BUILDING). REFER TO DIAGRAM ON THIS SHEET. ENTIRE GROUNDING SYSTEM SHALL COMPLY WITH LATEST NEC, ARTICLE 250. INSTALL GROUND RODS AT EACH TENANT
- ALL WIRING THRU OUT THE ENTIRE PROJECT (FEEDERS, BRANCH CIRCUITS, ETC.) SHALL BE COPPER.
- ALL SERVICE DISCONNECT SHALL BE SERVICE ENTRANCE RATED, NEMA 3R BY SQUARE D OR CUTLER HAMMER, PROVIDE LABEL PER NEC TO INDICATE SERVICE DISCONNECT 1 OF 2, AND 2 OF 2)
- COMMERCIAL ELECTRICAL PANELBOARDS BY SQUARE D OR CUTLER HAMMER, COPPER BUSSING, 100% RATED. LOAD CENTERS ARE NOT ALLOWED.
- ENTIRE INSTALLATION SHALL COMPLY WITH LATEST NEC



ELECTRICAL ONE LINE DIAGRAM-GROUNDING
NO SCALE

KEY NOTES

- PROVIDE GROUNDING SYSTEM AS PER DIAGRAM ABOVE.
- COPPER GROUND WIRE, BOND PIPING WITHIN WATER HEATER AS INDICATED PER ARTICLE 250
- 3/4"DIA. x 10'-0" LONG COPPERED GROUND ROD WITH TOP 12" BELOW GRADE. GROUND RODS MUST BE 6'-0" APART MINIMUM
- GROUND WIRE TO INCOMING WATER LINE SHALL BE WITHIN 5'-0" OF ENTRANCE TO BUILDING. PROVIDE GROUND JUMPER AT THE METER.
- 2'-0" LONG X 4" HIGH X 1/4" DEEP COPPER GROUND BUS BAR. INSTALL 1" OFF THE WALL, UTILIZE SPACERS.
- SEAL PENETRATION THRU WALL AND WATER PROOF.
- ENTIRE ELECTRICAL INSTALLATION SHALL COMPLY WITH 2017 MICHIGAN ELECTRICAL CODE (2017 NEC) (NEC COMMERCIAL ONLY). ENTIRE GROUNDING SHALL BE PER NEC 2017, ARTICLE 250

FEEDER SCHEDULE (COPPER)	
(UNLESS OTHERWISE INDICATED)	
DESIGNATION	SIZE
①	4-500KCMIL+1#1/0GRD-4°C.
②	4 #3/0 & 1#4GRD.-2°C.

	LOAD SUMMARY		
	CONN.	DEM. FACT.	DEMAND
LIGHTING	10,340	125%	12,925
RECEPACELS	5,600	100%	5,600
MISC.	32,640	70%	22,848
HVAC	14,400	125%	18,000
KITCHEN	0	65%	0
TOTAL DEMAND (VA)			59,373
TOTAL DEMAND (KVA)			59.4
TOTAL DEMAND (AMPS)			164.93

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REVISIONS:		
NO.	PERMITS	DATE
1-		03/20/24
2-		
3-		
4-		

RENOVATION TO EXISTING GAS STATION

8233 N. VIA PASEO DEL NORTE
SCOTTSDALE, AZ 85258

REAL / SIGNATURE

DATE

DRAWING TITLE:
ELECT. ONE LINE DIAGRAMS, SPECS & SCHEDULES

PROJECT NO.: 026-02 FILE NAME: Scottsdale

DRAWN BY: S.D.
CHECKED BY: S.D.
DATE: 03/30/24

SHEET NO:
E-3

LOCATION	STORAGE ROOM	PANEL DESIGNATION	RP-A							
120/208	VOLTS	3 PH. 4 WIRE	MOUNTING: F=FLUSH, S=SURFACE							
225	AMPERE BUS	200 AMPERE MAIN	M.C.B. OR M.L.O.:							
22,000	AMP INTERRUPT. CAPACITY		M.C.B.							
SPECIAL REQUIREMENT:		SERVICE ENTRANCE RATED								
CKT NO.	VA	LOAD TYPE	CKT BRK	A	B	C	CKT BRK	LOAD TYPE	VA	CKT NO.
1	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 1	1,800	2
3	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 2	1,800	4
5	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 3	1,800	6
7	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 4	1,800	8
9	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 1	1,800	10
11	1,560	WALK-IN COOLER CONDENSER	20				20	GAS PUMP NO. 2	1,800	12
13		SPARE	20				20	GAS PUMP NO. 3	1,800	14
15		SPARE	20				20	GAS PUMP NO. 4	1,800	16
17		SPARE	20				20	COFFEE STATION	1,800	18
19		SPARE	20				20	COFFEE STATION	1,800	20
21		SPARE	20				20	COFFEE STATION	400	22
23		SPARE	20				20	AUTOMATIC DOOR	1200	24
25		SPARE	20				20	COOLER COND. FANS	1200	26
27		SPARE	20				20	COOLER COND. FANS	1200	28
29		SPARE	20				20	SPARE		30
31		SPARE	20				20	SPARE		32
33		SPARE	20				20	SPACE		34
35		SPARE	20				20			36
37		SPARE	20				20			38
39		SPARE	20				20			40
41		SPARE	20				20			42
LIGHTING (VA)		0 AT 125%	=			=			0	
RECEPTACLE (VA)		0 AT 100%	=			=			0	
		50%	=			=			0	
MISC. (VA)		31,360 AT 80%	=			=			25,088	
HVAC (VA)		0 AT 125%	=			=			0	
KITCHEN (VA)		0 AT 65%	=			=			0	
TOTAL:		31,360 TOTAL DEMAND:							25,088	
									208V, 3 PHASE =	69.69 A

+ ESTIMATED LOAD, VERIFY ACTUAL WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN, ADJUST CIRCUIT BREAKER, FEEDER SIZE AND RECEPTACLE & SAFETY SWITCH SIZE ACCORDINGLY.

X PROVIDE FEEDER TO EXTERIOR OF BUILDING, WATTAGES AND CIRCUIT BREAKERS SIZES ARE ASSUMED FOR CALCULATIONS PURPOSES.

LOCATION	STORAGE ROOM	PANEL DESIGNATION	RP-B							
120/208	VOLTS	3 PH. 4 WIRE	MOUNTING: F=FLUSH, S=SURFACE							
225	AMPERE BUS	200 AMPERE MAIN	M.C.B. OR M.L.O.:							
22,000	AMP INTERRUPT. CAPACITY		M.C.B.							
SPECIAL REQUIREMENT:		SERVICE ENTRANCE RATED								
CKT NO.	VA	LOAD TYPE	CKT BRK	A	B	C	CKT BRK	LOAD TYPE	VA	CKT NO.
1	200	GAS WATER HTR	20				20	RECEPTS. (ROOF)	400	2
3	360	LIGHTING	20				20	RECEPTS. (EXTERIOR)	600	4
5	180	LIGHTING	20				20	COOLER LTG	600	6
7	600	LIGHTING (BUILDING)	20				20	COOLER LTG	600	8
9	400	LIGHTING (BLDG SIGN)	20				20	RECEPTS.	400	10
11	280	RECEPTS. & EX. FAN	20				20	RECEPTS.	400	12
13	1200	RECEPTS. (WINDOW)	20				20	RECEPTS.	400	14
15	1200	RECEPTS. (WINDOW)	20				20	RECEPTS.	400	16
17	1400	LIGHTING (PARKING LOT)	20				20	RECEPTS.	400	18
19	1400	LIGHTING (PARKING LOT)	20				20	RECEPTS.	200	20
21	800	PUMP LIGHTS	20				20	RECEPTS.	400	22
23	200	ROAD SIDE SIGN RECEPT.	20				20	RECEPTS.	400	24
25	1,200	CANOPY LIGHTING	20				20	SPARE		26
27	1,200	CANOPY LIGHTING	20				20			28
29	800	SIGN ON CANOPY	20				20			30
31	600	ROAD SIDE SIGN	20				20			32
33		SPARE	20				20			34
35		SPARE	20				20			36
37		SPARE	20				20			38
39		SPARE	20				20			40
41		SPARE	20				20			42
LIGHTING (VA)		10,340 AT 125%	=			=			12,925	
RECEPTACLE (VA)		5,600 AT 100%	=			=			5,600	
		50%	=			=			0	
MISC. (VA)		1,280 AT 80%	=			=			1,024	
HVAC (VA)		14,400 AT 125%	=			=			18,000	
KITCHEN (VA)		0 AT 65%	=			=			0	
TOTAL:		31,620 TOTAL DEMAND:							37,549	
									208V, 3 PHASE =	104.30 A

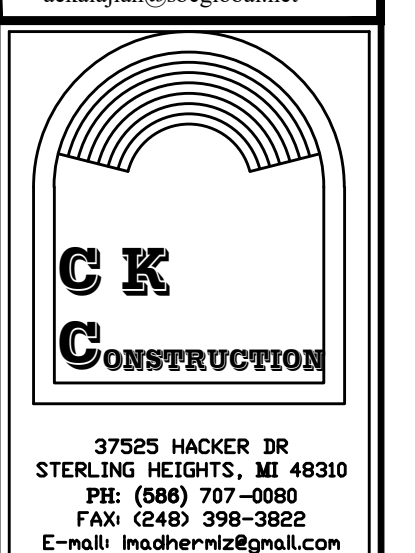
+ ESTIMATED LOAD, VERIFY ACTUAL WITH OWNER AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN, ADJUST CIRCUIT BREAKER, FEEDER SIZE AND RECEPTACLE & SAFETY SWITCH SIZE ACCORDINGLY.

X PROVIDE FEEDER TO EXTERIOR OF BUILDING, WATTAGES AND CIRCUIT BREAKERS SIZES ARE ASSUMED FOR CALCULATIONS PURPOSES. COORDINATE WITH OWNER WITH THE SITE PHOTOMETRICS DRAWINGS THAT WAS ISSUED FOR THE LOCATION OF TYPES OF LIGHTING FIXTURES.

LIGHTING FIXTURE SCHEDULE		
TYPE	DESCRIPTION	NOTES:
"A"	8' LONG VOLUMETRIC LED LIGHTING FIXTURE, PENDANT MOUNTED, STEEL HOUSING, MVOLT, 3500K COLOR TEMPERATURE, 80CRI, SNAP ON FROSTED DIFFUSER, WHITE PAINT FINISH, 80CRI COLOR RENDERING INDEX. LITHONIA: ZL-1N-L96-FST-MVOLT-35K-80CRI	PENDANT
"B"	SAME AS "A", EXCEPT 4' LONG.	SURFACE
"X"	EXIT SIGN WITH 6" HIGH RED LETTERS, BRUSHED ALUMINUM STENCIL FACE, DIE-CAST HOUSING, L.E.D. LAMPS, SEALED MAINTENANCE-FREE NICKEL CADMIUM BATTERY, (SINGLE OR DOUBLE FACE WITH DIRECTIONAL ARROWS, AND MOUNTING AS INDICATED ON DRAWING). 1WATT LITHONIA CAT. # LQM-S-W-R-120/277-ELN-SD	UNIVERSAL
"EBU"	EMERGENCY BATTERY LIGHTING UNIT WITH WHITE POLYCARBONATE HOUSING, TWO (2) 5.4W LINEAR PATTERN LED LAMPS, 9.6 VOLT LITHIUM IRON PHOSPHATE MAINTENANCE-FREE BATTERY, SELF-DIAGNOSTIC SYSTEM AND FULLY AUTOMATIC SOLID STATE CHARGER. REMOTE TESTER. (2)5.4W LITHONIA CAT. # ELMLT-W-LP06VS-LTP-SD-RT	UNIVERSAL
"EBUX"	COMBINATION EXIT SIGN AND EMERGENCY BATTERY UNIT WITH 6" HIGH RED LETTERS, BRUSHED ALUMINUM STENCIL FACE, DIE-CAST HOUSING, L.E.D. LAMPS, SEALED MAINTENANCE-FREE NICKEL CADMIUM BATTERY, (SINGLE OR DOUBLE FACE WITH DIRECTIONAL ARROWS, AND MOUNTING AS INDICATED ON DRAWING). 1W LITHONIA CAT. # LHQM-LED-R-HO-N-SD	UNIVERSAL
"EBU-1"	REMOTE EMERGENCY LIGHTING UNIT WITH WHITE POLYCARBONATE HOUSING, ONE (1) 1.5W LINEAR PATTERN LED LAMPS, 9.6 VOLT, SELF-DIAGNOSTIC SYSTEM, WEATHER PROOF, CAST ALUMINUM. SUITABLE WITH USE WITH TYPE "EBUX" (SEE ABOVE), 1.5W LITHONIA CAT. # ELA-QWP-L0309-SD	UNIVERSAL

SYMBOL LIST	
SYMBOL	DESCRIPTION
	EXIT LIGHT, WALL MTD, ARROWS AS INDICATED
	EXIT LIGHT, CEILING MOUNTED, ARROWS AS INDICATED
	EMERGENCY BATTERY UNIT
	RECESSED 2'x4' LIGHTING FIXTURE
	SURFACE MOUNTED 1'x4' LIGHTING FIXTURE
	PENDANT MOUNT LIGHTING FIXTURE
S	SINGLE POLE SWITCH
S ₃	THREE WAY SWITCH
S ₂	DOUBLE POLE SWITCH
S _T	MANUAL MOTOR STARTER, THERMAL PROTECTION
	CONTROL PANEL BY MECHANICAL TRADES
	DISCONNECT SWITCH (NF = NON FUSED)
	JUNCTION BOX
	LIGHTING/RECEPTACLE/EQUIPMENT PANEL
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
	COMBINATION TELEPHONE AND DATA OUTLET
	DUPLEX RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET, ABOVE COUNTER
	DOUBLE DUPLEX RECEPTACLE OUTLET
	SPECIAL RECEPTACLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
GFI	GROUND FAULT INTERRUPTER
WP	WEATHERPROOF
(E)	EXISTING INSTALLATION TO REMAIN
(R)	RELOCATED
(TYP.)	TYPICAL

KALAJIAN ARCHITECTURE & DESIGN LLC. ARCHITECTS
1871 AUSTIN DRIVE TROY MICHIGAN 48063
OFFICE: 248-524-3616
FAX: 248-524-0217
sekajian@shgglobal.net



REVISIONS:		
NO.	PERMITS	DATE
1-		03/20/24
2-		
3-		
4-		

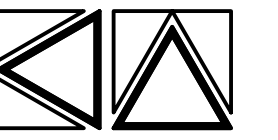
RENOVATION TO EXISTING GAS STATION
8233 N. VIA PASEO DEL NORTE
SCOTTSDALE, AZ 85258

REAL / SIGNATURE
DATE

DRAWING TITLE: ELECTRICAL SCHEDULES
PROJECT NO.: 026-02
FILE NAME: Scottsdale

DRAWN BY: S.D.
CHECKED BY: S.D.
DATE: 03/30/24

SHEET NO:
E-4



KALAJIAN ARCHITECTURE
& DESIGN LLC.
ARCHITECTS

1871 AUSTIN DRIVE TROY
MICHIGAN 48063

OFFICE: 248-524-3616
FAX: 248-524-0217
EMAIL:
aekalajian@sbcglobal.net

**PROPOSED REMODELING
OF AN EXISTING
BUILDING**

CONTACT PERSON/OWNER

Ronnie Jamil
ronniejamil29@gmail.com
CELL: (480)
580-6007

**RENO. EXIST. GAS
STATION**
8233 N. VIA PASEO DEL NORTE
SCOTTSDALE, ARIZ. 85258

**DESCRIPTION:
HVAC PLAN & NOTES**

DRAWN BY AK
CHECKED BY AK
DATE 02.14.24
PROJECT #: 008-23-03-16
SCALE 1/4" = 1'-0"

SEAL:

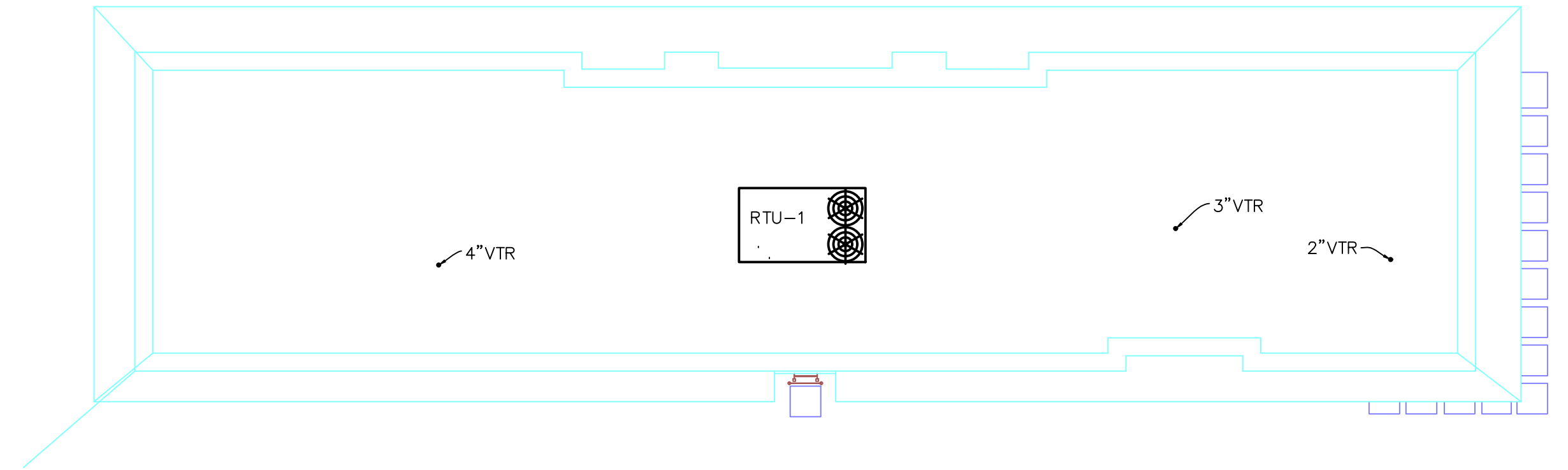
Date	No.	Issued by

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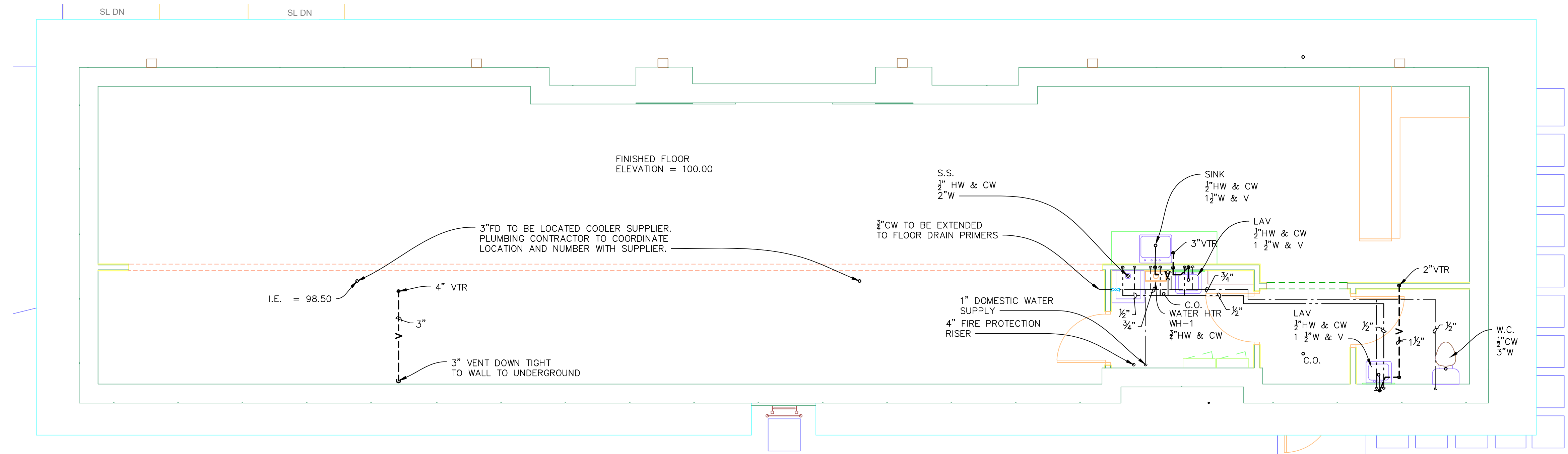
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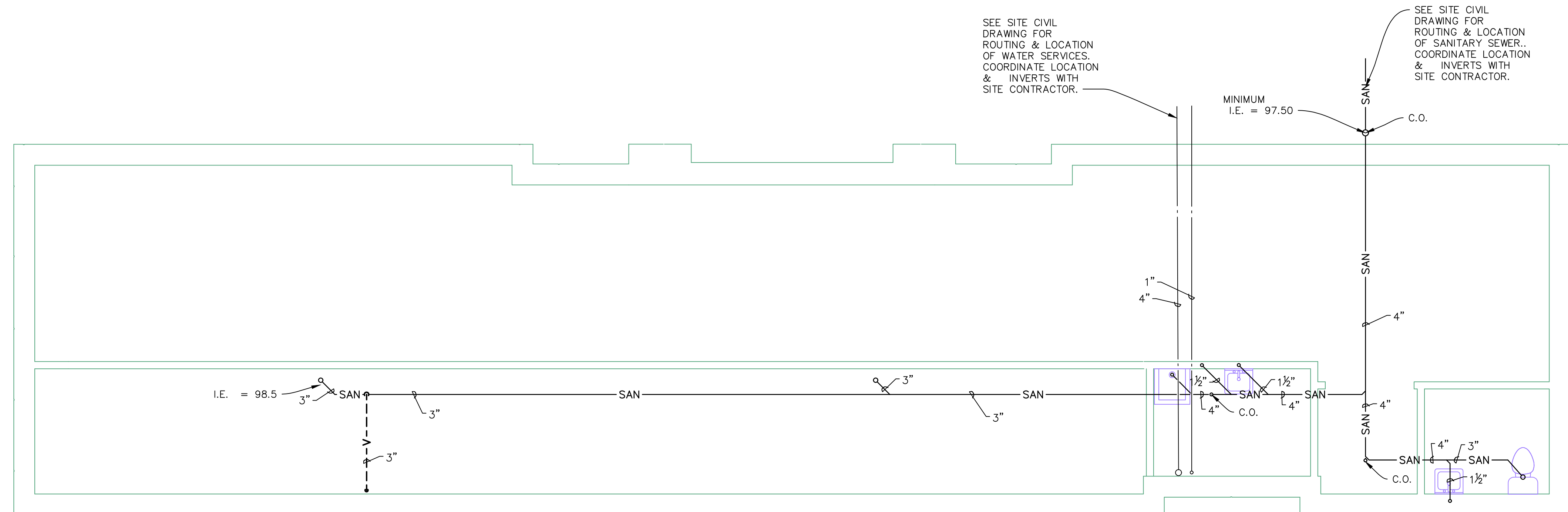
Plumbing Roof Plan

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



Plumbing Floor Plan

SCALE: 1/4" = 1'-0"



Plumbing Underground Plan

SCALE: 1/4" = 1'-0"

PLUMBING SPECIFICATION

GENERAL:

- CONTRACTOR SHALL PROVIDE EQUIPMENT AND SPECIALTIES INDICATED HERE-IN TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES AND CODES OF THE CITY OF SCOTTSDALE, STATE OF ARIZONA, FEDERAL AND COUNTY AGENCIES.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY FEES AND PERMITS REQUIRED IN THE PERFORMANCE OF HIS WORK.
- ALL CUTTING AND PATCHING FOR NEW WORK SHALL BE DONE BY THIS CONTRACTOR WITH THE APPROVAL OF THE GENERAL CONTRACTOR. ANY CUTTING OF THE PRECAST PLANK SHALL BE BY THE GENERAL CONTRACTOR ONLY.
- CONTRACTOR SHALL VISIT THE SITE AND CHECK THE EXISTING CONDITIONS BEFORE SUBMISSION OF BIDS. NO ALLOWANCE SHALL BE MADE IN BEHALF OF EXTRA EXPENSES DUE TO THE FAILURE TO MAKE SUCH AN EXAMINATION.
- CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT OF EQUIPMENT, PIPING AND DUCTWORK. DO NOT SCALE DRAWINGS.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
- CONTRACTOR SHALL SECURE FINAL OCCUPANCY INSPECTION AND SUBMIT CERTIFICATES TO THE ARCHITECT.
- CONTRACTOR SHALL FLUSH AND CLEAN AND SANITIZE ALL PIPING PER CODE REQUIREMENTS. ALL SYSTEMS TESTING REQUIRED BY THE RULING AGENCIES SHALL BE PERFORMED AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL FURNISH THE OWNER WITH A WRITTEN GUARANTEE TO CORRECT ALL IMPERFECTIONS IN MATERIALS AND WORKMANSHIP WHICH MAY DEVELOP IN THE SYSTEMS INSTALLED AND UNDER NORMAL USE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER.
- EXCAVATING AND BACKFILL WILL BE BY THIS CONTRACTOR. ALL BACKFILL SHALL BE COMPACTED SAND.
- CONTRACTOR SHALL PROVIDE, STORE, PLACE AND INSTALL ALL NECESSARY EQUIPMENT REQUIRED. ALL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A MANNER AS TO FUNCTION IN ITS INTENDED USE.

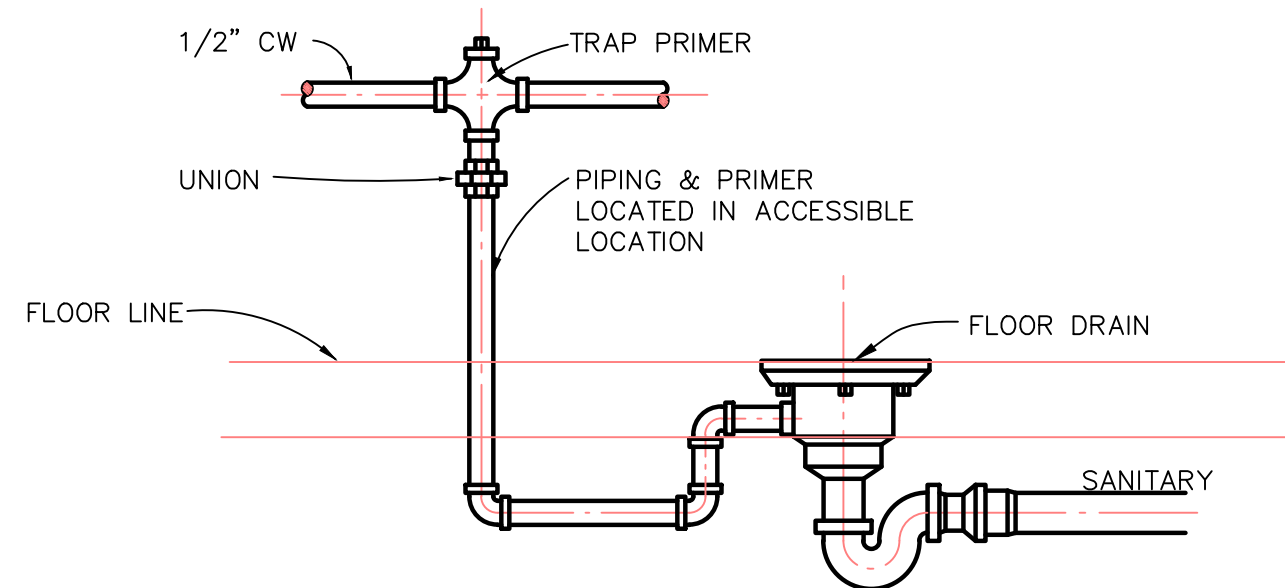
INSULATION:

- PROVIDE AND INSTALL A COMPLETE SYSTEM AS SPECIFIED FOR THE DOMESTIC WATER PIPING.
- ACCEPTABLE MANUFACTURERS ARE OWENS CORNING, JOHNS MANVILLE, CSG INDUSTRIES OR ARMSTRONG.
- ALL DOMESTIC HOT AND COLD WATER LINES SHALL BE INSULATED WITH 1" THICK FIBERGLASS INSULATION WITH INTEGRAL VAPOR BARRIER JACKET, UL LISTED NON-COMBUSTIBLE WITH A THERMAL CONDUCTIVITY OF 0.25 BTUH PER SQ. FT. PER INCH THICKNESS.
- INSULATE THE UNDERSIDE OF ALL ROOF SUMPS AND HORIZONTAL CONNECTING PIPING TO A POINT 5'-0" FROM THE ROOF SUMPS WITH 1" THICK FIBERGLASS INSULATION WITH INTEGRAL VAPOR BARRIER JACKET. CONTRACTOR MAY USE 3/8" THICK ARMAFLEX IN LIEU OF FIBERGLASS.

PLUMBING:

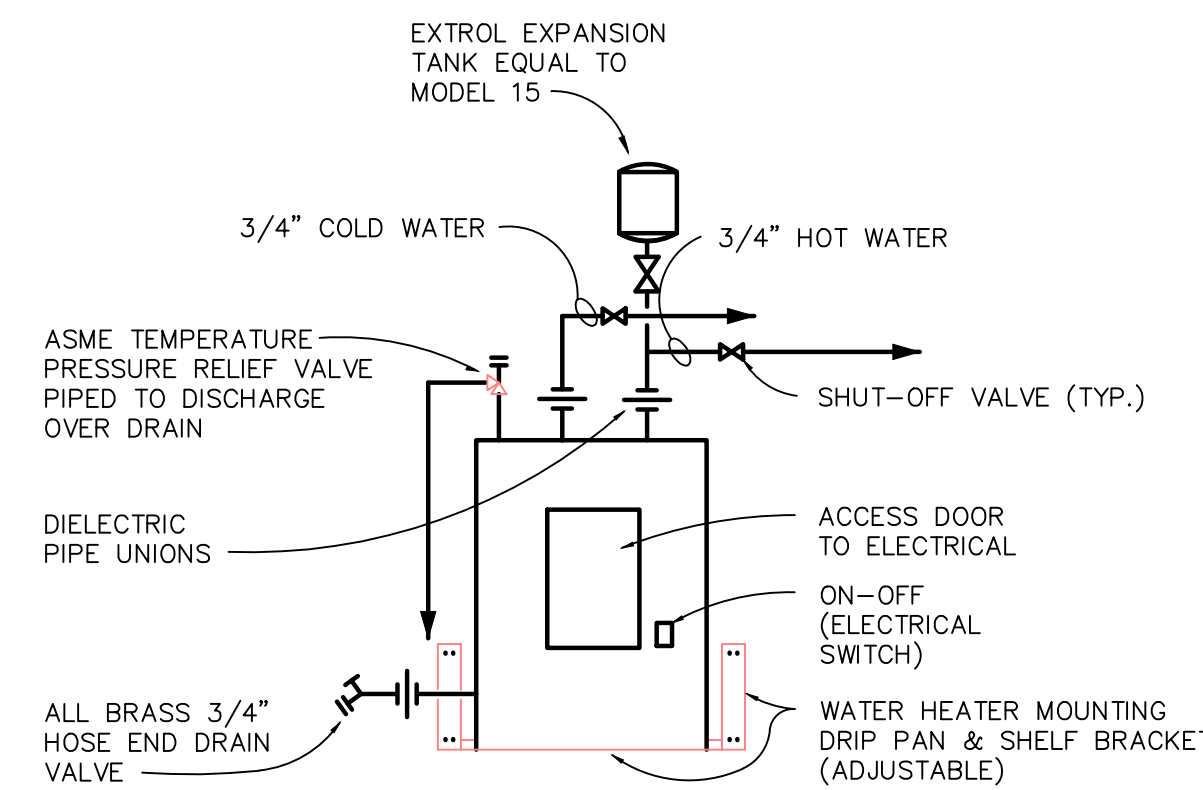
- DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE "M" HARD TEMPER COPPER PIPE WITH SWEAT FITTINGS THROUGHOUT. UNDER-GROUND PIPING 2 1/2" AND BELOW SHALL BE TYPE K COPPER AND 3" AND ABOVE SHALL BE CLASS 4 ANSI A21.6 CEMENT LINED CAST IRON PIPE WITH PUSH-ON JOINTS. PROVIDE THRUST BLOCKS AS REQUIRED.
- VENT PIPING SHALL BE GALVANIZED IRON PIPE OR SCHEDULE 40 PLASTIC PIPE IF APPROVED BY LOCAL CODE AND NOT IN RETURN AIR PLENUM.
- ALL SANITARY DRAIN PIPE ABOVE GROUND SHALL BE CAST IRON WITH NO-HUB CONNECTIONS OR PLASTIC PIPING IF APPROVED BY LOCAL CODE.
- ALL SANITARY DRAIN PIPING BELOW GROUND SHALL BE SERVICE WEIGHT CAST IRON WITH BELL AND SPIGOT CONNECTIONS OR NO-HUB FITTINGS WITH ALL STAINLESS STEEL COUPLINGS INCLUDING FASTENERS. PLASTIC PIPE MAY BE USED IF ALLOWED BY THE LOCAL CODE FOR THE SERVICE INVOLVED.
- PROVIDE FOR EXPANSION IN ALL PIPING.
- PROVIDE CLA-VAL CO. WATER PRESSURE REDUCING VALVES OF TYPES AND SIZES AS INDICATED IN THE CONTRACT DOCUMENTS. VALVES SHALL BE PILOT OPERATED WITH FLANGED ENDS, CAST IRON BODIES, AND BRONZE TRIM. APPROVED MANUFACTURERS: CLA-VAL CO., OCV CONTROL VALVES, SPENCE.
- PROVIDE WATTS SERIES L70A THERMOSTATIC MIXING VALVES AT ALL HANDICAP FIXTURES AND WHERE SHOWN ON THE CONTRACT DOCUMENTS. UNITS SHALL HAVE A BRONZE BODY, REPLACEABLE HYDRAULICALLY OPERATED CONNECTIONS AND MANUAL DIAL TEMPERATURE ADJUSTMENT CAP RANGING FROM 100 DEGREES F., TO 130 DEGREES F., TEMPERED WATER DISCHARGE TEMPERATURE. APPROVED MANUFACTURERS: WATTS REGULATOR CO., DOLE VALVE CO., HOLBY VALVE CO.
- AIR CHAMBERS: PROVIDE AIR CHAMBERS IN BOTH HOT AND COLD WATER RISERS, SUPPLY BRANCH RISERS, AND HORIZONTAL RUNOUTS TO EACH FIXTURE AND AT EACH FIXTURE. AIR CHAMBERS SHALL BE CONCEALED IN PARTITIONS, WALLS AND PIPE.
- PROVIDE PROPER HANGERS AND SUPPORTS FOR ALL PIPING.
- PROVIDE GATE VALVES AND UNION AT EACH PIECE OF EQUIPMENT AND FIXTURES.
- PROVIDE FLOOR DRAINS WITH DEEP SEAL TRAPS, LACQUER OR ASPHALTUM COATED CAST IRON BODY, CLAMPING COLLARS WITH INTEGRAL SEEPAGE PAN TO ACCEPT WATERPROOF MEMBRANE, EXTENSION FRAME AND/OR SLEEVE FOR HEIGHT ADJUSTMENT WHERE REQUIRED AND NICKEL BRONZE STRAINERS UNLESS OTHERWISE NOTED.
- PROVIDE TRAP PRIMER FITTING FOR ALL FLOOR DRAINS, FLOOR SINKS AND HUB OUTLETS. TRAP PRIMER FEED SHALL BE FROM SINK OR LAVATORY COLD WATER SERVICE. SUPPLY-TYPE TRAP SEAL PRIMER VALVES: ASSE 1018, WATER-SUPPLY-FED TYPE, WITH THE FOLLOWING CHARACTERISTICS: MANUFACTURERS: E & S VALVES, JOSAM CO., MIFAB MANUFACTURING, INC, PRECISION PLUMBING PRODUCTS, INC., SMITH, JAY R. MFG. CO., WATTS INDUSTRIES, INC.; DRAINAGE PRODUCTS DIV., ZURN INDUSTRIES, INC.; JONESPEC DIV.
- EXTENSION SLEEVES AND FRAME HEIGHT REQUIREMENTS SHALL COMPLY WITH ARCHITECTURAL REQUIREMENTS. PROVIDE CLAMPING COLLARS WITH INTEGRAL SEEPAGE PAN ON ALL DRAINS THAT ARE TO RECEIVE A WATERPROOF MEMBRANE.
- FLOOR OR SAFE WASTE SINK SHALL BE EQUAL TO SMITH 3160 WITH STRAINER, DUCO CAST IRON CONSTRUCTION AND 1/2 GRATE.
- FLOOR DRAINS SHALL BE EQUAL TO SMITH NO. 2270 CAST IRON WITH NICKEL BRONZE TOP.
- CLEANOUTS SHALL BE SIMILAR TO SMITH 4021 WITH SCORIATED NICKEL BRONZE TOP.
- WATER HEATER SHALL BE TANKLESS HEATER. UNITS SHALL BE COMPLETE WITH 25 KILOWATT, 240 VOLT/1 PH/60 HZ HEATER WITH GROUNDED PLUG CORD, CHROME PLATED FAUCET WITH ATMOSPHERIC OPENING FOR TANK. UNIT SHALL BE UL LISTED AND APPROVED.
- ALL PLUMBING FIXTURES SHALL CONFORM TO THE STATE OF ARIZONA BARRIER FREE CODE AND THE AMERICAN DISABILITIES ACT AS IT RELATES TO THE MOUNTING HEIGHTS, TYPES OF FIXTURES AND THE FITTINGS REQUIRED FOR CONFORMANCE.
- WATER CLOSETS (TANK TYPE) SHALL BE EQUAL TO AMERICAN STANDARD 2812.053 ELONGATED CADET, SIPHON JET ACTION BOWL, CLOSE- COUPLED TANK COMPLETE WITH SUPPLY PIPE. PROVIDE 2" HIGH SEAT TO COMPLY WITH HANDICAP REQUIREMENTS WHERE REQUIRED. STANDARD OPEN FRONT SEAT WITHOUT COVERS FOR REMAINDER. ALL SEATS SHALL BE WHITE.
- WALL HUNG LAVATORIES SHALL BE EQUAL TO AMERICAN STANDARD LUCERNE 0356041 020 FOR WALL HANGER CARRIER. PROVIDE AQUARIAN FAUCET 2379 018 WITH POP-UP 1 1/4" DRAIN AND SINGLE LEVER HANDLE AS SPECIFIED ABOVE. PROVIDE 1 1/4" DRAIN AND CHROME PLATED P-TRAP.
- ALL SINK DIMENSIONS SHALL BE CONFIRMED WITH ARCHITECTURAL BASE CABINET DRAWINGS TO INSURE THAT TOP AND SINK COMPARTMENTS MATE THE COMPANION BASE CABINET.
- SERVICE SINKS SHALL BE SIMILAR TO WILLIAMS SERVICECTOR MODELSB-900 WITH STAINLESS STEEL RIM. PROVIDE T-15-VB FAUCET, VACUUM BREAKER AND T-35 HOSE AND WALL HOOK.
- SUPPORTS, FITTINGS, SUPPLIES, ETC., FOR A WORKING SYSTEM.
- PROVIDE "REDUCED PRESSURE" BACKFLOW PREVENTERS WHERE INDICATED COMPLETE WITH TWO SPRING LOADED CHECK VALVES, SPRING LOADED DIAPHRAM ACTUATED DIFFERENTIAL PRESSURE RELIEF VALVES, TWO GATE VALVES, FOUR TEST COCKS, TWO UNIONS AND INTERCONNECTING PIPING AT 175 PSI MAXIMUM WORKING PRESSURE. PROVIDE FUNNEL DRAIN ASSEMBLY AND FULL SIZED DRAIN PIPED TO FLOOR DRAIN OR SAFE WASTE. UNIT SHALL BE EQUAL TO WATTS 909 SERIES.

WATER HEATER SCHEDULE	
MARK	WH-1
MANUFACTURER & MODEL NO.	RHEEM RETEX 24
FUEL TYPE	ELECTRIC
HEATER TYPE	INSTANTANEOUS
STORAGE CAPACITY	NONE
RECOVERY RATE	3 GPM @ 50' RISE
INPUT	24 KW @ 240/1/60
REMARKS	PROVIDE W/ T & P VALVE, TEN YEAR WARRANTY



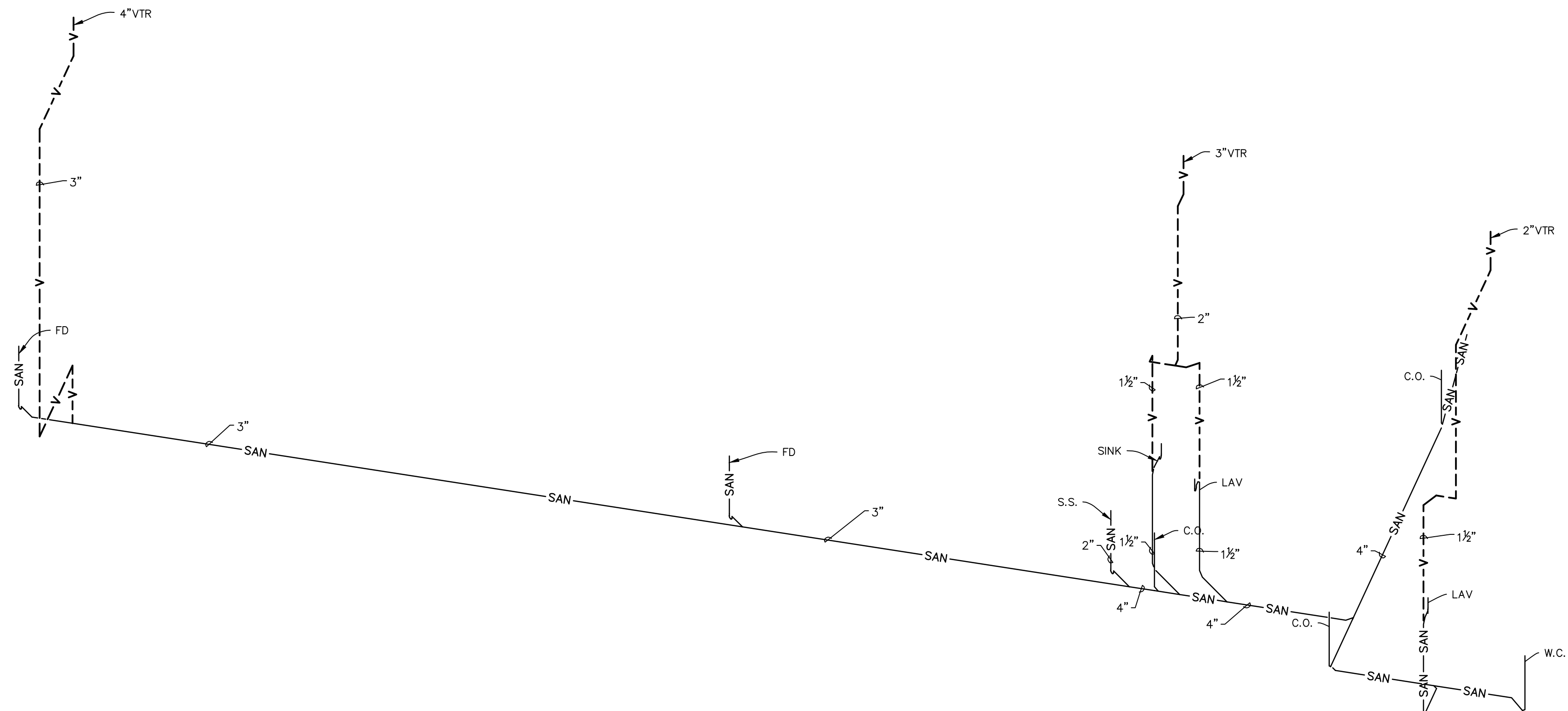
TYPICAL TRAP PRIMER CONNECTION DETAIL

NO SCALE



DOMESTIC HOT WATER HEATER PIPING DIAGRAM

NO SCALE



Plumbing Riser Diagram

SCALE: NONE

MECHANICAL SYMBOL LIST		
SYMBOL	ABBREVIATION	DESCRIPTION
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	SAN	SANITARY SEWER
	ST	STORM SEWER
	FP	FIRE PROTECTION
	R.V.	PRESSURE RELIEF VALVE
		GATE VALVE
		CHECK VALVE
		BALANCING VALVE
		SUPPLY AIR DIFFUSER
		RETURN AIR GRILLE
	EF	EXHAUST FAN
	FD	FLOOR DRAIN
	SWS	SAFE WASTE SINK
	WH	WALL HYDRANT
		UNION
		CLEAN OUT (HORIZONTAL)
		CLEAN OUT (VERTICAL)
	(T)	WALL MOUNTED THERMOSTAT
	LAV.	LAVATORY
	S.S.	SERVICE SINK
	SK-1	SINK
	W.C.	WATER CLOSET
	V.T.R.	VENT THRU ROOF
	A.F.F.	ABOVE FINISHED FLOOR
	I.W.	INDIRECT WASTE
	D.W.	DIRECT WASTE



KALAJIAN ARCHITECTURE & DESIGN LLC. ARCHITECTS

1871 AUSTIN DRIVE TROY MICHIGAN 48063

OFFICE: 248-524-3616 FAX: 248-524-0217 EMAIL: aekalajian@sbcglobal.net

PROPOSED REMODELING OF AN EXISTING BUILDING

CONTACT PERSON, OWNER

Ronnie Jamil
ronniejamil29@gmail.com
CELL: 580-6007 (480)

RENO. EXIST. GAS STATION

8233 N. VIA PASEO DEL NORTE SCOTTSDALE, ARIZ. 85258

DESCRIPTION: HVAC PLAN & NOTES

DRAWN BY	AK
CHECKED BY	AK
DATE	02.14.24
PROJECT #:	008-23-03-16
SCALE	1/4" = 1'-0"
SEAL:	

Date	No.	Issued by

SHEET NO. P-2.0

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HVAC SPECIFICATION

GENERAL:

- CONTRACTOR SHALL PROVIDE EQUIPMENT AND SPECIALTIES INDICATED HERE-IN TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES AND CODES OF THE CITY OF SCOTTSDALE, STATE OF ARIZONA, COUNTY AND FEDERAL AGENCIES.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY FEES AND PERMITS REQUIRED IN THE PERFORMANCE OF HIS WORK.
- ALL CUTTING AND PATCHING FOR NEW WORK SHALL BE DONE BY THIS CONTRACTOR WITH THE APPROVAL OF THE GENERAL CONTRACTOR. ANY CUTTING OF THE PRECAST PLANK SHALL BE BY THE GENERAL CONTRACTOR ONLY.
- CONTRACTOR SHALL VISIT THE SITE AND CHECK THE EXISTING CONDITIONS BEFORE SUBMISSION OF BIDS. NO ALLOWANCE SHALL BE MADE IN BEHALF OF EXTRA EXPENSES DUE TO THE FAILURE TO MAKE SUCH AN EXAMINATION.
- CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT OF EQUIPMENT, PIPING AND DUCTWORK. DO NOT SCALE DRAWINGS.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
- CONTRACTOR SHALL SECURE FINAL OCCUPANCY INSPECTION AND SUBMIT CERTIFICATES TO THE ARCHITECT.
- CONTRACTOR SHALL FURNISH THE OWNER WITH A WRITTEN GUARANTEE TO CORRECT ALL IMPERFECTIONS IN MATERIALS AND WORKMANSHIP WHICH MAY DEVELOP IN THE SYSTEMS INSTALLED AND UNDER NORMAL USE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER.
- CONTRACTOR SHALL PROVIDE, STORE, PLACE AND INSTALL ALL NECESSARY EQUIPMENT REQUIRED. ALL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A MANNER AS TO FUNCTION IN ITS INTENDED USE.

INSULATION:

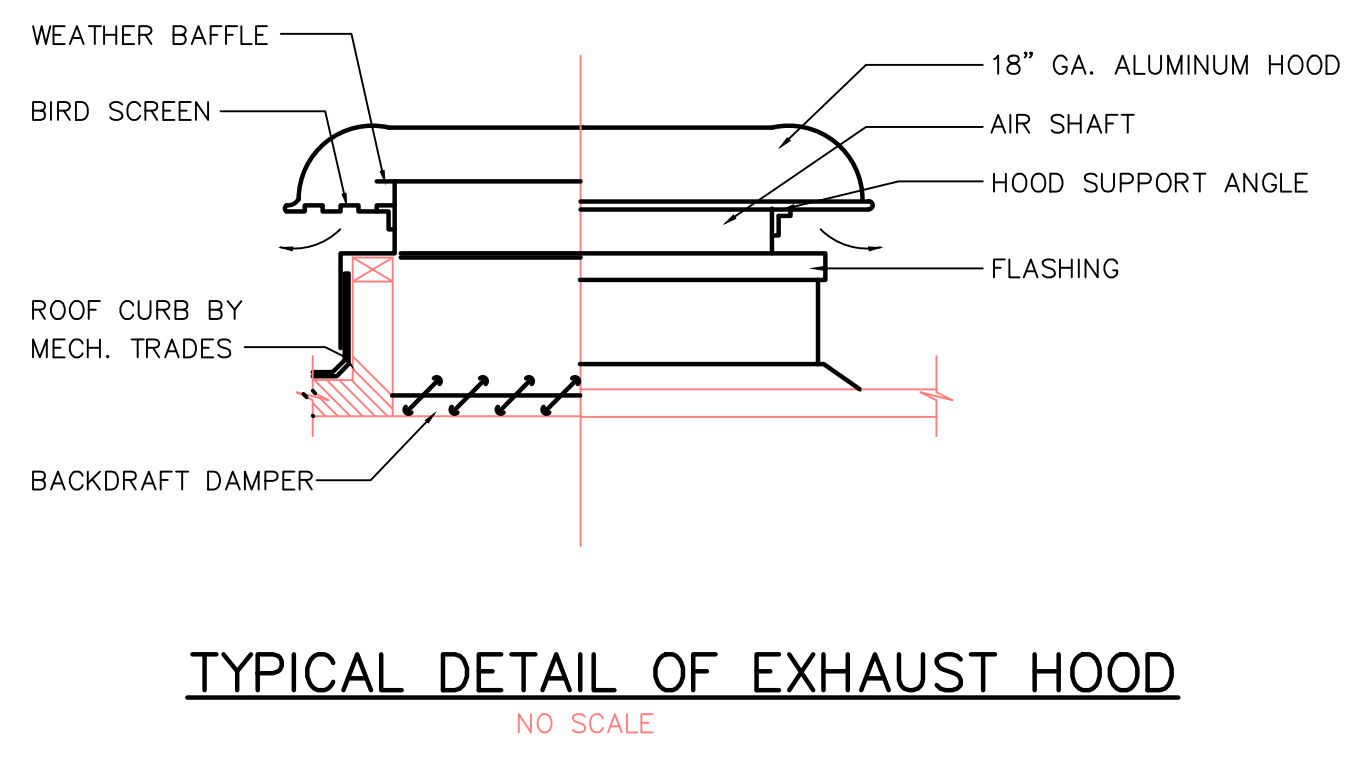
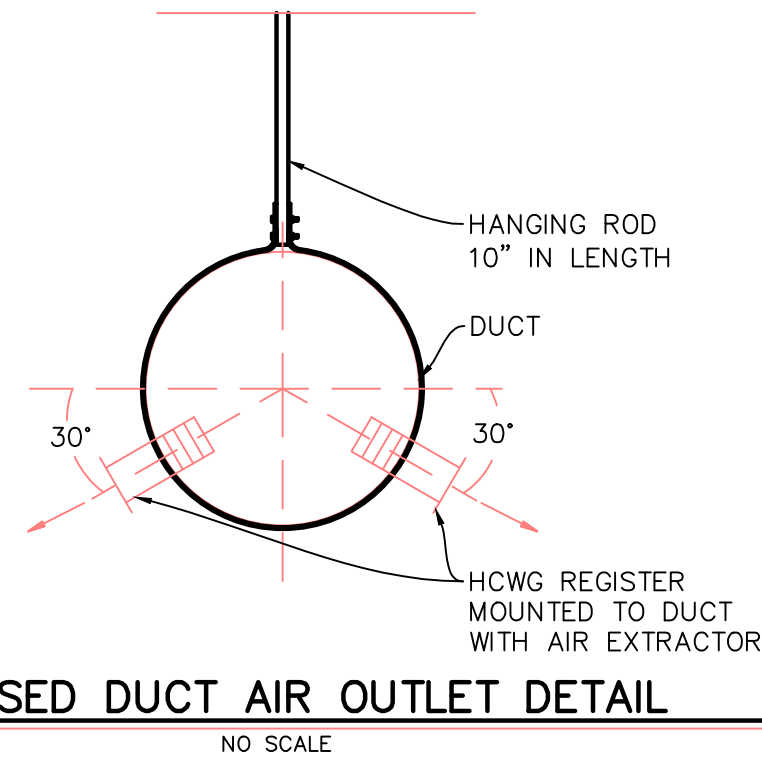
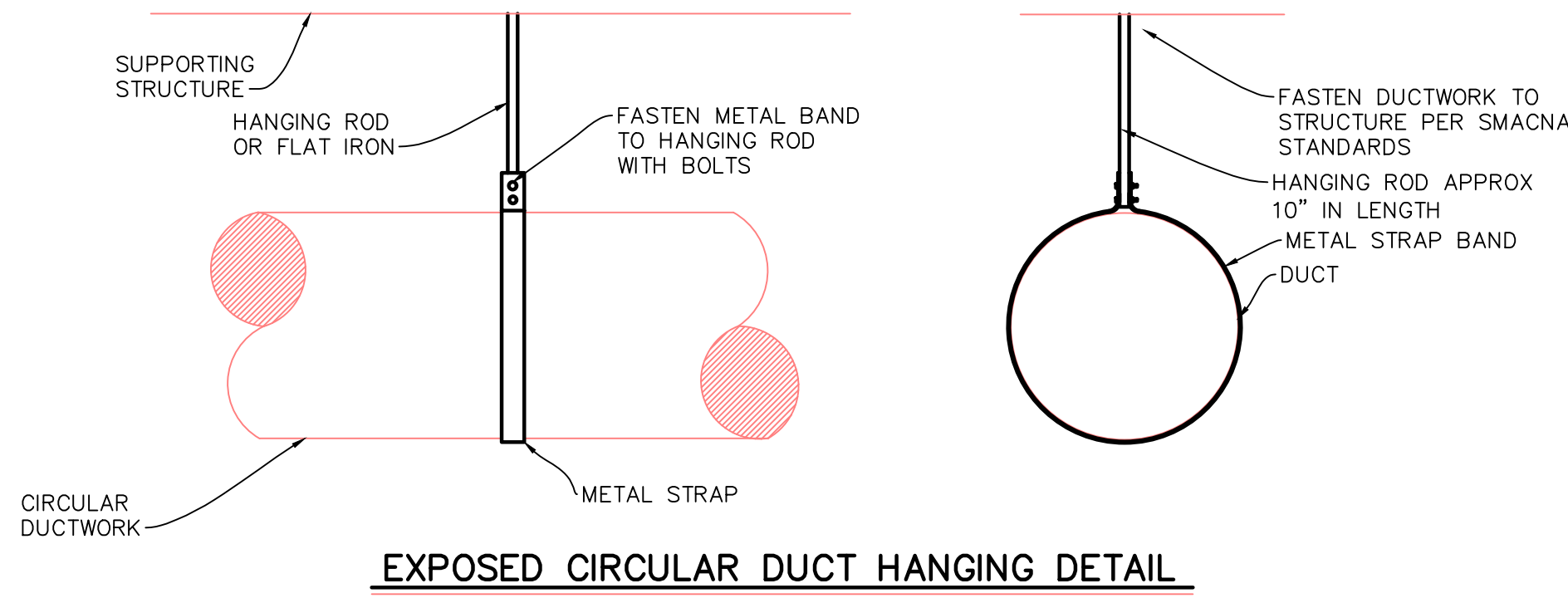
- PROVIDE AND INSTALL A COMPLETE SYSTEM AS SPECIFIED FOR THE DUCTWORK ACOUSTICAL LINING.
- ACCEPTABLE MANUFACTURERS ARE OWENS CORNING, JOHNS MANVILLE, CSG INDUSTRIES OR ARMSTRONG.
- DUCTWORK, WHERE INDICATED ON DRAWINGS, SHALL BE LINED WITH 1" THICK ACOUSTICAL INSULATION WITH INTEGRAL FIRE RETARDANT JACKET. UL LISTED NON-COMBUSTIBLE WITH THERMAL CONDUCTIVITY OF 0.25 BTUH PER SQ. FT. PER INCH THICKNESS.

HEATING AND AIR CONDITIONING:

- ALL SHEET METAL SHALL BE OF NEW MATERIAL, FULL WEIGHT AND BEST MATERIAL.
- FABRICATION AND INSTALLATION SHALL CONFORM TO SMACNA AND ASHRAE.
- DAMPERS SHALL BE SIMILAR TO PACIFIC AIR PRODUCTS MODEL MD-210.
- LOUVERS SHALL BE EQUAL TO AMERICAN WARMING LW-P-1447-J.
- SHEET METAL RUN-OUTS AND FLEXIBLE DUCT CONNECTIONS TO AIR DISTRIBUTION DEVICES SHALL BE SAME SIZE AS DEVICE NECK UNLESS OTHERWISE NOTED.
- FLEXIBLE DUCTWORK SHALL BE INSULATED WITH 1" THICK FIBER-GLASS INSULATION WITH INTEGRAL VAPOR BARRIER.
- CONSTRUCTION SHALL MEET CLASS I REQUIREMENTS OF NFPA 90-A AND BE UL LISTED WITH FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS. FLEXIBLE DUCTWORK SHALL BE 6'-0" IN LENGTH.
- GRILLES, REGISTERS AND DIFFUSERS SHALL BE AS MANUFACTURED BY TITUS, KRUEGER, TUTTLE & BAILEY, CARNES, METALLAIRE OR GRILLMASTER. SEE SCHEDULE ON DRAWING.
- CEILING AND IN-LINE FANS SHALL BE EQUAL TO GREENHECK SP OR CSP MODELS. FANS SHALL HAVE CENTRIFUGAL BLOWER, DIRECT DRIVE BLOWER MOTOR, ACOUSTICALLY LINES CASING AND WALL MOUNTING ON-OFF SWITCH OR VARIABLE SPEED CONTROLLER AS INDICATED. ACCEPTABLE MANUFACTURERS ARE GREENHECK, CARNES, COOK, PENN OR JENN-AIR. SEE SCHEDULE FOR CAPACITIES.
- PROVIDE PREFABRICATED ROOF CURBS AND SUPPORT RAILS FOR ALL ROOF MOUNTED EQUIPMENT. CURBS AND RAILS SHALL BE AS SUPPLIED BY THE EQUIPMENT MANUFACTURER OR THYCURB OR PATE.
- ROOF-TOP HEATING AND COOLING UNITS SHALL BE AS MANUFACTURED BY BRYANT, CARRIER, TRANE, YORK OR APPROVED EQUAL. UNIT SHALL HAVE UL OR AGA APPROVAL AND BE LABELED. UNIT SHALL BE SELF CONTAINED, FACTORY ASSEMBLED WITH ALL COMPONENTS WIRED, PIPED AND TESTED. UNITS SHALL BE ASSEMBLED ON A COMMON STRUCTURAL FRAME. PROVIDE WALL MOUNTING THERMOSTAT, 1" THICK THROWAWAY FILTERS, ECONOMIZER CONTROLS AND ROOF CURB. MANUFACTURER SHALL PROVIDE COMPLETE WIRING DIAGRAMS FOR ALL POWER AND CONTROL WIRING. OUTDOOR AIR AND RETURN AIR DAMPERS SHALL BE GASKETED MATERIAL AROUND PERIPHERY FOR A POSITIVE SEAL. PROVIDE RAIN HOODS FOR OUTDOOR AIR INTAKE. ALL STARTERS SHALL BE INCLUDED WITH UNITS. DISCONNECT SWITCH AND 115 VOLT DUPLEX RECEPTACLE SHALL BE BY ELECTRICAL CONTRACTOR. CONTRACTOR SHALL NOTIFY SAME OF REQUIREMENTS.

TEMPERATURE CONTROL:

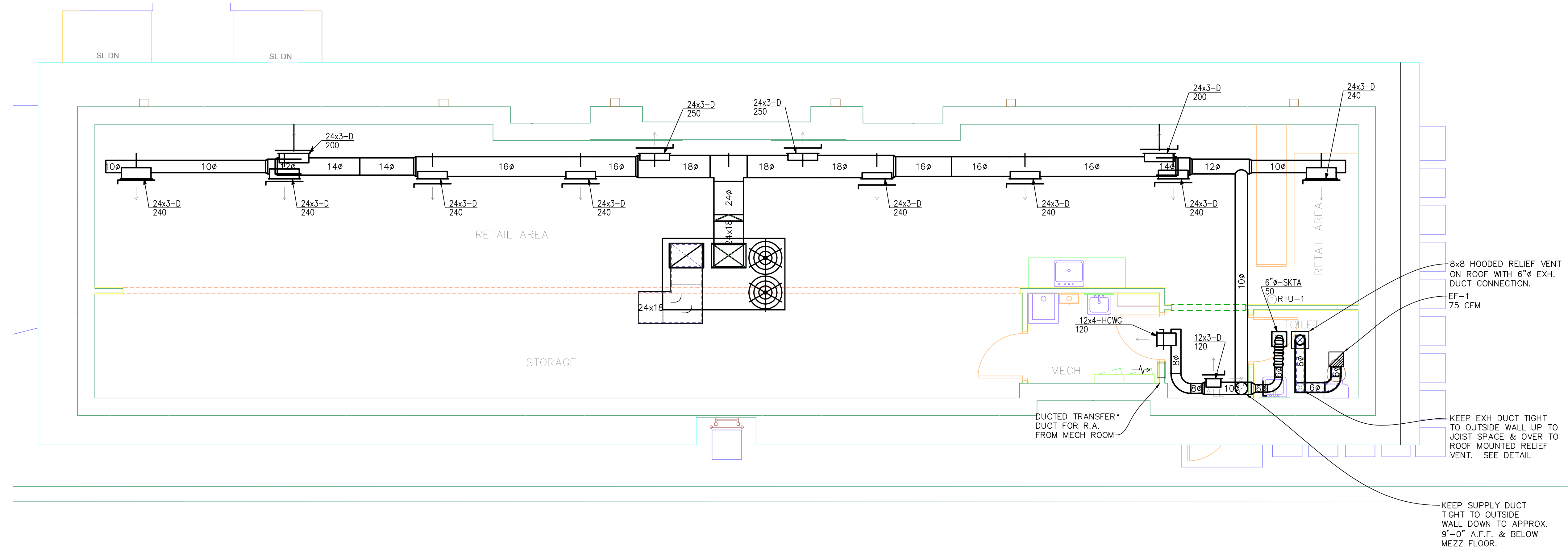
- PROVIDE ALL RELAYS, WIRING AND CONTROLS NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM AS DESCRIBED HEREIN.
- ROOF-TOP UNITS SHALL BE CONTROLLED BY WALL MOUNTED THERMOSTATS WITH SUB-BASE SWITCHING. THERMOSTATS SHALL BE EQUAL TO HONEYWELL CHRONOTHERM THERMOSTATS. DURING OCCUPIED HOURS THE UNIT BLOWERS SHALL RUN CONTINUOUSLY. THE HEATING SHALL CYCLE ON A CALL FOR HEAT. IN THE COOLING MODE THE OUTDOOR TEMPERATURE IS BELOW 65°F. ABOVE 65°F. THE OUTDOOR AIR DAMPER SHALL RETURN TO MINIMUM POSITION AND THE COMPRESSOR(S) SHALL CYCLE TO MAINTAIN SPACE TEMPERATURE. DURING THE UNOCCUPIED CYCLE THE BLOWER AND OUTDOOR AIR DAMPER SHALL BE CLOSED. IN THE "HEAT" MODE THE HEATING MODE AND BLOWER SHALL CYCLE TO MAINTAIN SPACE TEMPERATURE (60°F). IN THE "COOL" MODE THE UNIT SHALL REMAIN DE-ENERGIZED.
- EXHAUST FANS SHALL BE MANUALLY OPERATED FROM A WALL SWITCH.



OUTLET SCHEDULE			
MARK	"D"	"SKTA"	"HCWG"
MANUFACTURER & MODEL NO.	HART & COOLEY USVH	CARNES SKTA	HART & COOLEY 94
FINISH	WHITE	WHITE	WHITE
MATERIAL	STEEL	STEEL	STEEL
DESCRIPTION	TO FIT SPIRAL DUCT	FOR LAY-IN CEIL.	WALL REGISTER
REMARKS	WITH AIR EXTRACTOR	WITH OBD	PROVIDE DUCT SLEEVE

EXHAUST FAN SCHEDULE	
MARK	EF-1
MANUFACTURER & MODEL NO.	CARNES VCDK009C
AREA SERVED	TOILET ROOMS
CFM	75
S.P.(IN. W.G.)	0.375
R.P.M.	1330
WATTS	45 WATTS
ELECTRICAL V/PH/HZ	115/1/60
REMARKS	INTERLOCK W/LIGHT
A	ROOF CURB
C	DISCONNECT
C	BIRD SCREEN
E	BACKDRAFT DAMP.
S	VIB. ISOLATORS
S	2 SPEED
O	BELT DRIVE
R	DIRECT DRIVE
I	WALL CAP
E	ROOF CAP
S	WALL SWITCH

ROOFTOP HEATPUMP UNIT SCHEDULE	
MARK	RTU-1
AREA SERVED	BUILDING
MANUFACTURER	TRANE
MODEL NO.	RT-PRC077-WHC092-3
B	TYPE
L	CFM
O	ESP
W	TSP
E	RPM
R	B.H.P.
ELECTRICAL V/PH/HZ	208/3/60
MCA/MOP	43/50
C	OAT
O	MAT
L	
I	
N	EAT
G	LAT
C	MBH SENS
O	MBH TOTAL
I	
L	
H	MBH
E	EAT
A	LAT
T	OAT
I	
L	
N	
G	ELECT: KW
F	
I	TYPE
L	
T	VELOCITY
E	
R	MEDIUM
S	
REMARKS	PROVIDE ROOF CURB, ECONOMIZER CONTROLS, 7-DAY PROGRAMMABLE THERMOSTAT



KALAJIAN ARCHITECTURE & DESIGN LLC. ARCHITECTS
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PROPOSED REMODELING OF AN EXISTING BUILDING

CONTACT PERSON/OWNER
Rafael Atamil
onniejamil29@gmail.com
CELL: (480) 580-6007

RENO. EXIST. GAS STATION
8033 N. VIA PASO DEL NORTE
SCOTTSDALE, ARIZ. 85258

DESCRIPTION: HVAC PLAN & NOTES

DRAWN BY: AK
CHECKED BY: AK
DATE: 02.14.24
PROJECT #: 008-23-03-16
SCALE: 1/4" = 1'-0"
SEAL:

Date	No.	Issued by

SHEET NO. M-1.0

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