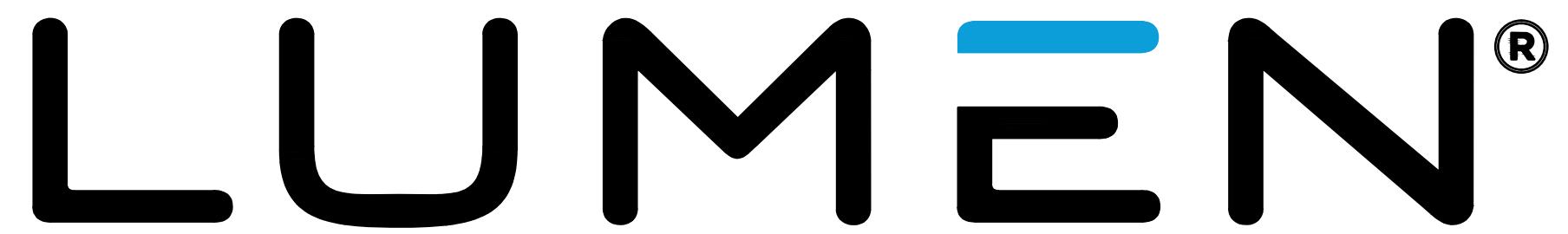
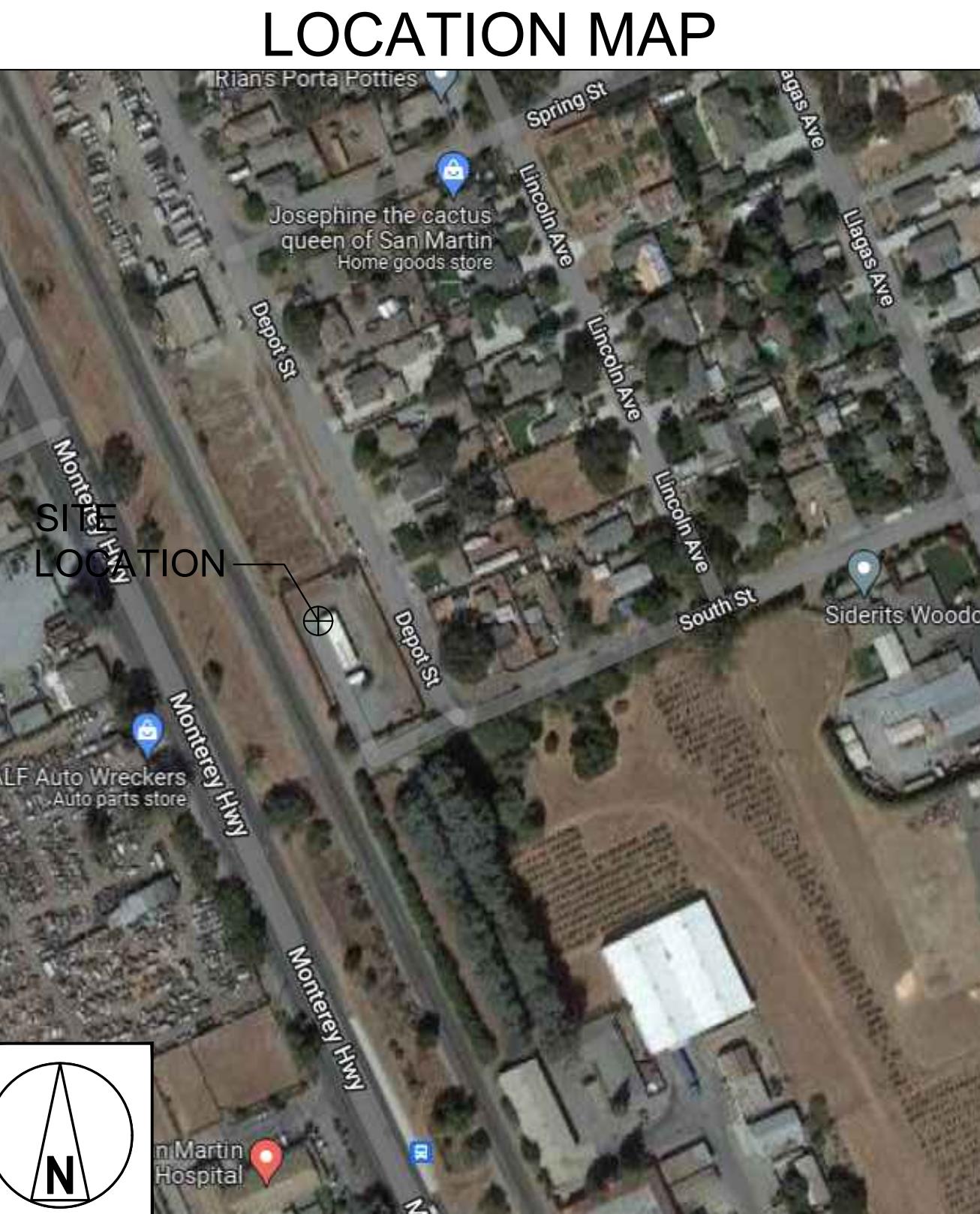
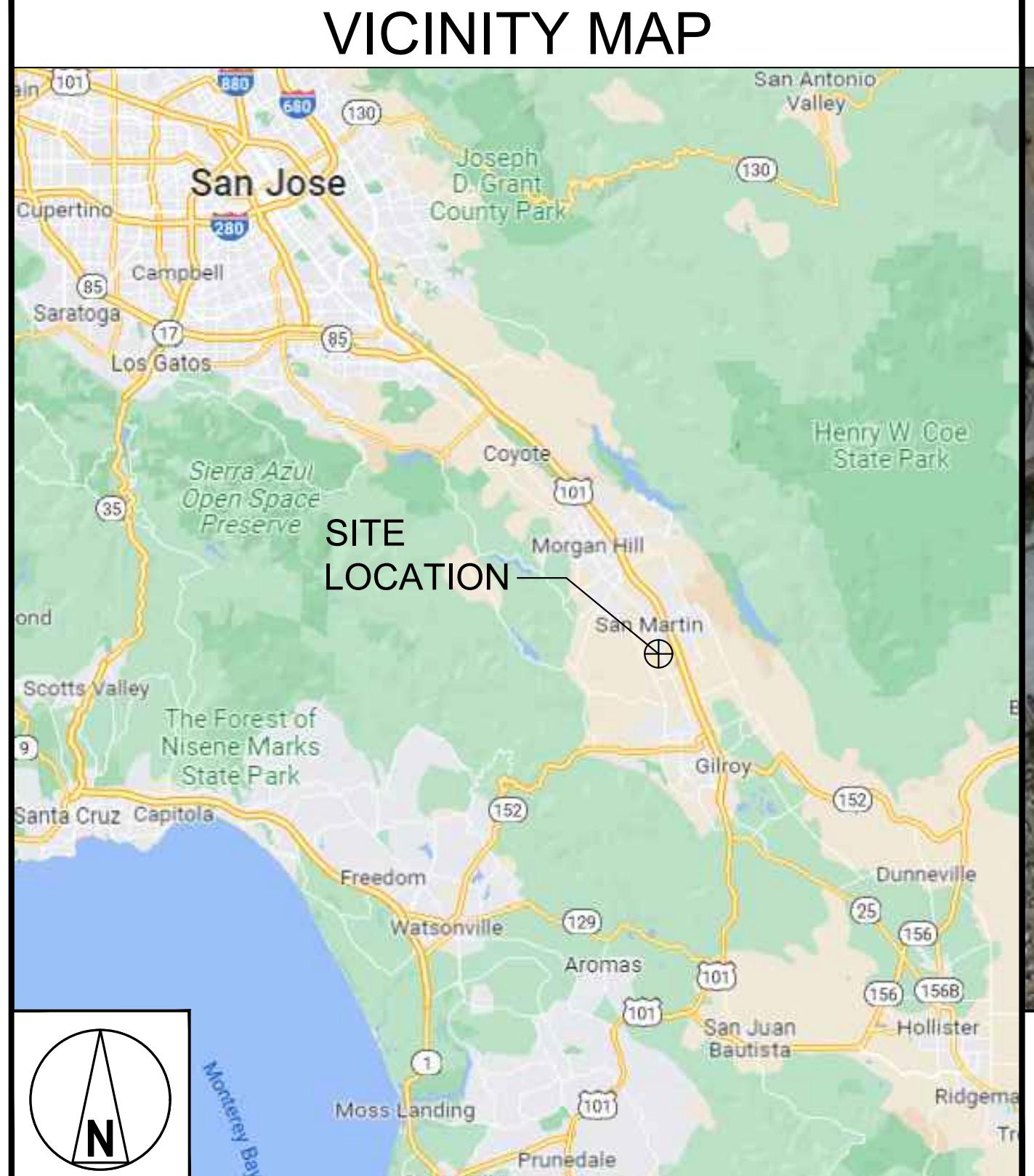


## PROJECT INFORMATION

SITE ADDRESS:	73 SOUTH ST SAN MARTIN, CA 95046
CLLI:	SNMACAAS
SITE NAME:	SAN MARTIN
BUILDING OWNER:	LUMEN
LUMEN PROJECT CONTACT:	TIMOTHY PAPICH LUMEN PROJECT MANAGER EMAIL: TIMOTHY.PAPICH@LUMEN.COM PHONE: (720) 280-4186
LUMEN SITE CONTACT:	CHARLES WALRAFEN CHARLES.WALRAFEN@LUMEN.COM (510) 755-5515
PARCEL NUMBER:	825-02-138
LAND OWNER:	LEVEL 3 COMMUNICATIONS LLC
JURISDICTION:	SANTA CLARA COUNTY
ZONING:	RR-5Ac-sm
USE GROUP:	U
RISK CATEGORY:	I
OCCUPANCY:	UNOCCUPIED
CONSTRUCTION TYPE:	V-B
LATITUDE:	37° 04' 55.5" N (37.0820750°) APPROX.
LONGITUDE:	121° 36' 28.3" W (-121.6078585°) APPROX.
ELEVATION:	284' AMSL (GOOGLE EARTH)



## ILA HUT INSTALLATION

SAN MARTIN  
SNMACAAS73 SOUTH ST  
SAN MARTIN, CA 95046

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520 South Main Street, Suite 2531  
Akron, OH 44311  
330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

REVISIONS			
REV.	DATE	DESCRIPTION	INITIALS
A	11/30/2022	75 CDs FOR REVIEW	JA
0	12/16/2022	ISSUED FOR CONST.	JA
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3	06/13/2023	REVISED PER JDX, CONSTRUCTION SET	JDM
4	09/13/2023	REVISED PER CLIENT, CONSTRUCTION SET	JDM
5	08/08/2024	REVISED PER JDX, CONSTRUCTION SET	JDM

DATE:  
"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."SITE NAME:  
SAN MARTINCLLI/ADDRESS:  
SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION:

APPROVED BY: JWB 5

SHEET TITLE: TITLE SHEET

SHEET NUMBER: T-1

## PROJECT TEAM

PROJECT MANAGEMENT: LUMEN  
1025 ELDORADO BLVD.  
BROOMFIELD, CO 80021  
CONTACT: TIMOTHY PAPICH  
PHONE: (720) 280-4186ENGINEER: GPD GROUP, INC  
520 SOUTH MAIN STREET, SUITE 2531  
AKRON, OHIO 44311  
CONTACT: GAVIN JACOB  
PHONE: (330) 572-3590

## SPECIAL NOTES

- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
- EXISTING CONDITIONS WILL BE CHANGED & VERIFIED IN FIELD. IF SIGNIFICANT DEVIATIONS OR DETERIORATION ARE ENCOUNTERED AT THE TIME OF CONSTRUCTION & CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
- THESE DRAWINGS ARE FULL SIZE & SCALEABLE ON 11"X17" SHEET SIZE.

## CONSTRUCTION NOTES

- THE CONTRACTOR IS TO CALL THE UNDERGROUND PROTECTION SERVICE AND NOTIFY ALL PUBLIC UTILITIES 48 HOURS PRIOR TO BEGINNING WORK TO HAVE THE UTILITIES MARKED IN THE FIELD. ALL EXISTING UTILITIES SHALL BE PROTECTED AT THE CONTRACTOR'S EXPENSE. IF DAMAGE IS CAUSED BY CONSTRUCTION TO ANY EXISTING UTILITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF THE REPAIR AND RESTORATION OF THE SAME.
- INDIVIDUAL STORM, SANITARY, GAS, WATER, ELECTRIC, TELEPHONE AND CABLE SERVICE CONNECTIONS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL LOCATE AND PROTECT SERVICE CONNECTIONS THROUGH THE COURSE OF WORK. IN THE EVENT SERVICE CONNECTIONS ARE BROKEN OR DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE CONNECTIONS AT THE CONTRACTOR'S COST.

## PROJECT DESCRIPTION

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- (4) EXISTING 11'-8" x 36'-0" PREFABRICATED EQUIPMENT SHELTERS TO REMAIN
- (1) EXISTING 11'-8" x 24'-0" PREFABRICATED GENERATOR SHELTER TO REMAIN
- (1) NEW 11'-8" X 36'-0" PREFABRICATED EQUIPMENT SHELTER INSTALLED ON NEW CONCRETE FOUNDATION
- NEW 11'-8" X 36'-0" CONCRETE FOUNDATION
- NEW 400A, 120/208V, 3 PHASE ELECTRICAL CIRCUIT TO PREFABRICATED BUILDING FROM EXISTING ELECTRICAL SERVICE



TO OBTAIN LOCATION OF PARTICIPANTS  
UNDERGROUND FACILITIES BEFORE  
YOU DIG IN CALIFORNIA (SOUTH), CALL  
DIG ALERT!  
TOLL FREE 1-800-227-2800 OR  
[www.digalert.org](http://www.digalert.org)  
CALIFORNIA STATUTE  
REQUIRES MIN OF 2  
WORKING DAYS NOTICE  
BEFORE YOU EXCAVATE

Know what's below.  
Call before you dig.

GENERAL CONSTRUCTION

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:

GENERAL CONTRACTOR - TBD  
CONTRACTOR: (CONSTRUCTION)  
OWNER - LUMEN

2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND LUMEN PROJECT SPECIFICATIONS.

3. GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.

5. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.

8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

9. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.

10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFIRM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.

11. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.

12. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.

13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.

14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.

15. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

16. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

17. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.

19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.

21. THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.

22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.

23. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.

24. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE STRUCTURE, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.

25. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.

26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPAKTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.

28. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.

30. CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

31. CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).

33. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE, INSPECTION, AND OPERATION BY LUMEN TECHNICIANS.

34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST VERSION OF LUMEN GROUNDING SPECIFICATION STANDARDS. IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.

36. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL OVER COUNTER PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.

37. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

38. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

SAFETY ENFORCEMENT

SAFETY IS OF PARAMOUNT CONCERN TO BOTH SITE WORKERS AND THE PUBLIC.

1. CONSTRUCTION WORK PRESENTS UNIQUE THREATS TO HEALTH AND SAFETY. THE CONTRACTOR IS RESPONSIBLE TO EDUCATE THEIR WORK FORCE OF THESE DANGERS AND LIMIT THEIR EXPOSURE TO HAZARDS. THIS EDUCATION SHALL INCLUDE BUT NOT BE LIMITED TO APPLICABLE TRAINING COURSES AND CERTIFICATIONS, PROPER PERSONAL PROTECTIVE EQUIPMENT USAGE, DAILY TAILGATE MEETINGS AND ANY OTHER PREVENTATIVE MEASURES WHICH MAY BE REASONABLY EXPECTED. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND ANY PROPERTY OCCUPANTS WHO MAY BE AFFECTED BY THE WORK UNDER CONTRACT. THE CONTRACTOR SHALL REVIEW ALL LANDOWNER, PRIME CONTRACTOR, CARRIER, OSHA, AND LOCAL SAFETY GUIDELINES AND AT ALL TIMES SHALL CONFORM TO THE MOST RESTRICTIVE OF THESE STANDARDS TO ENSURE A SAFE WORKPLACE.

2. ALL SAFETY EQUIPMENT SHALL BE INSPECTED ACCORDING TO ALL OSHA AND INDUSTRY SCHEDULED INTERVALS AND ALL INSPECTIONS SHALL BE DOCUMENTED PER APPLICABLE CODES AND STANDARDS.

3. ELECTRICAL WORK PRESENTS SPECIFIC THREATS TO THE HEALTH AND SAFETY OF WORKERS ON SITE. SPECIFICALLY ELECTROCUTIONS ARE THE FOURTH LEADING CAUSE OF DEATH ON CONSTRUCTION SITES. ALL ELECTRICAL WORKERS SHALL HAVE CURRENT CERTIFICATIONS WHICH SATISFY ALL TRAINING REQUIREMENTS FOR THE ELECTRICAL WORK THEY ARE PERFORMING PER OSHA STANDARDS. ALL ELECTRICAL WORKERS SHALL ADHERE TO ALL SAFETY RULES AND REGULATIONS FOR WORKER AND PUBLIC SAFETY. ALL WORK SHALL BE PERFORMED BY QUALIFIED ELECTRICIANS TRAINED FOR THE TYPE OF WORK AND THE VOLTAGES PRESENT FOR EACH TASK. THE CONTRACTOR SHALL REVIEW ALL LANDOWNER, PRIME CONTRACTOR, CARRIER, OSHA, NFPA 70, AND LOCAL SAFETY GUIDELINES AND AT ALL TIMES SHALL CONFORM TO THE MOST RESTRICTIVE OF THESE STANDARDS TO ENSURE A SAFE WORKPLACE.



520 South Main Street, Suite 2531  
Akron, OH 44311  
330.572.2100 Fax 330.572.2101

GPD JOB# 2022795.79

REVISIONS

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NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET



EXPIRES: 09/30/2024

08/08/2024

DATE:

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OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY:	JA	RELEASED:	08/08/2024
CHECKED BY:	GDJ	REVISION:	
APPROVED BY:	JWB	5	

SHEET TITLE:  
GENERAL  
CONSTRUCTION  
NOTES

SHEET NUMBER:

N-1

**PART 1 - GENERAL**

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

**1.1 REFERENCES:**

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION).
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).

**1.2 INSPECTION AND TESTING:**

- A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY CONTRACTORS INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATE BY THE CONTRACTOR.
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.
- C. SITE MAINTENANCE AND PROTECTION:
  - A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
  - B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
  - C. KEEP SITE FREE OF ALL PONDING WATER.
  - D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
  - E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
  - F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.
- 1. PROVIDE A MINIMUM 48 HOURS NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

**PART 2 - PRODUCTS**

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NONPOROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POREOUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR ENGINEER APPROVED EQUAL.
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES. 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

**PART 3 - EXECUTION****3.1 GENERAL:**

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
- 1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE. RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.

3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.

D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

**3.2 BACKFILL:**

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8 INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

3. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.

B. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

**3.3 TRENCH EXCAVATION:**

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

**3.4 TRENCH BACKFILL:**

A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6 INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8 INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

**3.5 AGGREGATE ACCESS ROAD:**

A. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL HOLES, RUTS, SOFT PLACES AND OTHER DEFECTS SHALL BE CORRECTED.

B. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.

C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE THE GEOTEXTILE FABRIC (MIRAFI 500XI) SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, ROLLING OUT AS SMOOTHLY AS POSSIBLE.

1. OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.

2. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.

3. ALL OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS A MINIMUM OF 10 INCHES LONG TO INSURE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25 FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET.

D. THE AGGREGATE BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 INCH (COMPACTED) THICKNESS. AGGREGATE TO BE PLACED ON THE GEOTEXTILE FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN TO A THICKNESS OF 8 INCHES PRIOR TO COMPACTION. AT NO TIME SHALL EQUIPMENT, EITHER TRANSPORTING THE AGGREGATE OR GRADING THE AGGREGATE, BE PERMITTED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE FABRIC.

E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557 WITH A TAMPING ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-WHEEL OR TANDEM ROLLER.

**3.6 FINISH GRADING:**

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" - 3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.

D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

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**GPD GROUP**  
Professional Corporation

520 South Main Street, Suite 2531  
Akron, OH 44311  
330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

**REVISIONS**

REV.	DATE	DESCRIPTION	INITIALS
A	11/30/2022	75 CDs FOR REVIEW	JA
0	12/16/2022	ISSUED FOR CONST.	JA
1	03/21/2023	REVISED PER JDJ, CONSTRUCTION SET	JDM
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OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:  
  
SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

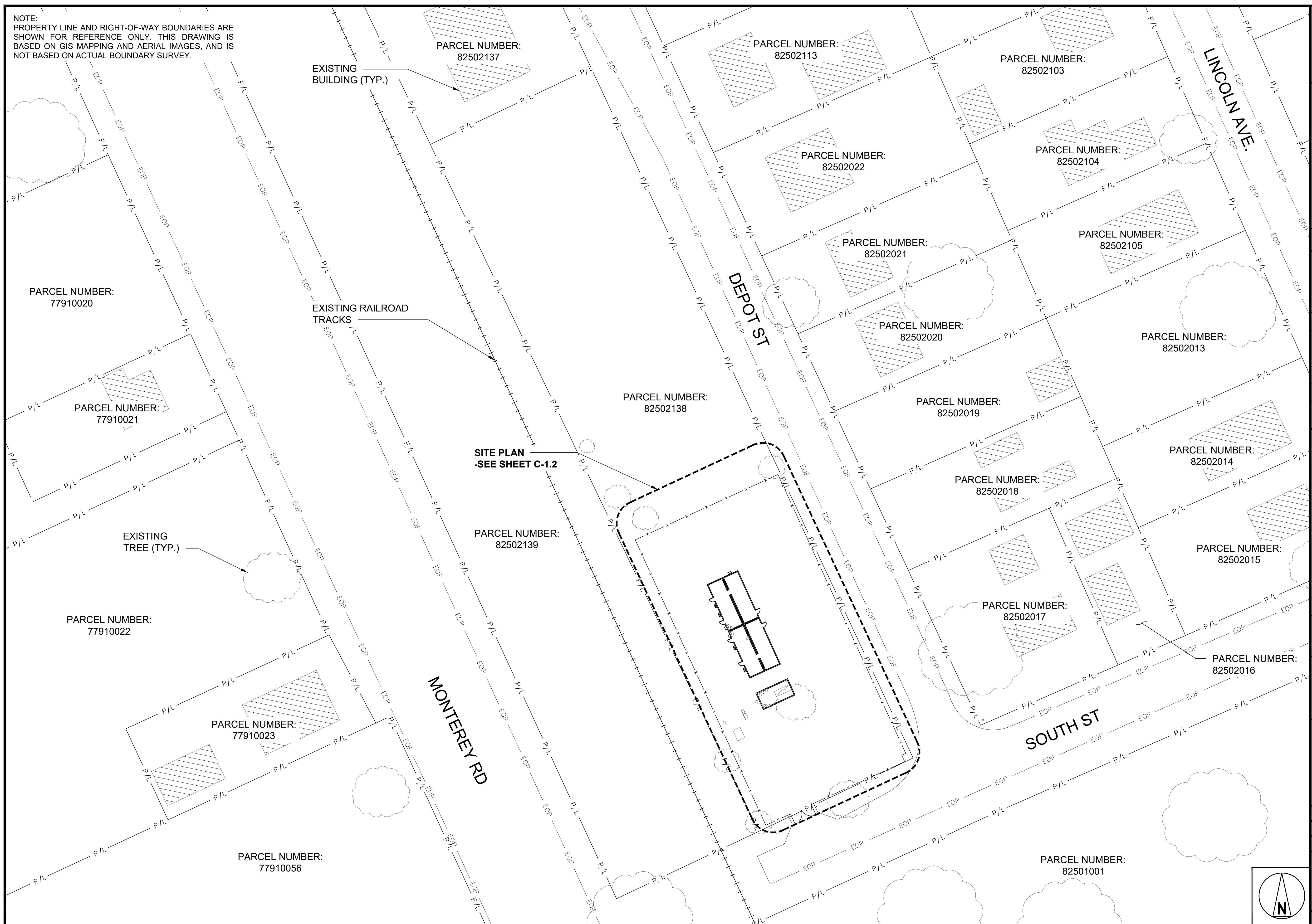
DRAWN BY: JA RELEASED: 08/08/2024  
CHECKED BY: GDJ REVISION: 5  
APPROVED BY: JWB

SHEET TITLE: GENERAL  
CONSTRUCTION  
NOTES  
  
SHEET NUMBER: N-2

NOTE:  
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## EXISTING OVERALL SITE PLAN



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GPD GROUP, INC.®

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08/08/2024

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SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

SHET TITLE:

EXISTING  
OVERALL SITE  
PLAN

SHET NUMBER:

C-1.1

1

0 10' 20' 30'

SCALE: 1/32"=1'-0" (22x34)  
(OR) 1/64"=1'-0" (11x17)

- NOTES:
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  - NO GRADING OR CUT/FILL IS REQUIRED AS PART OF THIS PROJECT.
  - EXISTING CHAIN LINK FENCE WITH REDWOOD SLATS TO REMAIN UNCHANGED. EXISTING FENCE MEETS REQUIREMENTS AS OUTLINED IN SECTION II.H.1 ON PAGE II-15 OF THE SAN MARTIN INTEGRATED DESIGN PLAN AND GUIDELINES.
  - CONTRACTOR SHALL CLEAN AND REMOVE GRAFFITI ON EXTERIOR OF EXISTING FENCE + ALONG THE WEST SIDE OF COMPOUND FACING THE RAILROAD AND MONTEREY ROAD
  - EXISTING KNOX BOX ATTACHED TO EXTERIOR OF COMPOUND GATE.
  - EXISTING FIRE HYDRANT FLOW DATA SHALL MEET APPENDIX B OF THE CFC.
  - LUMEN TO CONTACT WATER PURVEYOR FOR FLOW DATA AS REQUIRED.
  - FIRE DEPARTMENT ACCESS TO BE MADE OF AN "ALL WEATHER" MATERIAL CAPABLE OF HOLDING 75,000 POUNDS.

PARCEL NUMBER:  
82502138

110'-0" FENCE

EXISTING 11'-8"x36'-0"  
EQUIPMENT SHELTER #4  
EXISTING 11'-8"x36'-0"  
EQUIPMENT SHELTER #3  
EXISTING 11'-8"x36'-0"  
EQUIPMENT SHELTER #1  
EXISTING 11'-8"x36'-0"  
EQUIPMENT SHELTER #2

EXISTING 400A SERVICE  
DISCONNECT AND METER

EXISTING MANHOLE

EXISTING PAD MOUNTED  
TRANSFORMER

GRAFFITI ON EXTERIOR  
OF EXISTING FENCE TO  
BE REMOVED  
-SEE NOTE 4

EXISTING  
ACCESS GATE

DEPOT ST  
220'-0" FENCE

400' MIN.

±132'-6"

14'-6"

±60'-0"

20'-0" MIN.

SOUTH ST

EXISTING KNOX BOX  
-SEE NOTE 5

EXISTING  
ACCESS DRIVE  
-SEE NOTE 7

EXISTING TREE  
(TYP.)

EXISTING INTERMEDIATE SITE PLAN



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DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

EXISTING  
INTERMEDIATE  
SITE PLAN

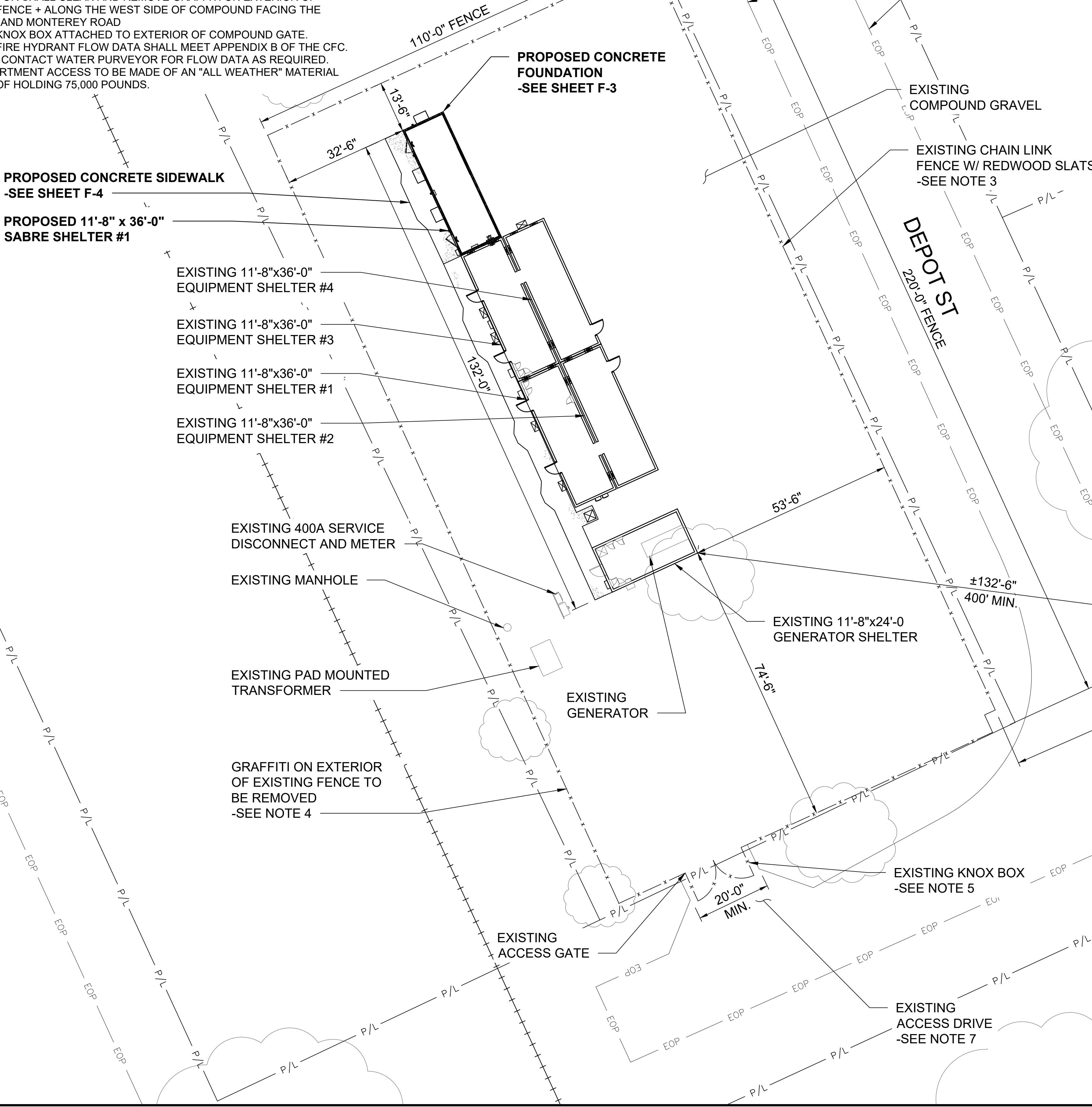
Sheet Number: 1

0 4' 8' 16'  
SCALE: 1/16"=1'-0" (22x34)  
(OR) 1/32"=1'-0" (11x17)

C-1.2

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 6. EXISTING FIRE HYDRANT FLOW DATA SHALL MEET APPENDIX B OF THE CFC.  
 7. LUMEN TO CONTACT WATER PURVEYOR FOR FLOW DATA AS REQUIRED.  
 FIRE DEPARTMENT ACCESS TO BE MADE OF AN "ALL WEATHER" MATERIAL CAPABLE OF HOLDING 75,000 POUNDS.

PARCEL NUMBER:  
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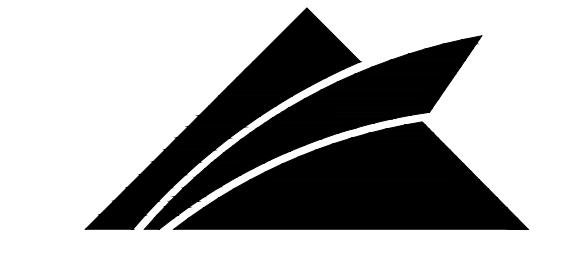
APPROVED BY: JWB

SHEET TITLE: PROPOSED INTERMEDIATE SITE PLAN

SHEET NUMBER: C-2.1

1

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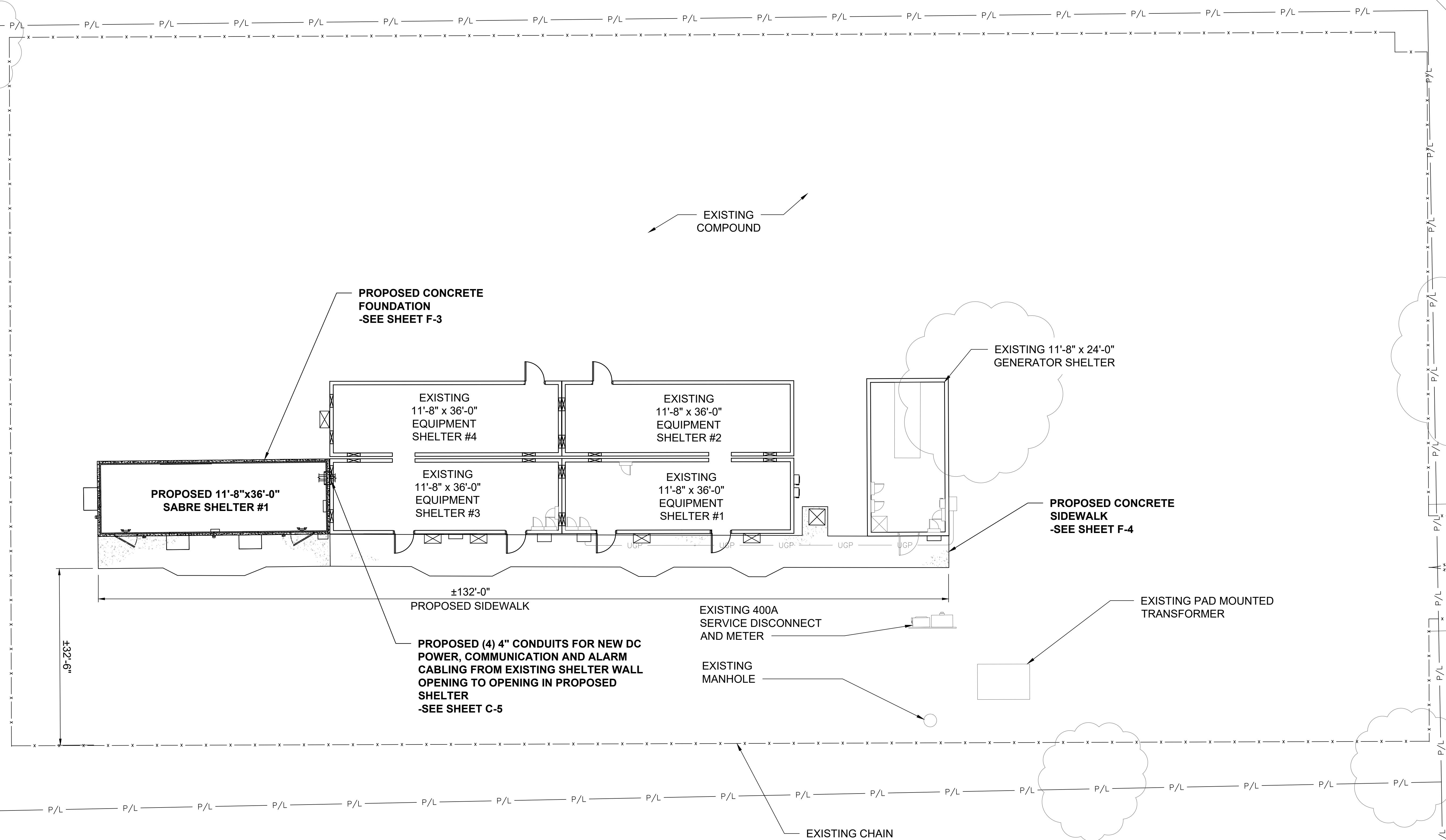
DRAWN BY:	JA	RELEASED:	08/08/2024
CHECKED BY:	GDJ	REVISION:	
APPROVED BY:	JWB	5	

SHEET TITLE:  
**PROPOSED  
DETAILED SITE  
PLAN**

SHEET NUMBER:

C-2.2

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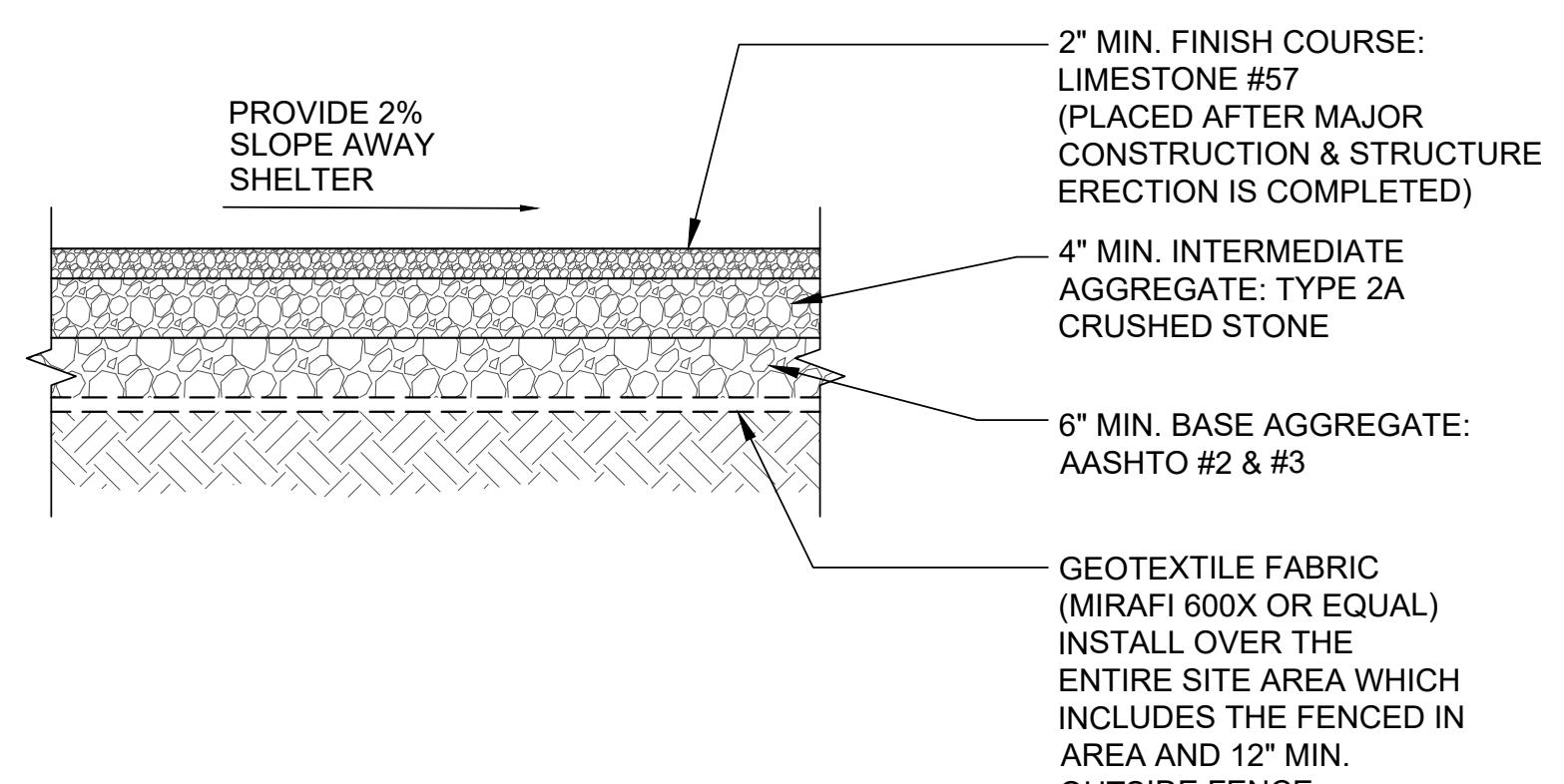
APPROVED BY: JWB 5

SHEET TITLE:

COMPOUND  
DETAILS

SHEET NUMBER:

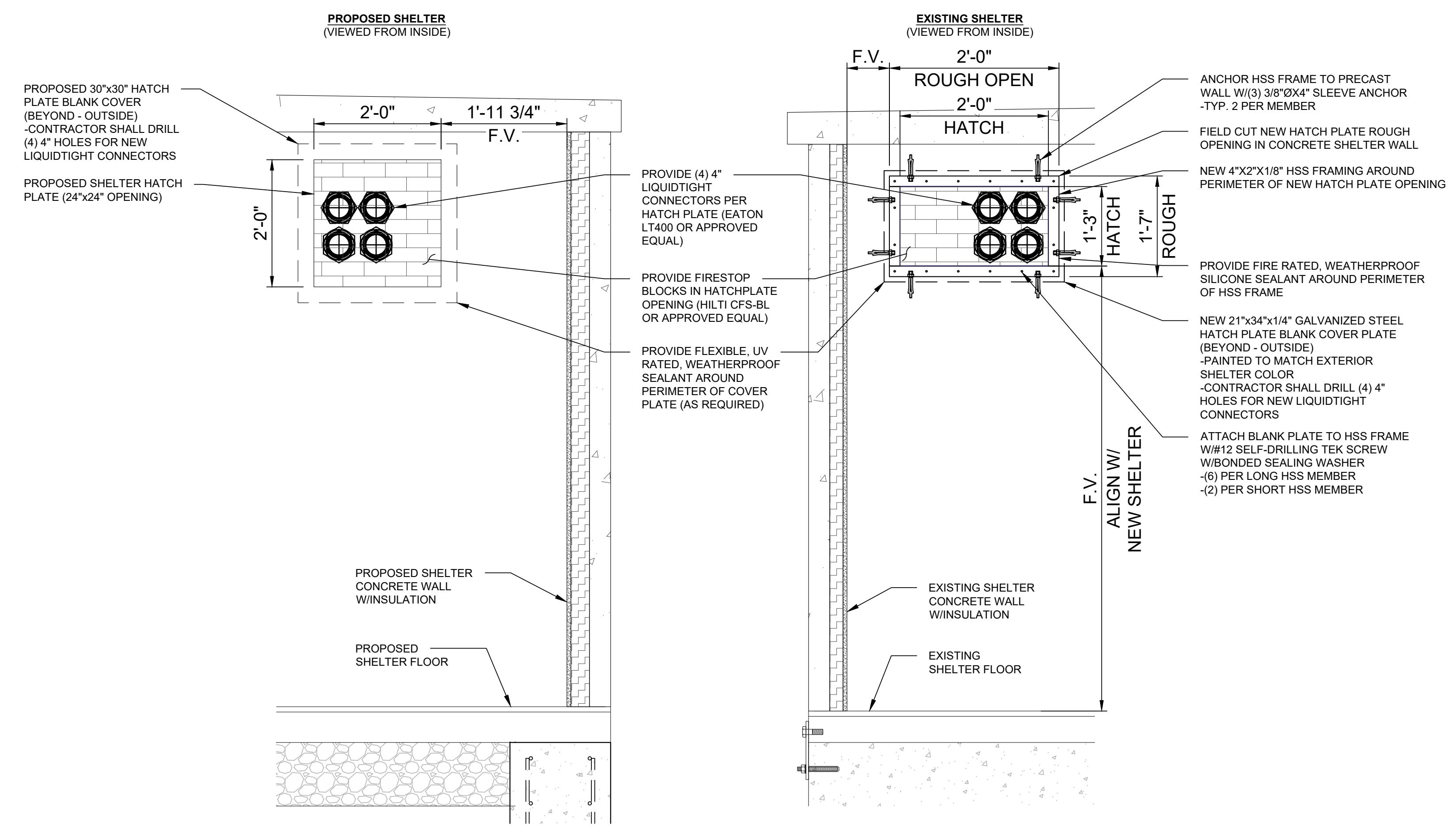
C-3



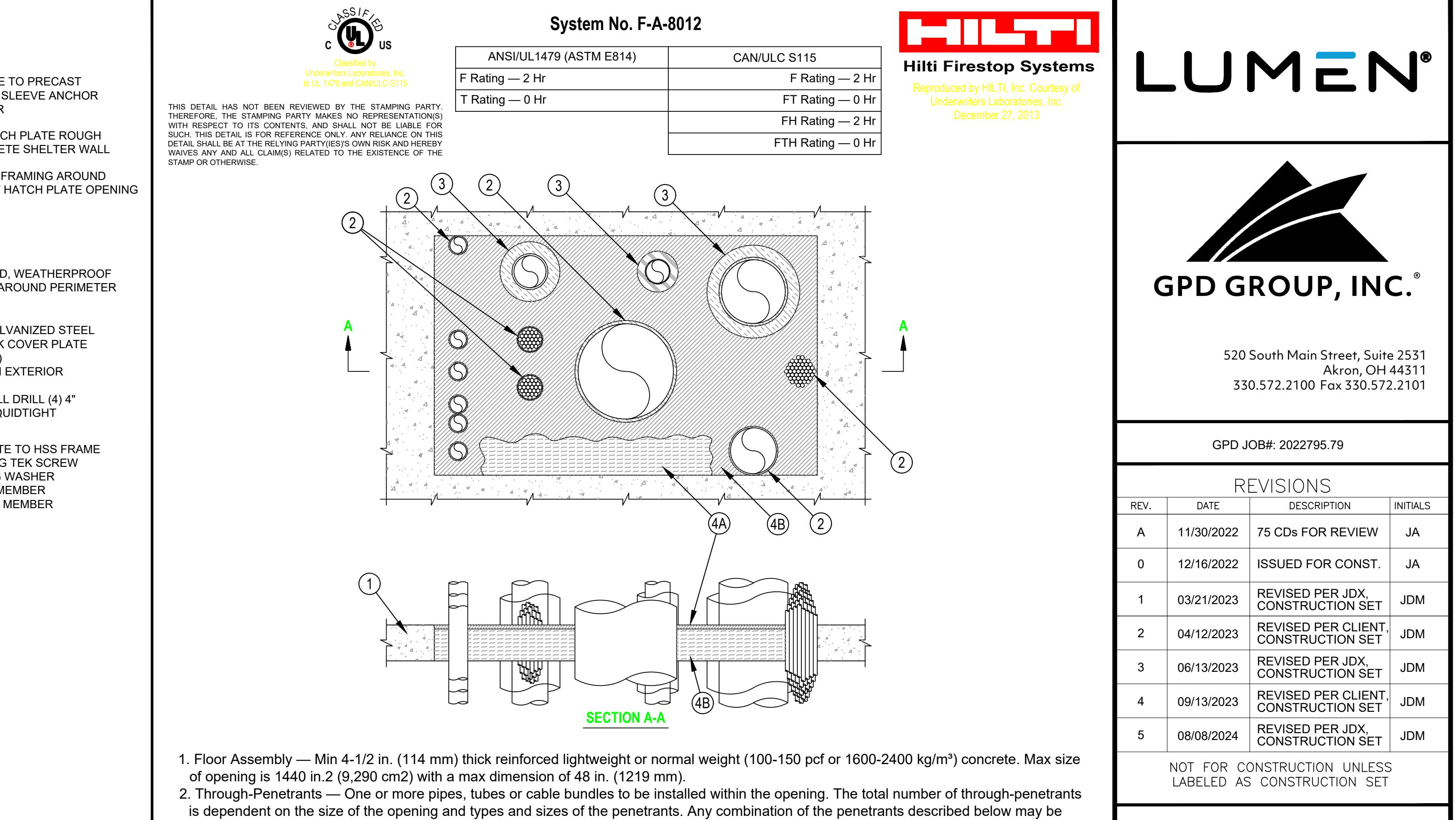
## 1.) ENGINEER FILL:

ENGINEER FILL SHOULD CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE, FREE FROM ORGANIC MATTER, SURFACE COATINGS AND DELETERIOUS MATERIALS. THE FILL SHOULD HAVE A MAXIMUM PARTICLE SIZE OF THREE INCHES (3"), A MAXIMUM LIQUID LIMIT OF 50% AND A MAXIMUM PLASTICITY INDEX OF LESS THAN 25%, AS PER ASTM D-4318. THE FILL SHOULD HAVE A MODIFIED PROCTOR MAXIMUM DRY DENSITY GREATER THAN 110 POUNDS PER CUBIC FOOT (PCF). SAMPLES OF THE PROPOSED FILL MATERIAL SHOULD BE TESTED AND EVALUATED BY THE TESTING AGENCY PRIOR TO PLACEMENT.

DETAIL NOT USED	SCALE N.T.S.	1	DETAIL NOT USED	SCALE N.T.S.	2	DETAIL NOT USED	SCALE N.T.S.	3
DETAIL NOT USED	SCALE N.T.S.	4	COMPOUND SECTION	SCALE N.T.S.	5	FILL NOTES	SCALE N.T.S.	6



## HATCH PLATE CONNECTIONS (INTERIOR - FRONT VIEW)



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Max size of opening is 1440 in.2 (9,290 cm<sup>2</sup>) with a max dimension of 48 in. (1219 mm).  
 2. Through-Penetrants — One or more pipes, tubes or cable bundles to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces are maintained. The annular space between cable bundles and other penetrants shall be a min 6 in. (152 mm). The annular space between metallic pipes, conduit and tubes and insulated pipes and tubes shall be a min 2 in. (51 mm). The annular space between nom 2 in. (51 mm) diam (and smaller) metallic pipes, conduit and tubes shall be a min 0 in. (0 mm). The annular space between insulated penetrants and the periphery of opening shall be a min 1/2 in. (13 mm). The annular space between all other penetrants and the periphery of opening shall be a min 0 in. (0 mm) (point contact). A max annular space in the system shall be 12 in. (305 mm). Penetrants to be rigidly supported on both sides of floor assembly. The following types and sizes of penetrants may be used.

- A. Metallic Penetrants — The following types of metallic pipes, tubes or conduits may be used:
  1. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
  2. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
  3. Steel Pipe — Nom 24 in. (610 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
  4. Iron Pipe — Nom 24 in. (610 mm) diam (or smaller) cast or ductile iron pipe.
  5. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electric metallic tubing (EMT) or nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.

- B. Cables Bundles — Max 4 in. (102 mm) diam tightly bundled cables. Any combination of the following types and sizes of cables may be used:
  1. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
  2. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
  3. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
  4. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
  5. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.

- C. Individual Cables — Any of the following types and sizes of individual (non-bundled) cables may be used:
  1. Max 3/C No. 20 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
  2. Through Penetrating Product\* — Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.

- C. Individual Cables — Any of the following types and sizes of individual (non-bundled) cables may be used:
  1. Max 3/C No. 20 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
  2. Through Penetrating Product\* — Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.
  - See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.
  3. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
  4. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
  5. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
  6. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
  7. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
  8. Max 4C/750 kcmil (or smaller) aluminum or copper conductor metal clad cable with aluminum or steel armor, with or without PVC jacket.

- 3. Pipe Insulation — (Optional) - Pipes and tubes of the sizes noted below may be provided with one of the following types of pipe insulations:

- A. Pipe Covering\* — Nom 1-1/2 in. (38 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes with a nom diam of 8 in. (203 mm) (or smaller) or tubes with a nom diam of 4 in. (102 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

- See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Mark with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

- B. Tube Insulation-Plastics+ — Nom 1 in. (25 mm) thick (or thinner) acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller).

- See Plastics (QMZFZ) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.

- 4. Firestop System — The firestop system shall consist of the following:

- A. Packing Material — Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.

- B. Fill, Void or Cavity Material - Sealant\* — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the top surface of the floor.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP604, CFS-S SIL GG or CFS-S SIL SL Sealant

\*Bearing the UL Classification Mark



REVISIONS			
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"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

SITE NAME: SAN MARTIN

CLLI/ADDRESS: SNMACAAS

73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

SHEET TITLE: HATCH PLATE CONNECTIONS

SHEET NUMBER: C-4

**HATCH PLATE CONNECTIONS (SIDE VIEW)**

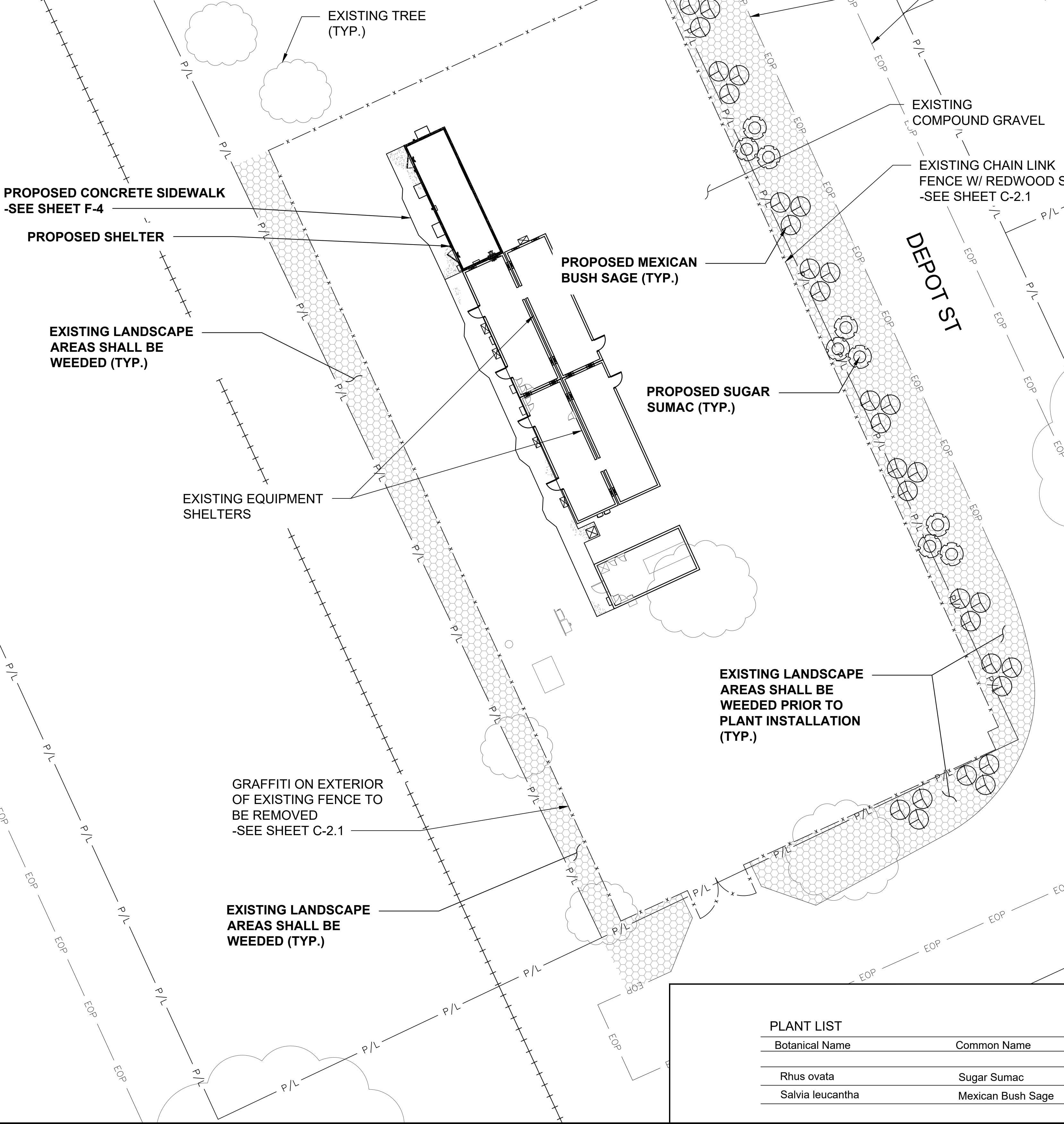
**HILTI CFS-BL FIRESTOP BLOCK**

**HATCH PLATE FIRE STOP SYSTEM**

**SEE DETAILED SITE PLAN**

NOTES:  
 1. PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. THIS DRAWING IS BASED ON GIS MAPPING AND AERIAL IMAGES, AND IS NOT BASED ON ACTUAL BOUNDARY SURVEY.  
 2. NO GRADING OR CUT/FILL IS REQUIRED AS PART OF THIS PROJECT.  
 3. SEE SHEET C-5 FOR LANDSCAPE NOTES AND DETAILS.  
 4. ALL DISTURBED LANDSCAPE AREAS SHALL BE MULCHED PER LANDSCAPE NOTES.

PARCEL NUMBER:  
 82502138



#### PLANT LIST

Botanical Name	Common Name	Quantity	Size	Condition	Remarks
Rhus ovata	Sugar Sumac	9	24" Ht.	Cont.	4' o/c
Salvia leucantha	Mexican Bush Sage	30	5 Gal.	Cont.	5' o/c

#### LEGEND

- Cloud icon: EXISTING TREE TO REMAIN
- Circle with cross icon: PROPOSED SUGAR SUMAC
- Circle with diagonal line icon: PROPOSED MEXICAN BUSH SAGE
- Hexagonal pattern icon: PROPOSED AREA TO BE MULCHED

1

C-5

LUMEN®

GPD GROUP, INC.®

520 South Main Street, Suite 2531  
 Akron, OH 44311  
 330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

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EXPIRES: 09/30/2024

08/08/2024

DATE:

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SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAAS  
 73 SOUTH ST  
 SAN MARTIN, CA 95046

DRAWN BY: JRA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION:

5

APPROVED BY: JWB

SHEET TITLE: PROPOSED LANDSCAPE PLAN

SHEET NUMBER:

SCOPE OF WORK

1. THIS WORK SHALL CONSIST OF PERFORMING CLEARING AND GRUBBING, SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT.
2. QUANTITY TAKEOFF IS SUPPLIED FOR CONTRACTOR'S ASSISTANCE ONLY. CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL PLANT MATERIALS AS PER PLAN.
3. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR WITHIN EASEMENT OR RIGHT-OF-WAY LIMITS.

PRESERVATION/PROTECTION (IF APPLICABLE)

1. CONTRACTOR SHALL MAINTAIN AND PRESERVE TREES AND SHRUBS NOT BEING REMOVED, INCLUDING THEIR ROOTS. TREE PROTECTION FENCING SHALL BE USED AT THE DRIP LINE OF ALL TREES AND SHRUBS WITHIN 50 FEET OF CONSTRUCTION EXCEPT AS SHOWN ON PLAN. FENCING SHALL REMAIN IN PLACE UNTIL FINAL PLANT INSPECTION FOLLOWING CONSTRUCTION. MATERIALS SHALL NOT BE STOCKPILED WITHIN THIS DEFINED AREA AND VEHICLES AND OTHER EQUIPMENT SHALL BE OPERATED TO AVOID SOIL COMPACTION.
2. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA EQUAL TO TWICE THE TREE CIRCUMFERENCE (MEASURED 6" ABOVE THE GROUND LINE IN INCHES) EXPRESSED IN FEET. (EXAMPLE: A CIRCUMFERENCE OF 10" WOULD HAVE A 'NO CUT' ZONE OF 20 FEET IN ALL DIRECTIONS FROM THE TREE). THIS SHOULD APPLY TO UTILITY SERVICES, IF FEASIBLE. THE ONLY EXCEPTION TO THIS REQUIREMENT WILL BE THOSE SPECIFICALLY ALLOWED BY THE LANDSCAPE ARCHITECT, SPECIFICATIONS OR AS INDICATION ON THE PLANS.
3. TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING EQUIPMENT OPERATIONS SHALL BE TREATED IN ACCORDANCE WITH THE ARBOR CULTURAL STANDARDS OF THE CITY.

PLANT MATERIALS

1. GENERAL - ALL MATERIALS SHALL BE OF ITS KIND AVAILABLE AND SHALL HAVE BEEN GROWN IN A CLIMATE SIMILAR TO THAT ON SITE.
2. PLANTS - ALL PLANTS SHALL BE HEALTHY, OF NORMAL GROWTH, WELL ROOTED, FREE FROM DISEASE AND INSECTS. QUALITY AND SIZE OF PLANT MATERIAL SHALL CONFORM TO ANSI Z60.1 "AMERICAN STANDARDS FOR NURSERY STOCK".
3. VARIETIES AND SIZES OF PLANTS SHALL BE AS SHOWN ON DRAWINGS.
4. PLANTS SHALL BE IN A HEALTHY, VIGOROUS CONDITION, FREE OF DEAD OR BROKEN BRANCHES, SCARS THAT ARE NOT COMPLETELY HEALED, FROST CRACKS, DISFIGURING KNOTS, BROKEN OR ABRADED BARK, REDUNDANT LEADERS OR BRANCHES, OR ABERRATIONS OF ANY KIND. PLANTS SHALL NOT HAVE MULTIPLE LEADERS, UNLESS THIS IS THE NATURAL FORM.
5. BALLED AND BURLAPPED (B&B) PLANTS SHALL BE DUG WITH A FIRM ROOT BALL OF NATURAL EARTH, OF A SIZE IN PROPORTION TO THE PLANT'S SIZE, AS MEASURED BY CALIPER, HEIGHT, OR SPREAD. BALLED AND BURLAPPED PLANTS SHALL BE HANDLED ONLY BY THE ROOT BALL, NOT BY THE TRUNK OR BRANCHES, AS THIS MAY BREAK OR LOSEN THE ROOT BALL AND DAMAGE THE ROOT SYSTEM. CONTAINER PLANTS SHALL HAVE BEEN ESTABLISHED FOR A MINIMUM OF ONE FULL GROWING SEASON IN THEIR CONTAINERS BEFORE INSTALLATION. CONTAINER PLANTS SHALL BE HANDLED ONLY BY THE CONTAINER, NOT BY THE STEMS OR BRANCHES, AS THIS MAY PULL THE PLANT OUT OF THE CONTAINER AND BREAK OR LOSEN THE ROOT BALL AND DAMAGE THE ROOT SYSTEM.

6. PLANTS SHALL BE PROTECTED FROM DRYING OUT DURING SHIPPING WITH TARPAULINS OR OTHER COVERINGS. PLANTS SHALL BE PROTECTED FROM DRYING OUT AFTER DELIVERY BY PLANTING IMMEDIATELY; IF THIS IS NOT POSSIBLE, THE ROOT BALL SHALL BE COVERED WITH PEAT MOSS OR EARTH, AND WATERED FREQUENTLY TO KEEP IT MOIST UNTIL PLANTING.
7. DO NOT HANDLE, MOVE, BIND, TIE OR OTHERWISE TREAT PLANTS SO AS TO DAMAGE THE ROOT BALL, ROOTS, TRUNK, OR BRANCHES IN ANY WAY.

PLANTING SOIL

1. PLANTING SOIL MIX SHALL BE CLEAR OF ALL STONES AND DEBRIS 1" OR LARGER, AND CONSIST OF THE FOLLOWING: 25% ORGANIC COMPOST, 75% ACCEPTABLE TOPSOIL.

OTHER MATERIALS

1. MULCH: LANDSCAPE AREAS PER PLAN SHALL RECEIVE DECOMPOSED GRAVEL MULCH, TAN IN COLOR, TO MATCH EXISTING IN TYPE AND DEPTH.

GENERAL WORK PROCEDURES

1. LANDSCAPE WORK SHALL BE ACCORDING TO THE WORKMANLIKE STANDARDS ESTABLISHED FOR LANDSCAPE CONSTRUCTION AND PLANTING IN THE CALIFORNIA STANDARDIZED LANDSCAPE SPECIFICATIONS (ASLA) AND ANY LOCAL LANDSCAPE ORDINANCES.
2. CONTRACTOR SHALL OBTAIN A COPY OF LOCAL ORDINANCES REGARDING ACCEPTABLE PLANT AND PLANTING DETAILS AND ABIDE BY THOSE ORDINANCES AND DETAILS.
3. ENGINEER RESERVES THE RIGHT TO REJECT ALL PLANT MATERIAL DEEMED NOT ACCEPTABLE.
4. ANY PROPOSED PLANT SUBSTITUTIONS SHALL BE EQUIVALENT IN FORM, HABIT, STRUCTURE, BRANCHING AND LEAF TYPE AND MUST BE ISSUED TO THE LANDSCAPE ARCHITECT FOR APPROVAL, IN WRITING, PRIOR TO INSTALLATION.

WEEDING

1. BEFORE AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

PLANTING

1. EXISTING GRAVEL, DEBRIS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH SHALL BE REMOVED WITHIN LANDSCAPE AREA PRIOR TO PLANTING.
2. POSITION PLANTS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE OWNER BEFORE EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
3. PLANTING PITS SHALL BE AS PER DETAILS.
4. PREPARED SOIL SHALL BE TAMPED FIRMLY AT BOTTOM OF PIT. FILL WITH PLANTING SOIL AROUND BALL OF PLANT. COMPLETE BACKFILLING AND WATER THOROUGHLY.
5. EACH PLANT SHALL RECEIVE THE LANDSCAPER'S BIONUTRITION (3-0-3) GRANULAR WITH MYCORRHIZAL TECHNOLOGY FERTILIZER OR APPROVED OTHER. APPLY FERTILIZER PER MANUFACTURER'S SPECIFICATIONS.
6. WATER IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH PLANT IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.
7. INSTALL BED EDGING AND MULCH PER MATERIALS SPECIFICATION AND DETAILS.
8. REMOVE ALL SALES TAGS, STRINGS, STRAPS, WIRE, ROPE OR OTHER MATERIALS THAT MAY INHIBIT PLANT GROWTH BOTH ABOVE AND BELOW THE SURFACE OF THE SOIL.
9. REMOVE ANY BROKEN, SUCKERING, DISEASED, CRISSCROSSED OR AESTHETICALLY DISPLEASING BRANCHES BACK TO LIVE LEADER OR SIDE LATERAL WITH A FLUSH CUT.

FINISH GRADING

1. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.

GUARANTEE

1. CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.

CLEANUP

1. UPON THE COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. AN 'ACCEPTABLE CONDITION' SHALL BE AS DEFINED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

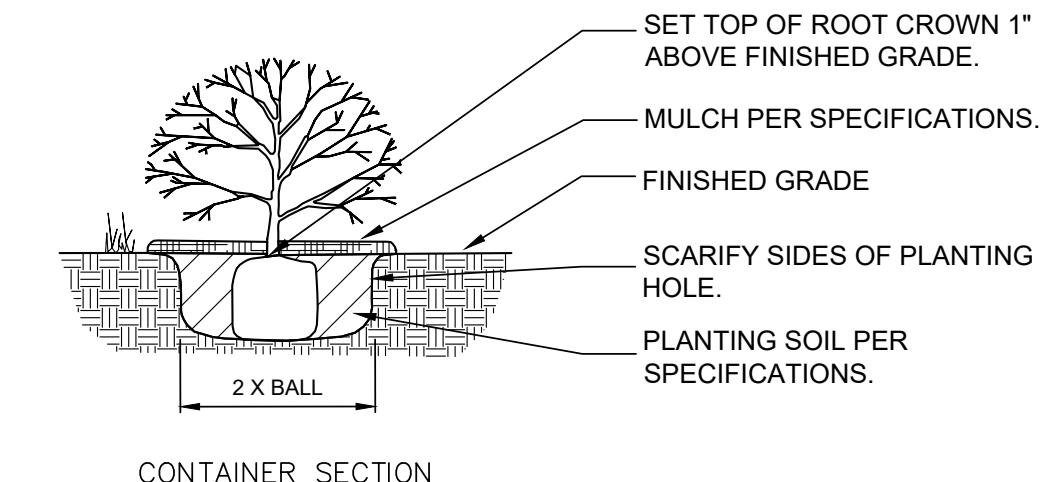
MAINTENANCE

(MAINTENANCE PERIOD TO COMMENCE AFTER FINAL INSPECTION.)

1. MAINTENANCE PERIOD FOR THIS CONTRACT SHALL BE 90 CALENDAR DAYS COMMENCING AFTER FINAL INSPECTION OF CONSTRUCTION.
2. MAINTAIN TREES, SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED.

3. MAINTAIN THE LANDSCAPING BY TEMPORARY WATERING WITHIN MAINTENANCE PERIOD.

4. REPLACE ANY REQUIRED PLANTING(S), WHICH SEVERELY DECLINE OR DIE AFTER THE DATE OF PLANTING. SUCH REPLACEMENT SHALL OCCUR DURING THE NEXT APPROPRIATE PLANTING SEASON.

GENERAL NOTES:

1. PRUNE ROOTS IF BALL IS ROOTBOUND.

2. REMOVE ALL CONTAINERS AND NON-Biodegradable BURLAP.

3. WHEN BACKFILLING PLANT PIT, PLACE PLANTING SOIL IN TWO LIFTS. AFTER FIRST LIFT, PUDDLE SOIL IN WITH WATER TO REMOVE ALL AIR POCKETS. PLACE SECOND LIFT AND CONTINUE TO PUDDLE AND FILL AS NECESSARY.

**LUMEN®**
**GPD GROUP, INC.®**  
 520 South Main Street, Suite 2531  
 Akron, OH 44311  
 330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

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**SHRUB/PERENNIAL PLANTING DETAIL**

1

EXPIRES: 09/30/2024  
08/08/2024

DATE:

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

 SNMACAAS  
 73 SOUTH ST  
 SAN MARTIN, CA 95046

DRAWN BY:

JRA

RELEASED: 08/08/2024

CHECKED BY:

GDJ

REVISION: 5

APPROVED BY:

JWB

SHEET TITLE:

 LANDSCAPE  
 NOTES & DETAILS

SHEET NUMBER:

C-6

DETAIL NOT USED

2

N.T.S.

## GENERAL NOTES

1. THIS DESIGN IS IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF TIA/EIA-222, AWS, ANSI TIA-322, AND AISC. MATERIALS, FABRICATION, INSTALLATION, AND ALL OTHER SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES AND THE CONTRACT SPECIFICATIONS.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING; ANY PROBLEMS WITH ACCESS, INTERFERENCE, ETC. SHALL BE RESOLVED PRIOR TO MOBILIZATION. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND NOTE ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS OR THAT INTERFERE WITH THE CONTINUOUS INSTALLATION OF THE STRUCTURE. GPD SHALL BE CONTACTED IMMEDIATELY TO EVALUATE THE SIGNIFICANCE OF ANY DEVIATION PRIOR TO ORDERING MATERIAL.
3. ALL MATERIAL SPECIFIED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZES AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING. CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR DETERMINING IF SUBSTITUTE IS SUITABLE FOR USE AND MEETS THE ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER.
4. CONTRACTOR IS RESPONSIBLE FOR ENGAGING AN INSPECTOR AT THE TIME OF AWARD TO COORDINATE AN INSPECTION SCHEDULE AND ENSURE PROPER DOCUMENTATION IS RETAINED THROUGHOUT THE PROJECT.
5. SPECIAL INSPECTIONS: UNLESS OTHERWISE SPECIFIED WITHIN THE PLANS OR REQUIRED BY THE BUILDING OFFICIAL, SPECIAL INSPECTIONS AND TESTS ARE NOT REQUIRED FOR GROUP U OCCUPANCIES, BUT NOT LIMITED TO, THOSE LISTED IN SECTION 312.1 (IBC SECTION 1042.4, EXCEPTION 2). CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF ANY SPECIAL INSPECTIONS ARE REQUIRED BY THE JURISDICTION HAVING AUTHORITY. IF REQUIRED BY THE JURISDICTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION AND SCHEDULING OF THE SPECIAL INSPECTIONS WITH THE ENGINEER OF RECORD. IN THOSE CASES, SPECIAL INSPECTIONS MUST BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL.
6. ALL CONTRACTORS AND LOWER TIER CONTRACTORS MUST ACKNOWLEDGE IN WRITING TO STRUCTURE OWNER AND GPD THAT THEY HAVE OBTAINED, UNDERSTAND, AND WILL FOLLOW STRUCTURE OWNER STANDARDS OF PRACTICE, CONSTRUCTION GUIDELINES, ALL SITE AND STRUCTURE SAFETY PROCEDURES, ALL PRODUCT LIMITATIONS, AND INSTALLATION PROCEDURES USED ON SITE AND PROPOSED STRUCTURE DESCRIBED. RECENT OR ACKNOWLEDGMENT MUST OCCUR PRIOR TO BEGINNING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE THIS DOCUMENTATION FOR OWNER AND GPD ON COMPANY LETTERHEAD AND THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN THIS DOCUMENTATION FROM LOWER TIER SUBCONTRACTORS (ON SUBCONTRACTOR LETTERHEAD) AND DELIVER IT TO STRUCTURE OWNER AND GPD.
7. IT IS ASSUMED THAT ANY STRUCTURAL WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH CONSTRUCTION EXPERIENCE. THIS INCLUDES PROVIDING THE NECESSARY CERTIFICATIONS TO THE OWNER AND ENGINEER.
8. THESE DRAWINGS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
9. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE SAFETY OF THEIR WORK FORCE, THE WORK AREA, ADJACENT AREA, AND ANY PROPERTY OCCUPANTS WHO MAY BE AFFECTED BY THE WORK UNDER CONTRACT. THE CONTRACTOR SHALL REVIEW AND ABIDE BY ALL LANDOWNER, PRIME CONTRACTOR, CAREER, OSHA, AND LOCAL SAFETY GUIDELINES. ALL WORKERS SHALL UTILIZE APPROPRIATE FALL PROTECTION AND SAFETY EQUIPMENT THAT IS UP-TO-DATE AND INSPECTED PER OSHA AND INDUSTRY GUIDELINES. ALL WORKERS SHALL BE TRAINED AND MONITORED TO ENSURE SAFE WORKING PRACTICES ARE MAINTAINED.
10. CONTRACTOR SHALL ONLY WORK WITHIN THE LIMITS OF THE OWNER'S PROPERTY OR LEASE AREA AND APPROVED EASEMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WORK IS WITHIN THESE BOUNDARIES. CONTRACTOR SHALL EMPLOY A SURVEYOR AS REQUIRED. ANY WORK OUTSIDE THESE BOUNDARIES SHALL BE APPROVED IN WRITING BY THE LAND OWNER PRIOR TO MOBILIZATION. CONSTRUCTION STAKING AND BOUNDARY MARKING IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 10-MPH). CONTRACTOR IS RESPONSIBLE FOR ALL SHORING OF SURROUNDING BUILDINGS, PADS, AND OTHER OUTDOOR SITE OBSTRUCTIONS. ALL SHORING, TEMPORARY BRACING, AND TEMPORARY SUPPORTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
12. ALL MANUFACTURERS HARDWARE AND ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED EXACTLY. DEVIATION FROM THE INSTRUCTIONS IS UNACCEPTABLE AND REQUIRES WRITTEN APPROVAL FROM ENGINEER.
13. DO NOT SCALE DRAWINGS.

## FOUNDATION NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR ENGAGING AN INSPECTOR AT THE TIME OF AWARD TO COORDINATE AN INSPECTION SCHEDULE AND ENSURE PROPER DOCUMENTATION IS RETAINED THROUGHOUT THE PROJECT. FOUNDATION WORK REQUIRES INSPECTION PRIOR TO THE CONCRETE POUR. CONTRACTOR SHALL NOTIFY THE PREVIOUSLY ENGAGED INSPECTOR A MINIMUM OF 5 BUSINESS DAYS, PREFERABLY 10, PRIOR TO FOUNDATION CONSTRUCTION IN ORDER TO COORDINATE INSPECTION. REFER TO SHEET F-2 FOR CONSTRUCTION INSPECTION CHECKLIST. REFERENCE THE GPD CONTACT INFORMATION ON THE TITLE SHEET TO OBTAIN PRICING TO COMPLETE FINAL AND/OR FOUNDATION INSPECTION SERVICES, IF NOT ALREADY COORDINATED WITH THE OWNER / PROGRAM MANAGER / CARRIER.
2. CONCRETE WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.
3. MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.
4. ALL NEW CONCRETE SHALL BE AIR ENTRAINED IN ACCORDANCE WITH ACI 318 REQUIREMENTS FOLLOWING EXPOSURE CLASS F2, U.N.O. AIR ENTRAINED CONCRETE SHALL BE TESTED IN ACCORDANCE WITH ASTM C231 OR ASTM C173 AND SHALL BE WITHIN -1.5% AND +2% OF THE SPECIFIED PERCENTAGE.
5. CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
6. ALL FOUNDATIONS SHALL REST ON AND AGAINST FIRM UNDISTURBED SOIL FREE FROM WATER, ORGANIC MATTER, AND FORM WORK. CONTRACTOR SHALL COMPACT SUBGRADE AS REQUIRED.
7. CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY OVERSPILL DISCOVERED AS REQUIRED FOR INSTALLATION OF THE NEW CONCRETE.
8. REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED. SPLICES IN REINFORCEMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE INDICATED. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
9. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO ENSURE A 3 INCH MINIMUM COVER OF REINFORCEMENT. ALL REINFORCING SHALL BE EQUALLY SPACED UNLESS NOTED OTHERWISE.
10. FOUNDATION DESIGN BASED ON THE PRESUMPTIVE ALLOWABLE BEARING PRESSURE OF 1,500 PSF. WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS AVAILABLE, THE CONTRACTOR SHALL ADHERE TO ALL RECOMMENDATIONS PROVIDED THEREIN. IF THE SITE SPECIFIC GEOTECHNICAL REPORT DOES NOT PROVIDE A BEARING PRESSURE VALUE FOR SOIL WITHIN 12 INCHES OF THE GROUND SURFACE, THE PRESUMPTIVE ALLOWABLE BEARING PRESSURE OF 1,500 PSF MAY BE USED.
19. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM SITE SHALL BE MAINTAINED.
20. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION. IF NECESSARY UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION INSTALLATION. CONSENT FROM THE OWNER AND EOR MUST BE OBTAINED TO ENCASE UTILITIES IN CONCRETE.
21. IF, DURING THE COURSE OF A FOUNDATION INSTALLATION, THE GC ENCOUNTERS EXISTING CONDUIT LOCATED WITHIN THE CONFINES OF THE PROPOSED FOUNDATION CONCRETE, AND THIS CONDUIT IS NOT IN A LOCATION THAT IS SPECIFIED WITHIN THESE DESIGN DRAWINGS, THE GC SHALL IMMEDIATELY CONTACT THE EOR FOR GUIDANCE BEFORE PROCEEDING WITH THE INSTALLATION OF THE PROPOSED FOUNDATION. IF CONDUIT IS TO BE INSTALLED THROUGH THE PROPOSED FOUNDATION AND HASN'T BEEN SPECIFIED WITHIN THESE DESIGN DRAWINGS THEN THE GC SHALL IMMEDIATELY CONTACT THE EOR FOR GUIDANCE PRIOR TO PROCEEDING WITH THE INSTALLATION OF THE PROPOSED FOUNDATION.
22. EQUIPMENT PAD AND SHELTER IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMMISSION. CONTRACTOR SHALL TAKE GREAT CARE AND ALL NECESSARY PROVISIONS WHEN SHORING IS REQUIRED.
23. FOUNDATION WAS DESIGNED TO SUPPORT EQUIPMENT SHELTER DESIGNED BY SABRE (DWG NO. SLMN02)
24. STEEL REINFORCEMENT AND CONCRETE SHOULD BE PLACED IMMEDIATELY UPON COMPLETION OF THE FOUNDATION EXCAVATION. CONTRACTOR SHALL NOT ALLOW A COLD JOINT TO FORM IN THE CONCRETE. PORTION AT GRADE SHOULD BE FORMED. TEMPORARY CASING MAY BE REQUIRED TO PREVENT CAVING PRIOR TO CONCRETE PLACEMENT.
25. FORMWORK FOR CONCRETE SHALL CONFORM TO ACI 341. TOLERANCES FOR FINISHED CONCRETE SURFACES SHALL MEET CLASS C REQUIREMENTS. IN NO CASE SHALL FINISHED CONCRETE SURFACES EXCEED THE FOLLOWING VALUES AS MEASURED FROM NEAT PLAN LINES AND FINISHED GRADES:  $\pm 1/4"$  VERTICAL AND  $\pm 1"$  HORIZONTAL.
26. CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ACI. PROVIDE ROUGH FINISH FOR ALL SURFACES NOT EXPOSED TO VIEW AND SMOOTH FINISH FOR ALL OTHERS, U.N.O.
27. ALL FILL SHOULD CONSIST OF APPROVED MATERIALS, FREE OF DEBRIS, ORGANICS, REFUSE AND OTHERWISE DELETERIOUS MATERIALS. STRUCTURAL FILL SHOULD BE A LOW PLASTICITY COHESIVE SOIL WITH A LIQUID LIMIT LESS THAN 45% AND A PLASTICITY INDEX LESS THAN 25%, OR A SPECIFIED GRANULAR MATERIAL. ALL FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND THOROUGHLY COMPAKTED. ALL FILL SHOULD BE COMPAKTED TO 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). THE SOIL'S WATER CONTENT AT THE TIME OF COMPAKCTION SHOULD BE AT  $\pm 2%$  OF THE SOIL'S OPTIMUM MOISTURE VALUE AS DETERMINED BY THE STANDARD PROCTOR TEST. IF AVAILABLE, THE GEOTECHNICAL REPORT SHALL BE REVIEWED AND ADHERED TO FOR SPECIFIC RECOMMENDATIONS. A COEFFICIENT OF FRICTION VALUE OF 0.35 MAY BE USED TO RESIST SLIDING FOR FILL MEETING THE REQUIREMENTS ABOVE.
28. THE BASE OF ALL FOUNDATION EXCAVATIONS SHOULD BE FREE OF WATER AND LOOSE SOIL PRIOR TO PLACING CONCRETE. CONCRETE SHOULD BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATING TO MINIMIZE BEARING SOIL DISTURBANCE. SHOULD THE SOILS AT BEARING LEVEL BECOME EXCESSIVELY DRY, SATURATED, DISTURBED, OR OTHERWISE ALTERED, THE AFFECTED SOIL SHOULD BE REMOVED PRIOR TO PLACING CONCRETE. IN THE EVENT SHALLOW GROUNDWATER IS ENCOUNTERED, IT MAY BE DESIRABLE TO STABILIZE THE BOTTOM OF THE EXCAVATIONS WITH LEAN CONCRETE.
29. ALL GROUNDRING SHALL ACHIEVE 50 OR LESS RESISTANCE UPON COMPLETION. ALL GROUNDRING ENCOUNTERED SHALL BE RELOCATED 3'-0" BEYOND FOUNDATION. ALL GROUNDRING SHALL BE CONTINUOUS AND COORDINATED WITH OWNER. GROUNDRING DESIGN AND ENGINEERING IS BEYOND THE SCOPE OF THESE DESIGN DRAWINGS AND IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMMISSION.

## DESIGN LOADS:

DEAD LOAD	= 86,000 lbs (SABRE SHELTER WEIGHT)
DEAD LOAD	= 15,000 lbs (MAX EQUIPMENT WEIGHT)
LIVE LOAD	= 207 PSF
SNOW LOAD	= 20 PSF
WIND LOAD	= 105 MPH
ROOF LIVE LOAD	= 120 PSF
RISK CATEGORY	= II
EXPOSURE CATEGORY	= C
SITE CLASS	= D (DEFAULT)
SEISMIC DESIGN CATEGORY	= D
SS	= 1.501
SS	= 0.600
RESPONSE MOD.COEF., R.	= 4 (INTERMEDIATE PRECAST SHEAR WALLS)

## STRUCTURAL STEEL NOTES

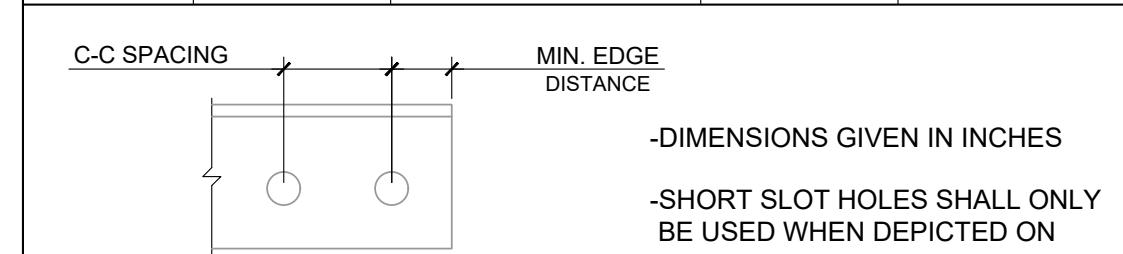
1. ALL NEW STEEL SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123, ASTM A153/A153M, OR ASTM A653 G90, AS APPLICABLE FOR FULL WEATHER PROTECTION. FOR HIGH STRENGTH STEEL FASTENERS WHERE HOT-DIPPED GALVANIZING IS NOT PERMITTED MAGNI 565 COATING (OR ENGINEER APPROVED EQUIVALENT) SHALL BE USED. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL AND/OR BUILDING MATERIAL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
2. ALL EXPOSED STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING, BUT NOT LIMITED TO, DAMAGED MEMBERS, FIELD WELDS, FIELD CUT MEMBERS, FIELD DRILLED HOLES, AND SHAFT INTERIORS (WHERE APPLICABLE), SHALL BE SOLVENT CLEANED AND HAVE TWO (2) COATS OF BRUSHED ON ZRC ZINC RICH COLD GALVANIZING PAINT APPLIED AND SHALL BE PAINTED TO MATCH THE TOWER FINISH (WHERE APPLICABLE). PHOTO DOCUMENTATION IS REQUIRED TO BE SUBMITTED TO THE MODIFICATION INSPECTOR.
3. ALL STRUCTURAL STEEL SHALL CONFORM TO THE LISTED REQUIREMENTS U.N.O. IN THESE DRAWINGS:

• STEEL ANGLE:	ASTM A36 (FY=36 KSI)
• SOLID ROUND:	ASTM A36 (FY=36 KSI)
• PIPE (ROUND):	ASTM A53 GRADE B (FY=35 KSI)
• HSS TUBE (ROUND):	ASTM A500 GRADE C (FY=46 KSI)
• HSS TUBE (SQUARE):	ASTM A500 GRADE D (FY=50 KSI)
• W-SHAPES:	ASTM A992 (FY=50 KSI)
• CHANNELS:	ASTM A36 (FY=36 KSI)
• PIPES:	ASTM A53 GRADE 50 (FY=50 KSI)
• ANCHOR RODS:	ASTM A193 GRADE B7
• THREADED ROD:	ASTM F1554 GRADE 36
• BOLTS:	ASTM A325 TYPE 1
• U-BOLTS:	ASTM A307 GRADE A
• NUTS:	ASTM A563 GRADE DH
• NUTS (ANCHOR RODS):	ASTM A194 GRADE 2H
• WASHERS (AS REQUIRED):	ASTM F436 TYPE 1
• LOCKING DEVICES:	PAL-NUT OR SPLIT WASHER
• WELDING ELECTRODES, SMAW:	E70XX
• WELDING ELECTRODES, FCAW:	E7XT-XX

4. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED.
5. ALL BOLTS, INCLUDING U-BOLTS, SHALL BE TIGHTENED IN ACCORDANCE WITH AISC "SNUG TIGHT" REQUIREMENTS, U.N.O.
6. ALL U-BOLTS SPECIFIED SHALL MEET THE REQUIREMENTS OF ASME B18.31.5-2011 BENT BOLTS.
7. ALL NEW BOLT ASSEMBLIES SHALL BE OF SUFFICIENT LENGTH TO ENSURE THE END OF THE BOLT IS FLUSH WITH, OR PROTRUDES BEYOND, THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETE.
8. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE PROVIDED TO ENGINEER FOR REVIEW PRIOR TO FABRICATION.
9. UNLESS NOTED OTHERWISE, ALL NEW MEMBERS SHALL MAINTAIN THE EXISTING MEMBER WORK LINES AND NOT INTRODUCE ECCENTRICITIES INTO THE STRUCTURE.

## BOLT SCHEDULE

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	C-C SPACING
1/2	9/16	9/16x11/16	7/8	1-1/2
5/8	11/16	11/16x7/8	1-1/8	1-7/8
3/4	13/16	13/16x1	1-1/4	2-1/4
7/8	15/16	15/16x1-1/8	1-1/2	2-5/8
1	1-1/8	1-1/8x1-5/16	1-3/4	3

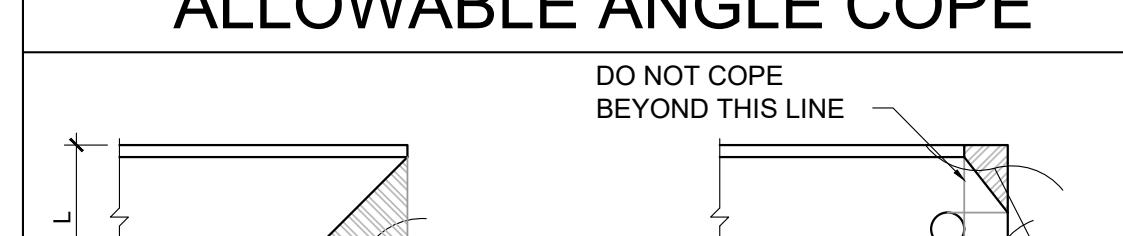


## WORKABLE GAGES

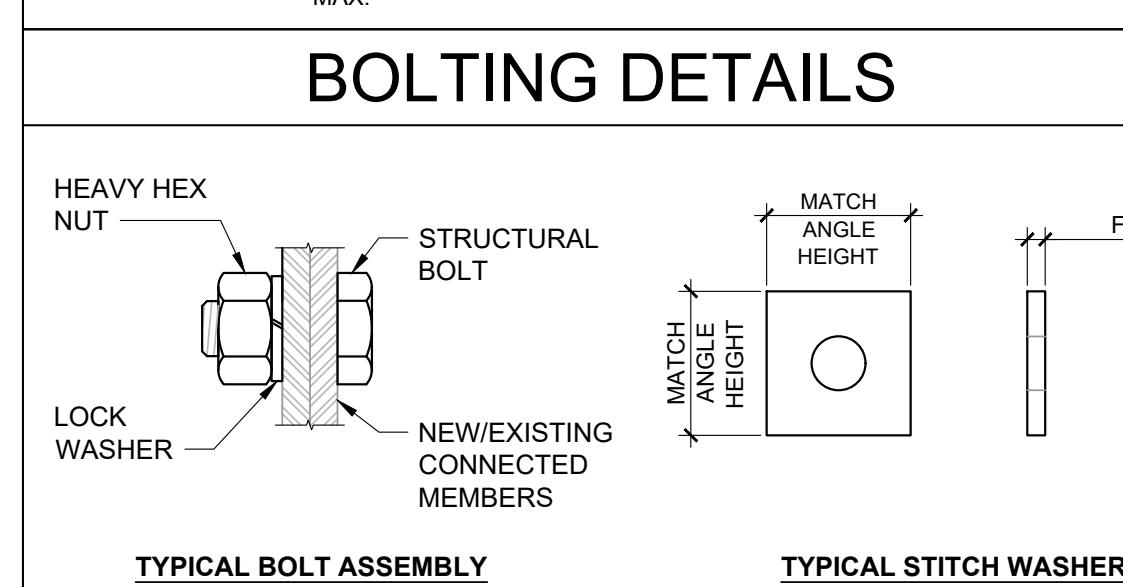
LEG	6	5	4	3-1/2	3	2-1/2	2	1-3/4
G	3-1/2	3	2-1/2	2	1-3/4	1-3/8	1-1/8	1



## ALLOWABLE ANGLE COPE



## BOLTING DETAILS



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NEW CONSTRUCTION INSPECTION CHECKLIST		
REQUIRED	REPORT ITEM	BRIEF DESCRIPTION
<b>PRE-CONSTRUCTION</b>		
X	INSPECTION CHECKLIST DRAWING	THIS CHECKLIST SERVES AS A GUIDELINE FOR THE REQUIRED CONSTRUCTION DOCUMENTS AND INSPECTIONS FOR THIS INSTALLATION.
X	EOR APPROVED SHOP DRAWINGS	PRIOR TO FABRICATION, THE CONTRACTOR SHALL PROVIDE DETAILED ASSEMBLY DRAWINGS AND/OR SHOP DRAWINGS TO THE EOR FOR APPROVAL.
X	FABRICATION INSPECTION	A LETTER FROM THE FABRICATOR STATING THAT ALL FABRICATION (I.E. DRILLING, CUTTING, WELDING, SHEARING, MILLING, GALVANIZING, ETC) HAS BEEN DONE ACCORDING TO INDUSTRY STANDARDS AND ALL APPLICABLE ANSI/ASTM STANDARDS.
NA	FABRICATOR CERTIFIED WELD INSPECTION	A CWI SHALL INSPECT ALL FABRICATION WELDS IN ACCORDANCE WITH AWS D1.1 AND A REPORT DETAILING THE RESULTS SHALL BE PROVIDED TO THE INSPECTOR FOR INCLUSION IN THE INSPECTION REPORT.
X	MATERIAL TEST REPORTS (MTR)	MATERIAL TEST REPORTS SHALL BE PROVIDED FOR ALL MATERIAL USED. MTR'S SHALL BE PROVIDED TO THE INSPECTOR FOR INCLUSION IN THE INSPECTION REPORT.
X	PACKING SLIPS	PACKING/SHIPPING LIST FOR ALL MATERIAL USED DURING CONSTRUCTION SHALL BE PROVIDED.
<b>DURING CONSTRUCTION</b>		
X	PRE-POUR REBAR INSPECTIONS	A 3RD PARTY VISUAL OBSERVATION OF THE EXCAVATION AND REBAR SHALL BE PERFORMED <u>BEFORE</u> PLACING THE CONCRETE. A WRITTEN REPORT SHALL BE PROVIDED TO THE INSPECTOR FOR INCLUSION IN THE INSPECTION REPORT.
NA	POST-INSTALLED REBAR AND/OR DOWEL INSPECTIONS	PHOTOGRAPHIC DOCUMENTATION OF DRILL HOLE SIZES AND DEPTHS SHALL BE RECORDED <u>BEFORE</u> SETTING THE POST INSTALLED REBAR AND DOWELS WITH EPOXY/GROUT.
X	CONCRETE COMP. STRENGTH & SLUMP TEST	THE CONCRETE MIX DESIGN, SLUMP TEST, AND COMPRESSIVE STRENGTH TESTS SHALL BE PROVIDED AS PART OF THE INSPECTION REPORT.
X	EARTHWORK: LIFT & DENSITY REPORT	REPORT DETAILING SOIL COMPACTION TEST RESULTS TO BE INCLUDED IN THE INSPECTION REPORT.
X	ON-SITE COLD GALVANIZING VERIFICATION	THE GENERAL CONTRACTOR SHALL PROVIDE WRITTEN AND PHOTOGRAPHIC DOCUMENTATION TO THE INSPECTOR VERIFYING THAT ANY ON-SITE COLD GALVANIZING WAS APPLIED PER MANUFACTURER SPECIFICATIONS.
X	GC AS-BUILT DRAWINGS	THE GENERAL CONTRACTOR SHALL SUBMIT A LEGIBLE COPY OF THE ORIGINAL DESIGN DRAWINGS EITHER STATING "INSTALLED AS DESIGNED" OR NOTING ANY CHANGES THAT WERE REQUIRED AND APPROVED BY THE ENGINEER OF RECORD. EOR/RFI FORMS APPROVING ALL CHANGES SHALL BE SUBMITTED.
X	MECHANICAL ANCHOR VERIFICATION	INSTALLATION TORQUE SHALL BE VERIFIED FOR THE POST INSTALLED ANCHORS. A REPORT SHALL BE PROVIDED FOR INCLUSION IN THE CI INDICATING THE RESULTS.
<b>POST-CONSTRUCTION</b>		
X	CONSTRUCTION COMPLIANCE LETTER	A LETTER FROM THE GENERAL CONTRACTOR STATING THAT THE WORKMANSHIP WAS PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS AND THESE DRAWINGS, INCLUDING LISTING ADDITIONAL PARTIES TO THE PROCESS.
NA	POST-INSTALLED ANCHOR ROD PULL TESTS	POST-INSTALLED ANCHOR RODS SHALL BE TESTED BY A PULL TEST INSPECTOR AND A REPORT SHALL BE PROVIDED INDICATING TESTING RESULTS.
X	PHOTOGRAPHS	PHOTOGRAPHS SHALL BE SUBMITTED TO THE INSPECTOR. PHOTOS SHALL DOCUMENT ALL PHASES OF THE CONSTRUCTION. THE PHOTOS SHALL BE ORGANIZED IN A MANNER THAT EASILY IDENTIFIES THE EXACT LOCATION OF THE PHOTO.
X	INSPECTOR REDLINE OR RECORD DRAWING(S)	THE INSPECTOR SHALL OBSERVE AND REPORT ANY DISCREPANCIES BETWEEN THE CONTRACTOR'S REDLINE DRAWING AND THE ACTUAL COMPLETED INSTALLATION.

\*THE INSPECTION CHECKLIST SHALL BE REVIEWED PRIOR TO THE START OF CONSTRUCTION. ALL PARTIES TO THE CONSTRUCTION SHALL UNDERSTAND ALL REQUIREMENTS AND INSPECTION/DOCUMENTATION THAT IS APPLICABLE TO THE SCOPE OF WORK THEY ARE PERFORMING. ERRORS ON THE INSPECTION CHECKLIST SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURE/STRUCTURE OWNER AND EOR AS SOON AS POSSIBLE.

## CONSTRUCTION INSPECTION NOTES

### GENERAL

1. THE INSPECTION IS AN ON-SITE VISUAL AND HANDS-ON INSPECTION OF ALL CONSTRUCTION INCLUDING A REVIEW OF CONSTRUCTION REPORTS AND ADDITIONAL PERTINENT DOCUMENTATION PROVIDED BY THE GENERAL CONTRACTOR (GC), AS WELL AS ANY INSPECTION DOCUMENTS PROVIDED BY 3RD PARTY INSPECTORS. THE INSPECTION IS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS; IN ACCORDANCE WITH APPLICABLE INDUSTRY STANDARDS; AND AS DESIGNED BY THE ENGINEER OF RECORD (EOR).
2. NO DOCUMENT, CODE OR POLICY CAN ANTICIPATE EVERY SITUATION THAT MAY ARISE. ACCORDINGLY, THIS CHECKLIST IS INTENDED TO SERVE AS A SOURCE OF GUIDING PRINCIPLES IN ESTABLISHING GUIDELINES FOR CONSTRUCTION INSPECTION.
3. THE INSPECTOR IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE DESIGN ITSELF, AND THE INSPECTOR DOES NOT TAKE OWNERSHIP OF THE DESIGN. THE INSPECTOR SHALL INSPECT AND NOTE CONFORMANCE/NONCONFORMANCE AND PROVIDE TO THE STRUCTURE/STRUCTURE OWNER AND EOR FOR EVALUATION.
4. TO ENSURE THAT THE REQUIREMENTS OF THE INSPECTION ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO OR PAYMENT IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. CONTACT LISTED ON THE TITLE SHEET SHALL BE CONTACTED IF SPECIFIC INSPECTOR CONTACT INFORMATION IS NOT KNOWN.

### FAILING INSPECTION CORRECTIONS

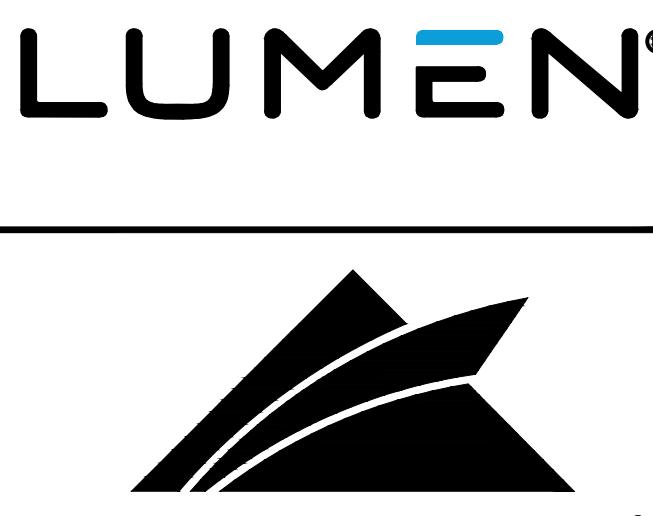
1. IF THE INSTALLATION WOULD FAIL THE INSPECTION ("FAILED INSPECTION"), THE GC SHALL WORK WITH INSPECTOR TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
  - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL DRAWINGS AND COORDINATE A SUPPLEMENT INSPECTION.
  - OR, WITH STRUCTURE OWNER'S APPROVAL, THE GC MAY WORK WITH THE ENGINEER OF RECORD TO RE-ANALYZE THE DESIGN USING THE AS-BUILT CONDITION.

### SERVICE LEVEL COMMITMENT

1. THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN INSPECTION REPORT:
  - THE GC SHALL PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE INSPECTION TO BE CONDUCTED.
  - THE GC AND INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
  - WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND INSPECTOR ON-SITE DURING THE INSPECTION TO HAVE ANY MINOR DEFICIENCIES CORRECTED DURING THE INITIAL INSPECTION. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE INSPECTION CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE INSPECTOR IS ON SITE.

### REQUIRED PHOTOS

1. BETWEEN THE GC AND THE INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE INSPECTION REPORT:
  - PRE-CONSTRUCTION GENERAL SITE CONDITION
  - PHOTOGRAPHS DURING THE CONSTRUCTION/ERCTION AND INSPECTION
    - RAW MATERIALS
    - PHOTOS OF ALL CRITICAL DETAILS
    - FOUNDATION CONSTRUCTION
    - WELD PREPARATION
    - BOLT INSTALLATION
    - FINAL INSTALLED CONDITION
    - SURFACE COATING REPAIR
  - POST CONSTRUCTION PHOTOGRAPHS
    - FINAL INFIL FIELD CONDITION
  - ANY OTHER PHOTOS DEEMED RELEVANT TO SHOW COMPLETE DETAILS OF THE CONSTRUCTION.
2. PHOTOS OF ELEVATED CONSTRUCTION TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.



520 South Main Street, Suite 2531  
Akron, OH 44311  
330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

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NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET



08/08/2024

DATE:

"I HEREBY CERTIFY THAT THESE PLANS WERE  
PREPARED BY ME OR UNDER MY DIRECT  
SUPERVISION AND THAT I AM A DULY  
REGISTERED UNDER THE LAWS OF THE STATE  
OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY:	JA	RELEASED:	08/08/2024
CHECKED BY:	GDJ	REVISION:	
APPROVED BY:	JWB	5	

SHEET TITLE:

INSPECTION  
CHECKLIST

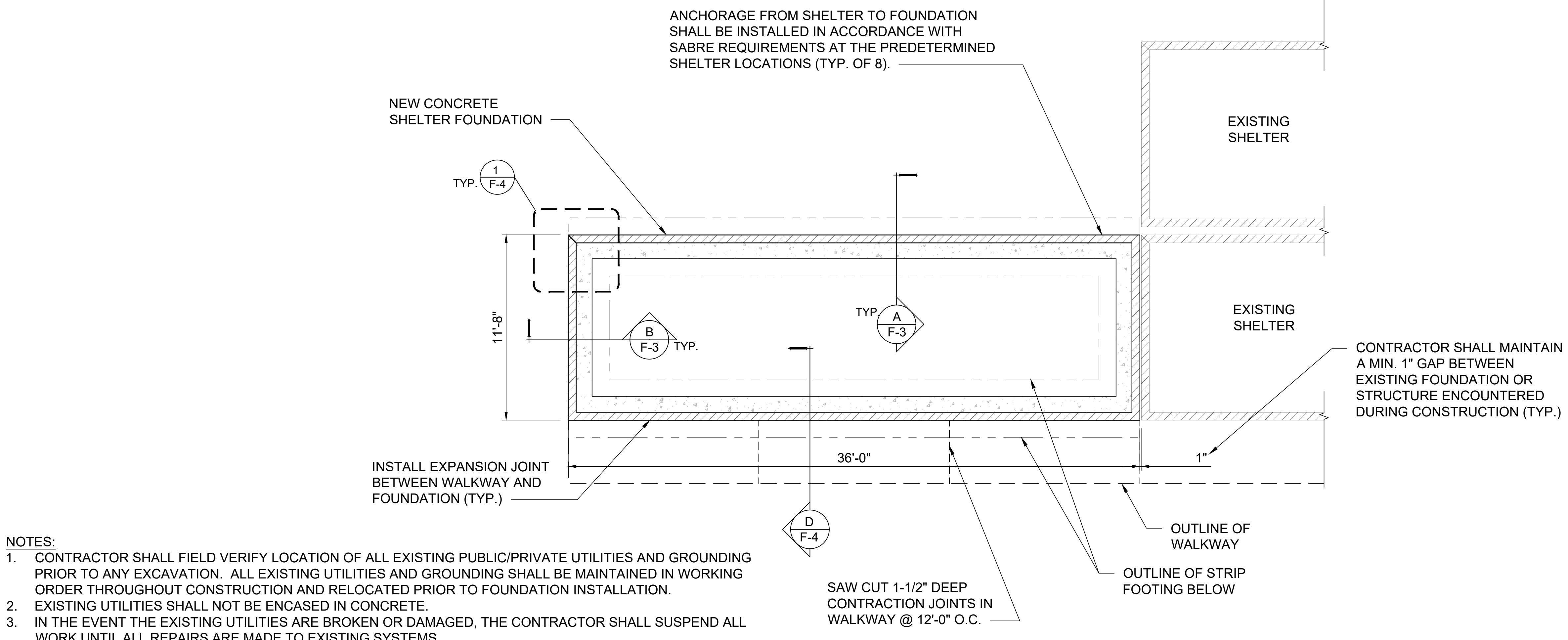
SHEET NUMBER:

F-2

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## FOUNDATION PLAN

 0 1' 2' 4'  
 SCALE: 1/4"=1'-0" (22x34)  
 (OR) 1/8"=1'-0" (11x17)
DATE:  
"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

SITE NAME:

SAN MARTIN

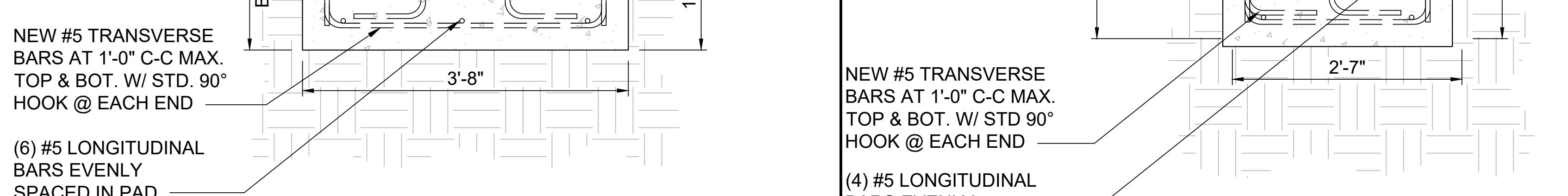
CLLI/ADDRESS:

SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

SHEET TITLE:  
FOUNDATION DETAILSSHEET NUMBER:  
F-3

## FOUNDATION SECTION

 0 3" 6" 1'  
 SCALE: 1"=1'-0" (22x34)  
 (OR) 1/2"=1'-0" (11x17)

A

## FOUNDATION SECTION

 0 3" 6" 1'  
 SCALE: 1"=1'-0" (22x34)  
 (OR) 1/2"=1'-0" (11x17)

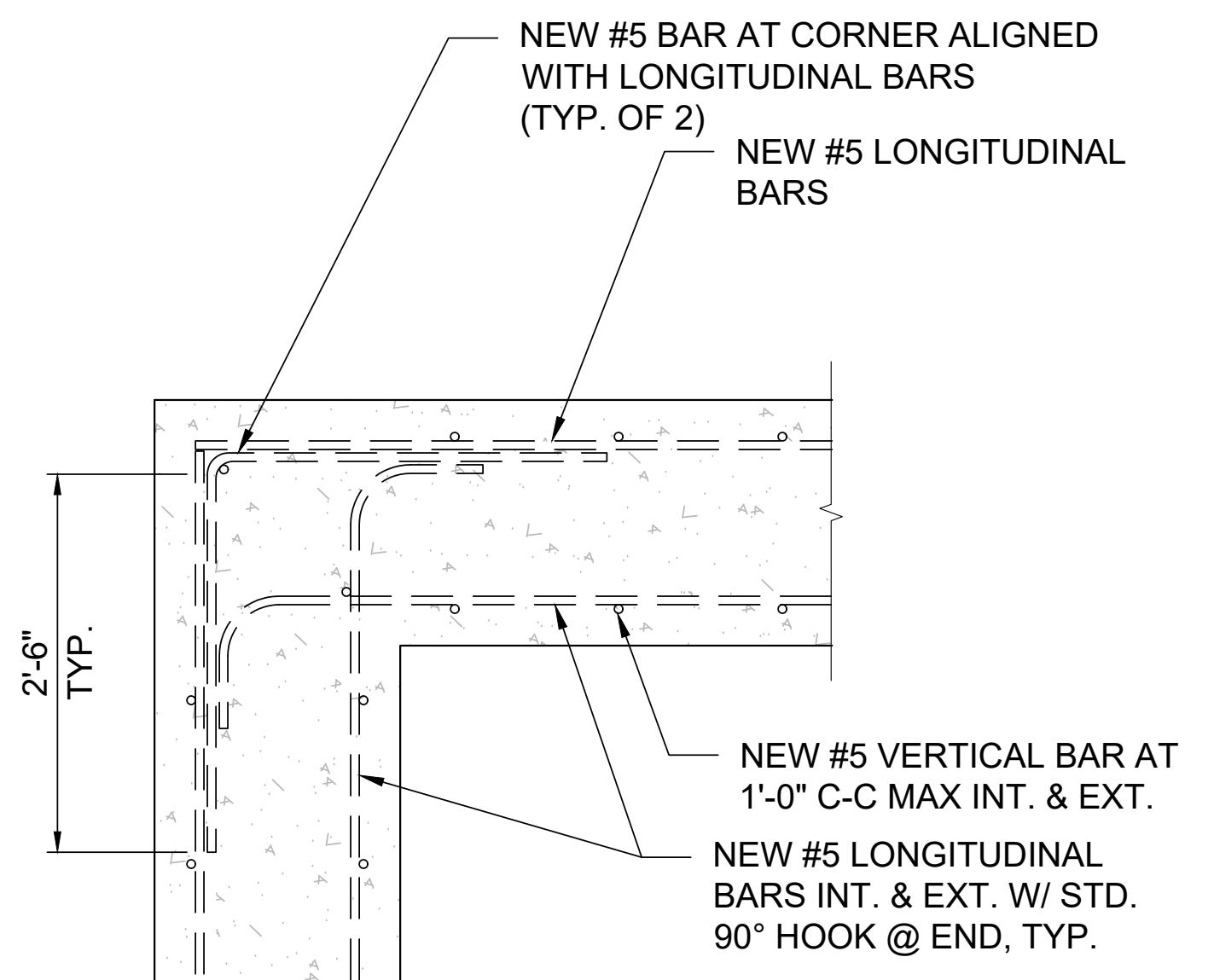
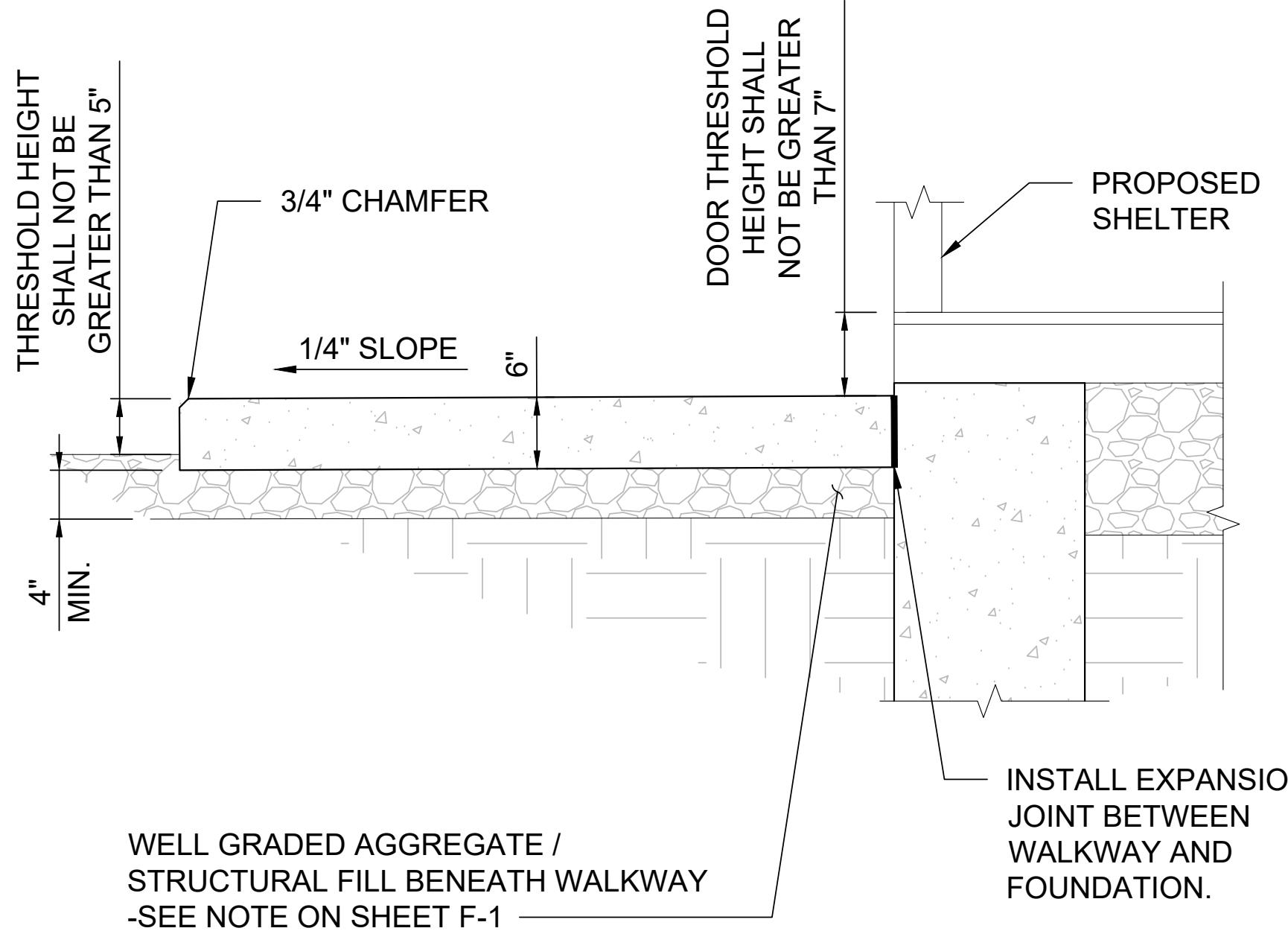
B

## NOT USED

 0 3" 6" 1'  
 SCALE: 1"=1'-0" (22x34)  
 (OR) 1/2"=1'-0" (11x17)

C

NOTE: SEE  
FOUNDATION  
PLAN FOR  
CONTRACTION  
JOINT SPACING



CONCRETE WALK SECTION

0 3" 6" 1'  
(OR) 1/2"=1'-0" (11x17)

D

FND CORNER DETAIL

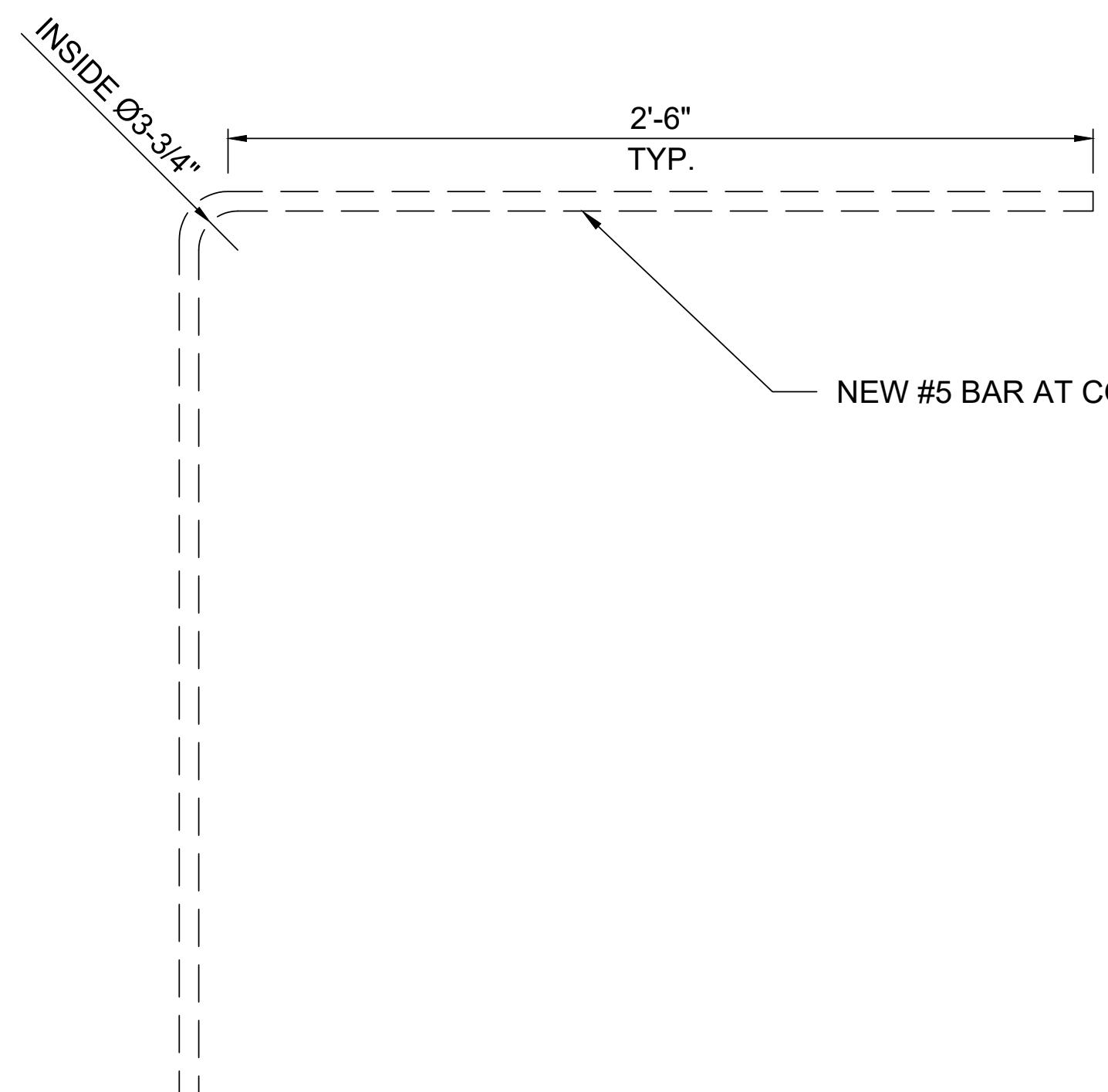
0 3" 6" 1'  
(OR) 1/2"=1'-0" (11x17)

1

NOT USED

0 3" 6" 1'  
(OR) 1/2"=1'-0" (11x17)

2



NOT USED

SCALE  
N.T.S.

3

NOT USED

SCALE  
N.T.S.

4

CORNER BAR DETAIL

SCALE  
N.T.S.

F-4

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SAN MARTIN

CLLI/ADDRESS:  
SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024  
CHECKED BY: GDJ  
APPROVED BY: JWB REVISION: 5

SHEET TITLE:  
FOUNDATION  
DETAILS

SHEET NUMBER:  
F-4

NOTES:  
 1. NO EXISTING FIRE SPRINKLERS IN EXISTING STRUCTURES. NO PROPOSED FIRE SPRINKLERS TO BE INSTALLED AS PART OF THIS PROJECT.  
 2. EXISTING DIESEL FUEL STORAGE CAPACITY = 1,000 GAL.  
 3. EXISTING (2) AVR95-33, 48V, 95AH LEAD-ACID BATTERY ENERGY STORAGE SYSTEMS IN EXISTING SHELTER #1 W/ ENERGY CAPACITY OF 4.56 KWH EA OR 9.12 KWH TOTAL.



520 South Main Street, Suite 2531  
 Akron, OH 44311  
 330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

#### REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	11/30/2022	75 CDs FOR REVIEW	JA
0	12/16/2022	ISSUED FOR CONST.	JA
1	03/21/2023	REVISED PER JDX, CONSTRUCTION SET	JDM
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3	06/13/2023	REVISED PER JDX, CONSTRUCTION SET	JDM
4	09/13/2023	REVISED PER CLIENT, CONSTRUCTION SET	JDM
5	08/08/2024	REVISED PER JDX, CONSTRUCTION SET	JDM

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



Expires: 06/30/2024

08/08/2024

DATE:

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

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CHECKED BY: GDJ REVISION:

APPROVED BY: JWB 5

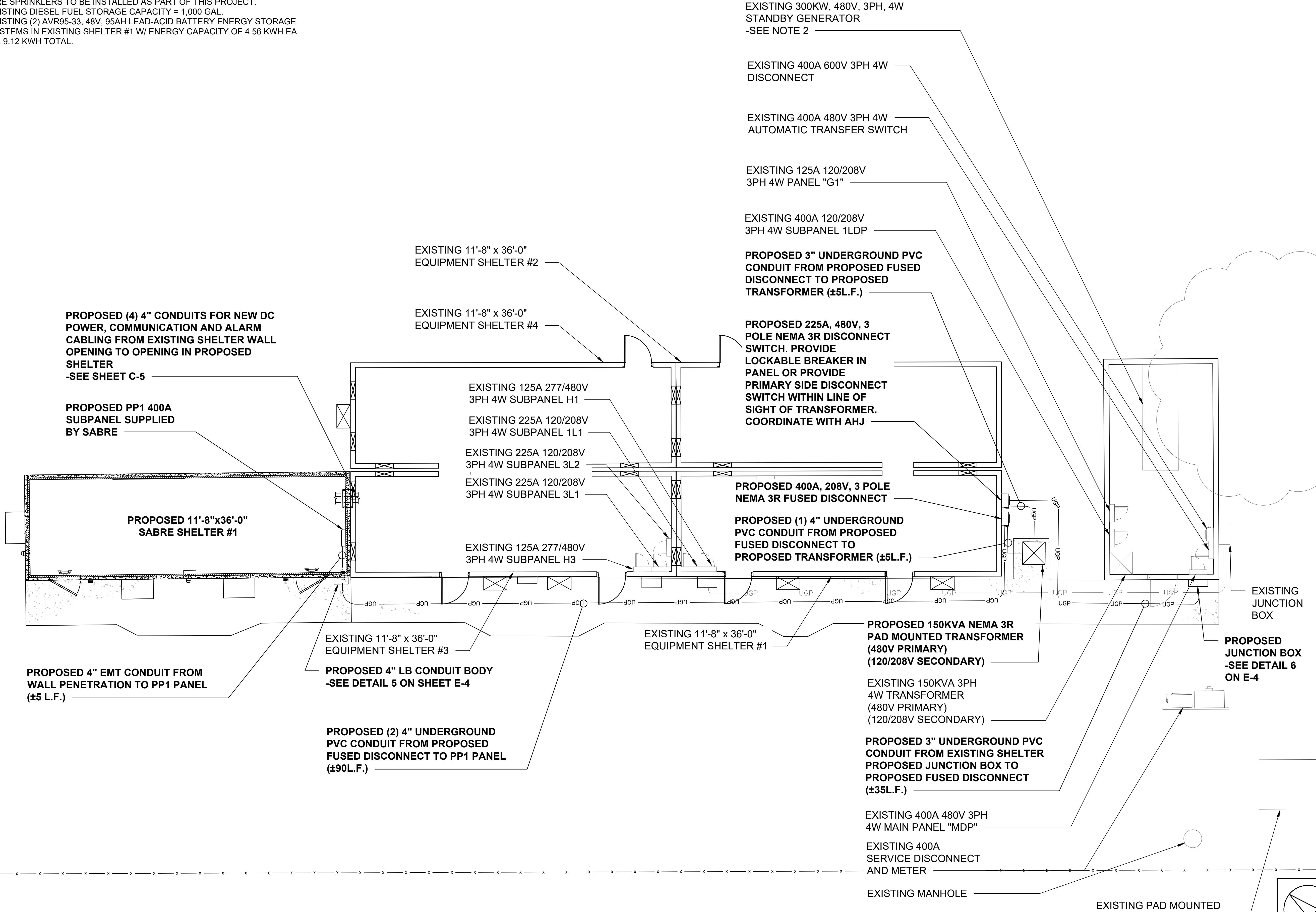
SHEET TITLE:

DETAILED UTILITY PLAN

SHEET NUMBER:

E-1

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE, ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATED TO CARRIER SERVICES IS STRICTLY PROHIBITED.



GPD JOB#: 2022795.79

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 SAN MARTIN, CA 95046

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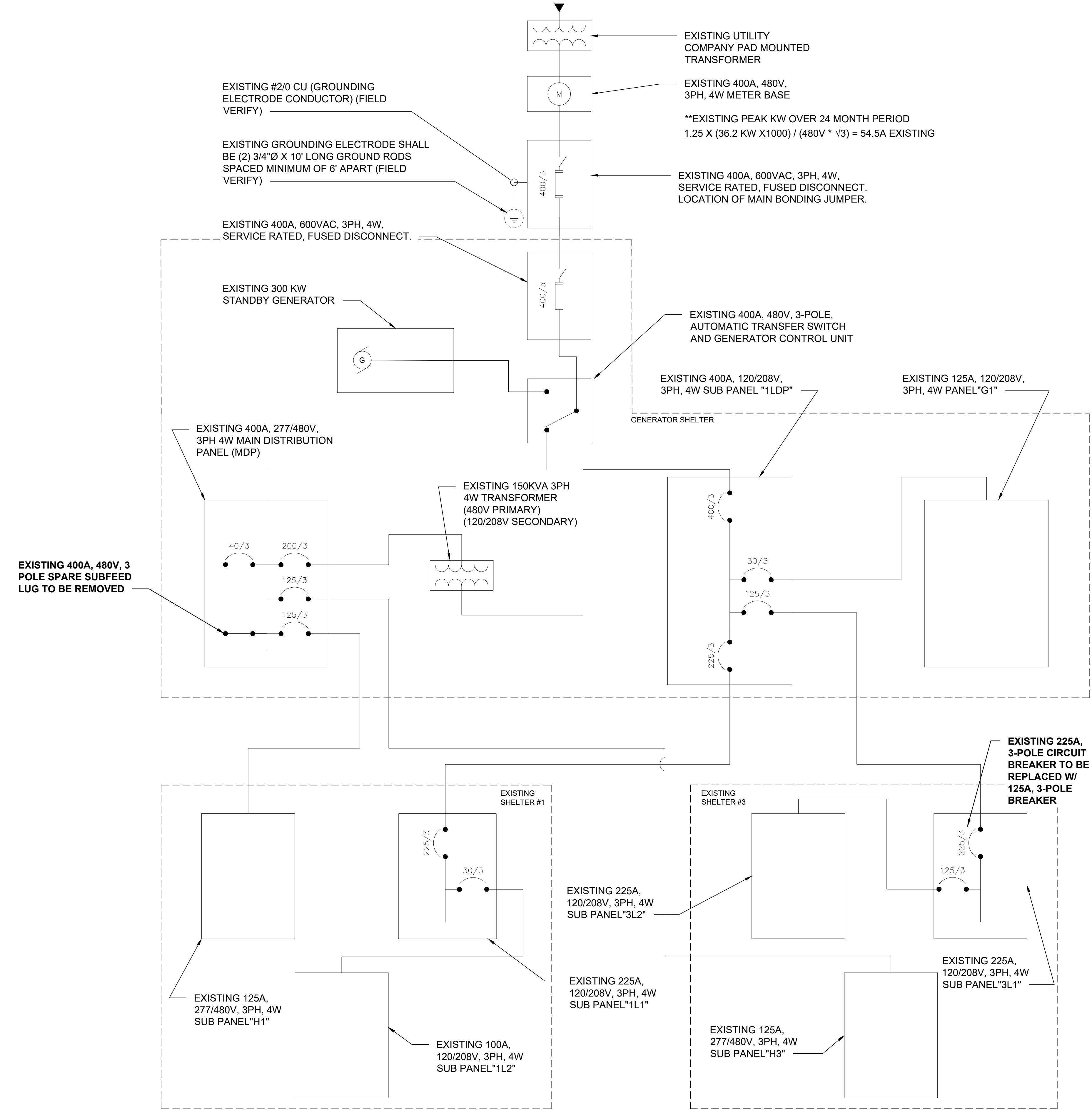
CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

SHEET TITLE: EXISTING ONE-LINE  
DIAGRAM

SHEET NUMBER:

E-2.1



AC POWER SUB PANEL 1L1 (EXISTING)										
120/208 VOLTS, 3-PHASE, 4-WIRE, 225A										
MAIN BREAKER RATING (A) :			225		SYSTEM VOLTAGE (V) : 208					
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	L3	POSN	BKR	c/nc
RECTIFIER #1*	445	c	20	1	445			2	20	c 0
	445	c		3		445		4		c 0
RECTIFIER #2*	445	c	20	5		445	6	20	c 0	
	445	c		7	445			8		c 0
RECTIFIER #3*	445	c	20	9		445	10	20	c 0	
	445	c		11		445	12		c 0	
RECTIFIER #4*	445	c	20	13	445			14	20	c 0
	445	c		15		445	16		c 0	
RECTIFIER #5*	445	c	20	17		445	18	20	c 0	
	445	c		19	445			20		c 0
RECTIFIER #6*	445	c	20	21		445	22	20	c 0	
	445	c		23		445	24		c 0	
RECTIFIER #7**	445	c	20	25	445			26	20	c 0
	445	c		27		445	28		c 0	
RECTIFIER #8**	0	c	20	29		0	30	20	c 0	
	0	c		31	0			32		c 0
SPARE	0	nc	30	33	1600			34	nc	1600
	0	nc		35		1600	36	30	nc	1600
	0	nc		37	1600			38	nc	1600
BLANK	0	-	-	39		500		40	20	nc 500
BLANK	0	-	-	41				0	42	- - 0
PHASE TOTALS (VA):			3825	4325	3380					
CURRENT PER PHASE (A):			37	41	32	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):			11530			Legend: c = continuous, nc = non-continuous				
PANEL CAPACITY (kVA): 81.0			CONNECTED LOAD (kVA): 11.5							
PANEL LOADING (100% non-cont. load) (kVA): 5.3			CONNECTED LOAD (AMP): 32.0							
PANEL LOADING (125% continuous load) (kVA): 7.8			DEMAND LOAD (kVA): 13.1							
PANEL LOADING (TOTAL) (kVA): 13.1			DEMAND LOAD (AMP): 36.4							
SPARE CAPACITY (kVA): 67.9										

## NOTES:

\*EXISTING RECTIFIER CIRCUITS TO BE REMOVED AND REPLACED FOR NEW DC POWER PLANT. REPLACE EXISTING 20A, 2P BREAKER WITH NEW 45A, 2P BREAKER.

\*\*EXISTING RECTIFIER CIRCUITS TO BE REMOVED. SWITCH BREAKER TO THE OFF POSITION AND LABEL AS "SPARE"

## EXISTING BUILDING #1 SUBPANEL (1L1)

AC POWER SUB PANEL 3L2 (EXISTING)										
120/208 VOLTS, 3-PHASE, 4-WIRE, 225A										
MAIN BREAKER RATING (A) :			125		SYSTEM VOLTAGE (V) : 208					
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	L3	POSN	BKR	c/nc
SPARE	0	nc	20	1	445			2	20	c 445
	0	nc		3		445		4		c 445
SPARE	0	nc	20	5		445	6	20	c 445	
	0	nc		7	445			8		c 445
SPARE	0	nc	20	9		445	10	20	c 445	
	0	nc		11	445			12		c 445
SPARE	0	nc	20	13	445			14	-	nc 0
	0	nc		15	0			16	-	nc 0
SPARE	0	nc	20	17		2454	18	-	nc 0	
	0	nc		19	0			20	-	nc 0
SPARE	0	nc	20	21		2454	22	-	nc 0	
	0	nc		23		0	24	-	nc 0	
BLANK	0	-	-	19	0			20	-	nc 0
BLANK	0	-	-	21		0		22	-	nc 0
BLANK	0	-	-	23			0	24	-	nc 0
PHASE TOTALS (VA):			9178	9178	9178					
CURRENT PER PHASE (A):			90	90	90	Amperes/phase cannot exceed main breaker rating				
PANEL TOTAL (VA):			27534			Legend: c = continuous, nc = non-continuous				
PANEL CAPACITY (kVA): 144.0			CONNECTED LOAD (kVA): 27.5							
PANEL LOADING (100% non-cont. load) (kVA): 8.6			CONNECTED LOAD (AMP): 76.5							
PANEL LOADING (125% continuous load) (kVA): 23.6			DEMAND LOAD (kVA): 32.3							
PANEL LOADING (TOTAL) (kVA): 32.3			DEMAND LOAD (AMP): 89.6							
SPARE CAPACITY (kVA): 111.7										

## NOTES:

\*EXISTING RECTIFIER CIRCUITS TO BE REMOVED AND REPLACED FOR NEW RECTIFIERS IN REPLACEMENT DC POWER PLANT. REPLACE EXISTING BREAKER WITH NEW 45A, 2P BREAKER.

\*\*EXISTING RECTIFIER CIRCUITS TO BE REMOVED. SWITCH BREAKER TO THE OFF POSITIONS AND LABEL AS "SPARE".

## EXISTING BUILDING #3 SUBPANEL (3L2)

<b>LUMEN®</b>	
<b>GPD GROUP, INC.®</b>	
520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101	
GPD JOB#: 2022795.79	
REVISIONS	
REV.	DATE
DESCRIPTION	INITIALS
A	11/30/2022
0	12/16/2022
1	03/21/2023
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3	06/13/2023
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5	08/08/2024
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET	



AC POWER SUB PANEL 1LDP (EXISTING)										
120/208 VOLTS, 3-PHASE, 4-WIRE, 400A										
MAIN BREAKER RATING (A) :			400		SYSTEM VOLTAGE (V) : 208					





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Expires: 06/30/2024

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SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

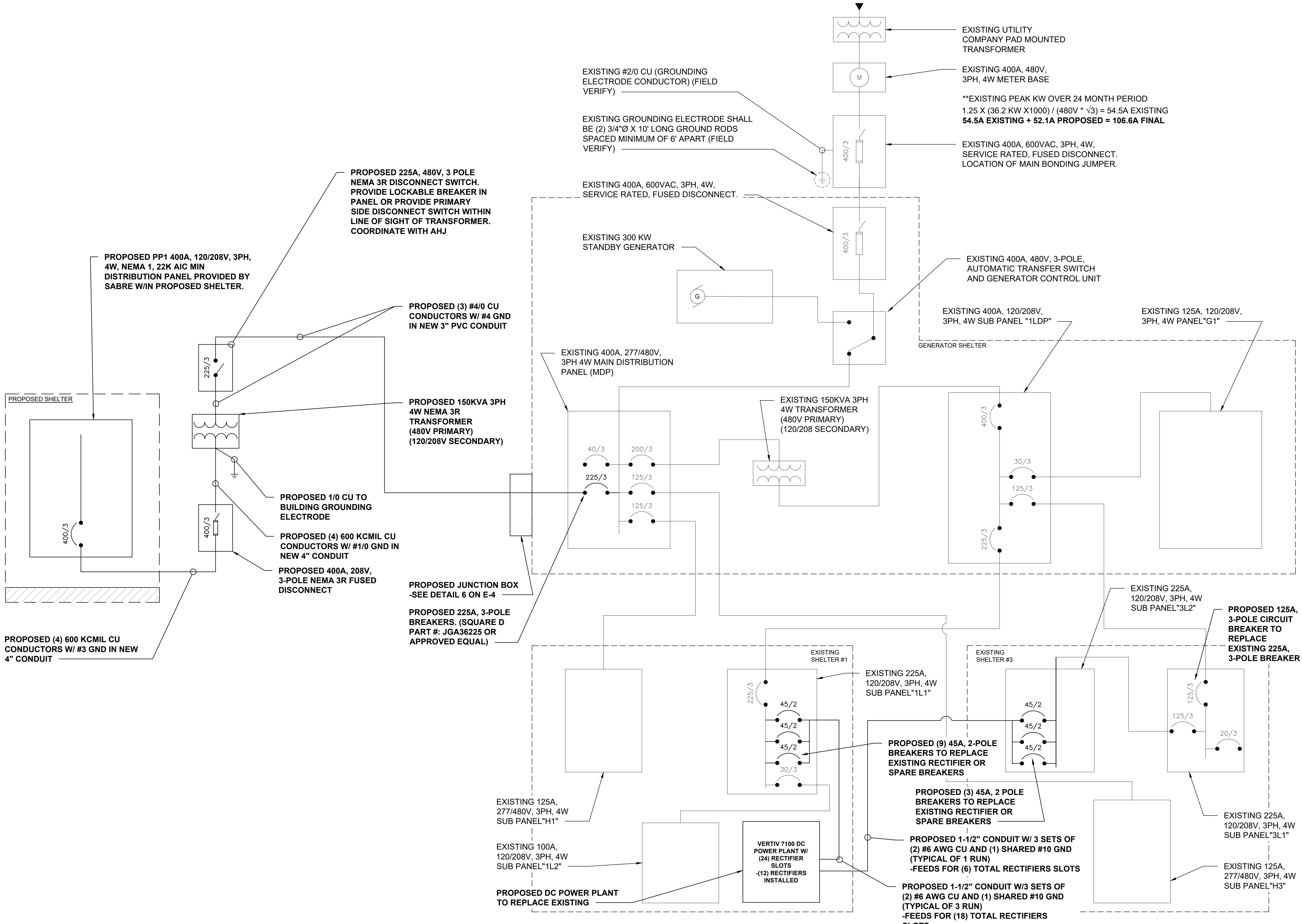
SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024  
 CHECKED BY: GDJ  
 APPROVED BY: JWB REVISION: 5  
 SHEET TITLE:

PROPOSED ONE-LINE  
DIAGRAM

SHEET NUMBER:

E-3.1



AC POWER SUB PANEL 1L1 (EXISTING)												
120/208 VOLTS, 3-PHASE, 4-WIRE, 225A												
MAIN BREAKER RATING (A) :				225				SYSTEM VOLTAGE (V) : 208				
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	L3	POSN	BKR	c/nc	VA	DESCRIPTION
RECTIFIERS SHELF 1&2 -1*	2253	c	45	1	2253			2	45**	OFF	0	RECTIFIERS SHELF 3&4 -1*
	2253	c		3	2253			4	OFF	0		
RECTIFIERS SHELF 1&2 -2*	2253	c	45	5		2253		6	45**	OFF	0	RECTIFIERS SHELF 3&4 -2*
	2253	c		7	2253			8	OFF	0		
RECTIFIERS SHELF 1&2 -3*	2253	c	45	9	2253			10	45**	OFF	0	RECTIFIERS SHELF 3&4 -3*
	2253	c		11	2253			12	OFF	0		
RECTIFIERS SHELF 1&2 -4*	2253	c	45	13	2253			14	20	OFF	0	SPARE
	2253	c		15	2253			16	OFF	0		
RECTIFIERS SHELF 1&2 -5*	2253	c	45	17		2253		18	20	OFF	0	SPARE
	2253	c		19	2253			20	OFF	0		
RECTIFIERS SHELF 1&2 -6*	1127	c	45	21	1127			22	20	OFF	0	SPARE
	1127	c		23		1127		24	OFF	0		
SPARE	0	OFF	20	25	0			26	20	OFF	0	SPARE
	0	OFF		27		0		28	OFF	0		
SPARE	0	OFF	20	29		0	30	20	OFF	0		SPARE
	0	OFF		31	0		32	OFF	0			
SPARE	0	OFF		33	1600			34	nc	1600		1L2 PANEL BOARD
	0	OFF	30	35		1600		36	30	nc	1600	
	0	OFF		37	1600			38	nc	1600		
BLANK	0	-	-	39	500			40	20	nc	500	DOOR SECURITY SYSTEM
BLANK	0	-	-	41				0	42	-	0	BLANK
PHASE TOTALS (VA):	10612	9986	9486									
CURRENT PER PHASE (A):	107	100	95									
PANEL TOTAL (VA):	30084											Legend: c = continuous, nc = non-continuous
PANEL CAPACITY (kVA):	81.0											CONNECTED LOAD (kVA): 30.1
PANEL LOADING (100% non-cont. load) (kVA):	5.3											CONNECTED LOAD (AMP): 83.6
PANEL LOADING (125% continuous load) (kVA):	31.0											DEMAND LOAD (kVA): 36.3
PANEL LOADING (TOTAL) (kVA):	36.3											DEMAND LOAD (AMP): 100.8
SPARE CAPACITY (kVA):	44.7											

## NOTES:

\*THE DC POWER PLANT REQUIRES (12) RECTIFIERS TO BE INSTALLED IN THE PROPOSED CONFIGURATION. IT IS ASSUMED THAT THE DC POWER PLANT OPERATES IN AN N+1 CONFIGURATION. THEREFORE, THE PROPOSED DC LOADING AS SPECIFIED BY LUMEN HAS BEEN DISTRIBUTED ACROSS 11 TOTAL RECTIFIERS.

\*\*NEW RECTIFIER CIRCUITS WITHOUT RECTIFIERS INSTALLED IN THE NEW DC POWER PLANT. BREAKER SHALL BE IN THE OFF POSITION.

## PROPOSED EXISTING BUILDING #1 SUBPANEL (1L1)

AC POWER SUB PANEL 3L2 (EXISTING)												
120/208 VOLTS, 3-PHASE, 4-WIRE, 225A												
MAIN BREAKER RATING (A) :				125				SYSTEM VOLTAGE (V) : 208				
DESCRIPTION	VA	c/nc	BKR	POSN	L1	L2	L3	POSN	BKR	c/nc	VA	DESCRIPTION
SPARE	0	OFF	20	1	0			2	45**	OFF	0	RECTIFIERS SHELF 3&4 -4*
	0	OFF		3		0		4	OFF	0		
SPARE	0	OFF	20	5				6	45**	OFF	0	RECTIFIERS SHELF 3&4 -5*
	0	OFF		7	0			8	OFF	0		
SPARE	0	OFF	20	9		0		10	45**	OFF	0	RECTIFIERS SHELF 3&4 -6*
	0	OFF		11				12	OFF	0		
SPARE	0	OFF	20	13	0			14	20	OFF	0	SPARE
	0	OFF		15		0		16	OFF	0		
SPARE	0	OFF	20	17			0	18	20	OFF	0	SPARE
	0	OFF		19	0			20	OFF	0		
SPARE	0	OFF	20	21		0		22	20	OFF	0	SPARE
	0	OFF		23				24	20	OFF	0	
SPARE	0	OFF	20	25	0			26	20	OFF	0	SPARE
	0	OFF		27		0		28	OFF	0		
SPARE	0	OFF	20	29			0	30	20	OFF	0	SPARE
	0	OFF		31	0			32	OFF	0		
RECEPT GROUP 1 L3	720	nc	20	33				960		34	20	nc 240 HVAC CONTROLLERS
RECEPT GR2 SHL 3 COLO	720	nc	20	35					720	36	20	OFF 0 SPARE
RECEPT GR3 SHL 4 COLO	720	nc	20	37	840				38	20	nc 120 EXT LT FIXTURES SHL 3 & 4	
RECEPT GR4 SHL 4 COLO	720	nc	20	39				920	40	20	nc 200 SMOKE DETECTOR SHL 3 & 4	
EXTERIOR GFI SHL 3	360	nc	20	41					360	42	- - 0 BLANK	
PHASE TOTALS (VA):	840			1880	1080							
CURRENT PER PHASE (A):	7	16	9									
PANEL TOTAL (VA):	3800											Legend: c = continuous, nc = non-continuous
PANEL CAPACITY (kVA):	45.0											CONNECTED LOAD (kVA): 3.8
PANEL LOADING (100% non-cont. load) (kVA):	3.8											CONNECTED LOAD (AMP): 10.6
PANEL LOADING (125% continuous load) (kVA):	0.0											DEMAND LOAD (kVA): 3.8
PANEL LOADING (TOTAL) (kVA):	3.8											DEMAND LOAD (AMP): 10.6
SPARE CAPACITY (kVA):	41.2											

## NOTES:

\*THE DC POWER PLANT REQUIRES (12) RECTIFIERS TO BE INSTALLED IN THE PROPOSED CONFIGURATION. IT IS ASSUMED THAT THE DC POWER PLANT OPERATES IN AN N+1 CONFIGURATION. THEREFORE, THE PROPOSED DC LOADING AS SPECIFIED BY LUMEN HAS BEEN DISTRIBUTED ACROSS 11 TOTAL RECTIFIERS.

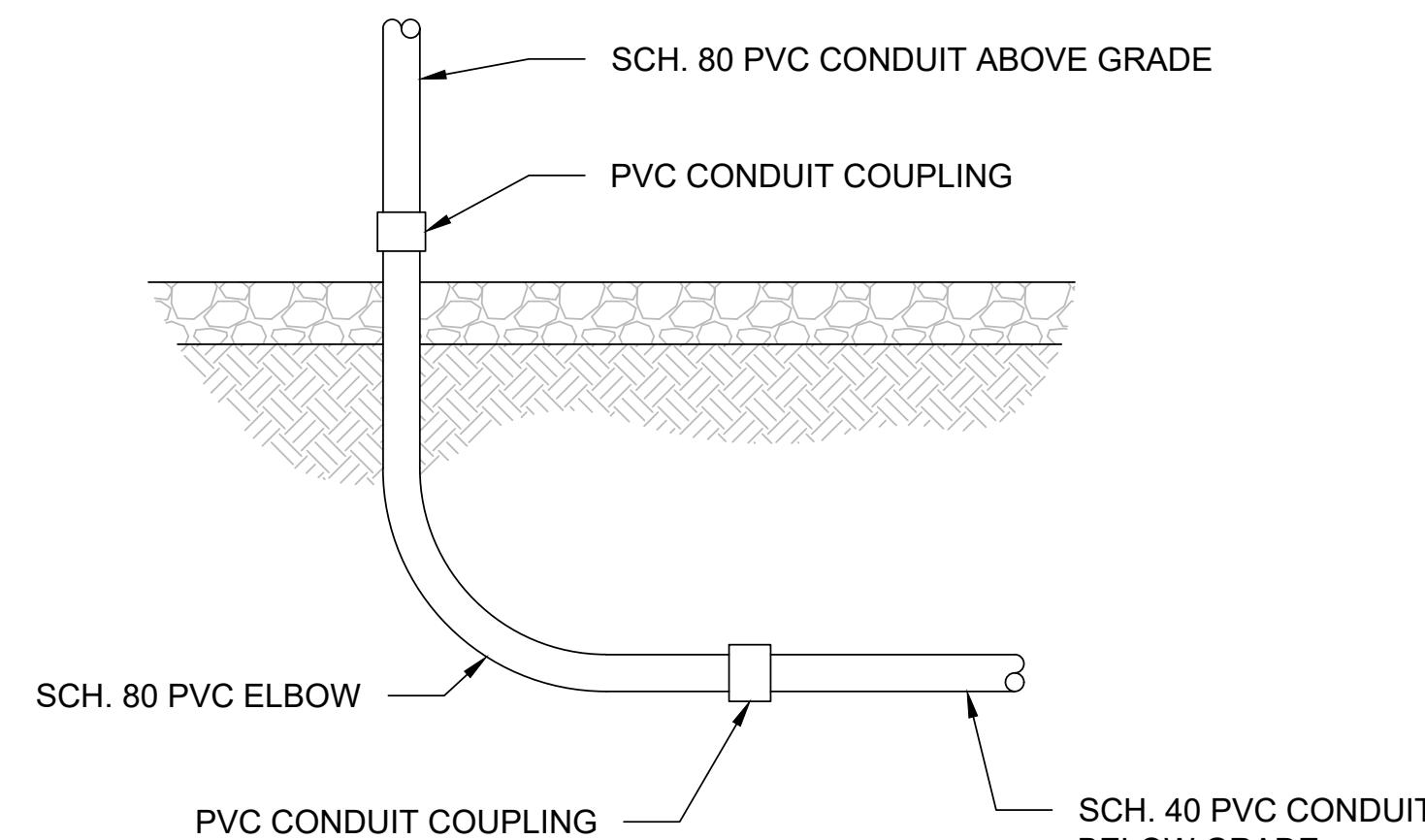
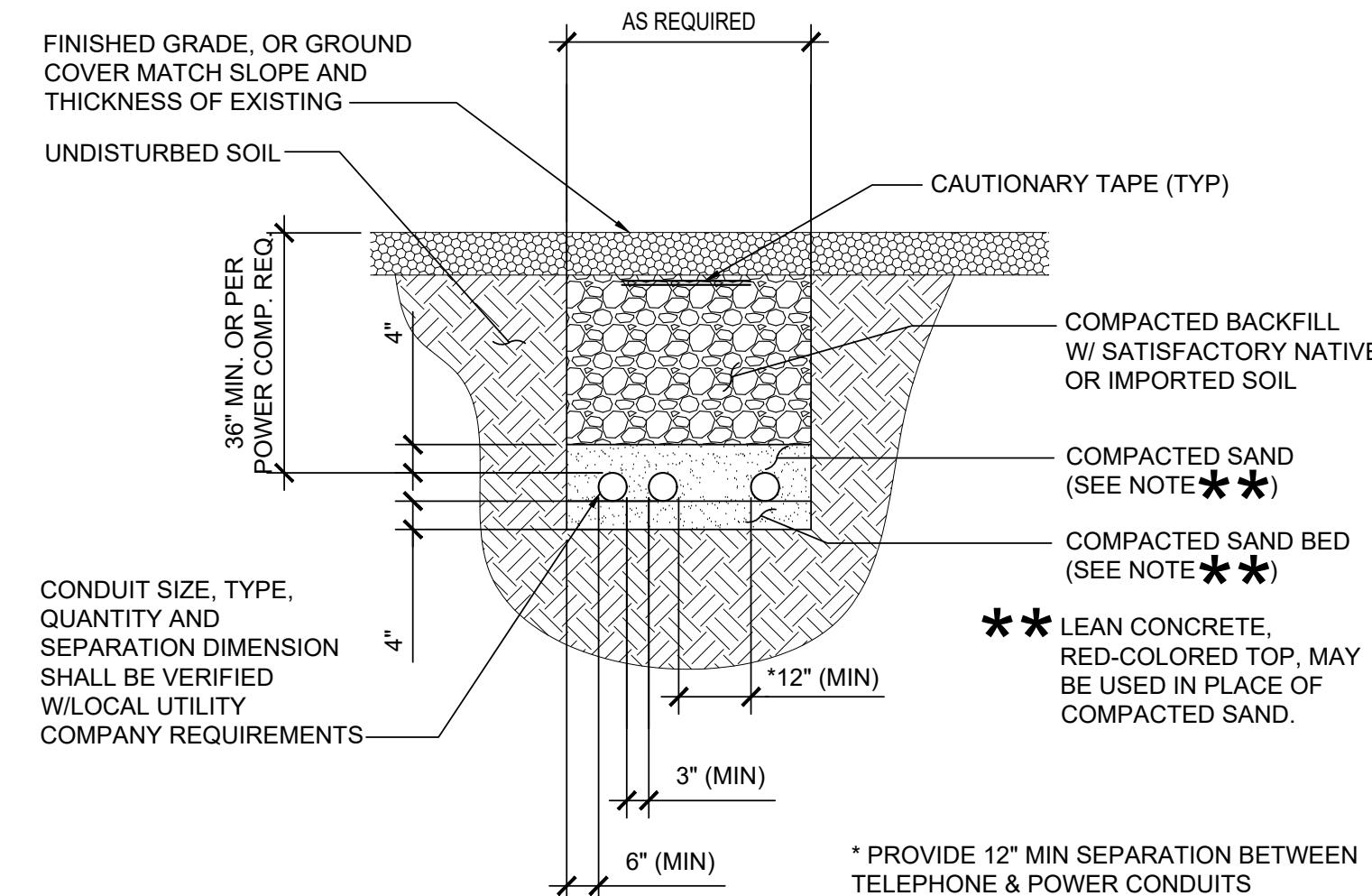
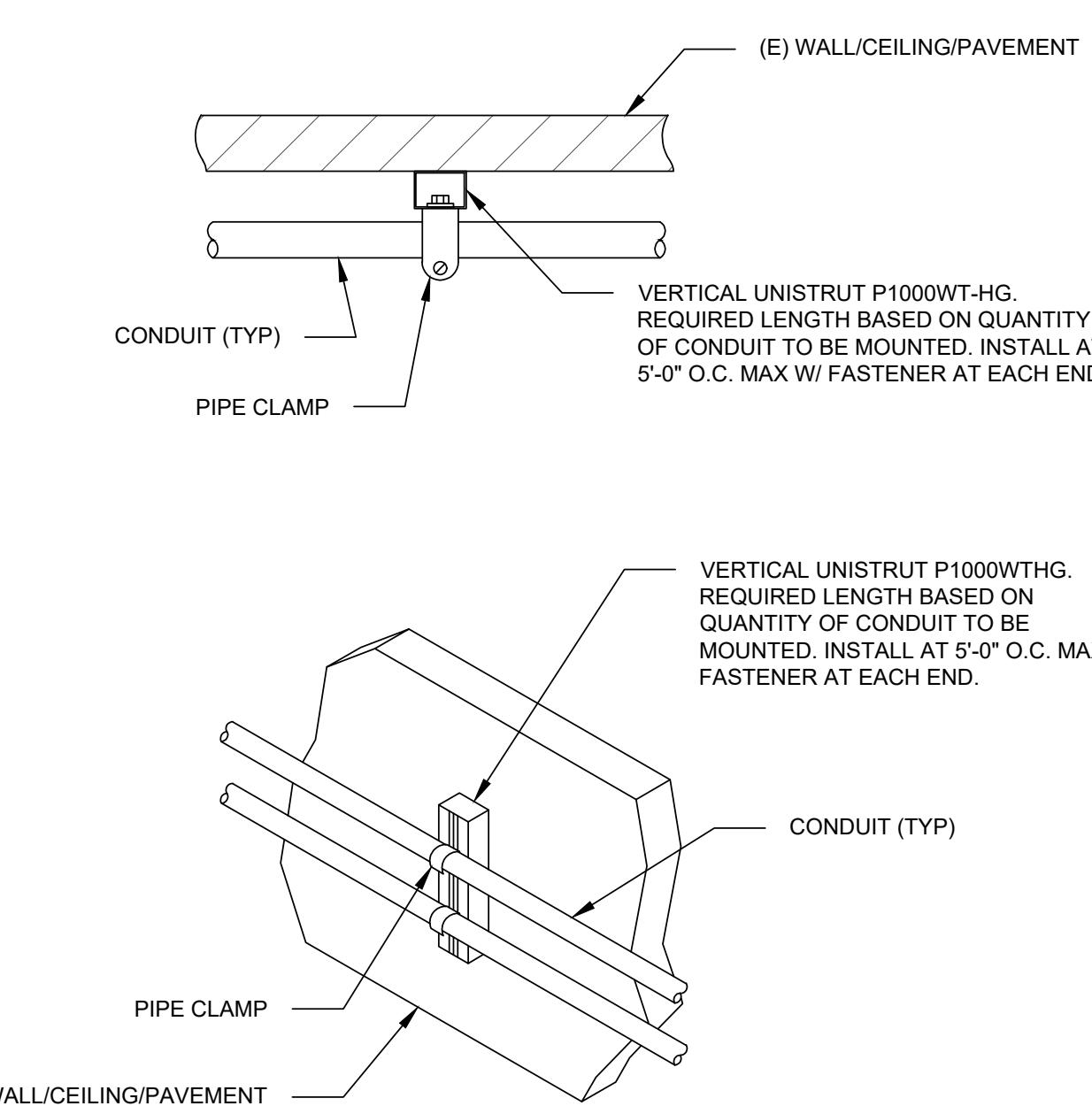
\*\*NEW RECTIFIER CIRCUITS WITHOUT RECTIFIERS INSTALLED IN THE NEW DC POWER PLANT. BREAKER SHALL BE IN THE OFF POSITION.

## PROPOSED EXISTING BUILDING #3 SUBPANEL (3L2)



## REVISIONS

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NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

CONDUIT WALL MOUNT DETAIL

SCALE  
N.T.S.

1

TYPICAL UTILITY TRENCH DETAIL

SCALE  
N.T.S.

2

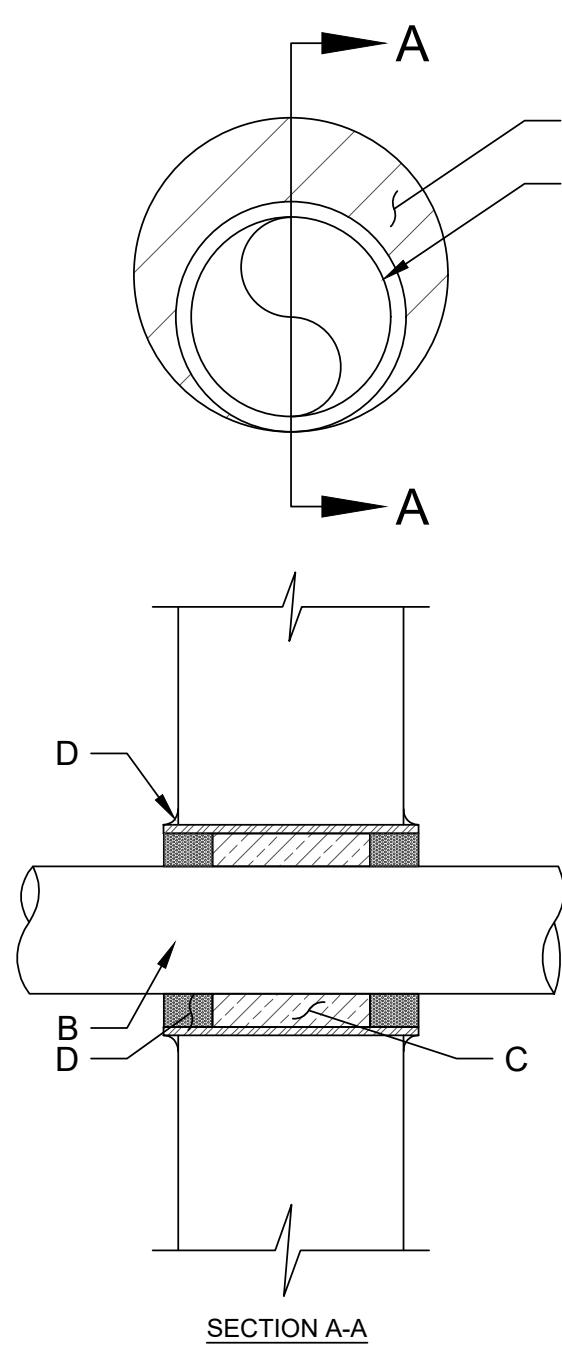
CONDUIT STUB UP DETAIL

SCALE  
N.T.S.

3

## INSTALLER NOTES:

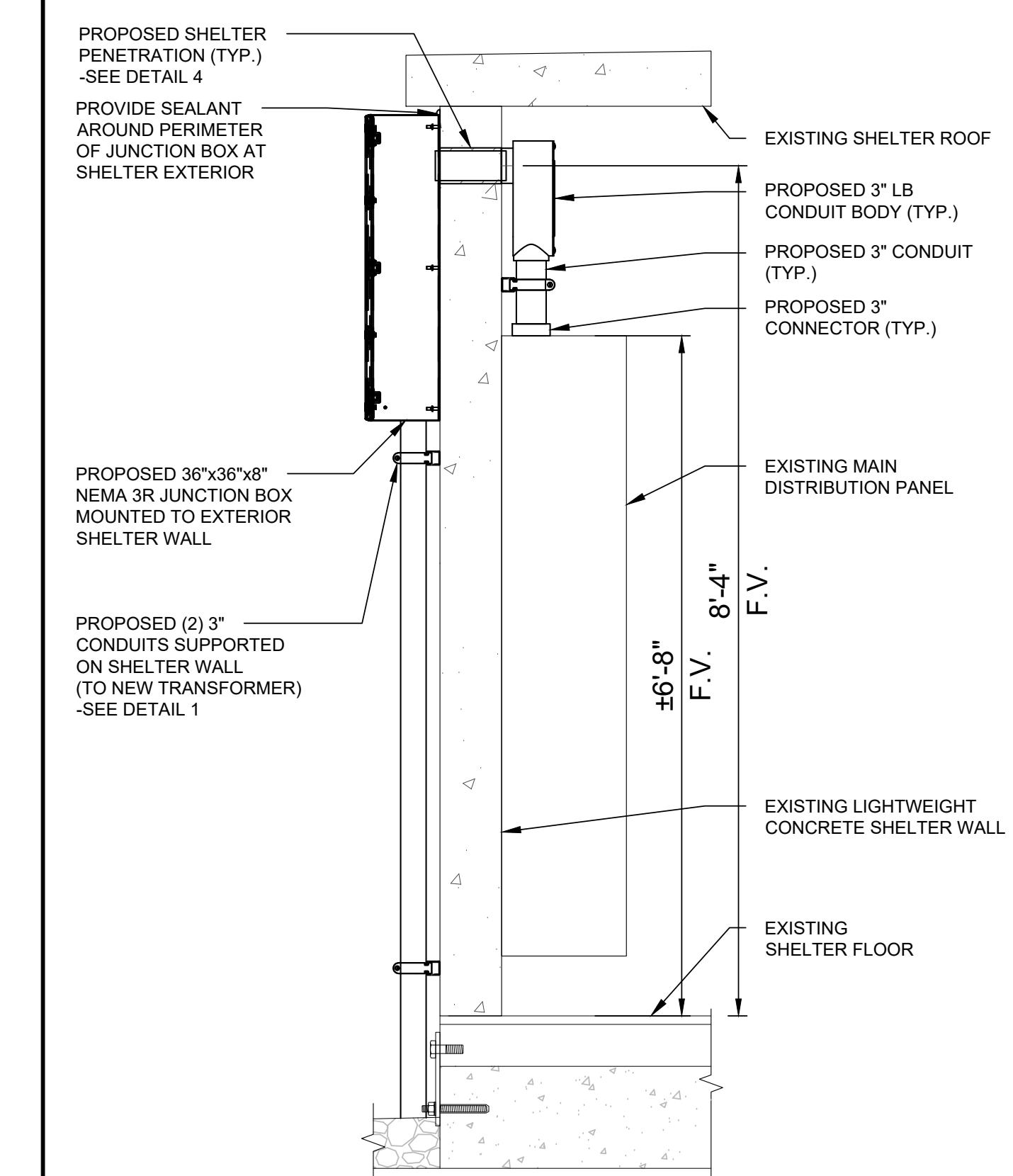
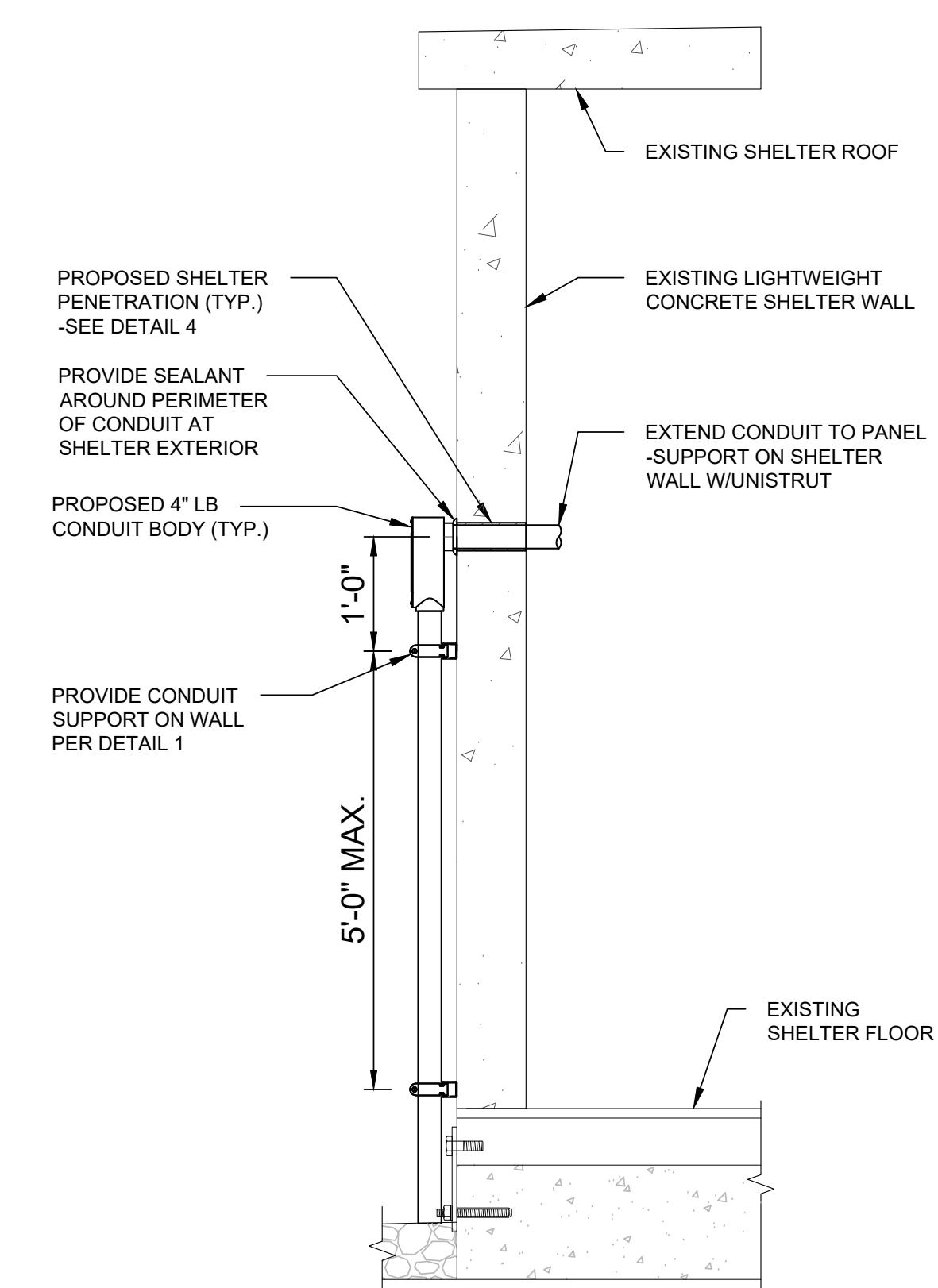
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.



- A. FLOOR OR WALL ASSEMBLY : MINIMUM 4 1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". (SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- B. THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNUAL SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
  - a. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE
  - b. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
  - c. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3 1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- C. PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- D. FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W-RATING APPLIES ONLY WHEN CP601S OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK



OUTER WALL PENETRATION DETAIL

SCALE  
N.T.S.

4

CONDUIT PENETRATION (LB)

SCALE  
N.T.S.

5

CONDUIT PENETRATION (J-BOX)

SCALE  
N.T.S.

6



"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY:

JA

RELEASED: 08/08/2024

CHECKED BY:

GDJ

REVISION: 5

APPROVED BY:

JWB

5

SHEET TITLE:

ELECTRICAL  
DETAILS

SHEET NUMBER:

E-4

**A. WORK INCLUDED:**

THIS SPECIFICATION AND ACCOMPANYING DRAWING CONTEMPLATE THE PROVISIONS AND INSTALLATION, BY THE ELECTRICAL CONTRACTOR OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS LUMEN SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISIONS AND INSTALLATION OF AN ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC. (UNLESS OTHERWISE NOTED).
4. ALL CONDUITS SHALL BE LEFT WITH 200# TEST PULL WIRE. (UNLESS NOTED OTHERWISE) STUB & PLUG BOTH ENDS OF ALL SPARE CONDUITS UP AT 12" ABOVE GRADE.
5. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS AND CONDUIT AND MAKE THE CONNECTION TO THE SERVICE EQUIPMENT WITHIN THE BUILDING.
6. ABOVE GRADE RISER CONDUIT SHALL BE GALVANIZED STEEL WITH MATCHING FITTINGS.
7. ALL WIRE SHALL BE (COPPER, 600V THHW, 90°C) UNLESS NOTED OTHERWISE.

**B. CODES, PERMITS AND FEES:**

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY SUBCONTRACTOR.

2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES; STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT, SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING RECOGNIZED AUTHORITIES:

A.N.S.I. - AMERICAN NATIONAL STANDARDS INSTITUTE  
I.E.E.E. - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS  
N.E.C. - NATIONAL ELECTRIC CODE  
N.E.M.A. - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION  
N.F.P.A. - NATIONAL FIRE PROTECTION ASSOCIATION  
U.L. - UNDERWRITERS LABORATORIES, INC.

3. THE SUBCONTRACTOR SHALL BE LICENSED TO PERFORM WORK IN THE STATE, CITY OR COUNTY OF THE PROJECT SITE AS REQUIRED.

**4. UTILITY COMPANY COORDINATION**

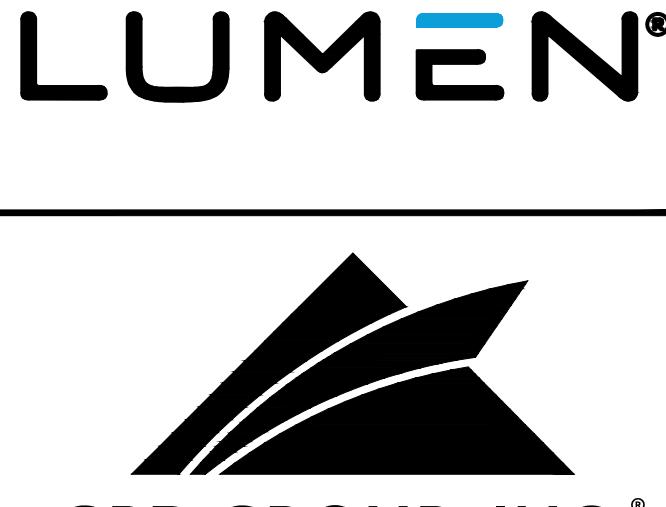
ELECTRICAL CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY. BEFORE SUBMITTING HIS BID, THE SUBCONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN HIS BID WHENEVER POSSIBLE.

**5. UTILITIES:**

THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE EXCAVATION AND PROPER BACKFILLING OF TRENCHES AND SUPPLY CONDUIT REQUIRED FOR UNDERGROUND TELEPHONE & ELECTRICAL UTILITIES. ALL TRENCHING SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY IN 6" LIFTS.

**C. ELECTRICAL LOADS**

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANEL BOARD AND CIRCUIT IDs).
8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
18. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
19. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
21. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.



520 South Main Street, Suite 2531  
Akron, OH 44311  
330.572.2100 Fax 330.572.2101

GPD JOB#: 2022795.79

## REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	11/30/2022	75 CDs FOR REVIEW	JA
0	12/16/2022	ISSUED FOR CONST.	JA
1	03/21/2023	REVISED PER JDX, CONSTRUCTION SET	JDM
2	04/12/2023	REVISED PER CLIENT, CONSTRUCTION SET	JDM
3	06/13/2023	REVISED PER JDX, CONSTRUCTION SET	JDM
4	09/13/2023	REVISED PER CLIENT, CONSTRUCTION SET	JDM
5	08/08/2024	REVISED PER JDX, CONSTRUCTION SET	JDM

NOT FOR CONSTRUCTION UNLESS  
LABELED AS CONSTRUCTION SET

Expires: 06/30/2024 08/08/2024

DATE:

"I HEREBY CERTIFY THAT THESE PLANS WERE  
PREPARED BY ME OR UNDER MY DIRECT  
SUPERVISION AND THAT I AM A DULY  
REGISTERED UNDER THE LAWS OF THE STATE  
OF CALIFORNIA."

SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

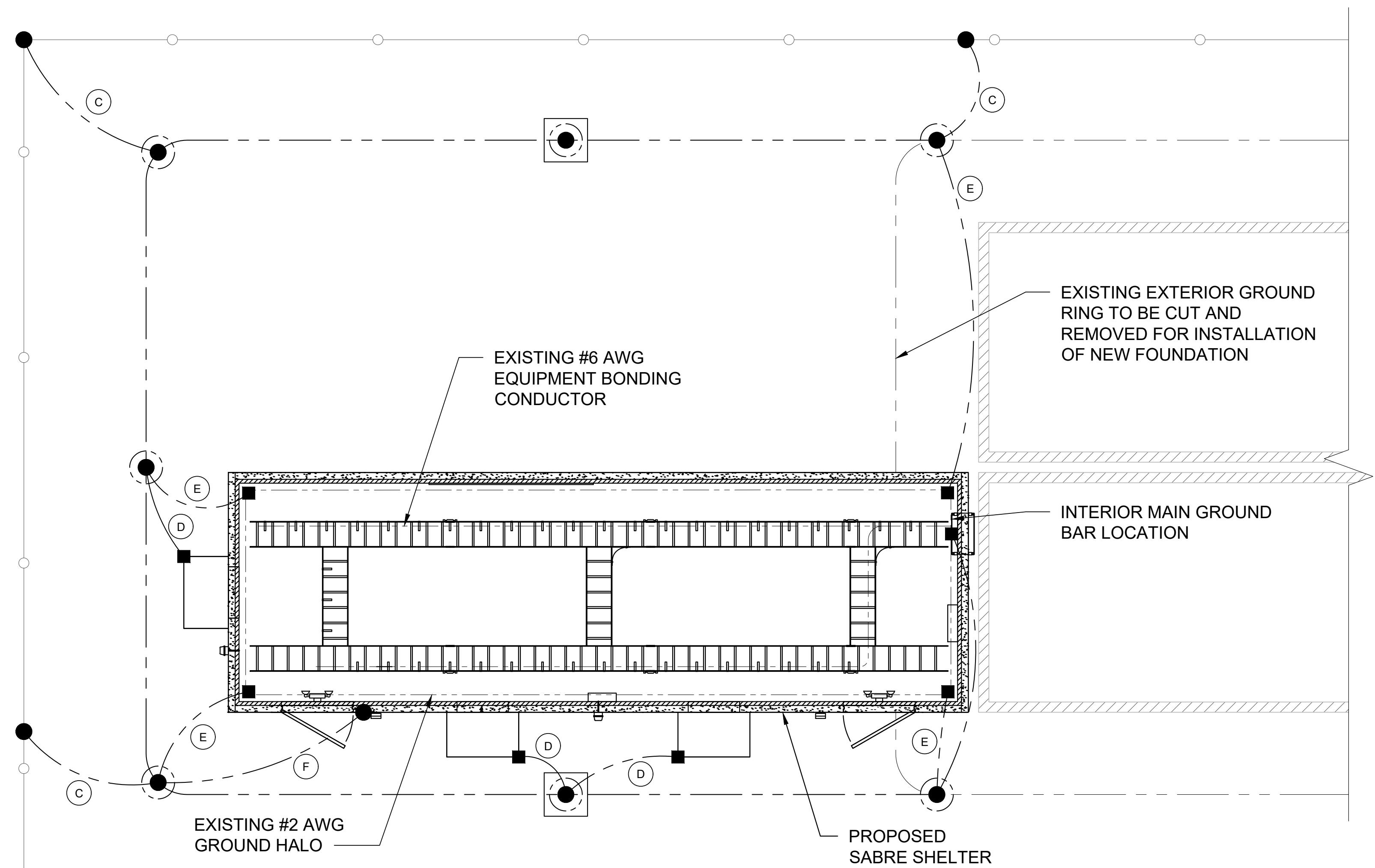
DRAWN BY:	JA	RELEASED:	08/08/2024
CHECKED BY:	GDJ	REVISION:	
APPROVED BY:	JWB	5	

SHEET TITLE:

ELECTRICAL  
NOTES

SHEET NUMBER:

E-5



SYMBOL	DESCRIPTION
○	3/4" x 10' COPPER CLAD STEEL GROUND ROD
○○	3/4" x 10' COPPER CLAD TEST WELL GROUND ROD W/INSPECTION SLEEVE
●	EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE
●	EXOTHERMIC WELD (CADWELD)
■	MECHANICAL CONNECTION



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"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED UNDER THE LAWS OF THE STATE OF CALIFORNIA."

SITE NAME:  
SAN MARTIN

CLLI/ADDRESS:  
SNMACAAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY:	JA	RELEASED:	08/08/2024
CHECKED BY:	GDJ	REVISION:	
APPROVED BY:	JWB	5	

SHEET TITLE: GROUNDING PLAN

SHEET NUMBER:  
G-1

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY. FOR GROUNDING DETAILS SEE THIS SHEET.
2. TESTING SHALL BE PERFORMED AT ALL SITES WHERE MODIFICATIONS OR ADDITIONS ARE MADE TO THE EXISTING GROUNDING SYSTEM AND SHALL BE IN ACCORDANCE WITH LUMEN GROUNDING AND BONDING STANDARDS. THE CONTRACTOR SHALL SUPPLY LUMEN WITH RESULTS FROM PRE-CONSTRUCTION AND POST-CONSTRUCTION OHM TESTING (GROUNDING) RESULTS AND BE IN COMPLIANCE WITH LUMEN GROUNDING AND BONDING STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A "FALL OF POTENTIAL" TEST ON THE PROPOSED SUPPLEMENTAL GROUNDING FIELD PRIOR TO FINAL CONNECTION OF THE GROUNDING SYSTEM TO EQUIPMENT. THE TEST SHALL BE PERFORMED BY A QUALIFIED AND CERTIFIED TESTING AGENT. PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. THE GROUNDING SYSTEM RESISTANCE TO EARTH GROUNDING SHALL NOT EXCEED (5) OHMS. IF THE GROUNDING TEST EXCEEDS THE MAXIMUM OF (5) OHMS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING RODS AND CONNECTIONS AS REQUIRED TO MEET THE (5) OHMS' MAXIMUM.
4. THE INSPECTOR HAVING JURISDICTION SHALL INSPECT ALL GROUNDING CONNECTIONS FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BEFORE BEING PERMANENTLY CONCEALED.

5. WHEN AN EXISTING METER RACK IS BEING UTILIZED AND A NEW METER IS INSTALLED IN THE EXISTING METER RACK, THE GROUNDING RODS, AND GROUNDING CONDUCTORS OF THE EXISTING GROUNDING RING, SHALL BE EXTENDED TO THE PROPOSED GROUNDING RING AND BECOME A COMPLETE GROUNDING SYSTEM.
6. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
7. FOR GROUNDING INSTALLATIONS WHICH HAVE A LIMITED AREA AND IS BEING REQUIRED TO BE INSTALLED WITHIN THE LEASE AREA ONLY, THE GROUNDING RING CONDUCTORS CAN BE INSTALLED UNDER FOOTINGS.
8. MAIN GROUNDING CONDUCTORS SHALL BE ROUTED AND BONDED TO ALL EFFECTIVE GROUNDING PATHS. THE NEW GROUNDING SYSTEM SHALL BE BONDED (2 PLACES) TO ALL EXISTING GROUNDING SYSTEMS, INCLUDING BUT NOT LIMITED TO BUILDING STEEL STRUCTURE, LIGHTNING PROTECTION SYSTEMS, BUILDING MAIN GROUNDING SYSTEM AND/OR MAIN WATER SUPPLY IF APPLICABLE.
9. CONNECTIONS TO THE BURIED GROUND RING SHALL BE EXOTHERMICALLY WELDED BY A CERTIFIED TECHNICIAN. CONNECTIONS TO ABOVE GROUND UNITS SHALL BE MADE WITH EXOTHERMIC WELD, WHERE PRACTICAL, OR WITH 2 HOLE CONNECTIONS.



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## GROUNDING NOTES

SCALE  
N.T.S. 1

## REVISIONS

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SITE NAME:

SAN MARTIN

CLLI/ADDRESS:

SNMACAS  
73 SOUTH ST  
SAN MARTIN, CA 95046

DRAWN BY: JA RELEASED: 08/08/2024

CHECKED BY: GDJ REVISION: 5

APPROVED BY: JWB

SHEET TITLE: GROUNDING NOTES & DETAILS

SHEET NUMBER: G-2

## BUILDING GROUNDING DETAIL

SCALE  
N.T.S. 2

## GROUND RING TRENCH DETAIL

SCALE  
N.T.S. 3

## EXOTHERMIC W/ INSPECTION SLEEVE DETAIL

SCALE  
N.T.S. 4

## HVAC GROUNDING DETAIL

SCALE  
N.T.S. 5

## TEST GROUND ROD DETAIL

SCALE  
N.T.S. 6

## GROUND ROD W/ INSPECTION SLEEVE DETAIL

SCALE  
N.T.S. 7

## DETAIL NOT USED

SCALE  
N.T.S. 8

THE INFORMATION CONTAINED IN THIS SET OF CONSTRUCTION DOCUMENTS IS PROPRIETARY BY NATURE, ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATED TO CARRIER SERVICES IS STRICTLY PROHIBITED.

CODE SUMMARY	
2006-2015	INTERNATIONAL BUILDING CODE
2009-2012	UNIFORM MECHANICAL CODE
2006-2015	INTERNATIONAL MECHANICAL CODE
2004	CHICAGO BUILDING CODE
2013	KENTUCKY BUILDING CODE
2015	MINNESOTA STATE BUILDING CODE
2015	MINNESOTA STATE MECHANICAL CODE (CH. 1346-2012 IMC & 2012 IFGC W/AMEND)
2015	MINNESOTA STATE ENERGY CODE (CH. 1323)
2009	NEW MEXICO COMMERCIAL BUILDING CODE
2014	NEW MEXICO ELECTRICAL CODE
2009	NEW MEXICO MECHANICAL CODE
2012	MICHIGAN BUILDING CODE
2012	MICHIGAN MECHANICAL CODE
2011	MICHIGAN ELECTRICAL CODE
2013	CALIFORNIA BUILDING CODE
2013	CALIFORNIA GREEN BUILDING STANDARDS
2013	CALIFORNIA ENERGY CODE TITLE 24
2013	CALIFORNIA ELECTRICAL CODE
2013	CALIFORNIA FIRE CODE
	CALIFORNIA TITLE 25
2010	NEW YORK CITY BUILDING CODE
	NORTH DAKOTA ELECTRICAL WIRING STANDARDS
2014	FLORIDA BUILDING CODE
2014	FLORIDA BUILDING CODE MECHANICAL
2014	FLORIDA BUILDING CODE FUEL GAS
8TH	MASSACHUSETTS STATE BUILDING CODE
2011	OHIO BUILDING CODE
2011	OHIO MECHANICAL CODE
2011	OHIO FIRE CODE
2014	OREGON STRUCTURAL SPECIALTY CODE
2014	OREGON MECHANICAL SPECIALTY CODE
2014	OREGON ENERGY EFFICIENCY SPECIALTY CODE
2012	NORTH CAROLINA BUILDING CODE
2011	NORTH CAROLINA ELECTRICAL CODE
2012	NORTH CAROLINA MECHANICAL CODE
2012	NORTH CAROLINA ENERGY CONSERVATION CODE
2012	TEXAS ACCESSIBILITY STANDARDS
1996 - 2014	NATIONAL ELECTRIC CODE
2004,2007,2010,2013	ASHRAE 90.1
2006,2009,2012,2015	INTERNATIONAL ENERGY CONSERVATION CODE
2003,2005,2006,2009,2012,2015	NFPA 101 LIFE SAFETY CODE
2009,2012	INTERNATIONAL FUEL GAS CODE
2012	NFPA 1 UNIFORM FIRE PREVENTION CODE
2002	ARKANSAS FIRE PREVENTION CODE
2012	NORTH CAROLINA FIRE PREVENTION CODE
	RHODE ISLAND FIRE SAFETY CODE

## NOTES

- LISTED CODES INCLUDE LATEST STATE ADOPTED AMENDMENTS.
- THIS SHELTER IS AN "ENCLOSED STRUCTURE" NOT INTENDED FOR HUMAN HABITATION.
- APPROVED MODEL MAY BE MIRROR IMAGE.
- OCCUPANT LOAD = 0, OHIO = 2
- SPECIAL CONDITIONS AND PERMISSIBLE TYPES OF GASSES: N/A
- SHELTER HAS NO COUNTY PLACEMENT RESTRICTION IN THE STATE OF MARYLAND.
- STATE INSIGNIA LABEL/DECAL IS LOCATED NEAR MAIN ELECTRICAL SERVICE PANEL.
- DOOR MUST BE MINIMUM 90 MINUTE FIRE RATED IF USED IN 2 HOUR FIRE RATED SHELTER AND MINIMUM 45 MINUTE FIRE RATED IF USED IN 1 HOUR FIRE RATED SHELTER.
- NOT SUBJECT TO FLORIDA FIRE SAFETY CODE, COMPLIANCE IS THE RESPONSIBILITY OF THE LOCAL JURISDICTION CODE OFFICIAL.
- ACCESS TO SHELTER SHALL COMPLY WITH MARYLAND ACCESSIBILITY CODE COMAR.05.02.02.07 / ADAAG SECTION 4.1.2.
- APPLICABLE INTERNAL PRESSURE COEFFICIENT (N/A) - THESE SHELTERS CONFORM TO THE REQUIREMENTS OF (2000,03,06,09 IBC), ASCE 7-05, METHOD 1 SIMPLIFIED PROCEDURE; (2012,15 IBC, 2014 FBC) ASCE 7-10 SIMPLIFIED DIAPHRAGM LOW-RISE BUILDINGS.
- WIND IMPORTANCE FACTOR - IW = 1.000
- THESE PLANS ARE DESIGNED TO BE USED FOR THE CONSTRUCTION OF COMMERCIAL MODULAR UNITS, IN ACCORDANCE WITH CA HEALTH AND SAFETY CODE SECTION 18028, 1991 UBC, 1993 NEC, ANSI A117.1-1986.
- HVAC UNITS ARE SIZED PER CUSTOMER REQUIREMENTS.
- EXTERNAL GROUNDING BY OTHERS.
- SHELTER CONSTRUCTED IN ACCORDANCE WITH 61G20-3.006.
- THIS BUILDING DOES NOT CONTAIN PLUMBING FACILITIES. PLUMBING FACILITIES SHALL BE PROVIDED ON SITE SUBJECT TO THE LOCAL AUTHORITY HAVING JURISDICTION.

EXTERIOR COMPONENTS AND CLADDING POSITIVE AND NEGATIVE PRESSURES IN TERMS OF PSF				
ZONE	2000 IBC, 120 MPH WIND SPEED	2003 IBC, 2006 IBC, 120 MPH WIND SPEED	2000, 03, 06, 09, 12, 15 IBC, 150 MPH WIND SPEED	2014 FBC 180 MPH WIND SPEED
ROOF ZONE 1 (100 SF EFFECTIVE WIND AREA)	+12.1/-28.7	+10.0/-28.7	+15.7/-44.8	+22.7/-64.5
ROOF ZONE 2 (20 SF EFFECTIVE WIND AREA)	+12.1/-46.9	+12.0/-46.9	+18.6/-73.4	+26.9/-105.8
ROOF ZONE 3 (10 SF EFFECTIVE WIND AREA)	+12.7/-79.1	+12.7/-79.1	+20.0/-123.7	+28.7/-178.1
WALL ZONE 4 (200 SF EFFECTIVE WIND AREA)	+25.8/-28.4	+25.8/-28.4	+39.6/-43.4	+58.2/-64.1
WALL ZONE 5 (30 SF EFFECTIVE WIND AREA)	+29.3/-38.0	+29.3/-38.0	+45.9/-59.2	+65.9/-92.3

## SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

\* = DENOTES SHEETS WHICH MAY CONTAIN FIELD WORK

## LAYOUT DRAWINGS

- 0-0 COVER SHEET
- 0-1 PARTS LIST
- 0-2 PARTS LIST (CONTINUED)
- 0-3 PARTS LIST (CONTINUED)
- 0-4 SHOP DETAILS / CUT LIST
- \* 1-0 EXTERIOR ELEVATION "A" WALL
- \* 1-1 EXTERIOR ELEVATION "C" WALL
- \* 1-2 EXTERIOR ELEVATION "B" & "D" WALLS
- 2-0 FLOOR PLAN
- 2-1 EQUIPMENT LAYOUT PLAN
- 2-2 ROOM OVERLAY PLAN
- 3-0 REFLECTED CEILING PLAN (ELECTRICAL)
- 3-1 UNITSUT LAYOUT (MECHANICAL)
- 3-2 CABLE TRAY LAYOUT (MECHANICAL)
- 3-3 FIBERGUARD LAYOUT (MECHANICAL)
- 4-0 INTERIOR ELEVATION "A" WALL (ELECTRICAL)
- 4-1 INTERIOR ELEVATION "C" WALL (ELECTRICAL)
- 4-2 INTERIOR ELEVATION "B" & "D" WALLS (ELECTRICAL)
- 5-0 INTERIOR ELEVATION "A" WALL (MECHANICAL)
- 5-1 INTERIOR ELEVATION "C" WALL (MECHANICAL)
- 5-2 INTERIOR ELEVATION "B" & "D" WALLS (MECHANICAL)
- \* 5-3 MECHANICAL GROUND BAR INSTALLATION DETAILS
- \* 6-0 ELECTRICAL ONE-LINE WIRING DIAGRAM
- 6-1 ELECTRICAL PANEL WIRING SCHEMATIC
- 6-2 SMOKE DETECTOR WIRING SCHEMATICS
- 6-3 HVAC WIRING SCHEMATICS
- 6-4 ALARM CONTACT DESCRIPTIONS

## REFERENCE DRAWINGS

- 108-007 ABBREVIATIONS & SYMBOLS
- 108-008 CONCRETE SHELTER PANEL CONNECTION DETAILS
- 108-015 GENERAL ELECTRICAL NOTES & LEGEND
- 108-016 GENERAL CASTING SPECIFICATIONS
- 108-035 CONCRETE SHELTER INTERIOR INSULATION/PANEL INSTALLATION DETAILS
- 108-039 ANGLED & FLAT TIE DOWN DETAILS
- 108-087 CANOPY FIELD INSTALLATION DETAIL
- 108-088 SHELTER LIFTING DETAILS
- 108-089 SHELTER LOADING DETAILS

## DESIGN PARAMETERS

- USE GROUP: U
- CONSTRUCTION TYPE: V-B
- OCCUPANCY CATEGORY: II
- ROOF LIVE LOAD: 120 PSF
- FLOOR LIVE LOAD: 207 PSF
- GROUND SNOW LOAD: 143 PSF (N/A FOR FBC 2017)
- WIND SPEED: 150 MPH/EXPOSURE C/RISK CATEGORY II
- SEISMIC DESIGN CATEGORY: D
- MEETS BULLET RESISTANCE UL 752 LEVELS 1, 2, 3, & 6 FOR 4" CONCRETE CONCRETE f'c: 5000 PSI AT 28 DAYS CONCRETE UNIT WEIGHT: 115 PCF
- FIRE RATING: 2 HOUR WALL PER IBC/FBC TABLE 721.1 (2) ITEM NUMBER 4-1-1, 2 HOUR ROOF PER IBC/FBC TABLE 721.1 (3) ITEM NUMBER 3-1-1, SOLID LIGHTWEIGHT CONCRETE (LIMITATIONS MAY APPLY DUE TO OPENINGS AND PROXIMITY ON SITE) MINIMUM FIRE SEPARATION DISTANCE: 10FT

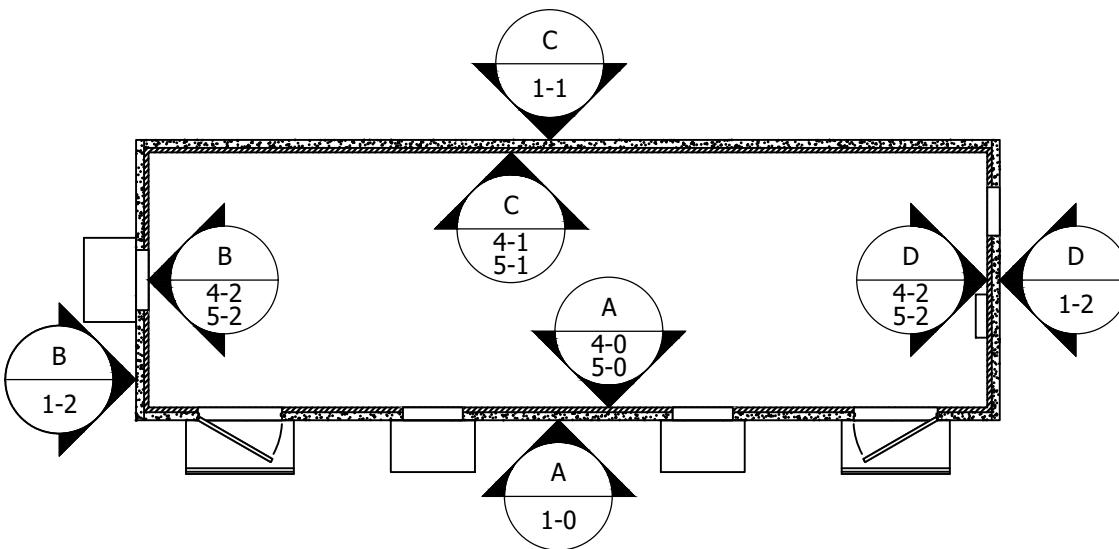
## PHYSICAL PROPERTIES

- SHELTER DIMENSIONS: 11'-8" W X 36'-0" L X 10'-5" H
- SHIPPING DIMENSIONS: 11'-11" W X 37'-11" L X 10'-05" H
- SHELTER WEIGHT: 86,000 lbs (SHELTER ONLY)
- EXCLUDES BATTERIES AND RADIO EQUIPMENT

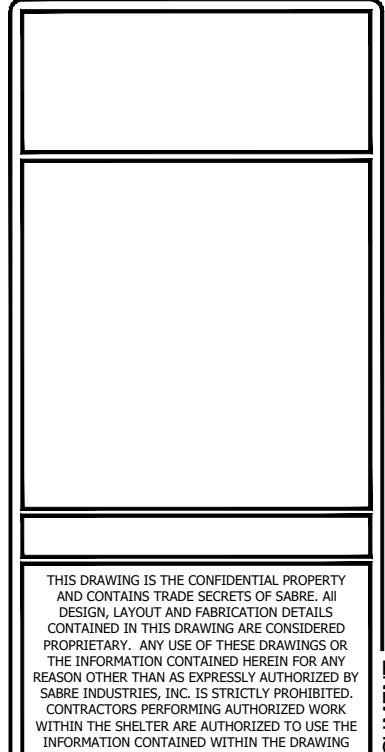
## STRUCTURAL DRAWINGS (MANUFACTURER ONLY)

- 1 OF 8 STRUCTURAL SPECIFICATIONS
- 2 OF 8 STRUCTURAL LAYOUT SIDE WALL "A"
- 3 OF 8 MESH LAYOUT SIDE WALL "A"
- 4 OF 8 STRUCTURAL LAYOUT END WALL "B"
- 5 OF 8 STRUCTURAL LAYOUT SIDE WALL "C"
- 6 OF 8 MESH LAYOUT SIDE WALL "C"
- 7 OF 8 STRUCTURAL LAYOUT END WALL "D"
- 8 OF 8 STRUCTURAL LAYOUT ROOF
- 9 OF 9 SHELTER ASSEMBLY EXPLODED LAYOUT

221-1108X3600 CONCRETE FLOOR ASSEMBLY



## ELEVATION KEY



**Sabre Industries\***  
INNOVATION DELIVERED  
5031 Hazel Jones Road  
Bossier City, LA 71111  
Voice: (318) 213-2900  
Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
COVER SHEET**

FILENAME:	SLMN02
SCALE:	TOLERANCE:
N.T.S.	
DRWN. BY:	DATE:
MD.ARFAZ	10/7/22
CHK. BY:	DATE:
N.KIRAN	10/7/22
APP. BY:	DATE:
SREENIVAS.E	10/7/22
SHEET NO.	0-0
DRAWING NO.:	SLMN02
REV.:	IR

PARTS LIST							
ITEM	QTY	U/M	DEPT	P/N	DESCRIPTION	MFG	MFG P/N
1	4.000	EA.	150	450141	FIBERGUIDE,4",HORIZONTAL 90,YELLOW	CommScope	FGS-MH9E-A
2	2.000	EA.	150	450142	FIBERGUIDE,4",4-WAY CROSS,YELLOW	CommScope	FGS-MHXP-A
3	22.000	EA.	150	450143	FIBERGUIDE,4",DOWNSPOUT,YELLOW	CommScope	FGS-MDSP-A
4	4.000	EA.	150	450144	FIBERGUIDE,4",END CAP KIT		
5	2.000	EA.	150	450145	FIBERGUIDE,4",HORIZONTAL TEE,YELLOW	CommScope	FGS-MHRT-A
6	17.000	EA.	150	450146	FIBERGUIDE,4"X4",JUNCTION KT,YELLOW	CommScope	FGS-MSHS-A
	8.000	EA.	150	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	CommScope	FGS-MFAW-A
10	50.000	EA.	150	450148	FIBERGUIDE,4",SNAP FIT JUNC KT,YELL	CommScope	FGS-KT03-A1
12	20.000	EA.	150	450150	FIBERGUIDE,5/8" NEW THRD ROD MTG KT	CommScope	FGS-HNTR-5/8
13	1.000	EA.	20	350032	TELCO BOARD,4'X8'X3/4",PAINTED WHIT	CELLXION	350032
14	3.000	EA.	30	168283	BUSHING,PLASTIC,1/2",SNAP-IN,HEYCO	HEYCO	SB875-11
15	6.000	EA.	30	170122	PIPE CAP,PLASTIC,NPT,NIAGARA T-6X	NIAGARA	T-6X
16	1.000	EA.	30	410063	NIPPLE,EMT,1/2",CHASE		
17	6.000	EA.	30	410075	BUSHING,1/2",PLASTIC	T&B	BU501
18	6.000	EA.	30	410183	NIPPLE,RIGID,3/4"X7 1/2"		
19	6.000	EA.	30	410207	NIPPLE,RIGID,1/2"X8"	GRAINGER	
20	1.000	EA.	30	410306	NIPPLE,RIGID,1/2"X4"		
	31.000	EA.	30	430005	BOX,JUNCT,4"X4",2-1/8D,1/2"-3/4KO		521711234E
25	2.000	EA.	30	430008	BOX,6X6X4,SCREW COVER,NEMA 1,0-KO	HOFFMAN	ASE6X6X4NK
26	2.000	EA.	30	430030	BOX,JUNCT,2X4,WP,(3) 1/2"HOLES	LEGRAND	WPB23
	2.000	EA.	30	430056	BOX,JUNCT,OCT,4"RND,2-1/8"DEEP	STEEL CITY	54171
29	1.000	EA.	30	430075	ALARM BLOCK,SIEMON,S66M1-50	SIEMON	S66M1-50
30	1.000	EA.	30	430089	ALARM BLOCK,MOUNTING BRACKET,S89D	SIEMON	S89D
31	2.000	EA.	30	430507	BOX,JUNCT,4X4,WEATHERPROOF,1/2"KO	BELL	5337-0
32	1.000	EA.	30	430714	PANELBOARD,SQD,400A,3PH,NQ442L4C	SQD	NQ442L4C
33	7.000	EA.	30	431419	BOX,JUNCT,4-11/16"W/3/4" & 1" K/O'S	STEEL CITY	721711
34	1.000	EA.	30	440088	SURGE ARRESTOR,TRANS,1101-809-1,3PH	TRANSECTOR	1101-809-1
35	2.000	EA.	30	460101	THERMOSTAT,HI/LOW TEMP,1UHH2	DAYTON	1UHH2
36	1.000	EA.	30	460175	CONTROLLER,LEAD LAG,MC5300-BC,BARD	BARD	MC5300-BC
37	9.000	EA.	30	470931	FIXTURE,36W,4FT,LED,201-X1 SERIES	SAYLITE	201A232X1LN18W40
38	1.000	EA.	40	390009	DETECTOR,SMOKE,120V,ION,KIDDE/FYRN	KIDDE	I12040
39	1.000	EA.	40	390020	RELAY,SMOKE DET,120V,KIDDE,SM120X	KIDDE	SM120X
40	1.000	EA.	40	400083	LUG,G-BAR NEUTRAL,SADDLE,LK100AN	SQD	LK100AN
41	16.000	EA.	40	400272	BREAKER,SQD,1P 20A,BOLT ON,QOB120	SQD	QOB120
42	1.000	EA.	40	400273	BREAKER,SQD,1P 15A,BOLT ON,QOB115	SQD	QOB115
43	1.000	EA.	40	400296	BREAKER,SQD,3P 15A,BOLT ON,QOB315	SQD	QOB315
44	1.000	EA.	40	400304	BREAKER,SQD,3P 60A,BOLT ON,QOB360	SQD	QOB360
45	4.000	EA.	40	400530	FUSE,HOLDER,IN-LINE,HLR2	BUSSMANN	HLR-2A
46	4.000	EA.	40	400533	FUSE,1 AMP,SMALL DIN BUSS,GLR1	BUSSMANN	GLR-1
	2.000	EA.	40	400537	RELAY,BASE,8-PIN OCT,10A,SNGLE TIER		5X852
49	1.000	EA.	40	400691	RELAY,COIL,8-PIN,208-480VAC,3P,10A	MACROMATIC	PAP208
50	1.000	EA.	40	400736	RELAY,COIL,8-PIN,48VDC,DPDT,10 AMP		KPD12P14V56
51	24.000	FT.	40	410111	CONDUIT,LFMC,3/4",SEALTITE	ANAMET ELECTRICAL, INC	EF34
52	3.000	FT.	40	410112	CONDUIT,LFMC,1/2",SEALTITE		
53	4.000	EA.	40	410118	CONNECTOR,LFMC,1/2",90D,SEALTITE	T&B	5372
54	6.000	EA.	40	410128	CONNECTOR,LFMC,3/4",45D,SEALTITE	T&B	5243
55	6.000	EA.	40	410129	CONNECTOR,LFMC,3/4",STRAIGHT,ST	T&B	5233
56	2.000	EA.	40	420006	LABEL,BLK,ELECT,"GFCI"	CELLXION	420006
57	1.000	EA.	40	420008	LABEL,BLK,ELECT,"SERVICE DISCONNECT	CELLXION	420008
58	2.000	EA.	40	420009	LABEL,BLK,ELECT,"INTERIOR LIGHT"	CELLXION	420009
59	1.000	EA.	40	420011	LABEL,BLK,ELECT,"LOW TEMP"	CELLXION	420011
60	1.000	EA.	40	420015	LABEL,BLK,ELECT,"HIGH TEMP"	CELLXION	420015

## DEPT CODES:

20	- CARPENTRY
30	- CONDUIT
40	- ELECTRICAL
50	- MECHANICAL
51	- DOORS
55	- HVAC
70	- TILE/FLOORING
75	- GENERATOR
90	- SHIPPING
95	- MULTI-TASK
99	- PACKING LIST
150	- INSTALLATION DEPT

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CUSTOMER:  
LUMEN  
CUMBERLAND

PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
PARTS LIST

FILENAME:	SLMN02
SCALE:	N.T.S.
DRWN. BY:	MD.ARFAZ
CHK. BY:	N.KIRAN
APP. BY:	SREENIVAS.E

SHEET NO.	0-1
DRAWING NO.:	SLMN02

REV.: IR

## NOTES:

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## PARTS LIST (CONTINUED)

ITEM	QTY	U/M	DEPT	P/N	DESCRIPTION	MFG	MFG P/N
61	1.000	EA.	40	420016	LABEL,BLK,ELECT,"LEAD-LAG CONTROL"	CELLXION	420016
62	1.000	EA.	40	420017	LABEL,BLK,ELECT,"HVAC #2"	CELLXION	420017
63	1.000	EA.	40	420018	LABEL,BLK,ELECT,"HVAC #1"	CELLXIONG	420018
64	2.000	EA.	40	420024	LABEL,BLK,ELECT,"EXTERIOR LIGHT"	CELLXION	420024
65	16.000	EA.	40	420033	LABEL,SELF TRANSFER,PANDUIT TTSL2	PANDUIT	S100X150VATY
66	1.000	EA.	40	420041	LABEL,"ARC FLASH AND SHOCK WARNING		
67	1.000	EA.	40	420043	LABEL,BLK,ELECT,"HVAC #3"		
68	1.000	EA.	40	420143	LABEL,RED, ELECT,BONDING TAG	CELLXION	420143
69	2.000	EA.	40	430006	COVER,SWITCH PLATE,4X4,1 SWITCH	STEEL CITY	460-BW
70	17.000	EA.	40	430012	COVER,BLANK PLATE,4X4	APPLETON	8465
71	7.000	EA.	40	430014	COVER,BLANK PLATE,4 11/16	APPLETON	8487
72	8.000	EA.	40	430025	COVER,RECPT PLATE,4X4,2R	APPLETON	8365N
73	8.000	EA.	40	430034	RECEPTACLE,DUPLEX,125V,20A,IVORY	COOPER	CR20V
74	2.000	EA.	40	430072	COVER,SWITCH PLATE,4X4,2 SWITCH	STEEL CITY	456
75	6.000	EA.	40	430162	SWITCH,3-WAY,20A,120V,IVORY	HUBBELL	CS1223I
76	2.000	EA.	40	430367	COVER,BLANK PLATE,4X4 WP	BELL	5175-0
77	2.000	EA.	40	430420	BREAKER,SDQ,3P 400A,LAL36400MB,MAIN	SDQ	LAL36400MB
78	9.000	EA.	40	430676	BREAKER,SDQ,3P 50A,BOLT ON,QOB350	SDQ	QOB350
79	1.000	EA.	40	430717	LOADCENTER,ENCLOSURE,MH62	SDQ	MH62
80	1.000	EA.	40	430718	LOADCENTER,COVER,NC62VS	SDQ	NC62VS
81	2.000	EA.	40	431727	COVER,GFCI,IN USE,EXTRA DTY,MM420C	TAYMAC	MM420C
82	2.000	EA.	40	431773	RECEPTACLE,GFCI,120V,20A,GFWRST20I	HUBBELL	GFWRST20I
83	1.000	EA.	40	460165	SENSOR,REMOTE,MC5600		8301-095BX
84	2.000	EA.	40	470056	LIGHT FIXTURE,COMBO EXIT/EMERGENCY	COMPASS	CCR
85	2.000	EA.	40	470966	LIGHT,EXT,WALLPACK,LED,18W,XTOR2B	Lumark	XTOR2B-PC1
86	2.000	EA.	40	490000	ALARM,MAGNETIC DOOR CONTACT	HONEYWELL	7939WG-2GY
87	1.000	EA.	40	490142	DETECTOR,SMOKE,120V,PHOTO,KIDDIE	KIDDE	1235E
88	1.000	EA.	40	540188	G-BAR KIT,SQUARE D,PK27GTA	SDQ	PK27GTA
89	1.000	EA.	40	540340	NEUTRAL KIT,SQUARE D,NQN2CU	SDQ	NQN2CU
90	0.140	EA.	50	146505	SHEET METAL,16GA,4'X10',GALV PHOSCO		
91	104.000	FT.	50	168025	ALL THREAD,5/8"-UNC,ZINC PLATED,6'		
92	60.000	EA.	50	168048	NUT,5/8",TWIRL,SPRINGLESS		
	4.000	EA.	50	400001	LUG,2H,#6,BLU,3/8"BOLT,1"C/C,LBFW	PANDUIT	LCCXF6-38D-L
95	1.000	EA.	50	400021	C-TAP,BROWN,54720	PANDUIT	CTAPF4-12TP-C
96	17.000	EA.	50	400021	C-TAP,BROWN,54720 (OR EQUAL)	PANDUIT	CTAPF4-12TP-C
97	4.000	EA.	50	400028	C-TAP,PURPLE,54745	T&B	54745
	96.500	FT.	50	400030	WIRE,#6 THHN,STRAND,GRN		
	132.000	FT.	50	400050	WIRE,#2 THHN,STRAND,GRN		
107	12.000	EA.	50	400051	C-TAP,ORANGE,54740 (OR EQUAL)	PANDUIT	CTAPF1/0-12TP-L
108	2.000	EA.	50	400082	LUG,2H,#6,BLU,1/4"BOLT,1"C/C,LBFW	PANDUIT	LCCXF6-14D-L
109	34.000	EA.	50	400174	C-TAP,PINK,54730 (OR EQUAL)	PANDUIT	CTAPF2-12TP-C
110	6.000	EA.	50	400371	LUG,2H,#6,BLU,1/4"BOLT,3/4"C/C,LBFW (OR EQUAL)	PANDUIT	LCCXF6-14B-L
111	2.000	EA.	50	400390	LUG,2H,#2,BRN,1/4"BOLT,3/4"C/C,LBFW	PANDUIT	LCCXF2-14B-L
112	5.000	EA.	50	400500	CLAMP,GROUND 1/2"-1",GC-1Z,WEAVER	NEER	GC-1Z
113	7.000	EA.	50	400500	CLAMP,GROUND 1/2"-1",GC-1Z,WEAVER (OR EQUAL)	NEER	GC-1Z
114	2.000	EA.	50	400622	CLAMP,GROUND,1/2-1",RB12A,PARALLEL (OR EQUAL)	HARGER	RB12A
115	2.000	EA.	50	400623	CLAMP,GROUND 1 1/2",RB12B,PERPENDIC	HARGER	RB12B
116	150.000	EA.	50	410343	WIRE STANDOFF,1 3/4"	T&B	TC376
117	2.000	EA.	50	480005	SABRE GRAY/BLUE SERIAL NO. PLATE	CELLXION	480005
118	12.000	EA.	50	510010	CABLE LADDER,STRAIGHT CLAMP,SC12CN	CENTRAL STEEL FABRICATORS	SC12N
119	80.000	EA.	50	510011	CABLE LADDER,HANGER BRACKET,HB1		
120	220.000	EA.	50	510012	WASHER,5/8" YELLOW ZINC,SQUARE	260	
121	260.000	EA.	50	510013	NUT,5/8",HEX,YELLOW ZINC		
122	42.000	EA.	50	510027	CABLE LADDER,AUX CABLE BRK,ACB2SZY	CENTRAL STEEL FABRICATORS	ACB2SZY
123	10.000	EA.	50	510114	UNISTRUT,1 5/8"CHANNEL,GOLDGALV,18"	THOMAS & BETTS	A1200HS10
124	4.000	EA.	50	510116	UNISTRUT,1 5/8"CHANNEL,GOLDGALV,10"	THOMAS & BETTS	A1200HS10
125	13.000	EA.	50	510160	UNISTRUT,1 5/8"CHANNEL,GOLDGALV,24"	THOMAS & BETTS	A1200HS10
	24.000	EA.	50	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	CSF	21015
129	3.000	EA.	50	521002	HVAC,GRILL,SUPPLY,10"X30"		

## DEPT CODES:

20	- CARPENTRY
30	- CONDUIT
40	- ELECTRICAL
50	- MECHANICAL
51	- DOORS
55	- HVAC
70	- TILE/FLOORING
75	- GENERATOR
90	- SHIPPING
95	- MULTI-TASK
99	- PACKING LIST
150	- INSTALLATION DEPT



CUSTOMER:  
LUMEN  
CUMBERLAND

PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
PARTS LIST  
(CONTINUED)

FILENAME: SLMN02	SCALE: N.T.S.	TOLERANCE:
DRWN. BY: MD.ARFAZ	DATE:	10/7/22
CHK. BY: N.KIRAN	DATE:	10/7/22
APP. BY: SREENIVAS.E	DATE:	10/7/22
SHEET NO. 0-2		
DRAWING NO.: SLMN02	REV.:	IR

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## PARTS LIST (CONTINUED)

ITEM	QTY	U/M	DEPT	P/N	DESCRIPTION	MFG	MFG P/N
130	3.000	EA.	50	521102	HVAC,GRILL,RETURN,16"X30"		
131	3.000	EA.	50	522001-00006	HVAC,SLEEVE,10"X30"X5 1/2"	CELLXION	522001-00006
132	3.000	EA.	50	522001-00012	HVAC,SLEEVE,16"X30"X5 1/2"	CELLXION	522001-00012
133	8.000	EA.	50	540215	GROUND STRAP ASSY,#4 THHN,14 1/2"	CELLXION	540215
134	6.000	EA.	50	540244	GROUND STRAP ASSY,#2 THHN,6"LONG	CELLXION	
135	1.000	EA.	50	P540106-02	G-BAR ASSY,540106-02 KIT & HARDWARE	CELLXION	P540106-02
136	2.000	EA.	51	500000	DOOR,3670,LH/RH,CURRIES,18G		
137	6.000	EA.	51	504000	DOOR,HINGES,STAINLESS STEEL 32D (OR EQUAL)	GLOBAL DOOR CONTROLS	CS4545BB
138	2.000	EA.	51	504102	DOOR,BUMPER,SS RUBBER STOP,BLACK		
139	2.000	EA.	51	504109	DOOR,CLOSER,W/90 DEGREE HOLD OPEN	GLOBAL DOOR CONTROLS	TC2200
140	2.000	EA.	51	504113	DOOR,HOLD OPEN,T-LATCH,6" (OR EQUAL)	A.L.HANSEN MFG.	ALH29-6
141	2.000	EA.	51	504303	DOOR,LOCKGUARD,MLP-111-630 3"X11"SS (OR EQUAL)	DON-JO	MLP-111-630
142	2.000	EA.	51	504400	DOOR,DRIP CAP,NGF16A-48" (OR EQUAL)	PEMKO	346C
143	2.000	EA.	51	504401	DOOR,THRESHOLD 48"X4.75",.090 ALUM	CELLXION	504401
144	2.000	EA.	51	504435	DOOR,THRESHOLD 48"X6.25",.090 ALUM	CELLXION	504435
145	2.000	EA.	51	504504	DOOR,PULL HANDLE KASON,CAST,382	McMASTER-CARR	1646A34
146	2.000	EA.	51	504762	LOCKSET,MORTISE CYLINDER,HAGAR		
147	2.000	EA.	51	504808	STRIKE,ELEC,12VDC/24VDC,ABLOY	ASSA ABLOY	
148	2.000	EA.	51	504812	LOCKSET,CYLINDER,HAGER,45CE		
149	2.000	EA.	51	504813	LOCKSET,RIM EXIT,HAGER 4500	HAGER	4500
150	2.000	FT.	51	540216	GROUND STRAP ASSY,1/2 BRAIDED,18"	SABRE	540216
151	2.000	EA.	51	570005	DOOR,CANOPY,48",MOUNTING BRACKET	CELLXION	570005
152	3.000	EA.	55	146514-005	DRIP CAP,48"X3",HVAC	CELLXION	146514-005
153	3.000	EA.	55	520690	HVAC,WALL,6T,6KW,BARD,3PH,ECONO	BARD	W72AC-B06ZPXXXJ
154	420.000	EA.	70	320021	TILE VINYL,1/8",VINYLASA,VL556	VINYLASA	VL-556
155	1.000	EA.	90	420048	LABEL,DATA,STANDARD SHELTER	CELLXION	420048
156	1.000	EA.	90	480001	PLATE,DATA,ALUM,8"X12",GRAY	CELLXION	480001
157	7.000	EA.	95	504216	DOOR,WEATHERSTRIP,SPONGE NEOPRENE	PEMKO	P491
158	2.000	EA.	95	504222	DOOR,WEATHERSTRIPPING,303-TF-3670	PEMKO	303-TF-3670
159	2.000	EA.	99	390021	EXTINGUISHER,15# CO2,FIRE (PACKING LIST ITEM)	AMEREX	N-331
160	1.000	EA.	99	480000	TRAY,WALL FILE PLASTIC,LR-SMOKE	UNIVERSAL	UNIV08122
161	1.000	EA.	99	480003	EYE WASH STATION,SINGLE 32OZ (PACKING LIST ITEM)	CERTIFIED SAFETY MANUF.	250-506
162	1.000	EA.	99	480087-02	PACKING KIT,TYPICAL EVERY SHELTER (PACKING LIST ITEM)	CELLXION	480087-01
163	1.000	EA.	99	504108	KEY,OPERATING BEST "A" CORE,GREEN		
164	2.000	EA.	99	570018	DOOR,CANOPY,54",METAL (PACKING LIST ITEM)	CELLXION	570018

SHELTER REQUIRES ONE OPTION NUMBER FROM EACH OPTION LISTED.

NOTE THAT SOME OPTION NUMBERS ARE A KIT W/ MULTIPLE PARTS.

OPTIONS ARE IDENTIFIED ON THE DRAWING BY THE OPTION LETTER  , BY  
OPTION NUMBER  , OR BY THE OPTION TAG NUMBER  -XX-X

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INNOVATION DELIVERED  
5031 Hazel Jones Road  
Bossier City, LA 71111  
Voice: (318) 213-2900  
Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

CUSTOMER:  
LUMEN  
CUMBERLAND

PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
PARTS LIST (CONTINUED)

FILENAME: SLMN02	TOLERANCE:
N.T.S.	
DRWN. BY: MD.ARFAZ	DATE: 10/7/22
CHK. BY: N.KIRAN	DATE: 10/7/22
APP. BY: SREENIVAS.E	DATE: 10/7/22
SHEET NO. 0-3	
DRAWING NO.: SLMN02	REV.: IR

**NOTE:**  
CUT LIST ITEM LENGTHS ARE ESTIMATED, CONFIRM  
LENGTHS REQUIRED PRIOR TO ACTUALLY CUTTING PARTS.

CUT LIST				
ITEM	P/N	DESCRIPTION	CUT	PCS
7	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	32 5/8"	2
8	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	15"	20
9	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	28 3/4"	1
51	410111	CONDUIT,LFMC,3/4",SEALTITE	48"	6
52	410112	CONDUIT,LFMC,1/2",SEALTITE	18"	2
90	146505	SHEET METAL,16GA,4'X10',GALV PHOSCO	26 1/2" X 26 1/2"	1
91	168025	ALL THREAD,5/8"-UNC,ZINC PLATED,6'	26"	48
98	400030	WIRE,#6 THHN,STRAND,GRN	18"	2
99	400030	WIRE,#6 THHN,STRAND,GRN	48"	2
100	400030	WIRE,#6 THHN,STRAND,GRN	80"	1
101	400030	WIRE,#6 THHN,STRAND,GRN	850"	1
102	400030	WIRE,#6 THHN,STRAND,GRN	48"	1
103	400030	WIRE,#6 THHN,STRAND,GRN	9"	4
104	400030	WIRE,#6 THHN,STRAND,GRN	12"	1
105	400050	WIRE,#2 THHN,STRAND,GRN	1200"	1
106	400050	WIRE,#2 THHN,STRAND,GRN	192"	2
126	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	116 1/2"	12
127	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	57 1/2"	6
128	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	56 1/2"	3
142	504400	DOOR,Drip Cap,NGF16A-48" (OR EQUAL)	46"	2
157	504216	DOOR,WEATHERSTRIP,SPONGE NEOPRENE	42"	2

SHOP DRAWINGS (ELECTRICAL)		SHOP DRAWINGS (ELECTRICAL)	
DWG #	DESCRIPTION	DWG #	DESCRIPTION
30-002	BOX TO BOX PENETRATION DETAIL	30-020	JUNCTION BOX MOUNTING DETAIL
30-004	BOX TO GFCI PENETRATION DETAIL	30-022	HVAC THRU WALL PENETRATION DETAIL
30-007	THRU WALL PEENTRATION RIGID NIPPLE DETAIL	40-008	ELECTRICAL GROUND BONDING DETAIL
30-008	BOX TO W/P BOX PENETRATION DETAIL	40-010	TYPICAL WIRE SECURING AT LOADCENTER
30-009	CONDUIT TO WIREWAY CONNECTION	40-011	HVAC THRU WALL CONDUIT PENETRATION
30-011	PLASTIC CAP INSTALLATION DETAIL	40-012	WARNING LABEL PLACEMENT DETAILS
30-012	RIGID, CLOSE & CHASE NIPPLE APPLICATION	40-013	FIRE PROTECTION CIRCUIT BREAKER INSTALLATION STANDARDS
30-013	WIREWAY TO AC PANEL CONNECTION	55-001	HVAC BLOCKOUT SLEEVE INSTALLATION
30-015	ONE LAYER UNISTRUT INSTALLATION	55-004	HVAC INSTALLATION DETAIL
30-016	WIREWAY MOUNTING INSTALLATION DETAIL	55-006	HVAC INSTALLATION AND CONNECTIONS
30-017	CONDUIT STRAP-BACK INSTALLATION DETAIL	55-010	HVAC Drip CAP INSTALLATION
30-019	CONDUIT STANDARD INTERIOR LIGHT FIXTURE DETAIL		

SHOP DRAWINGS (MECHANICAL)	
DWG #	DESCRIPTION
50-001	GROUND BAR MOUNTING INSTALLATION
50-005	CABLE LADDER GROUNDING DETAILS (T-JUNCTION INSIDE/OUTSIDE)
50-006	CABLE LADDER GROUNDING DETAILS (T-JUNCTION TWO SIDES)
50-008	CABLE LADDER SPLICE JUNCTION GROUNDING DETAILS
50-013	GROUND TO DOOR FRAME
50-020	GROUND TO PERPENDICULAR CONDUIT
50-034	GROUND TO HVAC GRILLE
50-035	THRU WALL PENETRATION PVC PIPE @ 45°
50-038	GROUND TO WIREWAY
50-042	WIRE STANDOFF INSTALLATION
50-050	SINGLE CONNECTOR AT GROUND BAR
50-051	SINGLE CONNECTOR AT STEEL OBJECT
50-070	LUG CRIMPING DETAIL
50-071	GROUND BAR HAT BRACKET INSTALLATION
50-083	GROUND CLAMP USAGE DETAIL
51-003	2 PIECE THRESHOLD INSTALLATION
51-006	DRIP CAP INSTALLATION
51-007	DOOR LOCKGUARD INSTALLATION
51-008	DOOR PULL HANDLE INSTALLATION
51-009	DOOR HOLD OPEN INSTALLATION
51-010	DOOR CLOSER INSTALLATION
51-012	DOOR CANOPY INSTALLATION
51-013	ID SIGN LOCATION
51-014	DOOR HARDWARE INSTALLATION
51-017	GROUND STRAP TO DOOR FRAME
51-021	PANELIZED SHELTER DOOR HARDWARE INSTALLATION
51-029	MAGNETIC DOOR CONTACT INSTALLATION
51-034	DOOR WEATHER STRIP INSTALLATION
51-040	DOOR FRAME IDENTIFICATION MATRIX
52-003	STRAIGHT CLAMP INSTALLATION
52-004	CORNER CLAMP INSTALLATION
52-016	CABLE LADDER WALL BRACKET INSTALLATION
52-017	CABLE LADDER DOG LEG INSTALLATION
52-018	CABLE LADDER TO HANGER BRACKET INSTALLATION DETAIL
52-019	CABLE LADDER INSTALLATION DETAIL (HANGER BRACKET)
52-021	CABLE LADDER HANGER BRACKET ONE LAYER INSTALLATION
55-002	HVAC FINISH SLEEVE INSTALLATION
55-003	HVAC MOUNTING ANGLE INSTALLATION DETAIL
70-001	TILE INSTALLATION DETAIL
70-002	BASE MOLD INSTALLATION DETAIL
70-003	VINYL TILE INSTALLATION PROCEDURE
80-001	1/2" PVC PIPE STANDOFF

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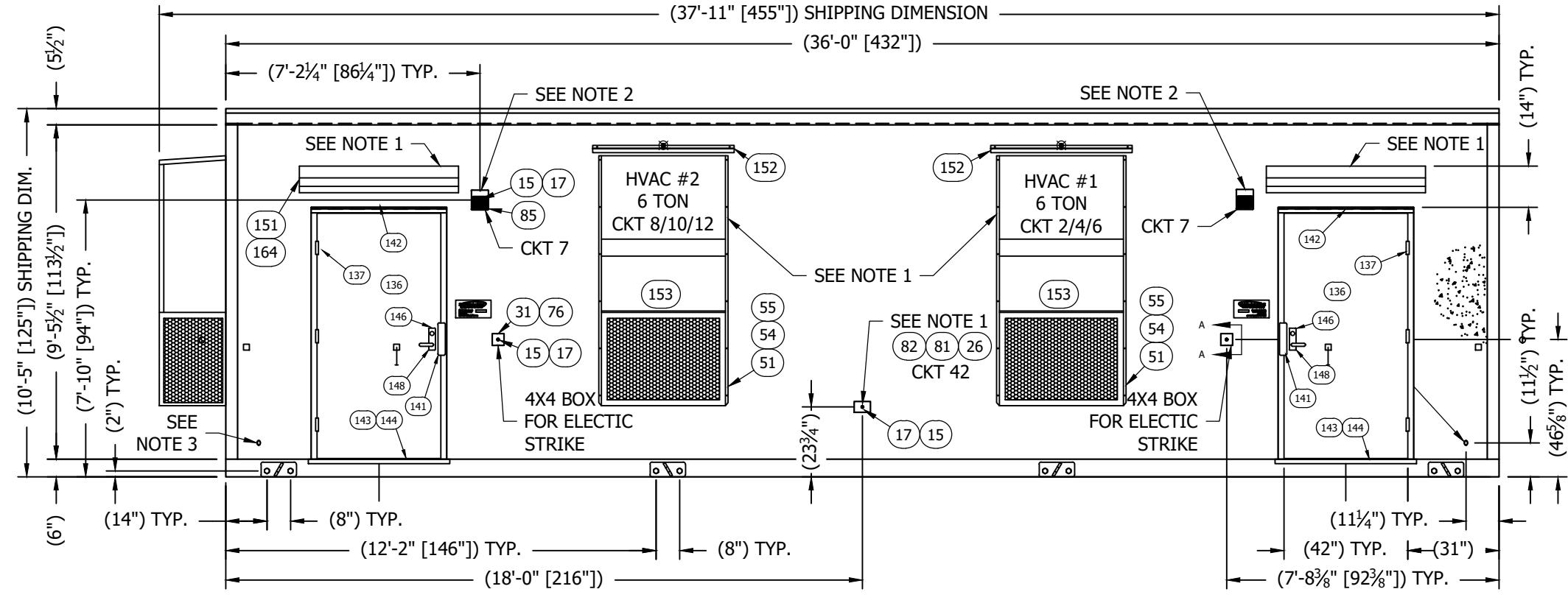


CUSTOMER:  
LUMEN  
CUMBERLAND

PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
SHOP DRAWINGS &  
CUT LIST

FILENAME:  
SLMN02  
SCALE:  
N.T.S.  
DRWN. BY:  
MD.ARFAZ  
CHK. BY:  
N.KIRAN  
APP. BY:  
SREENIVAS.E  
TOLERANCE:  
DATE:  
10/7/22  
DATE:  
10/7/22  
DATE:  
10/7/22

SHEET NO.:  
0-4  
REV.:  
IR  
DRAWING NO.:  
SLMN02

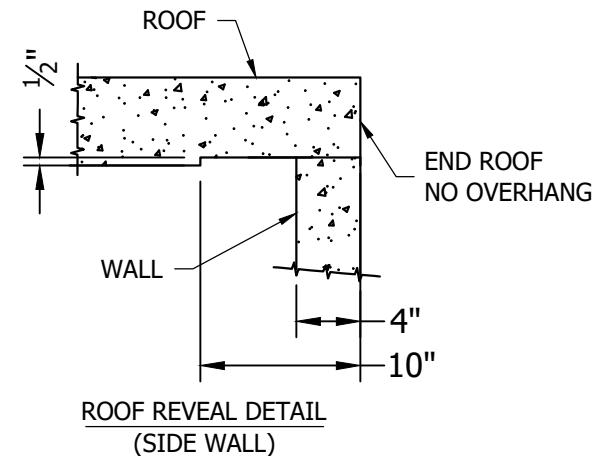
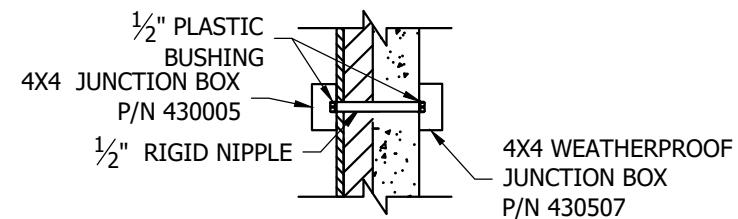


EXTERIOR ELEVATION "A" WALL

STRUCTURAL PANEL HEIGHT: 9'-6"

## NOTES:

1. REMOVE FOR SHIPPING
2. EXTERIOR LIGHT INSTALLED AT MANUFACTURER, TESTED FOR FUNCTION, THEN REMOVED AND PLACED INSIDE SHELTER FOR SHIPPING.
3. GROUNDING PENTRATIONS 1" PVC CAST @45°

SECTION AT 4X4 BOX FOR  
FUTURE ELECTRIC STRIKE

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SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

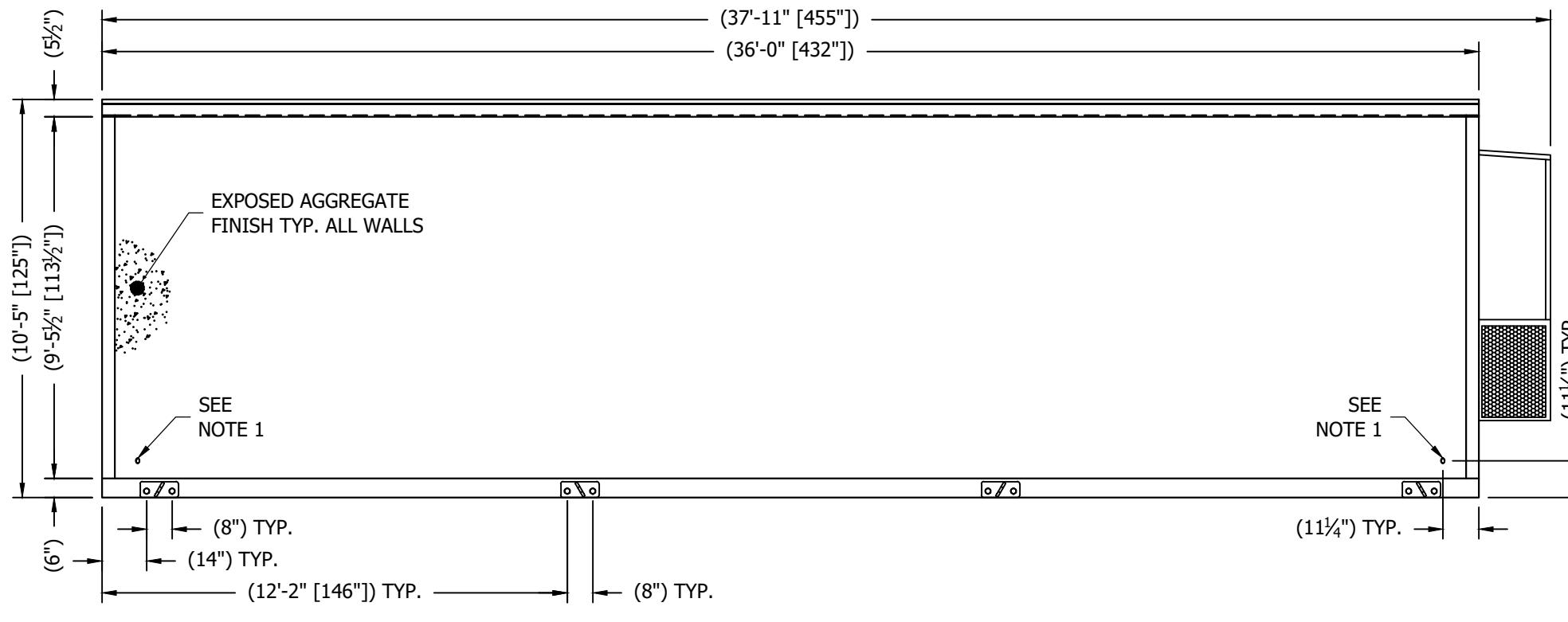
CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
EXTERIOR ELEVATION  
"A" WALL**

FILENAME:	SLMN02
SCALE:	1/4" = 1'-0"
DRWN. BY:	MD.ARFAZ
CHK. BY:	N.KIRAN
APP. BY:	SREENIVAS.E

SHEET NO.	1-0
DRAWING NO.:	SLMN02

REV.: IR

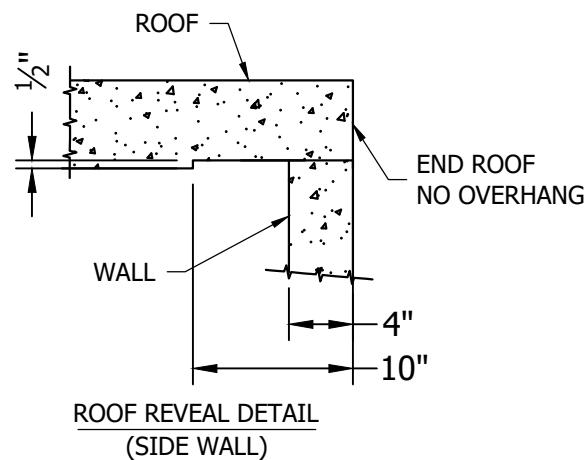


EXTERIOR ELEVATION "C" WALL

STRUCTURAL PANEL HEIGHT: 9'-6"

## NOTES:

1. GROUNDING PENTRATIONS 1" PVC CAST @45°

ROOF REVEAL DETAIL  
(SIDE WALL)

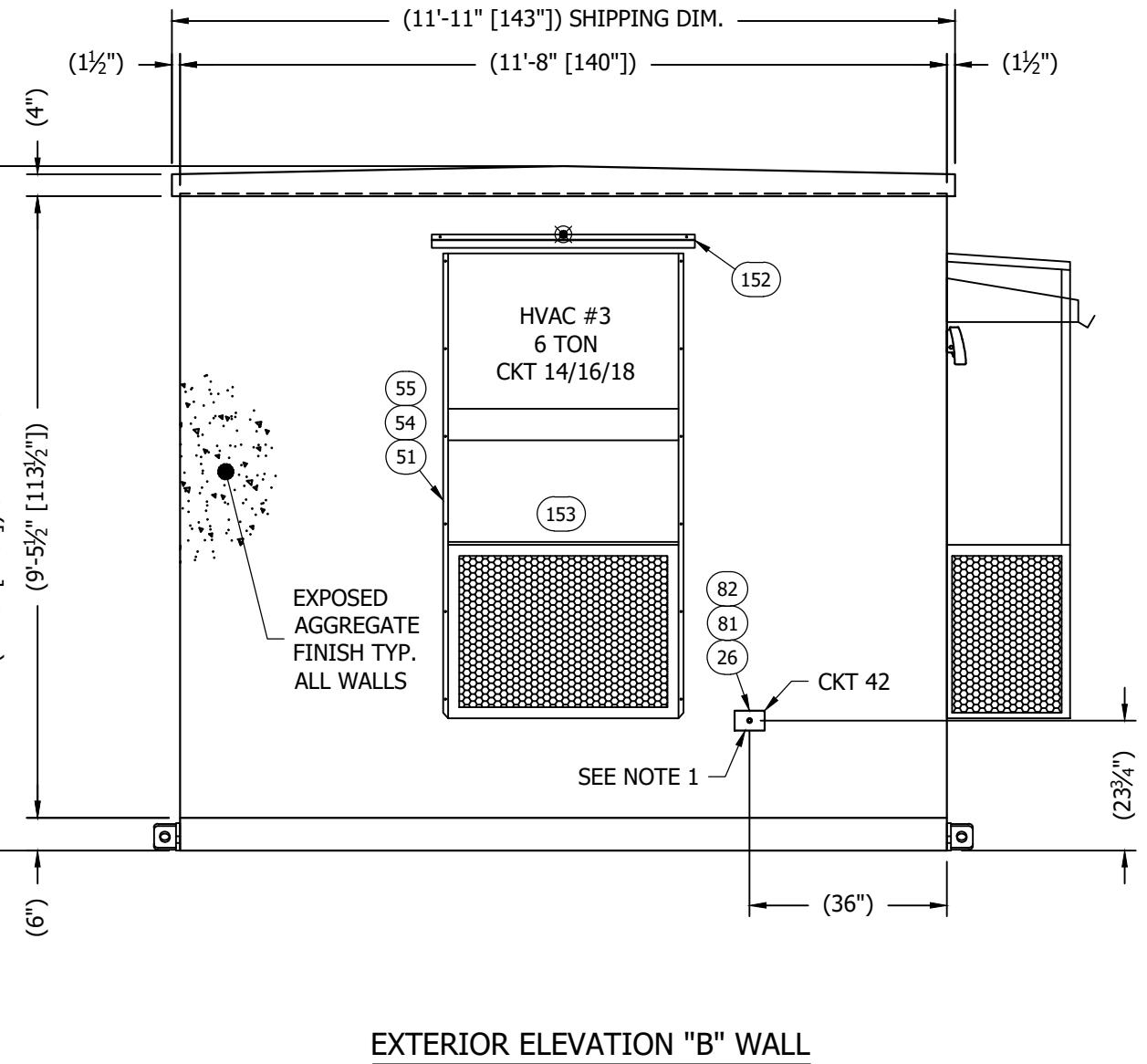
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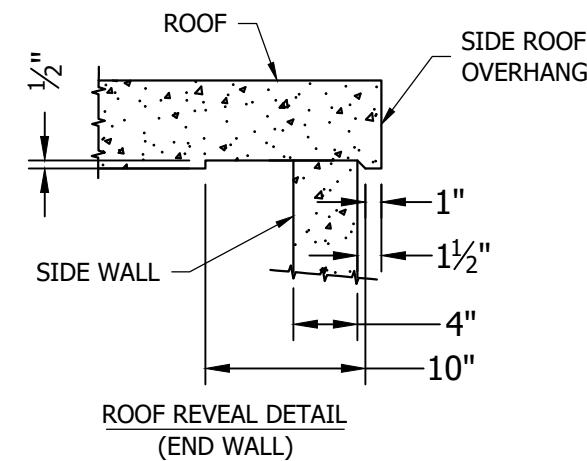
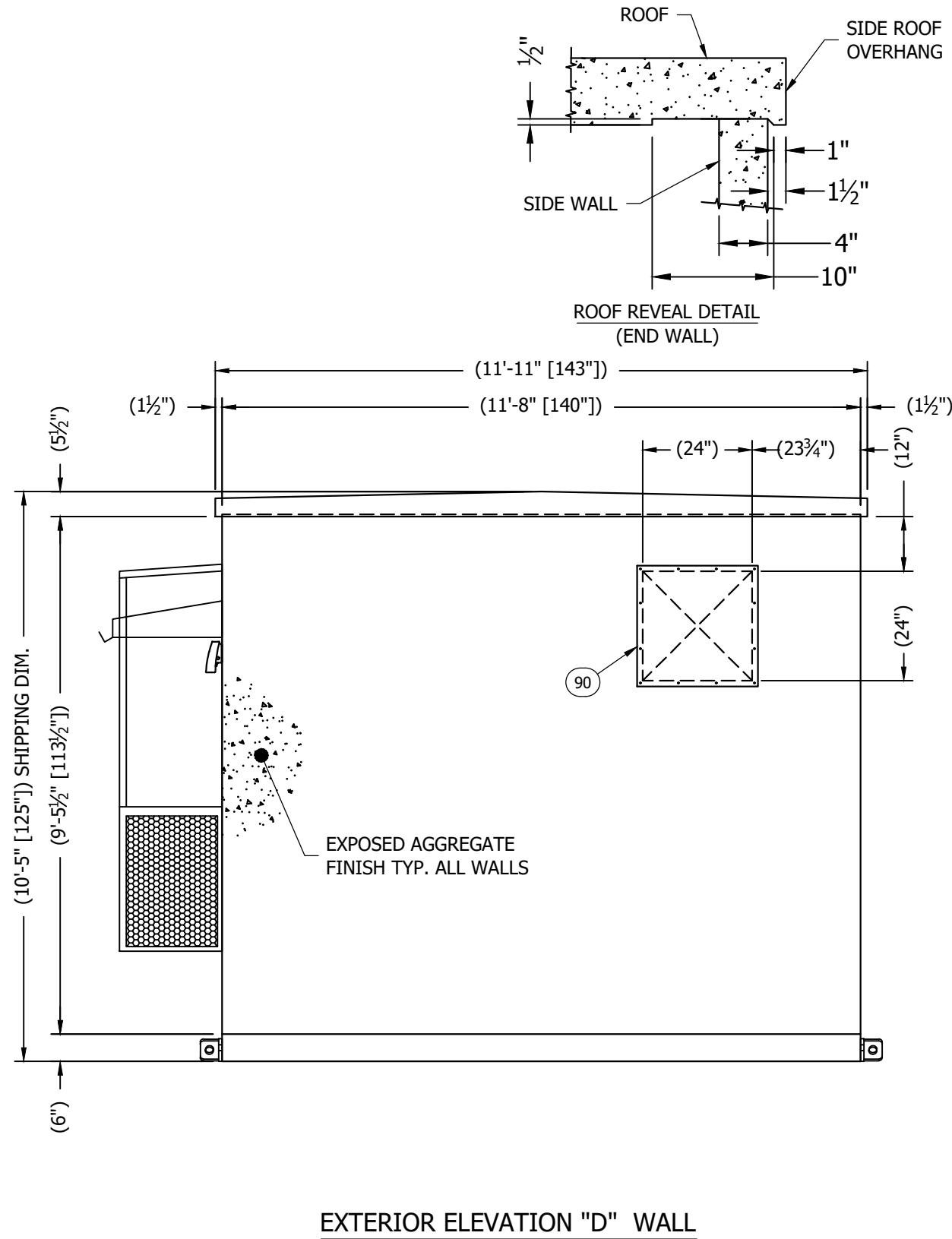
CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
EXTERIOR ELEVATION  
"C" WALL**

FILENAME: <b>SLMN02</b>	TOLERANCE: <b>1/4" = 1'-0"</b>
SCALE: <b>1/4" = 1'-0"</b>	DATE: <b>10/7/22</b>
DRWN. BY: <b>MD.ARFAZ</b>	DATE: <b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE: <b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE: <b>10/7/22</b>
SHEET NO. <b>1-1</b>	
DRAWING NO.: <b>SLMN02</b>	REV.: <b>IR</b>



**NOTES:**  
1. REMOVE FOR SHIPPING



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[www.sabreindustries.com](http://www.sabreindustries.com)

SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
EXTERIOR ELEVATION  
"B" & "D" WALLS**

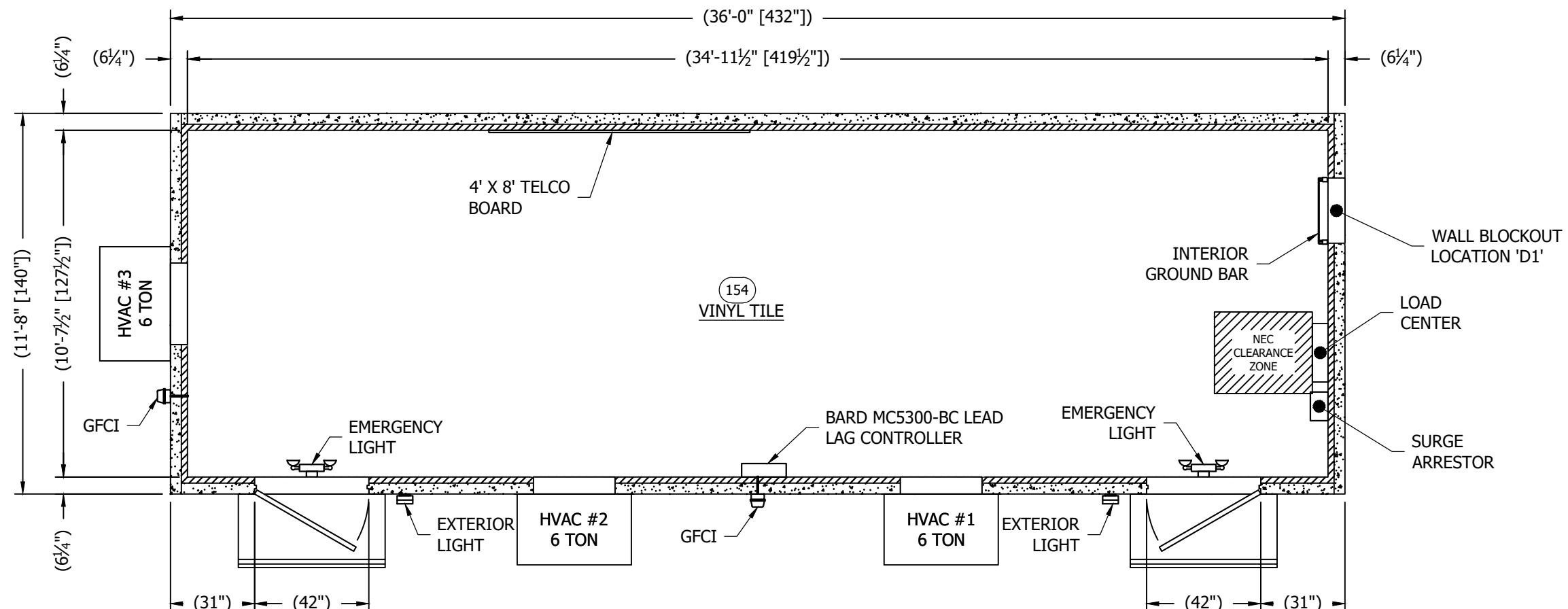
FILENAME: SLMN02	TOLERANCE: 3/4" = 1'-0"
SCALE: 3/4" = 1'-0"	DATE: 10/7/22
DRWN. BY: MD.ARFAZ	DATE: 10/7/22
CHK. BY: N.KIRAN	DATE: 10/7/22
APP. BY: SREENIVAS.E	DATE: 10/7/22
SHEET NO. 1-2	

DRAWING NO.:  
**SLMN02**

REV.:  
**IR**

## SUB PARTS LIST

ITEM	P/N	DESCRIPTION	PCS
154	320021	TILE VINYL,1/8",VINYLASA,VL556	420



## FLOOR PLAN

420.000 SQ. FT. EXTERIOR AREA  
371.432 SQ. FT. INTERIOR AREA

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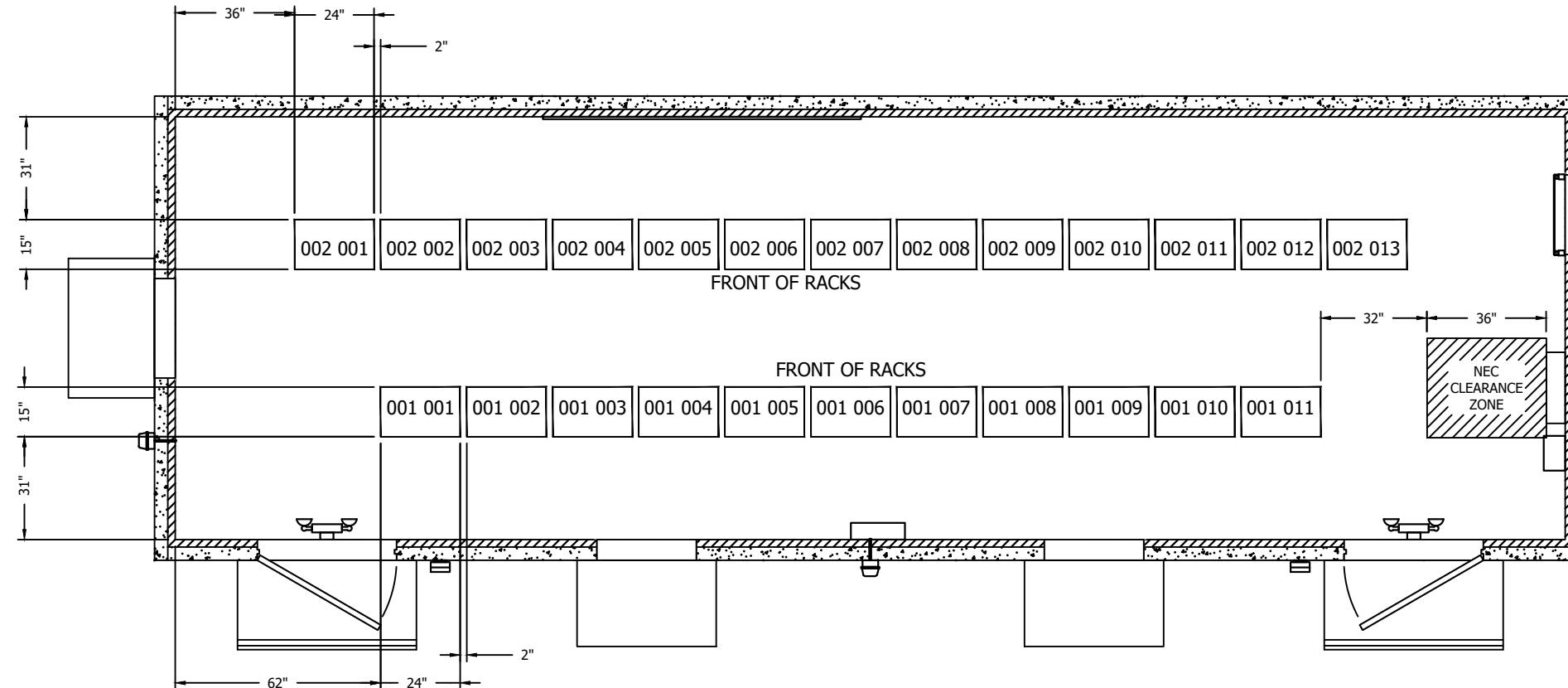
SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
FLOOR PLAN**

FILENAME:	SLMN02
SCALE:	1/4" = 1'-0"
DRWN. BY:	MD.ARFAZ
CHK. BY:	N.KIRAN
APP. BY:	SREENIVAS.E
SHEET NO.	2-0

DRAWING NO.:	SLMN02
REV.:	IR



EQUIPMENT LAYOUT PLAN

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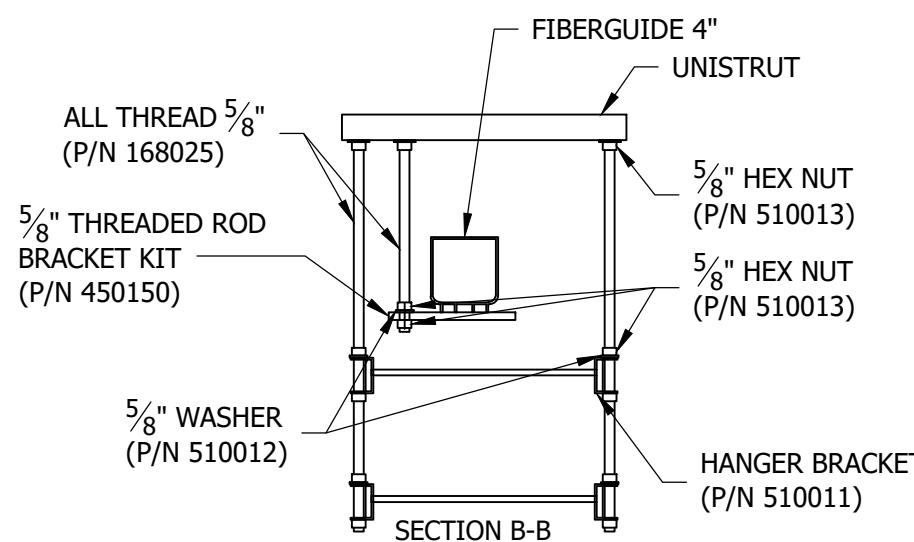
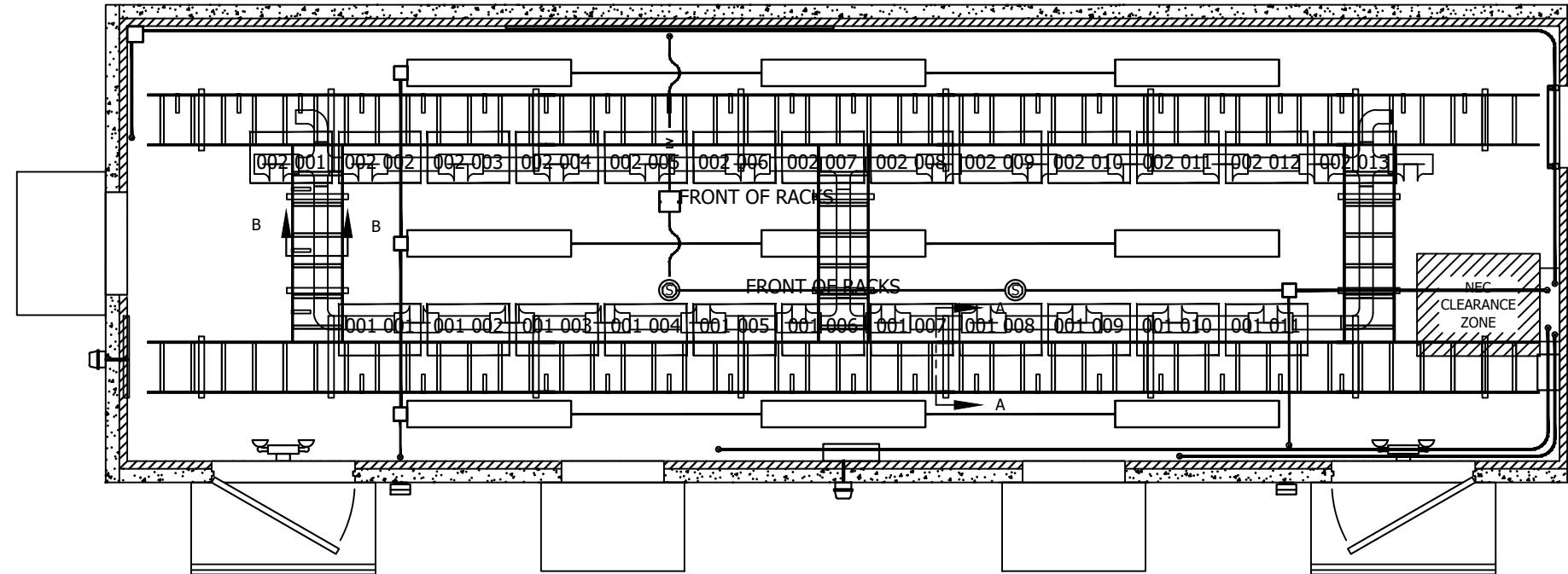


CUSTOMER:  
**LUMEN  
CUMBERLAND**

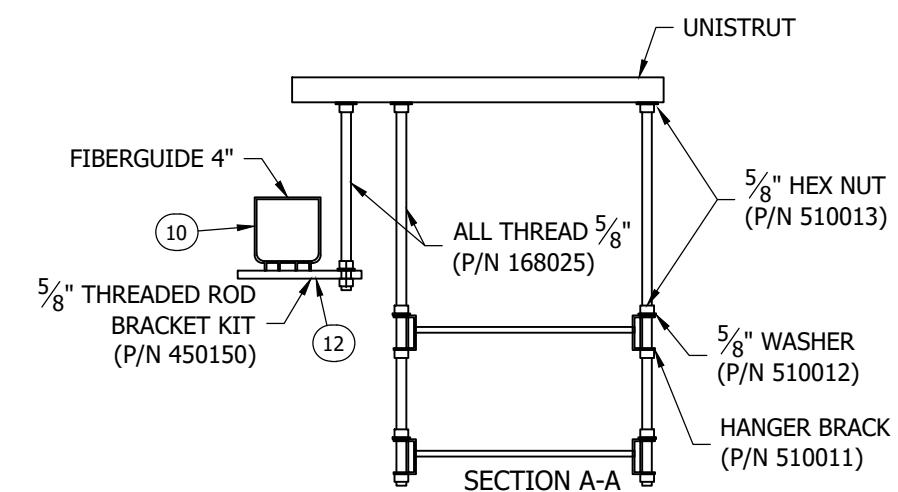
PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
EQUIPMENT LAYOUT  
PLAN**

FILENAME:	SLMN02	TOLERANCE:	
SCALE:	1/4" = 1'-0"		
DRWN. BY:	MD.ARFAZ	DATE:	10/7/22
CHK. BY:	N.KIRAN	DATE:	10/7/22
APP. BY:	SREENIVAS.E	DATE:	10/7/22
SHEET NO.	2-1		

DRAWING NO.:	SLMN02	REV.:	IR
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ROOM OVERLAY PLAN



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Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
ROOM OVERLAY PLAN**

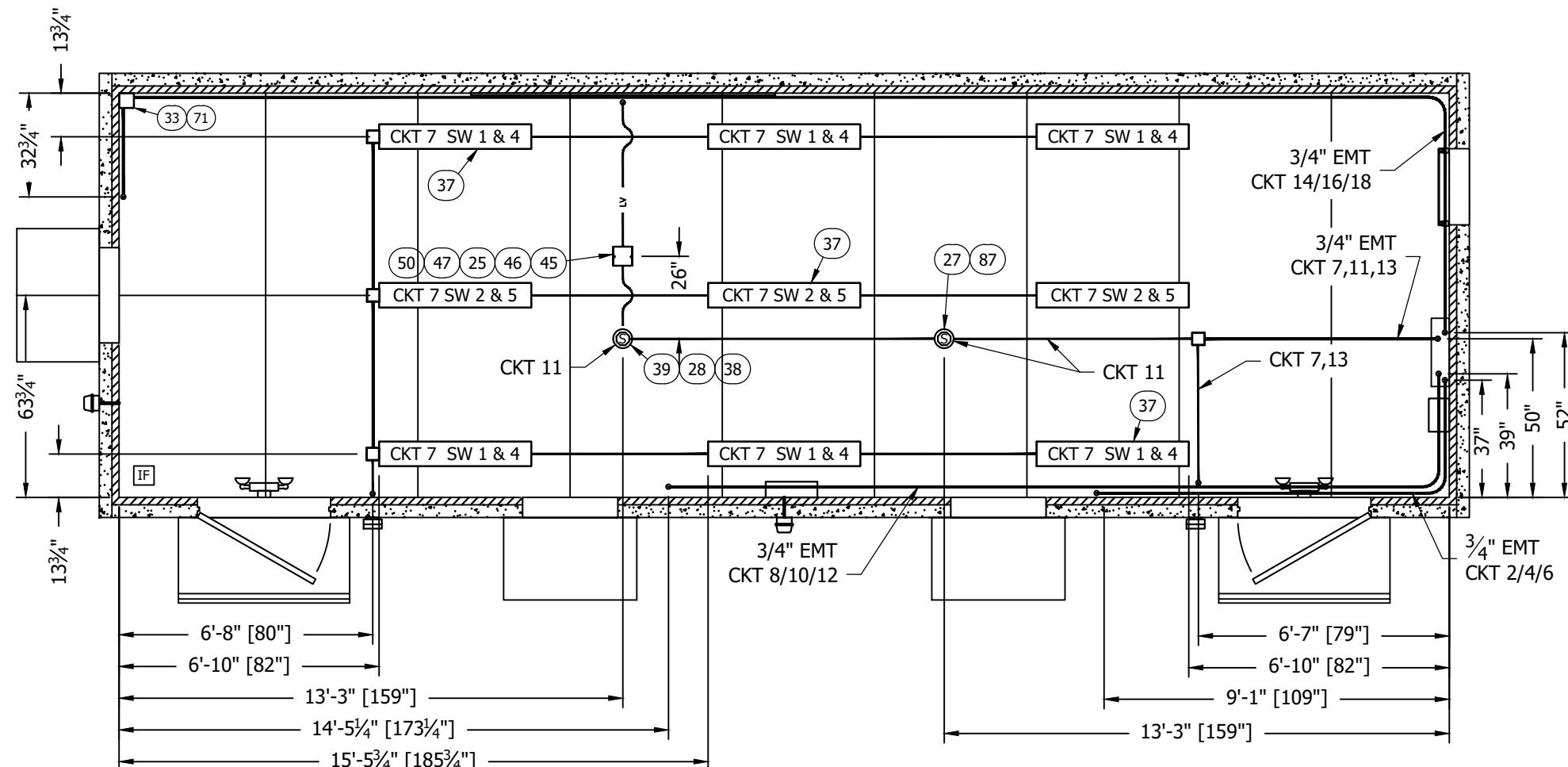
FILENAME: **SLMN02**  
SCALE: **1/4" = 1'-0"** TOLERANCE:  
DRWN. BY: **MD.ARFAZ** DATE: **10/7/22**  
CHK. BY: **N.KIRAN** DATE: **10/7/22**  
APP. BY: **SREENIVAS.E** DATE: **10/7/22**

SHEET NO.  
**2-2**

DRAWING NO.: **SLMN02** REV.: **IR**

## LEGEND:

= INTERIOR FINISH STARTING PANEL

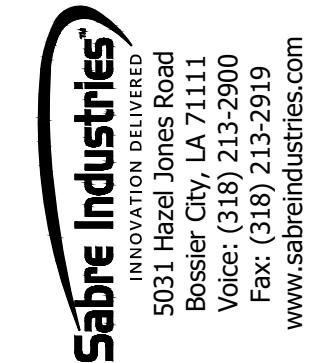


REFLECTED CEILING PLAN  
(ELECTRICAL)

## NOTES:

1. REF DWG 108-015 FOR ELECTRICAL LEGENDS & STANDARD NOTES

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SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

CUSTOMER:  
**LUMEN CUMBERLAND**

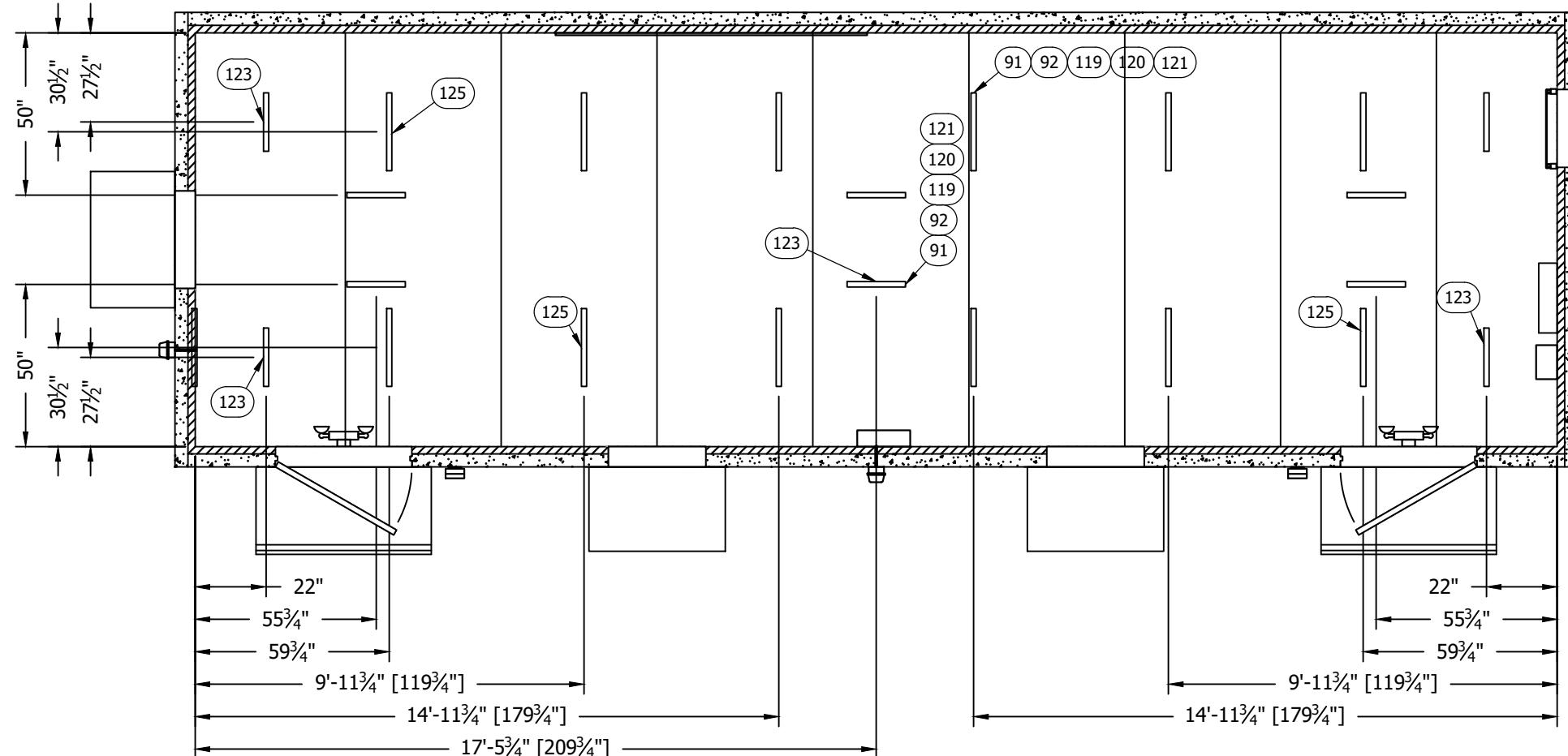
PROJECT:  
**11'-8" X 36'-0"  
CONCRETE SHELTER  
REFLECTED CEILING  
PLAN (ELECTRICAL)**

FILENAME: <b>SLMN02</b>	SCALE: <b>1/4" = 1'-0"</b>	TOLERANCE: <b>1/4"</b>
DRWN. BY: <b>MD.ARFAZ</b>	DATE: <b>10/7/22</b>	
CHK. BY: <b>N.KIRAN</b>	DATE: <b>10/7/22</b>	
APP. BY: <b>SREENIVAS.E</b>	DATE: <b>10/7/22</b>	
SHEET NO. <b>3-0</b>		

DRAWING NO.: <b>SLMN02</b>	REV.: <b>IR</b>
-------------------------------	--------------------

## SUB-PARTS LIST

ITEM	P/N	DESCRIPTION	CUT
91	168025	ALL THREAD,5/8"-UNC,ZINC PLATED,6'	26"



**UNISTRUT LAYOUT  
(MECHANICAL)**

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[www.sabreindustries.com](http://www.sabreindustries.com)

CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
UNISTRUT LAYOUT  
(MECHANICAL)**

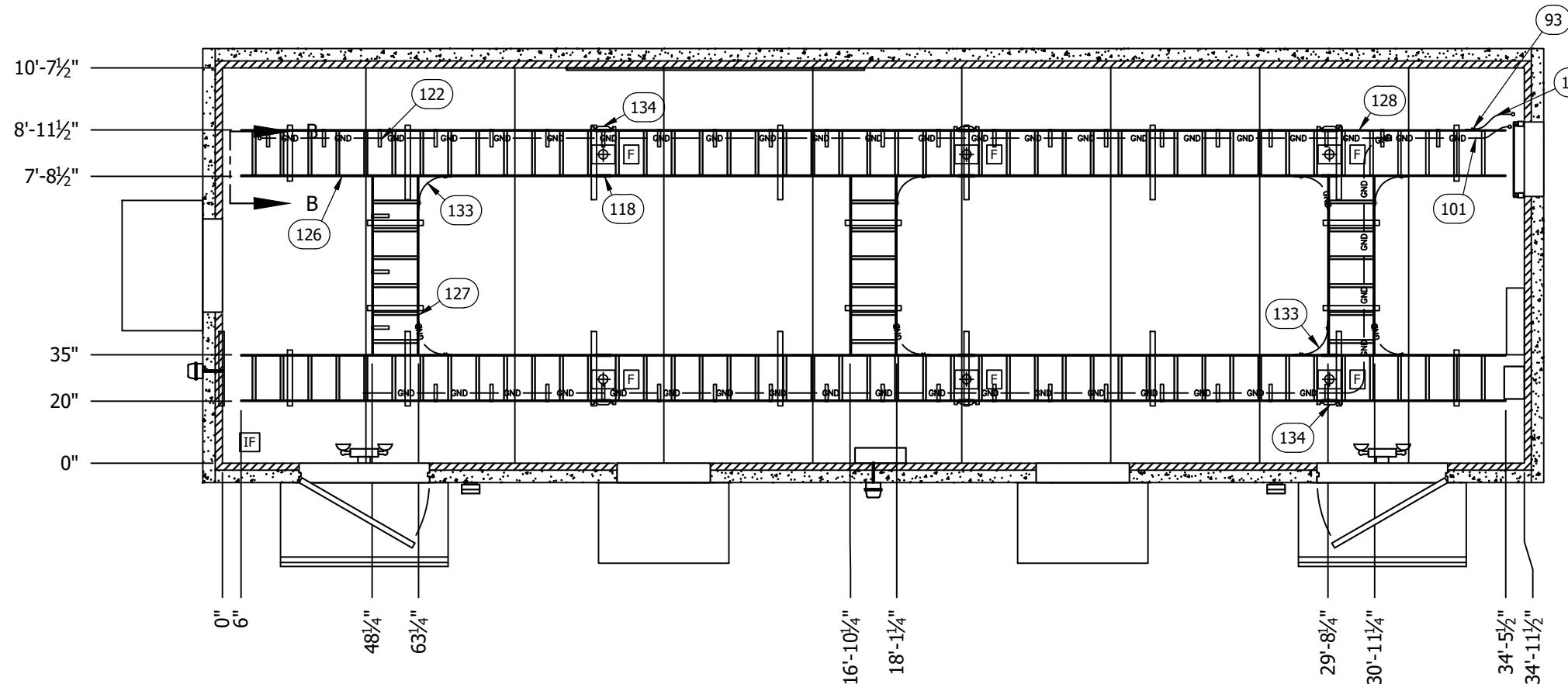
FILENAME: <b>SLMN02</b>	SCALE: <b>1/4" = 1'-0"</b>	TOLERANCE:
DRWN. BY: <b>MD.ARFAZ</b>	DATE:	<b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE:	<b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE:	<b>10/7/22</b>
SHEET NO. <b>3-1</b>		
DRAWING NO.: <b>SLMN02</b>	REV.:	<b>IR</b>

## SUB-PARTS LIST

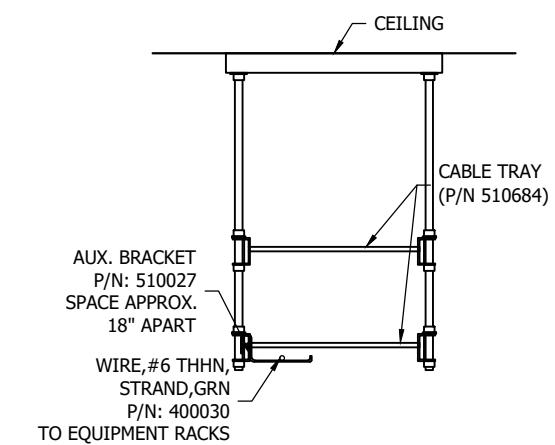
ITEM	P/N	DESCRIPTION	CUT
100	400030	WIRE,#6 THHN,STRAND,GRN	80"
101	400030	WIRE,#6 THHN,STRAND,GRN	850"
126	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	116 1/2"
127	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	57 1/2"
128	510684	CABLE LADDER,15"X2"X9'8.5",GRY,SOL	56 1/2"

## LEGEND:

-  = CABLE LADDER SPLICE LOCATION
-  = CABLE LADDER FACTORY CUT END
-  = INTERIOR FINISH STARTING PANEL



CABLE TRAY LAYOUT  
(MECHANICAL)



SECTION B-B

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**Sabre Industries**  
INNOVATION DELIVERED  
5031 Hazel Jones Road  
Bossier City, LA 71111  
Voice: (318) 213-2900  
Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
CABLE TRAY  
LAYOUT (MECHANICAL)**

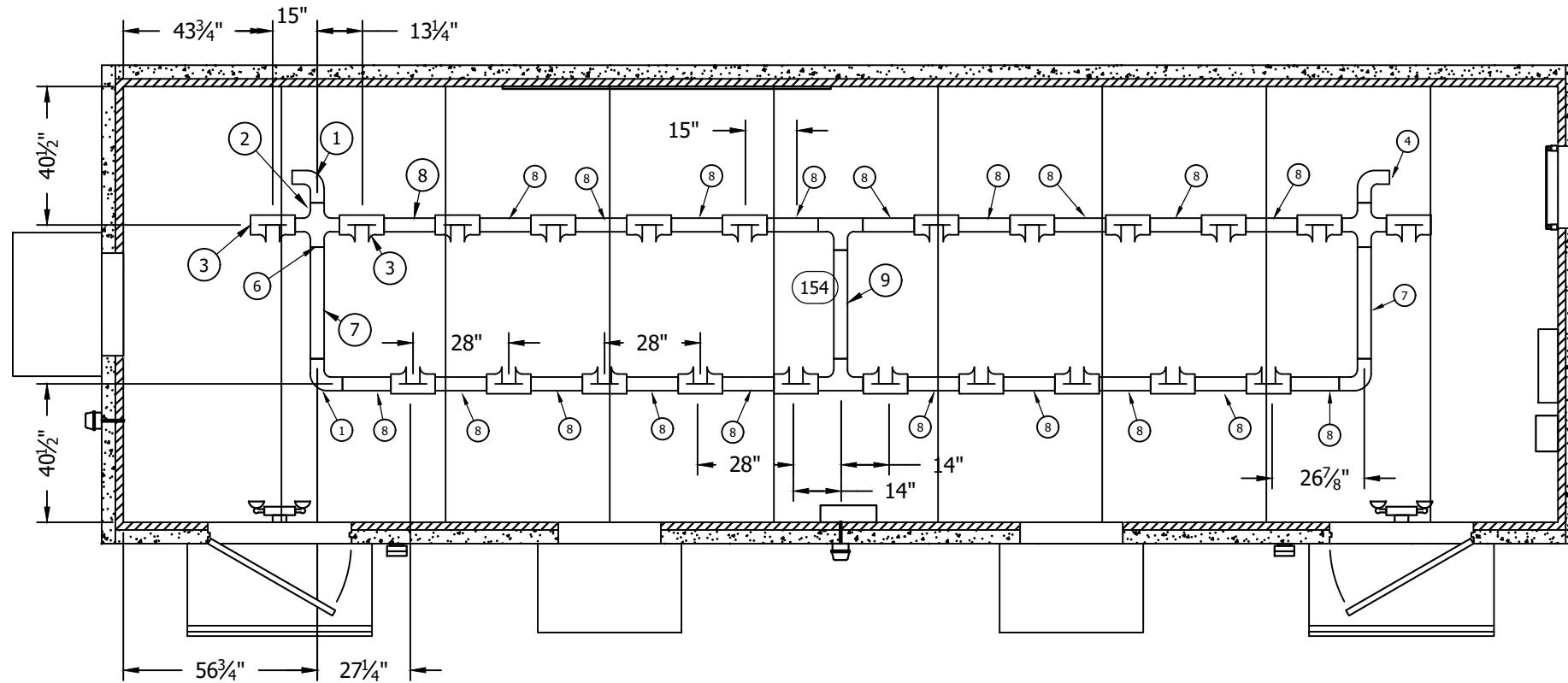
FILENAME:  
**SLMN02**  
SCALE: **1/4" = 1'-0"** TOLERANCE:  
**1/4"**  
DRWN. BY: **MD.ARFAZ** DATE: **10/7/22**  
CHK. BY: **N.KIRAN** DATE: **10/7/22**  
APP. BY: **SREENIVAS.E** DATE: **10/7/22**

SHEET NO.  
**3-2**

DRAWING NO.:  
**SLMN02** REV.: **IR**

## SUB-PARTS LIST

SUB-PARTS LIST			
ITEM	P/N	DESCRIPTION	CUT
7	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	32 5/8"
8	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	15"
9	450147	FIBERGUIDE,4",HORZ STR SECTION,72"	28 3/4"



# FIBERGUARD LAYOUT

---

## (MECHANICAL)

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FOR EQUIPMENT INSTALLATION PURPOSES. THIS  
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UNDERSTANDING THAT ANYONE RECEIVING OR  
OTHERWISE OBTAINING POSSESSION OF IT WILL BE  
EXPRESSLY NOTIFIED OF ITS CONFIDENTIAL NATURE.

**Sabre Industries™**

INNOVATION DELIVERED

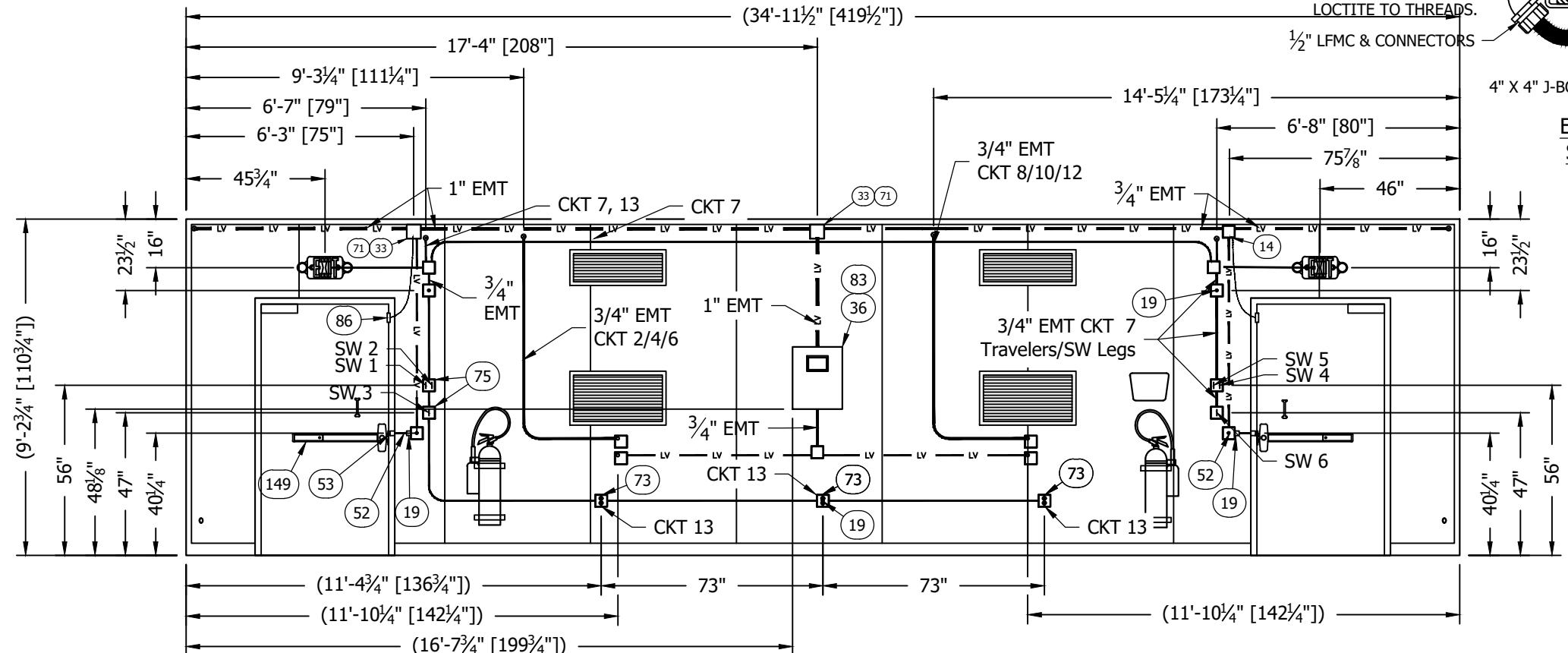
5031 Hazel Jones Road  
Bossier City, LA 71111  
Voice: (318) 213-2900  
Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

CUSTOMER:

**PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
FIBERGUARD LAYOUT  
(MECHANICAL)**

FILENAME: <i>SLMN02</i>	
SCALE: <i>1/4"</i> = <i>1'-0"</i>	TOLERANCE:
DRWN. BY: <i>MD.ARFAZ</i>	DATE: <i>10/7/22</i>
CHK. BY: <i>N.KIRAN</i>	DATE: <i>10/7/22</i>
APP. BY: <i>SCREENIVAS.E</i>	DATE: <i>10/7/22</i>
SHEET NO. <i>3-3</i>	
DRAWING NO.: <i>SLMN02</i>	REV.: <i>IR</i>

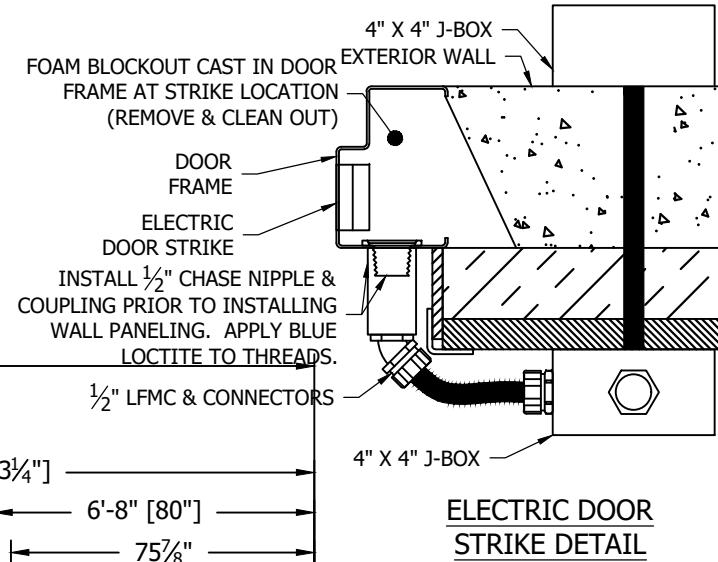
ITEM	P/N	DESCRIPTION	CUT
52	410112	CONDUIT,LFMC,1/2",SEALTITE	18"



INTERIOR ELEVATION "A" WALL  
(ELECTRICAL)

## NOTES:

- REF DWG 108-015 FOR ELECTRICAL LEGENDS & STANDARD NOTES



ELECTRIC DOOR  
STRIKE DETAIL

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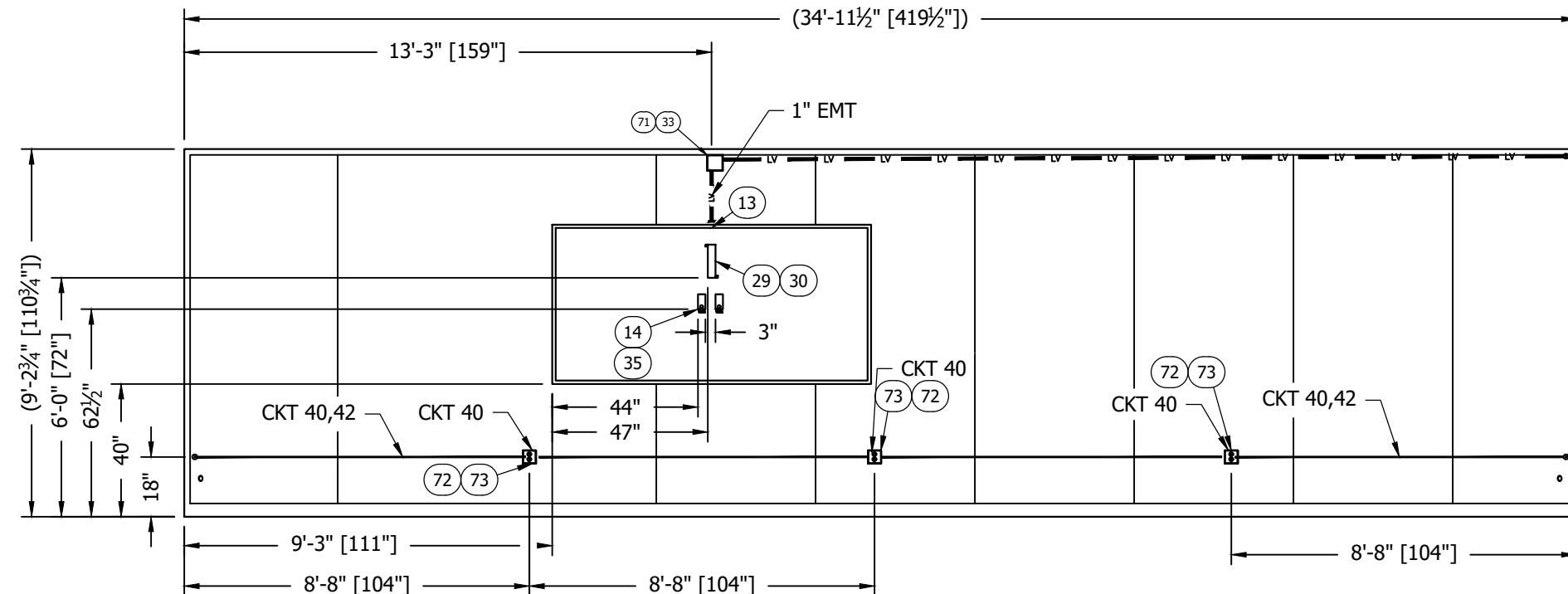
CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
INTERIOR ELEVATION  
"A" WALL (ELECTRICAL)**

FILENAME: SLMN02	TOLERANCE: 1/4" = 1'-0"
SCALE: 1/4" = 1'-0"	TOLERANCE: 1/4" = 1'-0"
DRWN. BY: MD.ARFAZ	DATE: 10/7/22
CHK. BY: N.KIRAN	DATE: 10/7/22
APP. BY: SREENIVAS.E	DATE: 10/7/22
SHEET NO. 4-0	

DRAWING NO.:  
**SLMN02**

REV.:  
**IR**



INTERIOR ELEVATION "C" WALL  
(ELECTRICAL)

## NOTES:

1. REF DWG 108-015 FOR ELECTRICAL LEGENDS & STANDARD NOTES

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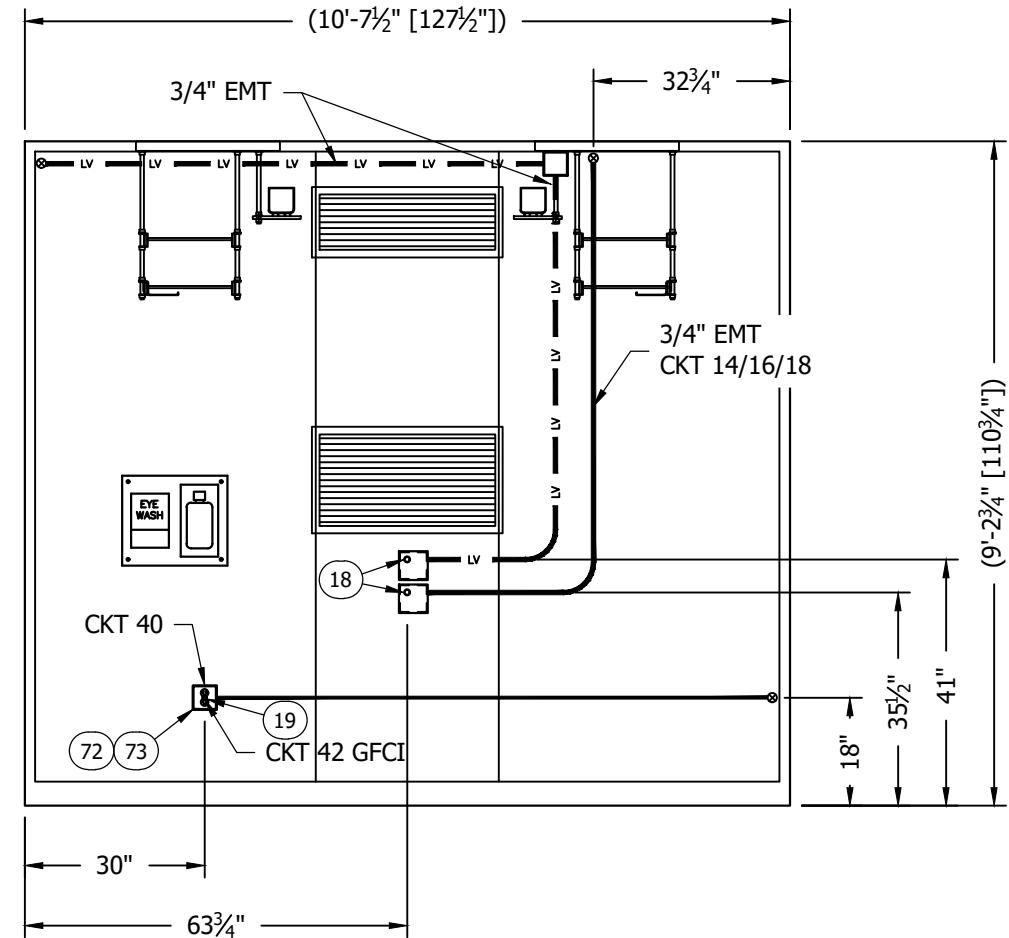


CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
INTERIOR ELEVATION  
"C" WALL (ELECTRICAL)**

FILENAME: SLMN02	SCALE: 1/4" = 1'-0"	TOLERANCE: 1/4" = 1'-0"
DRWN. BY: MD.ARFAZ	DATE: 10/7/22	
CHK. BY: N.KIRAN	DATE: 10/7/22	
APP. BY: SREENIVAS.E	DATE: 10/7/22	
SHEET NO. 4-1		

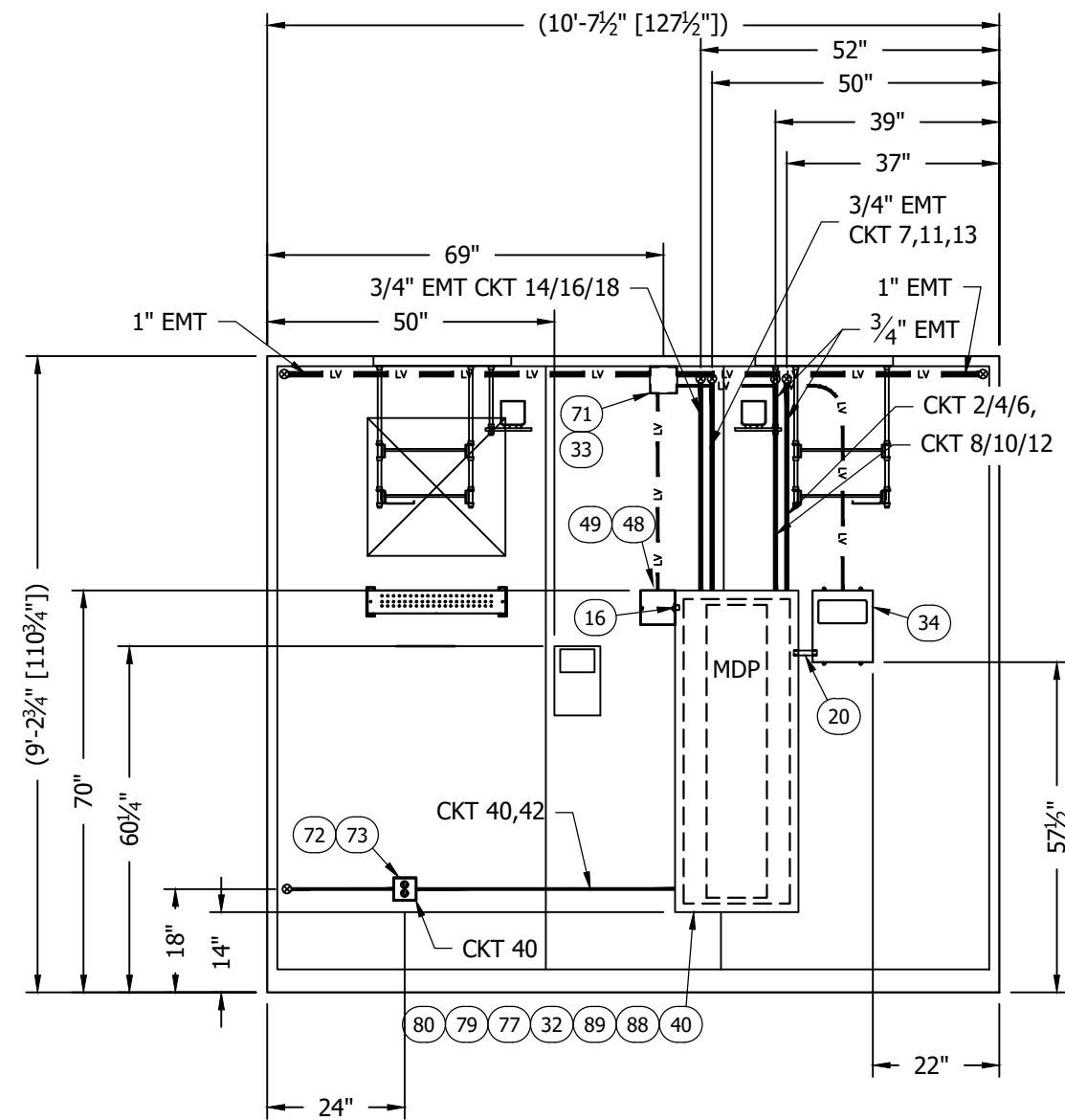
DRAWING NO.: SLMN02	REV.: IR
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**INTERIOR ELEVATION "B" WALL  
(ELECTRICAL)**

**NOTES:**

- REF DWG 108-015 FOR ELECTRICAL LEGENDS & STANDARD NOTES



**INTERIOR ELEVATION "D" WALL  
(ELECTRICAL)**

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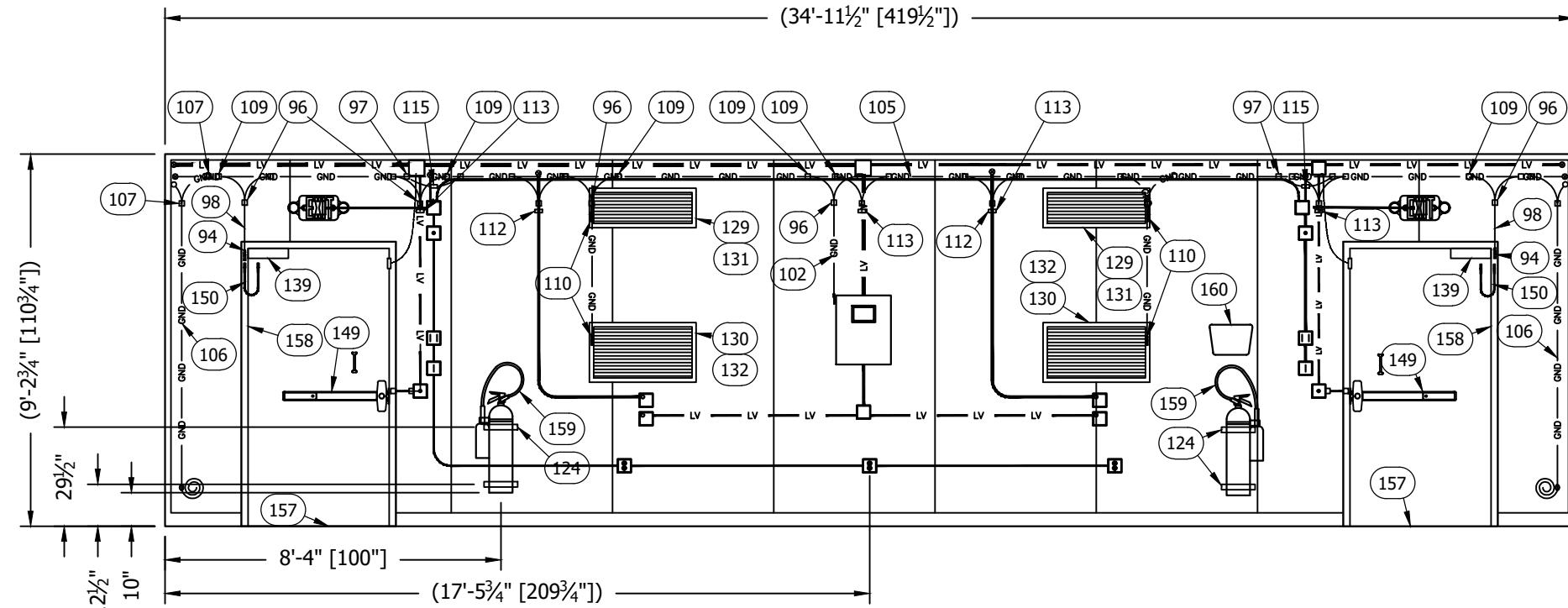


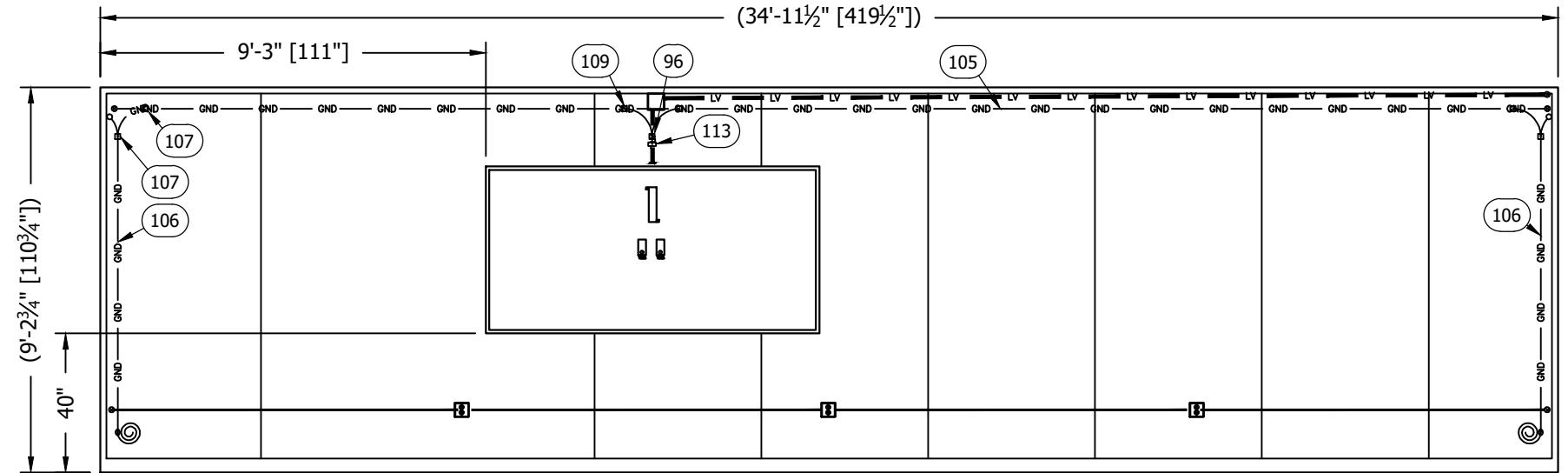
SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

FILENAME: SLMN02	TOLERANCE: 3/4" = 1'-0"
SCALE: 3/4" = 1'-0"	DATE: 10/7/22
DRWN. BY: MD.ARFAZ	DATE: 10/7/22
CHK. BY: N.KIRAN	DATE: 10/7/22
APP. BY: SREENIVAS.E	DATE: 10/7/22
SHEET NO. 4-2	
DRAWING NO.: SLMN02	REV.: IR

## SUB-PARTS LIST

ITEM	P/N	DESCRIPTION	CUT
98	400030	WIRE,#6 THHN,STRAND,GRN	18"
102	400030	WIRE,#6 THHN,STRAND,GRN	48"
105	400050	WIRE,#2 THHN,STRAND,GRN	1200"
106	400050	WIRE,#2 THHN,STRAND,GRN	192"





INTERIOR ELEVATION "C" WALL  
(MECHANICAL)

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CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
INTERIOR ELEVATION  
WALL "C" (MECHANICAL)**

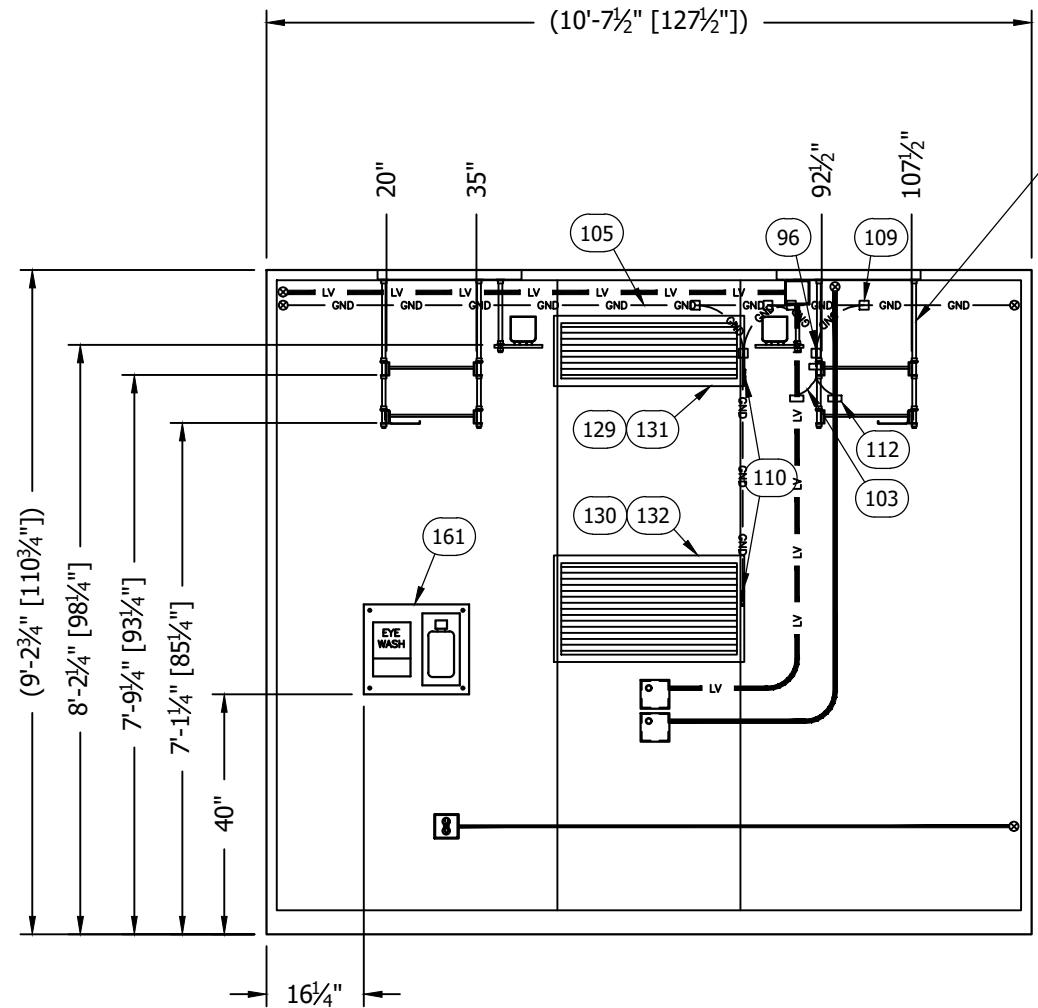
FILENAME:	SLMN02
SCALE:	1/4" = 1'-0"
DRWN. BY:	MD.ARFAZ
CHK. BY:	N.KIRAN
APP. BY:	SREENIVAS.E

SHEET NO.	5-1
DRAWING NO.:	SLMN02

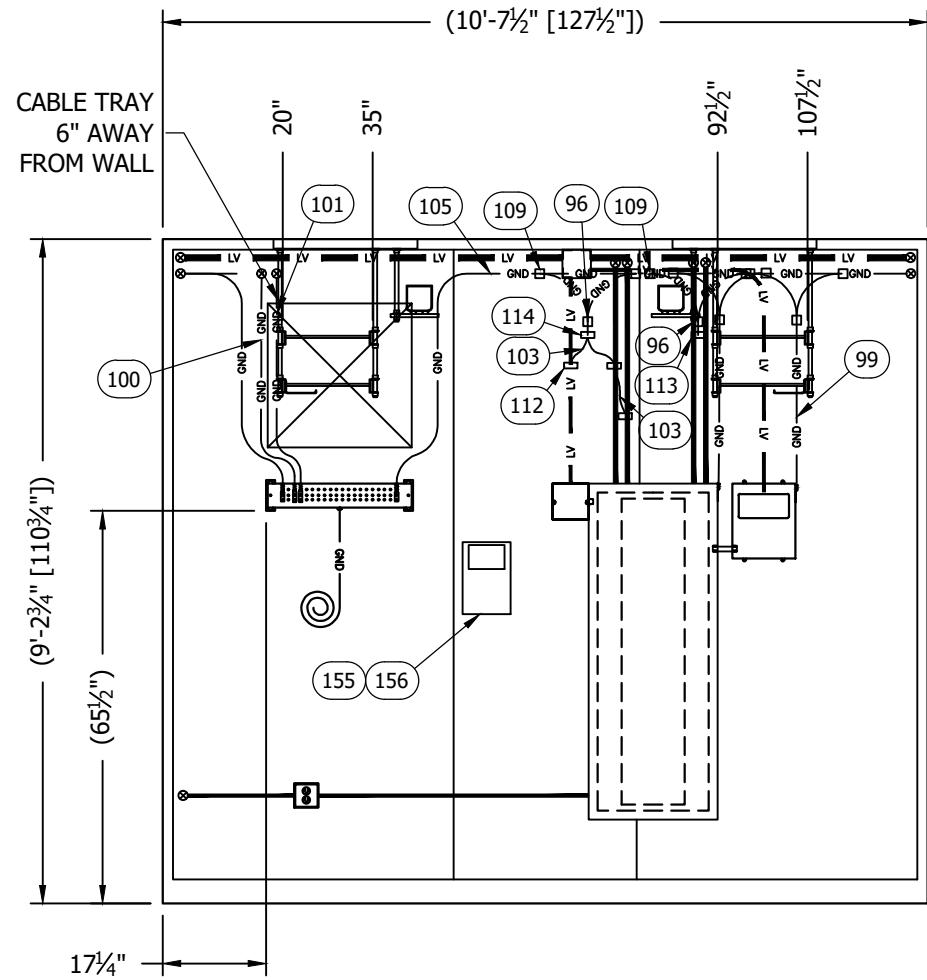
REV.:  
**IR**

## SUB-PARTS LIST

ITEM	P/N	DESCRIPTION	CUT
99	400030	WIRE,#6 THHN,STRAND,GRN	48"
103	400030	WIRE,#6 THHN,STRAND,GRN	9"
104	400030	WIRE,#6 THHN,STRAND,GRN	12"



INTERIOR ELEVATION "B" WALL  
(MECHANICAL)



INTERIOR ELEVATION "D" WALL  
(MECHANICAL)

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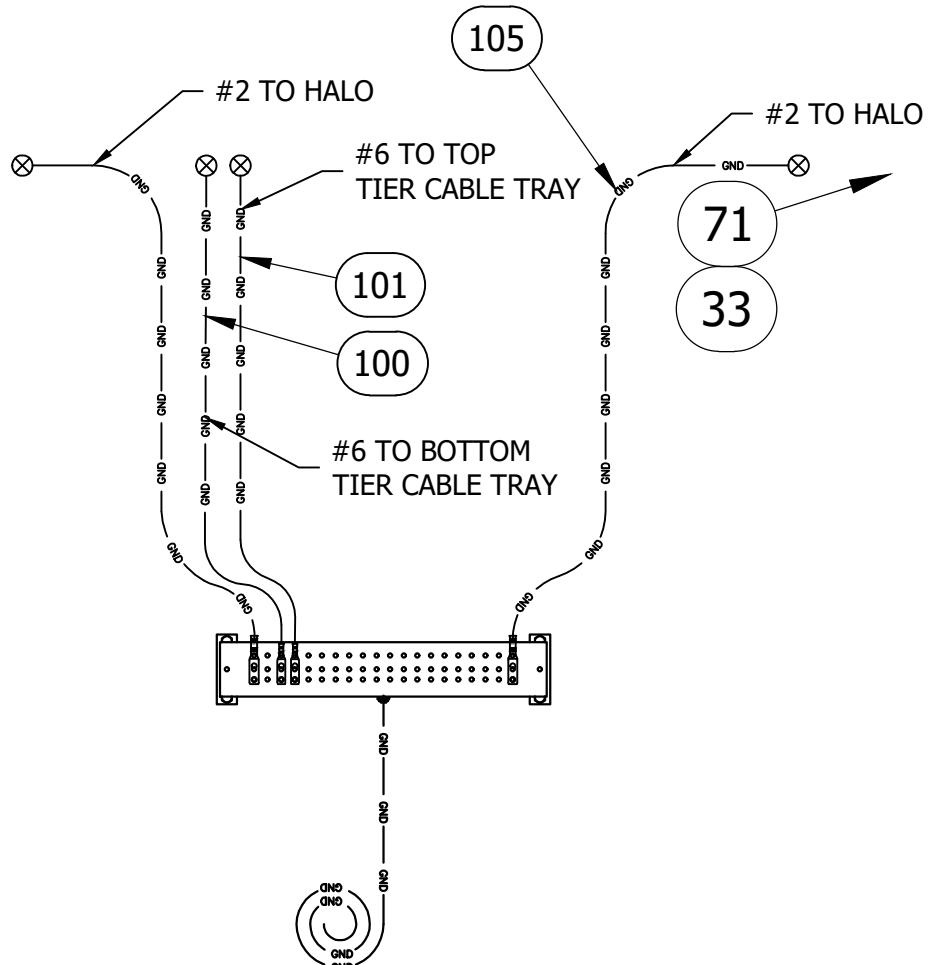
CUSTOMER:  
LUMEN  
CUMBERLAND

PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
INTERIOR ELEVATION  
"B" & "D" WALLS (MECHANICAL)

FILENAME:	SLMN02
SCALE:	TOLERANCE: 3/4" = 1'-0"
DRWN. BY:	DATE: MD.ARFAZ 10/7/22
CHK. BY:	DATE: N.KIRAN 10/7/22
APP. BY:	DATE: SREENIVAS.E 10/7/22
SHEET NO.	5-2

DRAWING NO.:	SLMN02
REV.:	IR

SUB-PARTS LIST			
ITEM	P/N	DESCRIPTION	CUT
100	400030	WIRE,#6 THHN,STRAND,GRN	80"
101	400030	WIRE,#6 THHN,STRAND,GRN	850"
105	400050	WIRE,#2 THHN,STRAND,GRN	1200"



INTERIOR GROUND BAR DETAIL

SCALE: N.T.S.

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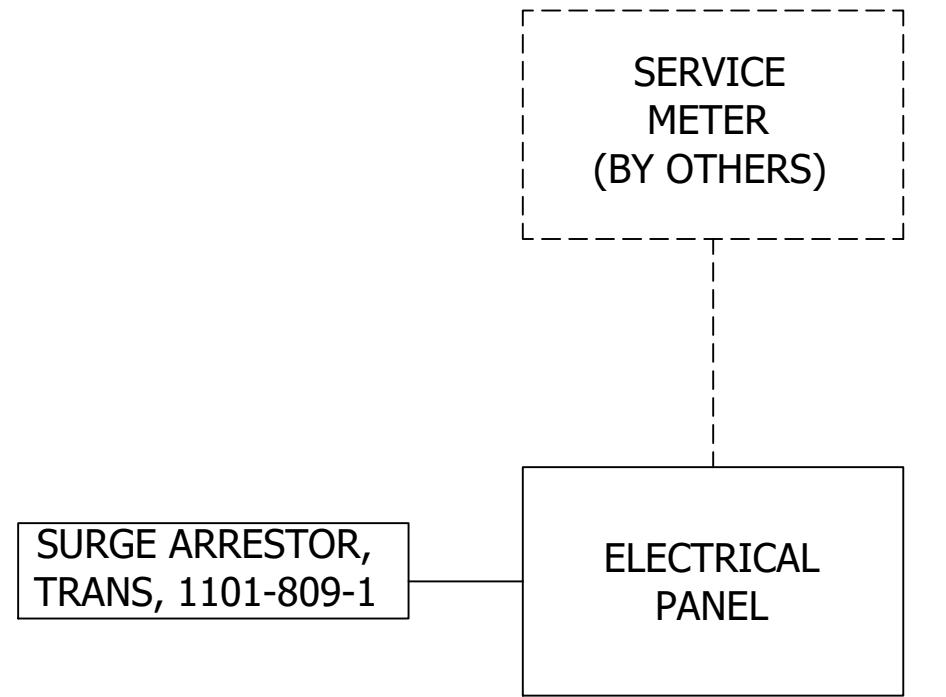


CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
MECHANICAL GROUND BAR  
INSTALLATION DETAILS**

FILENAME: <b>SLMN02</b>	TOLERANCE:
SCALE: <b>AS NOTED</b>	
DRWN. BY: <b>MD.ARFAZ</b>	DATE: <b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE: <b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE: <b>10/7/22</b>

SHEET NO. <b>5-3</b>	DRAWING NO.: <b>SLMN02</b>	REV.: <b>IR</b>
-------------------------	-------------------------------	--------------------

ELECTRICAL ONE-LINE WIRING DIAGRAM

SCALE: N.T.S.

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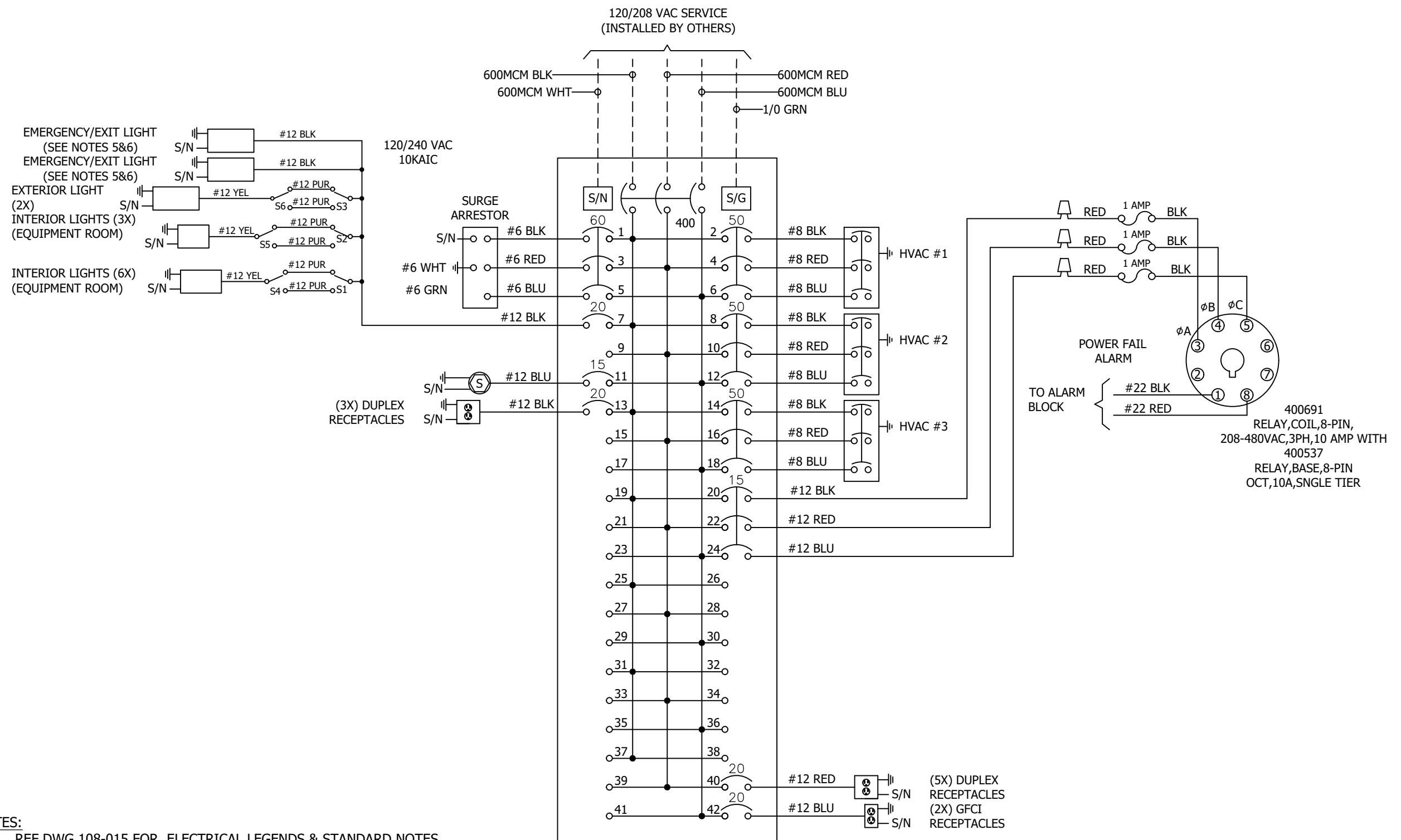


CUSTOMER:  
**LUMEN  
CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
ELECTRICAL ONE-LINE  
WIRING DIAGRAM**

FILENAME: <b>SLMN02</b>	TOLERANCE:
SCALE: <b>AS NOTED</b>	
DRWN. BY: <b>MD.ARFAZ</b>	DATE: <b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE: <b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE: <b>10/7/22</b>

SHEET NO. <b>6-0</b>	REV.: <b>IR</b>
DRAWING NO.: <b>SLMN02</b>	

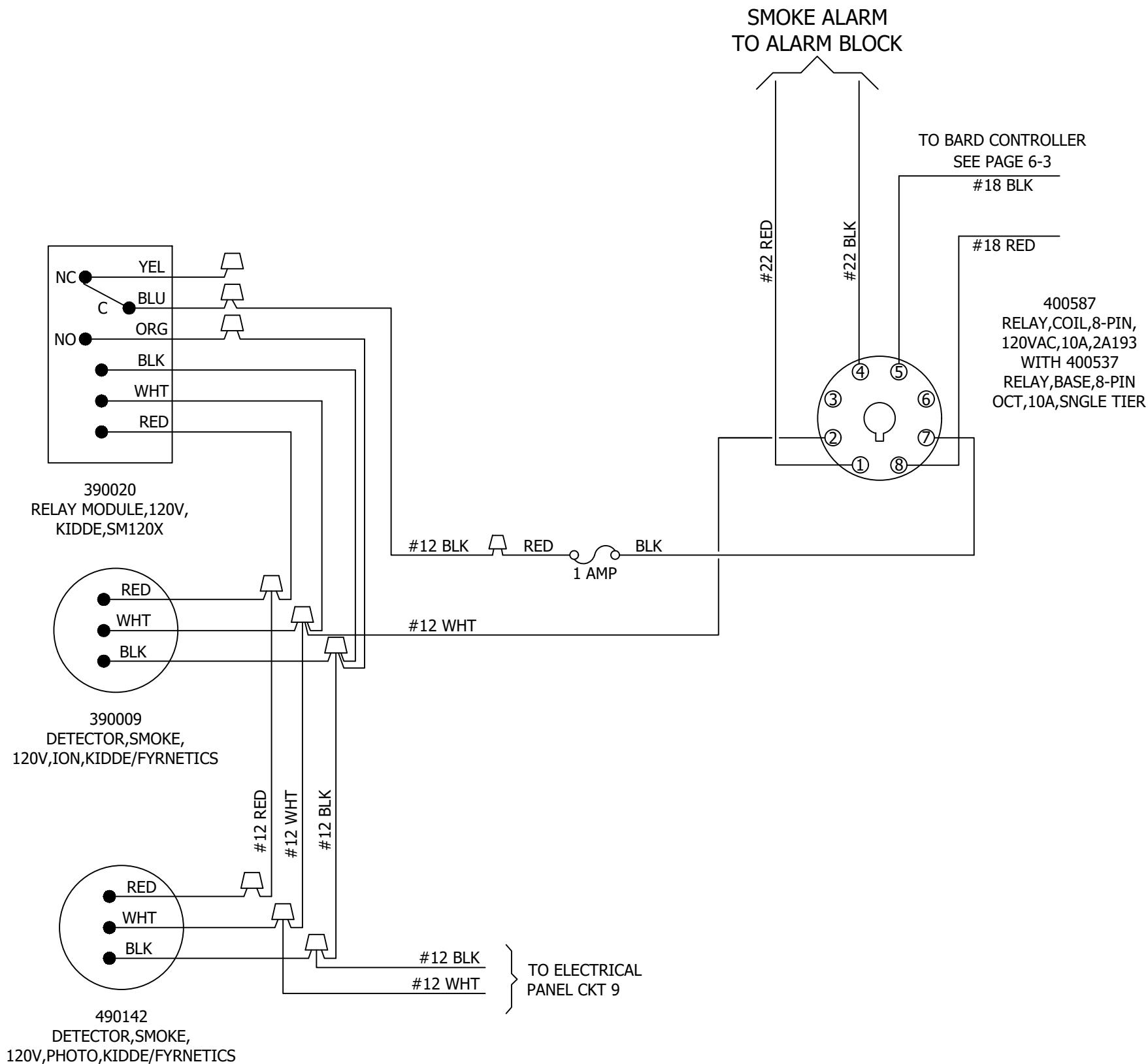


- NOTES:**
1. REF DWG 108-015 FOR ELECTRICAL LEGENDS & STANDARD NOTES.
  2. DO NOT SHARE NEUTRALS UNLESS OTHERWISE NOTED.
  3. WHEN AC & DC WIRING IS LOCATED IN THE SAME BOX, ENCLOSURE, OR WIREWAY, WIRES MUST BE LABELED WITH VOLTAGE TYPE.
  4. LABEL ALL CONDUCTORS WITH CIRCUIT NUMBER AT EVERY SPLICE OR CONNECTION POINT.
  5. CAP RED 27V POWER LEAD CONNECTION OPTION.
  6. DISCONNECT ALL BATTERIES AFTER TESTING, TO BE FIELD CONNECTED ON JOB SITE AFTER COMMERCIAL POWER IS MADE AVAILABLE.

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FILENAME: SLMN02	SCALE: AS NOTED	TOLERANCE: DRWN. BY: MD.ARFAZ
		DATE: 10/7/22
	CHK. BY: N.KIRAN	DATE: 10/7/22
	APP. BY: SREENIVAS.E	DATE: 10/7/22
SHEET NO. 6-1		DRAWING NO.: SLMN02
REV.: IR		



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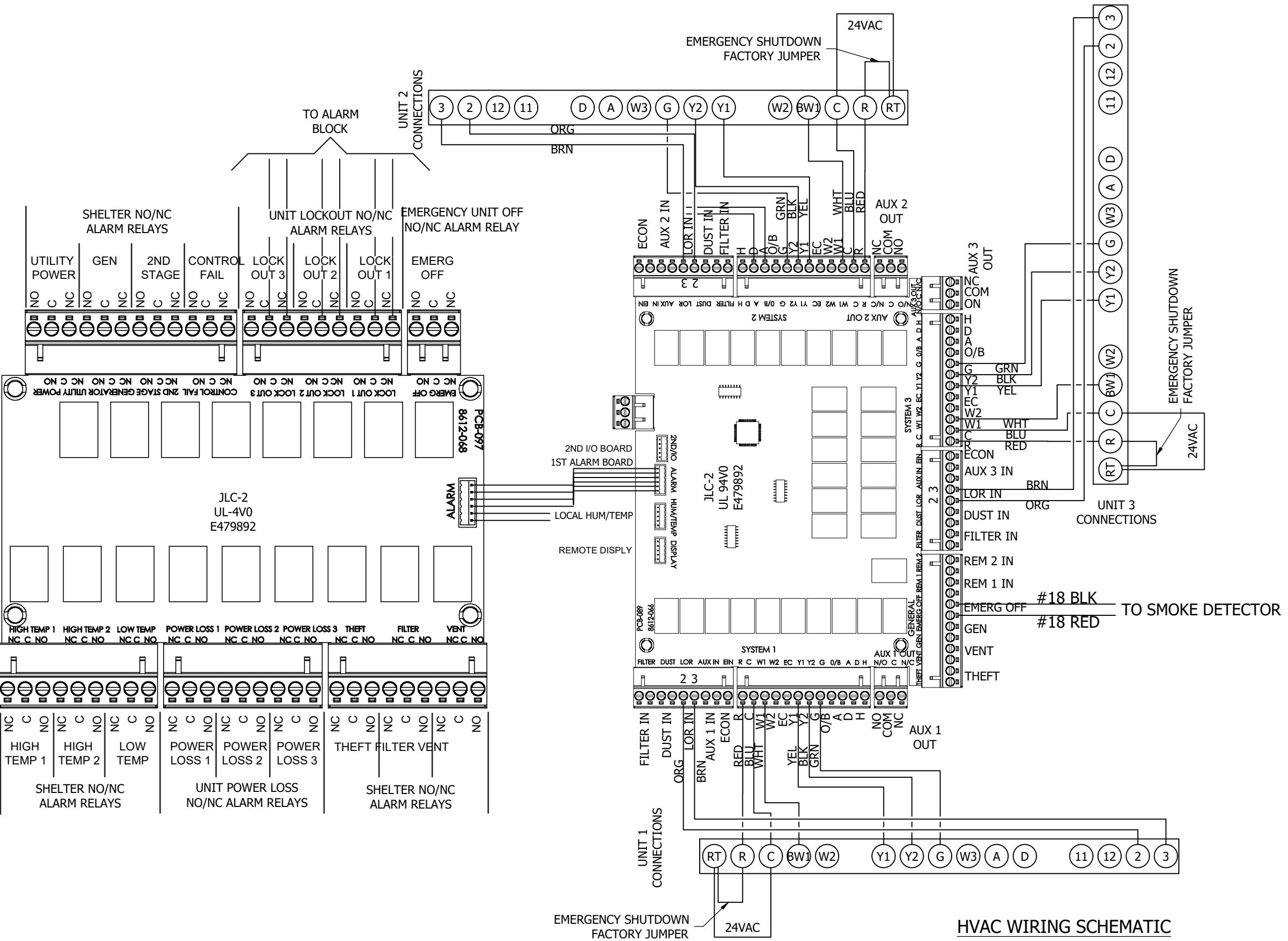
CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"**  
**CONCRETE SHELTER**  
**SMOKE DETECTOR**  
**WIRING SCHEMATIC**

FILENAME: <b>SLMN02</b>	SCALE: <b>N.T.S.</b>	TOLERANCE:
DRWN. BY: <b>MD.ARFAZ</b>	DATE:	<b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE:	<b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE:	<b>10/7/22</b>
SHEET NO. <b>6-2</b>		

DRAWING NO.:  
**SLMN02**

REV.:  
**IR**



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**Sabre Industries™** INNOVATION DELIVERED  
5031 Hazel Jones Road  
Bossier City, LA 71111  
Voice: (318) 213-2900  
Fax: (318) 213-2919  
[www.sabreindustries.com](http://www.sabreindustries.com)

SABRE INDUSTRIES(TM) PROPRIETARY DOCUMENT

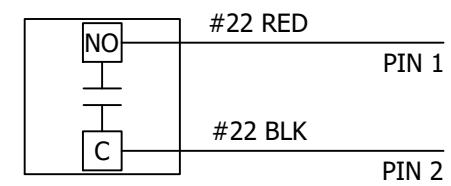
CUSTOMER:  
*LUMEN  
CUMBERLAND*

**PROJECT:  
11-8" X 36'-0"  
CONCRETE SHELTER  
HVAC WIRING  
SCHEMATICS**

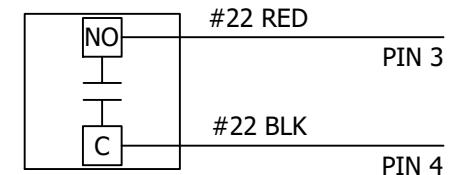
<b>FILENAME:</b> <i>SLMN02</i>	
<b>SCALE:</b> <i>N.T.S.</i>	<b>TOLERANCE:</b>
<b>DRWN. BY:</b> <i>MD.ARFAZ</i>	<b>DATE:</b> <i>10/7/22</i>
<b>CHK. BY:</b> <i>N.KIRAN</i>	<b>DATE:</b> <i>10/7/22</i>
<b>APP. BY:</b> <i>SCREENIVAS.E</i>	<b>DATE:</b> <i>10/7/22</i>

SHEET NO.	6-3	
DRAWING NO.:	<i>SLMN02</i>	REV.:

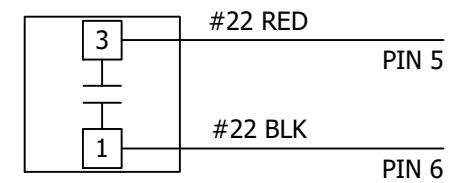
DOOR ALARM (EQUIPMENT ROOM)  
NORMALLY OPEN CONTACTS WILL CLOSE UPON DOOR CLOSURE. WHEN DOOR IS OPENED, CONTACTS OPEN SENDING AN ALARM.



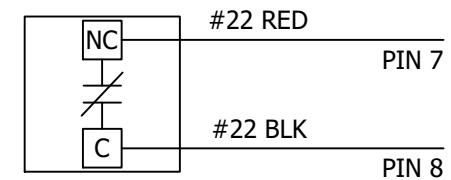
DOOR ALARM (EQUIPMENT ROOM)  
NORMALLY OPEN CONTACTS WILL CLOSE UPON DOOR CLOSURE. WHEN DOOR IS OPENED, CONTACTS OPEN SENDING AN ALARM.



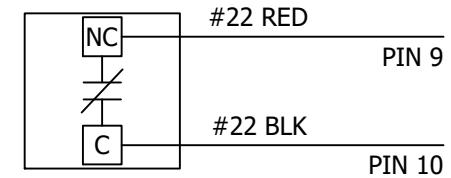
POWER FAIL ALARM  
NORMALLY OPEN CONTACTS WILL CLOSE UPON POWER UP. WHEN POWER IS LOST, CONTACTS WILL OPEN SENDING AN ALARM.



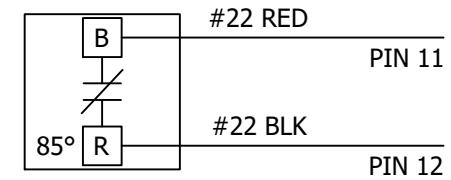
SURGE ARRESTOR ALARM  
NORMALLY CLOSED CONTACTS WILL OPEN WHEN THE SURGE MODULES HAVE FAILED.



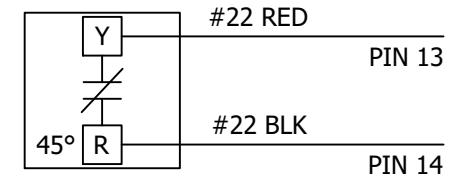
SMOKE ALARM  
NORMALLY CLOSED CONTACTS WILL OPEN WHEN SMOKE IS DETECTED, SHUTTING DOWN AIR MOVING EQUIPMENT AND SENDING AN ALARM.



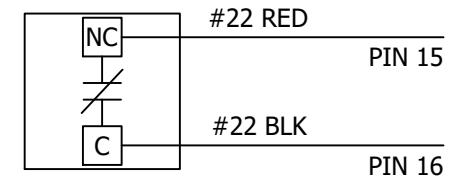
HIGH TEMPERATURE ALARM  
CONTACTS ARE CONNECTED TO OPEN WHEN TEMPERATURE EXCEEDS A SET VALUE, FACTORY SET POINT IS 85°.



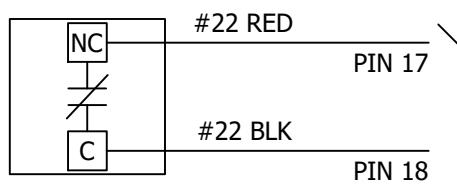
LOW TEMPERATURE ALARM  
CONTACTS ARE CONNECTED TO OPEN WHEN TEMPERATURE FALLS BELOW A SET VALUE, FACTORY SET POINT IS 45°.



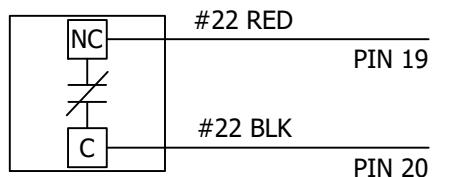
HVAC #1 LOCKOUT ALARM  
NORMALLY CLOSED CONTACTS WILL OPEN WHEN THE HVAC COMPRESSOR LOCKS OUT FROM EITHER HIGH OR LOW PRESSURE.



HVAC #2 LOCKOUT ALARM  
NORMALLY CLOSED CONTACTS WILL OPEN WHEN THE HVAC COMPRESSOR LOCKS OUT FROM EITHER HIGH OR LOW PRESSURE.

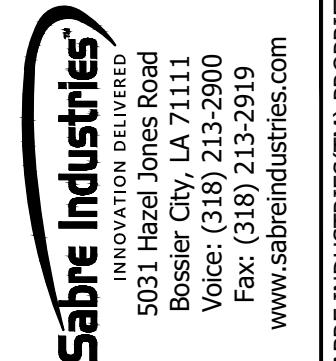


HVAC #3 LOCKOUT ALARM  
NORMALLY CLOSED CONTACTS WILL OPEN WHEN THE HVAC COMPRESSOR LOCKS OUT FROM EITHER HIGH OR LOW PRESSURE.



TO ALARM BLOCK  
SEE NOTES 1 & 2

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CUSTOMER:  
**LUMEN CUMBERLAND**

PROJECT:  
**11-8" X 36'-0"  
CONCRETE SHELTER  
ALARM CONTACT  
DESCRIPTIONS**

FILENAME: <b>SLMN02</b>	SCALE: <b>N.T.S.</b>	TOLERANCE:
DRWN. BY: <b>MD.ARFAZ</b>	DATE:	<b>10/7/22</b>
CHK. BY: <b>N.KIRAN</b>	DATE:	<b>10/7/22</b>
APP. BY: <b>SREENIVAS.E</b>	DATE:	<b>10/7/22</b>
SHEET NO. <b>6-4</b>		

DRAWING NO.:  
**SLMN02**

REV.:  
**IR**

### ALARM CONTACT DESCRIPTIONS (N.T.S.)

#### NOTES:

- ALL ALARM CABLES SHALL BE #22/2 SOLID, SHIELDED CABLE (P/N 400011) UNLESS NOTED OTHERWISE.
- TERMINATE ALARM WIRES TO TERMINAL STRIP ON LEFT SIDE .