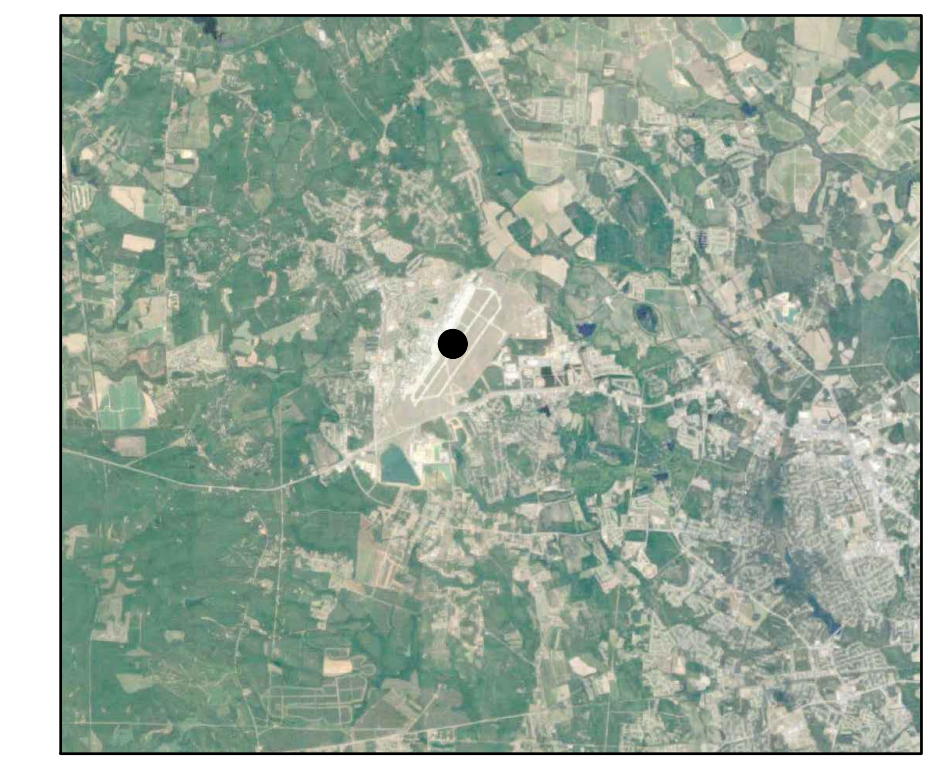
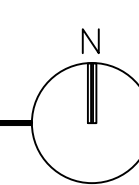




----- HAUL ROUTE



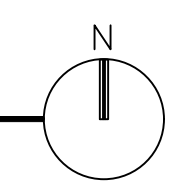
VICINITY MAP  
NOT TO SCALE



BASE CONTRACTING OFFICE (B216)

PROJECT LOCATION  
FAC 207, 2050HP,  
2010HP, AND 205PLN  
BASE CIVIL ENGINEER (B250)

BASE MAP  
NOT TO SCALE



REV	DATE	DESCRIPTION	BY	APPROVED

DEPARTMENT OF THE AIR FORCE  
AIR COMBAT COMMAND  
**SHAW A.F.B. S.C.**  
CIVIL ENGINEER OFFICE

AFCEC A&E POL SERVICES FOR SHAW AFB  
CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
ISSUED FOR CONSTRUCTION

COVER SHEET

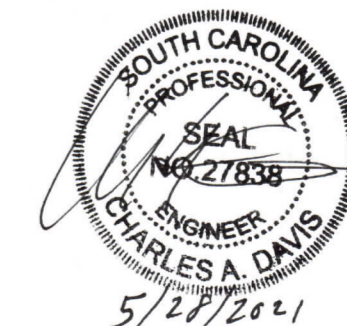
CHECKED BY SL	DRAWN BY CC	DATE 05/26/2021	SCALE N.T.S.
PROJECT NO. 60590568	DRAWING NO. 000-G-001	SHEET 1 OF 36	
REVIEWED CORROSION ENGINEER	APPROVED CHIEF ENGINEER		
REVIEWED CONSTRUCTION MANAGEMENT	APPROVED PROJECT ENGINEER		
REVIEWED FOR FIRE REGULATIONS	APPROVED USING AGENCY		
REVIEWED FOR SAFETY PROVISIONS	APPROVED COMMUNITY PLANNER		
REVIEWED ENVIRONMENTAL	REVIEWED OTHER		
REVIEWED MAINTENANCE ENGINEERING	REVIEWED OTHER		

**FACILITY 207 LIFE SAFETY COMPLIANCE MATRIX:**

1. APPLICABLE CODES AND STANDARDS:
  - 1.1. UFC 3-600-01, CHANGE 2, 25 MARCH 2018
  - 1.2. UFC 4-010-01, CHANGE 1 1 OCTOBER 2013, DoD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS
  - 1.3. NFPA 101, LIFE SAFETY CODE, 2018 EDITION
  - 1.4. IBC, INTERNATIONAL BUILDING CODE, 2015 EDITION
2. BUILDING CODE ANALYSIS:
  - 2.1. THE EXISTING CONSTRUCTION TYPE FOR THE FACILITY SHALL REMAIN, TYPE IIB, PER THE IBC TABLE 601. THE FACILITY IS AN EXISTING SINGLE-STORY BUILDING (12 FEET IN HEIGHT) WITH A TOTAL FLOOR AREA OF 400 SF. BOTH THE HEIGHT AND AREA OF THE FACILITY ARE LESS THAN THE STORIES/HEIGHT AND AREA REQUIREMENTS OF THE FACILITY FOR A TYPE IIB, BUSINESS OCCUPANCY (55 FEET AND 3 STORIES FOR A NON-SPRINKLERED BUILDING WITH A MAXIMUM ALLOWABLE FLOOR AREA OF 23,000 SF).
3. CLASSIFICATION OF OCCUPANCY:
  - 3.1. PER NFPA 101 AND THE ANTICIPATED USE OF THE SPACE, FACILITY 207 IS CLASSIFIED AS AN EXISTING BUSINESS OCCUPANCY. THE USE OF THE SPACE WILL NOT BE CHANGED THE OCCUPANCY CLASSIFICATION IS UNCHANGED.
  - 3.2. BASED ON THE USE OF THE FACILITY, THE BUILDING WOULD BE CLASSIFIED AS A BUSINESS OCCUPANCY PER IBC SECTION 304.
4. FIRE RATINGS:
  - 4.1. NONE PROVIDED. NOT APPLICABLE.
5. PROTECTION OF OPENINGS:
  - 5.1. THERE ARE NO HORIZONTAL OR VERTICAL PENETRATIONS OF OPENINGS OF FIRE RATED COMPONENTS. NO FIRE RATED COMPONENTS PROVIDED. NOT APPLICABLE.
6. SEPARATION FROM HAZARDS:
  - 6.1. NONE. NOT APPLICABLE.
7. INTERIOR FINISH RATINGS:
  - 7.1. INTERIOR WALL AND CEILING FINISHES WILL BE CLASS A OR CLASS B (NFPA 101 SECTION 39.3.3.2.1).
  - 7.2. NOT APPLICABLE FOR AN EXISTING BUSINESS OCCUPANCY INTERIOR FLOOR FINISH (NFPA 101 SECTION 39.3.3.3).
8. OCCUPANT LOAD:
  - 8.1. THE USE AND ARRANGEMENT OF FACILITY 207 IS TO BE UNALTERED. OCCUPANT LOAD OF 3 BASED UPON BUSINESS USE (150SF/OCCUPANT) PER NFPA 101 TABLE 7.3.1.2.
9. EXITS AND EGRESS:
  - 9.1. THE USE AND ARRANGEMENT OF FACILITY 207 IS TO BE UNALTERED. MINIMUM EGRESS WIDTH OF 32 INCHES REQUIRED (NFPA 101 7.2.1.2.3.2). ACTUAL EGRESS WIDTH OF 34 INCHES PROVIDED.
10. FIRE EXTINGUISHERS:
  - 10.1. PER NFPA 101 SECTION 39.3.5, PORTABLE FIRE EXTINGUISHERS ARE TO BE PROVIDED IN FACILITY 207.
11. FIRE DETECTION AND ALARM SYSTEM:
  - 11.1. AS THE BUILDING IS NOT MORE THAN THREE STORIES (SINGLE STORY) AND HAS A TOTAL OCCUPANCY OF LESS THAN 1,000 ACUTAL OCCUPANTS, A FIRE ALARM SYSTEM IS NOT REQUIRED (NFPA 101 SECTION 6.8).
12. FIRE SPRINKLER SYSTEM:
  - 12.1. WITH THE TOTAL BUILDING AREA BEING LESS THAN 15,000 SF AND IS OF TYPE II CONSTRUCTION, NO AUTOMATIC SPRINKLER SYSTEM IS REQUIRED (UFC 3-600-01 SECTION 9-7.2.1.1).
13. WATER SUPPLIES:
  - 13.1. NOT APPLICABLE.
14. LOCATION OF FIRE DEPARTMENT CONNECTION:
  - 14.1. NOT APPLICABLE.
15. LOCATION OF WATER CONTROL VALVES:
  - 15.1. NOT APPLICABLE.
16. STANDPIPE SYSTEMS:
  - 16.1. NOT APPLICABLE.
17. MASS NOTIFICATION:
  - 17.1. NOT APPLICABLE. AS THE BUILDING IS A LOW OCCUPANCY STRUCTURE THAT DOES NOT MEET THE REQUIREMENTS OF AN INHABITED BUILDING, THE REQUIREMENTS OF UFC 4-010-01 DO NOT APPLY (SECTION 1-9.1). NO MASS NOTIFICATION SYSTEM REQUIRED.
18. AHJ APPROVED EQUIVALENCIES:
  - 18.1. NOT APPLICABLE. NONE REQUESTED.

**PROJECT REFERENCE MATRIX**

Deficiency Number and Description (DLA Facility)	SHW027 (207)	SHW036 (2010HP)	SHW037 (2050HP)	SHW057 (205PLN)
DRAWINGS				
000-G-001 COVER SHEET	X	X	X	X
000-G-002 PROJECT REFERENCE MATRIX & FACILITY 207 LIFE SAFETY	X	X	X	X
000-G-003 NOTES, SYMBOLS, AND ABBREVIATIONS	X	X	X	X
000-G-004 CIVIL CONSTRUCTION NOTES		X	X	X
000-G-005 CIVIL CONSTRUCTION NOTES		X	X	X
000-G-006 STRUCTURAL GENERAL NOTES		X	X	
000-E-001 ELECTRICAL LEGEND	X	X	X	
000-C-101 OVERALL SITE PLAN	X	X	X	X
207-C-121 FAC207 AND FAC2050HP (NORTH) ENLARGED SITE PLAN			X	X
2010HP-C-122 FAC2010HP (SOUTH) ENLARGED SITE PLAN	X	X		
207-C-501 CIVIL DETAILS	X	X	X	X
207-S-001 FAC 207 BUILDING ABBREVIATIONS AND WIND LOADS	X			
207-S-002 WIND LOAD DIAGRAMS	X			
207-S-103 FAC 207 BUILDING STRUCTURAL ROOF PLAN	X			
207-S-301 FAC 207 BUILDING SECTION & DETAILS	X			
207-S-302 FAC 207 BUILDING CMU DETAILS	X			
207-AD-100 DEMOLITION DRAWINGS	X			
207-A-100 PLANS, RCP, AND ELEVATIONS	X			
207-A-300 BUILDING SECTION AND ROOF DETAILS	X			
207-A-400 RESTROOM, FINISH, AND CEILING DETAILS	X			
207-A-500 WINDOW AND FINISH DETAILS	X			
207-A-501 DOOR AND FRAME ELEVATIONS AND DETAILS	X			
207-PD-100 DEMOLITION DRAWINGS	X			
207-P-100 PLAN, DETAILS, AND SCHEDULES	X			
207-M-001 MECHANICAL NOTES AND DETAILS	X			
207-M-100 MECHANICAL DEMO PLAN, NEW WORK PLAN, AND SCHEDULES	X			
207-E-100 FACILITY 207 ELECTRICAL PART PLAN	X			
207-E-401 FACILITY 207 ELECTRICAL SCHEDULES	X			
2010HP-S-101 FAC 2010HP STRUCTURAL FOUNDATION FRAMING & SECTION		X		
2010HP-A-101 FAC 2010HP PLANS AND SECTION		X		
2010HP-E-101 ELECTRICAL PART PLAN		X		
2050HP-S-102 FAC 2050HP STRUCTURAL FOUNDATION FRAMING & SECTION			X	
2050HP-A-102 FAC 2050HP PLANS AND SECTION			X	
2050HP-E-102 ELECTRICAL PART PLAN			X	
2010HP/2050HP-A-500 CANOPY DETAILS		X	X	
205PLN-C-121 FAC205PLN (EAST) ENLARGED SITE PLAN				X



20th CIVIL ENGINEER SQUADRON  
 SHAW AIR FORCE BASE, SOUTH CAROLINA 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

A&E SERVICES POL FOR SHAW AFB  
 CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
 ISSUED FOR CONSTRUCTION

PROJECT REFERENCE MATRIX & FACILITY 207 LIFE SAFETY  
 DRAWING NO. 000-G-002  
 DATE 06/26/2021  
 SHEET 2 OF 36

REVISION	DATE	DESCRIPTION OF REVISION



GENERAL NOTES:

1. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE CURRENT REVISION.
2. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY ENVIRONMENTAL PROTECTION AGENCY PERMITTING WHERE REQUIRED. CONTRACTOR SHALL COORDINATE ALL ENVIRONMENTAL ISSUES WITH SHAW AFB.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.
5. CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE OWNER OR ENGINEER IMMEDIATELY FOR RESOLUTION.
6. CONTRACTOR SHALL REFER TO THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION, BY EAS PROFESSIONALS, INC. (DATED MARCH 2019) FOR SOIL BORING AND GROUNDWATER DATA, SOIL SUITABILITY, CONSTRUCTION CONSIDERATIONS, SITE PREPARATION RECOMMENDATIONS, ETC.
7. SURVEY DATA IS BASED UPON THE PROJECT TOPOGRAPHIC SURVEY PROVIDED BY AECOM, DATED 02/2019. HORIZONTAL COORDINATES ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM. VERTICAL ELEVATIONS IN SITE DRAWINGS ARE BASED ON NAVD88. COORDINATES, BEARINGS, AND ELEVATIONS ARE BASED UPON CONTROL POINTS SPECIFIED IN THE SURVEY DOCUMENT. REFER TO THIS SURVEY FOR ADDITIONAL INFORMATION. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME THESE DRAWINGS WERE PREPARED, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE INDICATED LOCATION OF UNDERGROUND UTILITIES, STRUCTURES, AND FACILITIES IS APPROXIMATE, AND REFLECTS THE BEST INFORMATION AVAILABLE FROM SURVEYS AND RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT SIZE, LOCATION, DEPTH, HEIGHT, ELEVATION, DIMENSION, AND EXTENT OF ALL UNDERGROUND AND OVERHEAD FACILITIES AND OTHER FEATURES AFFECTING THEIR WORK PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY THAT MAY AFFECT SUCH FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FAILURE TO COMPLY WITH THESE INSTRUCTIONS.
8. THE LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING FEATURES INCLUDING STRUCTURES, FIXTURES, ASSEMBLIES, PAVEMENTS, UTILITIES, ETC. AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER TO OBTAIN ANY AVAILABLE RECORD DRAWINGS AND SHALL DETERMINE THE EXACT LOCATIONS AND ELEVATIONS IN THE FIELD. THE CONTRACTOR SHALL ANTICIPATE THAT SCANNING WILL BE NECESSARY ALONG ALL PORTIONS OF WORK THAT INVOLVE EXCAVATION BELOW EXISTING GRADE. ADDITIONALLY, EXCAVATION USING LIGHT EQUIPMENT AND HAND METHODS WILL BE NECESSARY IN AREAS NEAR EXISTING UNDERGROUND UTILITIES AND STRUCTURES TO AVOID DAMAGING THESE FACILITIES.
9. THE LOCATIONS AND ELEVATIONS OF CONNECTIONS TO UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD PRIOR TO INSTALLING ANY NEW WORK THAT CROSSES OR CONNECTS TO EXISTING UTILITY SYSTEMS. HAND DIGGING AND SCANNING SHALL BE UTILIZED TO LOCATE EXISTING UTILITIES. LOCATIONS OF NEW UTILITIES SHALL BE ADJUSTED IN A MANNER APPROVED BY THE CONTRACTING OFFICER TO AVOID CONFLICTS. DAMAGES TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE GOVERNMENT.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF, DAMAGE TO, AND/OR INTERRUPTION OF ANY UTILITY, EITHER ABOVE OR BELOW GROUND RESULTING FROM CONSTRUCTION OPERATIONS.
11. ALL EXCAVATION, TRENCHING, SHEETING, SHORING AND BRACING SHALL BE INSTALLED AS REQUIRED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING OSHA (29 CFR 1926) AND EM 385-1-1 (U.S. ARMY CORPS OF ENGINEERS SAFETY MANUAL).
12. IF SUITABLE BACKFILL AND FILL MATERIALS ARE NOT AVAILABLE ON GOVERNMENT PROPERTY, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL FROM AN APPROVED OFFSITE SOURCE. CONTRACTOR SHALL DISPOSE OF EXCESS EXCAVATED MATERIAL OFFSITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. ANY MATERIALS ENTERING OR LEAVING THE AIR STATION SHALL BE TESTED FOR CONTAMINANTS TO THE SATISFACTION OF THE CONTRACTING OFFICER AS DESCRIBED IN THE SPECIFICATIONS.
13. UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITION TO MATCH ADJACENT GRADES AND SLOPE TO DRAIN, AND SHALL REPLACE ANY DISTURBED PAVED OR GRASSED AREAS IN KIND. REPLACE ANY EXISTING PAVEMENT MARKINGS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITY IN KIND.
14. ALL ITEMS INDICATED TO BE REMOVED OR DEMOLISHED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM GOVERNMENT PROPERTY AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, UNLESS OTHERWISE NOTED. NO SALVAGE VALUE IS EXPRESSED OR IMPLIED BY THESE CONTRACT DOCUMENTS FOR ANY ITEMS TO BE REMOVED OR DEMOLISHED.
15. ALL CONTRACTORS BIDDING ON THIS PROJECT ARE REQUIRED TO VISIT THE SITES OF THIS WORK AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS. ARRANGEMENTS FOR SITE VISITS SHALL BE MADE THROUGH AFCEC AND SHAW AFB.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE CONTRACTOR'S EQUIPMENT, MATERIALS, AND PERSONNEL, AND SHALL PROVIDE ADEQUATE BARRIERS TO PREVENT RISK TO OTHERS FROM THE CONTRACTOR'S ACTIVITIES.
17. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING CONDITIONS PRIOR TO PROCURING MATERIALS AND PERFORMING ANY WORK UNDER THIS CONTRACT AND NOTIFY THE CONTRACTING OFFICER IN WRITING OF ANY DIFFERENCES BEFORE COMMENCING WITH ANY CONSTRUCTION.
18. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS AND ADVISE THE CONTRACTING OFFICER OF ANY CONFLICTS OF REPRESENTATION BETWEEN DRAWINGS AND/OR SPECIFICATIONS PRIOR TO COMMENCING CONSTRUCTION.

19. WHERE ACTUAL DIMENSIONS AND SIZES ARE PROVIDED IN THE DRAWINGS, THEY SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.
20. THE USE OF EXPLOSIVES OR BLASTING IS PROHIBITED.
21. ALL PAVEMENT DISTURBED BY WORK IN THIS PROJECT SHALL BE REPLACED IN ACCORDANCE WITH BASE ENGINEERING STANDARDS, EXCEPT AS INDICATED OTHERWISE. MATCH THE EXISTING GRADES, THICKNESSES, AND WIDTH, UNLESS INDICATED OTHERWISE.
22. THE CONTRACTOR SHALL PHASE ALL WORK ON UTILITIES SO THAT EXISTING UTILITIES REMAIN IN OPERATION UNTIL NEW UTILITIES ARE PUT INTO OPERATION. AT NO TIME SHALL ANY UTILITIES BE TAKEN OUT OF OPERATION UNLESS INDICATED OTHERWISE OR IT HAS BEEN APPROVED BY THE CONTRACTING OFFICER.
23. PROVIDE SOD IN ACCORDANCE WITH THE SPECIFICATIONS IN ALL UNPAVED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS.
24. IF ANY ARCHAEOLOGICAL/HISTORICAL ITEMS ARE ENCOUNTERED DURING CONSTRUCTION, STOP WORK IN THE IMMEDIATE VICINITY AND NOTIFY THE CONTRACTING OFFICER. THE BASE WILL REVIEW THE MATERIAL FOUND AND PROVIDE THE CONTRACTOR WITH DIRECTION. REFER ALSO TO NOTE 6, SITE ACCESS AND SAFETY NOTES, SHEET 000-G-005.
25. THE CONTRACTOR SHALL HAVE THE OPTION OF PROVIDING PRECAST VERSIONS OF UNDERGROUND CONCRETE UTILITY STRUCTURES. SUCH UNITS SHALL BE OF DIMENSIONS AND PERFORMANCE CONSISTENT WITH THE STRUCTURES INDICATED IN THESE PLANS AND SHALL MEET APPROPRIATE CODES AND STANDARDS.
26. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE APPLICABLE AHJ(S) FOR ANY DEWATERING. ANY DEWATERING OPERATIONS MUST INCORPORATE THE USE AND MAINTENANCE OF FILTRATION BAGS TO CONTROL SEDIMENTS IN THE EFFLUENT AND TURBIDITY.
27. IF ANY UNANTICIPATED HAZARDOUS MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, STOP WORK IN THE IMMEDIATE VICINITY AND NOTIFY THE CONTRACTING OFFICER. THE BASE WILL REVIEW THE MATERIAL FOUND AND PROVIDE THE CONTRACTOR WITH DIRECTION.
28. BEFORE INSTALLING ANY FEATURES THAT PENETRATE BELOW GRADE, THE CONTRACTOR SHALL VERIFY THEY DO NOT CONFLICT WITH EXISTING OR OTHER NEW PROJECT FEATURES. LOCATIONS FOR INDIVIDUAL ITEMS SHALL BE ADJUSTED IN A MANNER ACCEPTABLE TO THE CONTRACTING OFFICER TO MITIGATE FOR ANY CONFLICTS.
29. ALL EXTERIOR STEEL, BOLLARDS, SUPPORT POSTS, RAILINGS, STAIRS, AND METAL FABRICATIONS SHALL HAVE A HOT DIP GALVANIZED COATING PER ASTM A123 OR A153, AS APPLICABLE. GALVANIZED AREAS DAMAGED OR REMOVED DURING FABRICATION OR INSTALLATION SHALL BE REPAIRED PER ASTM A780.
30. TO THE GREATEST EXTENT PRACTICAL, ALL WELDING OF ELEMENTS SHALL BE PERFORMED AT THE FABRICATION SHOP (NOT IN THE FIELD) PRIOR TO ANY COATING OR GALVANIZING THAT SHOULD ALSO BE SHOP PERFORMED TO THE GREATEST EXTENT PRACTICAL.
31. THE CONTRACTOR SHALL MAINTAIN ACCURATE AS-BUILT DRAWINGS AT THE PROJECT SITE AND PROVIDE TO THE CONTRACTING OFFICER AT CONSTRUCTION COMPLETION PER AHJ / SHAW AFB REQUIREMENTS.
32. THERE MAY BE OTHER CONTRACTS IN PROGRESS CONCURRENT WITH THIS CONTRACT. WHILE THE WORK FOR THESE PROJECTS IS NOT IN THIS CONTRACT, THE CONTRACTOR SHALL COOPERATE WITH THE CONTRACTING OFFICER IN COORDINATING BETWEEN ALL WORK ADJACENT, CROSSING, OR CONNECTING TO WORK OF OTHER CONTRACTORS.
33. SEE EROSION, SEDIMENTATION AND POLLUTION CONTROL NOTES ON SHEET 000-G-005.
34. THE CONTRACTOR SHALL VISUALLY INSPECT ALL EROSION AND SEDIMENT CONTROL BARRIERS AT THE START OF EACH WORK DAY AND SHALL REPAIR ANY DAMAGE.
35. ANY PERSONNEL WHO WILL BE INVOLVED WITH EXCAVATION OR DEWATERING ACTIVITIES ON THIS PROJECT MUST HAVE COMPLETED OSHA HAZWOPER TRAINING.
36. REFER TO ALL REFERENCED UFC AND OTHER SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

20th CIVIL ENGINEER SQUADRON

428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

CIVIL CONSTRUCTION NOTES

ENGINEER: M.J.R. BOGGS  
PROJECT NUMBER: 000-G-004  
DATE: 05/26/2021  
SHEET: 4 OF 36



REVISION	DATE	DESCRIPTION OF REVISION	REV BY

**SITE ACCESS AND SAFETY NOTES:**

1. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL OSHA AND SHAW AFB SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
2. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION WORK PER STANDARD 1910.12.
3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
4. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL LOCATE ALL EXISTING BURIED UTILITIES BY HAND-DIG METHODS. THE CONTRACTOR SHALL OBTAIN A SHAW AFB EXCAVATION PERMIT PRIOR TO ALL EXCAVATIONS.
5. ALL MODIFICATIONS TO THE EXISTING SITE SHALL BE COORDINATED WITH SHAW AFB.
6. THE PROPOSED PROJECT WILL NOT ADVERSELY AFFECT SIGNIFICANT HISTORICAL OR ARCHEOLOGICAL RESOURCES UNDER THE PROVISIONS OF SECTION 267.061, F.S. IF EVIDENCE OF THE EXISTENCE OF HISTORIC OR ARCHEOLOGICAL RESOURCES IS DISCOVERED OR OBSERVED AT DEVELOPMENT SITES OR DURING DEVELOPMENT ACTIVITIES AFTER FINAL APPROVAL, ALL WORK SHALL CEASE IN THE AREA OF EFFECT AS DETERMINED BY THE CONTRACTING OFFICER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IMMEDIATELY, AND THE DEPARTMENT OF HISTORICAL RESOURCES WITHIN TWO WORKING DAYS. EXAMPLES OF EVIDENCE OF HISTORIC RESOURCES INCLUDE WHOLE OR FRAGMENTARY STONE TOOLS, SHELL TOOLS, ABORIGINAL OR HISTORIC POTTERY, HISTORIC GLASS, HISTORIC BOTTLES, BONE TOOLS, HISTORIC BUILDING FOUNDATIONS, SHELL MOUNDS, SHELL MIDDENS, OR SAND MOUNDS. THE CONTRACTING OFFICER SHALL ASSESS THE SIGNIFICANCE OF THE FINDS AND MITIGATE ANY ADVERSE EFFECTS AS SOON AS POSSIBLE, BUT NO LATER THAN THREE WORKING DAYS OF NOTIFICATION.
7. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND SHALL NOT SCALE FROM DRAWINGS. THE DIMENSIONS OF SPECIFIED AND FURNISHED PRODUCTS AND MATERIALS TAKE PRECEDENCE OVER DIMENSIONS AND NOTES SHOWN ON THE DRAWINGS.
8. THE CONTRACTOR SHALL KEEP ALL ROADS AND PAVEMENT AREAS CLEAN OF CONSTRUCTION DEBRIS, MUD, ETC. AT ALL TIMES. CONTRACTOR TO PROVIDE EQUIPMENT AND PERSONNEL TO CLEAN ANY ROADS AND PAVEMENT AREAS AS REQUESTED BY THE CONTRACTING OFFICER. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS TO ROADS AND PAVEMENT AREAS, ETC. DUE TO DAMAGE BY THEIR CONSTRUCTION ACTIVITIES.
9. ACCESS ROUTES MAY BE SUBJECT TO CHANGE BASED ON OPERATIONAL REQUIREMENTS FOR THE BASE. POTENTIAL SCHEDULE IMPACTS SHALL BE COORDINATED WITH THE CONTRACTING OFFICER.
10. THE CONTRACTOR SHALL PROVIDE AND INSTALL A PROFESSIONALLY PAINTED SIGN, MEETING CONTRACTING OFFICER APPROVAL, AT THE CONSTRUCTION ENTRANCE TO DIRECT MATERIAL SUPPLIERS AND EMPLOYEES TO THE CONSTRUCTION SITE.
11. CONTRACTOR'S STAGING AREA LAYOUT SHALL BE SUBJECT TO APPROVAL OF CONTRACTING OFFICER. LOCATION OF CONTRACTOR'S STAGING AREA SHALL BE AS INDICATED AND AS DIRECTED BY THE CONTRACTING OFFICER. WHEN NOT ENGAGED IN ACTIVE CONSTRUCTION OPERATIONS, THE CONTRACTOR'S CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE PARKED IN THE CONTRACTOR'S STAGING AREA.
12. ALL HAUL ROUTES (EXISTING ROADS OR CONTRACTOR ESTABLISHED PATHS) SHALL BE MAINTAINED SUCH THAT UNOBSTRUCTED ACCESS WILL BE PROVIDED AT ALL TIMES TO THE STAGING AREA AND FROM THE STAGING AREA TO THE WORK SITE. FACILITATE GOVERNMENT ACCESS AT ALL TIMES. THE HAUL ROAD LOCATIONS SHALL BE APPROVED BY THE CONTRACTING OFFICER.
13. THE ONLY PERSONNEL ALLOWED INSIDE THE CONSTRUCTION LIMITS SHALL BE INDIVIDUALS INVOLVED WITH THIS PROJECT'S CONSTRUCTION, OTHER CONTRACTORS PERFORMING GOVERNMENT AUTHORIZED WORK, GOVERNMENT SECURITY PERSONNEL, AND OTHER INDIVIDUALS SPECIFICALLY AUTHORIZED BY THE GOVERNMENT.
14. THE CONTRACTOR SHALL COORDINATE ACTIVITIES THROUGHOUT THE PROJECT IN A MANNER THAT ALLOWS EMERGENCY ACCESS TO ALL EXISTING ROADWAYS, ACCESS ROUTES AND BUILDINGS AT ALL TIMES WITHOUT DELAYS TO EMERGENCY VEHICLE RESPONSE TIME.
15. THE CONTRACTOR SHALL MAINTAIN THE ACCESS ROUTE TO BE FREE FROM DEBRIS CAUSED FROM CONSTRUCTION ACTIVITY ON A DAILY BASIS.
16. STAGING AREA AND ANY OTHER AREA DISTURBED BY CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT THE END OF CONSTRUCTION.
17. THE CONTRACTOR SHALL COORDINATE WITH CONTRACTING OFFICER FOR ANY GOVERNMENT-OWNED EQUIPMENT REQUIRING RELOCATION TO COMPLETE WORK.
18. ALL CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE MARKED WITH COMPANY PAINTED DESIGNS, INSIGNIAS OR OTHER COMPANY MARKINGS, WHICH ARE CLEARLY VISIBLE.
19. CONSTRUCTION EQUIPMENT SHALL HAVE AUTOMATIC SIGNALING DEVICES TO SOUND AN ALARM WHEN MOVING IN REVERSE.
20. ONLY RUBBER-TIRED VEHICLES SHALL BE ALLOWED ON EXISTING PAVEMENT THAT IS TO REMAIN.
21. ANY DAMAGE TO ROADS AND PAVEMENT DUE TO CONSTRUCTION EQUIPMENT OR CONSTRUCTION TRAFFIC SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT HIS/HER OWN EXPENSE TO THE SATISFACTION OF THE CONTRACTING OFFICER.
22. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES ONE FIRE LANE FREE FROM CONSTRUCTION.
23. THE CONTRACTOR SHALL INSPECT WORK AREAS AT THE END OF EACH DAY AND ASSURE THEY ARE CLEANED TO THE SATISFACTION OF THE CONTRACTING OFFICER.
24. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CONTRACTING OFFICER AND OBTAIN APPROVAL BEFORE OPEN CUTTING OF ANY ROADWAY. THE CONTRACTOR SHALL MAINTAIN TRAFFIC ALONG ALL ROADWAYS AT ALL TIMES AND PROVIDE NECESSARY FLAGMEN, TRAFFIC CONTROL SIGNS AND BARRICADES, IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND APPLICABLE PORTIONS OF STATE DOT ROADWAY AND TRAFFIC DESIGN STANDARDS, WHEN WORKING WITHIN ROADWAYS.

25. OPEN FLAMES, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURES APPROVED BY THE CONTRACTING OFFICER. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE SHAW AFB SAFETY DEPARTMENT AND OBTAIN A HOT WORK PERMIT BEFORE CONDUCTING ANY HOT WORK

**EROSION, SEDIMENTATION, AND POLLUTION CONTROL NOTES:**

1. DRAWINGS 000-C-101, 207-C-121, 207TBD-C-122, 9300TBD-C-121, 000-C-501, AND 000-C-502 CONTAINED IN THIS SET HAVE BEEN PREPARED TO INDICATE MINIMUM REQUIRED LEVELS OF PROTECTIVE MEASURES TO BE IMPLEMENTED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING THE SERVICES OF A PROFESSIONAL ENGINEER QUALIFIED TO DEVELOP AND MONITOR ONGOING MEASURES NECESSARY TO SATISFY LOCAL, STATE AND FEDERAL REQUIREMENTS AND MAKE ALL NECESSARY INSPECTIONS, CERTIFICATIONS, AND NOTIFICATIONS. SEE ALSO SPECIFIED REQUIREMENTS FOR THE PROJECT STORMWATER POLLUTION PROTECTION PLAN (SWPPP) AND ENVIRONMENTAL PROTECTION PLAN.
2. THE CONTRACT PLANS INCLUDE DRAWINGS ESTABLISHING THE MINIMUM EROSION, SEDIMENT AND POLLUTION CONTROL MEASURES FOR THE CONTRACTOR TO IMPLEMENT. MEASURES MUST BE REMOVED UPON PROJECT COMPLETION AND CONTRACTOR DEMOBILIZATION. THE CONTRACTOR SHALL NOT CONSIDER THESE PLANS AS A COMPLETE AND THOROUGH DEPICTION OF ALL NECESSARY PERMANENT CONTROL MEASURES REQUIRED FOR THIS PROJECT. THE MEASURES SHOWN INDICATE ONLY THE MINIMUM MEASURES REQUIRED BY THE GOVERNMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PLANS, DETERMINE THE MOST APPROPRIATE MEANS OF PROTECTING THESE AREAS DEPENDING ON THE INTENDED APPROACH TO PROJECT WORK, AND INCORPORATE ANY ADDITIONAL MEASURES, ABOVE AND BEYOND THOSE SHOWN IN THE PLANS.
3. SOIL STOCKPILES SHALL BE STABILIZED WITH TEMPORARY COVERS, VEGETATION, OR OTHER SUITABLE MEANS. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT ITS MOVEMENT BY WIND FORCES.
4. THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ALL FERTILIZER, HYDROCARBON OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO THE EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER.
5. A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATIONS SHALL COLLECT ALL SANITARY WASTE FROM PORTABLE UNITS. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THIS PORTION OF THE SWPPP.
6. QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN CALENDAR DAYS OR WITHIN 24 HOURS OF THE END OF A RAINFALL. INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH WHERE SITES HAVE BEEN FINALLY STABILIZED.
  - 6.1. DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
  - 6.2. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
  - 6.3. SILT FENCES
  7. DAMAGED SILT FENCES AND DEVICES SHALL BE REPLACED IMMEDIATELY. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF SILT FENCES UNTIL THE PROJECT IS COMPLETED AND ALL BARED SOILS ARE STABILIZED. SILT FENCES SHALL REMAIN UNTIL THE SITE HAS BEEN FULLY STABILIZED. SILT FENCES SHALL BE REMOVED FOLLOWING PROJECT COMPLETION AND SOIL STABILIZATION OR AS DIRECTED BY THE CONTRACTING OFFICER.
  8. THE LOCATION SHOWN FOR THE SILT FENCES ARE APPROXIMATE. FIELD CONDITIONS MAY REQUIRE THE CONTRACTOR TO ADJUST THE PLACEMENT OF SILT FENCES FROM THOSE SHOWN ON THE PLANS.
  9. WASHOUT OF THE DRUM OF A CONCRETE TRUCK AT THE CONSTRUCTION SITE IS PROHIBITED. CONCRETE WASH DOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES WILL ONLY BE ALLOWED IN A DESIGNATED AREA PROVIDED FOR THIS PURPOSE, AS APPROVED BY THE CONTRACTING OFFICER. TEMPORARY CONCRETE WASHOUT AREAS SHALL BE PER BASE STANDARDS AND LOCATIONS SHALL BE SELECTED BY THE CONTRACTOR. THE FOLLOWING BEST MANAGEMENT PRACTICES MUST BE FOLLOWED:
    - 9.1. CONTAIN ALL WASH WATER ON SOIL, IN A BOWL SHAPED AREA CREATED IN THE DESIGNATED WASH AREA TO PREVENT THE WASH WATER FROM FLOWING FROM THE WASHOUT AREA;
    - 9.2. WASHOUT AREA MUST BE LINED WITH PLASTIC SHEETING, WHICH MUST BE REPLACED AS NEEDED TO PREVENT LEAKAGE;
    - 9.3. USE THE MINIMUM AMOUNT OF WATER TO WASH DOWN THE TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES;
    - 9.4. REMOVE ANY CONCRETE SEDIMENT FROM THE AREA SURROUNDING THE WASHOUT AREA BEFORE IT HARDENS; AND
    - 9.5. REMOVE ALL CONCRETE RESIDUE FROM THE DESIGNATED AREA ONCE IT HAS HARDENED.
  10. PRIOR TO SOIL DISTURBANCE AND DURING CONSTRUCTION, IMPLEMENT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES (BEST MANAGEMENT PRACTICES) REQUIRED TO RETAIN SEDIMENT ON SITE AND TO PREVENT VIOLATIONS OF STATE WATER QUALITY STANDARDS. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND SPECIFICATIONS, LATEST VERSIONS. IF SITE SPECIFIC CONDITIONS REQUIRE ADDITIONAL MEASURES DURING ANY PHASE OF CONSTRUCTION TO PREVENT EROSION OR CONTROL SEDIMENT, IMPLEMENT ADDITIONAL BEST MANAGEMENT PRACTICES AS NECESSARY.

**20th CIVIL ENGINEER SQUADRON**

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**A&E SERVICES POL FOR SHAW AFB  
 CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
 ISSUED FOR CONSTRUCTION**

**CIVIL CONSTRUCTION NOTES**

ENGINEER: M.J.R. BOGGS  
 PROJECT NUMBER: 000-C-005  
 DATE: 08/26/2021  
 SHEET: 5 OF 36  
 M.J.S.



REVISION	DATE	DESCRIPTION OF REVISION	REV. BY

**A – CODES:**

- 1. INTERNATIONAL BUILDING CODE (2015 EDITION)
2. ACI 318-14 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
3. UFC 1-200-01 DOD BUILDING CODE, OCTOBER 2019
4. FC 1-300-09N DESIGN PROCEDURES WITH CHANGE 4, JUNE 2018
5. UFC 3-301-01 STRUCTURAL ENGINEERING, OCTOBER 2019
6. UFC 4-010-01 DOD MINIMUM ANTITERRORISM STANDARD FOR BUILDINGS, DECEMBER 2018
7. ASCE 7-16 MINIMUM DESIGN LOAD FOR BUILDING AND OTHER STRUCTURES
8. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, NINTH EDITION (ASD), AND FOURTEEN EDITION.
9. AWS D1.1 STRUCTURAL WELDING CODE (LATEST EDITION).
10. STEEL DECK INSTITUTE CODE OF RECOMMENDED STANDARD PRACTICE

**B – DESIGN CRITERIA:**

- 1. ROOF LIVE LOADS: ALL AREAS . . . 20 PSF
2. SUPERIMPOSED LOADS: CEILING, MECHANICAL AND ELECTRICAL OTHER AREAS . . 10 PSF
3. WIND LOAD Vu ULTIMATE WIND SPEED (3 SECOND GUST) . . . .117 MPH
Vs,d NOMINAL WIND SPEED ( 3 SECOND GUST) . . . .91 MPH
STRUCTURAL CLASSIFICATION.....ENCLOSED (FAC BUILDING 207)
STRUCTURAL CLASSIFICATION .....OPEN (TRUCK FILL STAND CANOPY)
STRUCTURAL CLASSIFICATION.....OPEN (FILTER EQUIPMENT CANOPY)
RISK CATEGORY II
WIND EXPOSURE C
4. SEISMIC LOAD: SEISMIC IMPORTANCE FACTOR 1.0
MAP SPECTRAL RESPONSE ACCELERATIONS (UFC 3-301-01)
Ss 0.345g (UFC 3-301-01)
S1 0.115g (UFC 3-301-01)
SITE CLASS D
SPECTRAL RESPONSE COEFFICIENTS
SDs 0.467g
SD1 0.240g
SEISMIC DESIGN CATEGORY D
SEISMIC FORCE RESIST SYSTEM STEEL INTERMEDIATE MOMENT FRAME
HEIGHT LIMIT 35 FEET
RESPONSE MODIFICATION COEFF 4.5
DEFLECTION AMPLIFIER FACTOR 4
SYSTEM OVERSTRENGTH FACTOR 3
SEISMIC ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE
5. SNOW LOAD: GROUND SNOW LOAD 10 PSF
IMPORTANCE FACTOR 1.0

**C – CONSTRUCTION MATERIALS:**

- 1. ALL ANGLES, PLATES & MISCELLANEOUS STEEL: A-36.
2. ANCHOR BOLTS MATERIAL: ASTM F 1554 GRADE 55 WITH SUPPLEMENTAL REQUIREMENTS S1
3. WELDING ELECTRODES: AWS E-70XX
4. W SHAPES: ASTM A992 Gr50

**D – GENERAL:**

- 1. ALL CONCRETE EMBEDDED STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A-123 AND A-153.
2. ALL REINFORCEMENT TO BE DETAILED AND FABRICATED IN ACCORDANCE WITH ACI 315R (LATEST EDITION).

**E – MISCELLANEOUS:**

- 1. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ADDITIONAL SERVICES:
A. VERIFICATION OF ALL DIMENSIONS, ELEVATIONS, OPENING SIZES, AND MECHANICAL EQUIPMENT WEIGHTS PRIOR TO STARTING WORK.
B. REMOVE ALL ABANDONED FOUNDATIONS, UTILITIES, PIPELINES, ETC. THAT INTERFERE WITH NEW CONSTRUCTION
C. REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTAL, NOTING CHANGES MADE WHICH DO NOT COMPLY WITH DESIGN DRAWINGS.
2. THE CONTRACTOR SHALL SUPPLY AND DESIGN ALL ITEMS FOR ATTACHING MECHANICAL AND ELECTRICAL EQUIPMENT TO THE BUILDING STRUCTURE TO RESIST ALL LOADS INCLUDING WIND AND SEISMIC FORCES. ATTACHMENT SHALL BE MADE SO AS NOT TO OVERSTRESS STRUCTURAL MEMBERS. COORDINATE THE ATTACHMENTS AND LOCATIONS OF THE EQUIPMENT WITH THE STRUCTURAL SHOP DRAWINGS. REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
3. NOTE ALL STORAGE RACKS, EQUIPMENT MOUNTED OVERHEAD AND OR ABOVE SUSPENDED CEILINGS, WEIGHING 31 POUNDS OR MORE, SHALL BE SECURED TO PERMANENT STRUCTURE BY MEANS HAVING SUFFICIENT CAPACITY TO RESIST HORIZONTAL AND VERTICAL FORCES AS CALCULATED PER ASCE 7-16 BUT NOT LESS THAN HORIZONTAL FORCES OF 0.5 x THE EQUIPMENT WEIGHT AND VERTICAL FORCES OF 1.5 TIMES THE EQUIPMENT WEIGHT.

**F – COORDINATION:**

- 1. THE CONTRACTOR SHALL COORDINATE ALL PIPE AND CONDUIT PENETRATIONS THROUGH CONCRETE WITH THE CIVIL, MECHANICAL, AND ELECTRICAL SHOP DRAWINGS PRIOR TO PLACING CONCRETE.
2. THE STRUCTURAL SHEETS SHALL BE COORDINATED WITH THE CIVIL, ARCHITECTURAL, MECHANICAL AND ELECTRICAL SHEETS TO PROPERLY LOCATE DRAINS, SLOPES, PIPE SLEEVES, ANCHOR BOLTS, BLOCK-OUTS, ETC. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
3. THE STRUCTURAL SHEETS SHALL BE COORDINATED WITH THE PROJECT SPECIFICATIONS.

**G – SUBMITTALS:**

- 1. ALL SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
2. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS: COLD FORMED STEEL TRUSSES (\*) METAL DECK MISCELLANEOUS STEEL PRE-ENGINEERED METAL CANOPIES (\*) CONCRETE MIX DESIGNS CONCRETE REINFORCING STEEL
3. MANUFACTURER’S LITERATURE: SUBMIT TWO COPIES OF MANUFACTURER’S LITERATURE FOR ALL MATERIALS AND PRODUCTS USED IN CONSTRUCTION ON THE PROJECT.
4. DESIGN CALCULATIONS: THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW TWO SETS OF DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF SOUTH CAROLINA, FOR THE FOLLOWING ITEMS: A. COLD FORMED STEEL TRUSS WITH A ROOF DIAPHRAGM CAPABILITY TO RESIST WIND, SEISMIC & SNOW LOADS BY: (a) ENGINEERED BRACING/BRIDGING, OR (b) ENGINEERED METAL DECK. THE DECK IS COLD-FORMED STRUCTURAL STEEL FORMED FROM CARBON STEEL SHEETS CONFORMING TO ASTM A653 (LATEST EDITION), WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI. GALVANIZED COATING SHALL BE IN ACCORDANCE WITH ASTM A 924 (LATEST EDITION) AND SPECIFICATIONS QQ-S-7750, TYPE 1. CLASS - E. B. PRE-ENGINEERED METAL CANOPIES CAPABLE TO RESIST WIND, SEISMIC AND SNOW LOADS.

ITEMS MARKED (\*) SHALL HAVE SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. ADDITIONALLY, THESE SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE CONTRACTING OFFICER.

**H – STRUCTURAL STEEL:**

- 1. ALL BEAMS AND JOISTS TO BE ERECTED WITH NATURAL CAMBER UP U.N.O.
2. ERECTION BOLTS: REMOVE AFTER FIELD WELDING IS COMPLETED. PLUG WELD HOLES AND GRIND SMOOTH.
3. ALL WELDMENTS SHALL BE INSPECTED AND APPROVED BEFORE BEING COVERED BY OTHER MEMBERS AND/OR OTHER WELDMENTS.
4. ALL BOLTED CONNECTIONS TO HAVE 3/4" DIAM. A-325 BOLTS, (BEARING TYPE CONNECTION) ON STANDARD HOLES, U.N.O. ON THE DRAWINGS.
5. THE USE OF CUTTING TORCH IN THE FIELD WILL NOT BE PERMITTED.
6. FRAMING SHALL BE CARRIED UP TRUE AND PLUMB AND TEMPORARY BRACING SHALL BE INTRODUCED WHEREVER NECESSARY TO TAKE CARE OF ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING EQUIPMENT AND OPERATION OF SUCH BRACING SHALL BE THE RESPONSIBILITY OF THE STEEL CONTRACTOR AND SHALL BE LEFT IN PLACE AS LONG AS REQUIRED FOR SAFETY.
7. ALL WELDS SHALL BE FILLET WELDS OF THE MINIMUM SIZE REQUIRED FOR THE THICKNESS OF THE PLATE CONNECTION UNLESS NOTED OTHERWISE.
8. STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", LATEST EDITION.
9. WELDED CONNECTIONS SHALL CONFORM TO THE AMERICAN WELDING SOCIETY, AWS D1.1, LATEST EDITION.
10. ALL STRUCTURAL STEEL, BOLTS, ETC. SHALL BE DOMESTICALLY PRODUCED.
11. CONNECTION DETAILS NOT COMPLETELY DETAILED ON THE DRAWINGS INCLUDING MATERIAL GRADE AND SIZES, WELD SIZES, AND NUMBER OF BOLTS SHALL BE DESIGNED BY THE CONTRACTOR PER THE SPECIFICATIONS. THE CONCEPTUAL DETAILS PROVIDED MAY NOT FULLY REPRESENT THE COMPLEXITY OF THE CONNECTION AS REQUIRED BY THE FINAL CONNECTION DESIGN FOR THE FORCES THEY MUST RESIST. ADDITIONAL CONNECTION ELEMENTS MAY NOT BE SPECIFICALLY SHOWN IN THE CONCEPTUAL DETAILS BUT MAY BE REQUIRED BY THE FINAL CONNECTION DESIGN, SUCH AS STIFFENER PLATES, DOUBLER PLATES, SUPPLEMENT/REINFORCING PLATES, OR OTHER CONNECTION MATERIAL. THE FABRICATOR IS RESPONSIBLE FOR ENGAGING THE SERVICES OF A CONNECTION SPECIALTY ENGINEER TO PREPARE ALL FINAL CONNECTION DESIGNS FOR SUBMISSION THAT MEETS THE REQUIREMENTS OF THE CONCEPTUAL CONNECTION DETAILS AND RESISTS THE REQUIRED DESIGN FORCE.
12. IN GENERAL, IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT ALL SHOP CONNECTIONS BE WELDED AND ALL FIELD CONNECTIONS BE BOLTED EXCEPT WHERE NOTED OTHERWISE.
13. FRAMED BEAM CONNECTIONS SHALL DEVELOP ONE HALF OF THE ALLOWABLE UNIFORM LOAD FOR BEAMS AS SHOWN IN THE AISC TABLE OF ALLOWABLE UNIFORM LOAD CONSTANTS FOR THE SUBJECT MEMBER AND SPAN, OR THE REACTION SHOWN IN THE FRAMING PLANS.

**J – METAL DECK:**

- 1. METAL DECK SHALL CONFORM TO STEEL DECK INSTITUTE (SDI) SPECIFICATIONS, LATEST EDITION, AND BE DETAILED, FABRICATED AND ERECTED ACCORDING TO THE SAME. SUBMIT SHOP DRAWINGS FOR APPROVAL BY THE CONTRACTING OFFICER SHOWING COMPLIANCE WITH DIAPHRAGM AND NET UPLIFT LOADS REQUIREMENTS AS INDICATED ON THE DRAWINGS.
2. DECKING SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SUPPORTS. EACH DECK UNIT SHALL BE ATTACHED TO SUPPORTING MEMBERS AND ADJACENT PANELS PER DIAPHRAGM ATTACHMENT NOTES SPECIFIED ON PLANS.
3. ALL METAL DECKS TO BE HOT DIPPED GALVANIZED.
4. FOR METAL DECK PROPERTIES AND THEIR ATTACHMENT, REFER TO THE PLAN NOTES ON S-301.

**K – UFC 4-010-01:**

- 1. THE BUILDING AND CANOPIES ARE CLASSIFIED AS LOW OCCUPANCY AND ARE EXEMPT FROM THE PROVISIONS OF UFC 4-010-01.

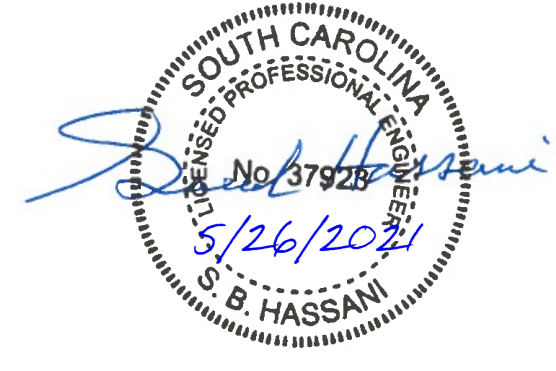
**L – LIGHT GAGE METAL (COLD FORMED STEEL) TRUSS ROOF SYSTEM**

- 1. GENERAL
a. THE METAL STUD ROOF SYSTEM INCLUDES TRUSSES, PURLINS, BRIDGING CONNECTIONS TO THE LOWER SURFACE OF THE METAL ROOF DECK.
b. THE COLD FORMED STEEL TRUSS ROOF MEMBERS SHALL BE DESIGNED AS COMPONENT AND CLADDING ELEMENTS (NOT MWFRS).
c. THE METAL ROOF SYSTEM SHALL BE DESIGNED AND SEALED BY A SOUTH CAROLINA REGISTERED P.E.. CALCULATIONS SHALL BE SUBMITTED TO THE EOR FOR RECORD PURPOSES.
2. MATERIAL
a. 16 GAGE AND HEAVIER. 16 GAGE HEAVIER MATERIAL SHALL BE OF STRUCTURAL QUALITY STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI AND CONFORM TO ASTM A446, A570, OR A611.
3. DESIGN
a. DESIGN AND ALL STRUCTURAL PROPERTIES SHALL CONFORM TO THE LATEST SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS, AS PUBLISHED BY THE AMERICAN IRON AND STEEL INSTITUTE (AISI).
b. COLD FORMED STEEL PURLINS AND TRUSSES SHALL BE DESIGNED TO RESIST ALL APPLICABLE LOADS. WIND, LIVE AND DEAD LOADS AS WELL AS MISCELLANEOUS ITEMS SHOWN ON THE ARCHITECTURAL DRAWINGS. COLD FORMED STEEL PURLINS AND TRUSSES SHALL ALSO BE DESIGNED TO ACT AS BRACING FOR THE SUPPORTING MEMBERS. AS SUCH, AN AXIAL LOAD OF ± 500 LBS. SHALL BE ADDED TO THE PURLIN BOTTOM FLANGE FOR THE DESIGN OF EACH PURLIN / TRUSS AND CONNECTION. MINIMUM PURLIN BRIDGING SHALL BE AT PURLIN THIRD POINTS OR 5'-0" O.C. MAXIMUM.
4. CONNECTIONS
a. TYPICAL CONNECTION OF LIGHT GAGE METAL COMPONENTS SHALL BE WELDED OR SCREWED UNLESS NOTED OTHERWISE ON THE DRAWINGS.
b. WELDED CONNECTIONS. CONNECTION OF LIGHT GAGE METAL COMPONENTS SHALL BE MADE USING ARC WELDING OR RESISTANCE WELDING METHODS. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST RECOMMENDED PROCEDURES AND PRACTICES OF THE AMERICAN WELDING SOCIETY, AWS C1.3 RECOMMENDED PRACTICES FOR RESISTANCE WELDING COATED LOW CARBON STEELS AND AWS D1.3 SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES. WELDING PROCESS ALONG WITH WELD SIZES AND LENGTHS NECESSARY TO DEVELOP THE MEMBER FORCES REQUIRED SHALL BE SHOWN ON THE SHOP DRAWINGS. THE WELD AREA SHALL BE REPAINTED AFTER COMPLETION OF WELDING. WELDED CONNECTIONS SHALL BE PROVIDED AT TRUSS TO SUPPORTING STRUCTURE CONNECTIONS AND FOR TRUSS BRIDGING.
c. THE METAL ROOF SYSTEM SHALL BE CONNECTED BY WELDING TO THE SUPPORTING STRUCTURAL MEMBERS.
d. SCREWED CONNECTIONS. CONNECTION OF LIGHT GAGE METAL COMPONENTS SHALL BE MADE USING SELF-DRILLING SELF-TAPPING SCREWS. SCREW TYPE AND SIZE, ALONG WITH THE NUMBER OF SCREWS REQUIRED TO RESIST THE MEMBER FORCES REQUIRED, SHALL BE SHOWN ON THE SHOP DRAWINGS. SCREW TYPE AND INSTALLATION SHALL BE APPROVED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO). ALL SCREWS SHALL BE ZINC OR CADMIUM PLATED.
e. WIRE TYING OF FRAMING COMPONENTS IN STRUCTURAL APPLICATIONS SHALL NOT BE PERMITTED.

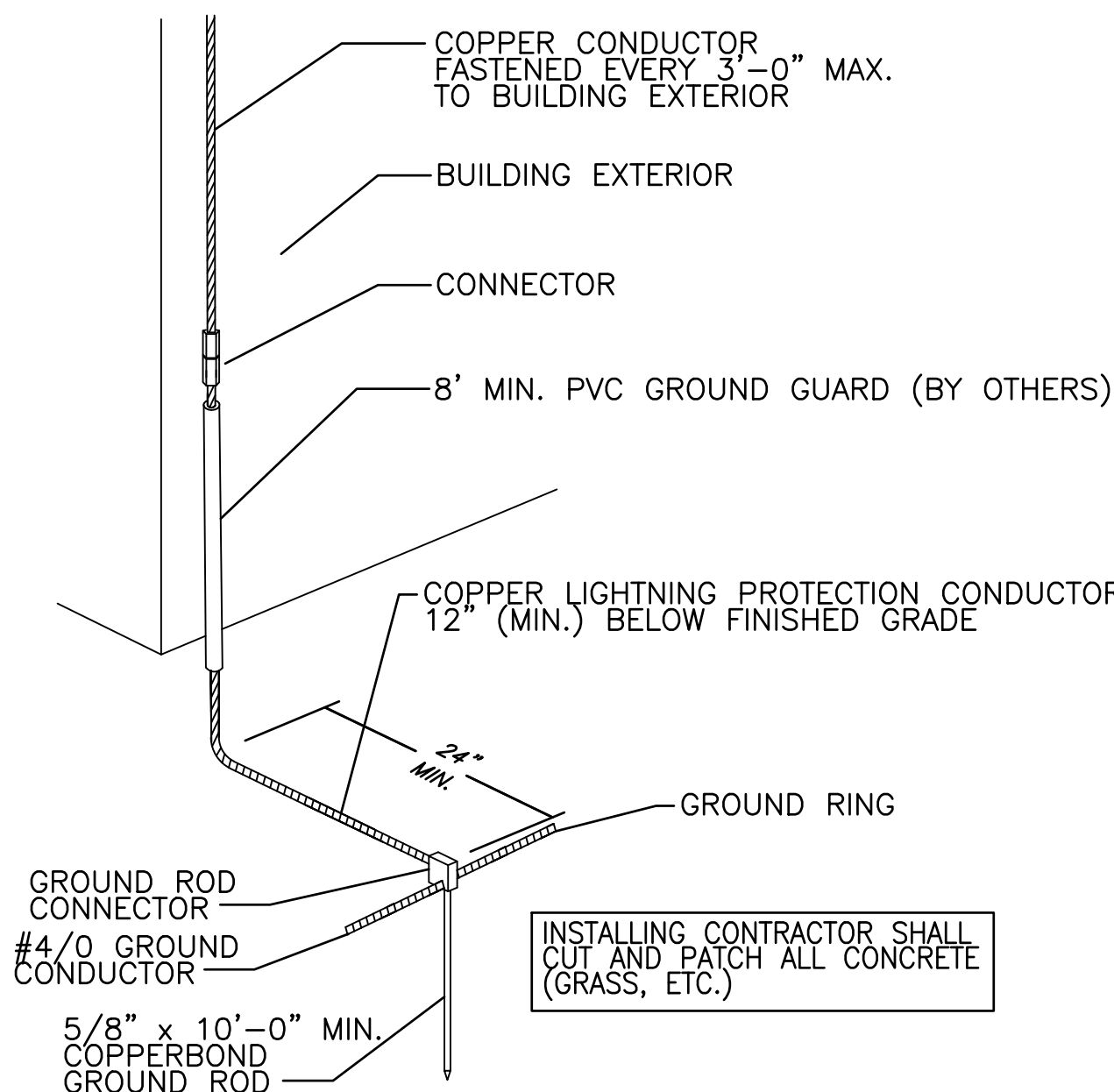
**M – CAST-IN-PLACE CONCRETE:**

- 1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-14.
2. THE REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.
3. CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 4500 PSI.
4. SHOP DRAWINGS SHALL BE SUBMITTED WITH REINFORCING STEEL DETAILED IN ACCORDANCE WITH ACI 315R, LATEST EDITION.
5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" UNLESS NOTED OTHERWISE.
6. NO ALUMINUM SHALL BE EMBEDDED IN CONCRETE.
7. PROVIDE 2" MINIMUM COVER FOR FORMED SURFACES AND 3" MINIMUM COVER FOR UNFORMED SURFACES, UNLESS NOTED OTHERWISE.
8. THE METAL CANOPIES SHALL NOT BE ERECTED UNTIL THE FOUNDATION CONCRETE HAS ACHIEVED 70% OF THE MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF THE CONCRETE.

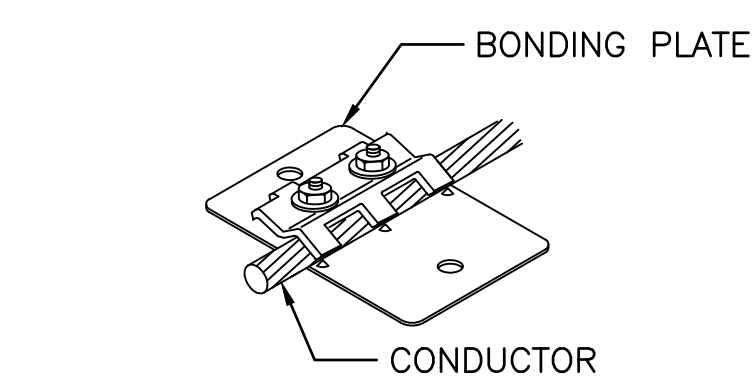
CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS BEFORE PROCEEDING WITH FABRICATION AND CONSTRUCTION.



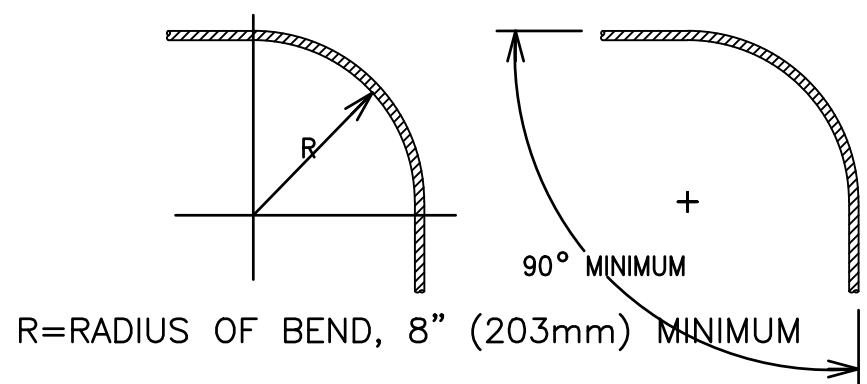
20th CIVIL ENGINEER SQUADRON
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CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291
ISSUED FOR CONSTRUCTION
STRUCTURAL GENERAL NOTES
MRM 000-G-006
PROJECT NUMBER
DATE 06/26/2021 1/4" = 1'-0"
SCALE SHEET 06 OF 36



**(C1) EXPOSED DOWN CONDUCTOR & GROUNDING**  
SCALE: NONE

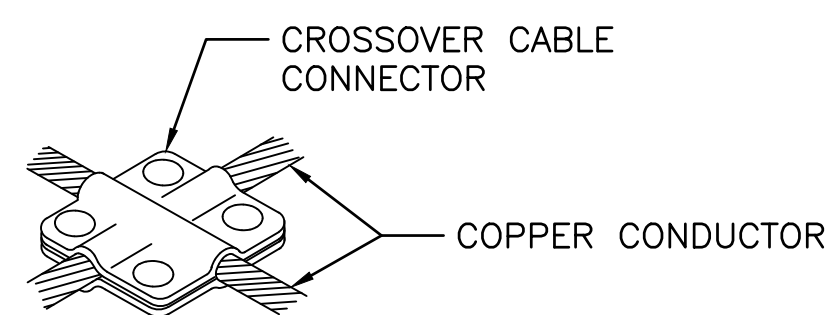


**(D2) TYPICAL BONDING PLATE**  
SCALE: NONE

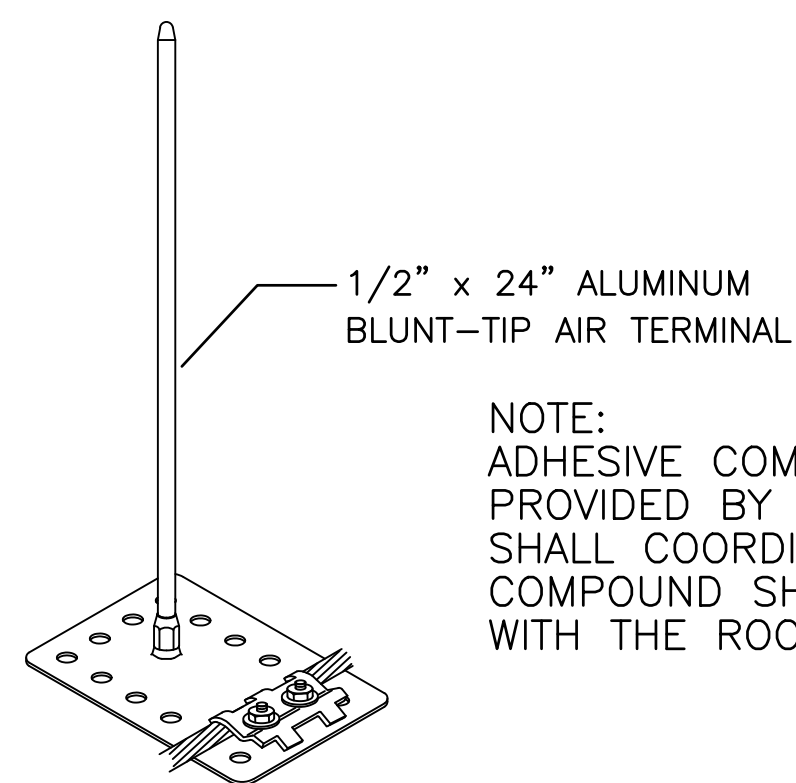


NOTE:  
1. LP CONDUCTOR SHALL REMAIN IN A HORIZONTAL OR DOWN-WARD PATH AVOIDING "U" & "V" POCKETS (DOWN & UP).  
2. NO BEND OF A CONDUCTOR SHALL FROM AN INCLUDED ANGLE OF LESS THAN 90° OF HAVE A RADIUS OF BEND LESS THAN 8".

**(C3) TYPICAL LP CABLE BENDS**  
SCALE: NONE

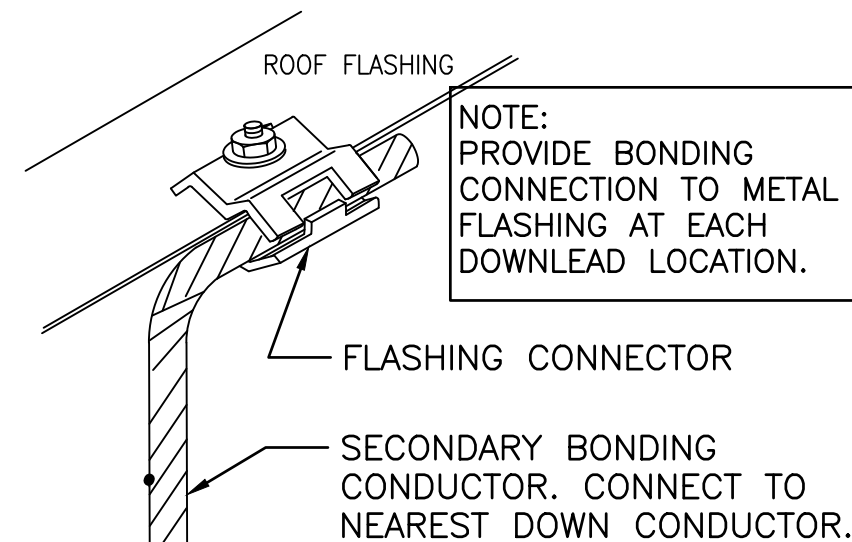


**(B1) CROSSOVER CABLE CONNECTOR**  
SCALE: NONE

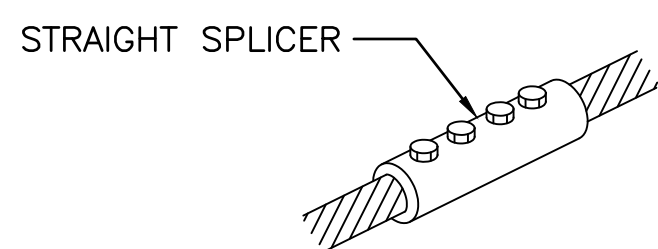


NOTE:  
ADHESIVE COMPOUND SHALL BE PROVIDED BY OTHERS-ELEC. CONTR. SHALL COORDINATE. THE ADHESIVE COMPOUND SHALL BE COMPATIBLE WITH THE ROOFING SYSTEM.

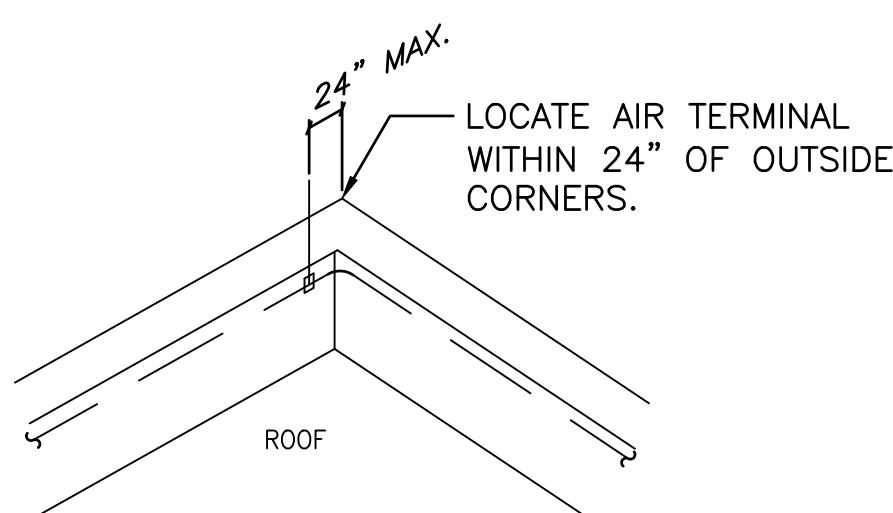
**(B2) TYPICAL AIR TERMINAL**  
SCALE: NONE



**(A1) FLASHING CONNECTOR**  
SCALE: NONE



**(A2) STRAIGHT SPLICER**  
SCALE: NONE



NOTE: AIR TERMINALS SHALL BE LOCATED WITHIN 24" OF OUTSIDE CORNERS

**(A3) AIR TERMINALS NEAR CORNERS**  
SCALE: NONE

**ELECTRICAL SYMBOLS**

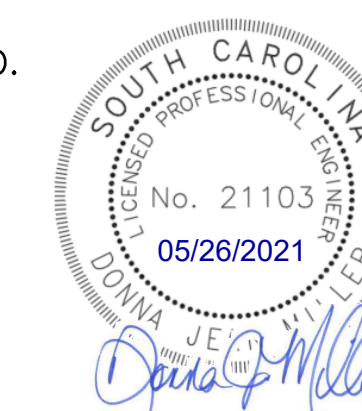
- LA - LINEAR FIXTURE. LETTERS DENOTE FIXTURE TYPE (TYPICAL). SHADING INDICATES NIGHTLIGHT (TYPICAL). NUMERAL INDICATES CIRCUIT NUMBER (TYPICAL). SUBSCRIPT CORRESPONDS WITH SIMILARLY IDENTIFIED SWITCH OR MULTI-WAY SWITCH GROUP (TYPICAL)
- HA - LIGHTING FIXTURE, SURFACE ON OR PENDANT MOUNT FROM CEILING
- XA - EXIT LIGHT SURFACE MOUNTED ON WALL, ARROWS INDICATE DIRECTION
- 18 - DUPLEX RECEPTACLE, 18" AFF UNLESS OTHERWISE INDICATED. NUMERAL INDICATES CIRCUIT NUMBER (TYPICAL)
- 48 - DUPLEX RECEPTACLE, 48" AFF OR 6" ABOVE COUNTER TOP
- S - SINGLE POLE SWITCH, 48" AFF UNLESS OTHERWISE INDICATED. NUMERAL IN PARENTHESIS INDICATES CIRCUIT NUMBER (TYPICAL). SUBSCRIPT CORRESPONDS WITH SIMILARLY IDENTIFIED LIGHTING FIXTURES (TYPICAL)
- S2 - DOUBLE POLE SWITCH, 48" AFF UNLESS OTHERWISE INDICATED
- SD - DIMMING SWITCH, 48" AFF UNLESS OTHERWISE INDICATED
- Wiring in conduit concealed in or above ceiling or in wall
- Wiring in conduit concealed in or under floor, or underground concrete encased single conduit ductbank
- Wiring in conduit exposed on ceiling or wall
- Branch circuit wiring in 3/4" conduit homerun as indicated. ONE ARROW PER CIRCUIT. SLASHES INDICATE NUMBER OF CONDUCTORS, #12 UNLESS OTHERWISE INDICATED
- 4/0 BARE COPPER GROUND WIRE. SEE DETAILS ON THIS PAGE.
- LIGHTNING PROTECTION CABLE. SEE DETAILS ON THIS PAGE.
- EXISTING UNDERGROUND ELECTRICAL DUCTBANK
- GROUND ROD
- GROUND TEST WELL
- AIR TERMINAL, MIN. 24" LENGTH
- DEVICE REQUIRING ELECTRICAL CONNECTION, TYPE AS INDICATED (INSTRUMENT DESIGNATIONS PER ISA)
- EQUIPMENT TAG
- MOTOR

**ELECTRICAL ABBREVIATIONS**

- AFF - ABOVE FINISHED FLOOR
- AFG - ABOVE FINISHED GRADE
- AIC - AMPS INTERRUPTING CAPACITY
- C - CONDUIT
- CU - COPPER
- EC - EMPTY CONDUIT
- EF - EXHAUST FAN
- ELP - EXISTING LIGHT POLE AND FOUNDATION TO BE REMOVED
- EX - EXISTING
- G - GROUND
- GFI - GROUND FAULT INTERRUPTING
- MLO - MAIN LUGS ONLY
- SPD - SURGE PROTECTION DEVICE
- WP - WEATHERPROOF, NEMA 4 OR 3R

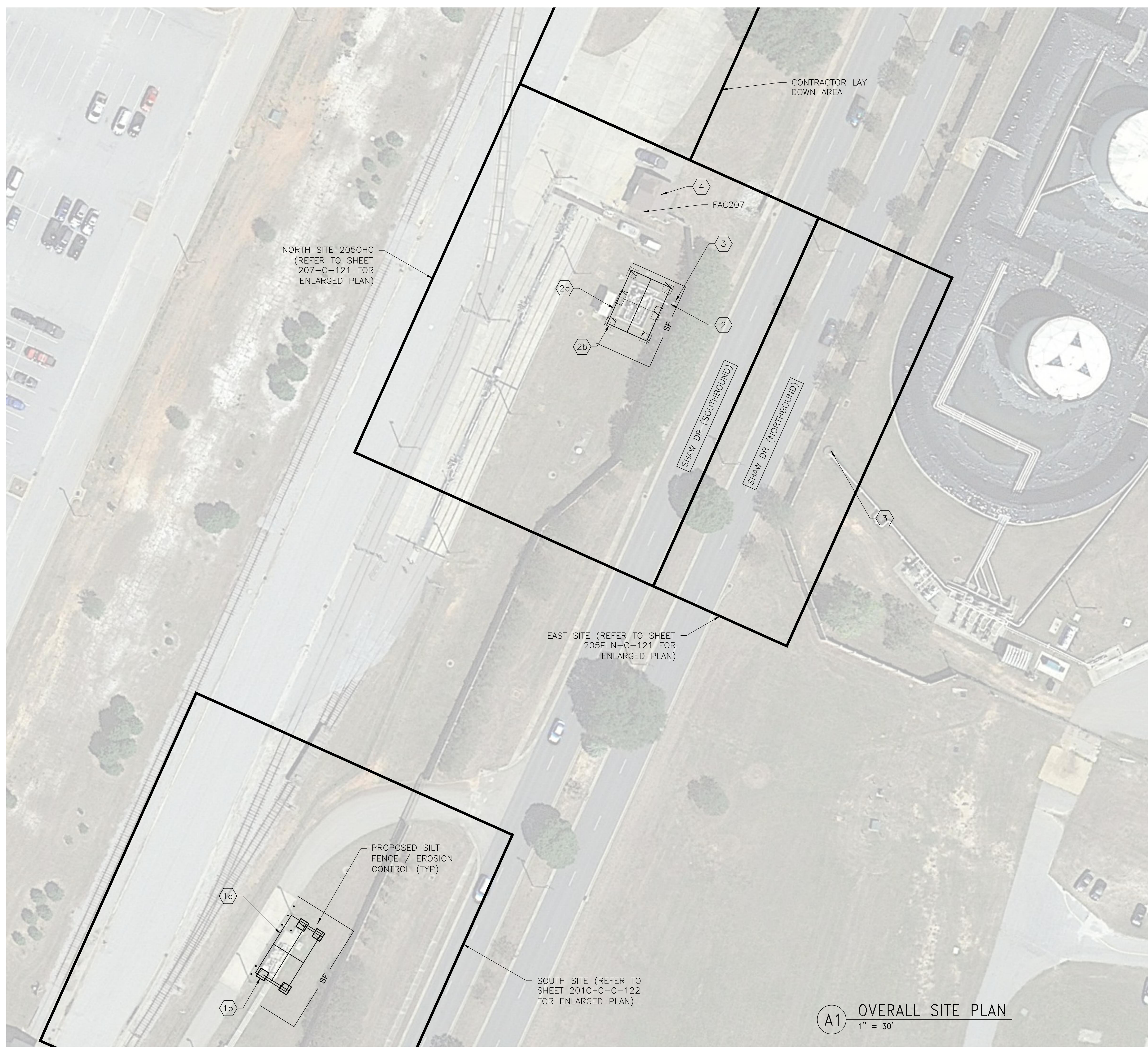
**NOTE:**

NOT ALL INFORMATION ON THIS LEGEND MAY BE USED.

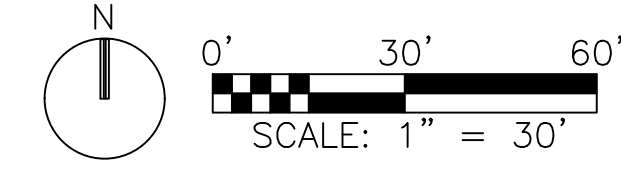


**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626  
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

ELECTRICAL LEGEND	
DATE	05/26/2021
PROJECT NUMBER	60590568
ISSUED BY	JWH
DESIGNED BY	JWH
PROJECT NUMBER	000-E-001
DATE	05/26/2021
REVISION	
DATE	
DESCRIPTION OF REVISION	



**A1** OVERALL SITE PLAN  
1" = 30'



**DEFICIENCY SHW036 (FAC 2010HP):**

- 1a PROPOSED CANOPY ROOF
- 1b EXCAVATION FOR PROPOSED CANOPY FOOTING (TYP)

**DEFICIENCY SHW037 (FAC 2050HP):**

- 2a PROPOSED CANOPY ROOF
- 2b EXCAVATION FOR PROPOSED CANOPY FOOTING (TYP)

**DEFICIENCY SHW057 (FAC 207 AND 205PLN):**

- 3 LOCATION OF DEFICIENCY AND PROPOSED IMPROVEMENTS

**DEFICIENCY SHW027 (FAC 207):**

- 4 REPAIR BUILDING

20th CIVIL ENGINEER SQUADRON

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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

OVERALL SITE PLAN	M.J.R. ENGINEER	000-C-101 DRAWING NUMBER	8	36
60590568 PROJECT NUMBER	05/26/2021 DATE	1" = 30" SCALE	SHEET	OF

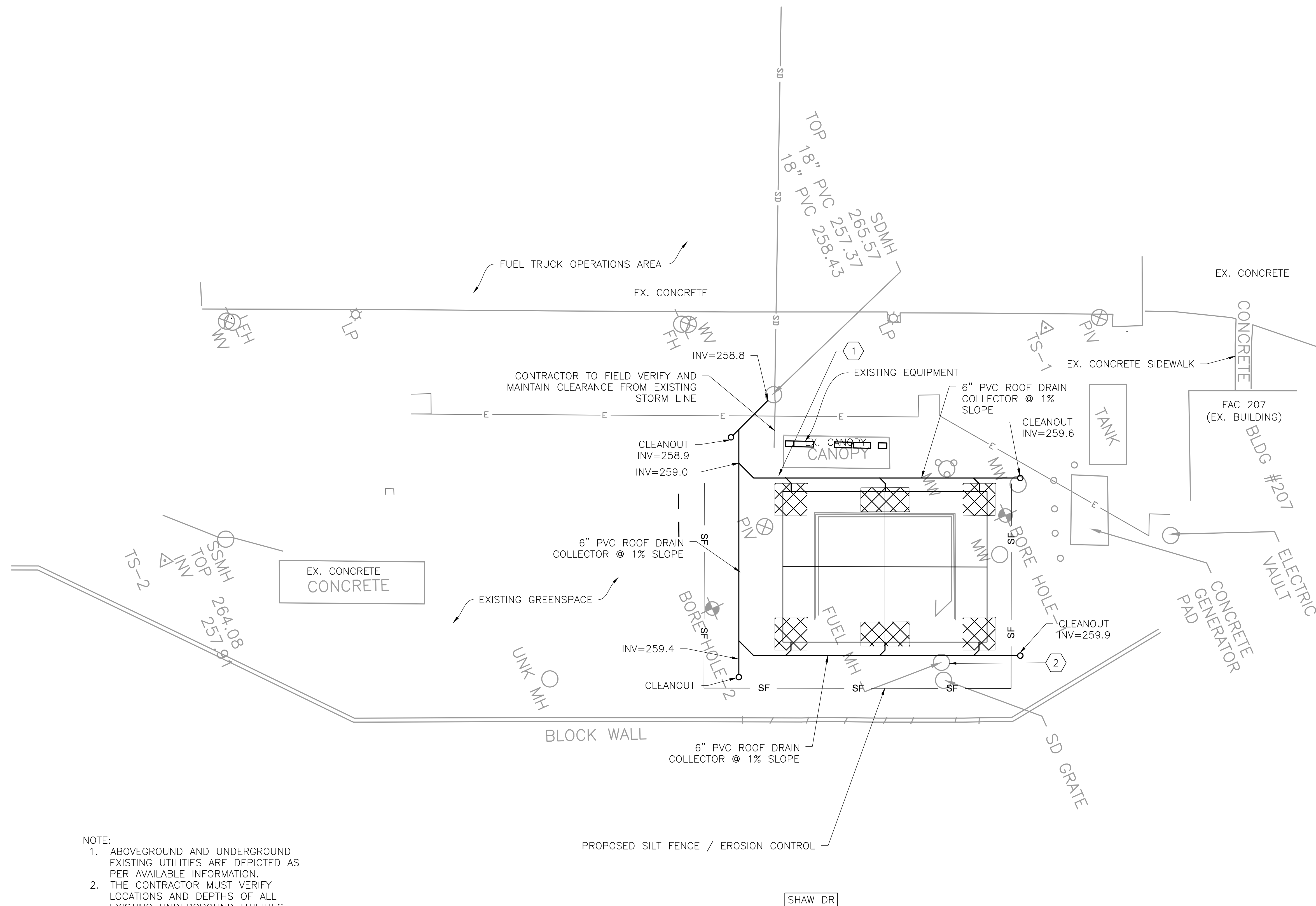


DEFICIENCY SHW037 (FAC 205OHP):

- PROPOSED CANOPY COLUMN AND FOOTING LOCATION (TYP). REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION. EXCAVATE WHERE REQUIRED (SAWCUT AND REMOVE EXISTING PAVEMENT WHERE APPLICABLE) TO INSTALL FOUNDATIONS. CONTRACTOR TO FIELD-VERIFY AND AVOID EXISTING UTILITIES OR DRAINAGE FACILITIES WITH 30" MINIMUM HORIZONTAL CLEARANCE. RESTORE EXISTING GROUND AND / OR PAVEMENT TO MATCH EXISTING CONDITIONS. REFER TO CIVIL CONSTRUCTION NOTES, CIVIL DETAILS, AND SPECIFICATIONS FOR RESTORATION REQUIREMENTS. CANOPY SUPPORTS AND FOUNDATIONS SHALL NOT DISTURB EXISTING DRAINAGE PATTERNS.

DEFICIENCY SHW057 (FAC 207 AND 205PLN):

- INSTALL (2) 2'-8" BY 1'-8" CURBED CONTAINMENT AT HIGH POINT VENTS FOR UNDERGROUND FUEL SUPPLY PIPING, AS FOLLOWS. ONE LOCATION IS A FUEL MANHOLE IN THE VICINITY OF FAC207, AND THE OTHER LOCATION IS A FUEL MANHOLE ON THE SAME PIPELINE ACROSS SHAW DRIVE (FAC205PLN), INSIDE A WALLED AREA WHERE THE UNDERGROUND PIPE DAYLIGHTS. CONSTRUCT ON THE SURFACE OF EACH CONCRETE MANHOLE LID BY BUILDING A CURB WITH 4" WIDTH AND HEIGHT UNDERNEATH THE LOCATION OF CONTAINMENT CONCERN. SCARIFY EXISTING CONCRETE SURFACE PRIOR TO CONSTRUCTION AND ANCHOR PROPOSED CURB TO EXISTING SURFACE VIA VERTICAL REBAR. INSTALL STEEL OUTFLOW PIPE WITH FITTING AND VALVE ON EXTERIOR.



- NOTE:
- ABOVEGROUND AND UNDERGROUND EXISTING UTILITIES ARE DEPICTED AS PER AVAILABLE INFORMATION.
  - THE CONTRACTOR MUST VERIFY LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE THE ENGINEER FOR RESOLUTION.

**A1** 207-C-121 - FAC207 AND FAC205OHP (NORTH) ENLARGED SITE PLAN  
1" = 10'



**20th CIVIL ENGINEER SQUADRON**  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REVISION	DATE	DESCRIPTION OF REVISION

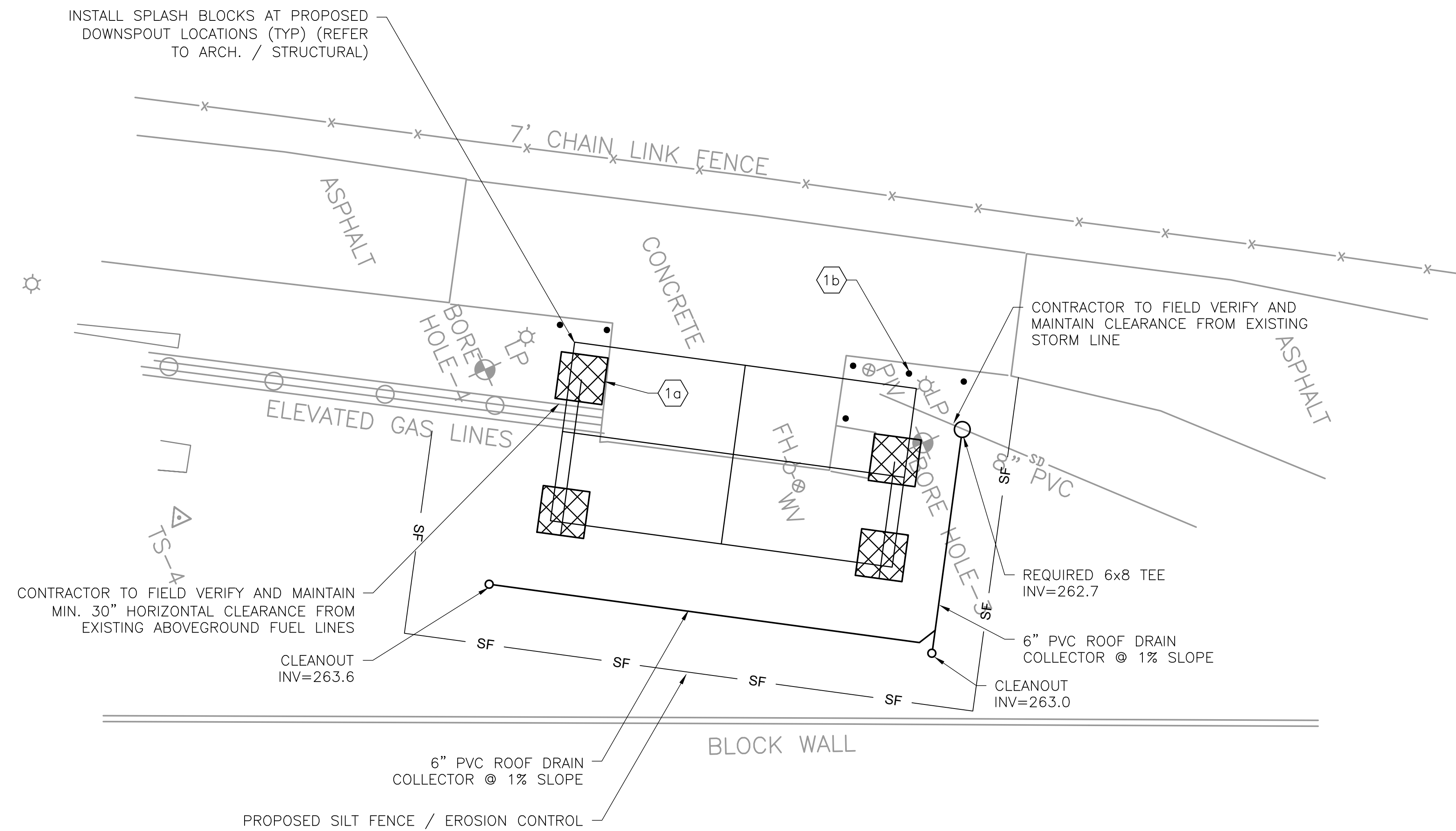
  

FAC207 AND FAC205OHP (NORTH) ENLARGED SITE PLAN	PLN TYPE
60590568	ENGINEER
207-C-121	PROJECT NUMBER
05/26/2021	DATE
1" = 10'	SCALE
9	SHEET
36	OF

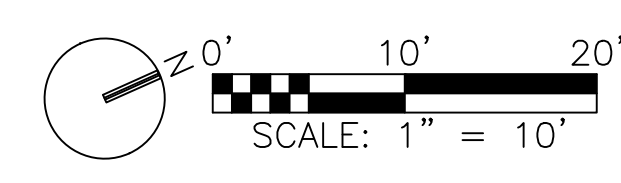
DEFICIENCY SHW036 (FAC 2010HP):

1a) PROPOSED CANOPY COLUMN AND FOOTING LOCATION (TYP). REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION. EXCAVATE WHERE REQUIRED (SAWCUT AND REMOVE EXISTING PAVEMENT WHERE APPLICABLE) TO INSTALL FOUNDATIONS. CONTRACTOR TO FIELD-VERIFY AND AVOID EXISTING UTILITIES OR DRAINAGE FACILITIES WITH 30" MINIMUM HORIZONTAL CLEARANCE. RESTORE EXISTING GROUND AND / OR PAVEMENT TO MATCH EXISTING CONDITIONS. REFER TO CIVIL CONSTRUCTION NOTES, CIVIL DETAILS, AND SPECIFICATIONS FOR RESTORATION REQUIREMENTS. CANOPY SUPPORTS AND FOUNDATIONS SHALL NOT DISTURB EXISTING DRAINAGE PATTERNS.

1b) PROPOSED 8 INCH DIAMETER CONCRETE FILLED PIPE BOLLARDS WITH 4 FEET EMBEDMENT FOR CANOPY COLUMN PROTECTION (TYP). REFER TO DETAIL SHEET 000-C-501.



A1 2010HP-C-122 - FAC2010HP (SOUTH) ENLARGED SITE PLAN  
1" = 10'



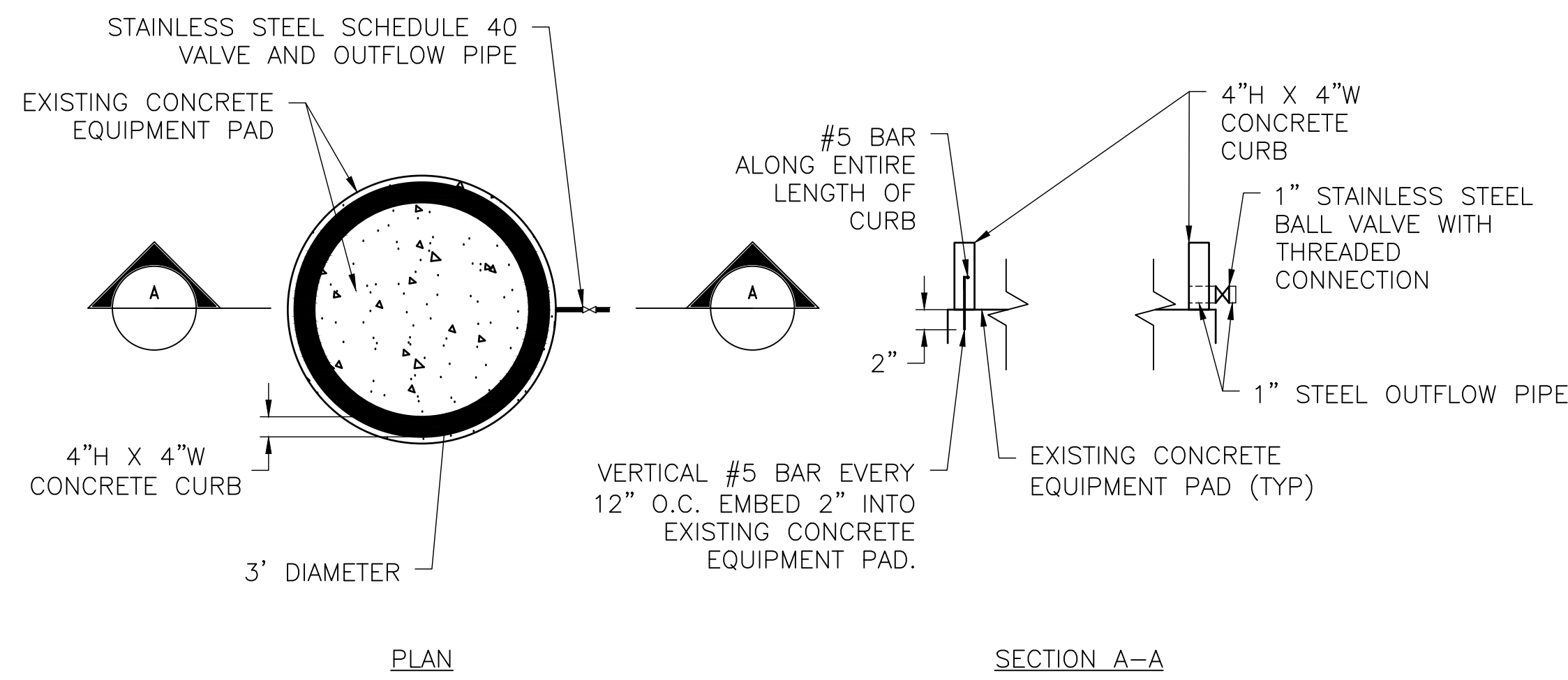
20th CIVIL ENGINEER SQUADRON  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

FAC2010HP (SOUTH) ENLARGED SITE PLAN	MJR	10	36
ENGINEER	DISPOSITION	SHEET	OF
60590568	2010HP-C-122		
05/26/2021	PROJECT NUMBER		
	DRAWING NUMBER		
	SCALE = 1" = 10'		

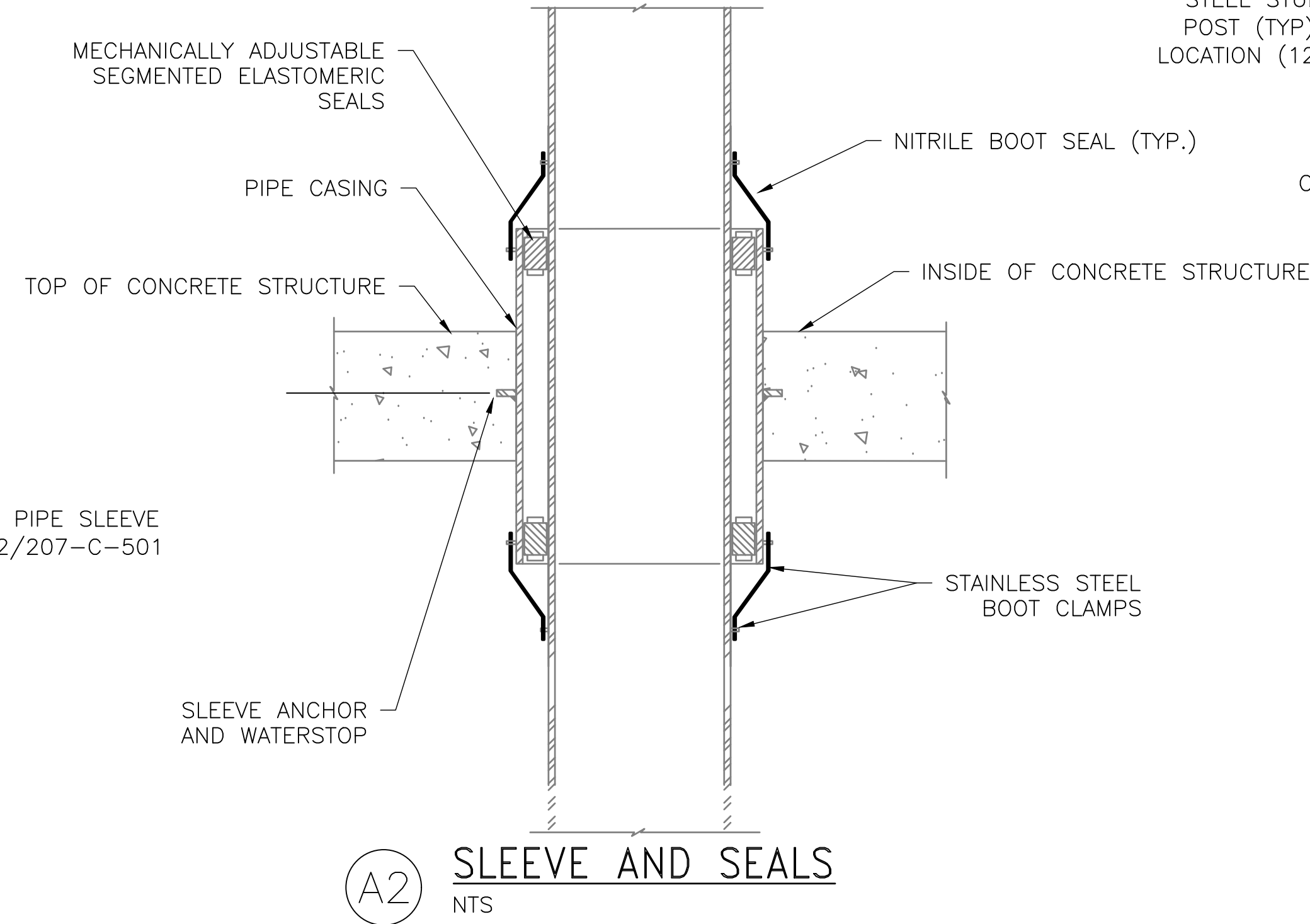


- NOTES:**
- CONSTRUCT ON THE SURFACE OF EACH CONCRETE MANHOLE LID BY BUILDING A CURB WITH 4" WIDTH AND HEIGHT UNDERNEATH THE LOCATION OF CONTAINMENT CONCERN. SCARIFY EXISTING CONCRETE SURFACE PRIOR TO CONSTRUCTION AND ANCHOR PROPOSED CURB TO EXISTING SURFACE VIA VERTICAL REBAR. INSTALL STEEL OUTFLOW PIPE WITH FITTING AND VALVE ON EXTERIOR.
  - INSTALL (1) VALVE AND OUTFLOW PIPE INTENDED TO BE UTILIZED AFTER CONFIRMATION BY BASE PERSONNEL THAT RUNOFF FOUND WITHIN CONTAINMENT IS ACCEPTABLE FOR RELEASE PER APPLICABLE ENVIRONMENTAL REGULATIONS.

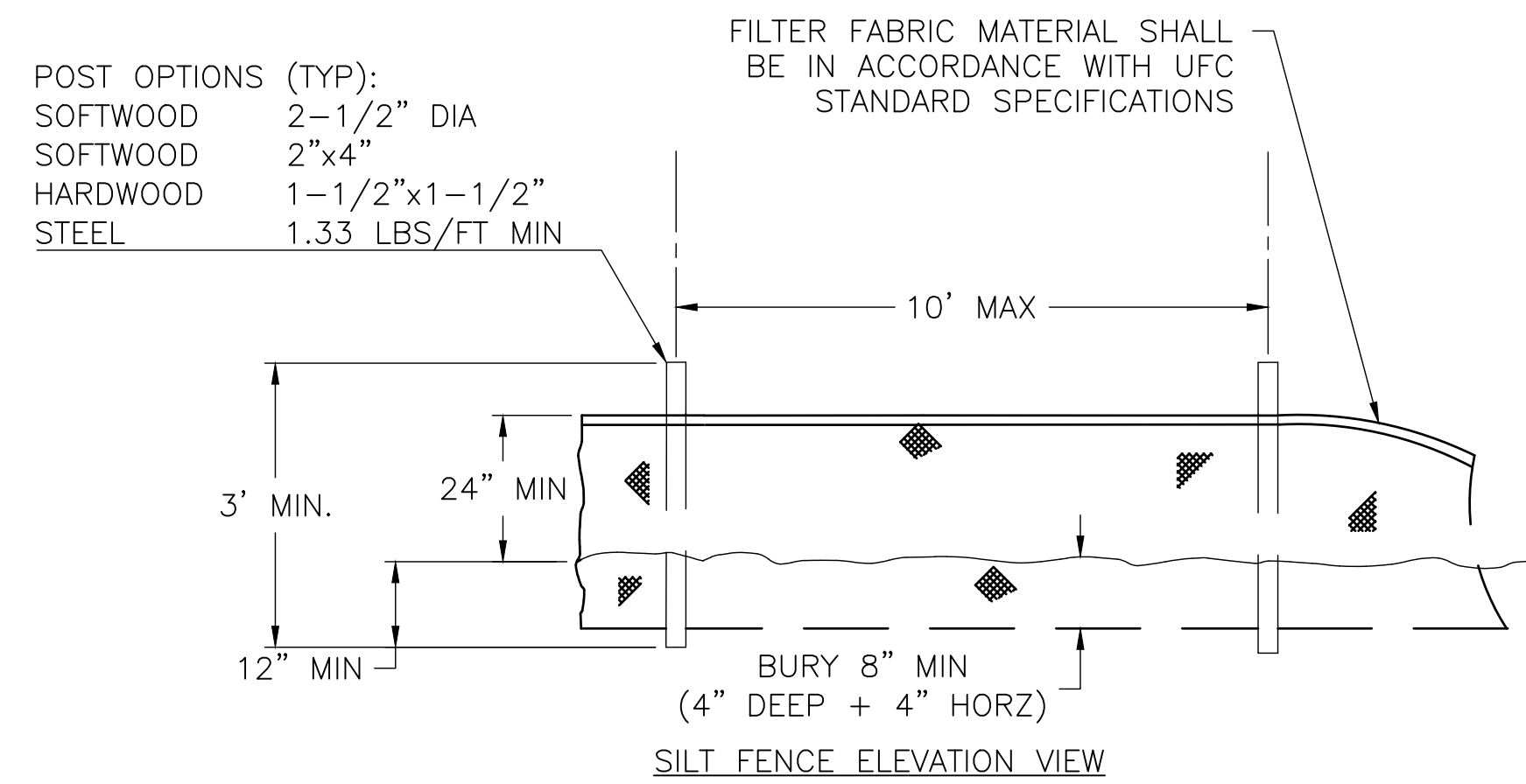


PHOTO

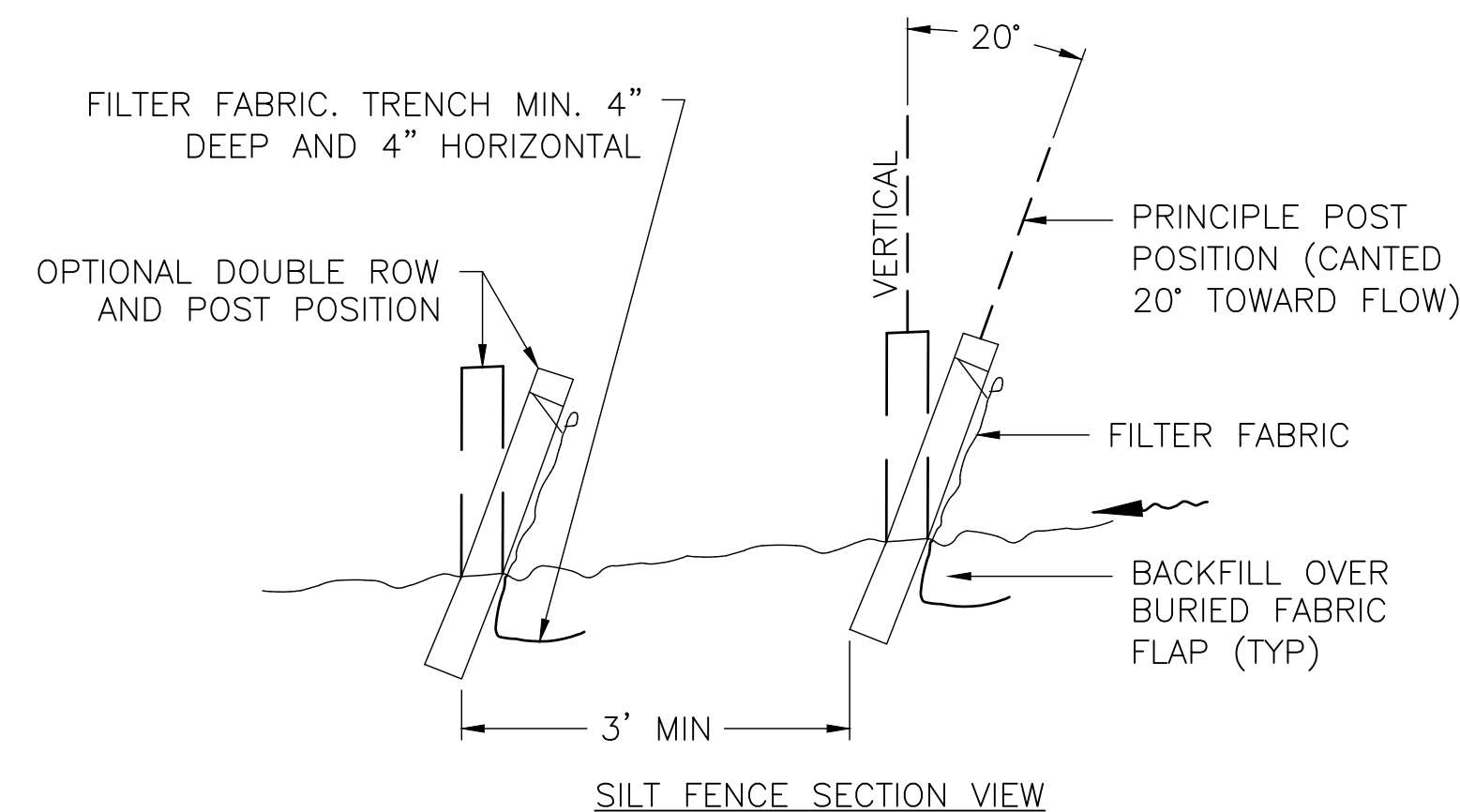
INSTALL RUBBER BOOT BETWEEN PIPE SLEEVE AND PIPE. SEE DETAIL A2/207-C-501



**(A2) SLEEVE AND SEALS**  
NTS

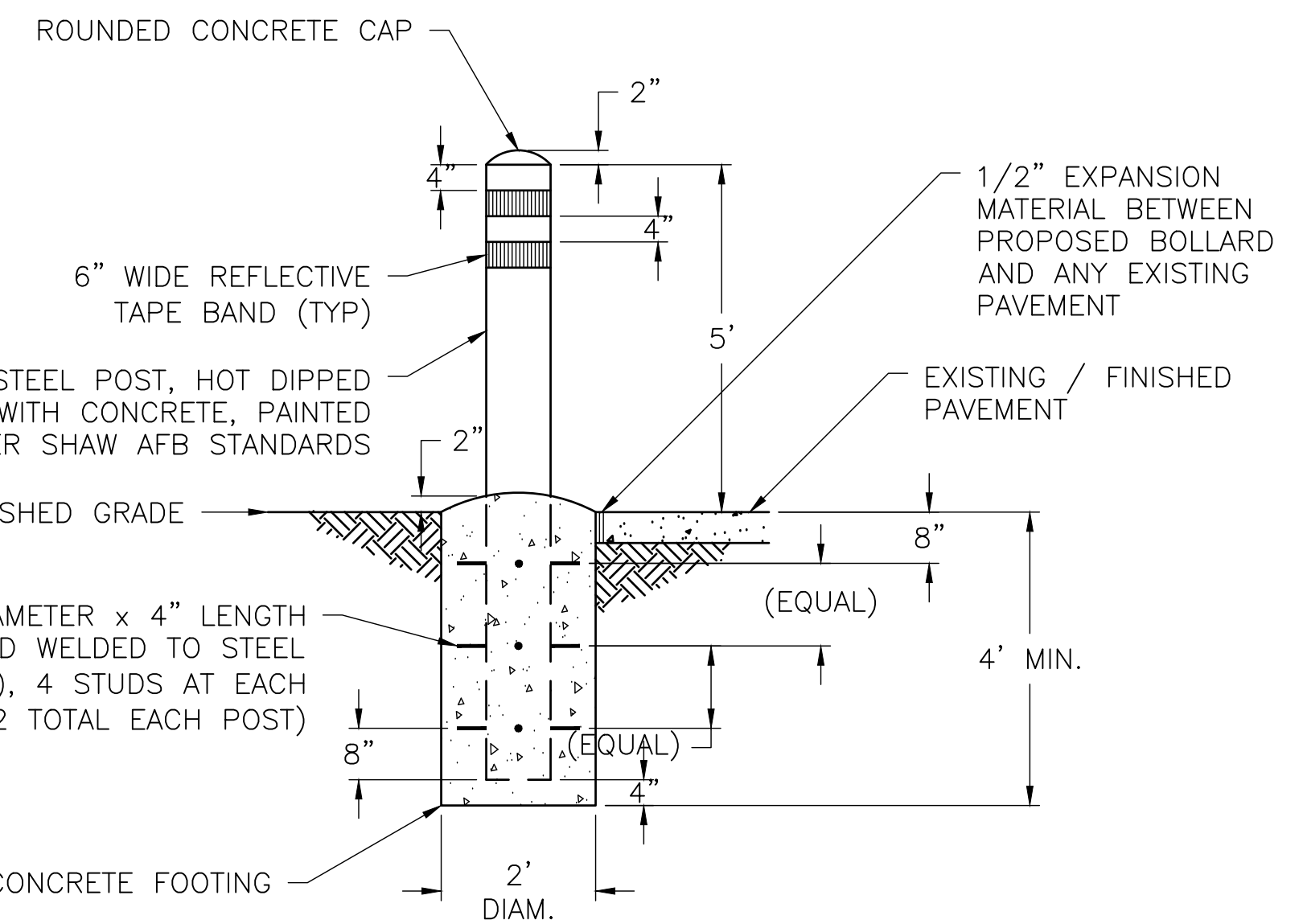


SILT FENCE ELEVATION VIEW



SILT FENCE SECTION VIEW

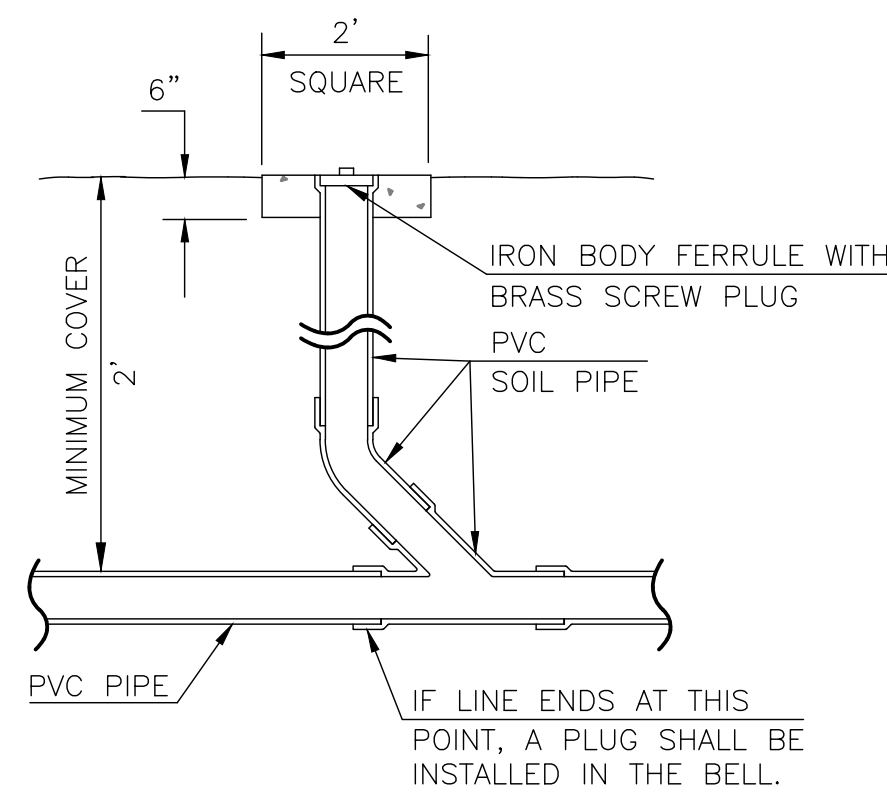
**(A1) TYPICAL EROSION CONTROL DETAILS**  
NTS



**(A3) BOLLARD DETAIL**  
NTS



**(C3) CURBED CONTAINMENT DETAIL FOR EXIST. EQUIP. PADS**  
NTS



**(C1) SANITARY SEWER CLEANOUT DETAIL**  
NTS

NOTE: REFER TO GEOTECHNICAL REPORT AND STRUCTURAL DESIGN FOR FOUNDATION REQUIREMENTS.

NOTE: THESE DETAILS APPLY TO ALL CIVIL ENGINEERING PORTIONS OF THE PROPOSED PROJECT AT ALL FACILITIES (AND ALL RELATED IMPROVEMENTS), INCLUDING THE FOLLOWING DEFICIENCIES: SHW036; SHW037; SHW057.

NOTE: CONTRACTOR SHALL NOT DEPLOY SILT FENCES IN A MANNER SUCH THAT THEY WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE ACROSS MINOR DITCHES / SWALES

**NOTES:**

- PRIOR TO CONSTRUCTION, THE ENTIRE SILT FENCE MUST BE IN PLACE. CONTRACTOR IS REQUIRED TO PREVENT ANY SEDIMENT TRANSPORT FROM THE PROJECT SITE ONTO ADJACENT PROPERTY. INSTALLATION OF BALED CONTROL AND/OR FABRIC FENCE TYPE SILT BARRIER IS ACCEPTABLE. THE BARRIER MUST REMAIN IN PLACE UNTIL UPLAND VEGETATION IS ESTABLISHED FOR DISTURBED AREAS.
- THE EROSION CONTROL PROVISIONS DELINEATED ON THE PLANS ARE THE MINIMUM REQUIRED. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NEEDED DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATIONS. CONTRACTOR SHALL ADJUST AS NECESSARY TO MAINTAIN PROTECTION.
- BEFORE REMOVING SILT BARRIER, CONTRACTOR SHALL COLLECT AND DISPOSE OF ANY ACCUMULATED SILT.
- SEE CIVIL CONSTRUCTION NOTES ON SHEETS 000-C-001 AND 000-C-002, AND EROSION CONTROL PLAN LOCATIONS ON SHEETS 000-C-101, 000-C-102, 207-C-121, AND 207TBD-C-121.

20th CIVIL ENGINEER SQUADRON

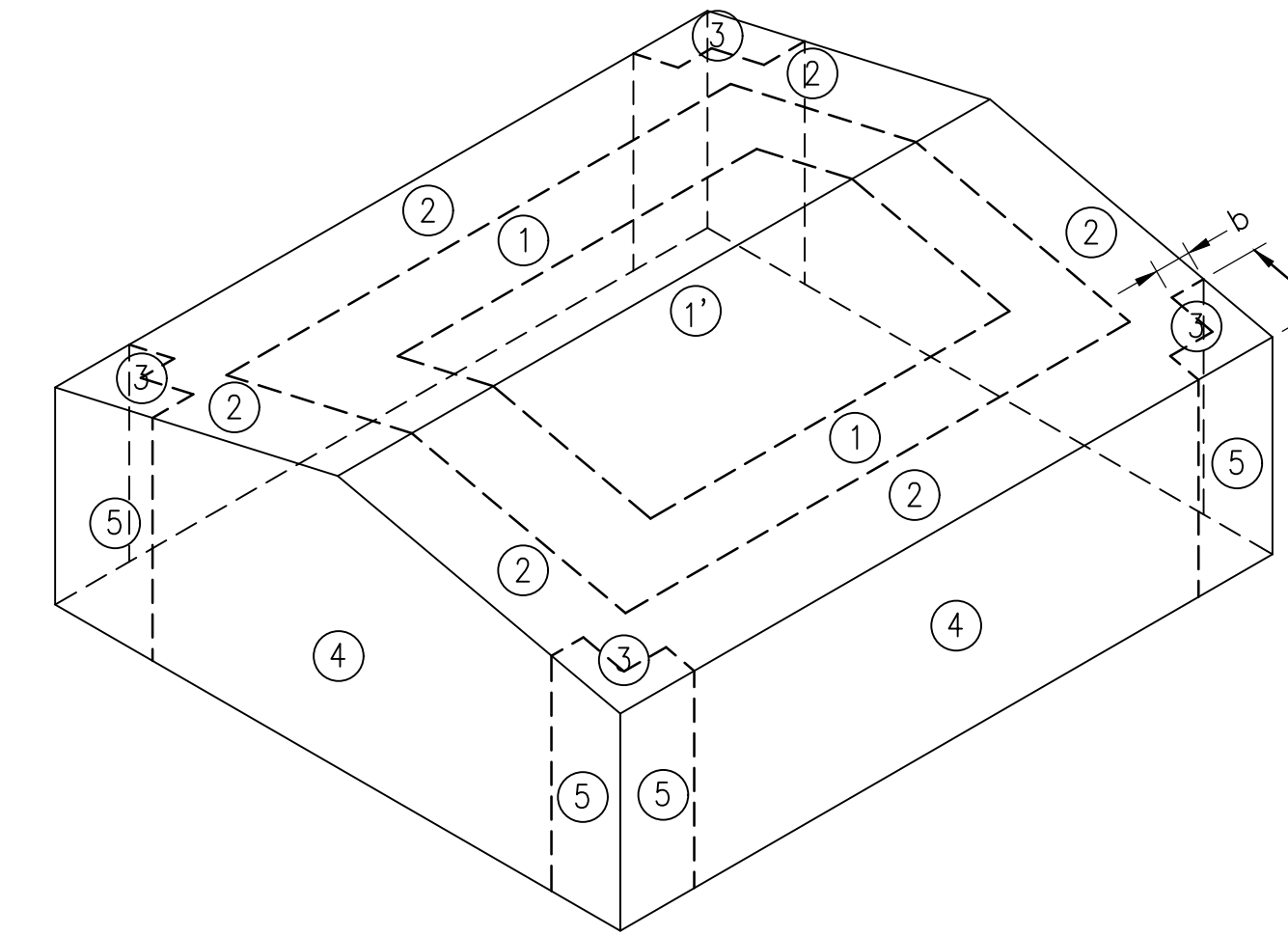
428 CHAPIN STREET  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

CIVIL DETAILS  
M.J.R. ROBERTS  
ENGINEER  
60590568  
PROJECT NUMBER  
05/26/2021  
DATE  
AS NOTED  
SHEET 11 OF 36

## FREQUENTLY USED ABBREVIATIONS

ADDL. ADDITIONAL A.F.F. ABOVE FINISHED FLOOR ANCH. ANCHOR & AND L ANGLE APPROX. APPROXIMATELY @ AT ARCHIT'L ARCHITECTURAL  BLDG. BUILDING BM BEAM B.O. BOTTOM OF BOT BOTTOM  CANT. CANTILEVER C.I.P. CAST IN PLACE C.J. CONTROL JOINT CL OR CL CENTER LINE C.M.U. CONCRETE MASONRY UNIT CLR. CLEAR, CLEARANCE COL. COLUMN CONC CONCRETE CONN CONNECTION CONT CONTINUOUS CTRS CENTERS  DET DETAIL DIA DIAMETER DIAG DIAGONAL DWL DOWEL DWG DRAWING  EA EACH E.F. EACH FACE E.W. EACH WAY EOS EDGE OF SLAB EQ EQUAL EQUIP EQUIPMENT EL. ELEVATION EXIST. EXISTING EXP EXPANSION	FIN. FINISH OR FINISHED FL FLOOR FTG FOOTING F.D. FLOOR DRAIN F.O.C. FACE OF CONCRETE F.S. FAR SIDE  GALV GALVANIZED GA. GAGE  HGR HANGER HEX HEXAGON HORI HORIZONTAL HR HANDRAIL  INCL INCLUDE/INCLUSIVE I.D. INSIDE DIAMETER I.V.E. INVERT ELEVATION  JT JOINT  L.L.H. LONG LEG HORIZONTAL L.L.V. LONG LEG VERTICAL  MAX. MAXIMUM M.C. MOMENT CONNECTION M.D. METAL DECK MFR MANUFACTURER MIN MINIMUM MISC MISCELLANEOUS  RAD. RADIUS RE: REFER TO REF. REFERENCE REINF REINFORCING, REINFORCE REQ'D REQUIRED REV. REVISION  N/A NOT APPLICABLE N.G.V.D. NATIONAL GEODETIC VERTICAL DATUM	# OR NO. NUMBER N.S. NEAR SIDE N.T.S. NOT TO SCALE  O.C. ON CENTER O.D. OUTSIDE DIAMETER O.H. OVERHANG OPNG OPENING OPP HD OPPOSITE HAND  PL PLATE PENET. PENETRATION  SECT. SECTION SH. SHEET SIM SIMILAR SPCS SPACES SPCS. SPECIFICATIONS STD STANDARD STIRR STIRRUPS SST STAINLESS STEEL  TEMP TEMPORARY THK THICK T.O. TOP OF T.O.S. TOP OF STEEL TYP. TYPICAL  U.N.O. UNLESS NOTED OTHERWISE  VERT VERTICAL V.B. VAPOR BARRIER V.I.F./VIF VERIFY IN FIELD  W.W.F. WELDED WIRE FABRIC WF WIDE FLANGE W/ WITH W.P. WORK POINT	# OR NO. NUMBER N.S. NEAR SIDE N.T.S. NOT TO SCALE  O.C. ON CENTER O.D. OUTSIDE DIAMETER O.H. OVERHANG OPNG OPENING OPP HD OPPOSITE HAND  PL PLATE PENET. PENETRATION  SECT. SECTION SH. SHEET SIM SIMILAR SPCS SPACES SPCS. SPECIFICATIONS STD STANDARD STIRR STIRRUPS SST STAINLESS STEEL  TEMP TEMPORARY THK THICK T.O. TOP OF T.O.S. TOP OF STEEL TYP. TYPICAL  U.N.O. UNLESS NOTED OTHERWISE  VERT VERTICAL V.B. VAPOR BARRIER V.I.F./VIF VERIFY IN FIELD  W.W.F. WELDED WIRE FABRIC WF WIDE FLANGE W/ WITH W.P. WORK POINT
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**WIND LOAD EQUIPMENT CANOPY**  
 $a = 17'$   $b = 6'$

SQUARE FOOT	ZONE 1'		ZONE 1		ZONE 2		ZONE 3		ZONE 4		ZONE 5	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
10	16	-31	16	-54	16	-71	16	-97	31	-34	31	-41
20	16	-31	16	-50	16	-67	16	-88	30	-32	30	-39
50	16	-31	16	-46	16	-60	16	-76	28	-30	28	-35
100	16	-31	16	-42	16	-56	16	-67	27	-29	27	-32
500	16	-21	16	-34	16	-45	16	-45	23	-26	23	-26

NOTES:  
 1. WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH ASCE 7-16.  
 2. ALL LOADS SHOWN ARE ULTIMATE WIND PRESSURE.

COMPONENT & CLADDING NOTES:

- CC1. ALL COMPONENT AND CLADDING MATERIALS NOT SPECIFICALLY DESIGNED OR OTHERWISE NOTED ON THESE DRAWINGS SHALL SAFELY RESIST THESE MINIMUM DESIGN WIND PRESSURES FOR THE SUBJECT MEMBER'S EFFECTIVE WIND AREA AS WELL AS THE WIND PRESSURE RESULTING FROM THE DESIGN WIND SPEED AND APPLICABLE CODES AS INDICATED ON THE STRUCTURAL NOTES AND SPECIFICATIONS (WHICHEVER ARE GREATER). THE EFFECTIVE WIND SPEED AREA SHALL BE DEFINED AS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
- CC2. DESIGN WIND LOAD ZONES INDICATED SHALL BE LOCATED IN ACCORDANCE WITH THE ADJACENT SCHEMATIC ROOF AND WALL ZONE LOCATION DIAGRAMS.
- CC3. PLUS AND MINUS SIGNS SIGNIFY GROSS COMPONENT PRESSURES ACTING TOWARD AND AWAY FROM BUILDING EXTERIOR SURFACES, RESPECTIVELY.
- CC4. LINIER INTERPOLATION MAY BE USED TO DETERMINE PRESSURES FOR EFFECTIVE AREAS BETWEEN THOSE LISTED, OR USE THE LOAD ASSOCIATED WITH THE LOWER AREA.
- CC5. THE "ULTIMATE" WIND LOADS SHOWN SHALL BE MULTIPLIED BY 0.6 TO OBTAIN "SERVICE" WIND LOADS.
- CC6. THE COLD FORMED STEEL TRUSS ROOF MEMBERS SHALL BE DESIGNED AS COMPONENT (NOT MWFRS) ELEMENTS. THE COLD FORMED STEEL TRUSS ENGINEER SHALL REDUCE THE GROSS UPLIFT DESIGN FORCES BY 6 PSF (SERVICE LOAD) IN ORDER TO DETERMINE THE MINIMUM NET DESIGN UPLIFT FORCE FOR ROOF MEMBERS SUBJECTED TO WIND UPLIFT.

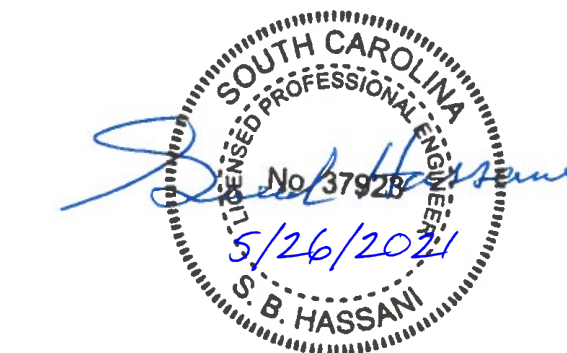
FOUNDATION NOTES:

1. DESIGN ALLOWABLE SOIL BEARING PRESSURE IS EQUAL TO 2500 PSF PER THE GEOTECHNICAL REPORT BY EAS PROFESSIONALS, INC. DATED APRIL 26, 2019.
2. FOUNDATIONS SHALL BE SUPPORTED ON PROPERLY COMPACTED SOIL. REFER TO THE TYPICAL FOUNDATION SECTIONS IN THESE DRAWINGS FOR COMPACTION REQUIREMENTS.
3. LOCATE EXISTING FOUNDATIONS AND UTILITIES PRIOR TO CONSTRUCTING NEW FOUNDATIONS. CONTRACTOR SHALL TAKE EXTREME CARE NOT TO DAMAGE ANY EXISTING FOUNDATIONS AND UTILITIES.
4. PRIOR TO COMMENCING ANY EXCAVATION OPERATIONS, FIELD VERIFY THE BOTTOM OF THE EXISTING, ADJOINING FOUNDATIONS. DO NOT EXCAVATE BELOW THE BOTTOM OF ANY EXISTING, ADJOINING FOUNDATIONS. SUPPORT SYSTEMS SUCH AS SHORING, BRACING, OR UNDERPINNING SHALL BE PROVIDED TO ENSURE THE STABILITY OF EXISTING STRUCTURES.
5. EXPECT TO PERFORM DEWATERING FOR FOUNDATIONS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT FLOTATION OF STRUCTURES UNTIL ALL CONSTRUCTION IS COMPLETE.
6. POSITIVE SURFACE DRAINAGE SHALL BE ESTABLISHED AND MAINTAINED DURING CONSTRUCTION TO PREVENT ACCUMULATION OF WATER IN CONSTRUCTION AREAS.

ANCHOR BOLT EMBEDMENT FOR PRE-ENGINEERED METAL CANOPIES:

- \* FOR BOLTS UP TO 1 INCH DIAMETER; PROVIDE 20.0" MINIMUM EMBEDMENT DEPTH.
- \* FOR BOLTS WITH A DIAMETER OF 1.25" OR LARGER; PROVIDE A MINIMUM EMBEDMENT OF 20 TIMES THE DIAMETER OF THE ANCHOR BOLT.

EMBEDDED DEPTH IS DEFINED AS THE DISTANCE FROM THE TOP OF THE CONCRETE TO THE UPPER EMBEDDED NUT/PLATE WASHER. THE PROJECTION LENGTH OF THE ANCHOR BOLT ABOVE THE TOP OF THE CONCRETE IS THE RESPONSIBILITY OF THE CONTRACTOR.



**20th CIVIL ENGINEER SQUADRON**

428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

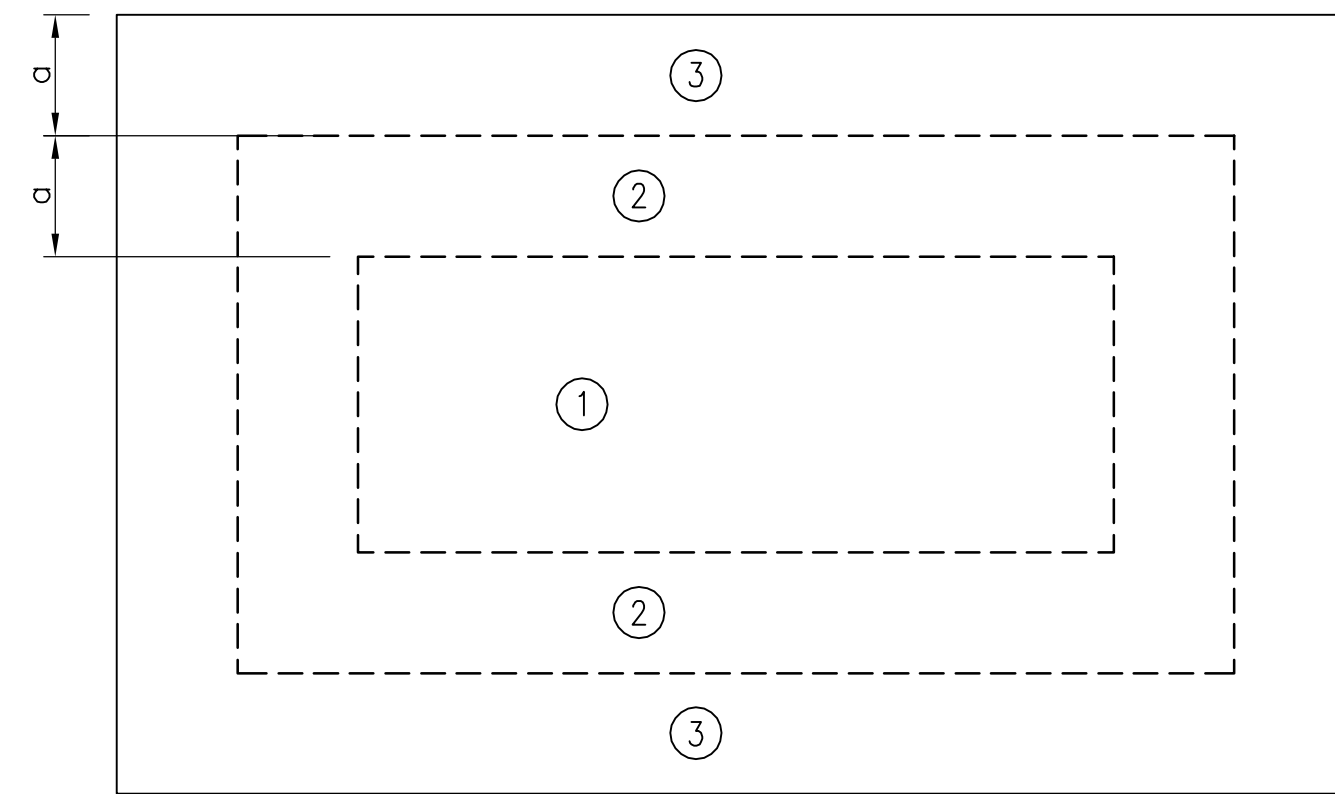
FAC-207 ABBREVIATIONS AND WIND LOADS

CIP: MRV  
 DRAWING: 207-S-001  
 PROJECT NUMBER: 05/26/2021  
 DATE: AS SHOWN

12 OF 36 SHEET

REVISION	DATE	DESCRIPTION OF REVISION

REV BY



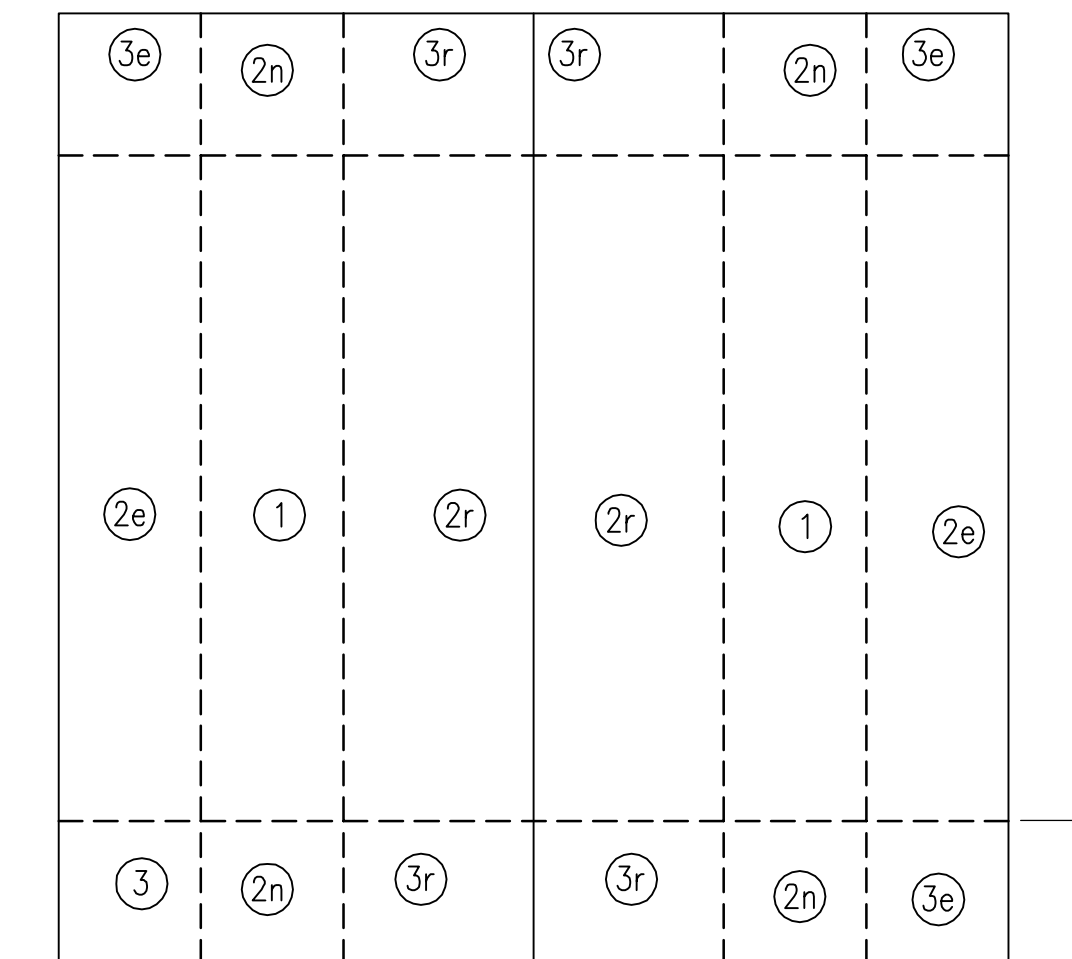
**WIND LOAD TRUCK FILL STAND CANOPY**

$a = 3'$

SQUARE FOOT	ZONE 1 (psf)		ZONE 2 (psf)		ZONE 3 (psf)	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
≤9 SF	14	-31	21	-47	27	-93
>9≤36SF	14	-31	21	-47	21	-47
>36 SF	14	-31	14	-31	14	-31

NOTES:

1. WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH ASCE 7-16.
2. ALL LOADS SHOWN ARE ULTIMATE WIND PRESSURE.



**WIND LOAD FAC 207 BUILDING**

$a = 3'$

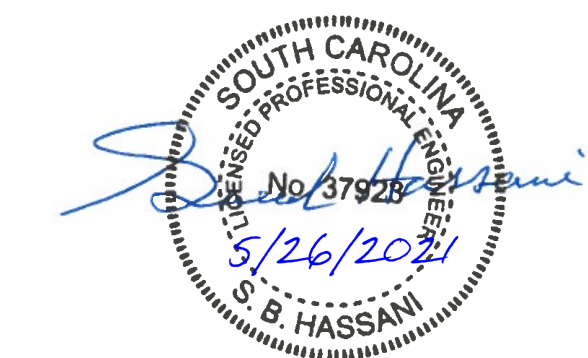
SQUARE FOOT	ZONE 1&2e (psf)		ZONE 2n,2r & 3e (psf)		ZONE 3r (psf)		OVERHANG ZONE 1 & 2e (psf)		OVERHANG ZONE 2n & 2r (psf)		OVERHANG ZONE 3e (psf)		OVERHANG ZONE 3R (psf)	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
10	18	-55	18	-80	18	-96	18	-63	18	-89	18	-104	18	-119
20	16	-55	16	-70	16	-82	16	-63	16	-80	16	-90	16	-101
50	16	-36	16	-55	16	-64	16	-49	16	-70	16	-71	16	-76
100	16	-17	16	-44	16	-50	16	-38	16	-61	16	-57	16	-58
500	16	-17	16	-30	16	-50	16	-38	16	-51	16	-38	16	-58

NOTES:

1. WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH ASCE 7-16.
2. ALL LOADS SHOWN ARE ULTIMATE WIND PRESSURE.

**COMPONENT & CLADDING NOTES:**

- CC1. ALL COMPONENT AND CLADDING MATERIALS NOT SPECIFICALLY DESIGNED OR OTHERWISE NOTED ON THESE DRAWINGS SHALL SAFELY RESIST THESE MINIMUM DESIGN WIND PRESSURES FOR THE SUBJECT MEMBER'S EFFECTIVE WIND AREA AS WELL AS THE WIND PRESSURE RESULTING FROM THE DESIGN WIND SPEED AND APPLICABLE CODES AS INDICATED ON THE STRUCTURAL NOTES AND SPECIFICATIONS (WHICHEVER ARE GREATER). THE EFFECTIVE WIND SPEED AREA SHALL BE DEFINED AS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
- CC2. DESIGN WIND LOAD ZONES INDICATED SHALL BE LOCATED IN ACCORDANCE WITH THE ADJACENT SCHEMATIC ROOF AND WALL ZONE LOCATION DIAGRAMS.
- CC3. PLUS AND MINUS SIGNS SIGNIFY GROSS COMPONENT PRESSURES ACTING TOWARD AND AWAY FROM BUILDING EXTERIOR SURFACES, RESPECTIVELY.
- CC4. LINIER INTERPOLATION MAY BE USED TO DETERMINE PRESSURES FOR EFFECTIVE AREAS BETWEEN THOSE LISTED, OR USE THE LOAD ASSOCIATED WITH THE LOWER AREA.
- CC5. THE "ULTIMATE" WIND LOADS SHOWN SHALL BE MULTIPLIED BY 0.6 TO OBTAIN "SERVICE" WIND LOADS.
- CC6. THE COLD FORMED STEEL TRUSS ROOF MEMBERS SHALL BE DESIGNED AS COMPONENT (NOT MWFRS) ELEMENTS. THE COLD FORMED STEEL TRUSS ENGINEER SHALL REDUCE THE GROSS UPLIFT DESIGN FORCES BY 6 PSF (SERVICE LOAD) IN ORDER TO DETERMINE THE MINIMUM NET DESIGN UPLIFT FORCE FOR ROOF MEMBERS SUBJECTED TO WIND UPLIFT.



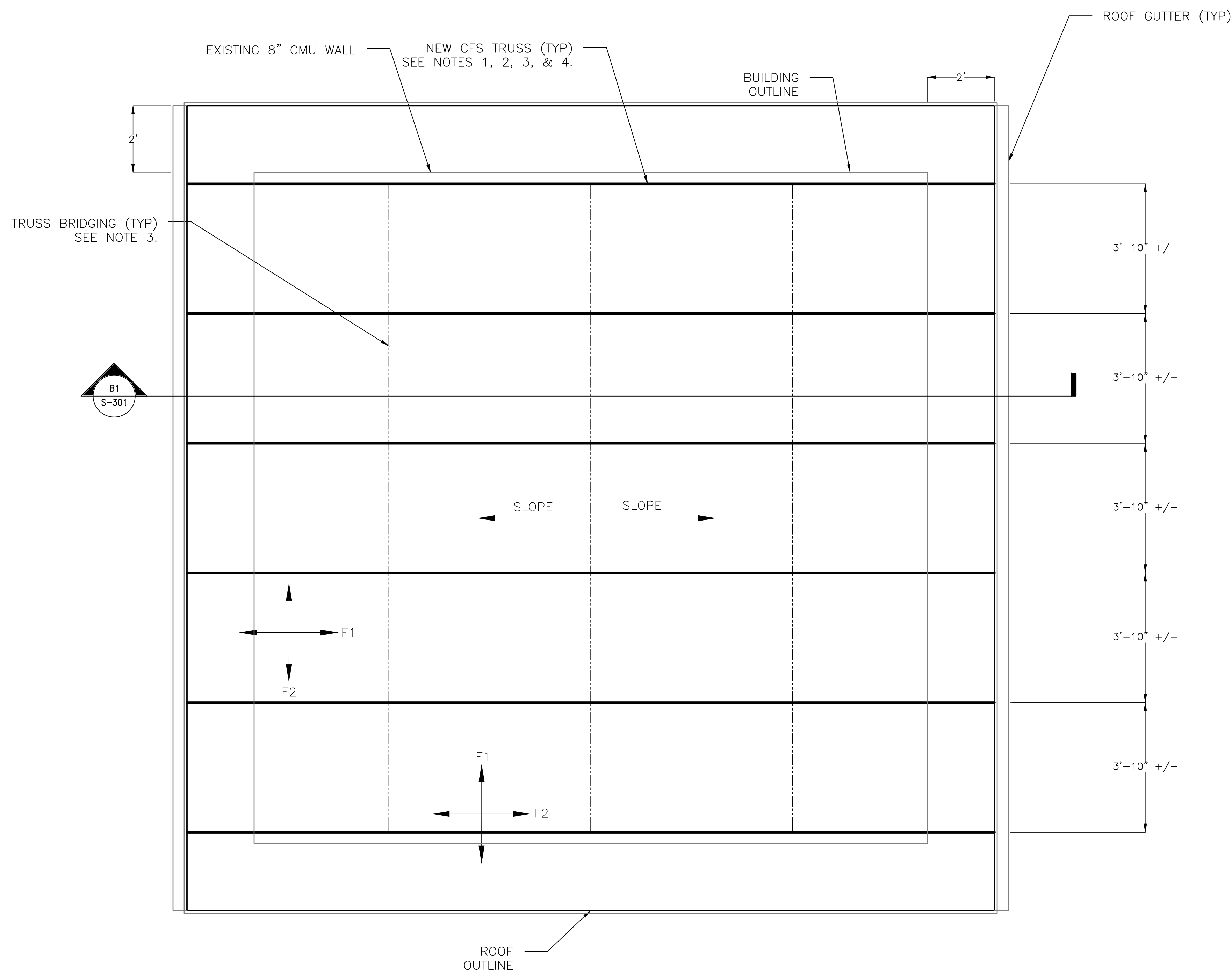
20th CIVIL ENGINEER SQUADRON  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

A&E SERVICES POL FOR SHAW AFB  
CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
ISSUED FOR CONSTRUCTION

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

FAC 207 WIND LOAD DIAGRAMS	MRM	13	36
DRYERMAN	207-S-002		
ENGINEER	DRAWING NUMBER		
60590568			
PROJECT NUMBER			
03/26/2021	AS SHOWN		
DATE			

**1** STRUCTURAL ROOF PLAN FAC 207 BUILDING  
SCALE: 1/2" = 1' = 0"



**GENERAL NOTES:**

A. DIMENSIONS HAVE BEEN TAKEN FROM EXISTING DRAWINGS PROVIDED BY CLIENT. CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO COMMENCING WITH THE TRUSS FABRICATION.

**NOTES:**

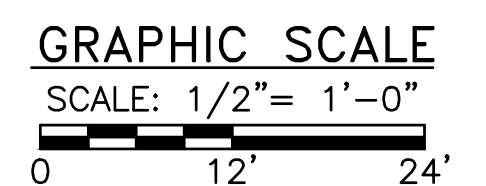
1. ROOF SYSTEM IS ROOF DECK SUPPORTED BY NEW CFS TRUSSES. STEEL DECK SHALL BE PLACED WITH A TWO-SPAN CONDITION MINIMUM. NO SINGLE SPANS ARE ALLOWED. SEE DETAIL "A2" ON S-301.
2. THE COLD FORMED STEEL TRUSSES, BRIDGING, FRAMING, AND CONNECTIONS TO THE EXISTING STRUCTURE'S CMU BOND BEAM SHALL BE DESIGNED BY A STEEL TRUSS ENGINEER. ADDITIONALLY, THIS SPECIALLY ENGINEER SHALL ACCOUNT FOR LATERAL LOADS.
3. COLD FORMED STEEL TRUSSES AND ALL CONNECTIONS SHALL BE DESIGNED TO TRANSFER HORIZONTAL IN-PLANE AND OUT-OF-PLANE ULTIMATE LOADS FROM THE METAL ROOF DECK TO THE TOP OF THE EXISTING WALL. ALSO REFER TO DETAIL "A3" ON S-301.
4. STEEL TRUSS AND CONNECTIONS SHALL BE DESIGNED FOR BOTH THE UPLIFT AND DOWNWARD WIND PRESSURES INDICATED ON S-002.

FOR MASONRY WALL RENOVATIONS,  
REFER TO SHEET S-302.

**LEGEND**

- NEW TRUSS BY TRUSS ENGINEER
- - - TRUSS BRIDGING BY TRUSS ENGINEER

F1 = HORIZONTAL IN-PLANE LOAD = 200 #/FT. (ULTIMATE) (TYPICAL BOTH ENDS OF THE BUILDING).  
F2 = HORIZONTAL OUT-OF-PLANE LOADS = =200 #/FT. (ULTIMATE) (TYPICAL BOTH ENDS OF BUILDING).

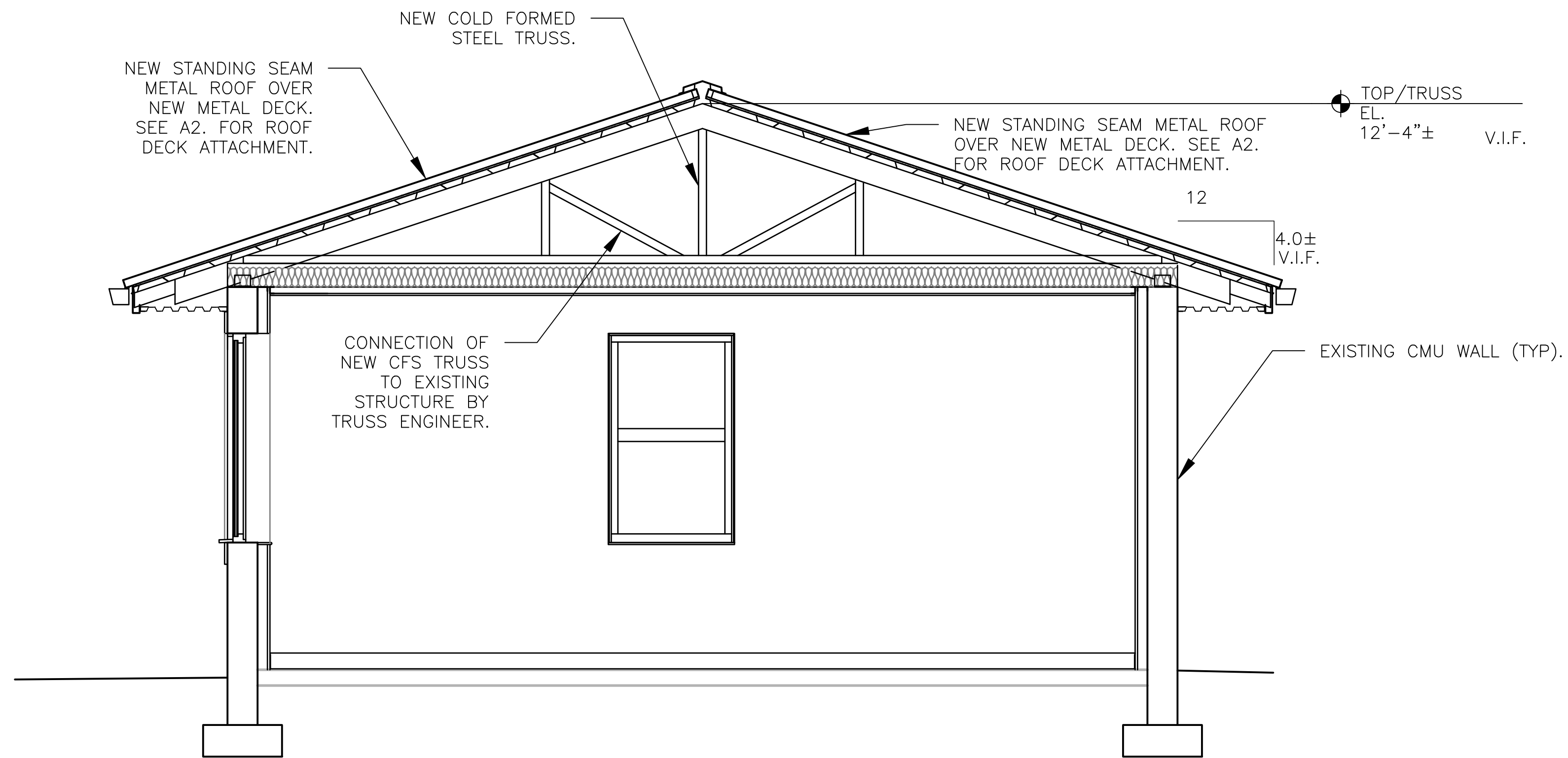


**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626  
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

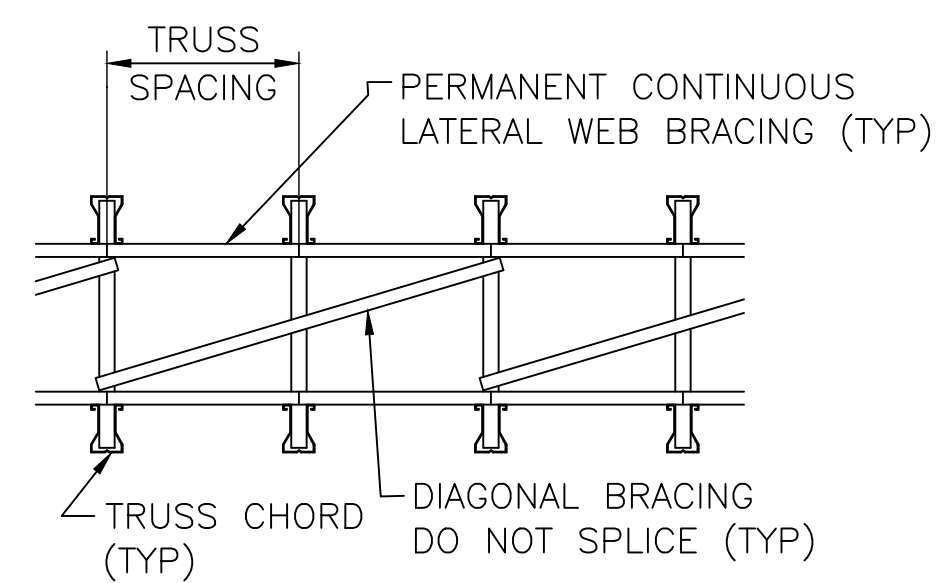
  

FAC 207 STRUCTURAL ROOF PLAN	MRM	14	36
GROUP	ENGINEER	SHEET	OF
60590568	207-S-103	AS SHOWN	AS SHOWN
05/26/2021	DATE	PROJECT NUMBER	FORMING NUMBER

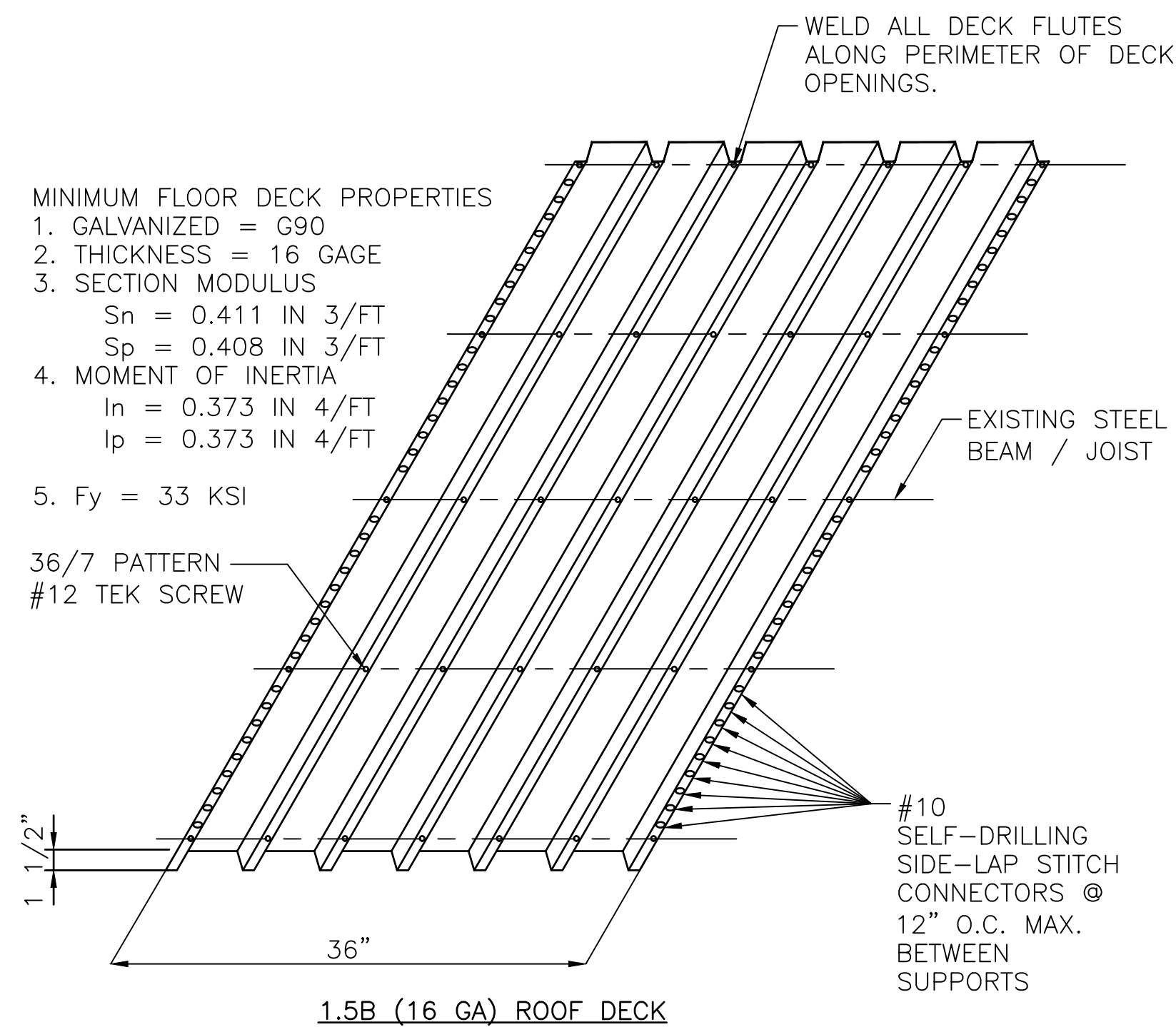


**B1** BUILDING SECTION  
SCALE: 1/2" = 1'-0"

FOR MASONRY WALL RENOVATIONS,  
REFER TO SHEET S-302.

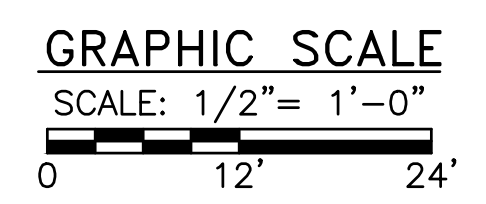
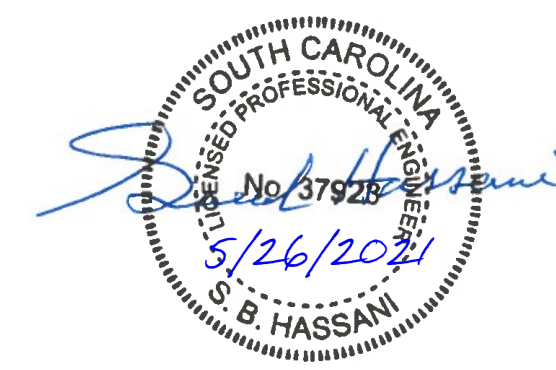


**A3** DETAIL - DIAGONAL BRACE ELEVATION  
SCALE: N.T.S.



**A2** DETAIL - TYPICAL METAL ROOF DECK ATTACHMENT  
SCALE: N.T.S.

- MINIMUM FLOOR DECK PROPERTIES
1. GALVANIZED = G90
  2. THICKNESS = 16 GAGE
  3. SECTION MODULUS  
 $S_n = 0.411$  IN 3/FT  
 $S_p = 0.408$  IN 3/FT
  4. MOMENT OF INERTIA  
 $I_n = 0.373$  IN 4/FT  
 $I_p = 0.373$  IN 4/FT
  5.  $F_y = 33$  KSI

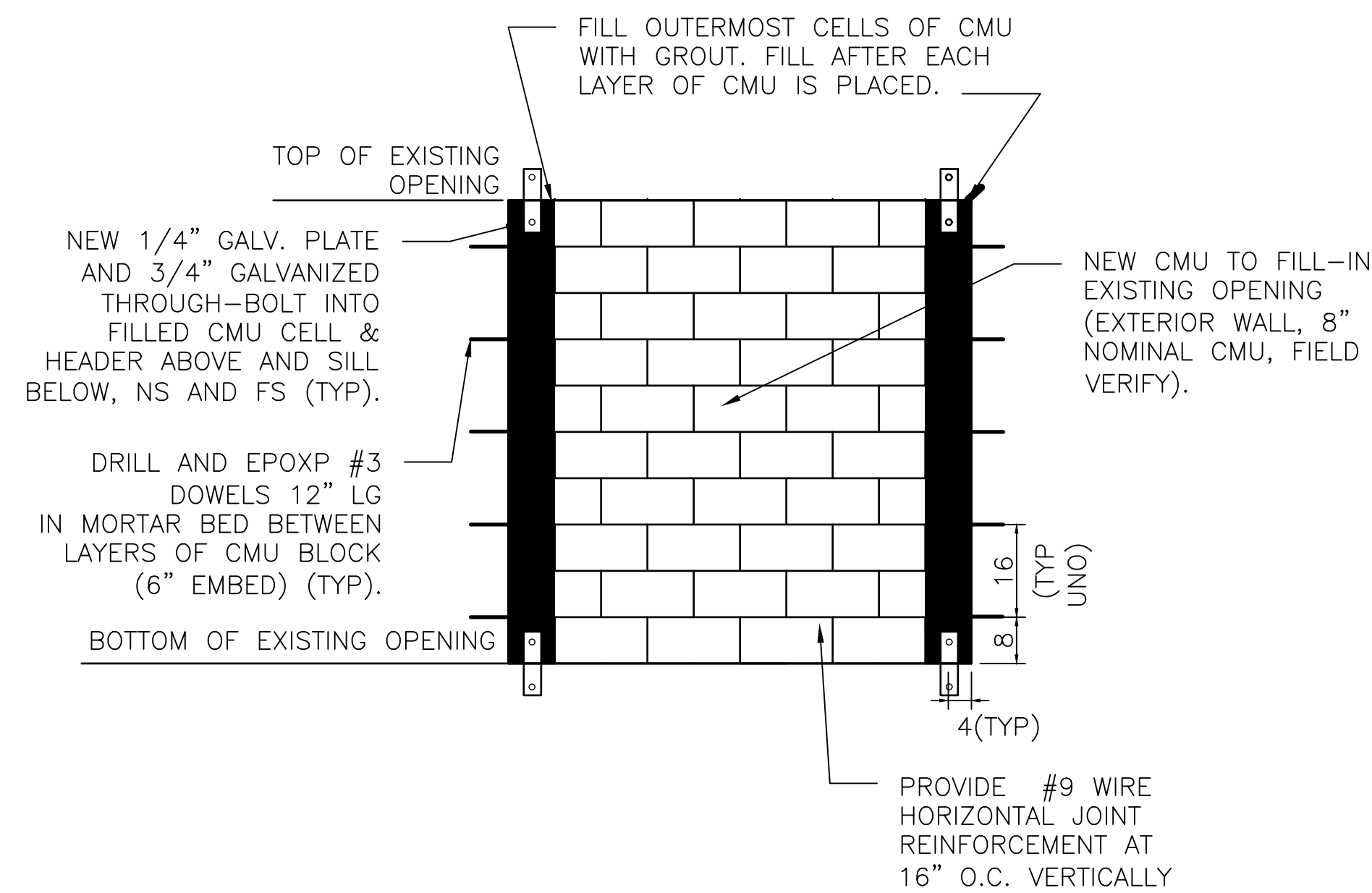


**20th CIVIL ENGINEER SQUADRON**  
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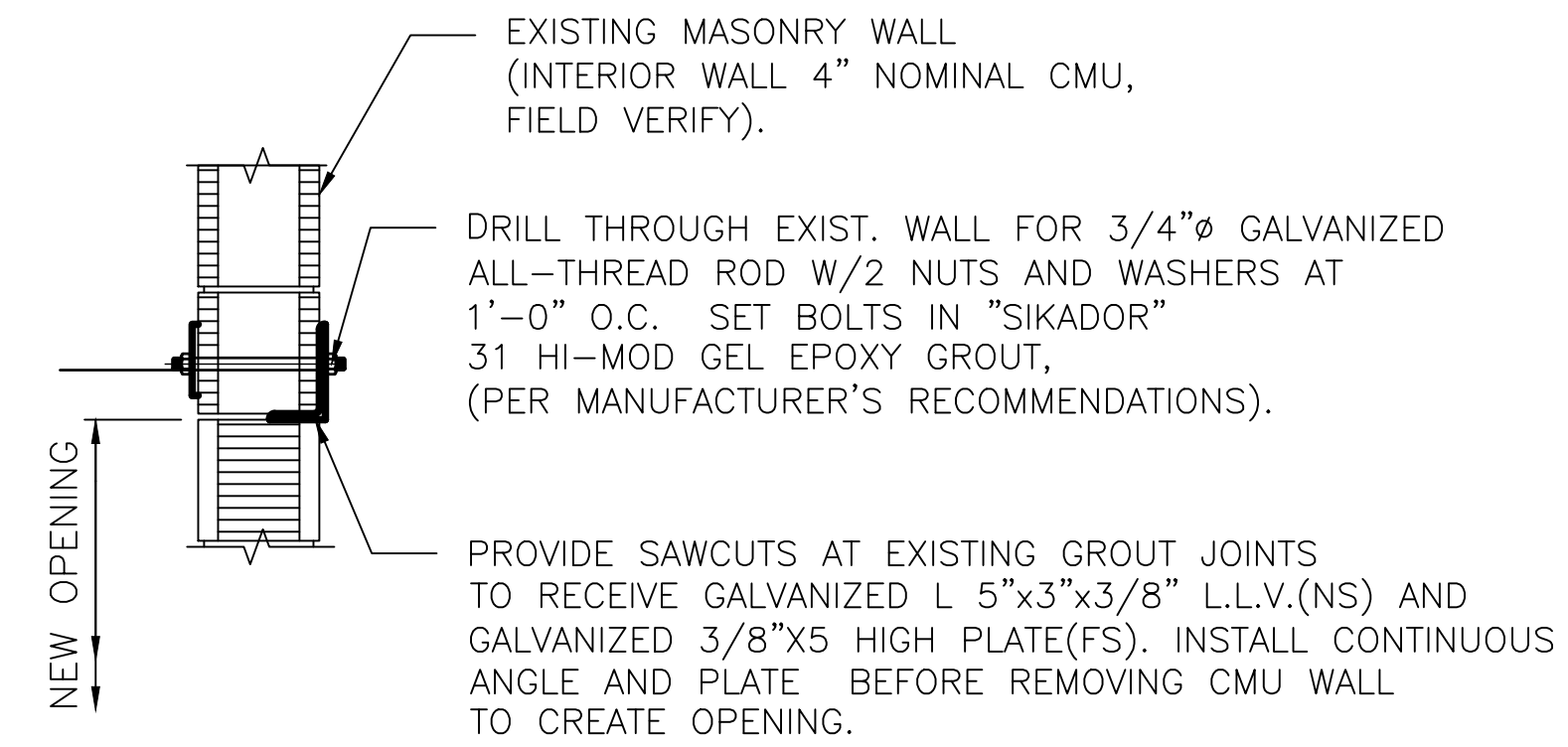
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

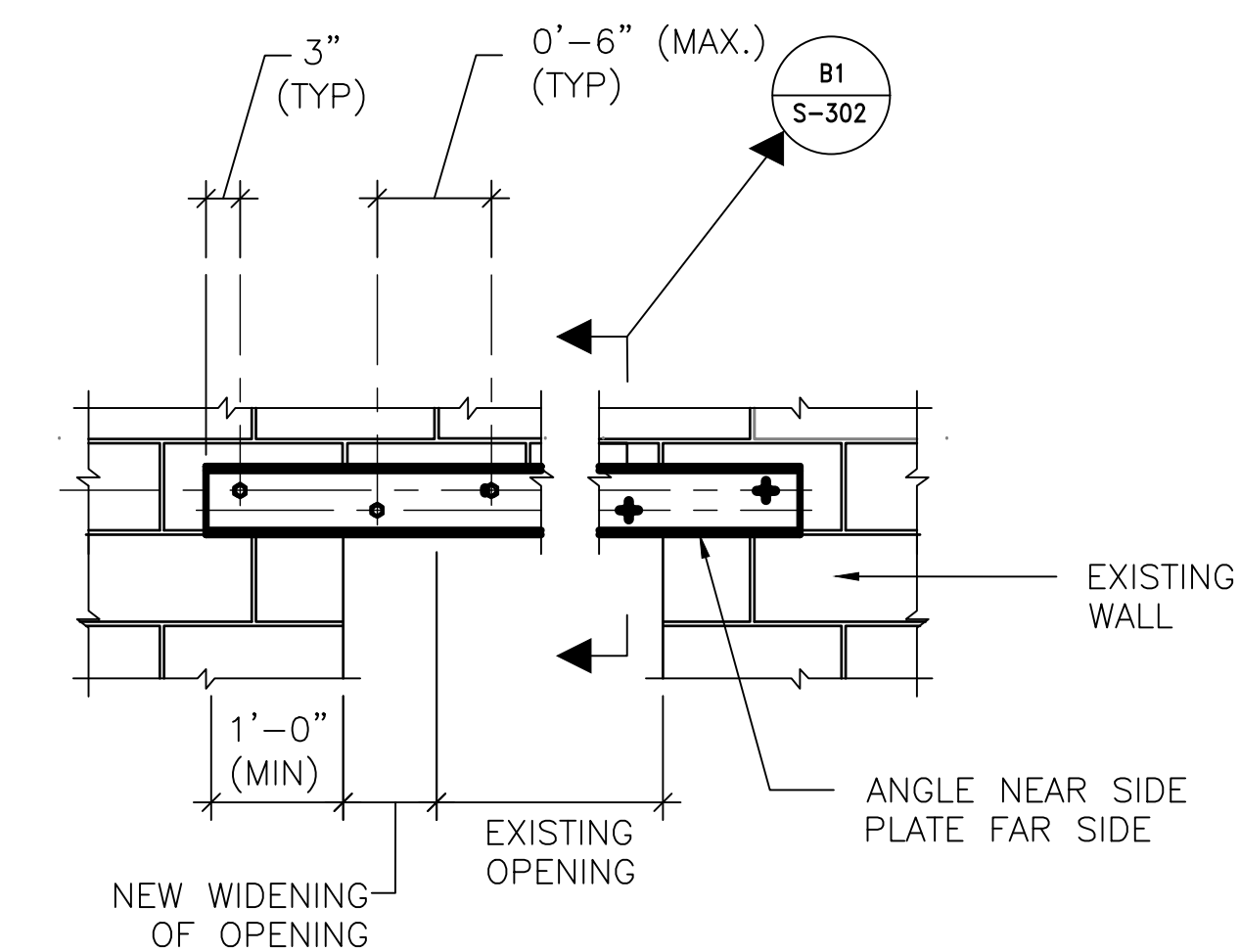
FAC. 207 BUILDING SECTION	MRM
DR. TYPE	DR. HASSAN
ENGINEER	207-S-301
PROJECT NUMBER	ISSUE NUMBER
05/26/2021	AS SHOWN
15	36
SHEET	OF



**A3** CMU IN-FILL DETAIL  
SCALE: N.T.S.



**B1** DETAIL - CMU OVER NEW OPENING  
SCALE: N.T.S.



NOTE:  
ANGLE ON RESTROOM SIDE  
PLATE ON OFFICE SIDE

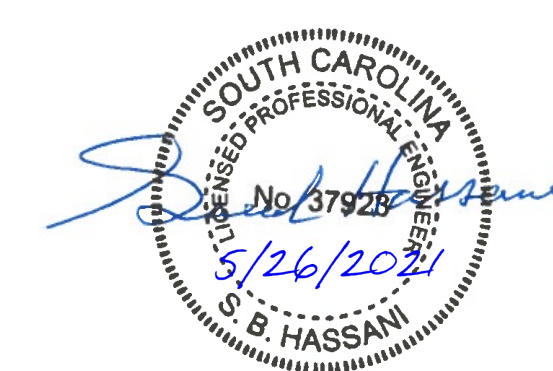
**A1** DETAIL - ELEVATION VIEW CMU OVER NEW OPENING  
SCALE: N.T.S.

MASONRY CONSTRUCTION NOTES:

1. ALL BLOCK SHALL BE HOLLOW LOAD BEARING CONCRETE BLOCK CONFORMING TO ASTM C90, GRADE N, TYPE II.
2. ALL MORTAR SHALL BE CONFORM TO ASTM C270, TYPE M OR S.

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SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
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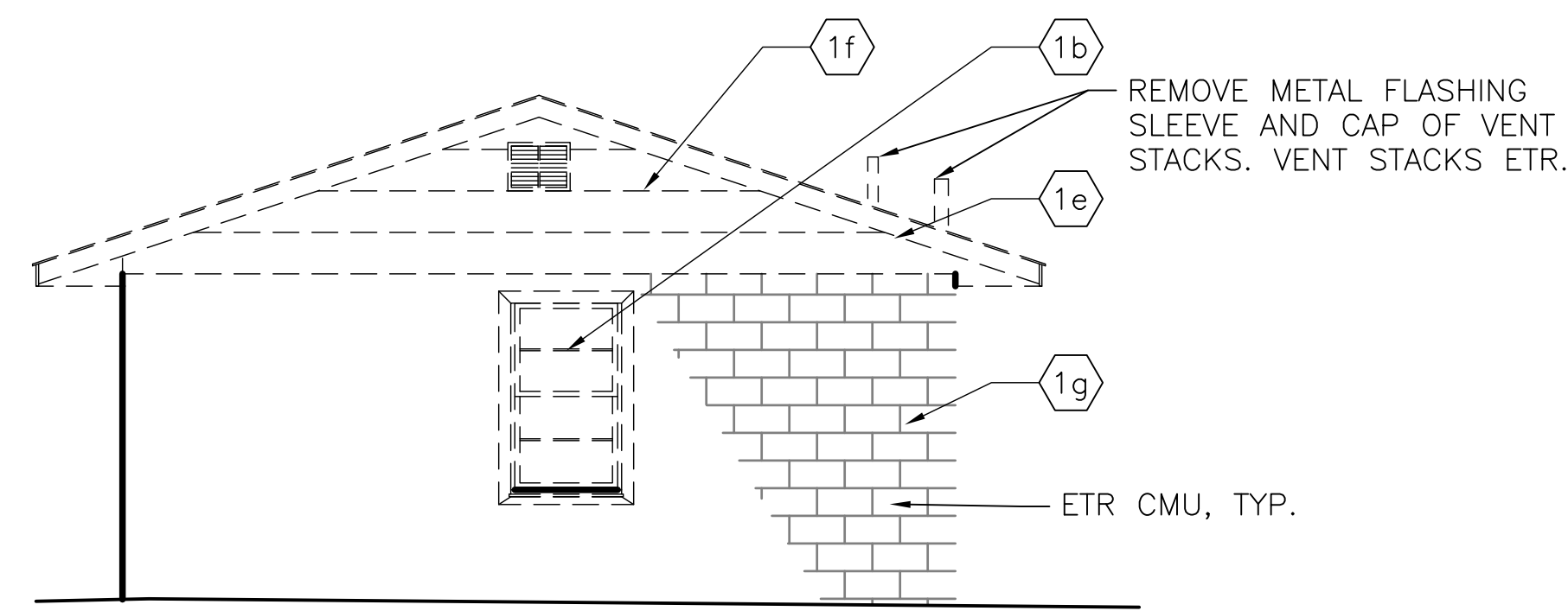
FAC 207 CMU DETAILS  
MRM  
B. HASSAMI  
207-S-302  
05/26/2021 AS SHOWN



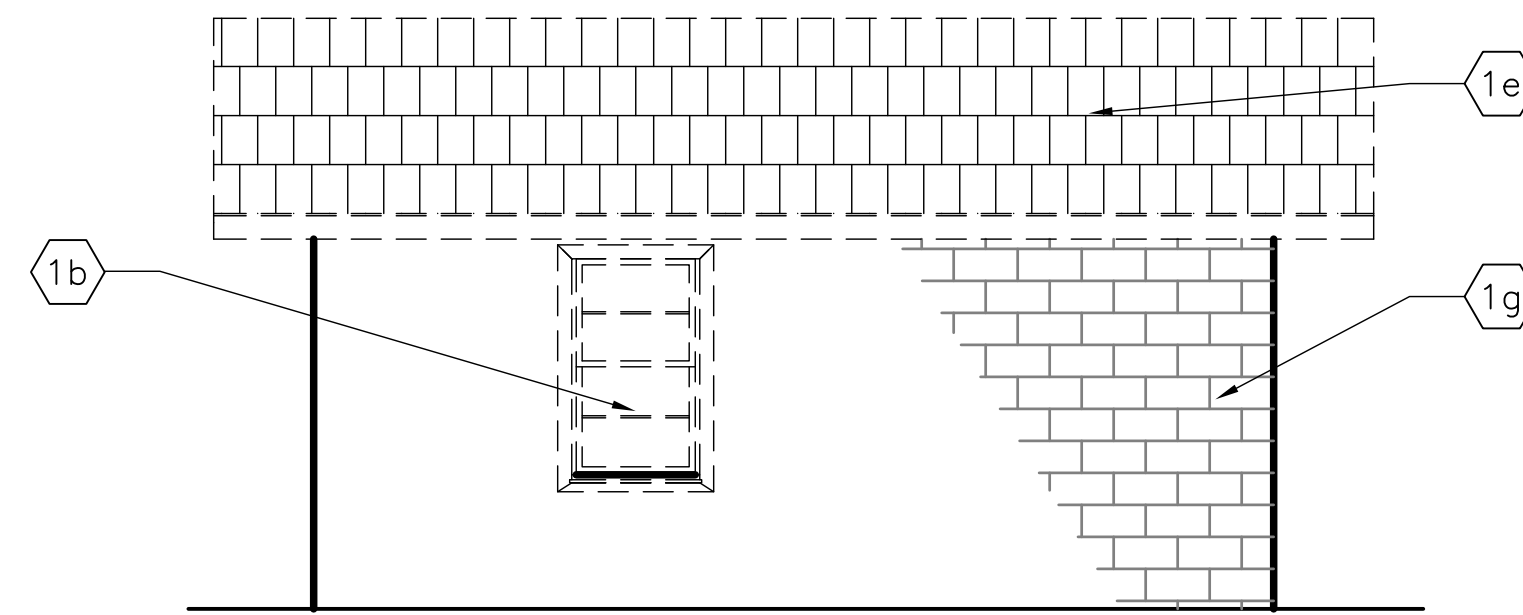
A&E SERVICES POL FOR SHAW AFB  
CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
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REVISION	DATE	DESCRIPTION OF REVISION	REV BY

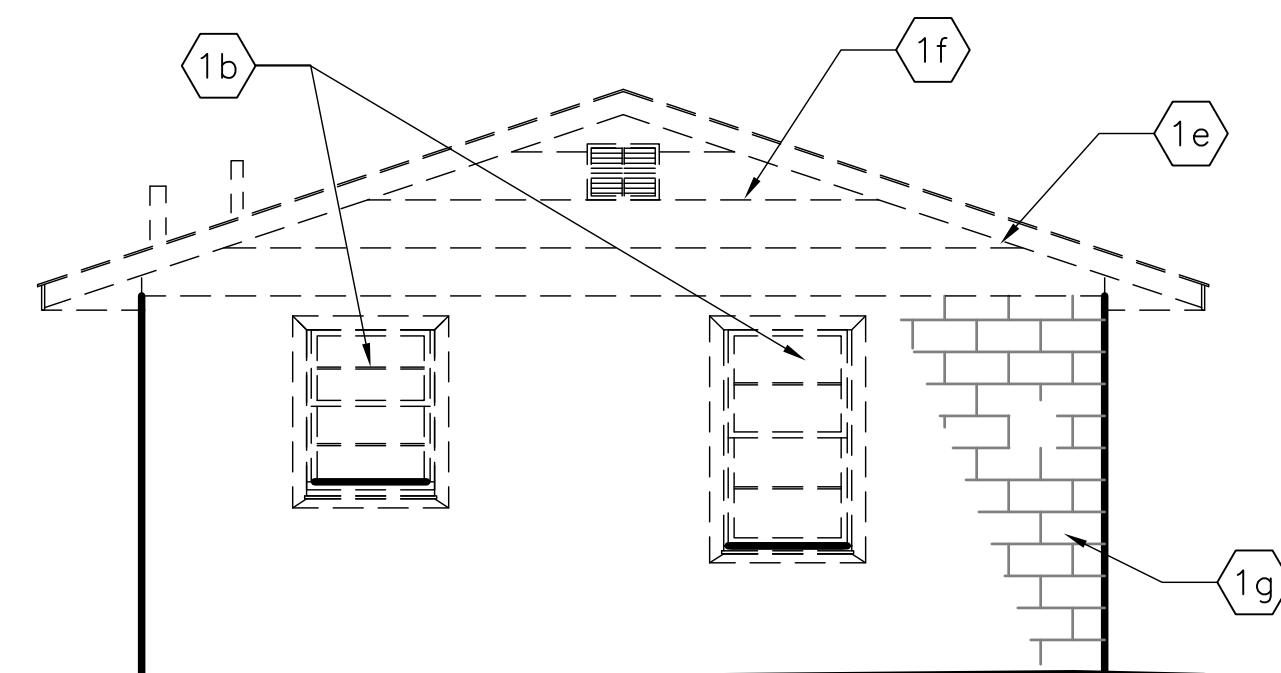




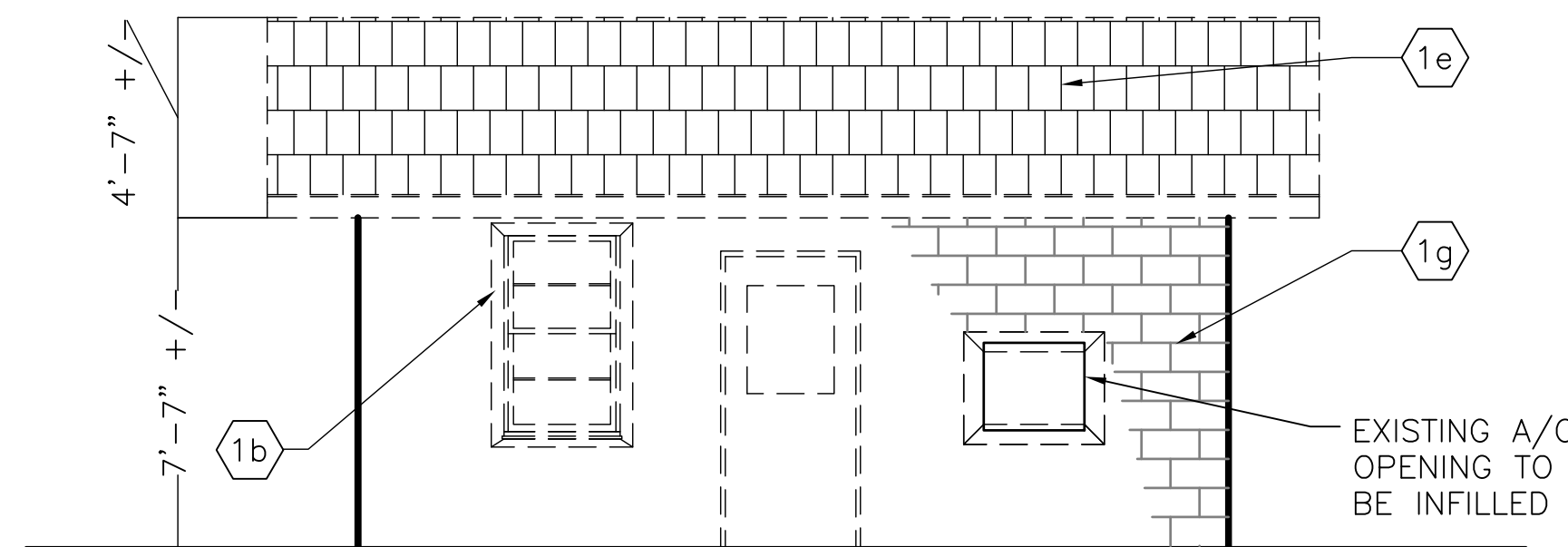
**C3 SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



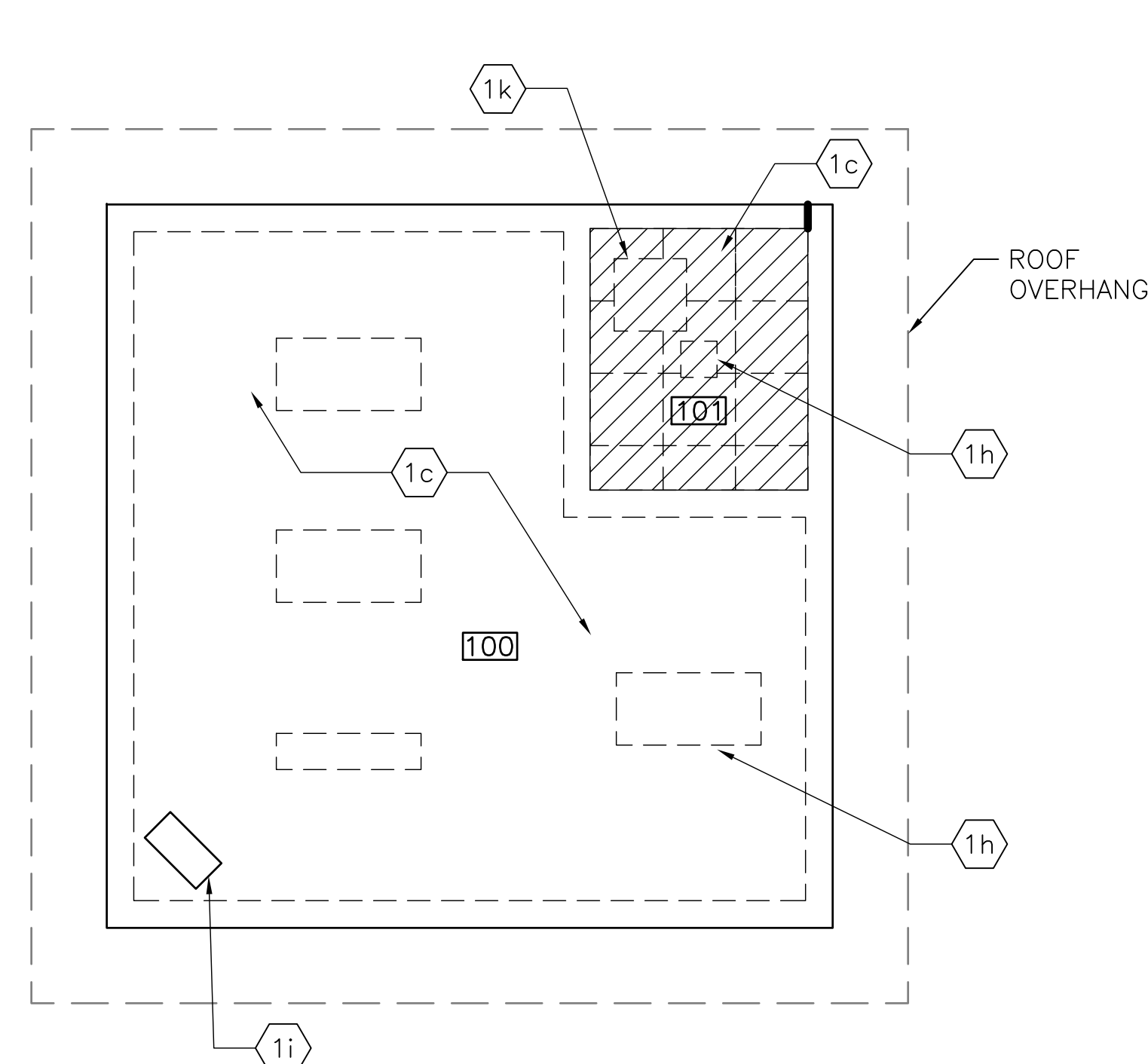
**C2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



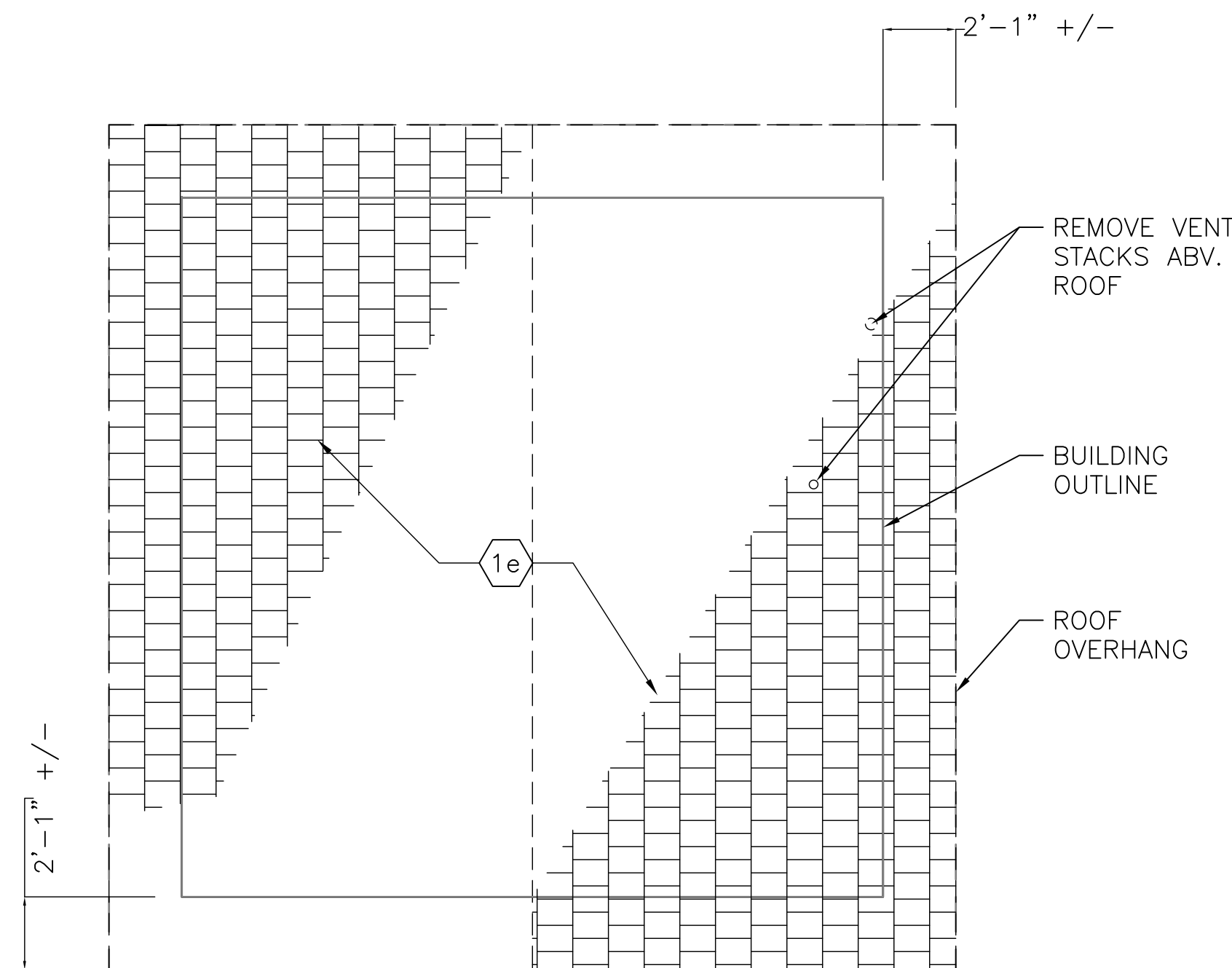
**B3 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



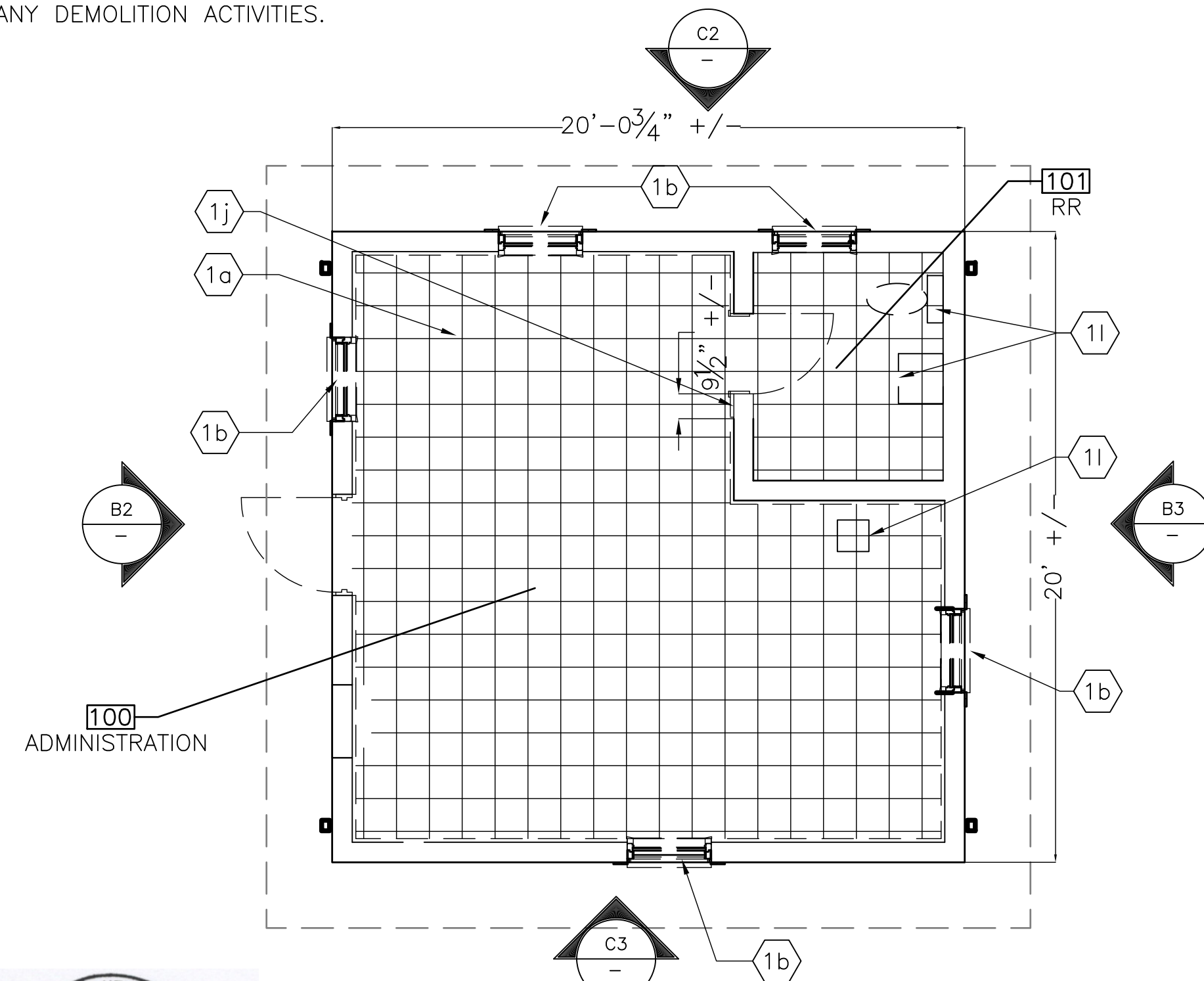
**B2 WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



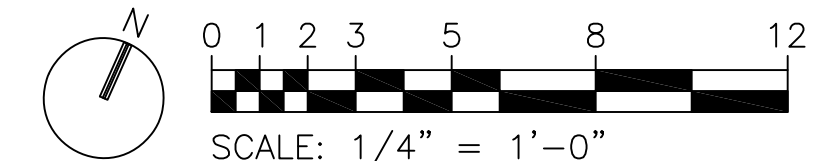
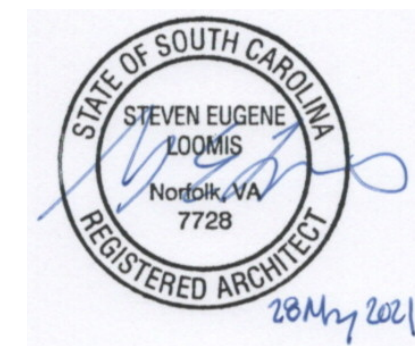
**A3 RCP**  
SCALE: 1/4" = 1'-0"



**A2 ROOF PLAN**  
SCALE: 1/4" = 1'-0"



**A1 FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**DEFICIENCY SHW027 (FAC 207):**

- 1a REMOVE EXISTING VINYL ASBESTOS FLOOR TILE AND ADHESIVE COMPLETELY. REFER TO SPECIFICATION SECTION 02 82 13.00 10. REMOVE WOOD BASE COMPLETELY. PREP FLOOR AND WALL TO RECEIVE NEW WORK.
- 1b REMOVE FIVE (5) EXISTING WINDOWS COMPLETELY, INCLUDING FRAME, STORM WINDOWS, SCREENS, AND EXTERIOR TRIM. PREP FOR NEW WORK.
- 1c REMOVE CEILING COMPLETELY AND PREP FOR NEW WORK.
- 1d REMOVE ASBESTOS ROOFING SHINGLES COMPLETELY IN ACCORDANCE WITH SPECIFICATIONS 02 82 13.00 10. SALVAGE EXISTING BUILDING SIGNAGE FOR REINSTALLATION.
- 1e REMOVE EXISTING ROOF ENTIRELY, INCLUDING BUT NOT LIMITED TO SHINGLES, EAVES, SOFFITS, WOOD TRUSSES, SUBSTRATE, AND INSULATION. PREP FOR NEW WORK.
- 1f REMOVE PREFINISHED SIDING AND VENTS COMPLETELY.
- 1g PREP BUILDING EXTERIOR TO BE PAINTED.
- 1h REMOVE EXISTING LIGHT FIXTURES COMPLETELY.
- 1i REMOVE EXISTING UNIT HEATER COMPLETELY.
- 1j REMOVE PORTION OF WALL INDICATED TO ACCOMMODATE NEW DOOR.
- 1k DEMO EXISTING ATTIC ACCESS.
- 1l DEMO EXISTING PLUMBING FIXTURES AND PREP FOR NEW.

**ENVIRONMENTAL NOTES:**

- ALL WORK SHALL BE PERFORMED AS INDICATED IN THE CONTRACT DOCUMENTS.
- A COMPLETE ASBESTOS SURVEY SHALL BE PERFORMED WHICH SHALL IDENTIFY THE PRESENCE, LOCATION, AND QUANTITY OF ALL ASBESTOS CONTAINING MATERIALS (ACM) IN OR ON THE BUILDING. IF SUCH A SURVEY EXISTS, THE GOVERNMENT WILL PROVIDE THIS TO THE CONTRACTOR.
- ALL MATERIALS IDENTIFIED AS ASBESTOS CONTAINING MATERIALS SHALL BE REMOVED OR CONTROLLED IN ACCORDANCE WITH SPECIFICATION SECTION 02 82 00 ASBESTOS REMEDIATION BY A SOUTH CAROLINA LICENSED ABATEMENT CONTRACTOR.
- WHEN SUSPECT MATERIALS ARE ENCOUNTERED FOR WHICH ASBESTOS SAMPLING DATA ARE NOT AVAILABLE, CONTRACTOR SHALL SAMPLE AND TEST EACH SUSPECTED MATERIAL. THE SAMPLING AND TESTING SHALL BE PERFORMED IN THE MANNER DESCRIBED IN GENERAL NOTE 5.
- IN ACCORDANCE WITH U.S. EPA AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, THE OSHA ASBESTOS CONSTRUCTION STANDARD, AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP), ASSUMED ACMS MAY BE DETERMINED TO BE NEGATIVE (NON-ACM) ONLY THROUGH SAMPLING AND ANALYSIS. THE CONTRACTOR SHALL ADDRESS AND COMPLY WITH THE SAMPLING AND ANALYSES OF SUSPECT MATERIALS IN ACCORDANCE WITH SPECIFICATION SECTION 02 82 00 ASBESTOS REMEDIATION.
- ALL DEMOLITION AND REMOVAL WORK IMPACTING MATERIALS WITH LEAD CONTAINING PAINT (CONTAINING LEAD IN ANY AMOUNT) SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA LEAD IN CONSTRUCTION STANDARD (29 CFR 1926.62).
- OTHER HAZARDOUS MATERIALS INCLUDING POLYCHLORINATED BIPHENYL (PCB) CONTAINING LIGHT BALLASTS, LIGHT TUBES THAT CONTAIN MERCURY, OTHER EQUIPMENT SUCH AS A WATER FOUNTAIN, AND AN AIR CONDITIONER THAT MAY CONTAIN OZONE DEPLETING SUBSTANCES, AND THERMOSTATS. LIGHT BALLASTS SHOULD BE ASSUMED TO CONTAIN PCBs UNLESS THEY HAVE A "NO PCBs" LABEL.
- IF SUSPECT HAZARDOUS MATERIALS ARE ENCOUNTERED IN AREAS NOT INDICATED TO CONTAIN THESE MATERIALS, DEMOLITION ACTIVITIES SHALL CEASE AND SAMPLING OR ASSESSMENTS SHALL BE CONDUCTED. THE BUILDING CONTAINS AREAS OF MOLD. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR WORKERS WHEN THESE AREAS ARE DISTURBED.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FROM RESPIRABLE SILICA DUST IN ACCORDANCE WITH OSHA CRYSTALLINE SILICA STANDARD FOR CONSTRUCTION (29 CFR 1926.1153).

**DEMOLITION NOTES:**

- CONTRACTOR SHALL REFER TO AND COMPLY WITH SPECIFICATION SECTION 02 82 13.00 10 ASBESTOS ABATEMENT, AND ALL OTHER BASE AND LOCAL REQUIREMENTS PRIOR TO BEGINNING DEMOLITION.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK.
- REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
- ALL ASBESTOS AND OTHER BUILDING HAZMAT REMOVAL SHALL OCCUR PRIOR TO THE START OF ANY DEMOLITION ACTIVITIES.

20th CIVIL ENGINEER SQUADRON

428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

DEMOLITION DRAWINGS

ENGINEER  
60590568

PROJECT NUMBER  
207-AD-100

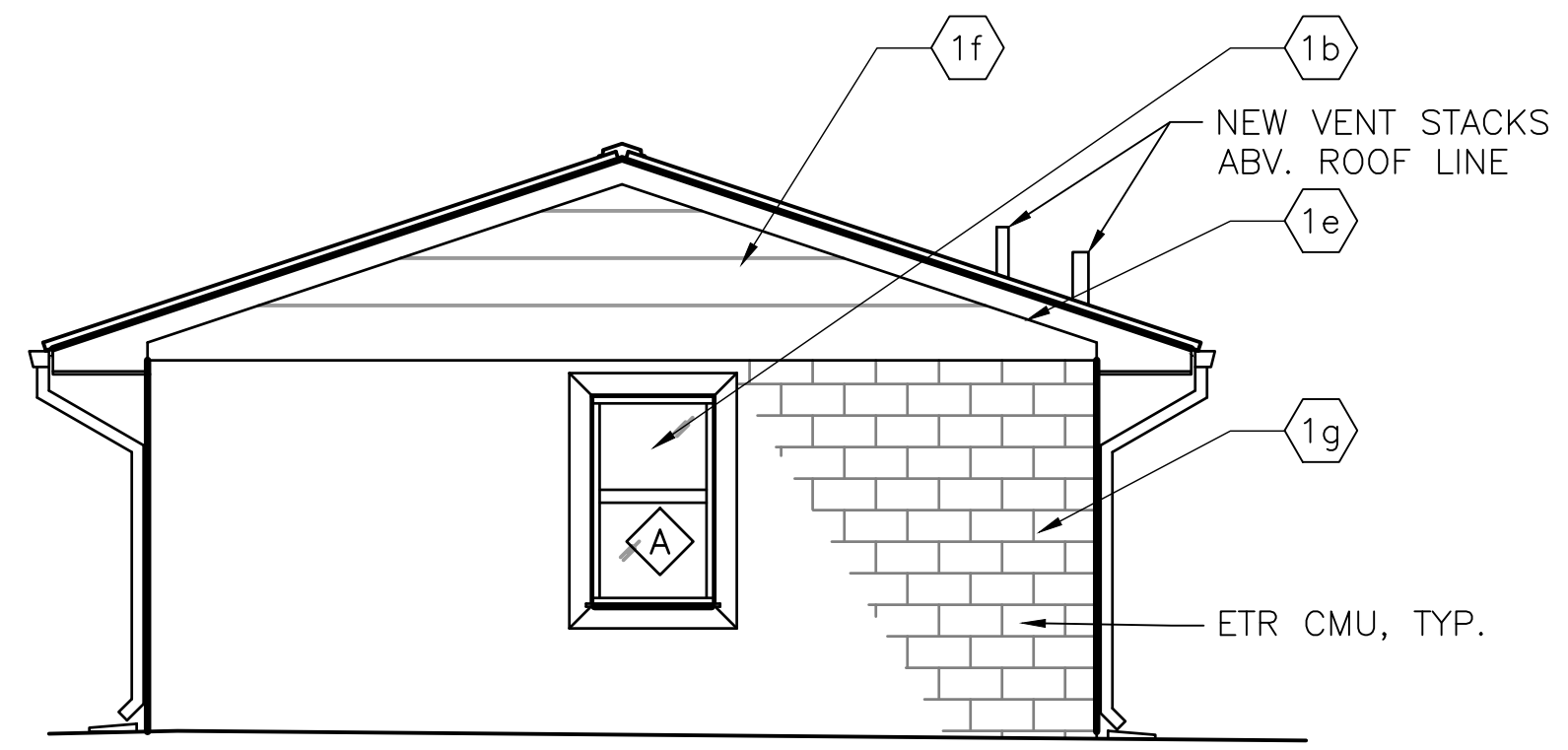
DATE  
08/26/2021

SCALE  
1/4" = 1'-0"

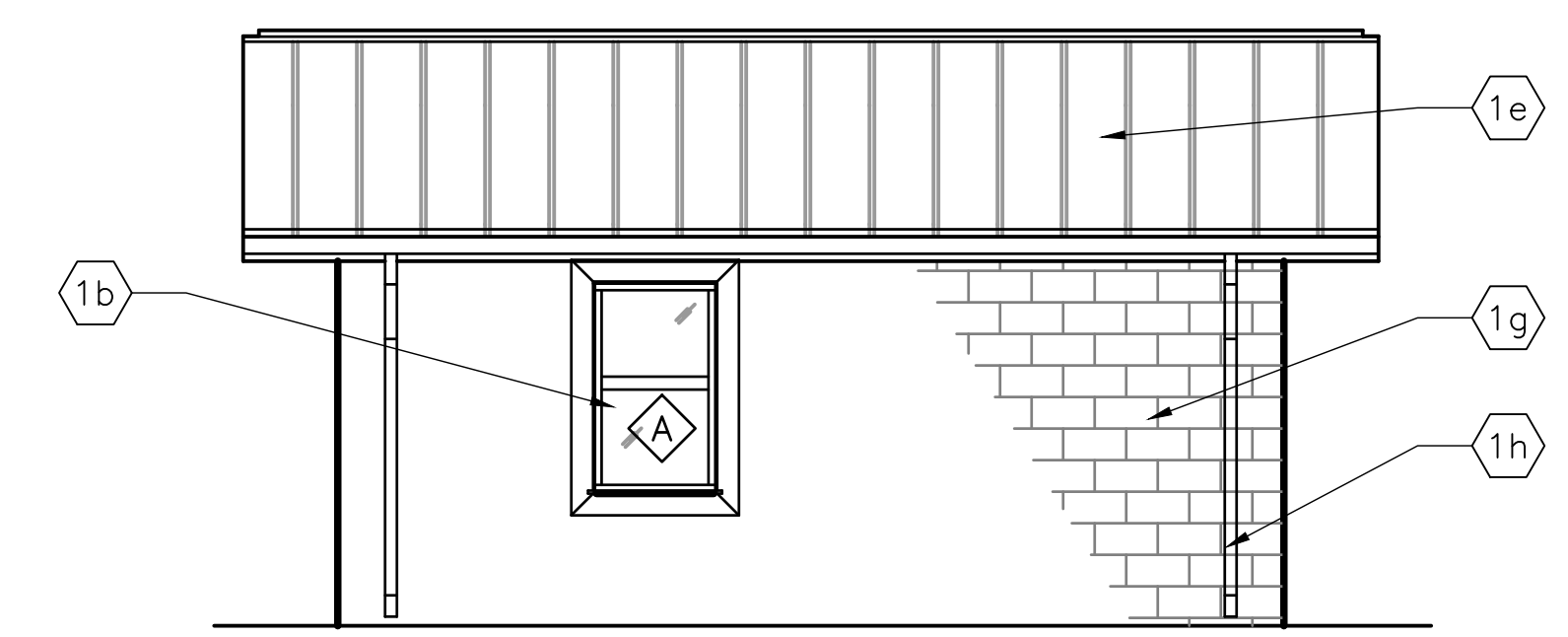
SHEET  
17 OF 36

REVISION	DATE	DESCRIPTION OF REVISION

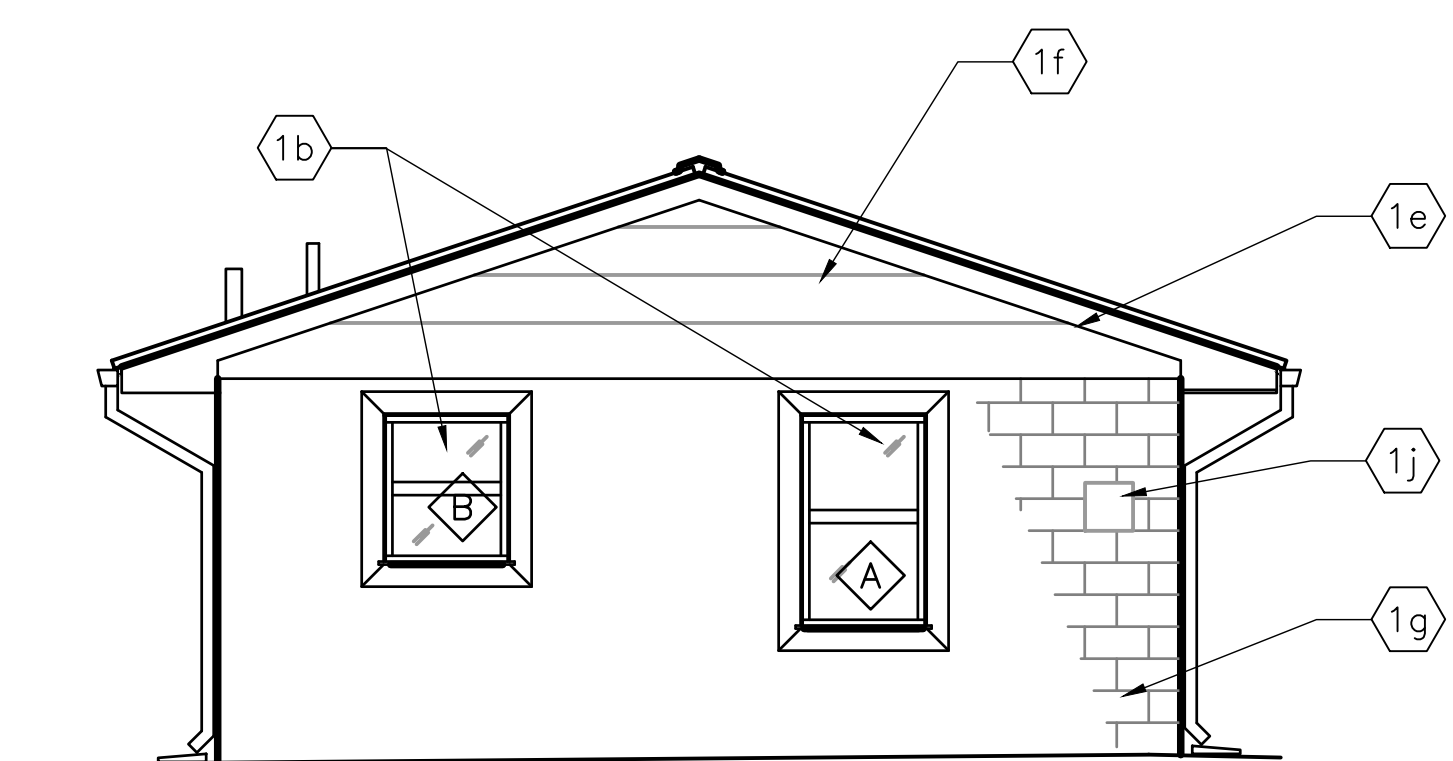
REV BY



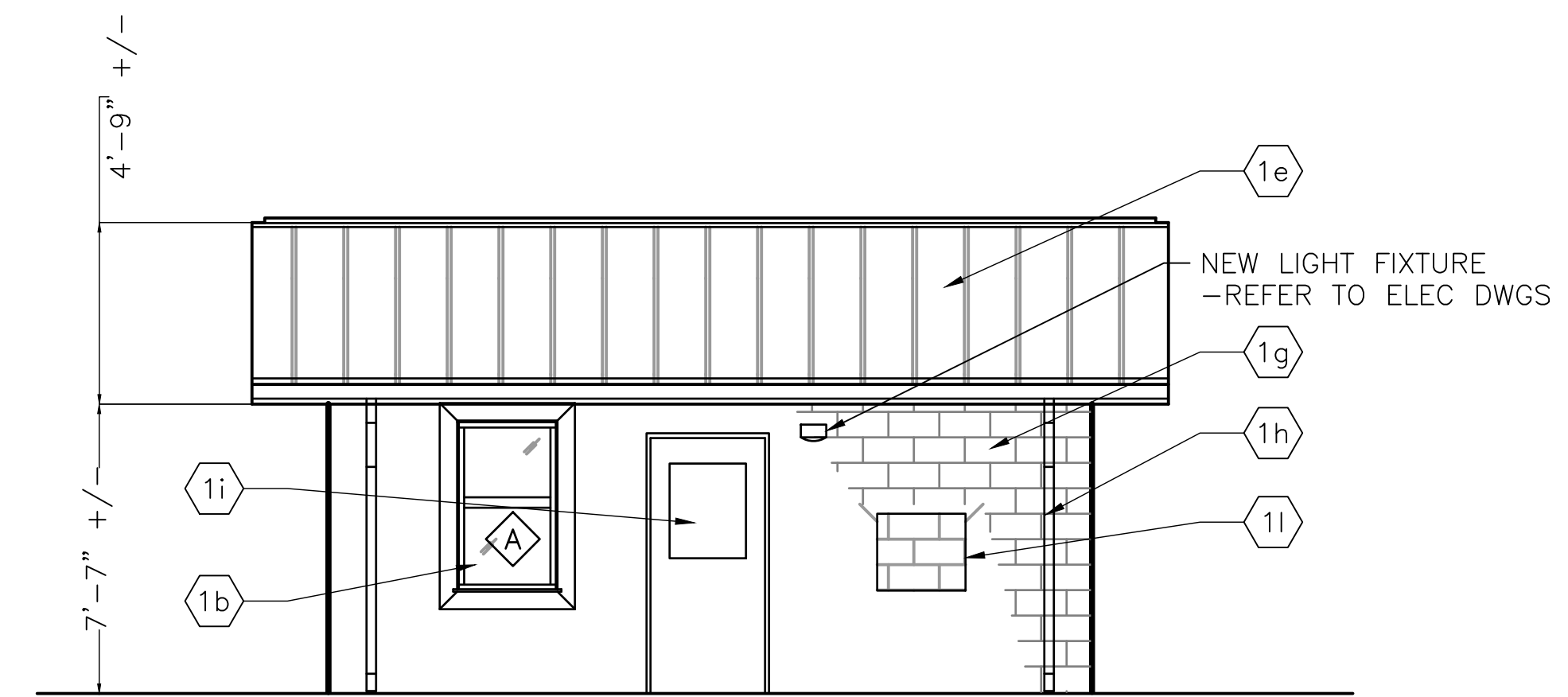
**C3 SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



**C2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



**B3 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



**B2 WEST ELEVATION**  
SCALE: 1/4" = 1'-0"

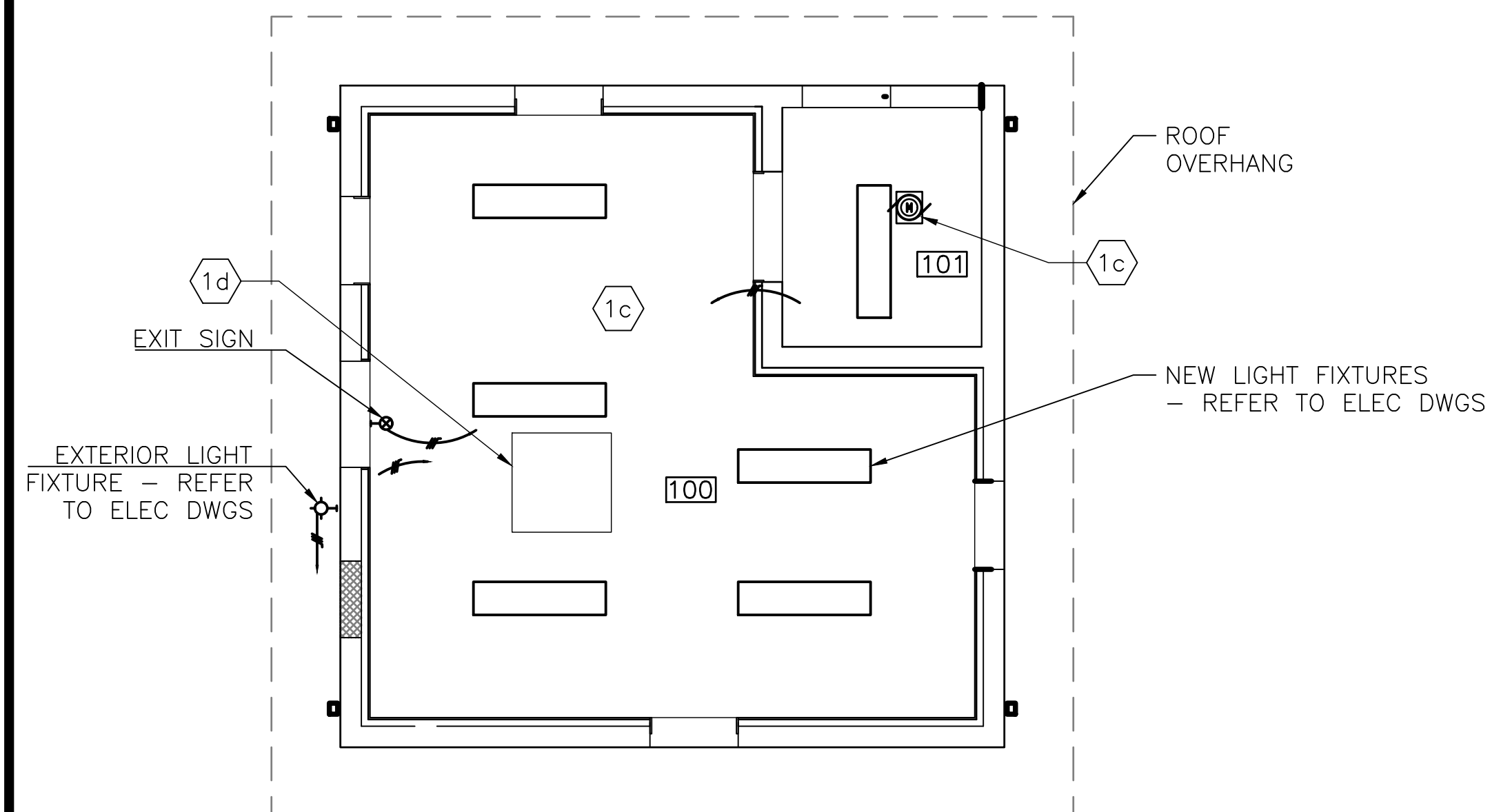
**DEFICIENCY SHW027 (FAC 207):**

- 1a INSTALL NEW VINYL TILE AND RESILIENT BASE.
- 1b INSTALL FIVE (5) NEW WINDOWS AND EXTERIOR TRIM. PREP ADJACENT SURFACES TO RECEIVE NEW WORK.
- 1c NEW DRYWALL CEILING - PAINT. 8'-0" +/- A.F.F.
- 1d INSTALL NEW 36"x36" ATTIC ACCESS HATCH. COORDINATE EXACT LOCATION IN FIELD BETWEEN TRUSSES.
- 1e INSTALL NEW METAL ROOFING SYSTEM.
- 1f INSTALL NEW FIBER CEMENT SIDING.
- 1g APPLY EXTERIOR WATERPROOF COATING AND DECORATIVE COAT TO ETR CMU WALL - PAINT BUILDING EXTERIOR.
- 1h INSTALL NEW 4"x4" GUTTERS AND 2"x3" RECTANGULAR DOWNSPOUTS. PROVIDE CONCRETE SPLASH BLOCKS AT GRADE.
- 1i INSTALL NEW DOOR AND HARDWARE.
- 1j REINSTALL SALVAGED BUILDING SIGNAGE.
- 1k NEW PLUMBING FIXTURES - REFER TO PLUMBING DWG.
- 1l INFILL EXISTING OPENING WITH 8" CMU TO MATCH EXISTING - REFER TO STRUCTURAL DRAWINGS FOR DETAIL.
- 1m INSTALL NEW HVAC - REFER TO MECH AND ELEC DWGS.
- 1n PROVIDE WALL MOUNTING BRACKET FOR FIRE EXTINGUISHER. INSTALLATION TO PROVIDE FIRE EXTINGUISHER.

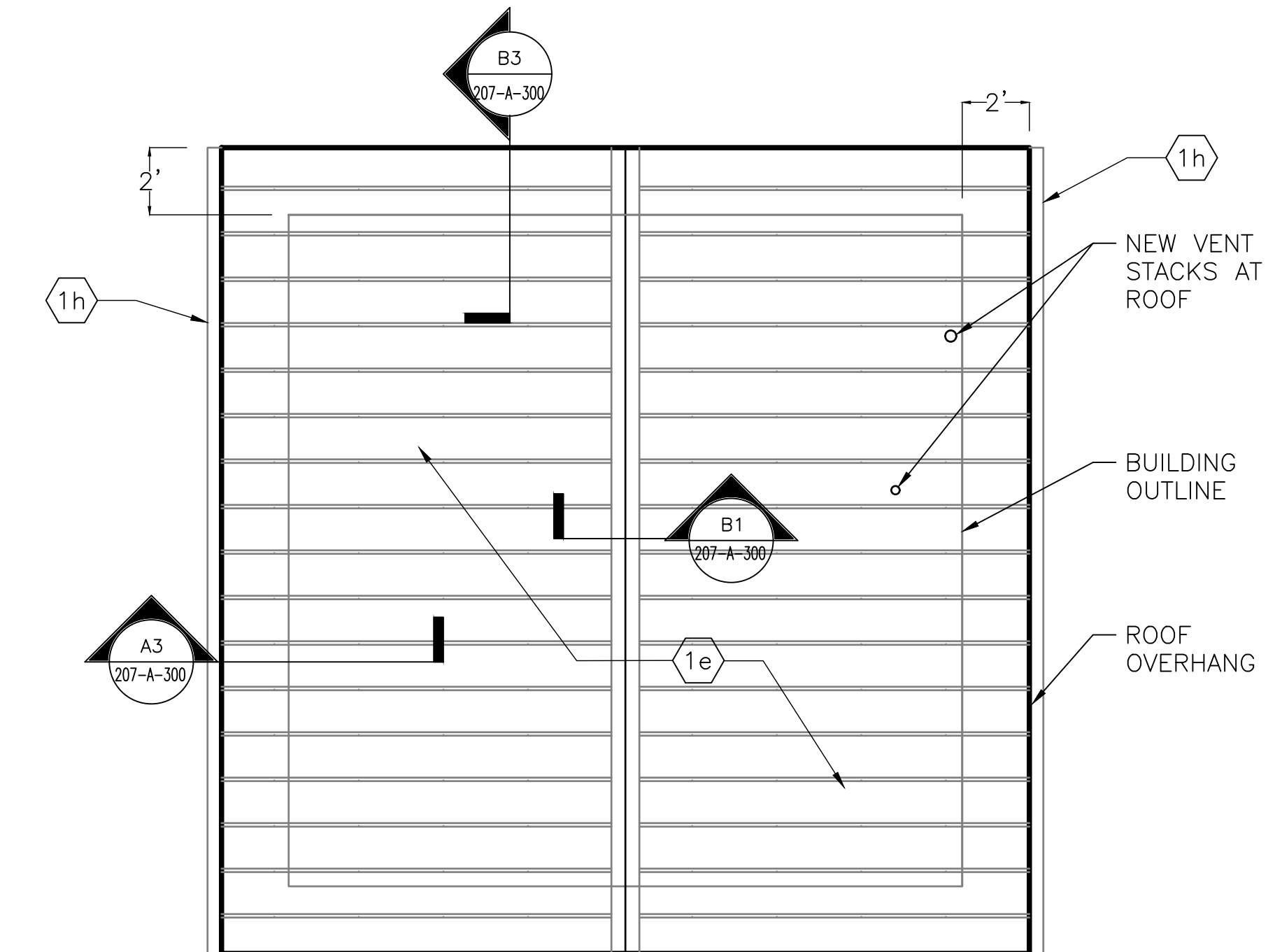
**GENERAL NOTES:**

1. DRYWALL CEILING JOINTS INDICATED SHOW AREAS REQUIRING EXTENSIVE PATCHING/REPAIR. THE ENTIRE CEILING SHALL HAVE ALL JOINTS REPAIRED.
2. PROTECT ETR EQUIPMENT, FIXTURES, AND FINISHES.
3. SEE SHEET 207-A-500 FOR WINDOW DESIGNATION AND DETAILS.

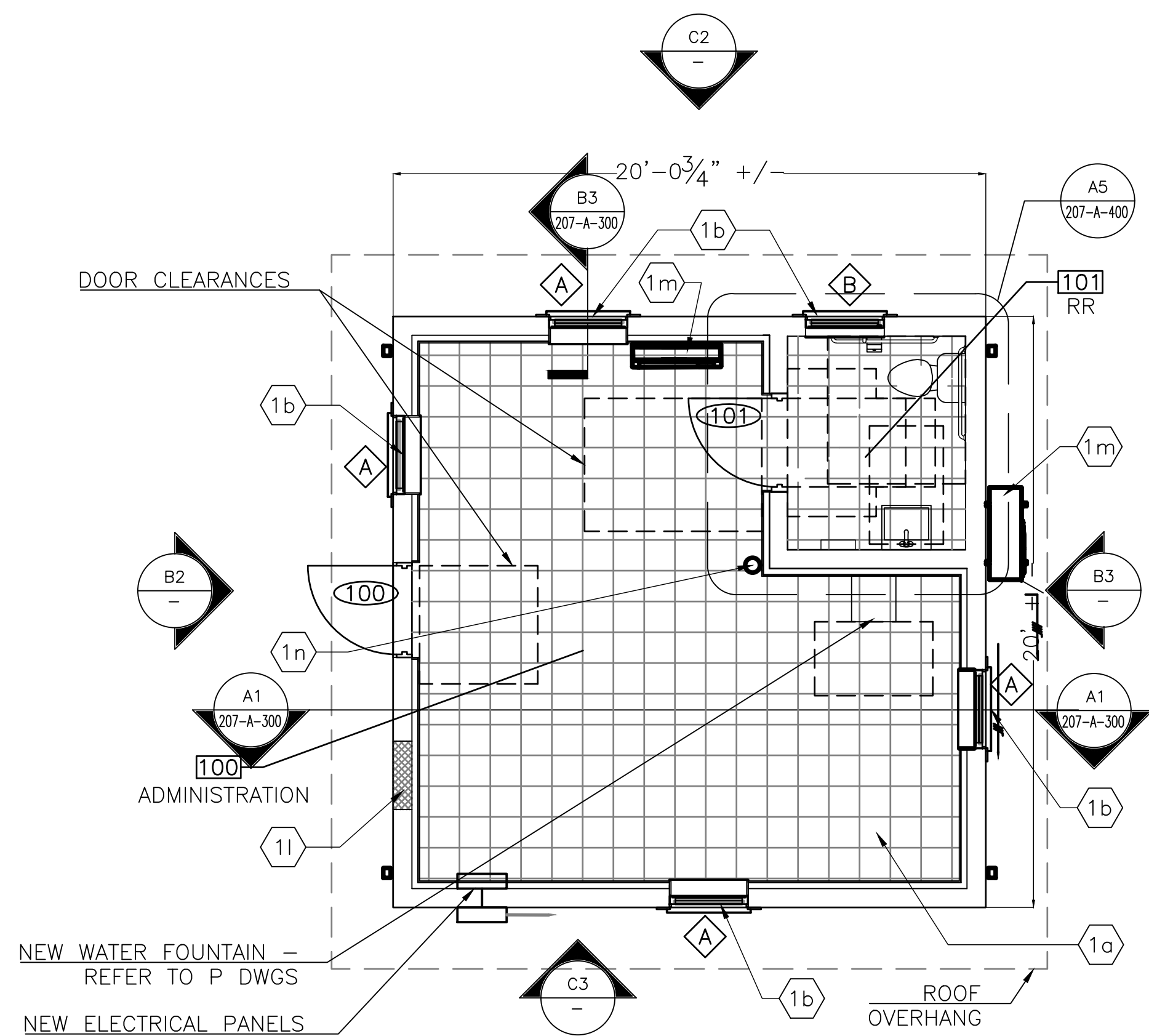
EXTERIOR FINISH SCHEDULE		
MATERIAL	COLOR	MANUFACTURER
EXTERIOR CMU	SHAW BEIGE	UNITED PAINTS
STANDING SEAM METAL ROOF (SSMR)	SIERRA TAN	TBD
FIBER CEMENT SIDING	SHAW BEIGE	TBD
FIBER CEMENT WINDOW TRIM	TBD	TBD
ALUMINUM WINDOW	ANODIZED BRONZE	TBD
GUTTERS AND DOWNSPOUTS	MATCH SSMR	TBD



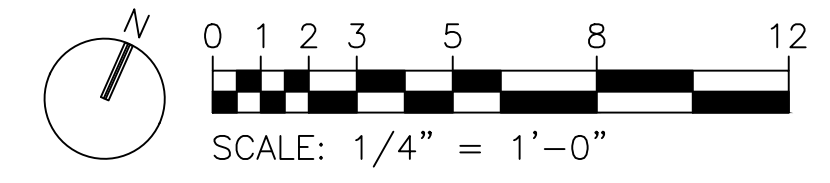
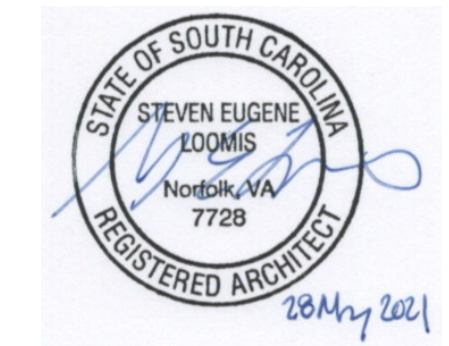
**A3 RCP**  
SCALE: 1/4" = 1'-0"



**A2 ROOF PLAN**  
SCALE: 1/4" = 1'-0"



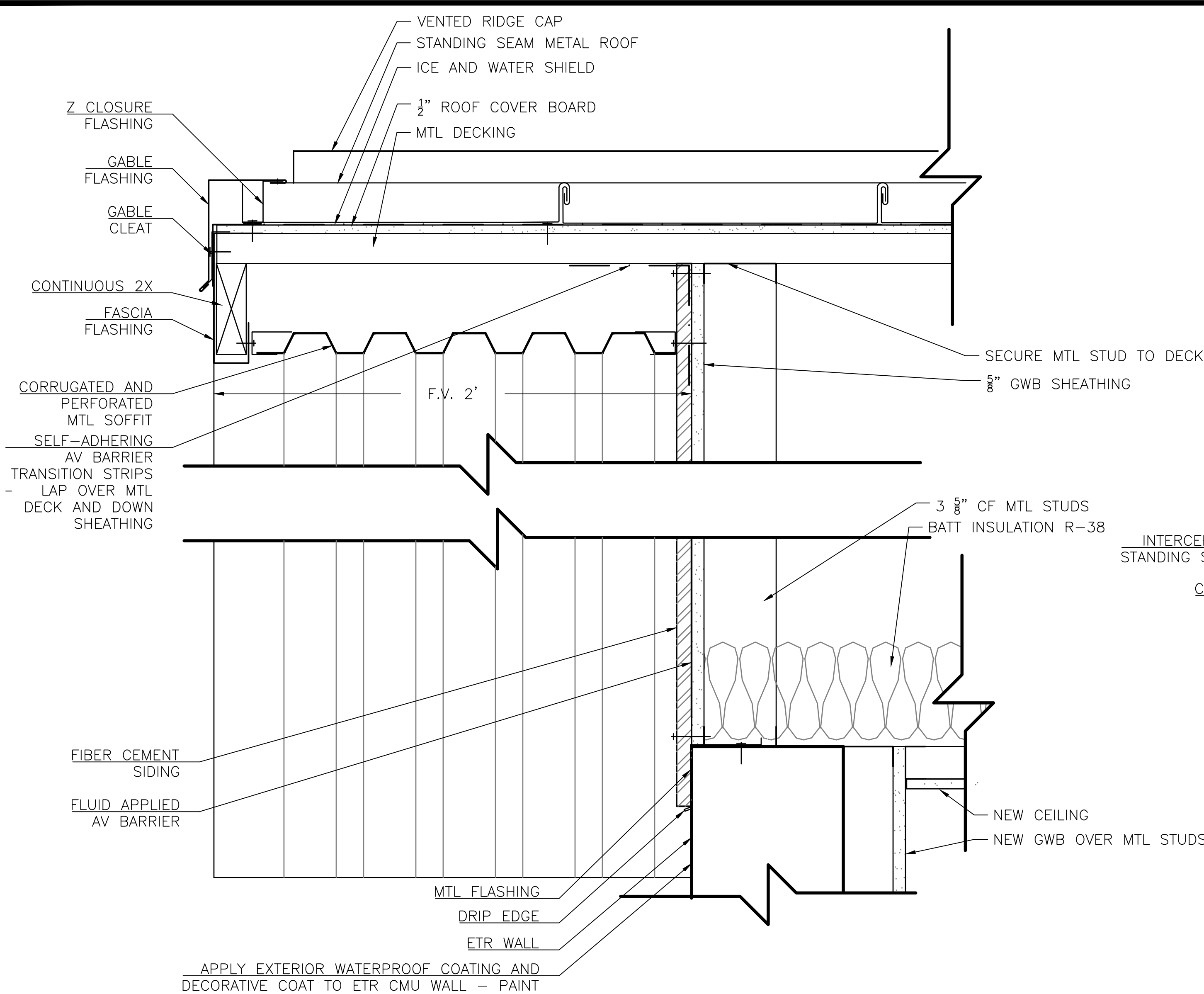
**A1 FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



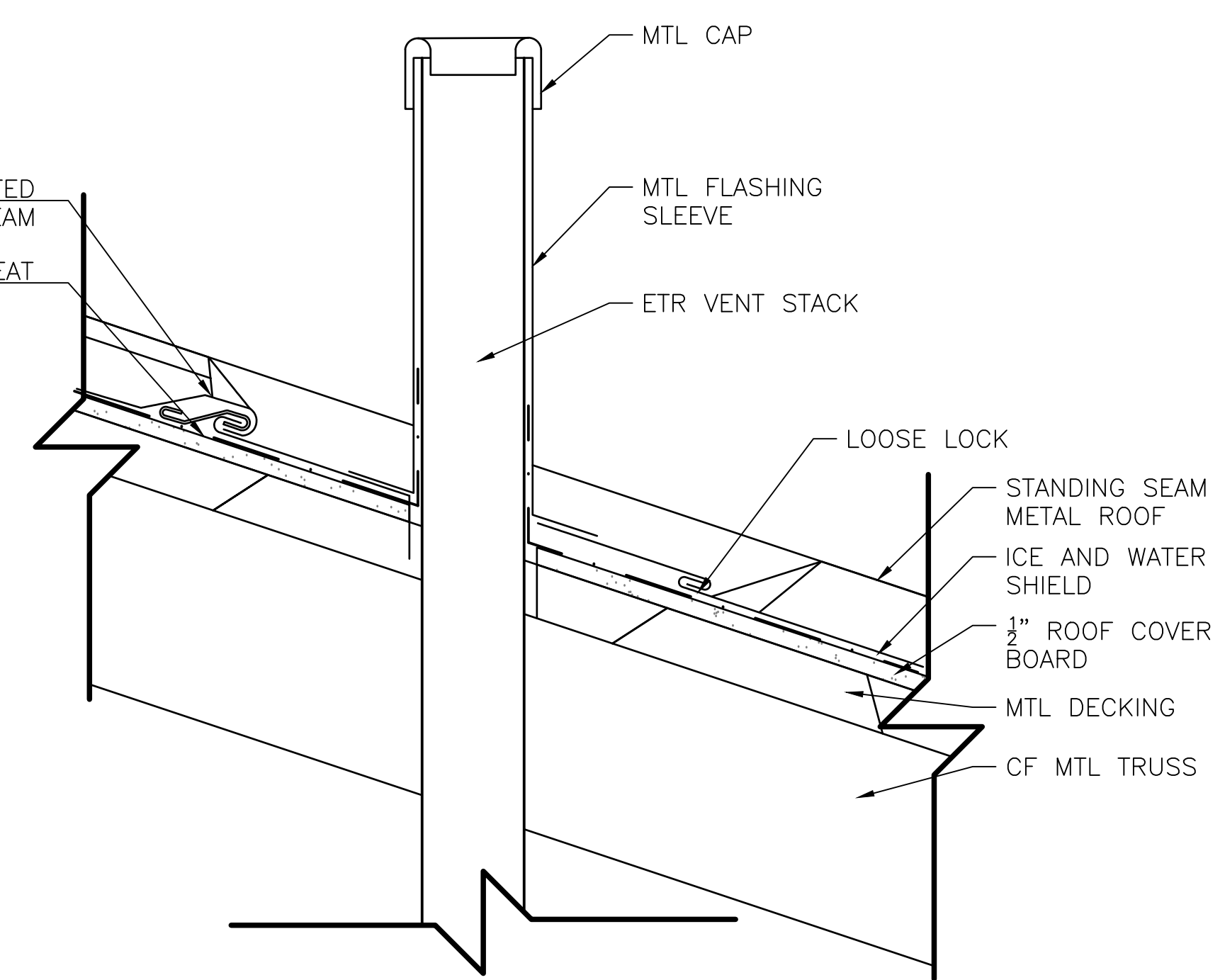
**20th CIVIL ENGINEER SQUADRON**  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

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**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

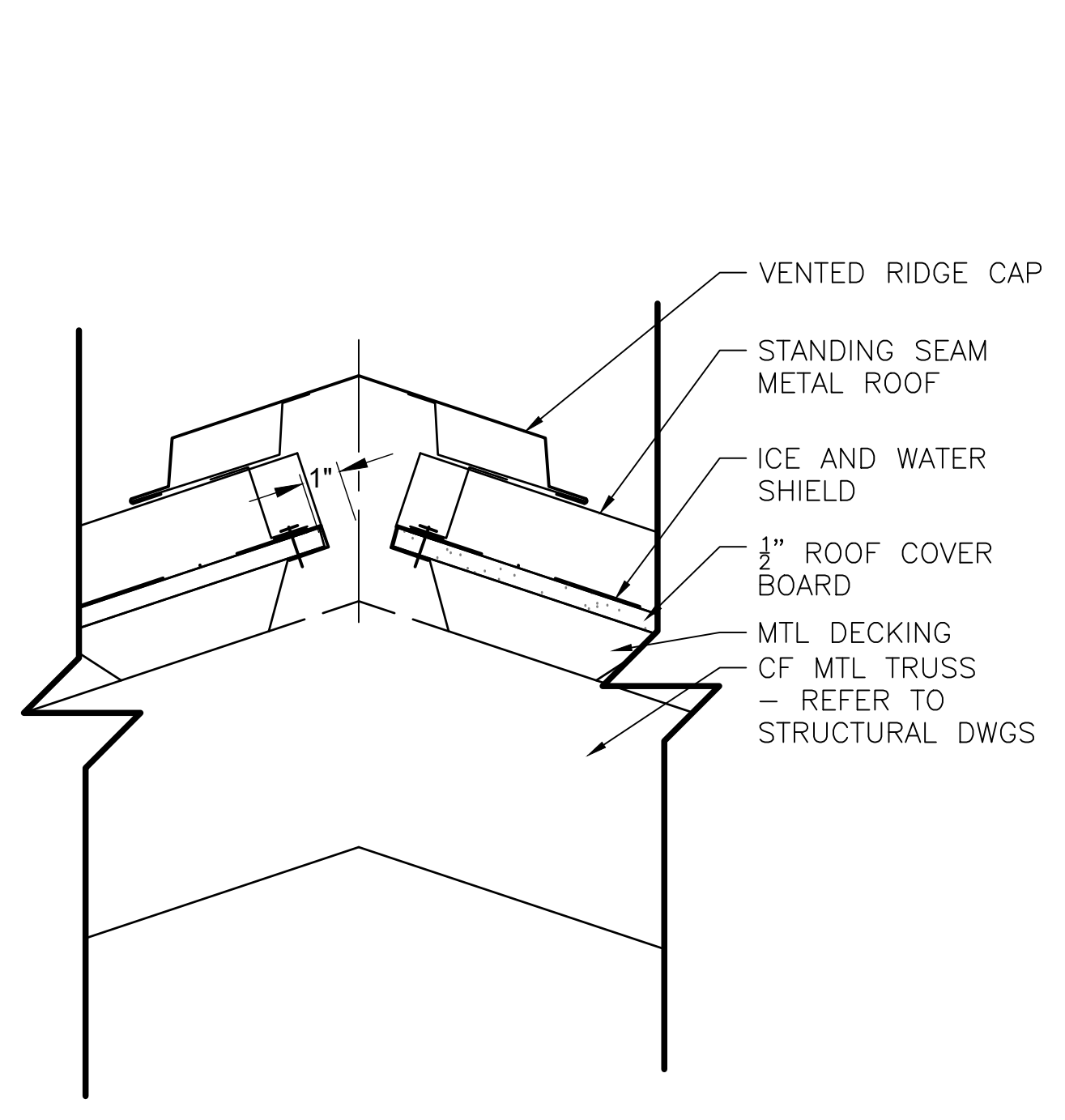
PLANS, RCP, AND ELEVATIONS  
ENGINEER: CC  
PROJECT NUMBER: 207-A-100  
DATE: 05/26/2021  
SCALE: 1/4" = 1'-0"  
SHEET 18 OF 36



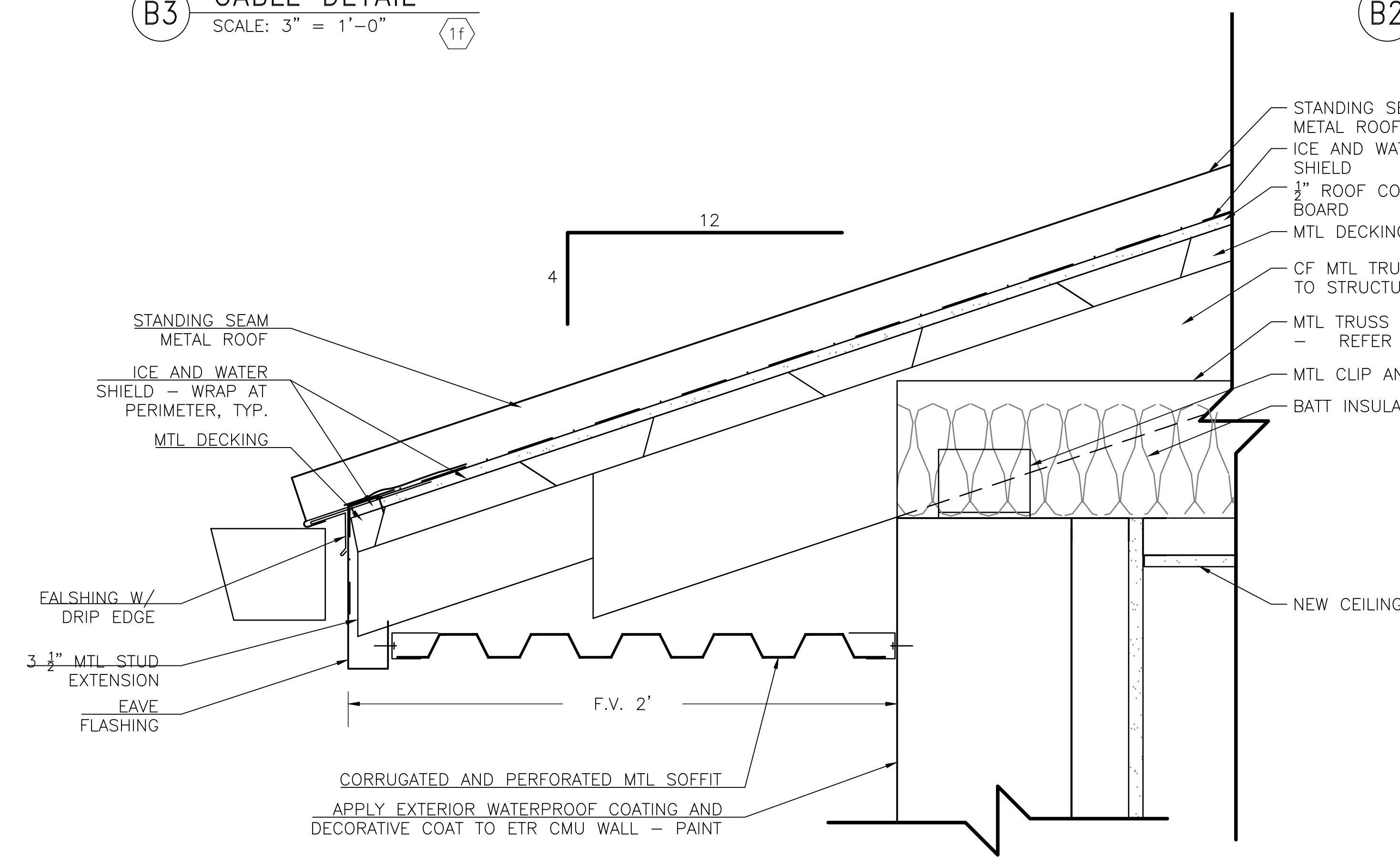
**B3** GABLE DETAIL  
SCALE: 3" = 1'-0"



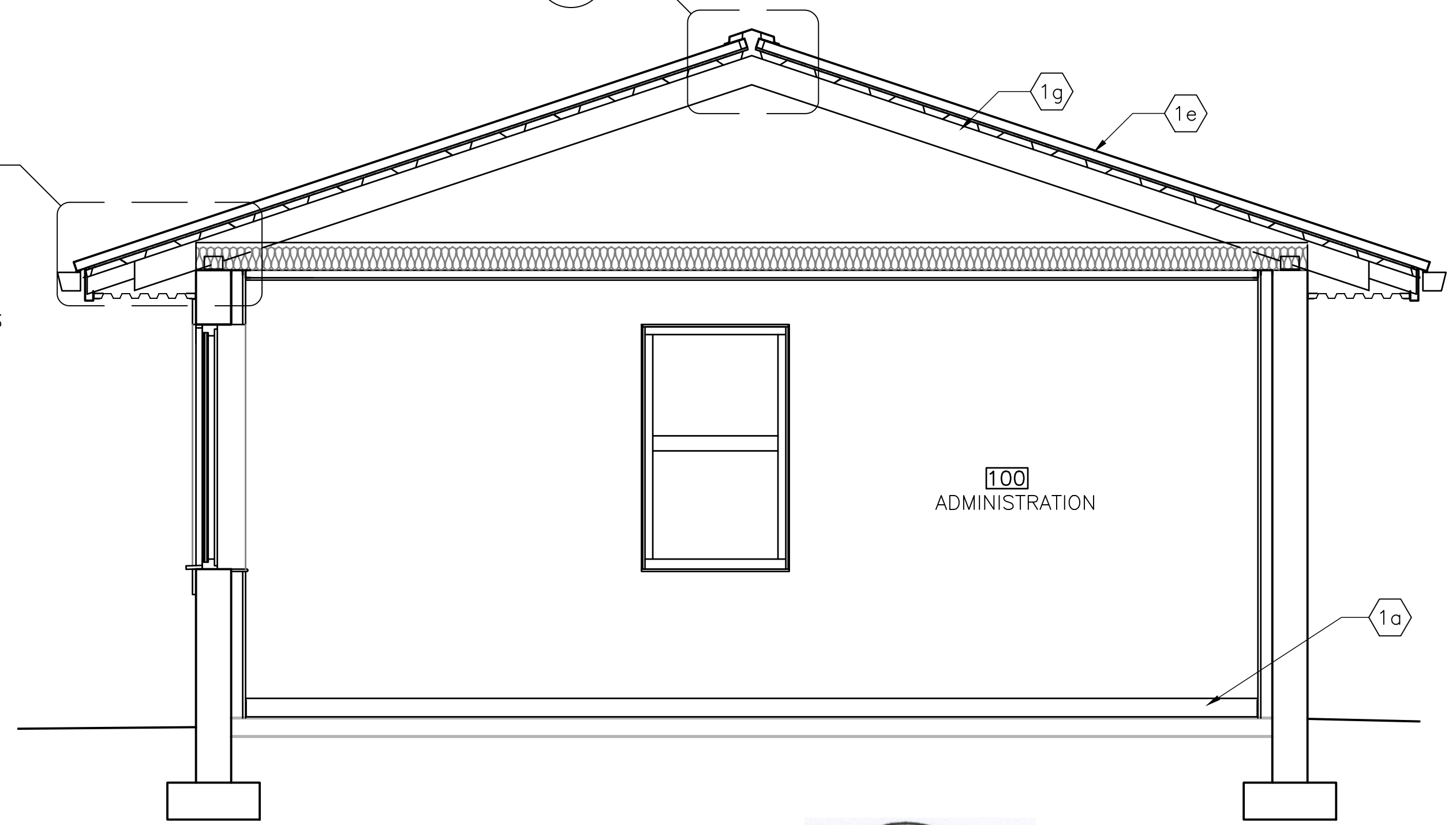
**B2** VENT PENETRATION DETAIL  
SCALE: 3" = 1'-0"



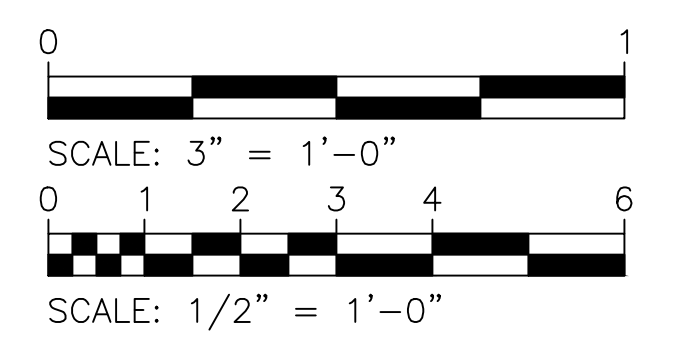
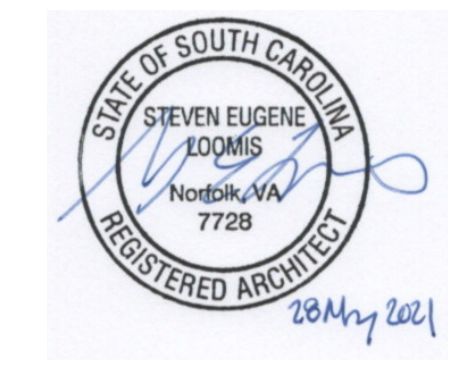
**B1** RIDGE DETAIL  
SCALE: 3" = 1'-0"



**A3** EAVE DETAIL  
SCALE: 3" = 1'-0"



**A1** BUILDING SECTION  
SCALE: 1/2" = 1'-0"



**DEFICIENCY SHW027 (FAC 207):**

- 1a INSTALL NEW LUXURY VINYL TILE AND RESILIENT BASE.
- 1e INSTALL NEW STRUCTURAL STANDING SEAM METAL ROOFING SYSTEM.
- 1f INSTALL NEW FIBER CEMENT SIDING AT GABLE ENDS - SEE DETAIL B3.
- 1g NEW COLD FORM METAL TRUSS - REFER TO STRUCTURAL DWGS.

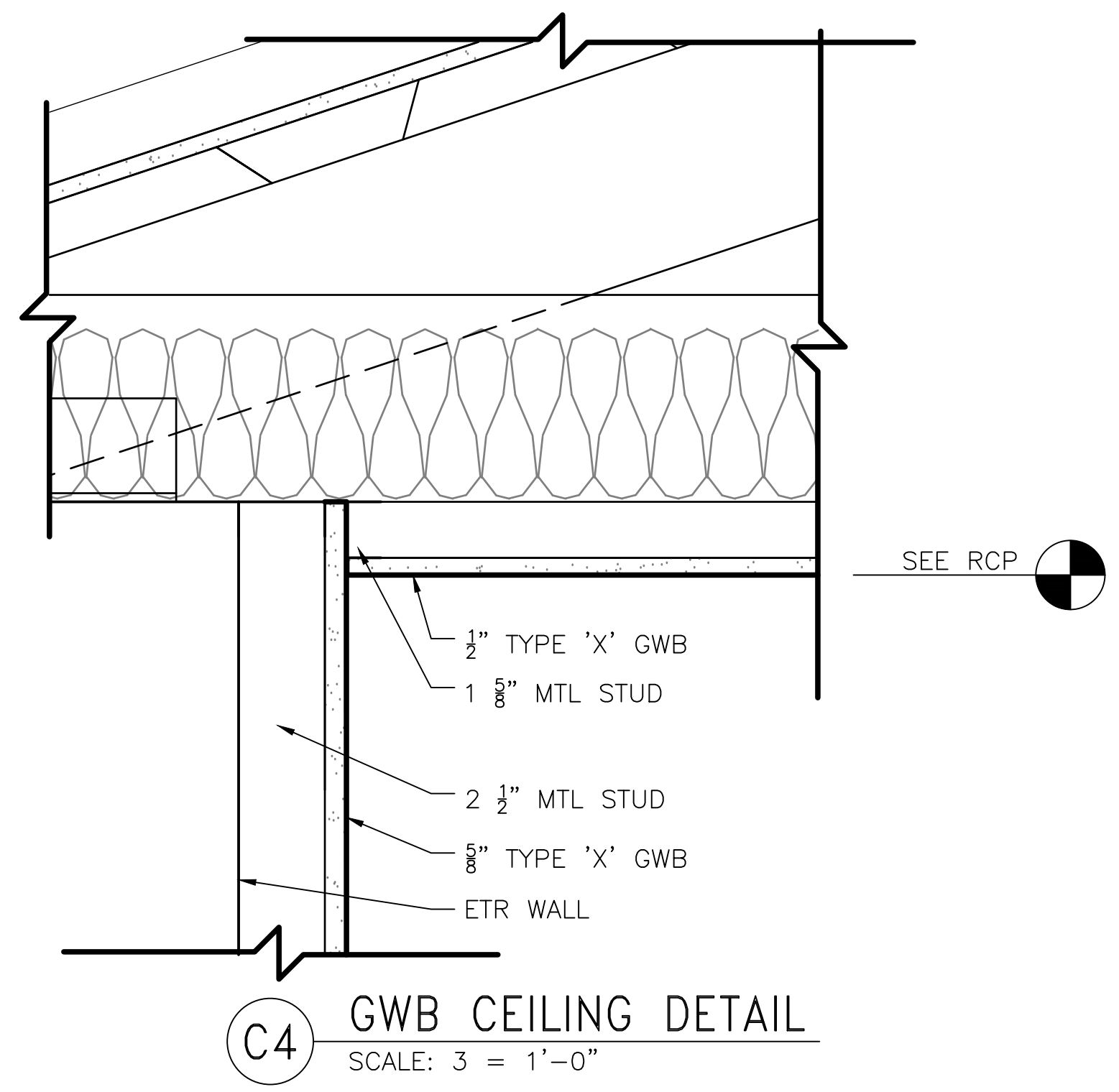
**NOTES:**  
1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

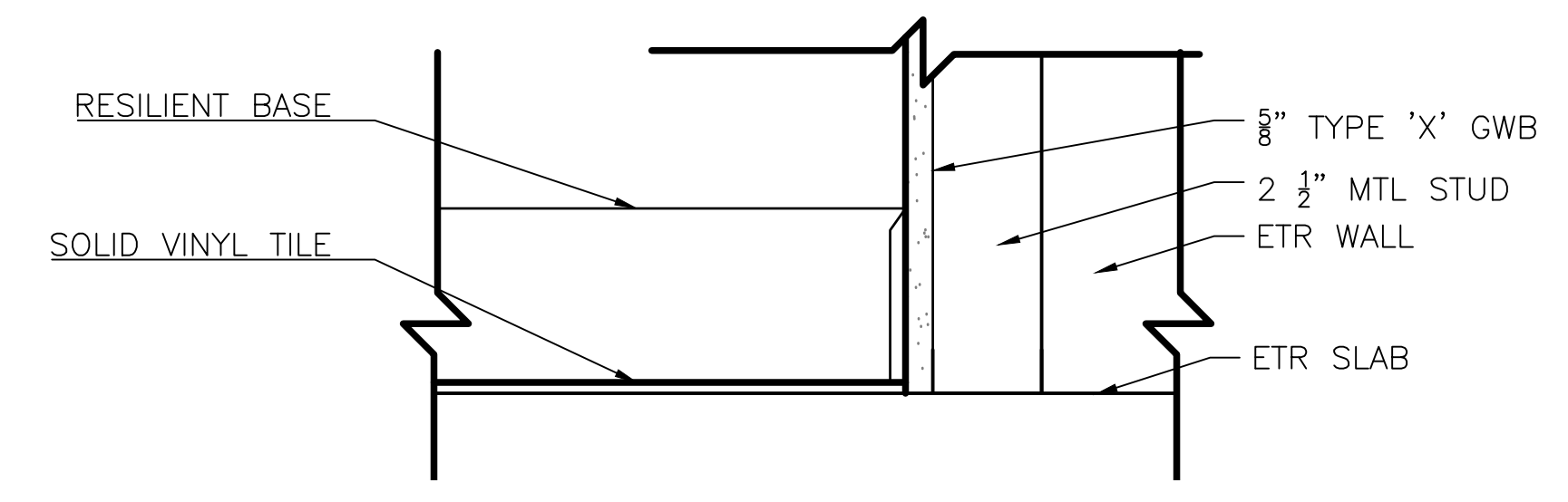
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

BUILDING SECTION AND ROOF DETAILS  
 CC  
 ENGINEER  
 60590568  
 PROJECT NUMBER  
 05/26/2021  
 AS NOTED  
 19 OF 36 SHEET



**C4** GWB CEILING DETAIL  
SCALE: 3 = 1'-0"



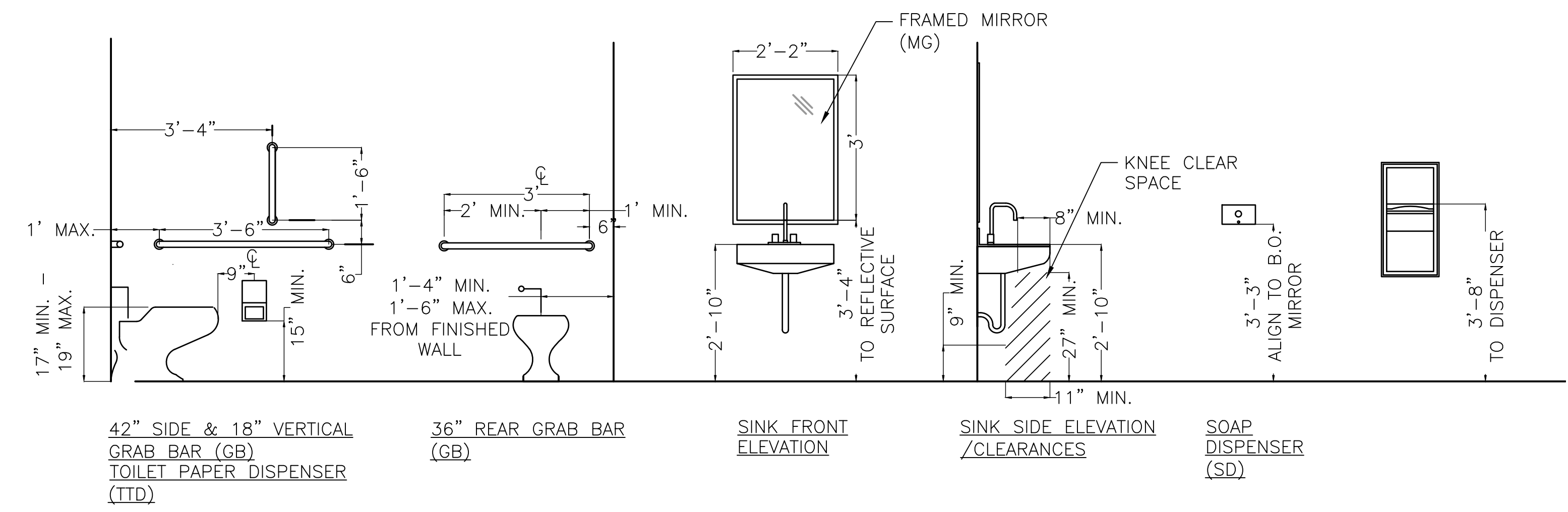
**B4** WALL BASE DETAIL  
SCALE: 3 = 1'-0"

INTERIOR PAINT SCHEDULE		
ROOM NO. / NAME	COLOR	MANUFACTURER
100 / ADMINISTRATION	TBD	SHERWIN WILLIAMS
101 / RESTROOM	TBD	SHERWIN WILLIAMS

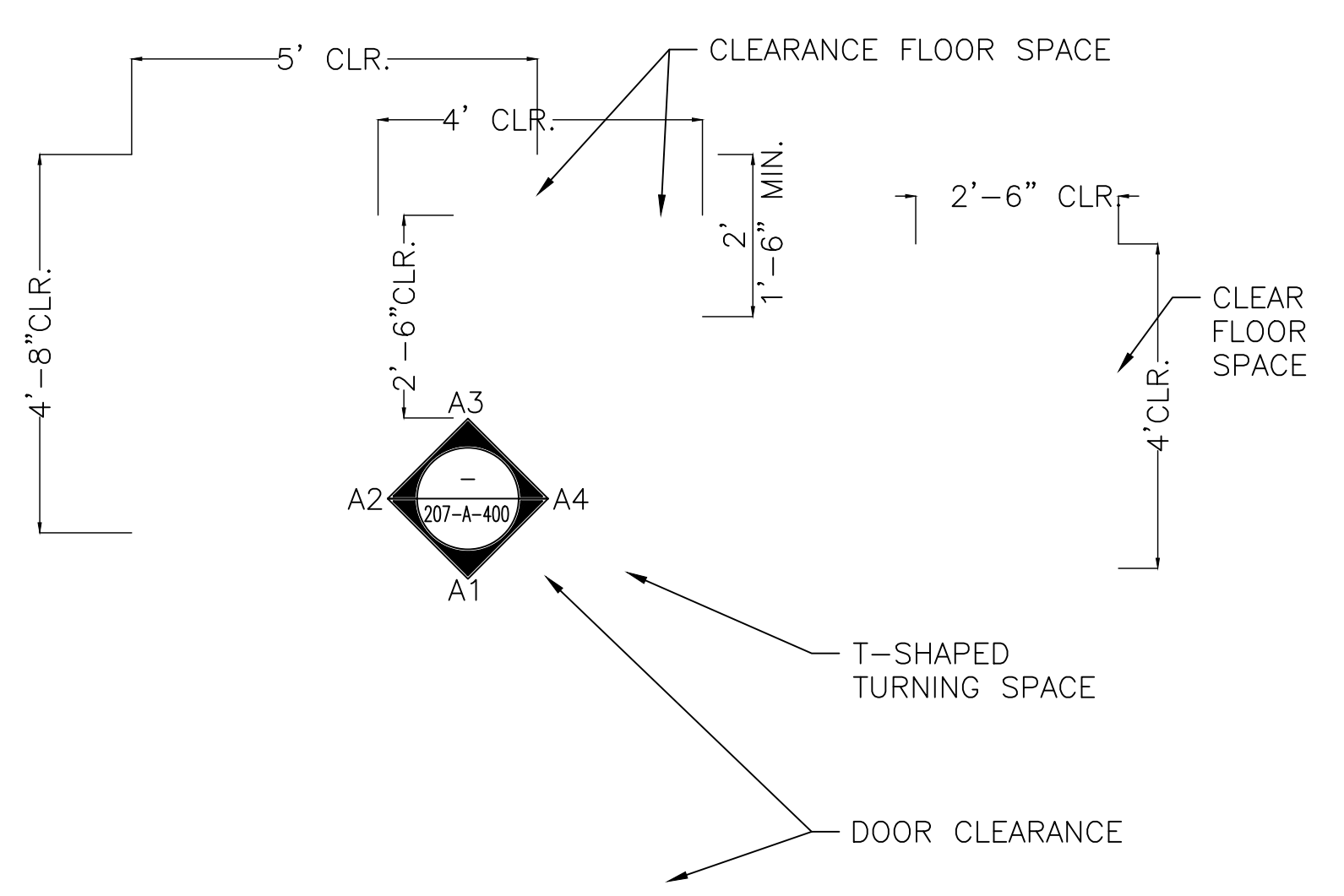
INTERIOR FINISH LEGEND			
DESCRIPTION	DIVISION	MANUFACTURER	ITEM/STYLE
SOLID SURFACE WINDOW SILL	06 61 16	DUPONT CORIAN	RAIN CLOUD
SOLID VINYL TILE	09 65 00	PATCRAFT	ADMIX1346V/ SCALLOP 00520
RESILIENT BASE	09 65 00	ROPPE	175 SLATE

- DEFICIENCY SHW027 (FAC 207):**
- 1a) INSTALL NEW VINYL TILE AND RESILIENT BASE.
  - 1b) INSTALL FIVE (5) NEW FIXED ALUMINUM WINDOWS, INTERIOR AND EXTERIOR TRIM.

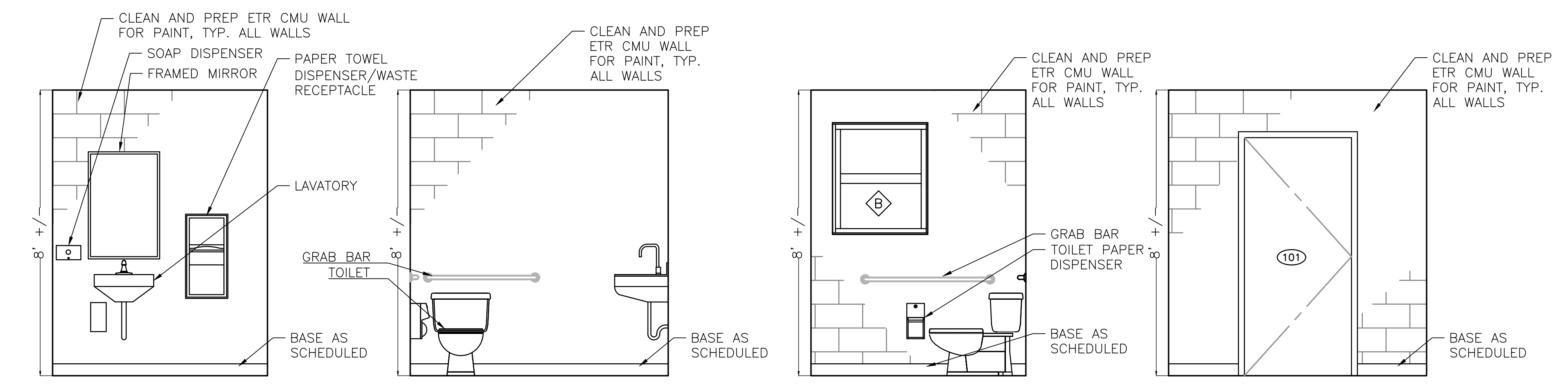
- NOTES:**
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF ANY WORK.
  - CLEAN AND PROTECT ETR CMU WALLS. PREP SURFACE TO RECEIVE NEW PAINT.
  - ALL MOUNTING HEIGHTS SHALL COMPLY WITH ABA/ADA AND BASE STANDARDS.



**B2** FIXTURE CLEARANCE  
SCALE: 1/2" = 1'-0"



**A5** RR 101 - ENLARGED PLAN  
SCALE: 1/2" = 1'-0"

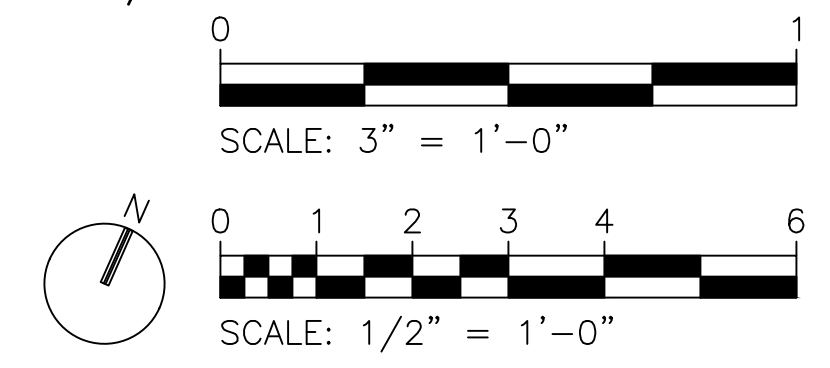
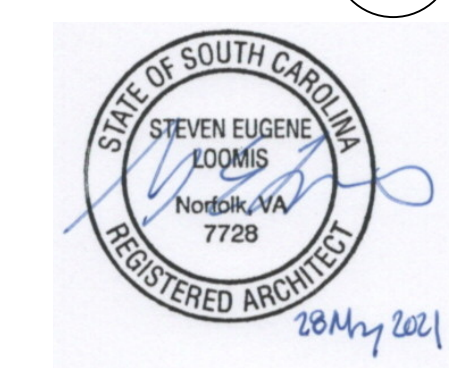


**A4** RR 101 - SOUTH ELEV  
SCALE: 1/2" = 1'-0"

**A3** RR 101 - EAST ELEV  
SCALE: 1/2" = 1'-0"

**A2** RR 101 - NORTH ELEV  
SCALE: 1/2" = 1'-0"

**A1** RR 101 - WEST ELEV  
SCALE: 1/2" = 1'-0"

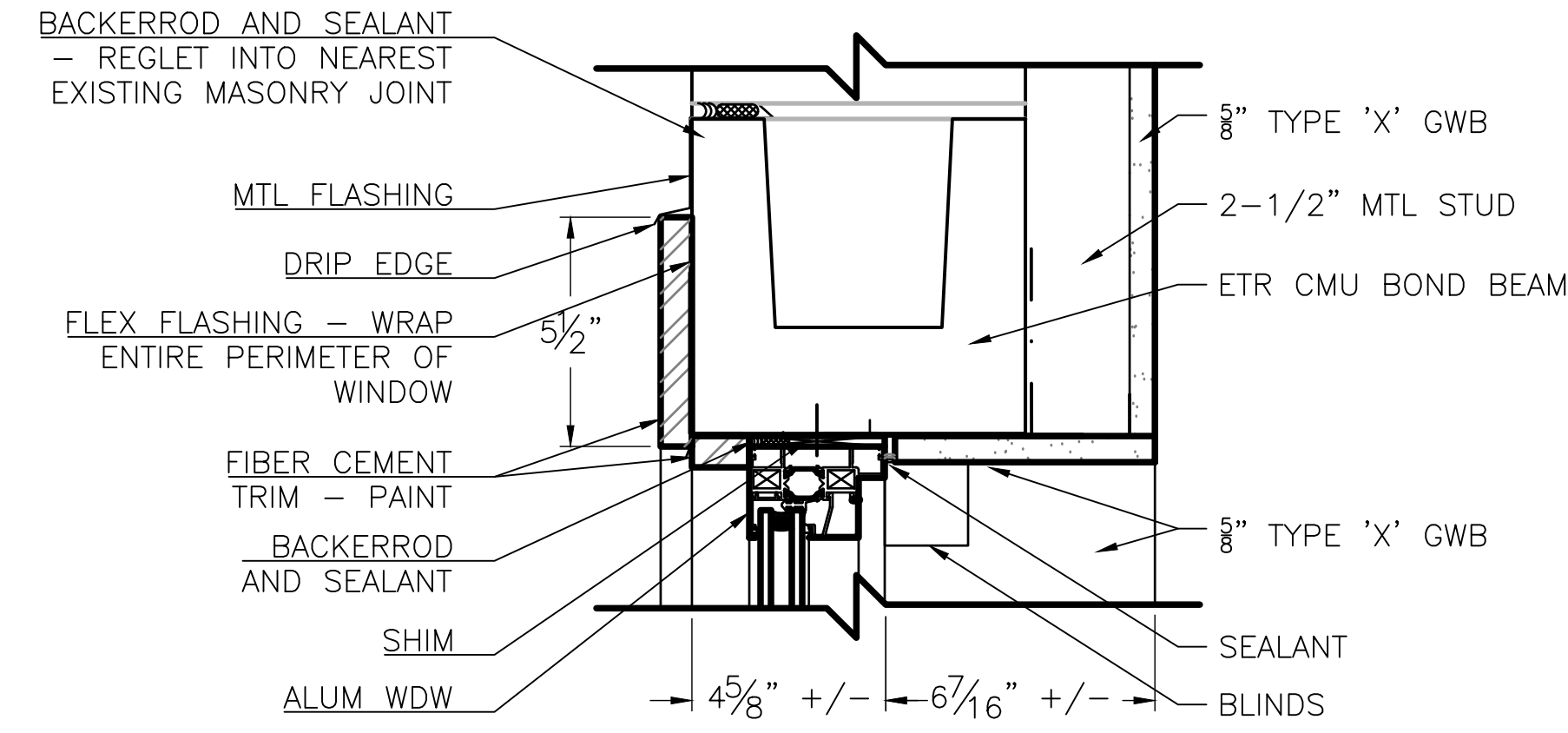


**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626  
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

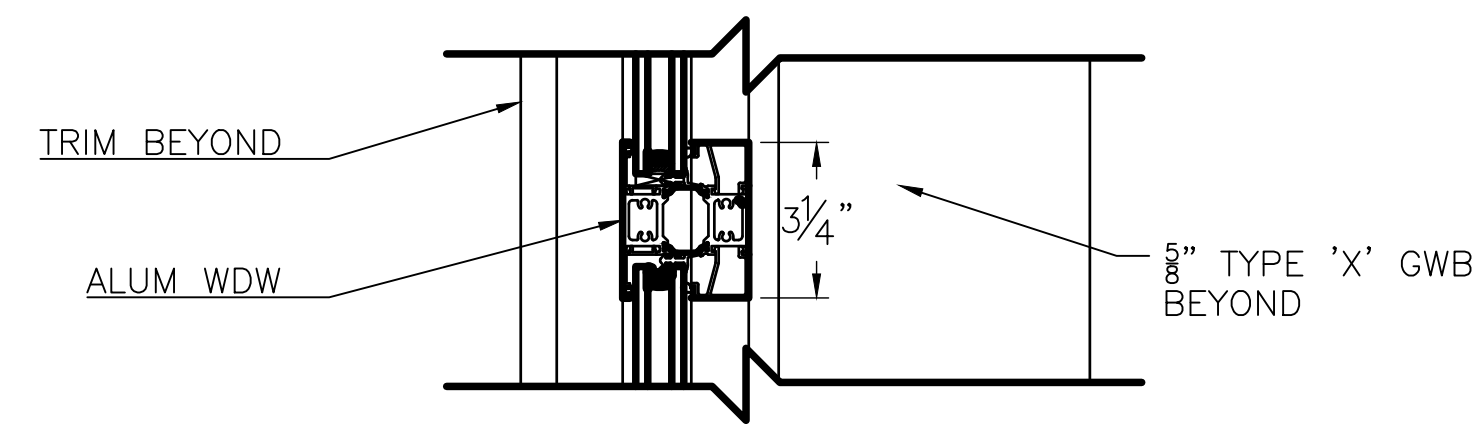
REVISION	DATE	DESCRIPTION OF REVISION	REV BY

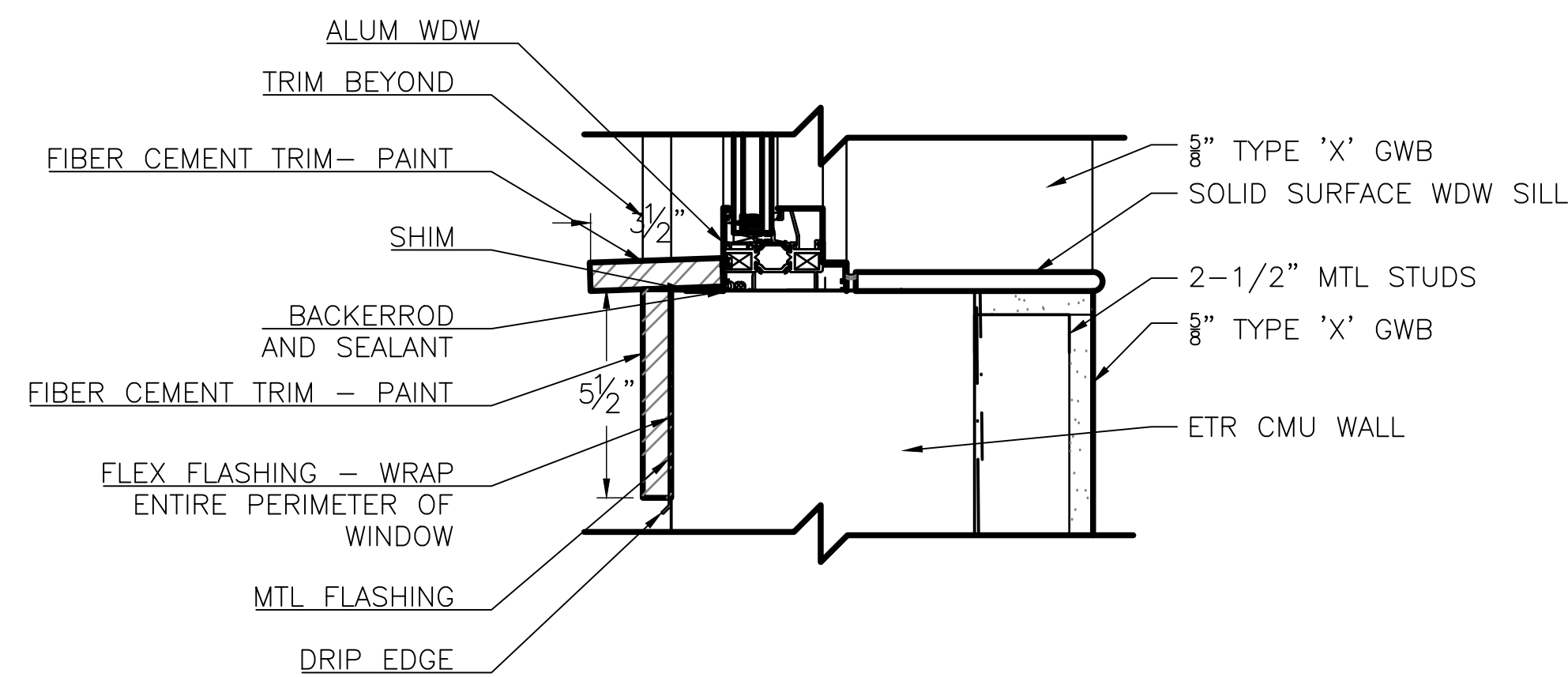
ENGINEER	CC	20	36
PROJECT NUMBER	207-A-400	SHEET	OF
DATE	05/26/2021	AS NOTED	



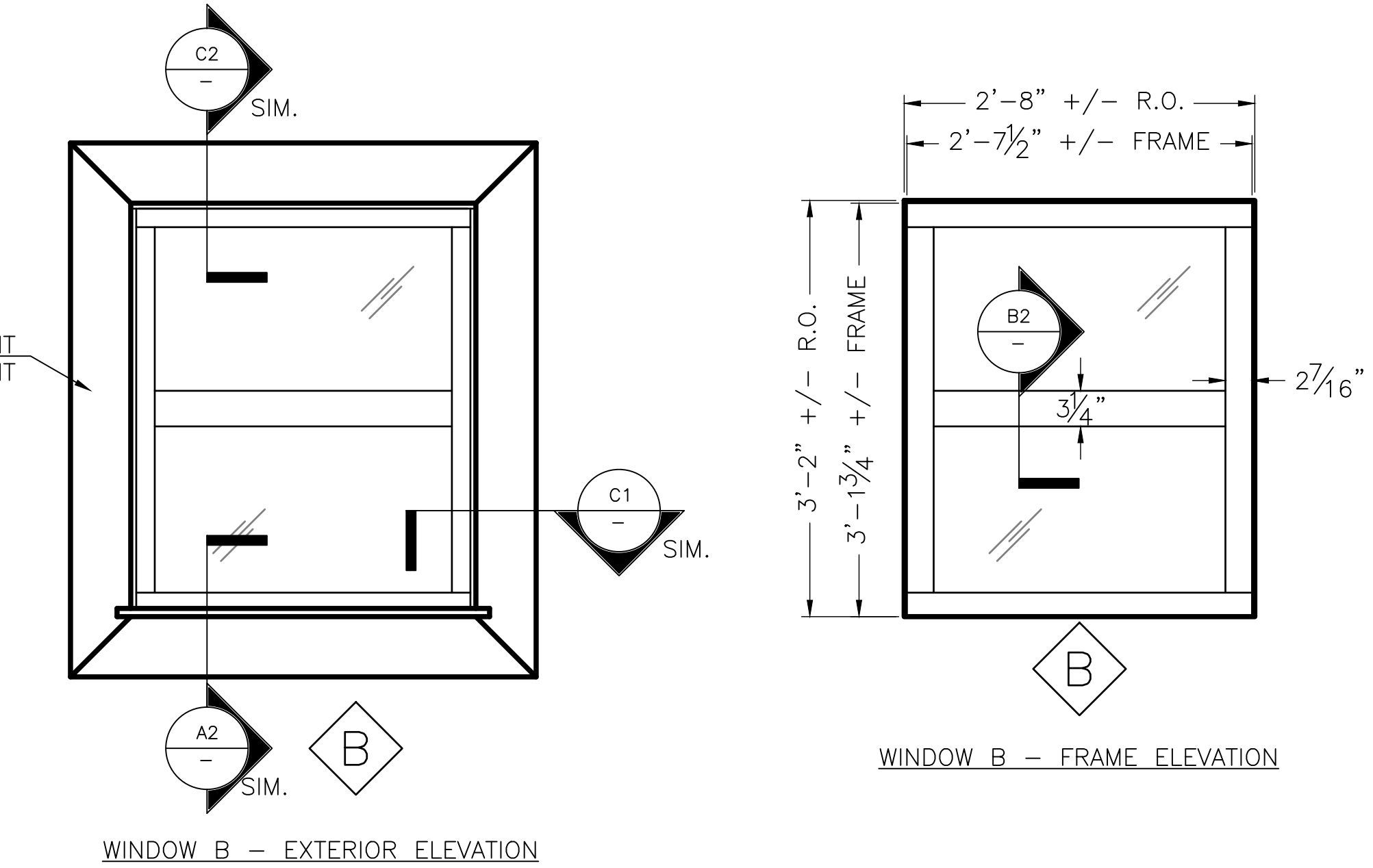
**C2 HEAD DETAIL**  
SCALE: 3" = 1'-0"



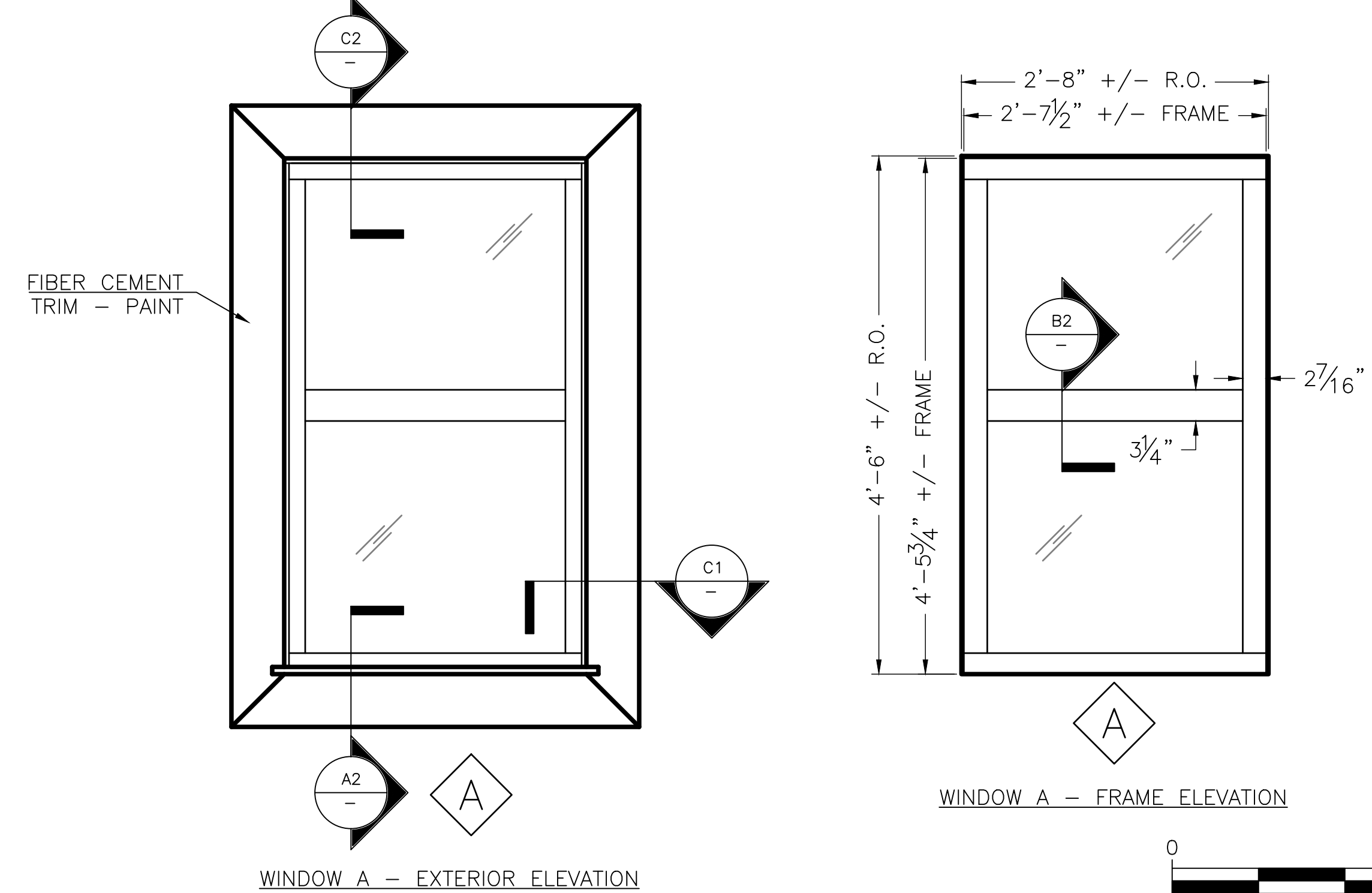
**A2 SILL DETAIL**  
SCALE: 3" = 1'-0"



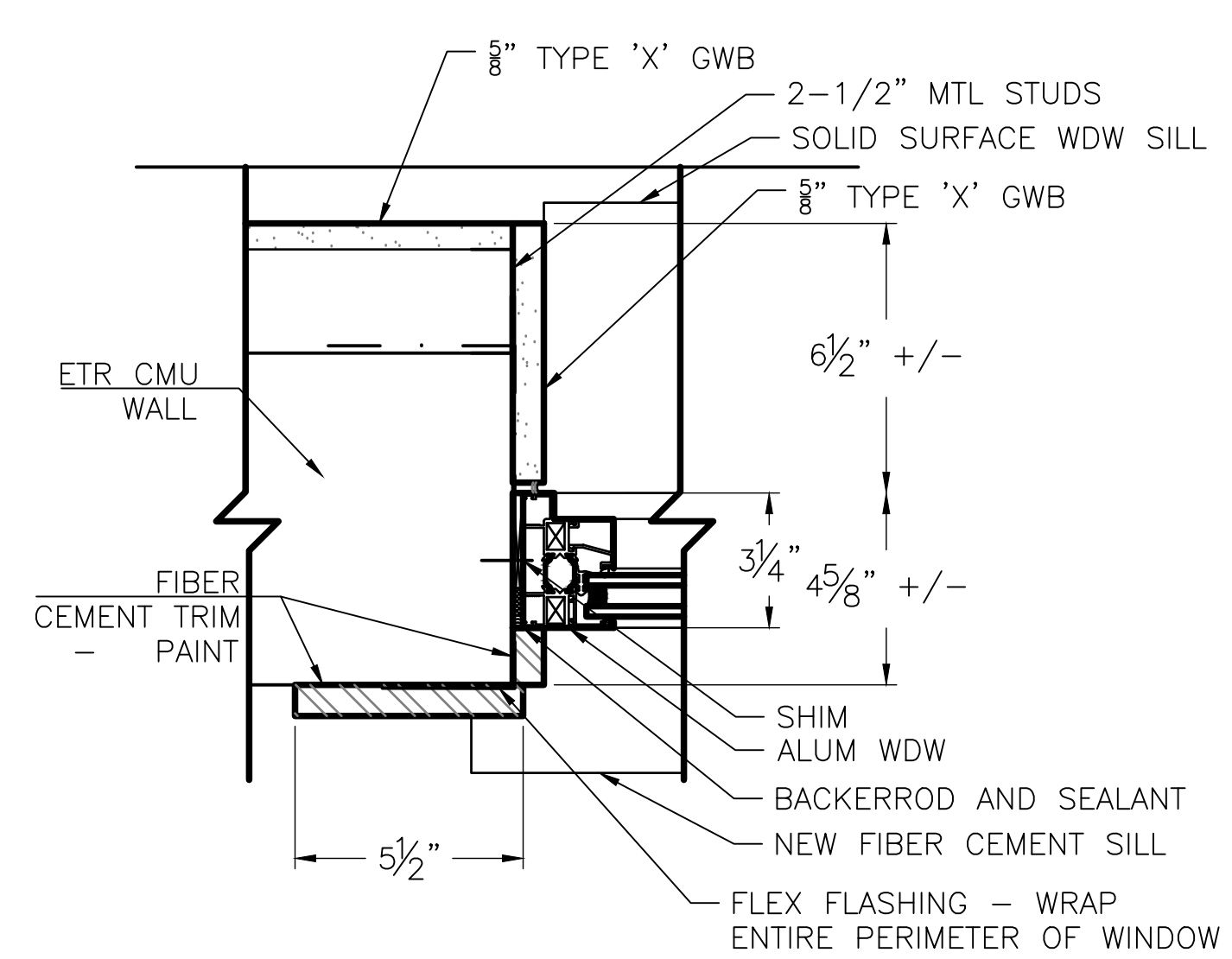
**A1 WINDOW ELEVATIONS**  
SCALE: 1" = 1'-0"



**C1 JAMB DETAIL**  
SCALE: 3" = 1'-0"



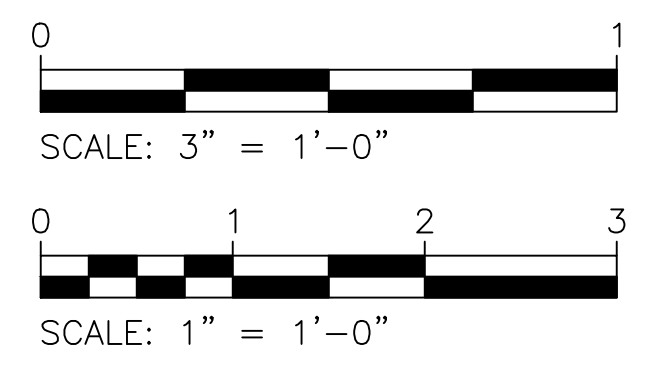
**B2 HORIZONTAL MULLION DETAIL**  
SCALE: 3" = 1'-0"



**C1 JAMB DETAIL**  
SCALE: 3" = 1'-0"

**DEFICIENCY SHW027 (FAC 207):**  
INSTALL FIVE NEW FIXED ALUMINUM WINDOWS AND EXTERIOR TRIM, INCLUDING NEW BLINDS.

- NOTES:**
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF ANY WORK.
  - WRAP A/V TRANSITION MEMBRANE AS INDICATED.
  - ALL EXTERIOR GLAZING ARE INSULATED GLAZING UNITS (IGU).
  - DOOR AND WINDOW ROUGH OPENINGS ARE EXISTING TO REMAIN.



**20th CIVIL ENGINEER SQUADRON**  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

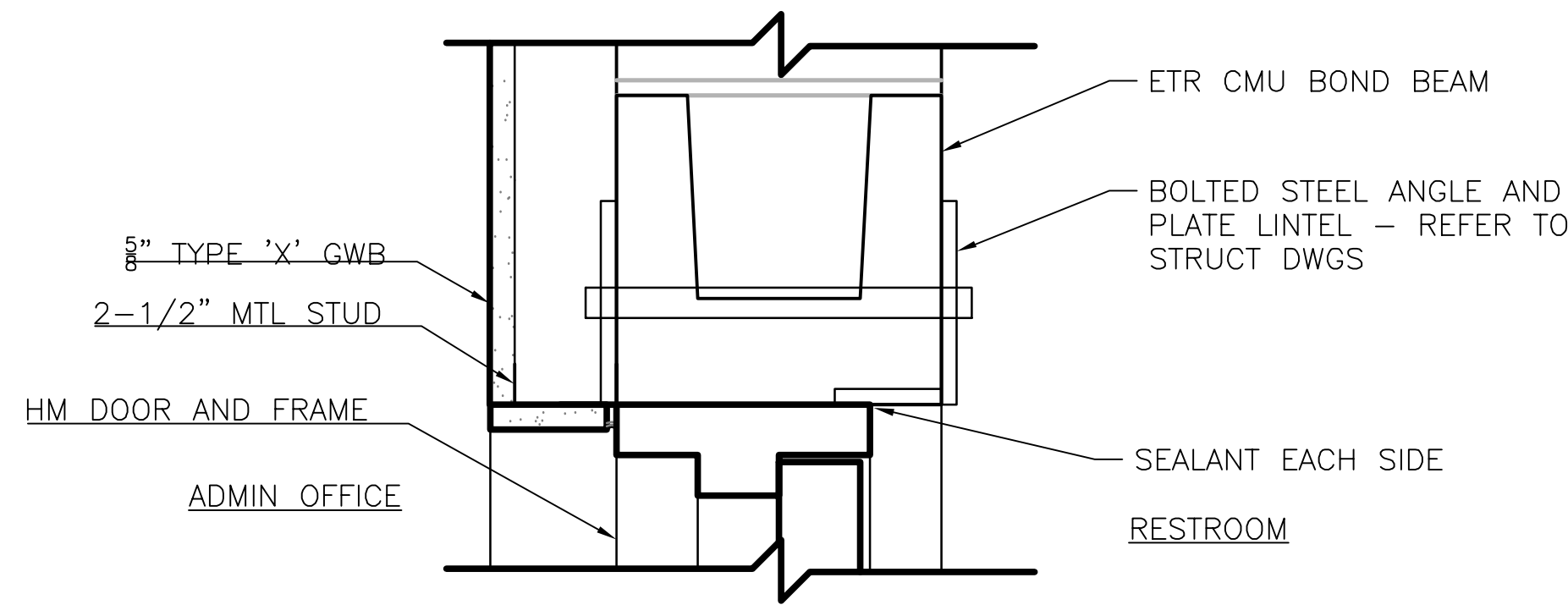
WINDOW ELEVATIONS AND DETAILS

ENGINEER: CC  
PROJECT NUMBER: 60590568  
DATE: 05/26/2021

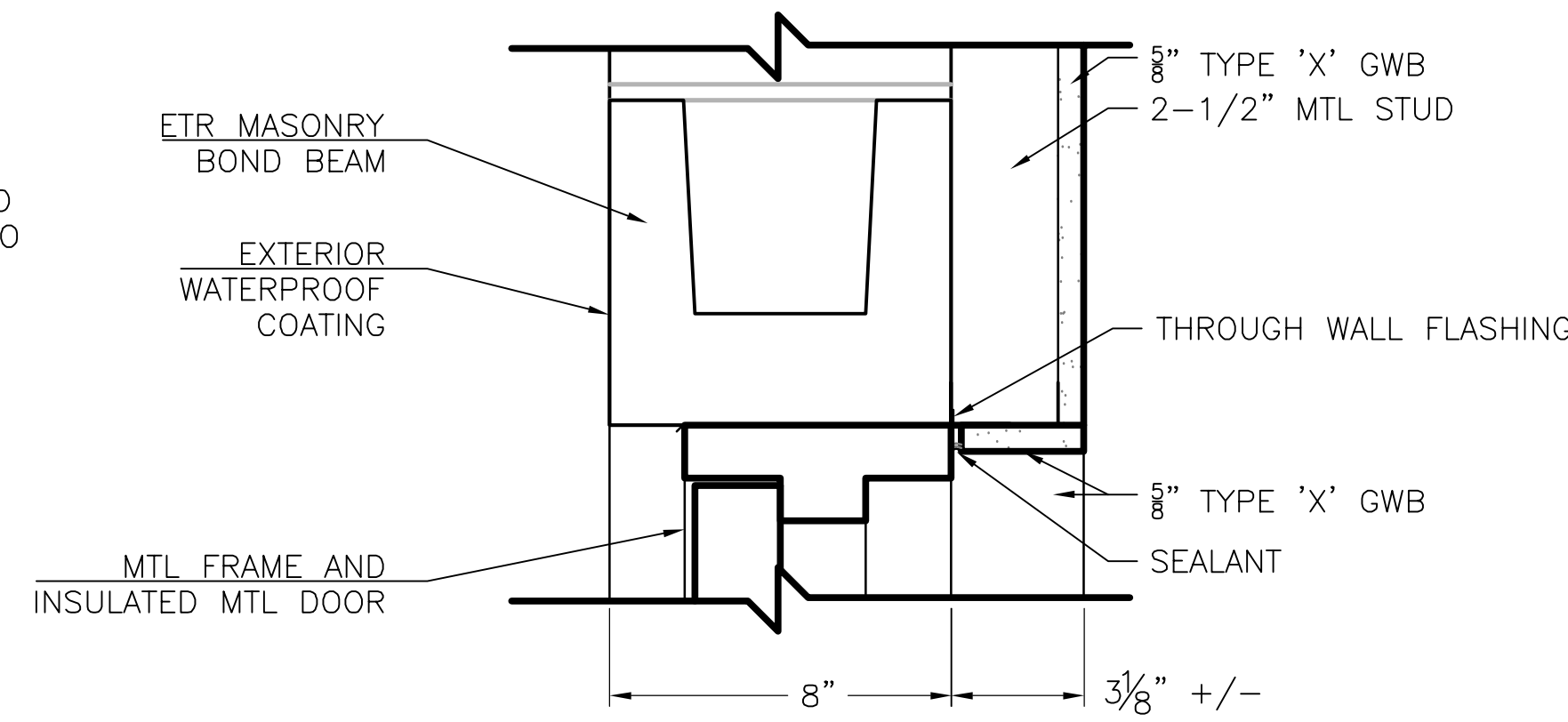
207-A-500  
DRAWING NUMBER

AS NOTED  
SCALE

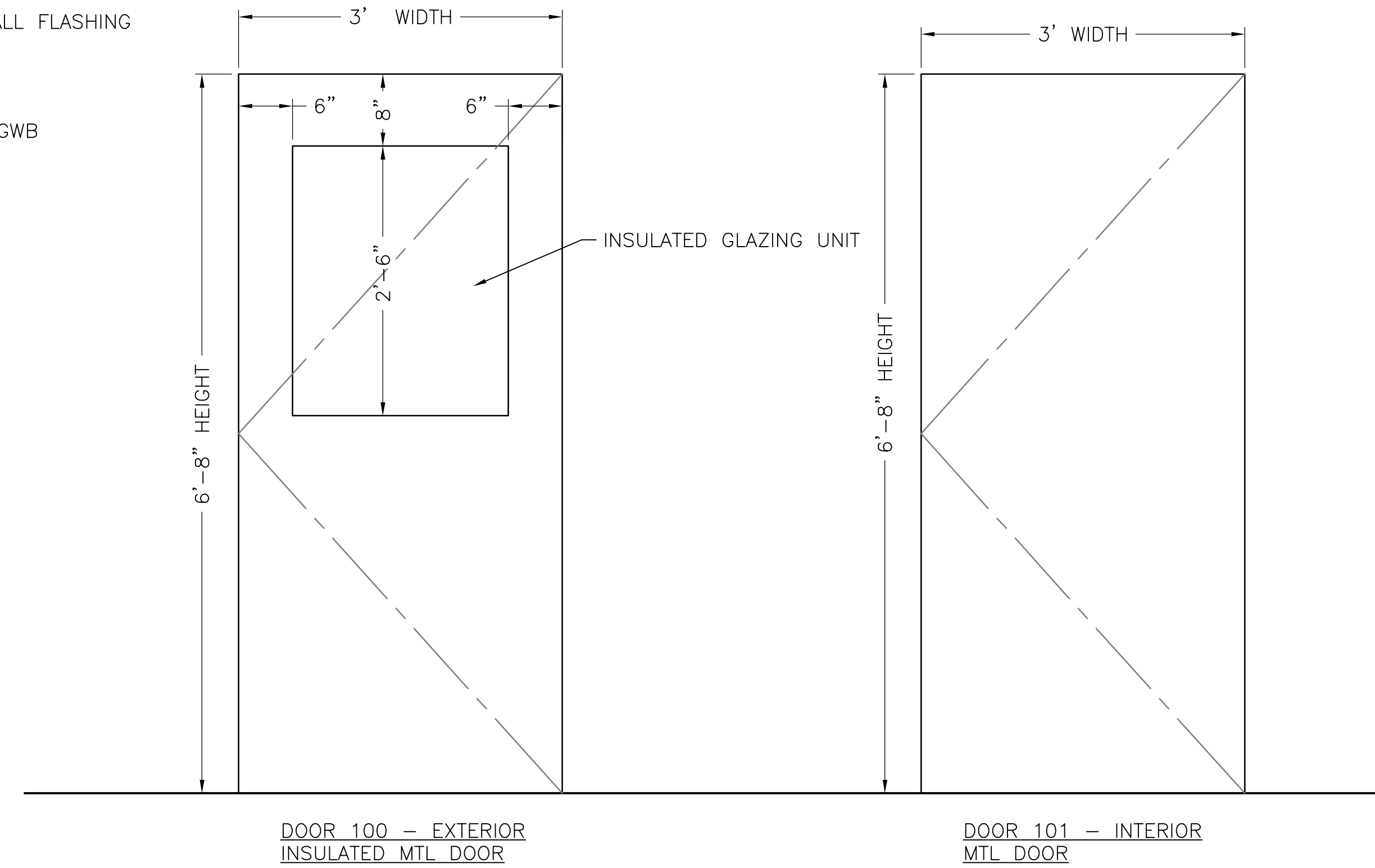
21 OF 36  
SHEET



**C3 HEAD DETAIL**  
SCALE: 3" = 1'-0"

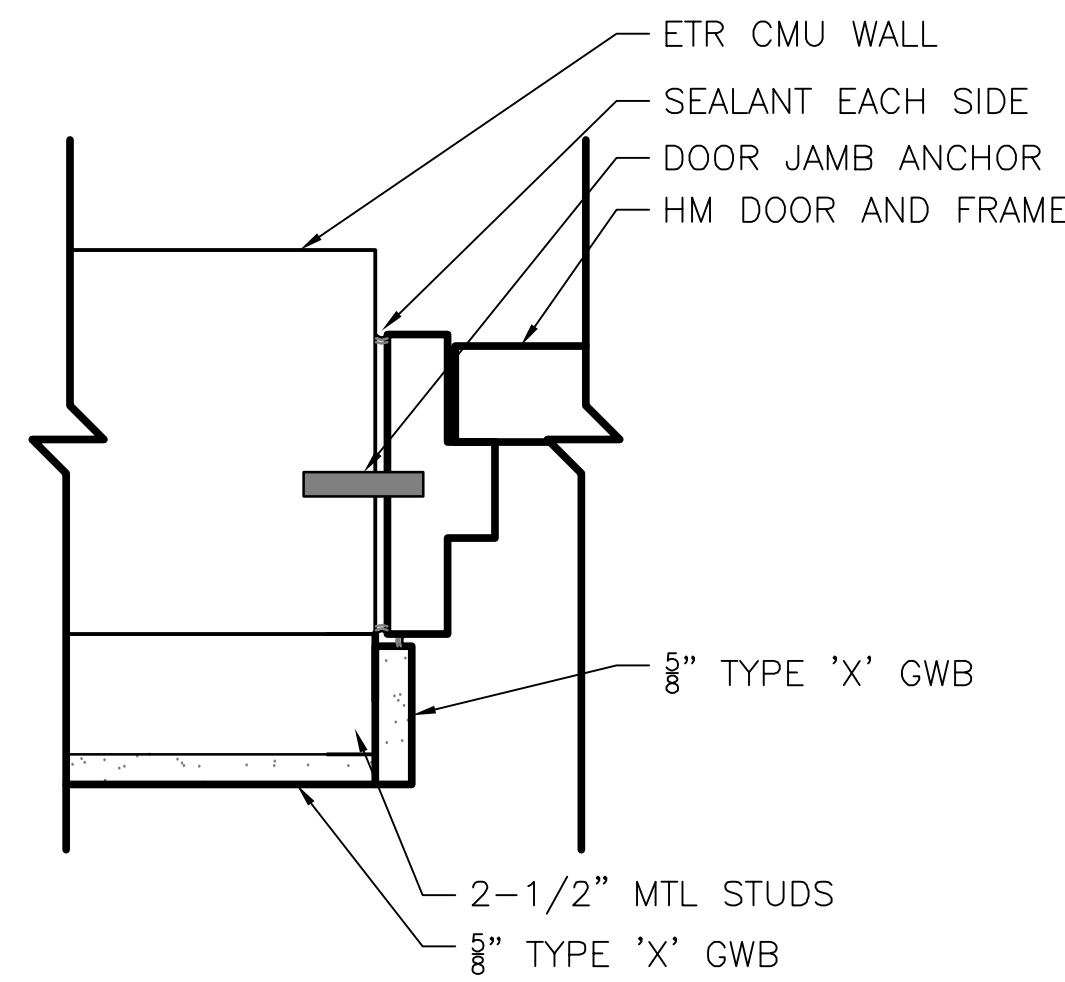


**C2 HEAD DETAIL**  
SCALE: 3" = 1'-0"

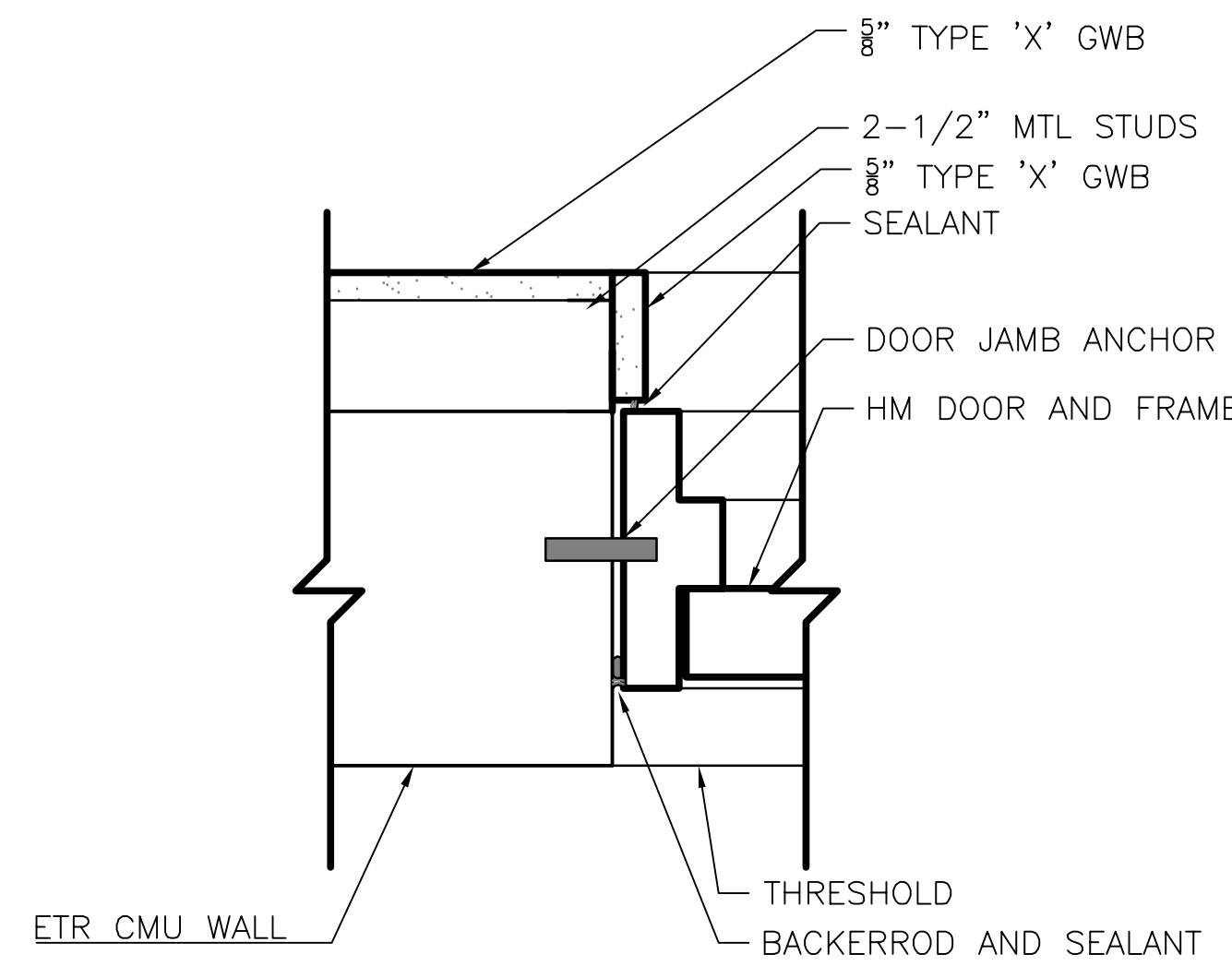


**A1 DOOR AND FRAME ELEVATIONS**  
SCALE: 1" = 1'-0"

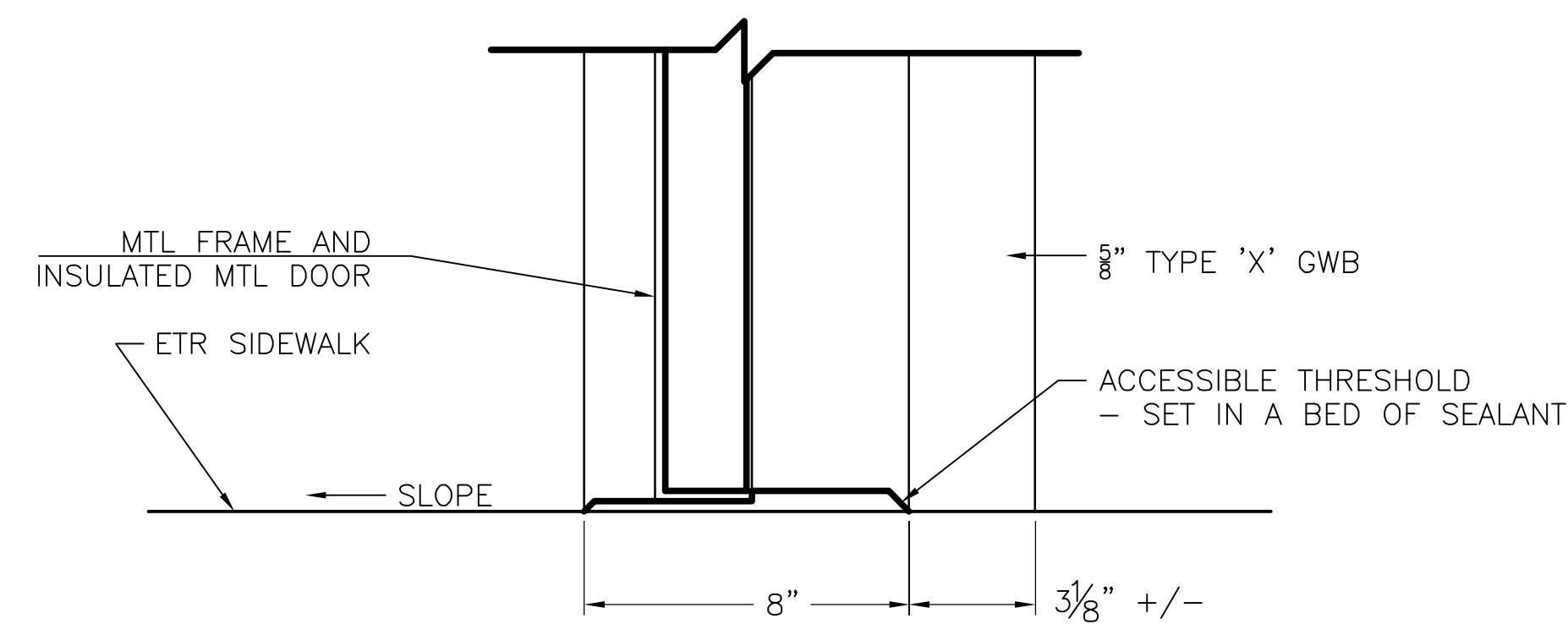
- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF ANY WORK.
  2. WRAP A/V TRANSITION MEMBRANE AROUND JAMBS AS INDICATED.
  3. ALL EXTERIOR GLAZING IS INSULATED GLAZING UNIT (IGU).
  4. DOOR AND WINDOW ROUGH OPENINGS ARE EXISTING TO REMAIN.



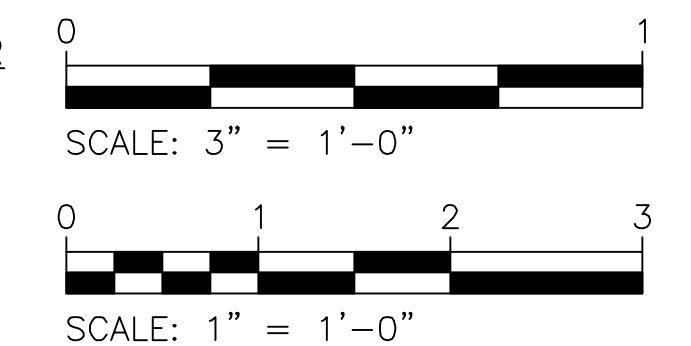
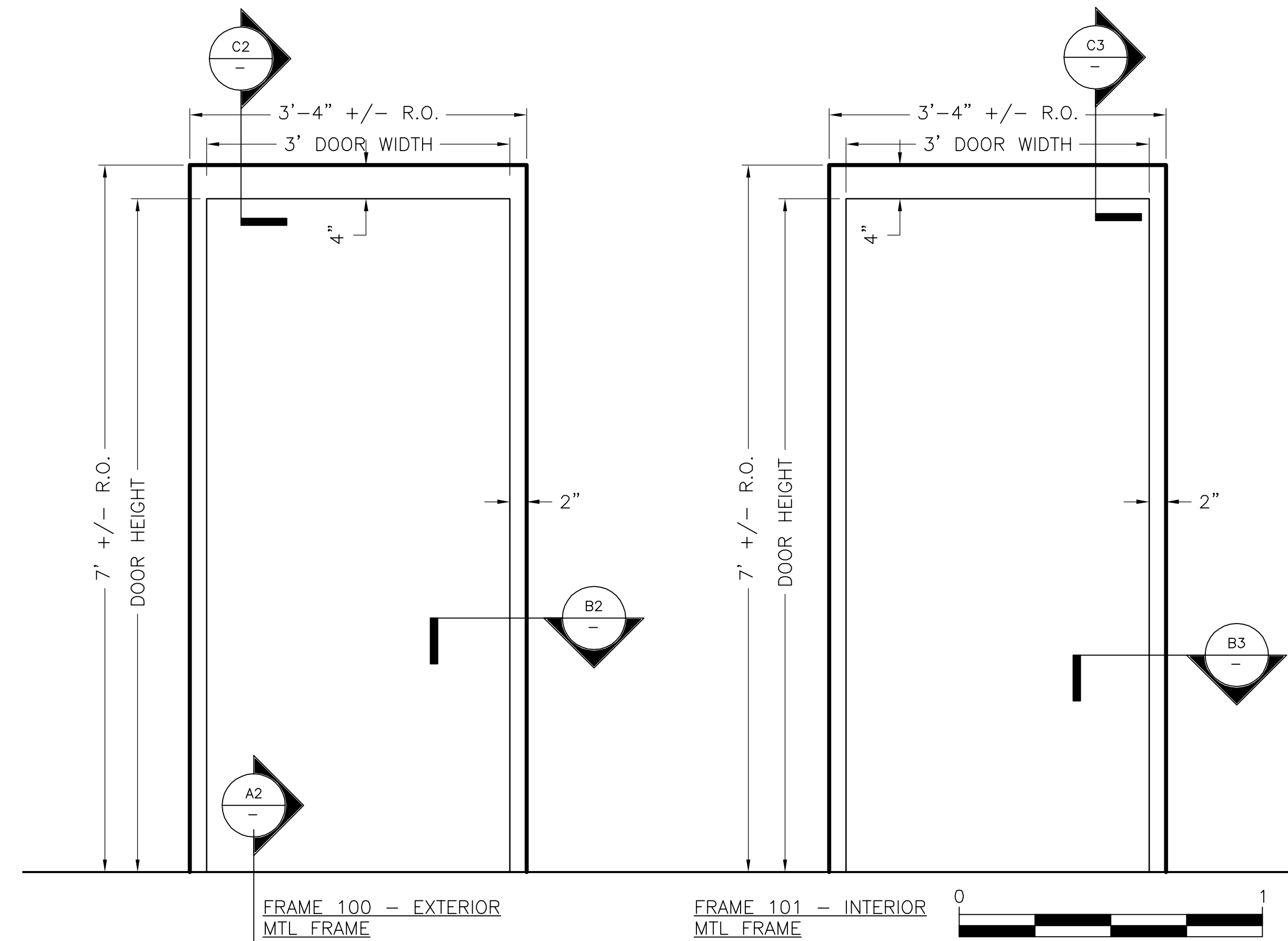
**B3 JAMB DETAIL**  
SCALE: 3" = 1'-0"



**B2 JAMB DETAIL**  
SCALE: 3" = 1'-0"



**A2 SILL DETAIL**  
SCALE: 3" = 1'-0"



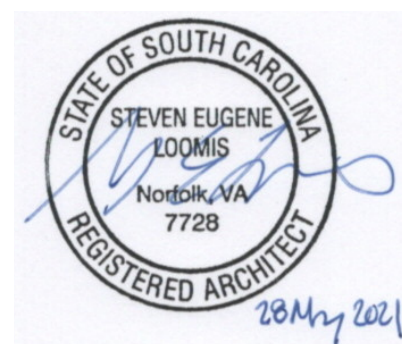
20th CIVIL ENGINEER SQUADRON

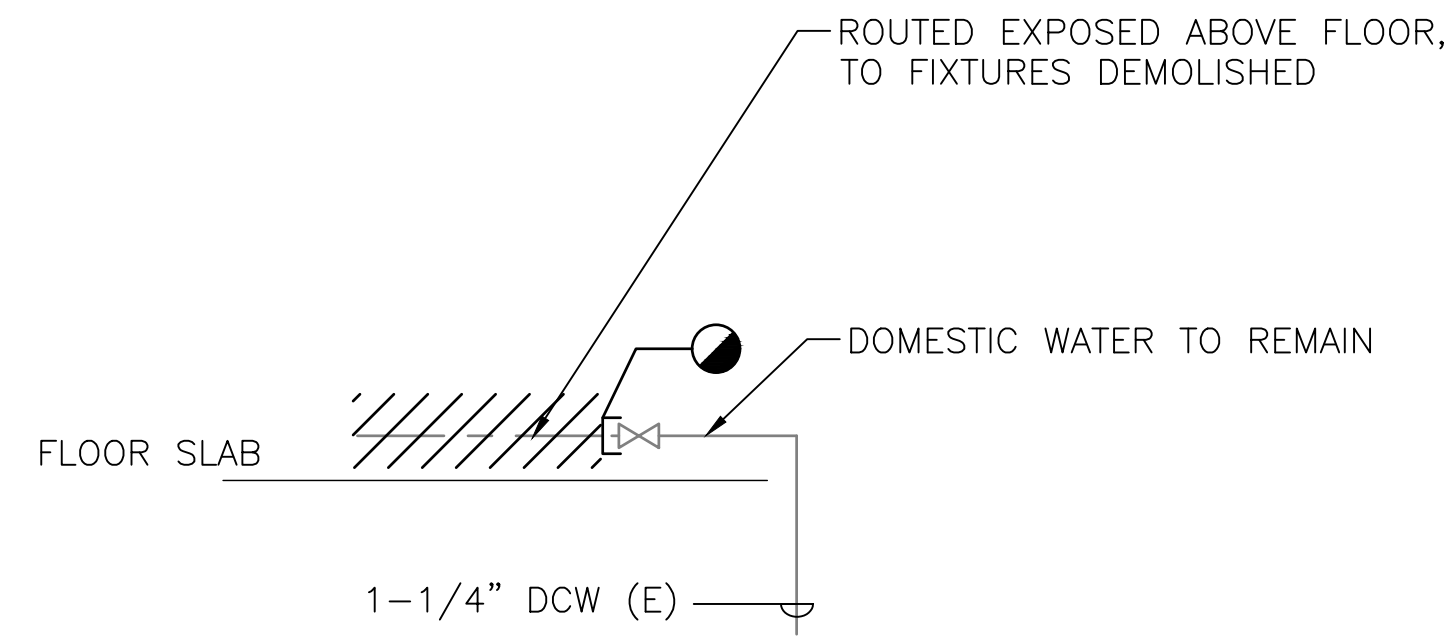
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626

A&E SERVICES POL FOR SHAW AFB  
CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
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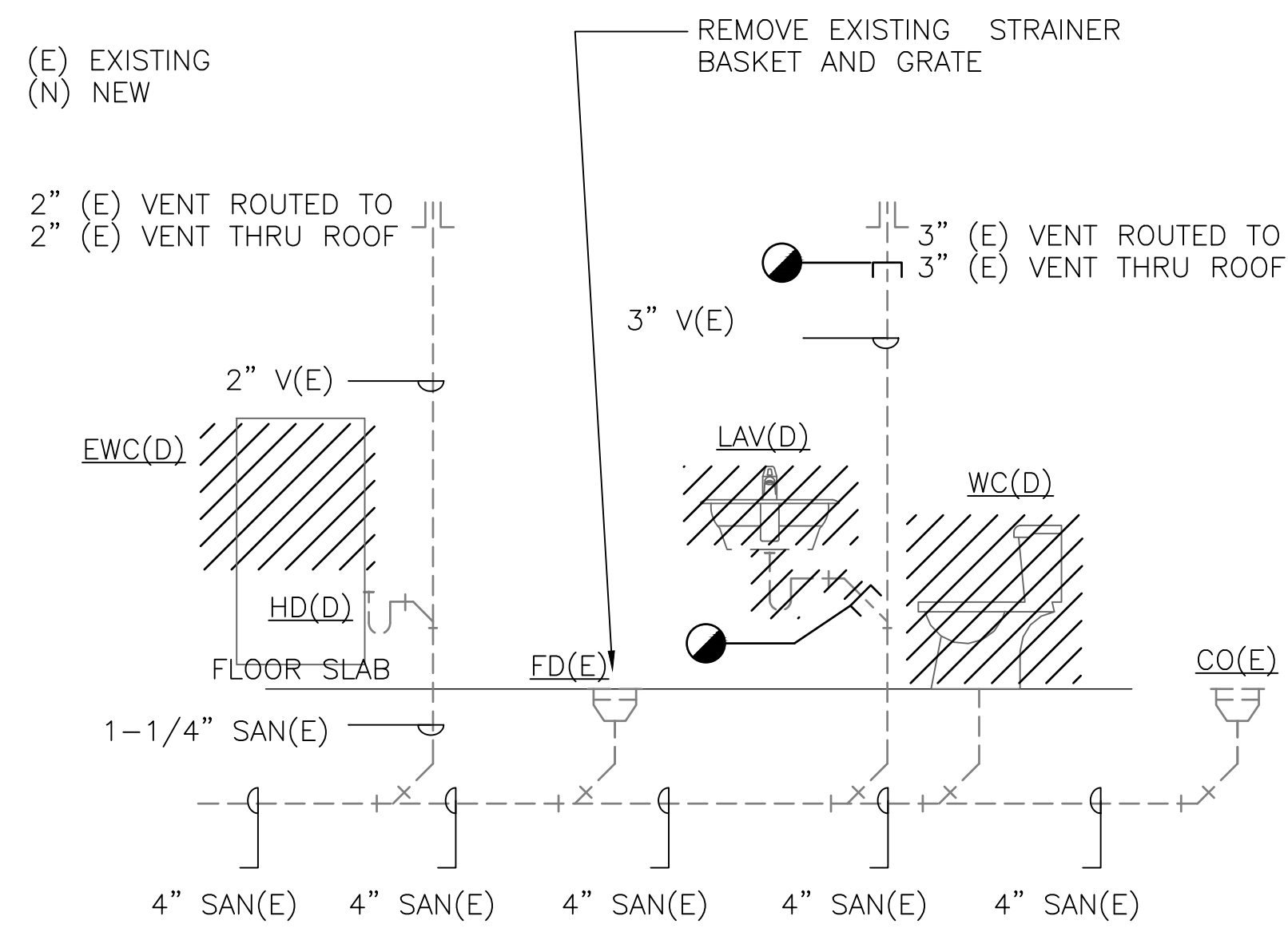
DOOR AND FRAME ELEVATIONS AND DETAILS

DESIGNER: CC  
PROJECT NUMBER: 207-A-501  
DATE: 08/26/2021  
SHEET 22 OF 36

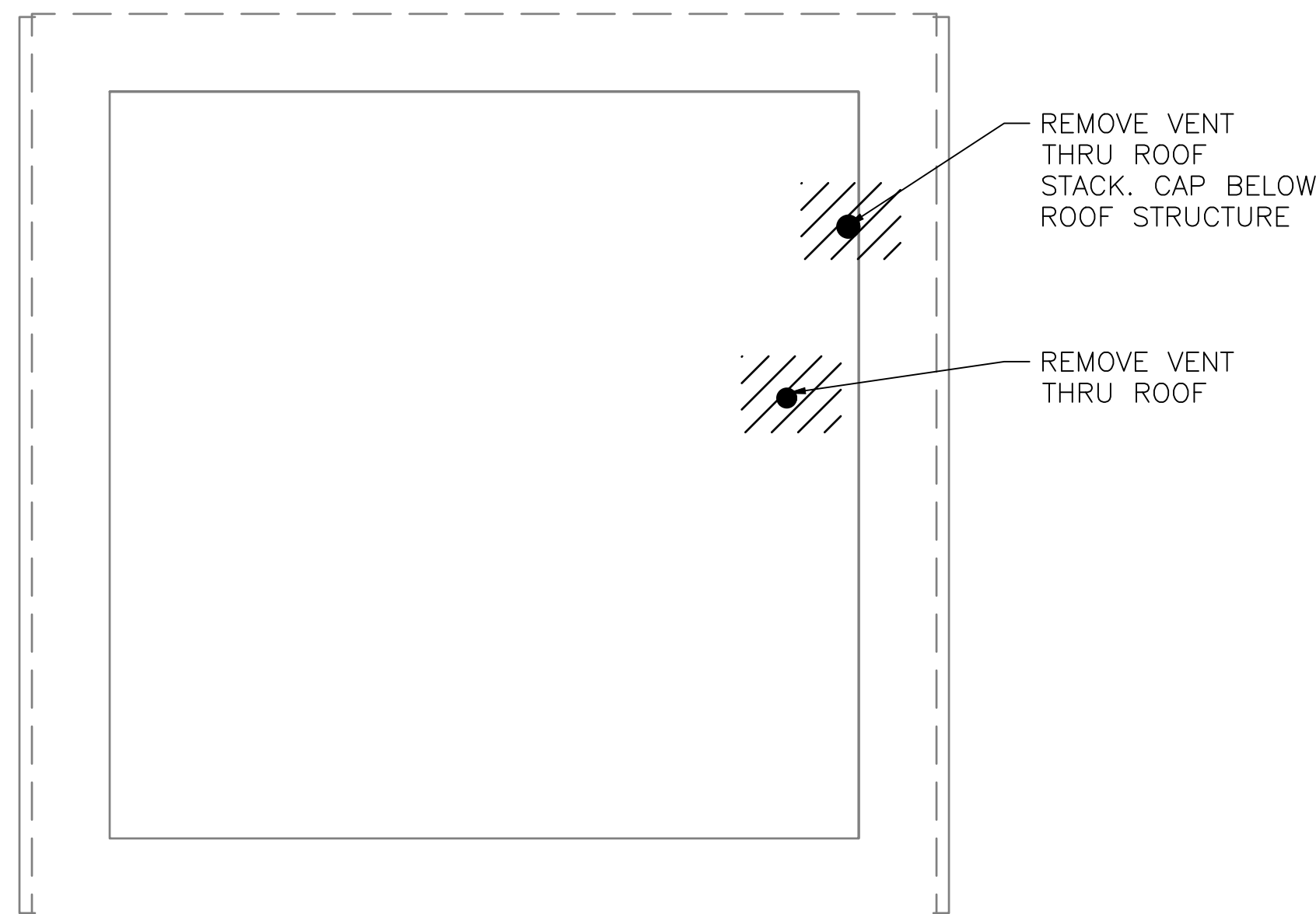




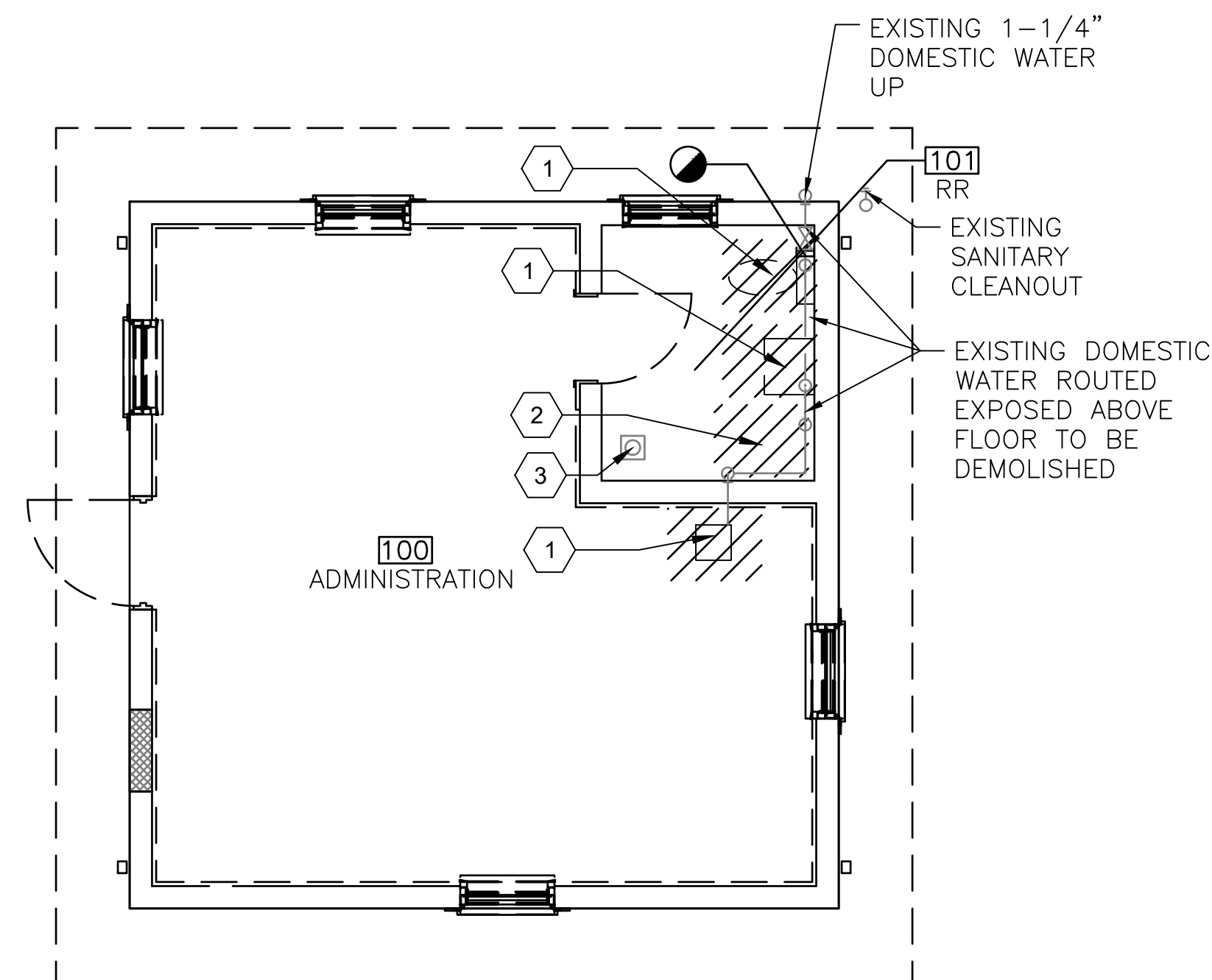
**C2** DOMESTIC WATER RISER DIAGRAM – EXISTING  
SCALE: N.T.S.



**C1** SANITARY RISER DIAGRAM – EXISTING  
SCALE: N.T.S.



**A2** ROOF PLAN  
SCALE: 1/4" = 1'-0"



**A1** FLOOR PLAN  
SCALE: 1/4" = 1'-0"

**DEMOLITION LEGEND:**

////// EXISTING PIPING AND/OR EQUIPMENT TO BE REMOVED

**PLUMBING PIPING SYMBOLS**

----- DOMESTIC COLD WATER, COLD WATER  
 - - - - - SANITARY WASTE  
 - - - - - SANITARY VENT

**GENERAL PLUMBING SYMBOLS**

● → POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK  
 ● → LIMIT OF DEMOLITION

**PLUMBING VALVE SYMBOLS**

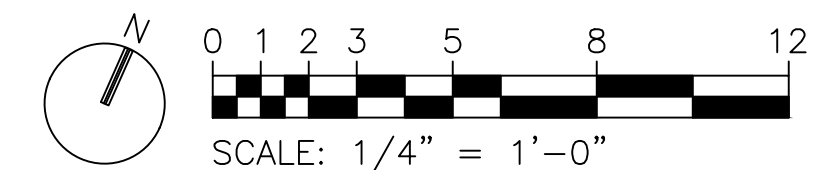
⊗ GATE VALVE  
 ⊕ BALL VALVE  
 ∞ ∞ CLEAN OUT

**DEMOLITION GENERAL NOTES:**

1. PROVIDE ALL DEMOLITION REQUIRED FOR THE RENOVATED AREAS OF CONSTRUCTION AND AS INDICATED ON THE ARCHITECTURAL DEMOLITION DRAWINGS. ALL DEMOLISHED MATERIALS SHALL BE STORED ON SITE OR DISPOSED OF AS DIRECTED BY THE GOVERNMENT FIELD REPRESENTATIVE.
2. EXISTING CONDITIONS ARE TAKEN FROM RECORD AND "AS-BUILT" DRAWINGS AND ARE, UNVERIFIED. CONTRACTOR SHALL FIELD VERIFY ALL FIELD CONDITIONS PRIOR TO FABRICATION OF NEW WORK.
3. MAKE REPAIRS TO ANY SERVICES DAMAGED BY THIS WORK. REPAIRS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
4. DEMOLITION SHALL BE PERFORMED IN SUCH A MANNER THAT WILL NOT DAMAGE ADJOINING SURFACES OR EQUIPMENT INDICATED TO REMAIN.
5. FIXTURES, PIPING AND/OR EQUIPMENT THAT ARE HATCHED ARE TO BE DISCONNECTED AND REMOVED.
6. ALL EXISTING SANITARY PIPING TO REMAIN SHALL BE CLEANED BACK TO THE FIRST EXISTING MANHOLE OUTSIDE THE BUILDING.

**DEFICIENCY SHW027 (FAC 207):**

- 1 EXISTING PLUMBING FIXTURE(S) TO BE DISCONNECTED AND REMOVED. DISCONNECT AND REMOVE ALL ASSOCIATED DOMESTIC WATER PIPING FROM WALL. REMOVE SANITARY PIPING IN WALL TO BELOW FLOOR. REMOVE VENT PIPING ABOVE CEILING. PATCH/REPAIR EXISTING PENETRATIONS TO MATCH ADJACENT SURFACES.
- 2 EXISTING WATER HEATER TO BE DISCONNECTED AND REMOVED. DISCONNECT AND REMOVE ALL ASSOCIATED PIPING, VALVES AND ACCESSORIES. REFER TO ELECTRICAL FOR DEMOLITION OF ELECTRICAL SERVICE AND COMPONENTS.
- 3 EXISTING FLOOR DRAIN TO REMAIN IN SERVICE. REMOVE AND REPLACE EXISTING FLOOR DRAIN GRATE AND STRAINER BASKET.



20th CIVIL ENGINEER SQUADRON  
 428 CHAPIN STREET  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

DEMOLITION DRAWINGS

ENGINEER  
 BJO  
 60590568  
 PROJECT NUMBER  
 08/26/2021  
 1/4" = 1' - 0"  
 23 OF 36  
 SHEET

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

PLUMBING FIXTURE SCHEDULE									
MARK	DESCRIPTION	MATERIAL	WASTE	VENT	COLD	HOT	COMMENTS		
EWC-1	ELECTRIC WATER COOLER, ADA	STAINLESS STEEL	1 1/4"	1 1/4"	1/2"		SINGLE WITH BOTTLE FILLER, FILTERED, 8 GPH		
LV-1	LAVATORY, WALL HUNG, ADA	VITREOUS CHINA	1 1/2"	1 1/2"	1/2"	1/2"	REAR-OVERFLOW, SOAP DEPRESSION. FAUCET - WRIST BLADE HANDLES, RIGID/SWIVEL GOOSENECK SPOUT, 0.5 GPM, CHROME-PLATED, TAMPER-PROOF AERATOR, INSULATION GUARD		
WC-1	WATER CLOSET, ADA, FLOOR MOUNTED	VITREOUS CHINA	3"	2"	3/4"		TANK TYPE, TWO PIECE, 1.28 GPF, PROVIDE NEW FLOOR FLANGE AS REQUIRED FOR FIXTURE INSTALLATION		

INSTANTANEOUS ELECTRIC WATER HEATER										
MARK	LOCATION	TEMP. RISE °F	TURN ON GPM	ELECTRICAL DATA				MANUFACTURER	MODEL	COMMENTS
				KW	VOL	PH	Hz			
IWH-1	RESTROOM 101	56 °F	0.3 GPM	4.1	208 V	1	60	EEMAX	SP4208	

**PLUMBING PIPING SYMBOLS**

- DOMESTIC COLD WATER, COLD WATER
- SANITARY WASTE
- SANITARY VENT

**GENERAL PLUMBING SYMBOLS**

- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- LIMIT OF DEMOLITION

**PLUMBING VALVE SYMBOLS**

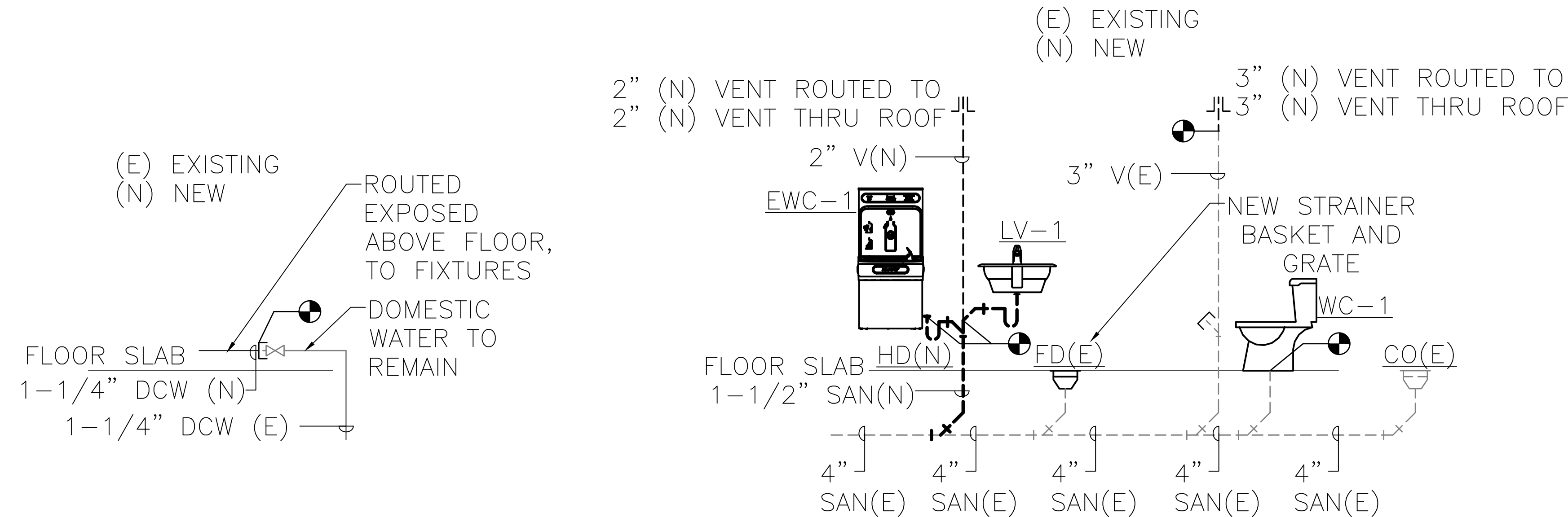
- GATE VALVE
- BALL VALVE
- CLEAN OUT

**GENERAL NOTES:**

1. PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
2. VERIFY ALL SIZES WITH MANUFACTURER'S INSTALLATION LITERATURE.
3. REFER TO PLUMBING SCHEDULE FOR EQUIPMENT IDENTIFICATION.
4. CORE DRILL SLAB AND WALL AS NECESSARY. COORDINATE WITH STRUCTURAL ENGINEERS. PROVIDE SLEEVES AT ALL PENETRATIONS; FIRESTOP AT FIRE PARTITIONS.
5. PROVIDE BALANCING VALVES FOR SERVICE LINES AT ALL EQUIPMENT.
6. PROVIDE CLEARANCES FOR ALL MAINTENANCE, INSPECTION AND OR REMOVAL.
7. OFFSET OF PIPING INSTALLATIONS MAY BE REQUIRED, BUT NOT SHOWN IN ALL OCCURRENCES.
8. DO NOT EXCEED MINIMUM DISTANCE REQUIREMENTS FOR ELBOW AND TRANSITIONS LOCATIONS FROM EQUIPMENT.
9. PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
10. DRAWINGS ARE SCHEMATIC IN NATURE.
11. MOUNT ALL FIXTURES TO ADA/ABA ACCESSIBILITY STANDARDS.

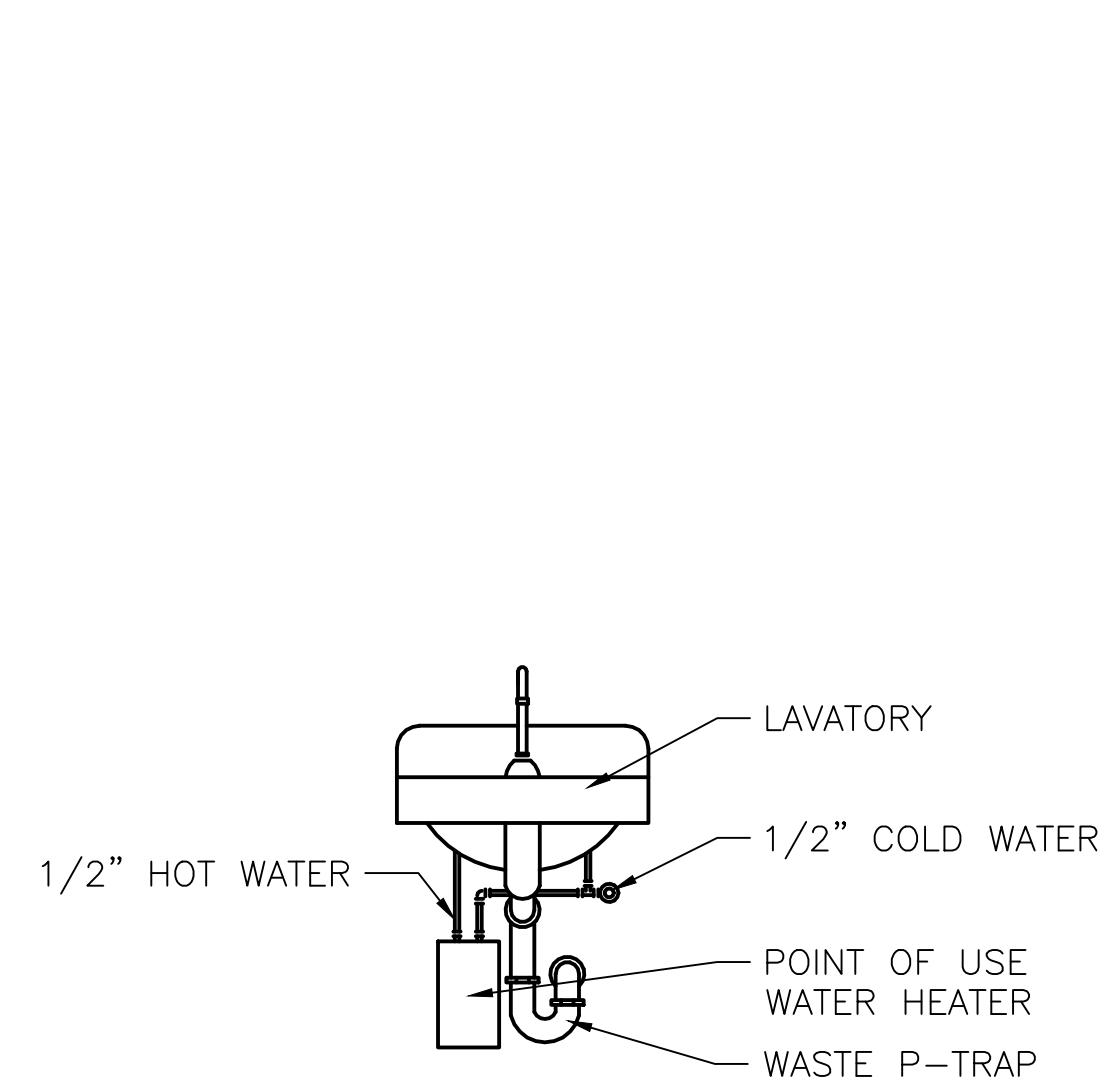
**DEFICIENCY SHW027 (FAC 207):**

1. ROUTE 1/2" DOMESTIC COLD WATER UP TO INLET OF POINT OF USE WATER HEATER AND UP TO LAVATORY FAUCET. ROUTE 1/2" DOMESTIC HOT WATER FROM OUTLET OF POINT OF USE WATER HEATER UP TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET. PROVIDE NEW 1-1/2" SANITARY WASTE CONNECTION TO EXISTING SANITARY WASTE AT WALL.
2. ROUTE 1/2" DOMESTIC COLD WATER TO ELECTRIC WATER COOLER. PROVIDE INLINE FILTER AND ISOLATION VALVE. REMOVE CAP AND PROVIDE NEW 1-1/4" SANITARY WASTE CONNECTION TO EXISTING SANITARY WASTE BELOW FLOOR. ROUTE 1-1/4" VENT UP. ROUTE 2" VENT THRU ROOF.
3. ROUTE 1-1/2" DOMESTIC COLD WATER TO INLET OF WATER CLOSET. REMOVE CAP AND PROVIDE NEW 3" SANITARY WASTE CONNECTION TO EXISTING SANITARY WASTE BELOW FLOOR. ROUTE 2" VENT UP. ROUTE 3" VENT THRU ROOF.

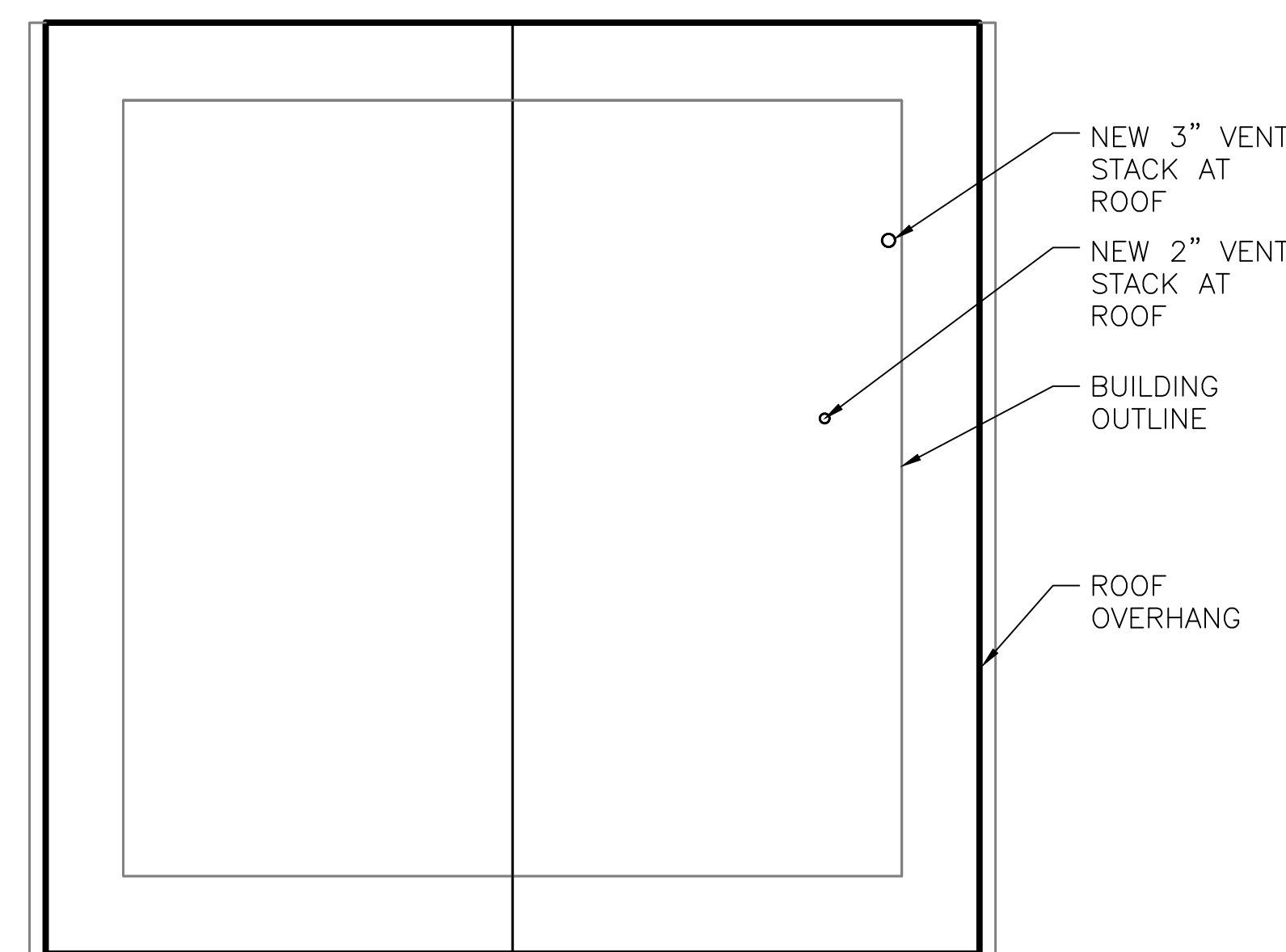


**B2** SANITARY RISER DIAGRAM - NEW  
SCALE: N.T.S.

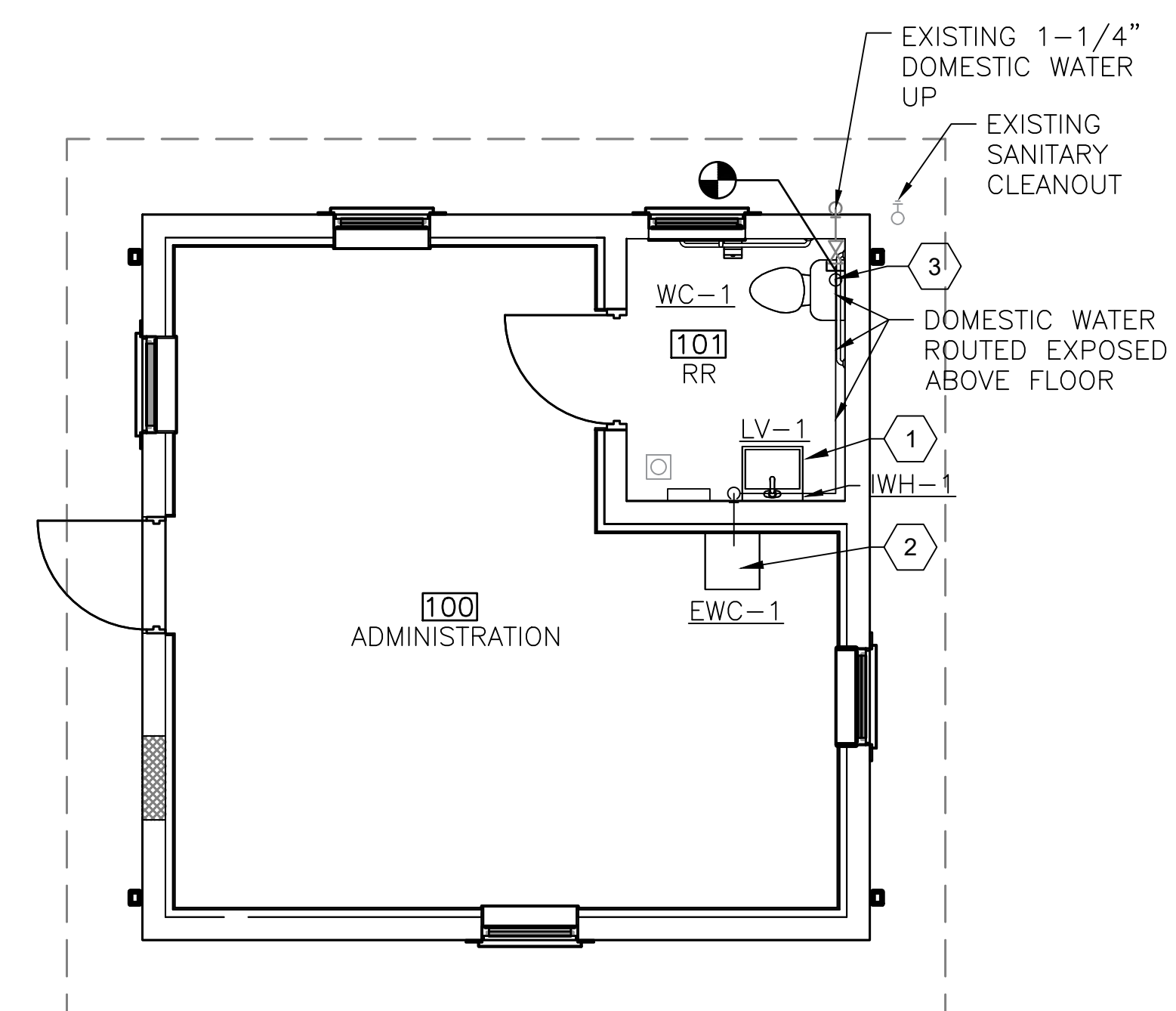
**B3** DOMESTIC WATER RISER DIAGRAM - NEW  
SCALE: N.T.S.



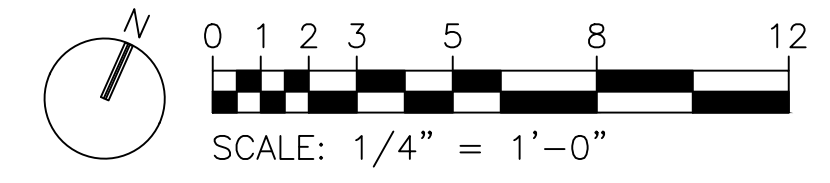
**A3** DETAIL - WATER HEATER  
SCALE: N.T.S.



**A2** ROOF PLAN  
SCALE: 1/4" = 1'-0"



**A1** FLOOR PLAN  
SCALE: 1/4" = 1'-0"



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428 CHAPIN STREET  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

PLANS, DETAILS AND SCHEDULES  
ENGINEER: BJO  
PROJECT NUMBER: 207-P-100  
DATE: 05/26/2021  
SCALE: 1/4" = 1'-0"  
SHEET: 24 OF 36





MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFG	BELOW FINISHED GRADE
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DCU	DUCTLESS CONDENSING UNIT
DFCU	DUCTLESS FAN COIL UNIT
DX	DIRECT EXPANSION
FLA	FULL LOAD AMPS
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
MBH	THOUSAND BTU PER HOUR
MIN	MINIMUM
NTS	NOT TO SCALE
SEER	SEASONAL ENERGY EFFICIENCY RATING
WB	WET BULB TEMPERATURE °F

SYMBOLS

- ⊕ THERMOSTAT (TEMPERATURE SENSOR)
- ▨ EXISTING EQUIPMENT TO BE REMOVED/DEMOLISHED
- ▬ NEW DUCTLESS SPLIT SYSTEM FAN COIL UNIT (DFCU-1)
- NEW DUCTLESS SPLIT SYSTEM HEAT PUMP (DCU-1)

HVAC GENERAL NOTES

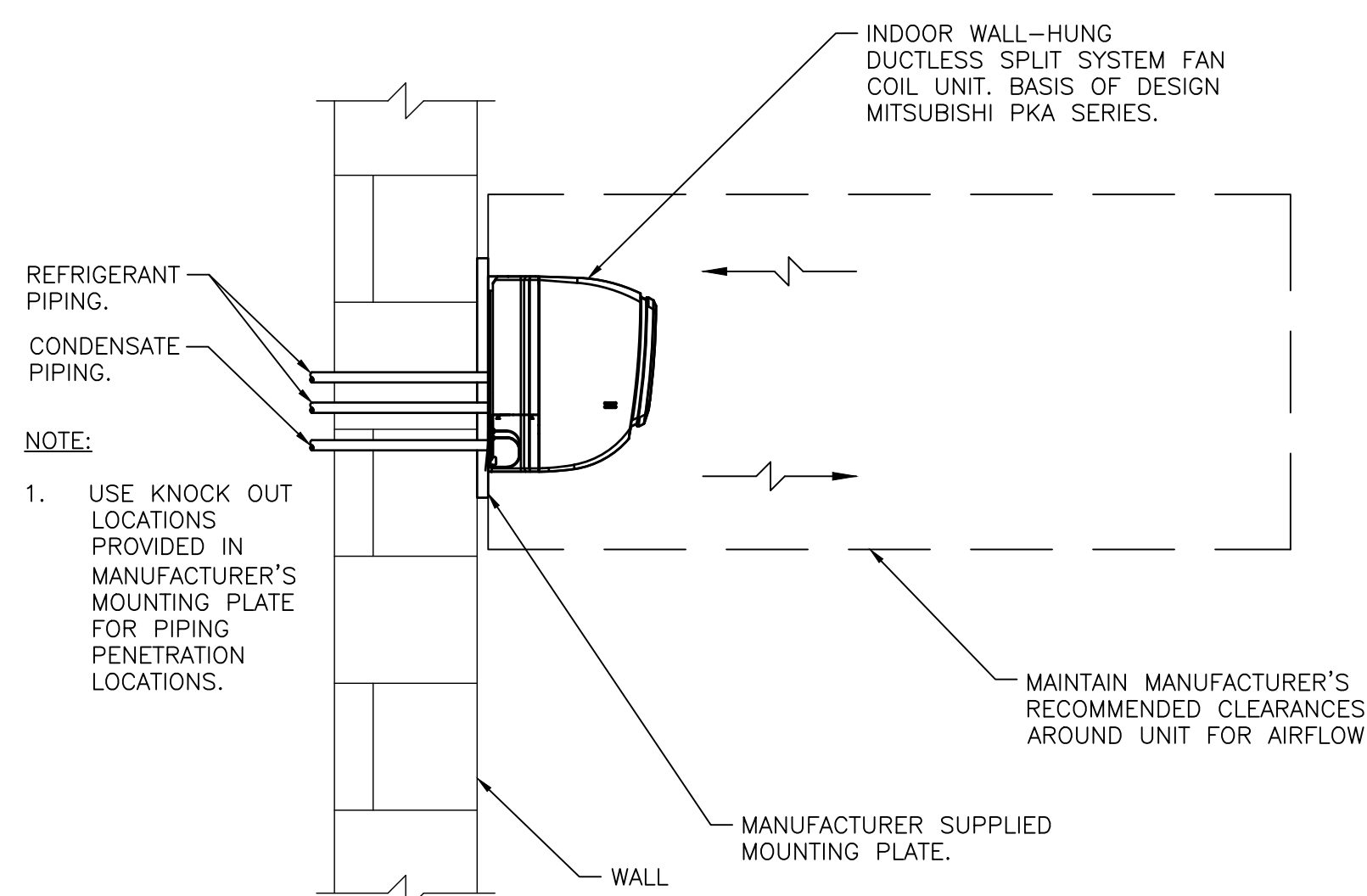
GENERAL:

- COOLING DESIGN CONDITIONS ARE 75 F, 50% RH INDOOR AT 96.0°F DB/75.7°F WB OUTDOOR.
- HEATING DESIGN CONDITIONS ARE 70°F INDOOR AT 23.7°F OUTDOOR.
- ALL HVAC WORK SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES.
- THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICE.
- THE HVAC CONTRACTOR SHALL BE FAMILIAR WITH ALL CONTRACT DOCUMENTS FOR ALL TRADES AND COORDINATE WITH OTHER CONTRACTORS.
- THE HVAC CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, PIPING, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
- DRAWINGS ARE DIAGRAMMATIC ONLY; FINAL ROUTING OF PIPING AND EQUIPMENT LOCATIONS SHALL BE DETERMINED IN THE FIELD. ADDITIONAL OFFSETS, ELBOWS, ETC., SHALL BE PROVIDED AND INSTALLED WITHOUT ADDITIONAL COST TO THE OWNER.
- SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY MECHANICAL EQUIPMENT.
- THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE HVAC WORK COMPLETE AND READY FOR OPERATION.
- ALL HVAC EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
- ALL HVAC COMPRESSORS SHALL HAVE EXTENDED 5-YEAR MANUFACTURER'S WARRANTY.
- THE HVAC CONTRACTOR SHALL FURNISH TO THE GENERAL CONTRACTOR ALL INFORMATION REQUIRED FOR SETTING OF WALL OPENINGS FOR HVAC WORK. THIS INFORMATION SHALL BE FURNISHED IN A TIMELY MANNER SUCH THAT CONSTRUCTION SCHEDULE IS NOT JEOPARDIZED.
- THERMOSTATS SHALL BE INSTALLED 48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- THE HVAC CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
- THE HVAC CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO SUBMITTING SHOP DRAWINGS OR ORDERING EQUIPMENT. EQUIPMENT SHALL BE FURNISHED WIRED FOR THE VOLTAGES SHOWN ON THE ELECTRICAL PLANS.
- ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS AND THE ELECTRICAL DRAWINGS.
- ALL REQUIRED CONTROL WIRING (INCLUDING POWER WIRING REQUIRED FOR CONTROL PANELS, DEVICES, ETC.) NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK.
- ALL MECHANICAL EQUIPMENT SHALL BE CLEARLY LABELED AND SHOW THE EQUIPMENT TAG USED ON THESE PLANS. LABELS SHALL BE MULTILAYER PLASTIC LABELS FOR MECHANICAL ENGRAVING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- ALL NEW SYSTEMS SHALL HAVE TEST AND BALANCE PERFORMED.

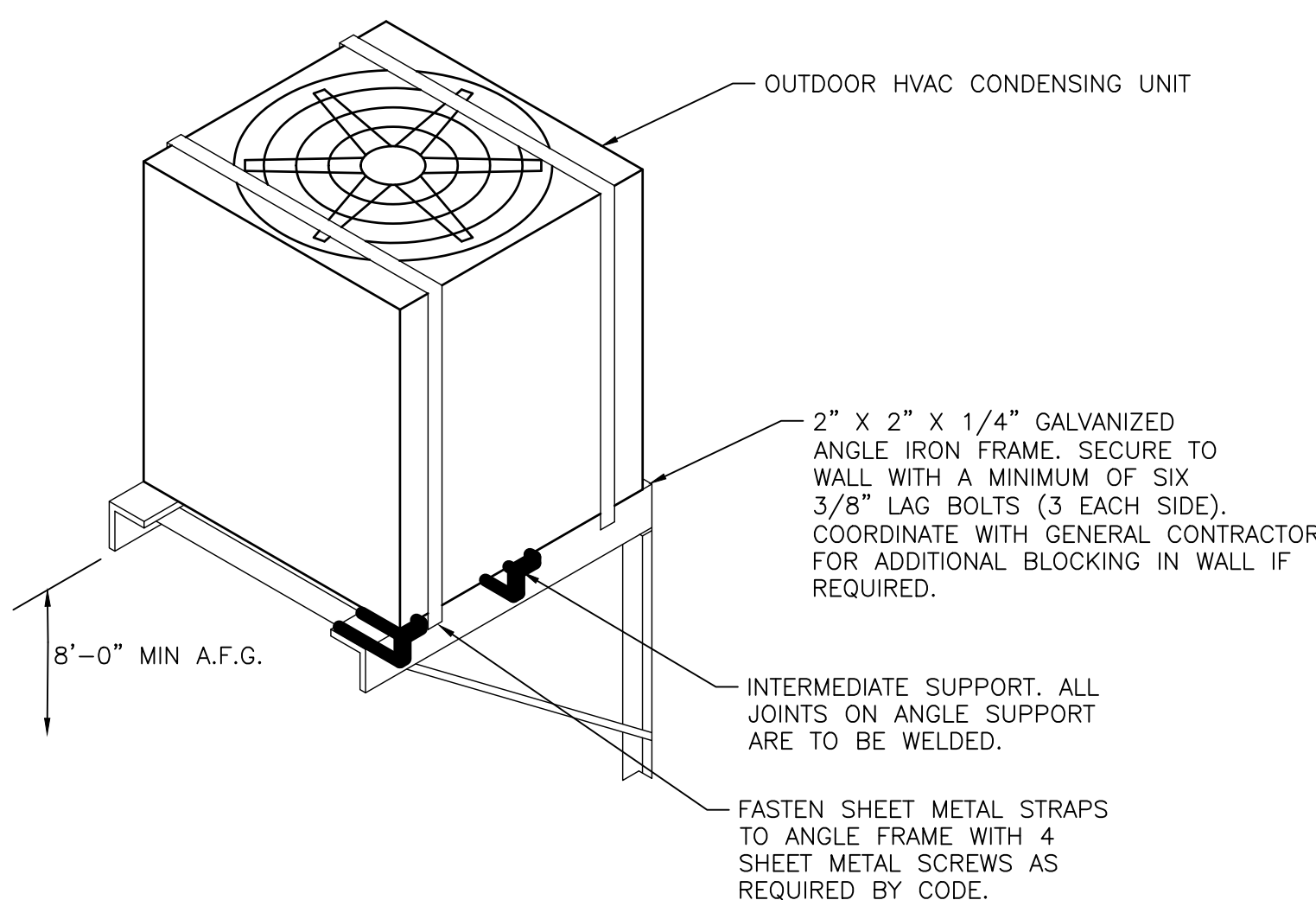
PIPING:

- CONDENSATE FROM ALL EVAPORATOR COILS SHALL BE TRAPPED AND ROUTED TO DRAINAGE COLLECTION SYSTEM. CONDENSATE PIPING SHALL BE INSULATED COPPER. CONDENSATE SHALL BE PUMPED AS REQUIRED.

MECHANICAL DETAILS



**1** WALL-HUNG FAN COIL UNIT DETAIL  
NTS



**2** CONDENSING UNIT DETAIL  
NTS

20th CIVIL ENGINEER SQUADRON

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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

MECHANICAL NOTES AND DETAILS

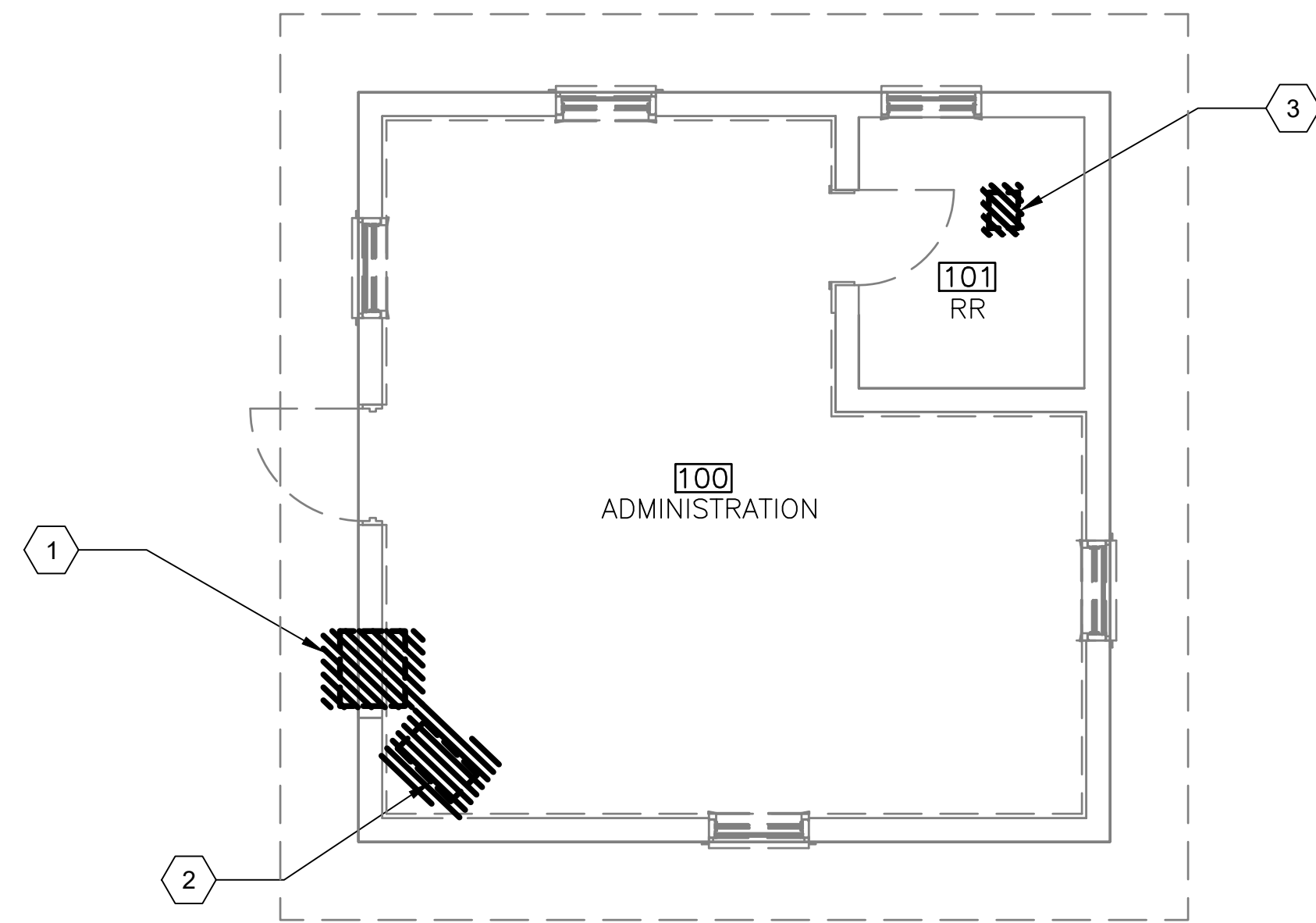
ENGINEER CW

PROJECT NUMBER 60590568

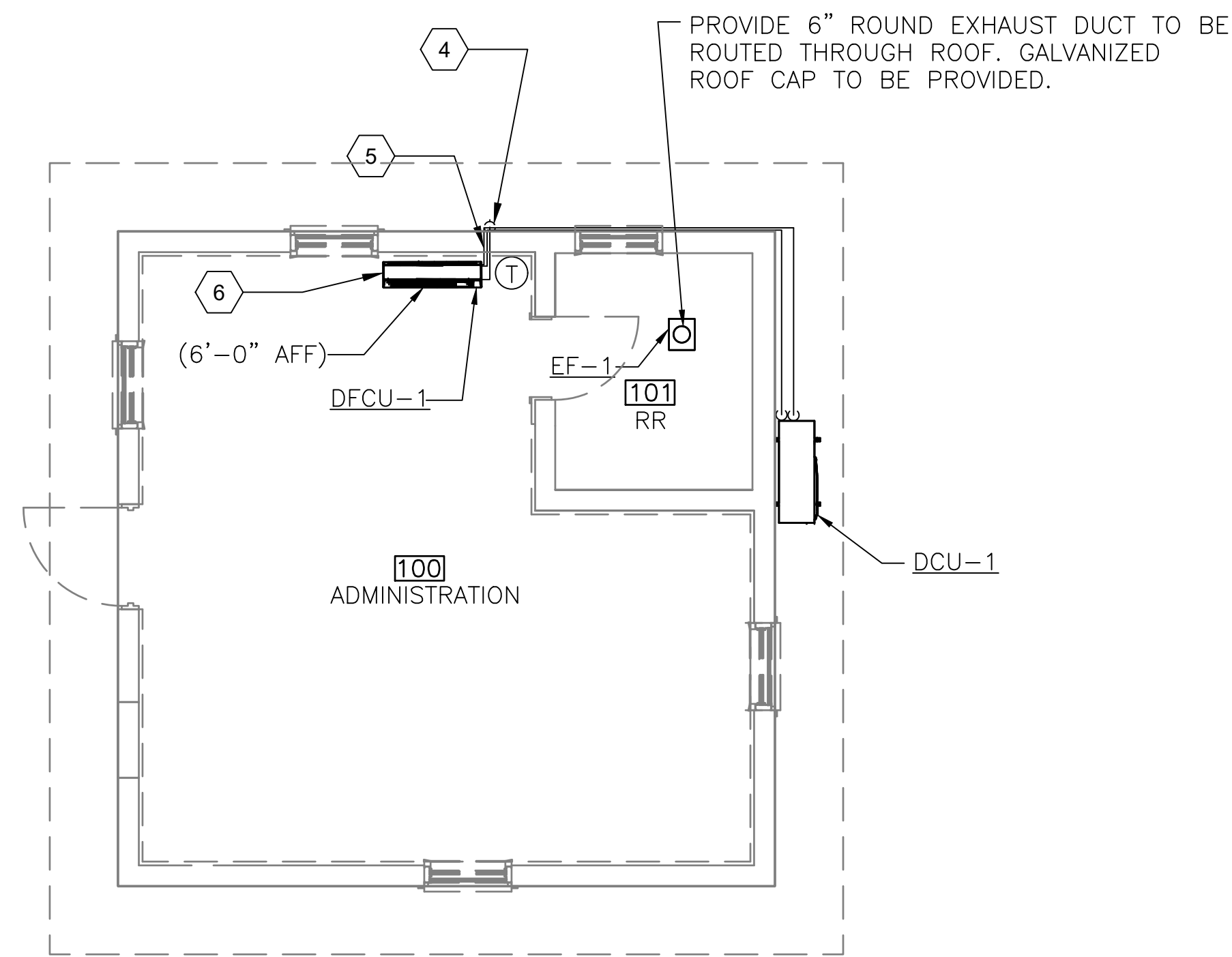
DATE 05/26/2021

SHEET 25 OF 36





**A1 DEMO FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**A1 NEW WORK FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**DEFICIENCY SHWO27 (FAC 207):**

- 1 EXISTING AIR CONDITIONING UNIT TO BE DISCONNECTED AND REMOVED. REMOVE ALL ASSOCIATED WIRING AND ACCESSORIES. SEE ARCHITECTURAL DRAWINGS FOR INFILL.
- 2 EXISTING ELECTRIC UNIT HEATER TO BE DISCONNECTED AND REMOVED. REMOVE ALL ASSOCIATED WIRING AND ACCESSORIES.
- 3 EXISTING EXHAUST FAN TO BE DISCONNECTED AND REMOVED. REMOVE ALL ASSOCIATED WIRING AND ACCESSORIES.
- 4 ROUTE 3/4" CONDENSATE PIPING THROUGH WALL AND ROUTE NEAR TO GROUND. GROUT AND SEAL PENETRATION WATER TIGHT. PIPE TO BE PAINTED TO MATCH BUILDING.
- 5 ROUTE REFRIGERANT PIPING THROUGH WALL, ALONGSIDE EXTERIOR WALL, ABOVE WINDOW AND TO WALL MOUNTED CONDENSING UNIT. SIZE PIPING PER MANUFACTURER'S RECOMMENDATIONS. GROUT AND SEAL PENETRATION WATER TIGHT. PIPE TO BE PAINTED TO MATCH BUILDING.
- 6 DUCTLESS SPLIT SYSTEM FAN COIL UNIT TO BE MOUNTED NO LESS THAN 2" FROM THE CEILING.

**EXHAUST FAN SCHEDULE**

TAG	LOCATION	SERVES	AIRFLOW (CFM)	ESP (IN WG)	WATTS	VOLT	PHASE	DRIVE TYPE	MANUFACTURER/MODEL	NOTES
EF-1	FAC207	TOILET RM	70	0.5	80	115	1	DIRECT	GREENHECK SP-B110	1

**NOTES:**

- 1. PROVIDE SPEED CONTROLLER OPTION FOR BALANCING DIRECT-DRIVE FAN.
- 2. FAN SHALL BE CONNECTED TO LIGHT SWITCH.

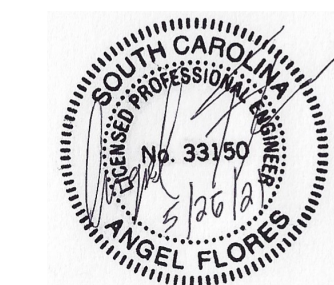
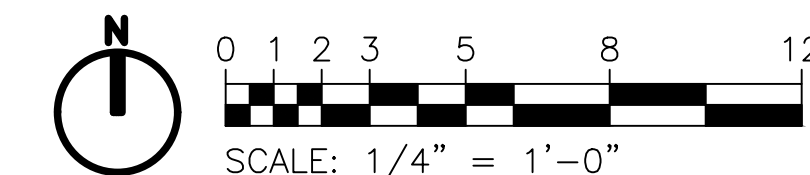
**DUCTLESS SPLIT SYSTEM SCHEDULE**

TAG	MODEL	SERVES	CFM	COOLING CAPACITY MBH		HEATING CAPACITY MBH @ 17 DEG F	OUTDOOR UNIT LOCATION	SEER	HSPF	ELECTRICAL			NOTES
				TOTAL	SENSIBLE					V	PH	HZ	
DFCU-1/DCU-1	PKA-A18HA/PUZ-A18NHA3	FAC207	425	18.2	13.6	13.0	WALL MOUNTED	15.3	9.5	208	1	60	1 2 3 4 5 6

SELECTION BASED ON: MITSUBISHI  
EQUAL PRODUCTS BY: DAIKIN, LG, HITACHI

**NOTES:**

- 1. PROVIDE HEAT PUMP/CONDENSING UNIT WITH SEACOAST PROTECTION.
- 2. PROVIDE WITH WIRED, PROGRAMMABLE WALL-MOUNTED THERMOSTAT.
- 3. INVERTER DRIVEN COMPRESSOR.
- 4. MECHANICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.
- 5. DISCONNECTS FOR INDOOR AND OUTDOOR UNITS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 6. INSTALL PER MANUFACTURER'S RECOMMENDED CLEARANCES AND GUIDELINES.



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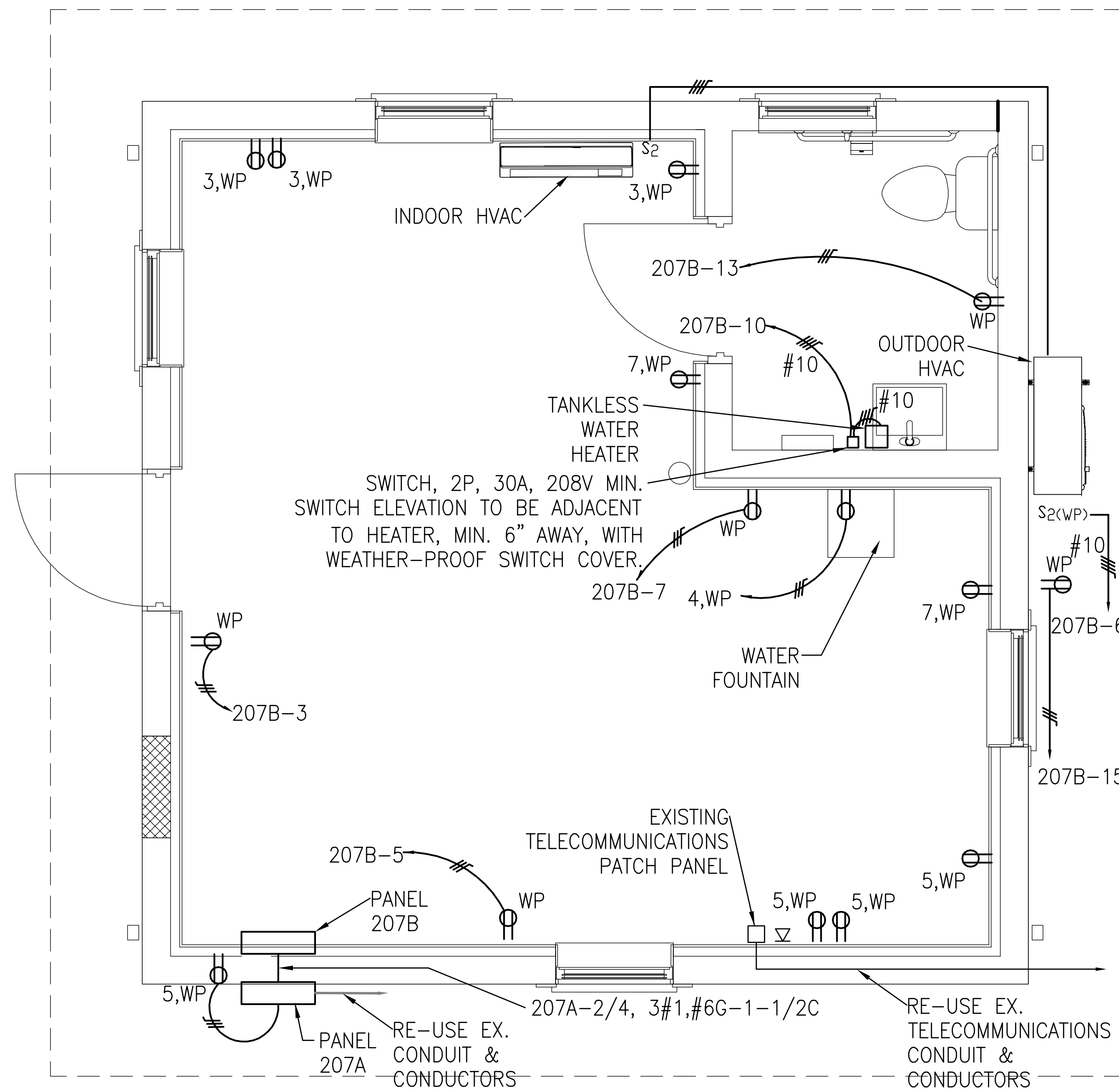
MECHANICAL DEMO PLAN, NEW WORK PLAN, AND SCHEDULES

ENGINEER	CW	DATE	SCALE
60590568	02/26/2021	1/4" = 1'-0"	26 OF 36

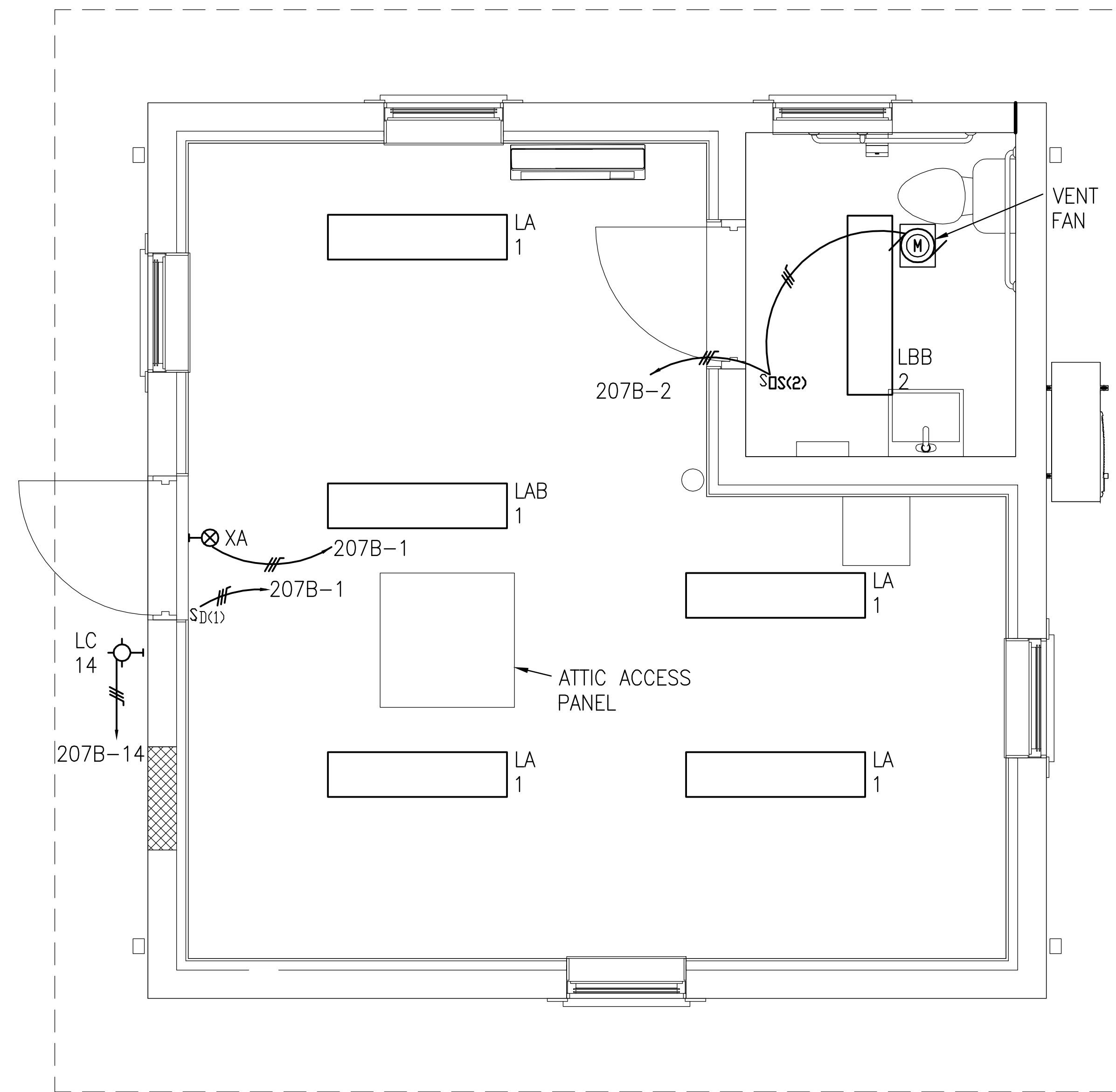
REVISION	DATE	DESCRIPTION OF REVISION	REV BY

NOTES:

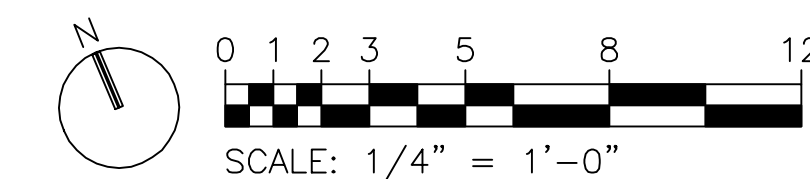
1. DEMOLISH ALL EXISTING ELECTRICAL OUTLETS, LIGHTING, CONDUCTORS, AND PANELBOARDS INSIDE FACILITY 207.
2. DEMOLISH EXISTING EXTERIOR PANELBOARD. TERMINATE EXISTING CONDUCTORS TO PANELBOARD 207A ACCORDING TO THE PANELBOARD SCHEDULE.
3. DEMOLISH EXISTING TELECOMMUNICATIONS PATCH PANEL. PROTECT INCOMING TELECOMMUNICATIONS LINE FOR REUSE. PROVIDE TELECOMMUNICATIONS PATCH PANEL AND TELEPHONE OUTLET DROP PER BASE STANDARDS. COORDINATE INSTALLATION AND NEW TELECOMMUNICATION EQUIPMENT WITH BASE TELECOMMUNICATIONS CONTACT TSGT RUBEN MONTIJO (RUBEN.MONTIJO@US.AF.MIL).
4. PROVIDE CAST FD BOX AND WHILE-IN-USE COVER FOR RECEPTACLE LOCATED ADJACENT OUTDOOR HVAC UNIT.



**A1** FAC 207 ELECTRICAL POWER PART PLAN  
SCALE: 1/4" = 1'-0"



**A2** FAC 207 ELECTRICAL REFLECTED CEILING PART PLAN  
SCALE: 1/4" = 1'-0"



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REV. BY	DATE	DESCRIPTION OF REVISION

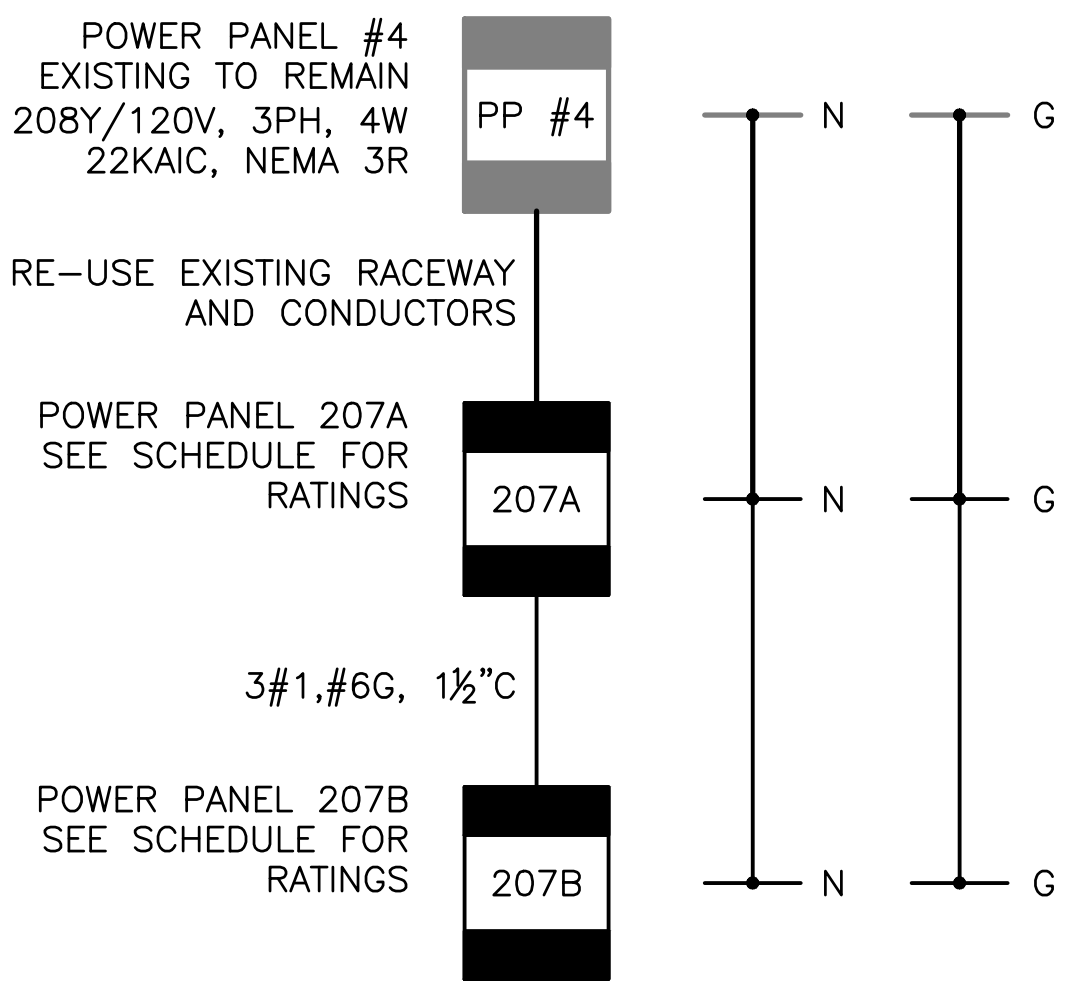
FACILITY 207 ELECTRICAL PART PLAN	JWH	207-E-100	27	36
DESIGNED BY	PROJECT NUMBER	DATE	SHEET	OF
JWH	60590568	05/26/2021	27	36
SCALE	N.T.S.			

PANEL 207A									
LOCATION: MAINTENANCE BUILDING									
VOLTS: 120/208VAC MAIN: MLO									
PHASE: 1 AIC: 22,000A									
WIRES: 3									
NO.	TRIP	DESCRIPTION	LOAD (KVA)	A	B	LOAD (KVA)	DESCRIPTION	TRIP	NO.
1	-	SPACE	0.0	4.6	4.6	4.6	FAC 207 - PNL 207B	100/2	2
3	-	SPACE	0.0	4.8	4.8	4			
5	20*	RECEPTACLE UNDER PNL 207A	0.2	2.2	2.0	2.0	NOT LABELED	30	6
7	40	SECURITY LIGHTS	1.0	3.0	2.0	2.0	T-22	30	8
9	20	EYE WASH	0.2	2.2	2.0	2.0	T-21	30	10
11	15	NOT LABELED	1.0	3.0	2.0	2.0	NOT LABELED	30	12
13	-	SPACE	0.0	0.0	0.0	0.0	SPARE	20*	14
15	-	SPACE	0.0	0.0	0.0	0.0	SPACE	-	16
17	-	SPACE	0.0	0.0	0.0	0.0	SPACE	-	18
19	-	SPACE	0.0	0.0	0.0	0.0	SPACE	-	20
21	40/2	SPD	0.0	0.0	0.0	0.0	SPACE	-	22
23			0.0	0.0	0.0	0.0	SPACE	-	24
NEMA 3R ENCLOSURE, BOTTOM ENTRY				9.0	10.8	TOTAL KVA/PHASE			
PROVIDE SOLID NEUTRAL & GROUND BUS * INDICATES GFCI BREAKER				19.8		GRAND TOTAL KVA			

PANEL 207B "MAIN SERVICE DISCONNECT"									
LOCATION: MAINTENANCE BUILDING									
VOLTS: 120/208VAC MAIN: MLO									
PHASE: 1 AIC: 22,000A									
WIRES: 3									
NO.	TRIP	DESCRIPTION	LOAD (KVA)	A	B	LOAD (KVA)	DESCRIPTION	TRIP	NO.
1	20	MAIN ROOM LIGHTING	0.2	0.3	0.1	0.1	BATHROOM LIGHTING & VENT FAN	20	2
3	20*	RECEPTACLES - MAIN ROOM	0.8	1.0	0.2	0.2	WATER FOUNTAIN	20*	4
5	20*	RECEPTACLES - MAIN ROOM	0.8	3.3	2.5	2.5	OUTDOOR HVAC UNIT	20/2*	6
7	20*	RECEPTACLES - MAIN ROOM	0.5	3.0	2.5	2.5		8	
9	20/2*	SPARE	0.0	2.5	2.5	2.5	WATER HEATER	30/2*	10
11			0.0	2.5	2.5	2.5	12		
13	20*	RECEPTACLE - BATHROOM	0.2	0.3	0.1	0.1	OUTDOOR LIGHT	20	14
15	20*	HVAC CONVENIENCE RECEPTACLE	0.0	0.0	0.0	0.0	SPACE	-	16
17	20	SPARE	0.0	0.0	0.0	0.0	SPACE	-	18
19	-	SPACE	0.0	0.0	0.0	0.0	SPACE	-	20
21	40/2	SPD	0.0	0.0	0.0	0.0	SPACE	-	22
23			0.0	0.0	0.0	0.0	SPACE	-	24
NEMA 12 ENCLOSURE, DOOR-IN-DOOR, BOTTOM ENTRY				6.4	6.5	TOTAL KVA/PHASE			
PROVIDE SOLID NEUTRAL & GROUND BUS * INDICATES GFCI BREAKER				12.9		GRAND TOTAL KVA			

LIGHTING FIXTURE SCHEDULE

FIXTURE REF.	FIXTURE TYPE CATALOG DESCRIPTION	LAMP	VOLT.	MOUNTING
LA	LINEAR LUMINAIRE: COOPER LIGHTING CORELITE RX SERIES OR EQUAL DIE-FORMED ALUMINUM HOUSING, 4FT LONG, 1FT WIDE, CEILING SURFACE MOUNT, WHITE POWDER COAT REFLECTOR, ROUND ACRYLIC LENS, 6000 LUMEN, 80 CRI, STD DRIVER	LED	120-277	CEILING
LAB	LINEAR LUMINAIRE: COOPER LIGHTING CORELITE RX SERIES OR EQUAL DIE-FORMED ALUMINUM HOUSING, 4FT LONG, 1FT WIDE, CEILING SURFACE MOUNT, WHITE POWDER COAT REFLECTOR, ROUND ACRYLIC LENS, 6000 LUMEN, 80 CRI, STD DRIVER, WITH 7W BATTERY BACKUP	LED	120-277	CEILING
LBB	LINEAR LUMINAIRE: COOPER LIGHTING CORELITE RX SERIES OR EQUAL DIE-FORMED ALUMINUM HOUSING, 4FT LONG, 1FT WIDE, CEILING SURFACE MOUNT, WHITE POWDER COAT REFLECTOR, ROUND ACRYLIC LENS, 3900 LUMEN, 80 CRI, STD DRIVER, WITH 7W BATTERY BACKUP	LED	120-277	CEILING
LC	WALL LUMINAIRE: EATON-LUMARK WAL-PAK OR EQUAL WALL-PAK, FULL CUTOFF DOOR, 3 LED PACKAGE (27W), BRONZE FINISH, ELECTRONIC LED DRIVER (120-277V), UL LISTED FOR WET LOCATIONS, IP66 ENCLOSURE, WITH PHOTOCELL	LED	120-277	WALL MH: 7'-6"
XA	EXIT LIGHT: COOPER LIGHTING APXH7 SURE-LITE SERIES OR EQUAL NICKEL CADMIUM BATTERIES, WHITE TRIM PLATE, WHITE BACKGROUND FACE/RED LETTER, SINGLE FACE	LED	120	WALL ABOVE DOOR

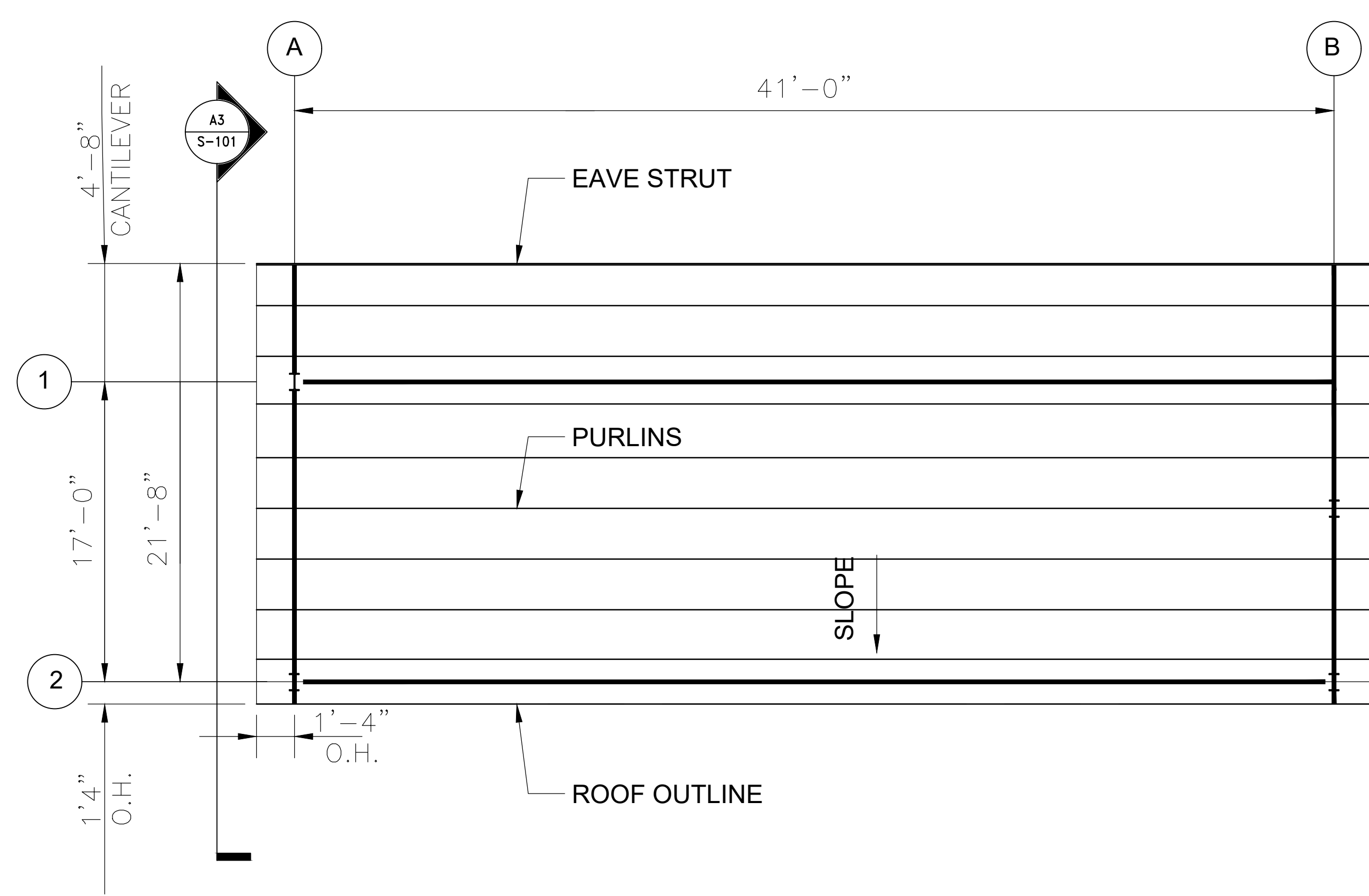
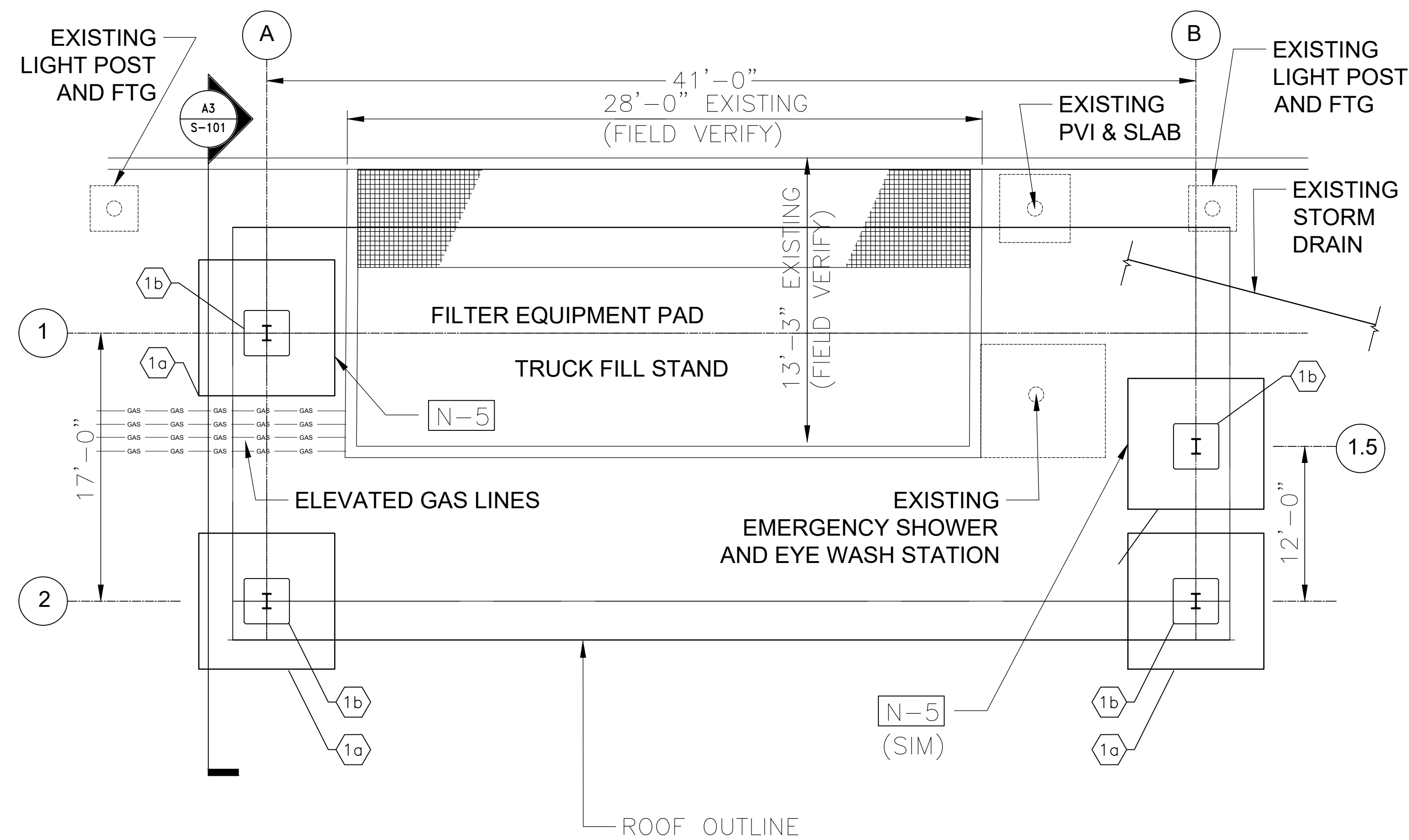


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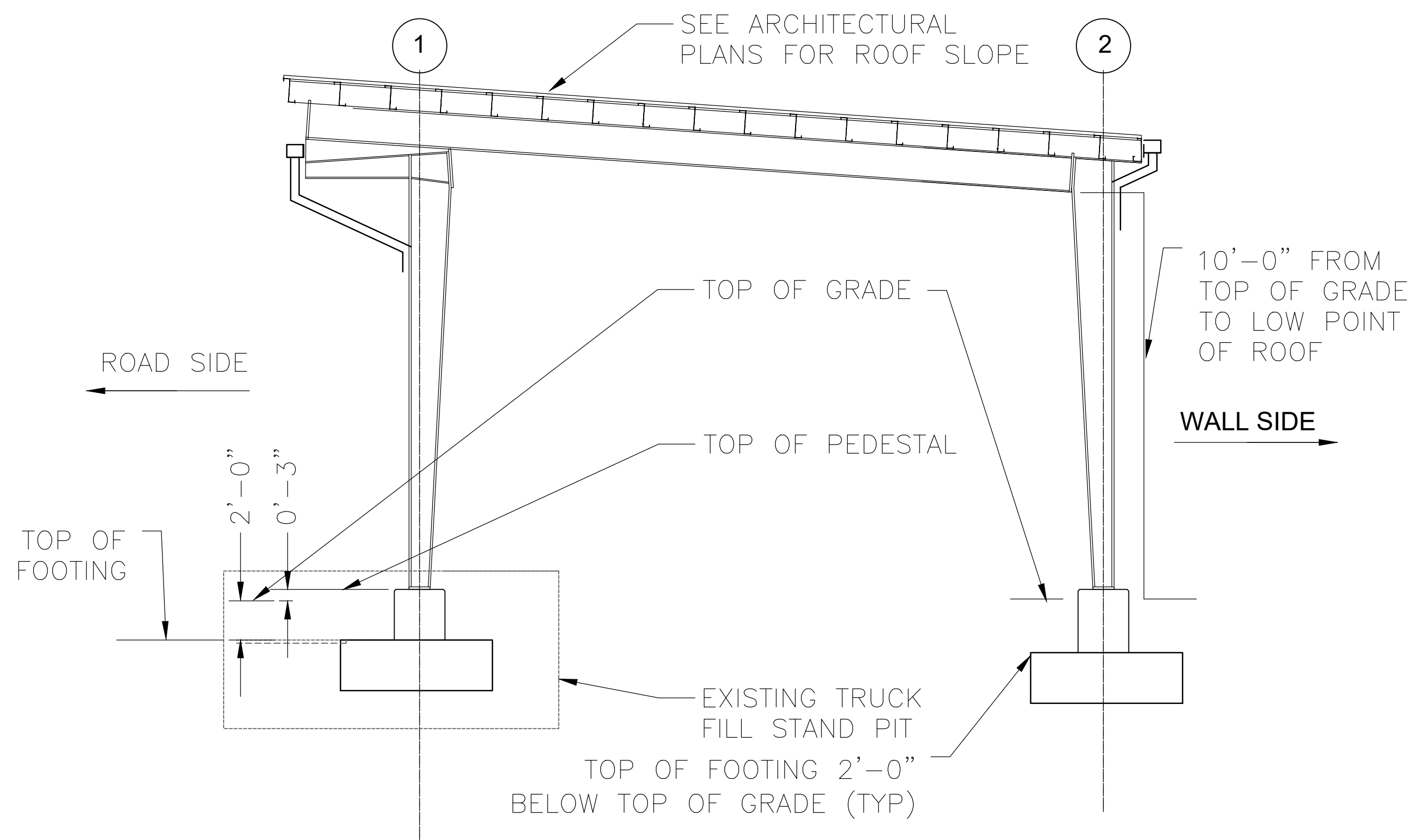
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

FACILITY 207 ELECTRICAL SCHEDULES  
 DRAWN BY: JWH  
 CHECKED BY: JWH  
 PROJECT NUMBER: 207-E-401  
 SHEET NUMBER: 28 OF 36  
 DATE: 05/26/2021  
 N.T.S.

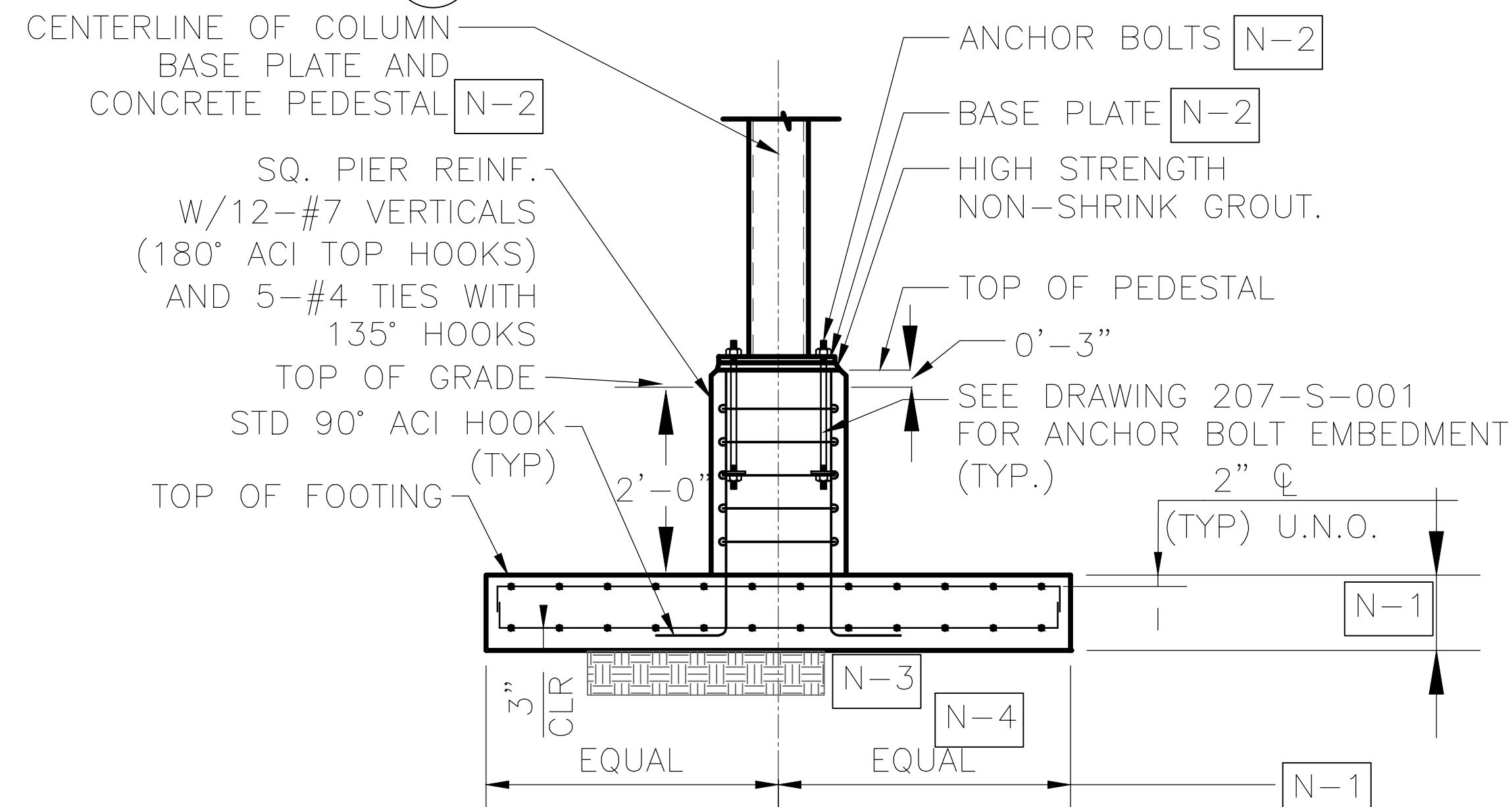


**B3** FOUNDATION PLAN - CANOPY OVER TRUCK FILL STAND [N-4]  
 SCALE: 1/4"=1'-0" WORK THIS FOUNDATION PLAN WITH THE CIVIL PLANS.



**A3** SECTION  
 SCALE: 1/4"=1'-0"

**B2** ROOF FRAMING PLAN - CANOPY OVER TRUCK FILL STAND  
 SCALE: 1/4"=1'-0"



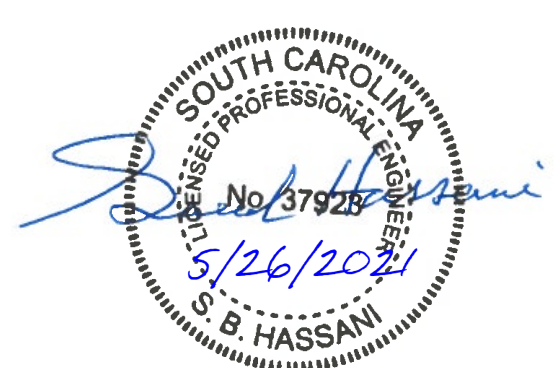
REFER TO THE FOUNDATION PLAN AND SECTION FOR PEDESTAL AND FOOTING DIMENSIONS  
 DESIGN OF COLUMN, BASE PLATE AND ANCHOR BOLTS BY PRE-ENGINEERED CANOPY MANUFACTURE.  
 COMPACT THE SOIL UNDER AND ABOVE THE FOOTING TO 98% OF THE MODIFIED PROCTOR.  
 MAXIMUM DRY DENSITY (ASTM-D-1557).  
 REFER TO THE FOUNDATION NOTES ON 207-S-001.

DO NOT OVEREXCAVATE THE AREA AROUND THE FOUNDATION. TAKE CARE NOT TO UNDERMINE THE EXISTING TRUCK FILL STAND, ELEVATED GAS LINES OR OTHER EXISTING STRUCTURES. USE TEMPORARY SHEETING TO PROTECT EXISTING STRUCTURES UNTIL THE FOUNDATION IS FULLY CONSTRUCTED AND BACKFILL SOIL IS PLACED ABOVE THE FOUNDATION.

**A4** TYPICAL FOUNDATION SECTION  
 SCALE: N.T.S.



- DEFICIENCY SHW036 (FAC 207):
- 1a) 6'-0"x6'-0"x4'-0" THICK FOOTING REINF. WITH 12-#7 W/STD 90 HK AT EACH END TOP AND BOTTOM EACH WAY SEE SECTION A4.
  - 1b) 3'-0"x3'-0" PEDESTAL. TOP OF PEDESTAL EL. 2'-3" ABOVE TOP OF FOOTING.
  - 2) CANOPY DESIGNER NEEDS TO ACCOUNT FOR LATERAL LOADS. DUE TO CONFLICTS WITH EQUIPMENT. CROSS-BRACING CANNOT BE USED. PROVIDE PORTAL FRAMES.

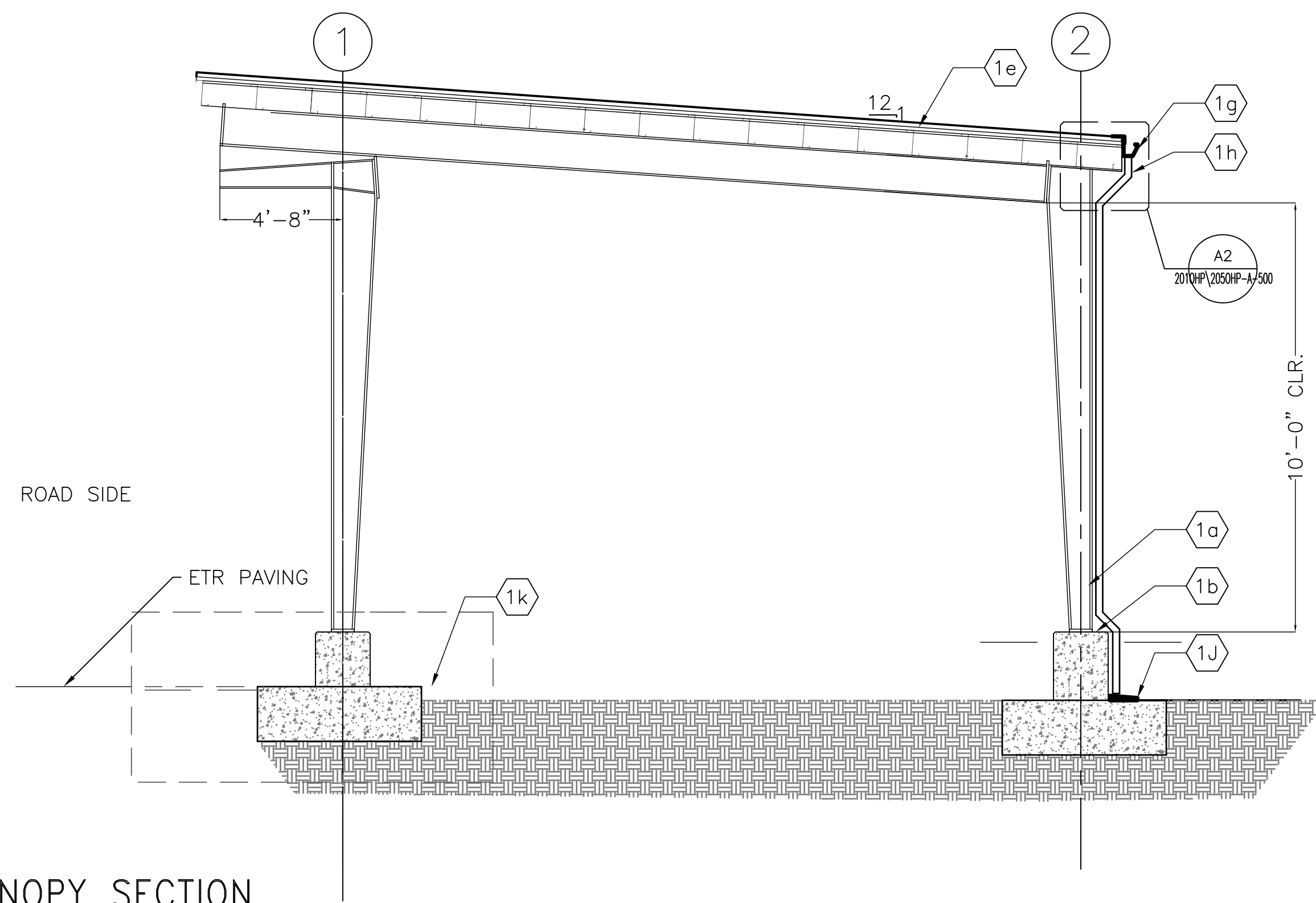


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REV. BY	DATE	DESCRIPTION OF REVISION

FAC-2010HP STRUCTURAL FOUNDATION, FRAMING & SECTION  
 MRM  
 60590568  
 05/26/2021  
 1/4" = 1'-0"  
 29 OF 36

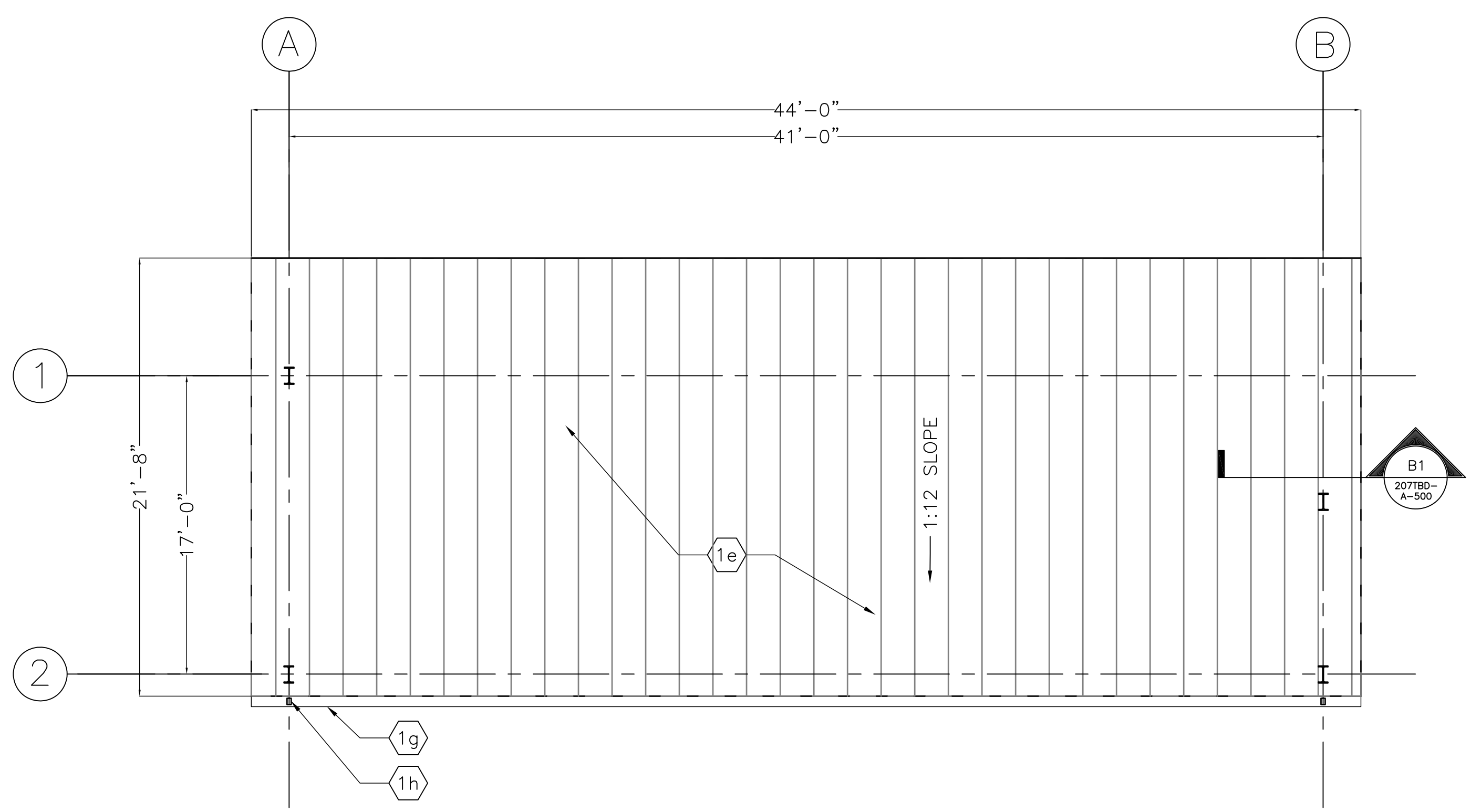
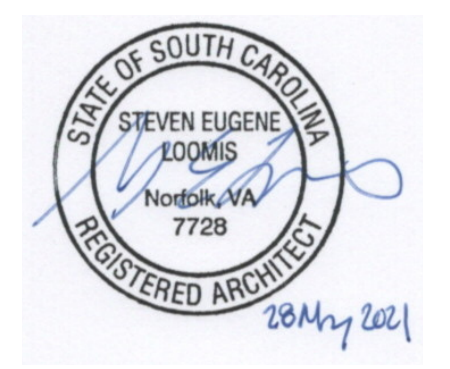


**C3** CANOPY SECTION  
SCALE: 1/4" = 1'-0"

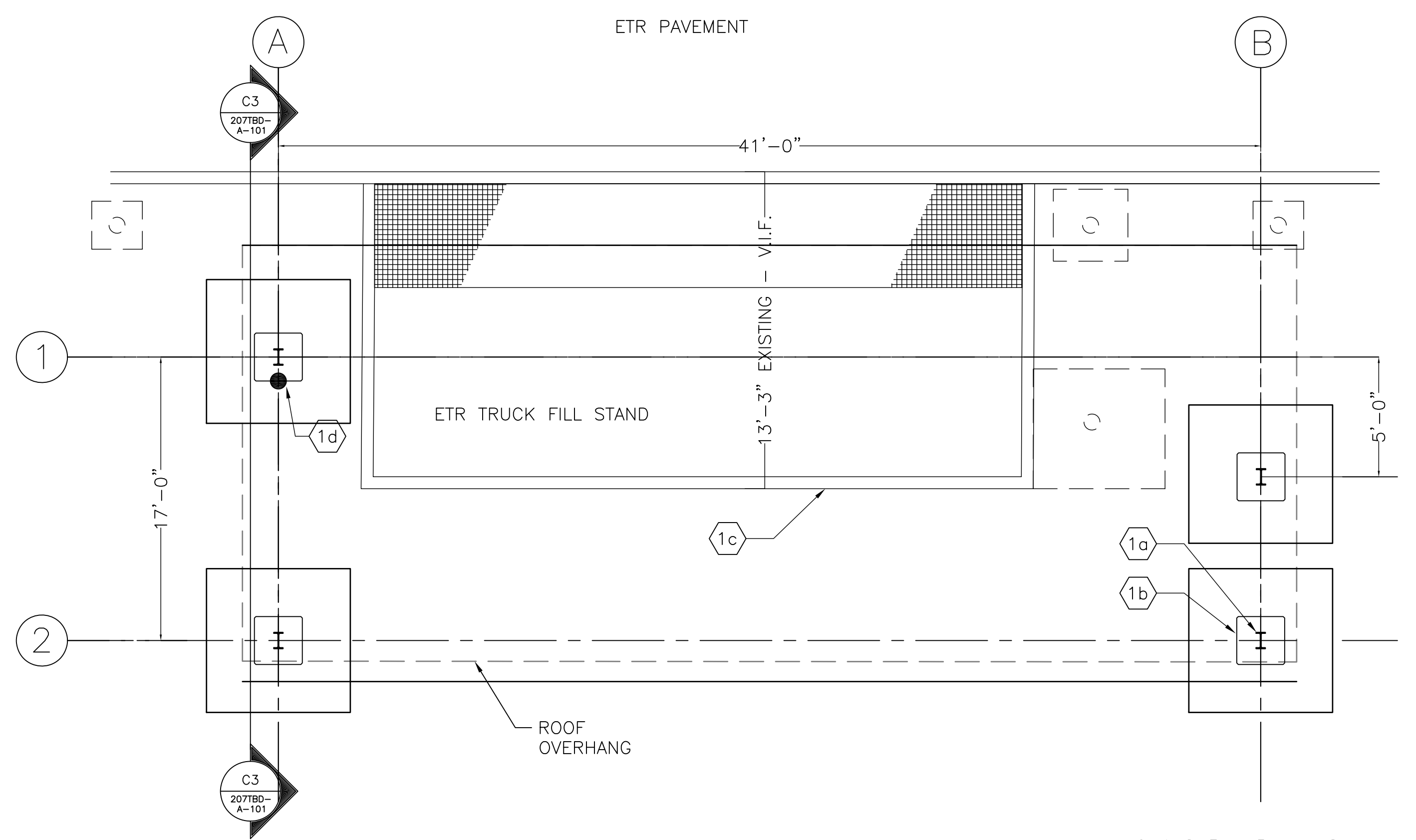
DEFICIENCY SHW036 (FAC 2010HP):

- 1a) STRUCTURAL RIGID FRAME
- 1b) CONCRETE PEDESTAL - SEE STRUCTURAL DRAWINGS
- 1c) ETR CURB
- 1d) PROVIDE FIRE EXTINGUISHER MOUNTING BRACKET. INSTALLATION TO PROVIDE NEW FIRE EXTINGUISHER.
- 1e) STANDING SEAM METAL ROOFING
- 1f) METAL RIDGE CAP
- 1g) 5"X5" METAL GUTTER, TYP.
- 1h) 2"X3" METAL DOWNSPOUT, TYP.
- 1j) CONCRETE SPLASH BLOCK
- 1k) PROTECT ETR FILTER EQUIPMENT PAD AND TRUCK FILL STAND

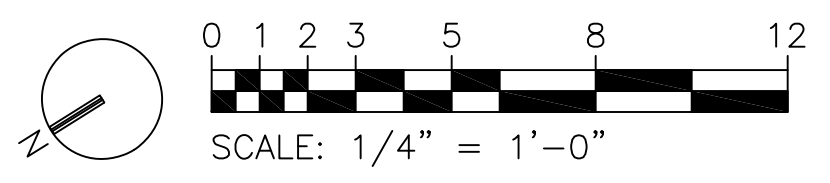
NOTES:  
1. PROTECT ADJACENT ETR SURFACES THROUGHOUT CONSTRUCTION.



**A3** ROOF PLAN  
SCALE: 1/4" = 1'-0"



**A1** FLOOR PLAN  
SCALE: 1/4" = 1'-0"



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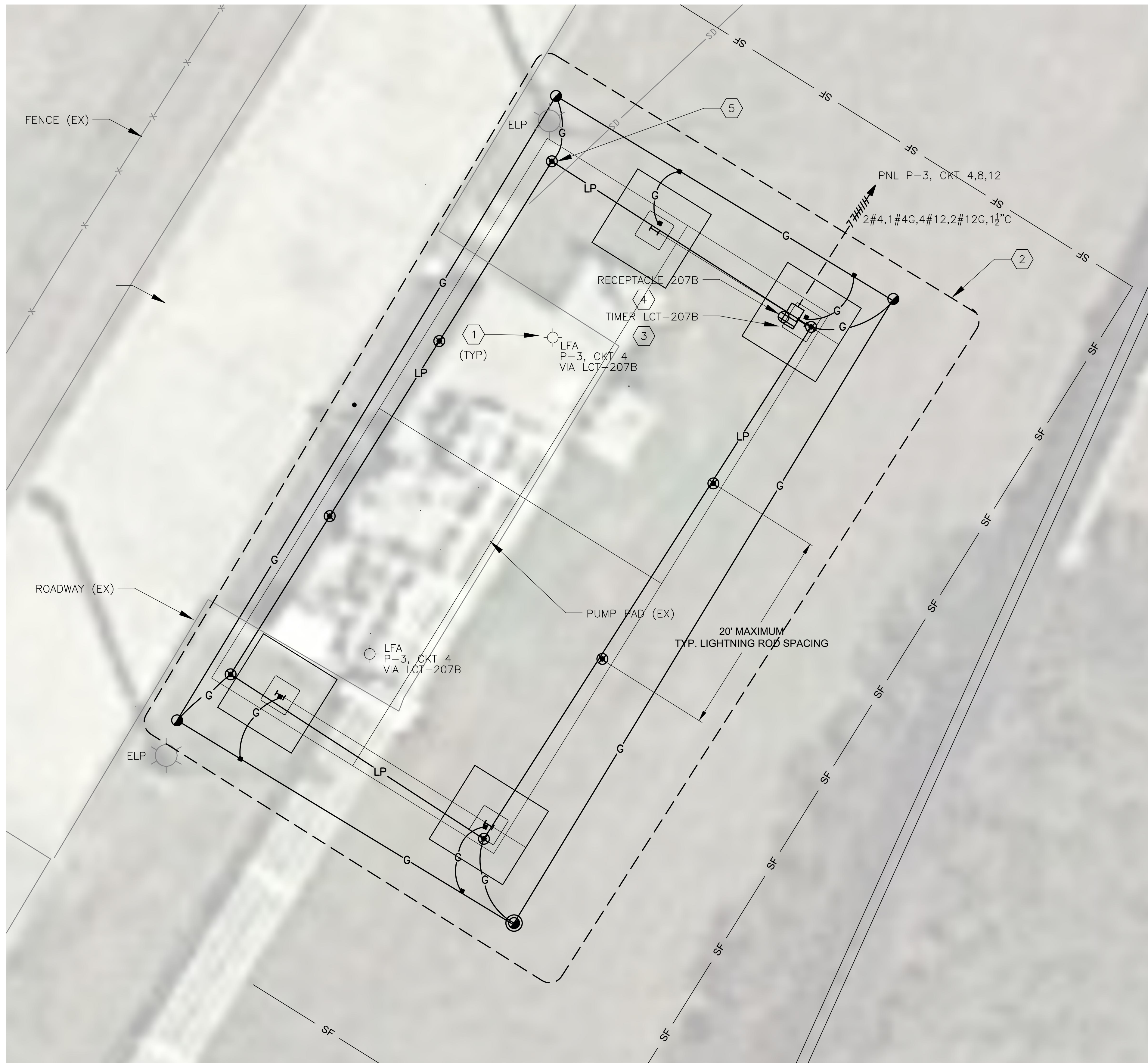
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**ISSUED FOR CONSTRUCTION**

FAC 2010HP PLANS AND SECTION

CC  
60590568  
02/26/2021

1/4" = 1'-0"  
36/36

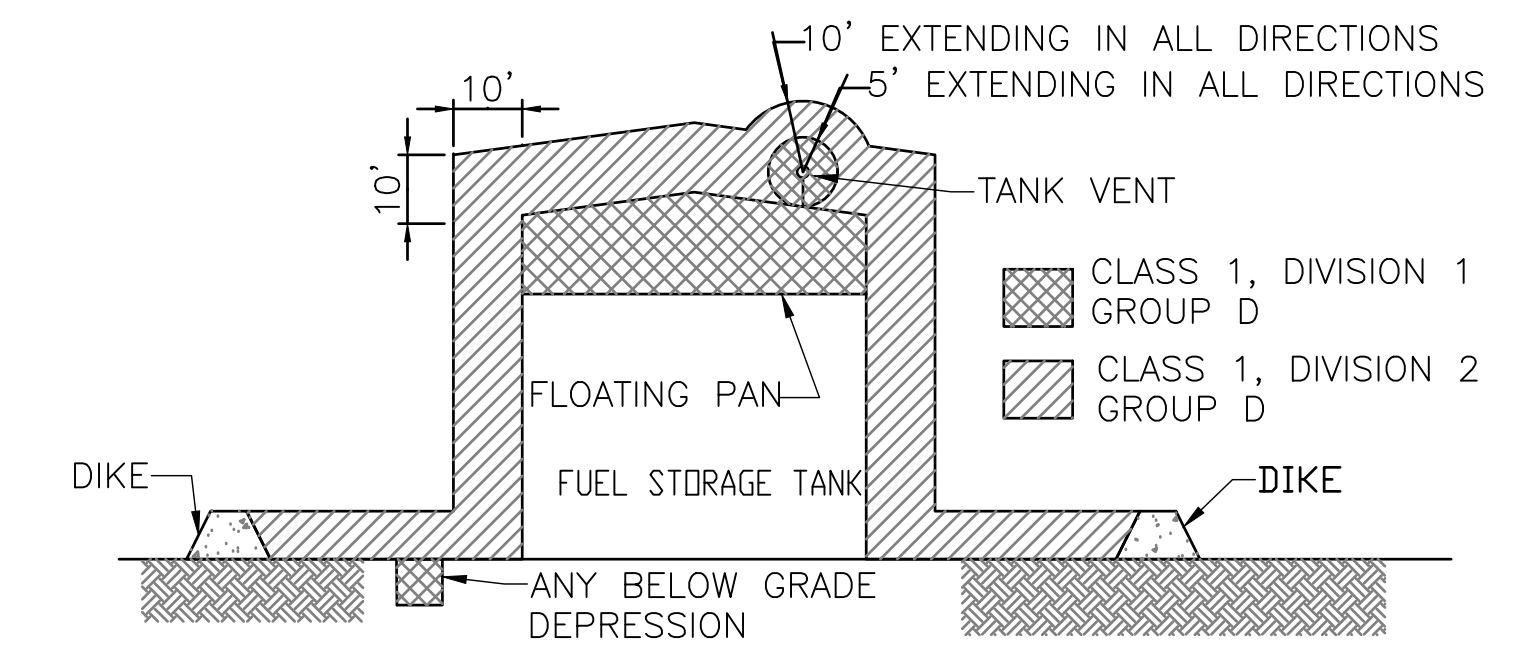
REVISION	DATE	DESCRIPTION OF REVISION



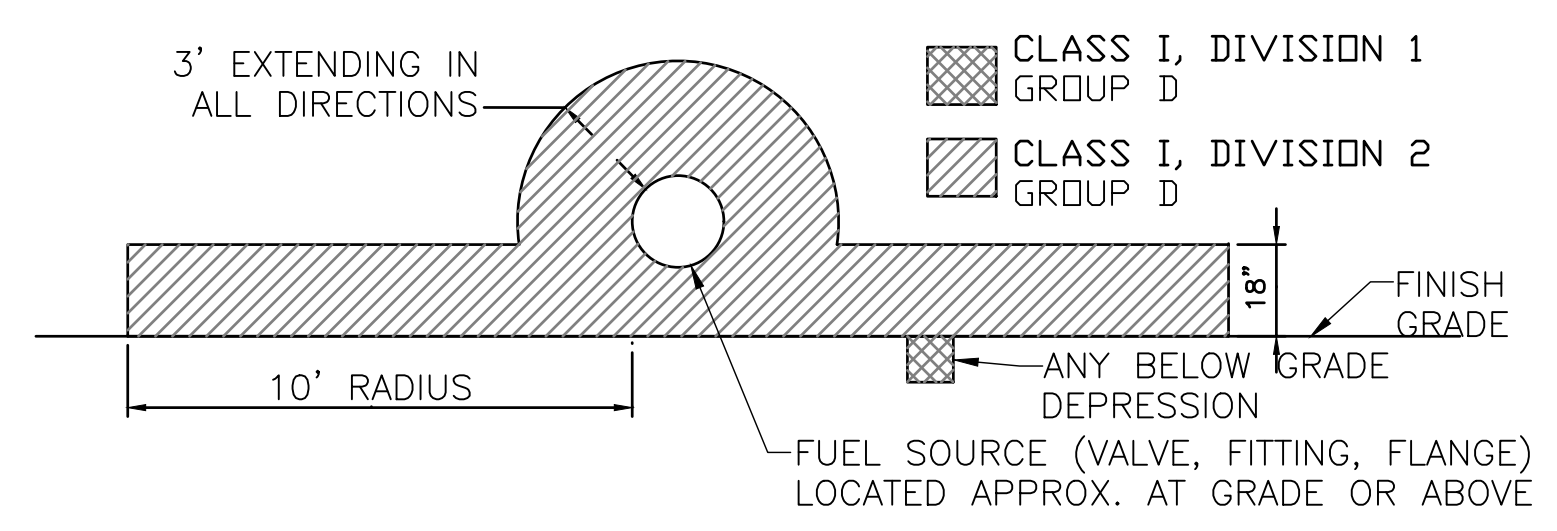
**A1 ELECTRICAL PART PLAN**  
SCALE: 1/4" = 1'-0"

**DEFICIENCY SHW036 (FAC 2010HP):**

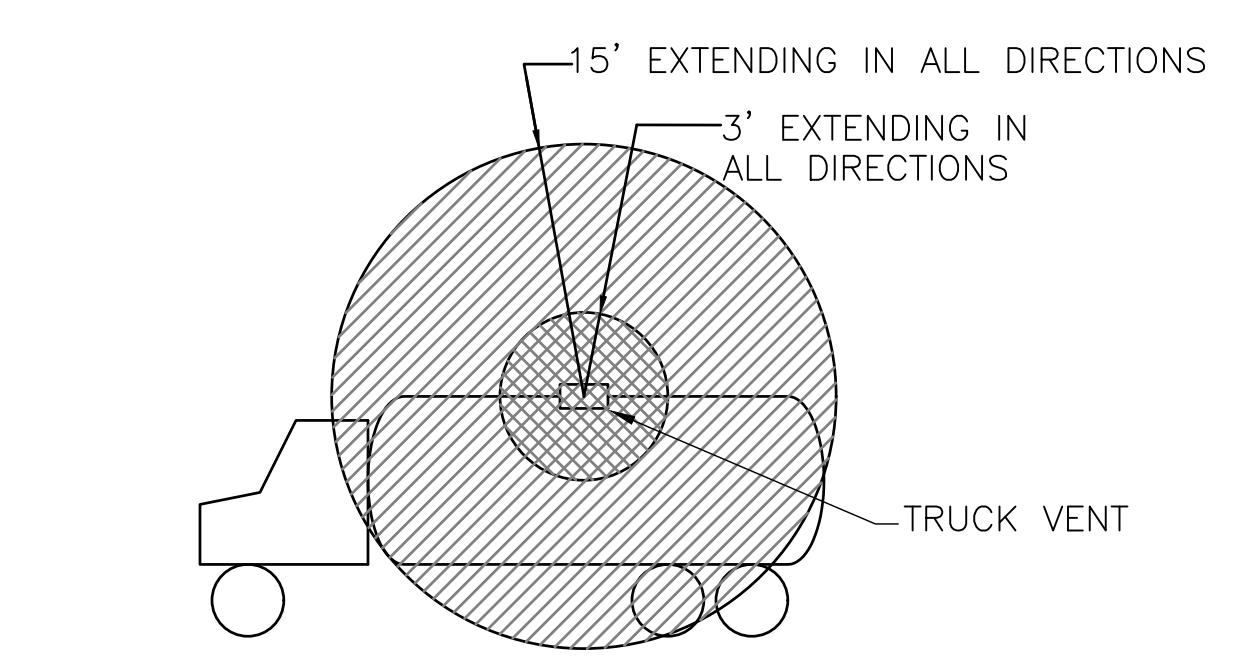
- 1 PROVIDE LED-TYPE LIGHT FIXTURE. SEE SCHEDULE FOR RATINGS.
- 2 WORK PERFORMED IN THIS AREA SHALL CONFORM TO UFC 3-460-01 REQUIREMENTS. SEE UFC 3-460-01 AND DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
- 3 PROVIDE TIMERSWITCH AND LIGHTING CONTACTOR. TIMERSWITCH PROGRAMMING SHALL CONFORM TO SITE PRACTICES AND STANDARDS.
- 4 PROVIDE 120V, 20A, WEATHERPROOF GFCI RECEPTACLE, CAST FD BOX, AND WHILE-IN-USE COVER.
- 5 LIGHTNING PROTECTION SYSTEM TO BE INSTALLED BY CERTIFIED LIGHTNING PROTECTION PROFESSIONAL. SEE SHEET 000-E-001 FOR DETAILS.



**1 FUEL STORAGE TANK HAZARDOUS AREA DETAIL**  
Scale: NTS



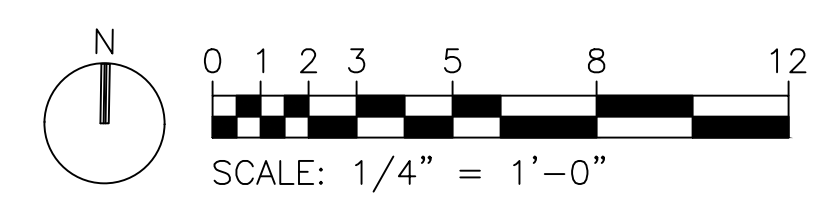
**2 EXTERIOR FUEL PIPING HAZARDOUS AREA DETAIL**  
Scale: NTS



**3 FUEL TRUCK HAZARDOUS AREA DETAIL**  
Scale: NTS

**LIGHTING FIXTURE SCHEDULE**

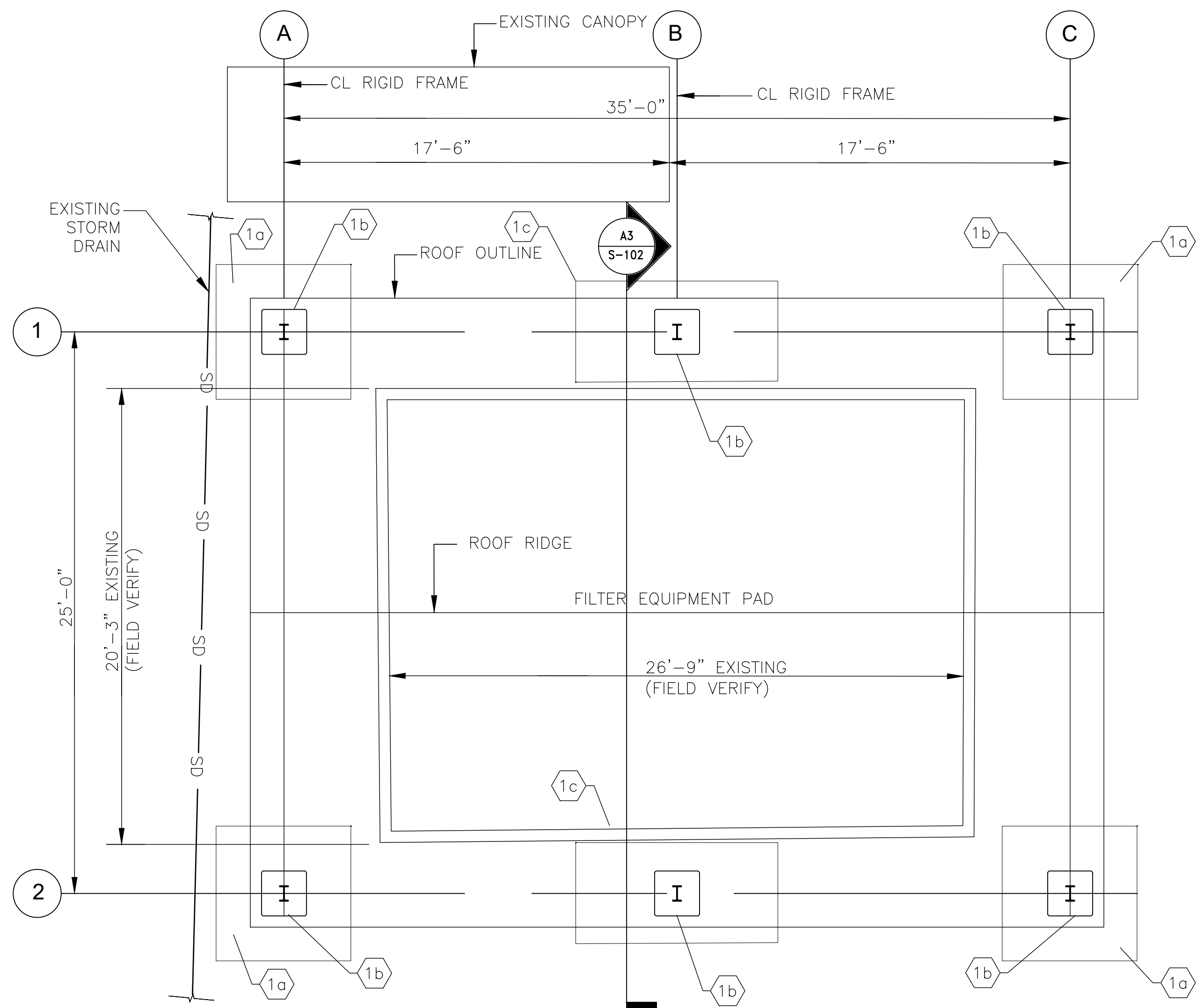
FIXTURE REF.	FIXTURE TYPE CATALOG DESCRIPTION	LAMP	VOLT.	MOUNTING
LFA	LED LUMINAIRE: HOLOPHANE PXLH OR EQUAL EXTERIOR RATED, SUITABLE FOR CLASS 1 DIVISION 2 GROUP D APPLICATIONS, TYPE V DISTRIBUTION, PENDANT MOUNTED, 4000K COLOR TEMPERATURE, LUMEN OUTPUT TO BE 7000 TO 8000, ZERO UPLIGHT	LED	120-277	10FT



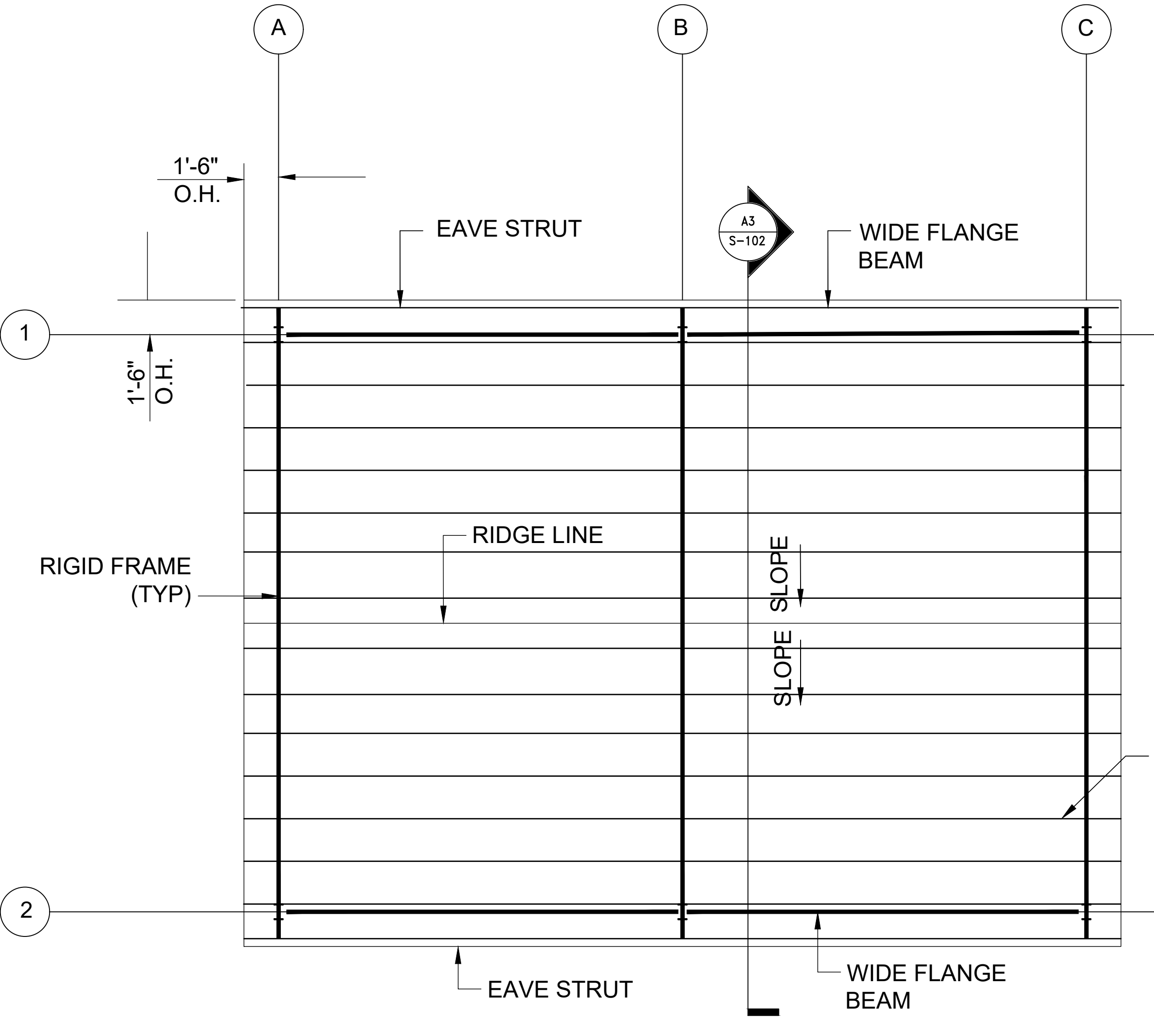
**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626  
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

**ELECTRICAL PART PLAN**  
 JWH  
 60590568  
 05/26/2021  
 1/4" = 1'-0"  
 31 of 36

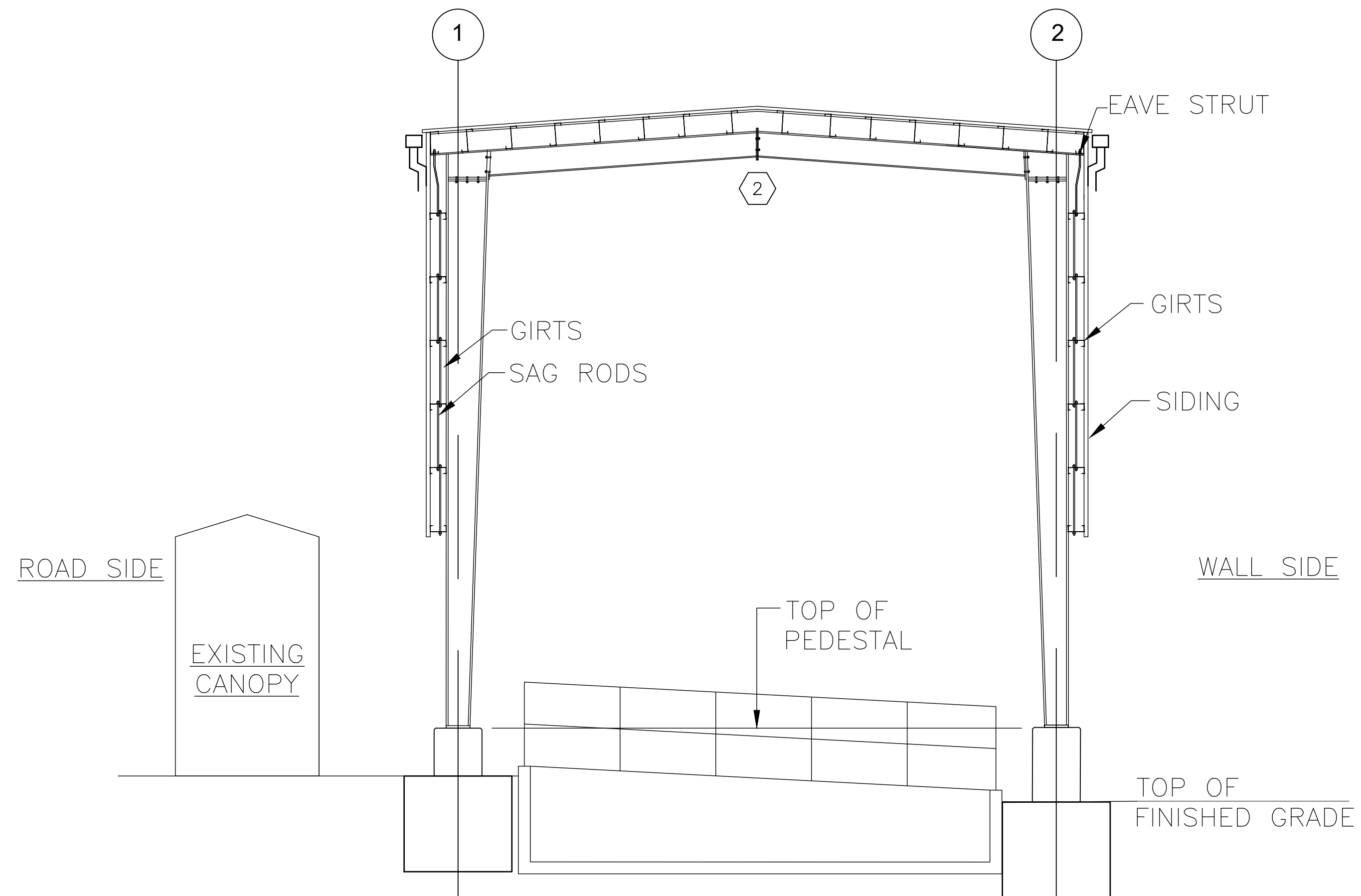




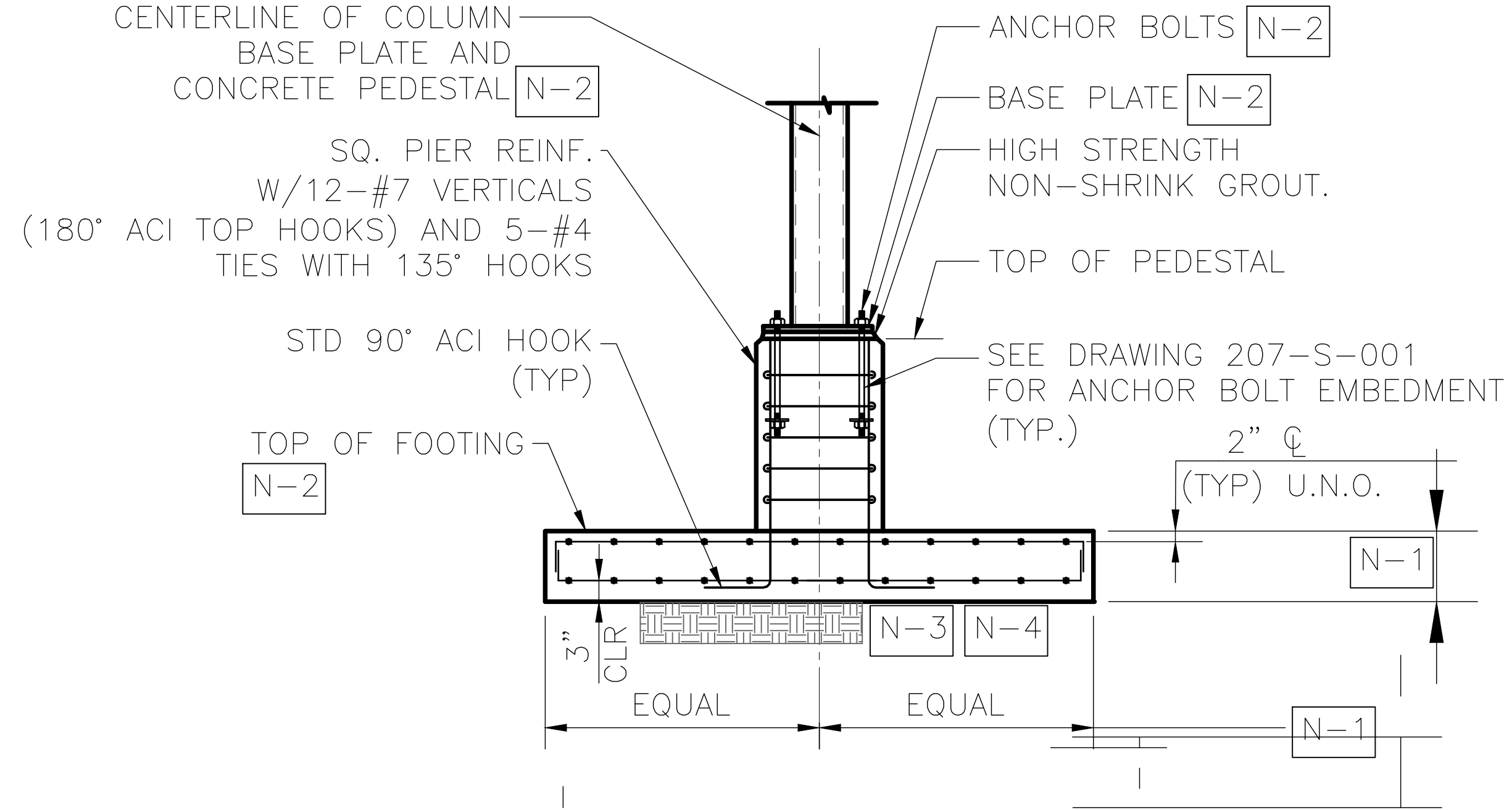
**B3** FOUNDATION PLAN – CANOPY OVER FILTER EQUIPMENT AREA N-4  
 SCALE: 1/4"=1'-0" WORK THIS FOUNDATION PLAN WITH THE CIVIL PLANS.



**B2** ROOF FRAMING PLAN – CANOPY OVER FILTER EQUIPMENT AREA  
 SCALE: 1/4"=1'-0"



**A3** SECTION  
 SCALE: 1/4"=1'-0"



- N-1 REFER TO THE FOUNDATION PLAN AND SECTION FOR PEDESTAL AND FOOTING DIMENSIONS
- N-2 DESIGN OF COLUMN, BASE PLATE AND ANCHOR BOLTS BY PRE-ENGINEERED CANOPY MANUFACTURE.
- N-3 COMPACT THE SOIL UNDER THE FOOTING TO 98% OF THE MODIFIED PROCTOR. MAXIMUM DRY DENSITY (ASTM-D-1557).
- N-4 REFER TO THE FOUNDATION NOTES ON 207-S-001.

**A4** TYPICAL FOUNDATION SECTION  
 SCALE: N.T.S.

- DEFICIENCY SHW037 (FAC 207):
- 1a 6'-0"x6'-0"x4'-0" THICK FOOTING REINF. WITH 12-#7 WITH STD 90° HKS EACH END TOP AND BOTTOM EACH WAY. SEE SECTION A4.
  - 1b 3'-0"x3'-0" PEDESTAL. TOP OF PEDESTAL EL. 2'-0" ABOVE GRADE AT ROAD SIDE GRADE.
  - 1c 4'-6"x9'-0"x4'-0" THICK FOOTING REINF. WITH 8-#7 WITH STD 90° HKS EACH END TOP AND BOTTOM LONG DIRECTION AND 16-#7 WITH STD 90° HKS EACH END TOP AND BOTTOM SHORT DIRECTION. SIMILAR TO SECTION A4.
  - 2 CANOPY DESIGNER NEEDS TO ACCOUNT FOR LATERAL LOADS. DUE TO CONFLICTS WITH EQUIPMENT. CROSS-BRACING CANNOT BE USED. PROVIDE PORTAL FRAMES.

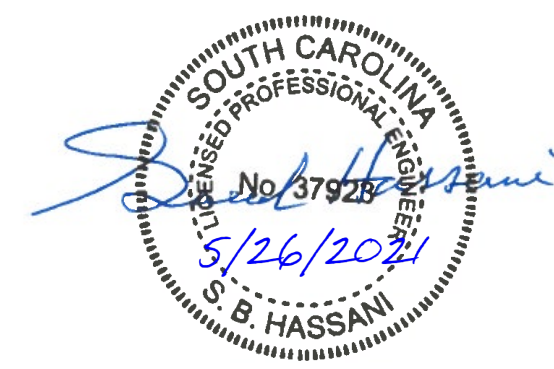


**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

FAC-2050HP STRUCTURAL FOUNDATION, FRAMING & SECTION  
 MRM  
 60590568  
 05/26/2021  
 1/4" = 1'-0"  
 32 of 36

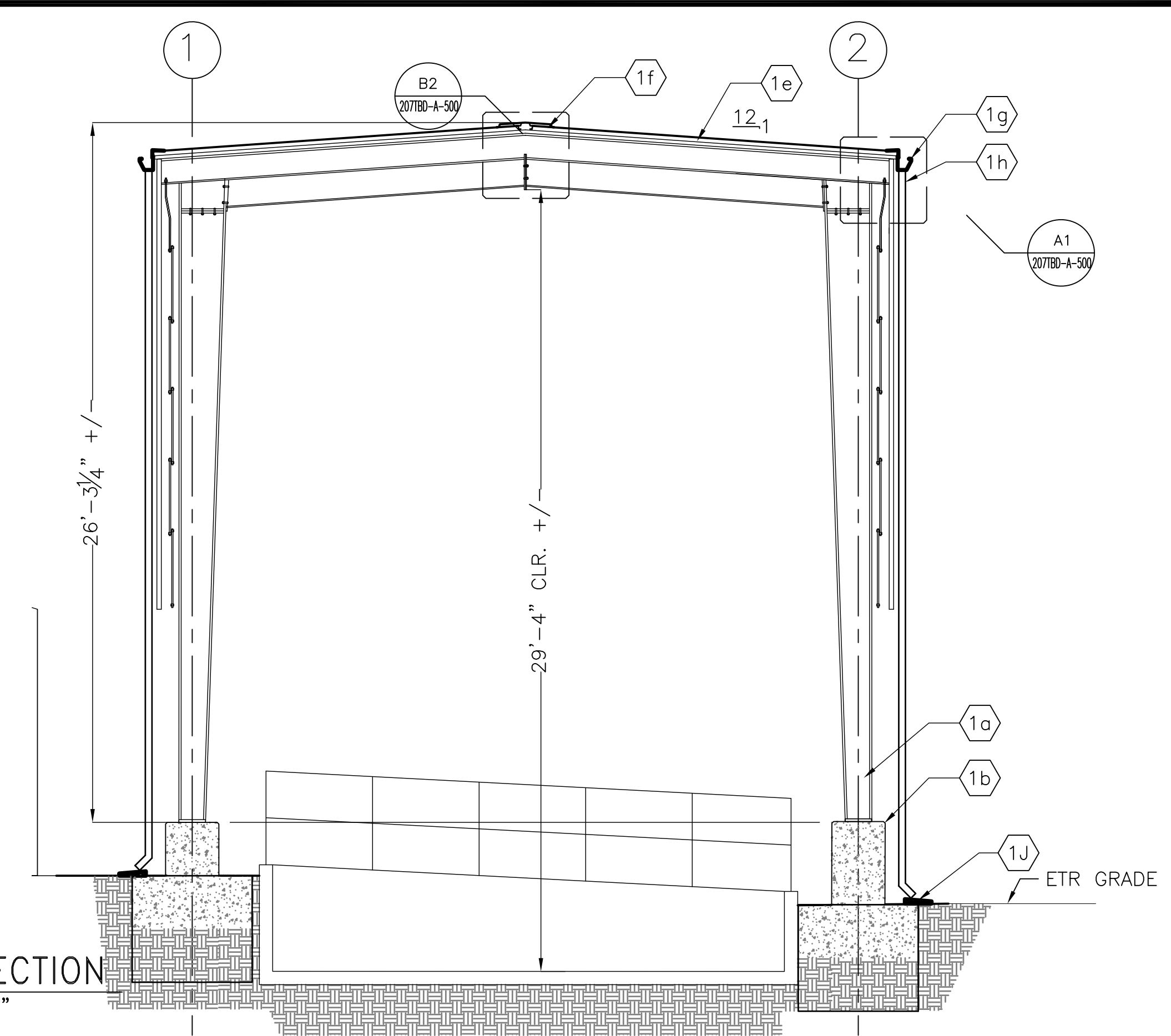




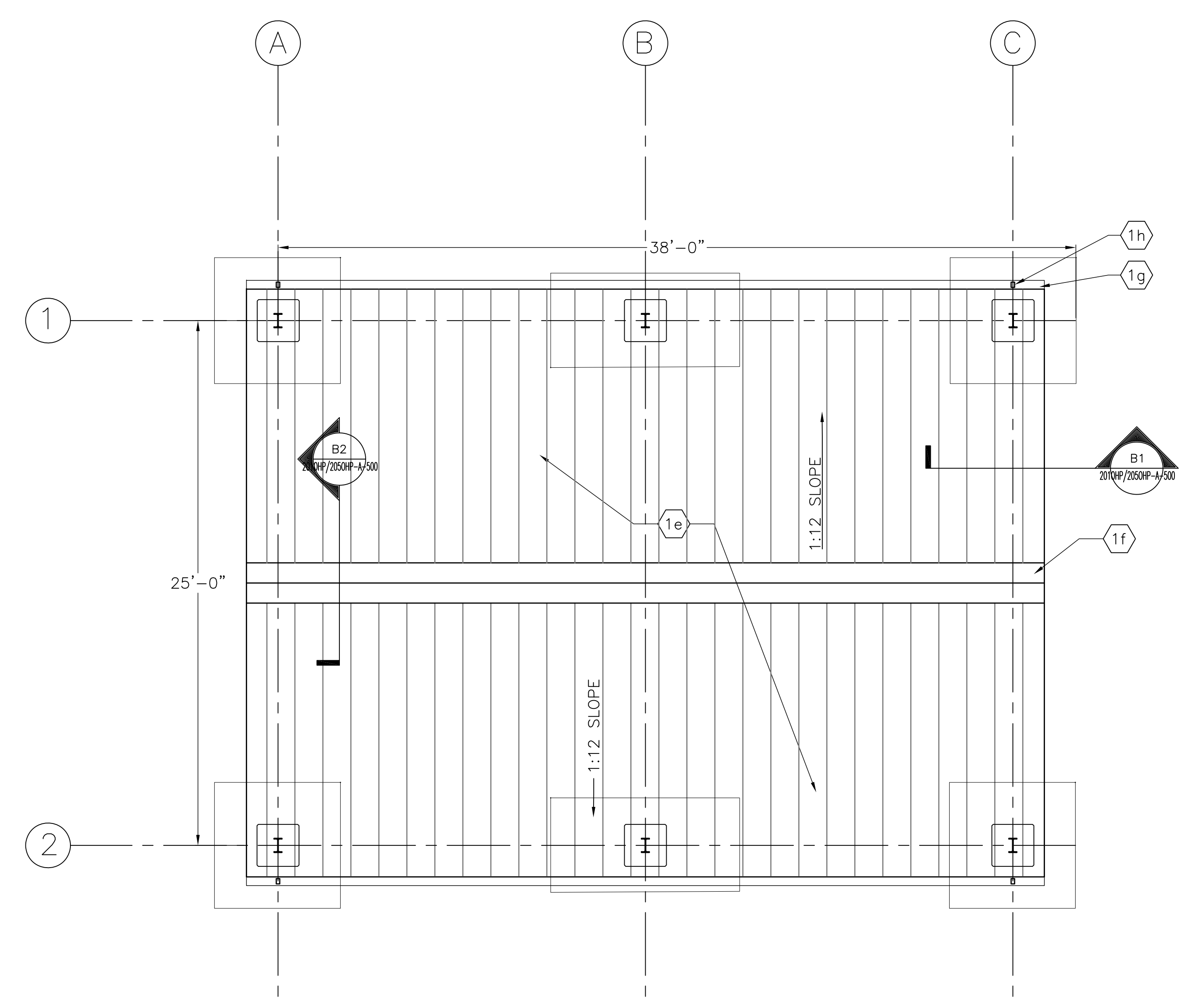
DEFICIENCY SHW037 (FAC 2050HP):

- 1a STRUCTURAL RIGID FRAME
- 1b CONCRETE PEDESTAL - SEE STRUCTURAL DRAWINGS
- 1c ETR CURB
- 1d PROVIDE FIRE EXTINGUISHER MOUNTING BRACKET. INSTALLATION TO PROVIDE NEW FIRE EXTINGUISHER.
- 1e STANDING SEAM METAL ROOFING
- 1f METAL RIDGE CAP
- 1g 5"X5" METAL GUTTER, TYP.
- 1h 2"X3" METAL DOWNSPOUT, TYP.
- 1j CONCRETE SPLASH BLOCK

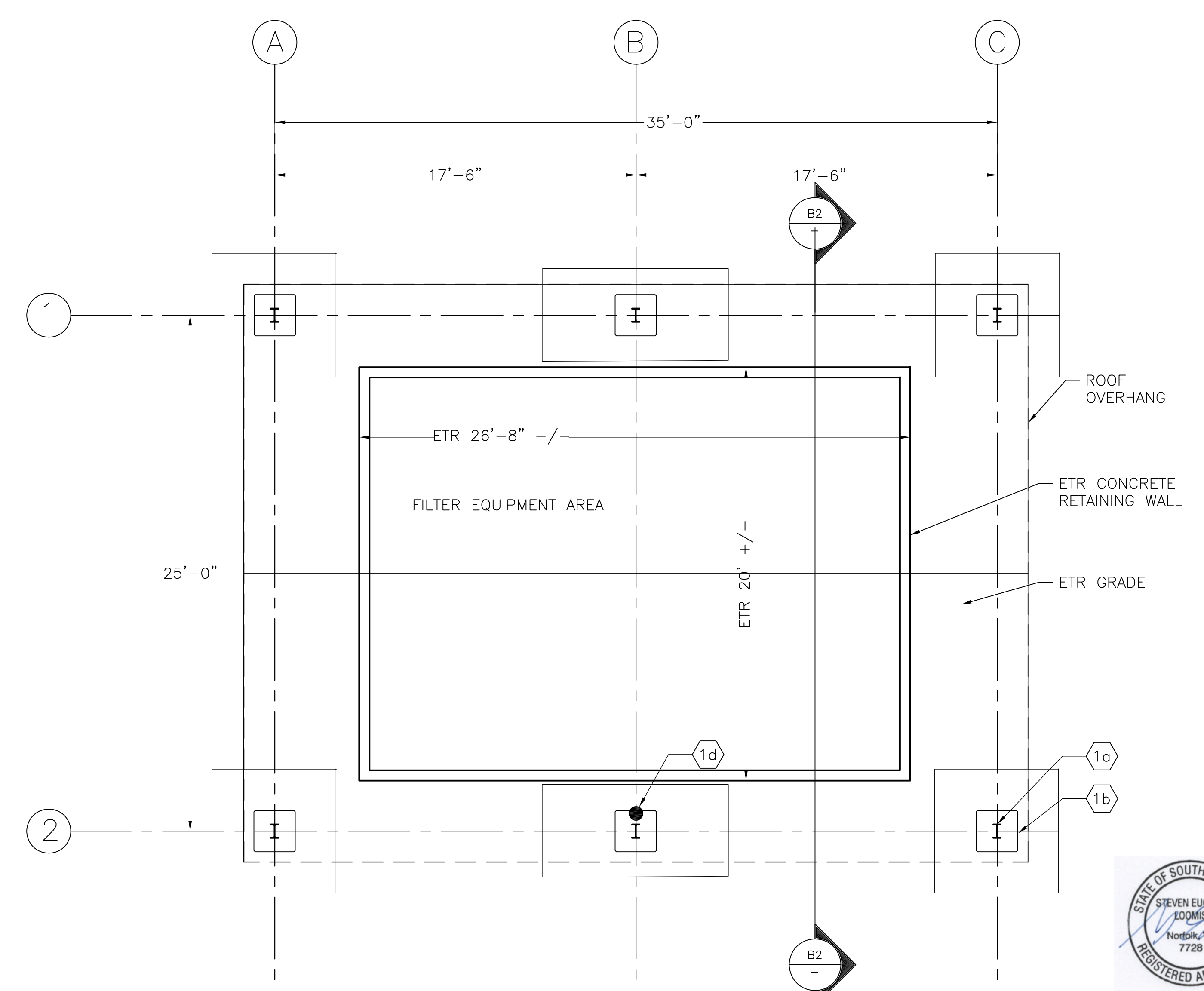
NOTES:  
1. PROTECT ADJACENT ETR SURFACES THROUGHOUT CONSTRUCTION.



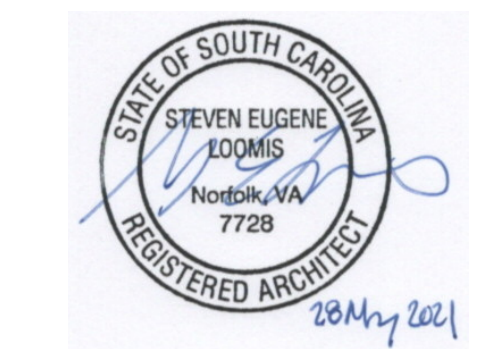
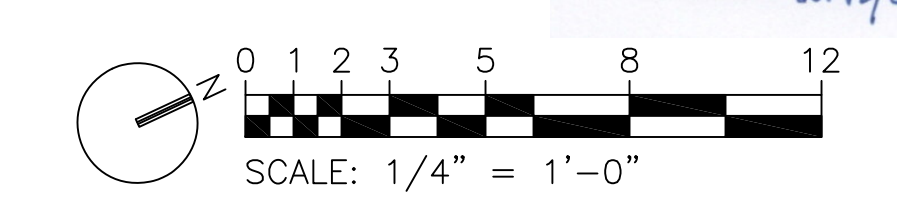
**B2** CANOPY SECTION  
SCALE: 1/4" = 1'-0"



**A3** ROOF PLAN  
SCALE: 1/4" = 1'-0"



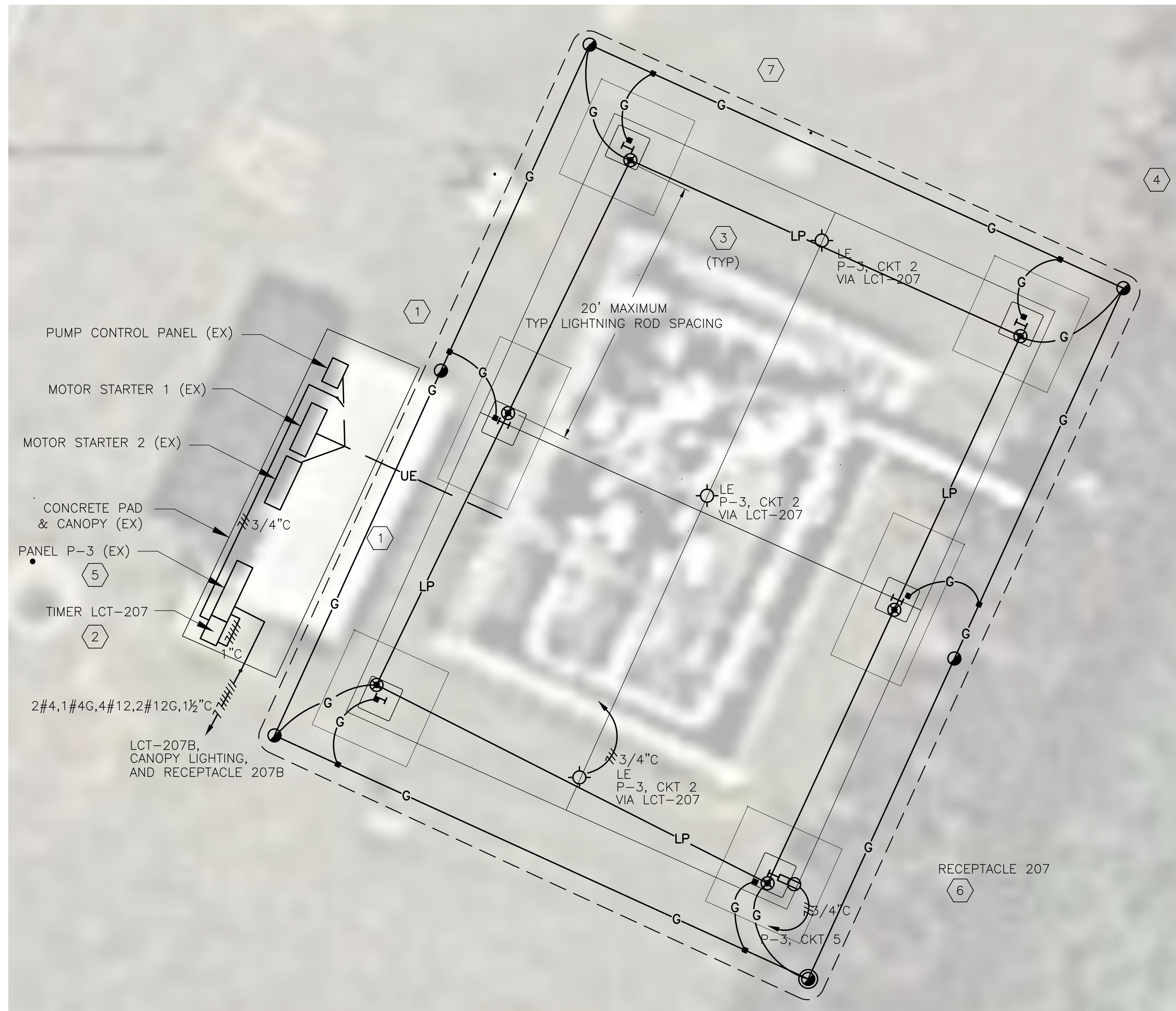
**A1** FLOOR PLAN  
SCALE: 1/4" = 1'-0"



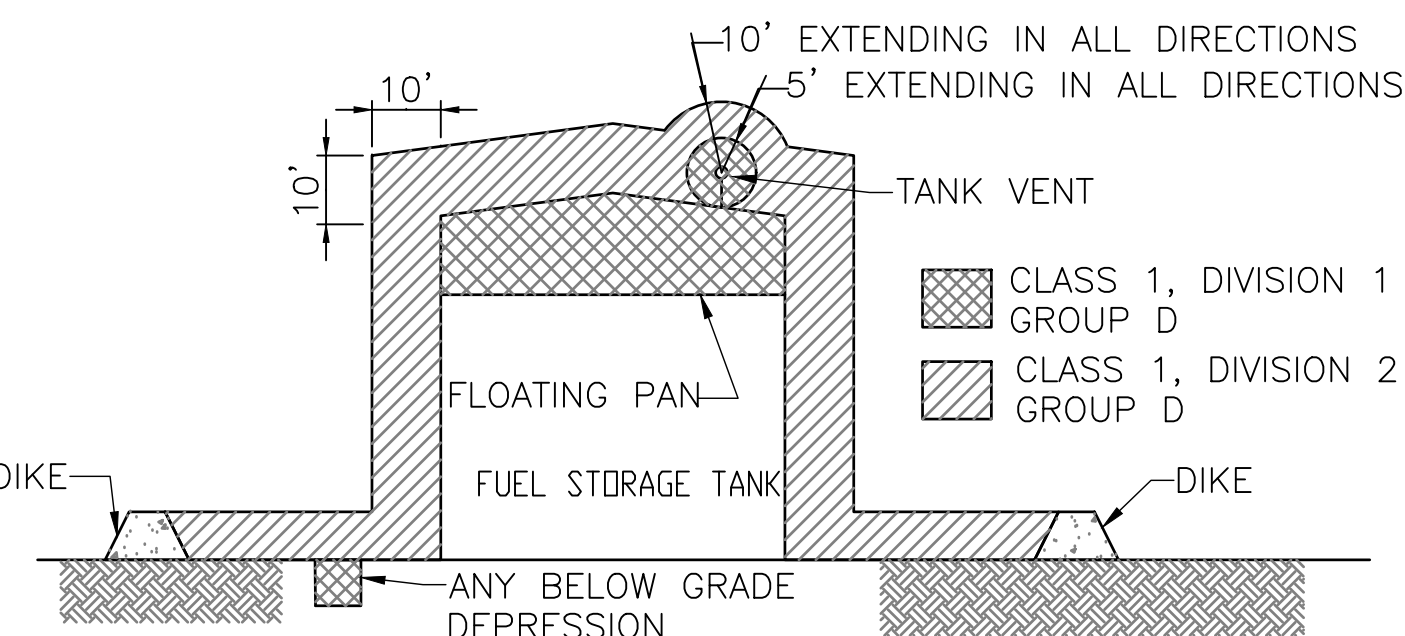
**20th CIVIL ENGINEER SQUADRON**  
 428 CHAPIN STREET  
 SHAW AIR FORCE BASE, SOUTH CAROLINA, 29152  
 COMMERCIAL PHONE: 1-803-895-9632 COMMERCIAL FAX: 1-803-895-9626  
**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REV. BY	DATE	DESCRIPTION OF REVISION

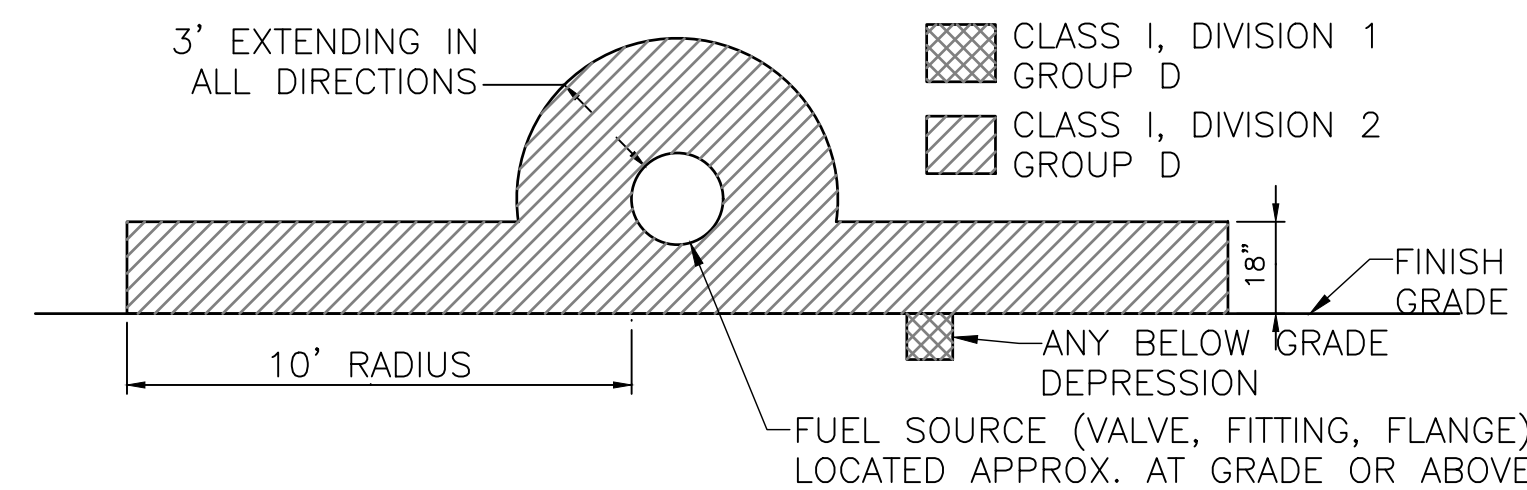
FAC 2050HP PLANS AND SECTIONS  
 CC  
 60590568  
 02/26/2021  
 1/4" = 1'-0"  
 33 of 36 SHEET



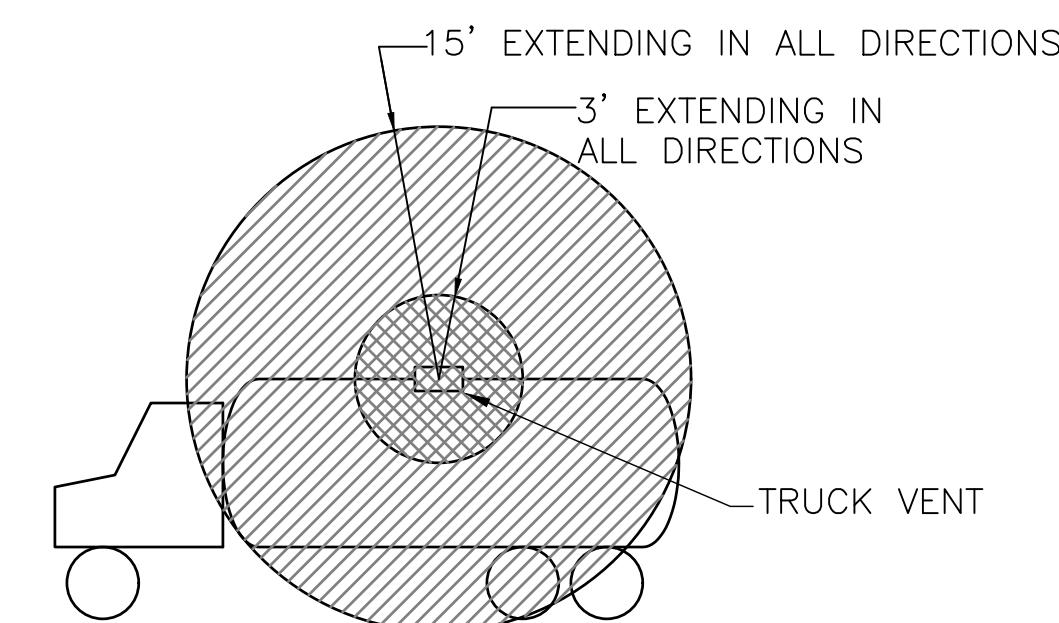
**A1 ELECTRICAL PART PLAN**  
SCALE: 1/4" = 1'-0"



**1 FUEL STORAGE TANK HAZARDOUS AREA DETAIL**  
Scale: NTS



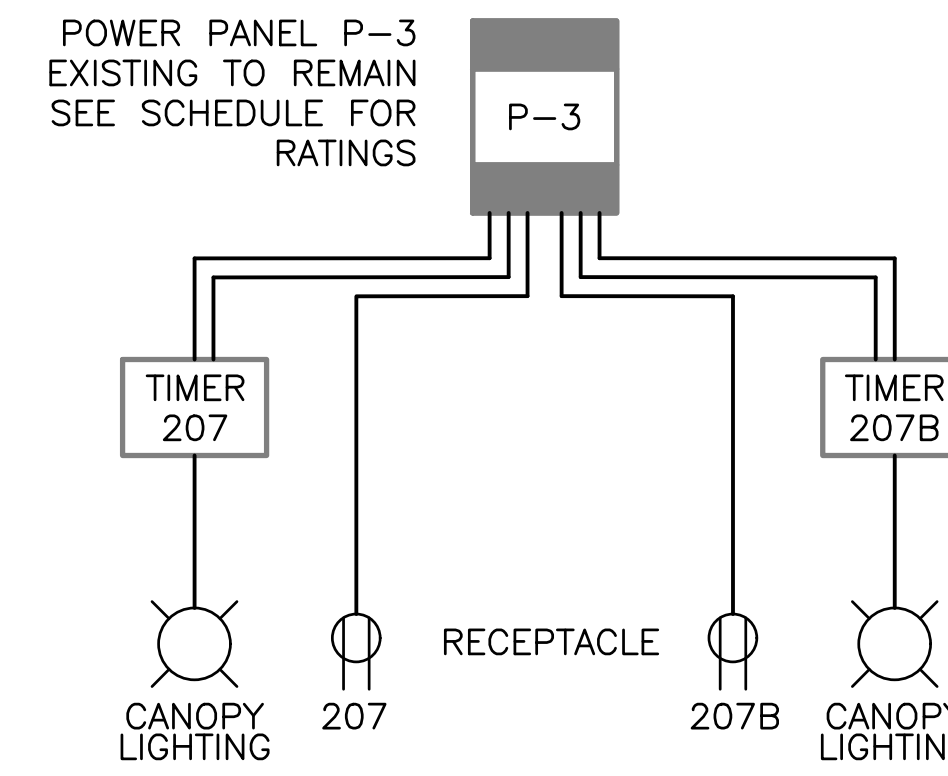
**2 EXTERIOR FUEL PIPING HAZARDOUS AREA DETAIL**  
Scale: NTS



**3 FUEL TRUCK HAZARDOUS AREA DETAIL**  
Scale: NTS

**DEFICIENCY SHW037 (FAC 2050HP):**

- 1 ROUTE CONDUCTORS THROUGH EXISTING SPARE CONDUIT IN EXISTING DUCT BANK.
- 2 PROVIDE TIMERSWITCH AND LIGHTING CONTACTOR. TIMERSWITCH PROGRAMMING SHALL CONFORM TO SITE PRACTICES AND STANDARDS.
- 3 PROVIDE LED-TYPE LIGHT FIXTURE. SEE SCHEDULE FOR RATINGS.
- 4 WORK PERFORMED IN THIS AREA SHALL CONFORM TO UFC 3-460-01 REQUIREMENTS. SEE UFC 3-460-01 AND DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
- 5 PROVIDE SIX MATCHING-TYPE SINGLE-POLE 20A CIRCUIT BREAKERS.
- 6 PROVIDE 120V, 20A, GFCI WEATHERPROOF RECEPTACLE, CAST FD BOX, AND WHILE-IN-USE COVER.
- 7 LIGHTNING PROTECTION TO BE INSTALLED BY CERTIFIED LIGHTNING PROTECTION SYSTEM PROFESSIONAL. SEE DRAWING 000-E-001 FOR DETAILS.



**ONE-LINE DIAGRAM**

PANEL P-3										
LOCATION: PROCESS AREA NEAR BUILDING 207										
VOLTS: 208Y/120 VAC MAIN: 600A										
PHASE: 3 AIC: 65,000A										
WIRES: 4										
NO.	TRIP	DESCRIPTION	LOAD (KVA)	A	B	C	LOAD (KVA)	DESCRIPTION	TRIP	NO.
1			18.7	18.9			0.2	CANOPY 207 LIGHTING +	20	2
3	350	MOTOR STARTER #2	18.7		18.9		0.2	CANOPY 207B LIGHTING +	20	4
5			18.7			18.7	0.0	CANOPY LIGHTING TIMER 207 +	20	6
7			18.7	18.7			0.0	CANOPY LIGHTING TIMER 207B +	20	8
9	350	MOTOR STARTER #1	18.7		18.9		0.2	RECEPTACLE 207 +	20	10
11			18.7			18.9	0.2	RECEPTACLE 207B +	20	12
13	20	CONTROL PANEL	0.3	0.3			0.0	SPARE +	20	14
15	20	TRENCH LIGHTS	0.0		0.0		0.0	SPARE +	20	16
17	20	CANOPY LIGHTS	0.1			0.1	0.0	SPARE +	20	18
19	-	SPACE	0.0	0.0			0.0			20
21	-	SPACE	0.0		0.0		0.0			22
23	-	SPACE	0.0		0.0		0.0			24
25	-	SPACE	0.0	0.0			0.0			26
27	-	SPACE	0.0		0.0		0.0			28
29			0.0			0.0	0.0			30
31	600	MAIN BREAKER	0.0	0.0			0.0			32
33			0.0		0.0		0.0	SPD +	40	34
35			0.0			0.0	0.0			36
+ REVISED OR ADDED CIRCUIT				37.9	37.7	37.7		TOTAL KVA/PHASE		
ENCLOSURE RATING: NEMA 3R, PROVIDE SOLID NEUTRAL & GROUND BUS				113.4				GRAND TOTAL KVA		

**LIGHTING FIXTURE SCHEDULE**

FIXTURE REF.	FIXTURE TYPE CATALOG DESCRIPTION	LAMP	VOLT.	MOUNTING
LF	LED LUMINAIRE: HOLOPHANE PXLH OR EQUAL EXTERIOR RATED, SUITABLE FOR CLASS 1 DIVISION 2 GROUP D APPLICATIONS, TYPE V DISTRIBUTION, PENDANT MOUNTED, 4000K COLOR TEMPERATURE, LUMEN OUTPUT TO BE 7000 TO 8000, ZERO UPLIGHT	LED	120-277	25FT



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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REVISION	DATE	DESCRIPTION OF REVISION	REV. BY

**ELECTRICAL PART PLAN**  
 JWH  
 60590568  
 05/26/2021  
 1/4" = 1'-0"  
 34 of 36

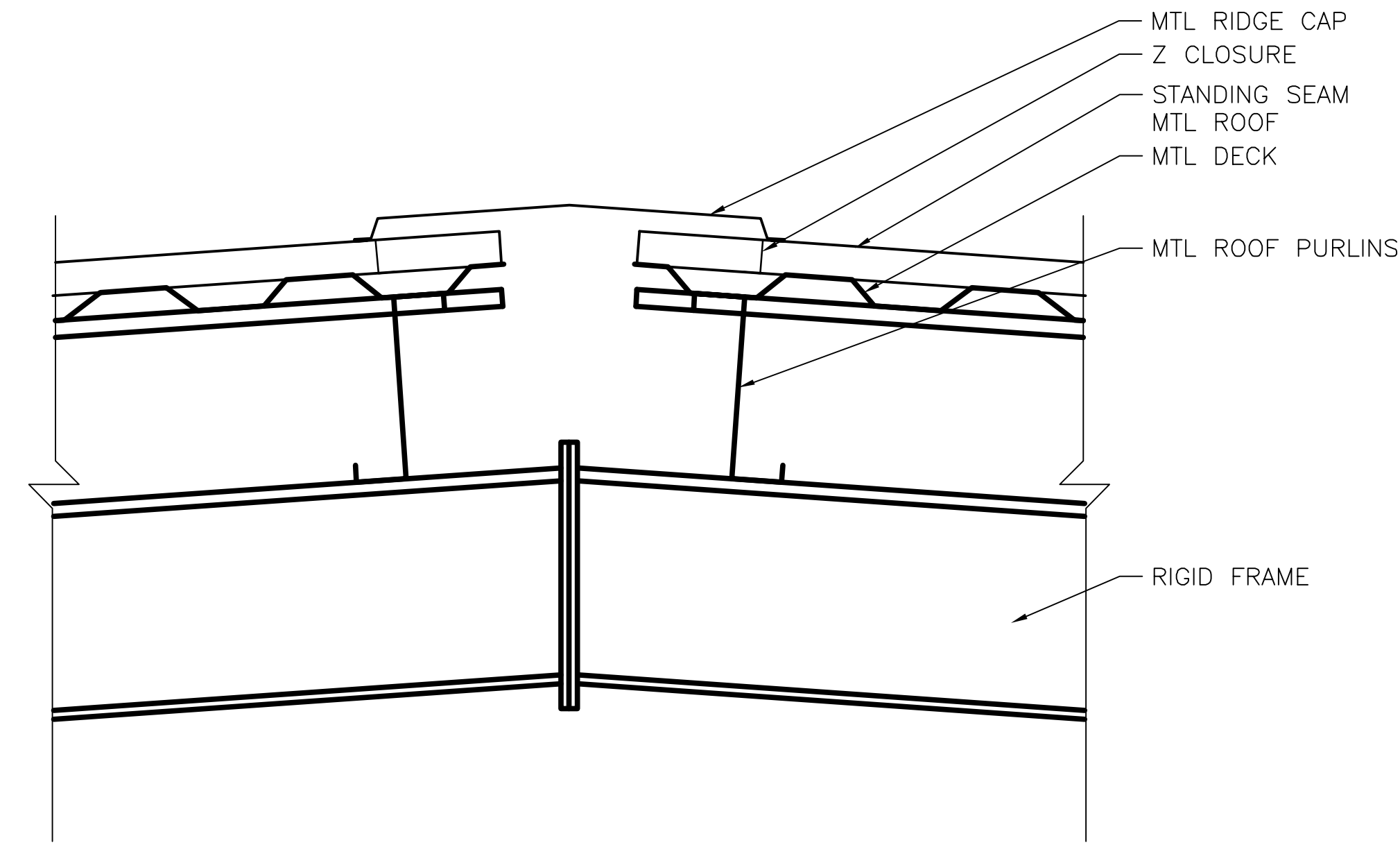


DEFICIENCY SHW036 (FAC 2010HP)  
AND SHW037 (FAC 2050HP):

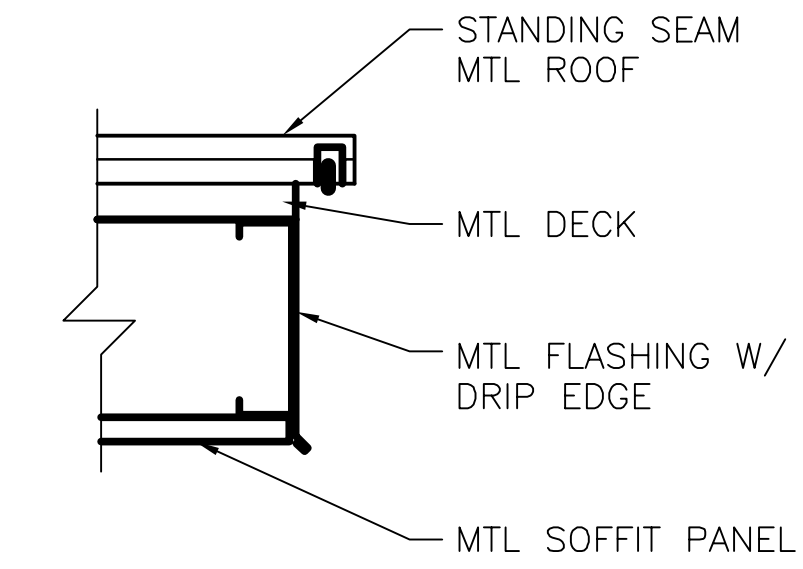
NOTES:  
1. PROTECT ADJACENT ETR SURFACES  
THROUGHOUT CONSTRUCTION.

EXTERIOR FINISH SCHEDULE

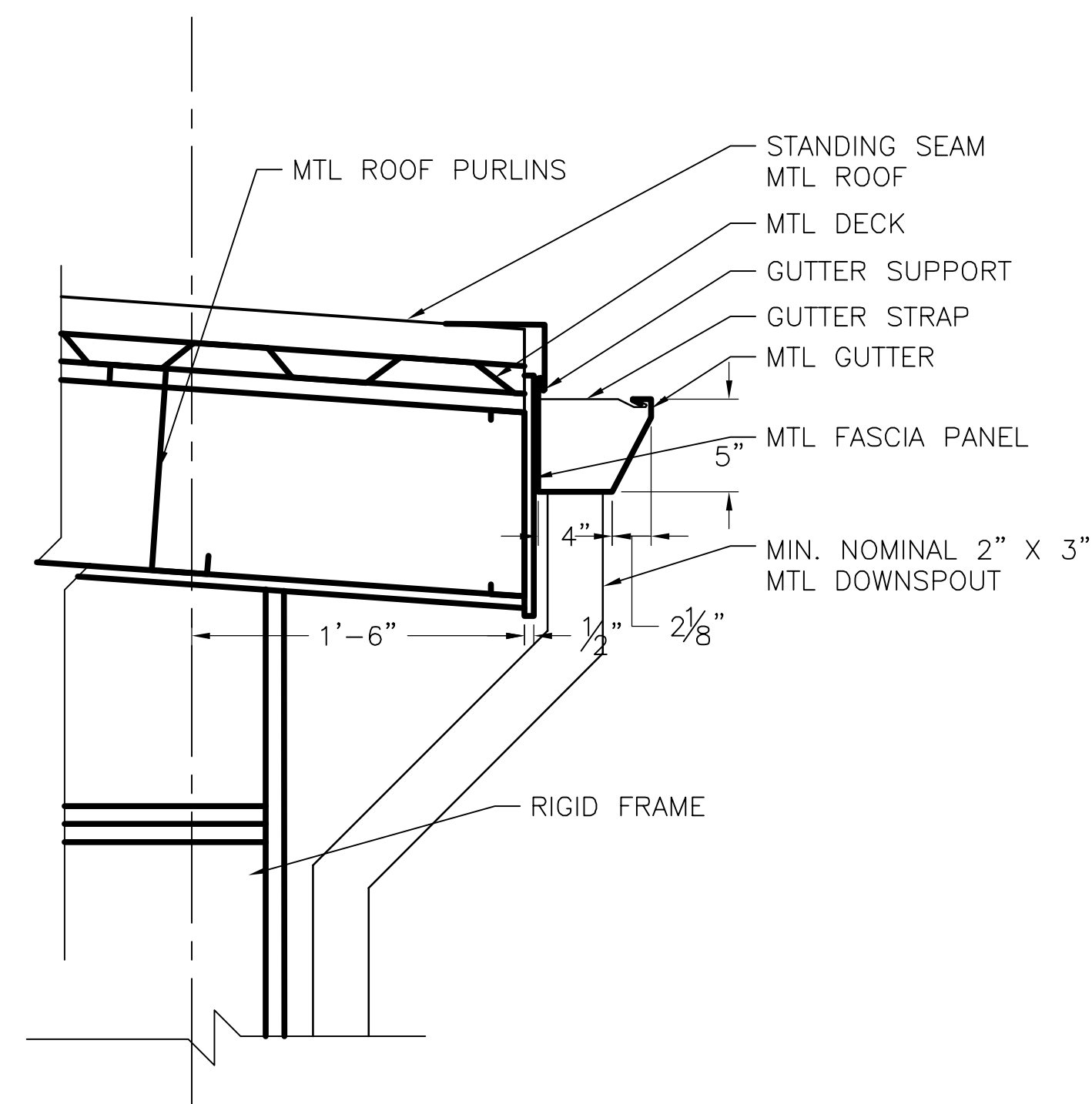
MATERIAL	COLOR	MANUFACTURER
STANDING SEAM METAL ROOF (SSMR)	SIERRA TAN	TBD
GUTTERS AND DOWNSPOUTS	MATCH SSMR	TBD



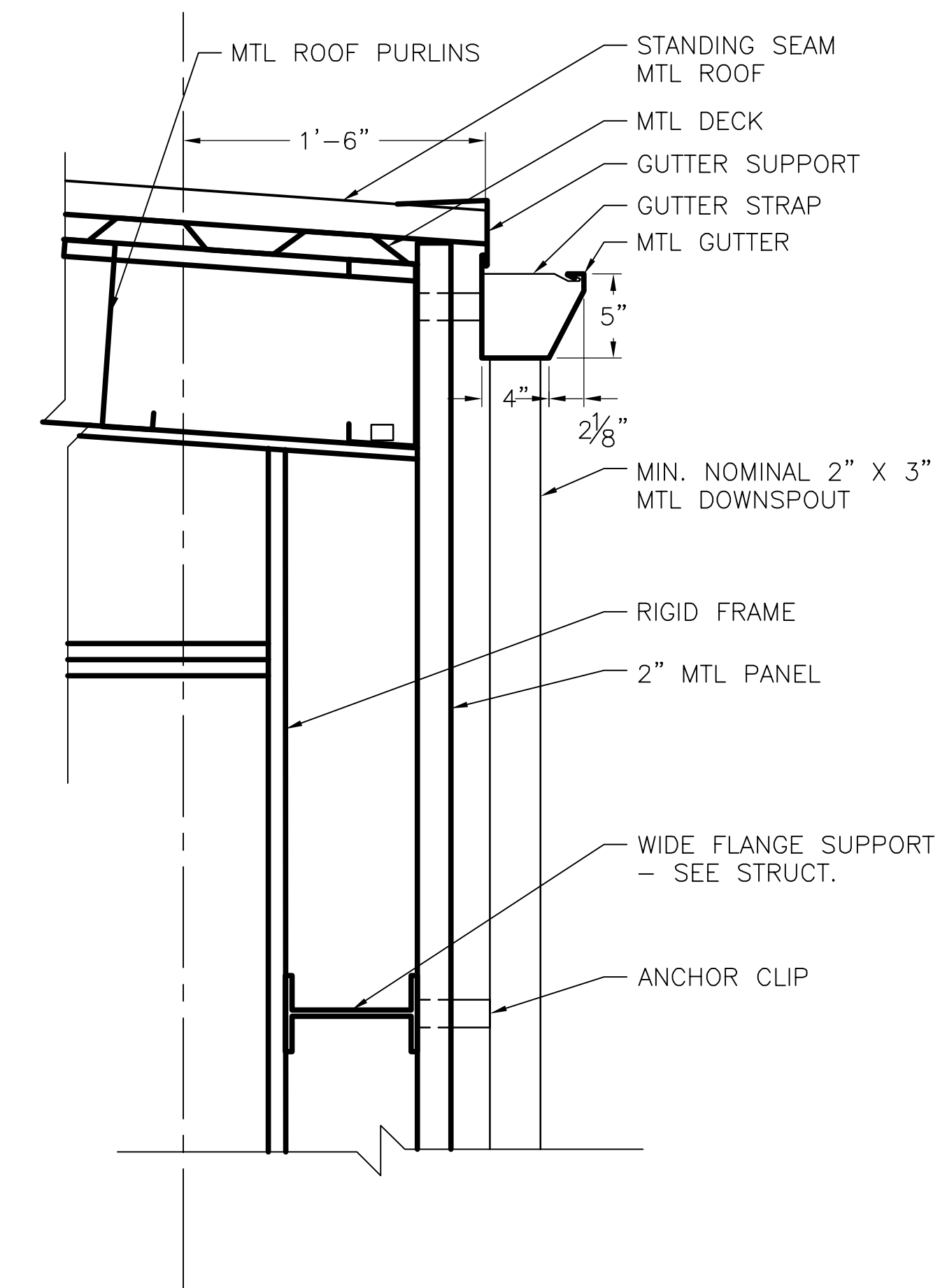
B2 RIDGE CAP DETAIL  
SCALE: 1-1/2" = 1'-0"



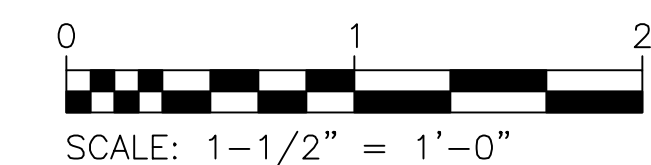
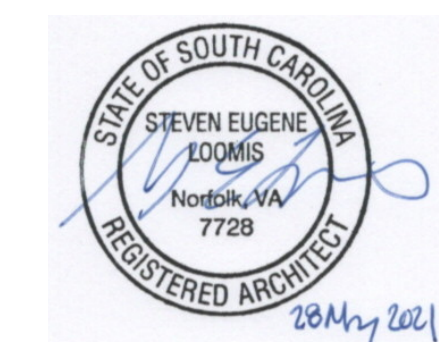
B1 GABLE DETAIL  
SCALE: 1-1/2" = 1'-0"



A2 ROOF EAVE DETAIL - SHW036  
SCALE: 1-1/2" = 1'-0"



A1 ROOF EAVE DETAIL - SHW037  
SCALE: 1-1/2" = 1'-0"



20th CIVIL ENGINEER SQUADRON  
428 CHAPIN STREET  
SHAW AIR FORCE BASE, SOUTH CAROLINA 29152  
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A&E SERVICES POL FOR SHAW AFB  
CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291  
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CANOPY DETAILS

CC  
60590568  
08/26/2021  
2010HP/2050HP-A-500  
PROJECT NUMBER  
DATE

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

35  
SHEET

36  
OF

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

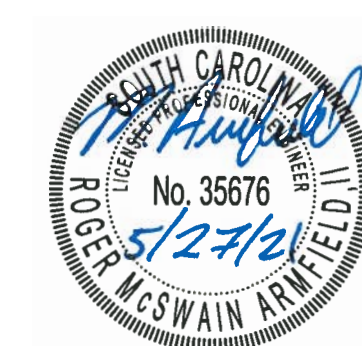
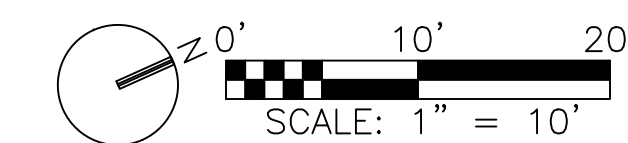


DEFICIENCY SHW057 (FAC 207 AND 205PLN):

- 1 INSTALL (2) CURBED CONTAINMENT AREAS AT FUEL SUPPLY PIPING UNDERGROUND TO ABOVE GROUND TRANSITIONS IN TWO LOCATIONS, AS FOLLOWS. ONE LOCATION IS A FUEL MANHOLE IN THE VICINITY OF FAC 207, AND THE OTHER LOCATION IS A FUEL MANHOLE ON THE SAME PIPELINE ACROSS SHAW DRIVE (FAC 205PLN) INSIDE A WALLED AREA WHERE THE UNDERGROUND PIPE DAYLIGHTS. CONSTRUCT ON THE SURFACE OF EACH CONCRETE MANHOLE LID BY BUILDING A CURB WITH 4" WIDTH AND HEIGHT. SCARIFY EXISTING CONCRETE SURFACE PRIOR TO CONSTRUCTION AND ANCHOR PROPOSED CURB TO EXISTING SURFACE VIA VERTICAL REBAR. INSTALL STEEL OUTFLOW PIPE WITH FITTING AND VALVE ON EXTERIOR. INSTALL RUBBER BOOT BETWEEN FUEL SUPPLY PIPE AND PIPE SLEEVE AT THE ABOVEGROUND TO UNDERGROUND TRANSITION POINTS. SEE DETAIL C3/207-C-501.

(SECOND PART OF DEFICIENCY SHW057 LOCATED ACROSS SHAW DR AT FAC207; REFER TO DEFICIENCY NOTES, THIS SHEET)

A1 205PLN-C-121 - FAC205PLN (EAST) ENLARGED SITE PLAN  
1" = 10'



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**A&E SERVICES POL FOR SHAW AFB**  
**CONTRACT NO. FA8903-18-D-0003 / TO NO. F0291**  
**ISSUED FOR CONSTRUCTION**

REVISION	DATE	DESCRIPTION OF REVISION	REV BY

FAC205PLN (EAST) ENLARGED SITE PLAN PLAN TYPE ENGINEER 60590568 PROJECT NUMBER 08/26/2021 DATE	M.J.R. DORRISMAN 205PLN-C-121 DRAWING NUMBER	1" = 10' SCALE	36 OF 36 SHEET
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