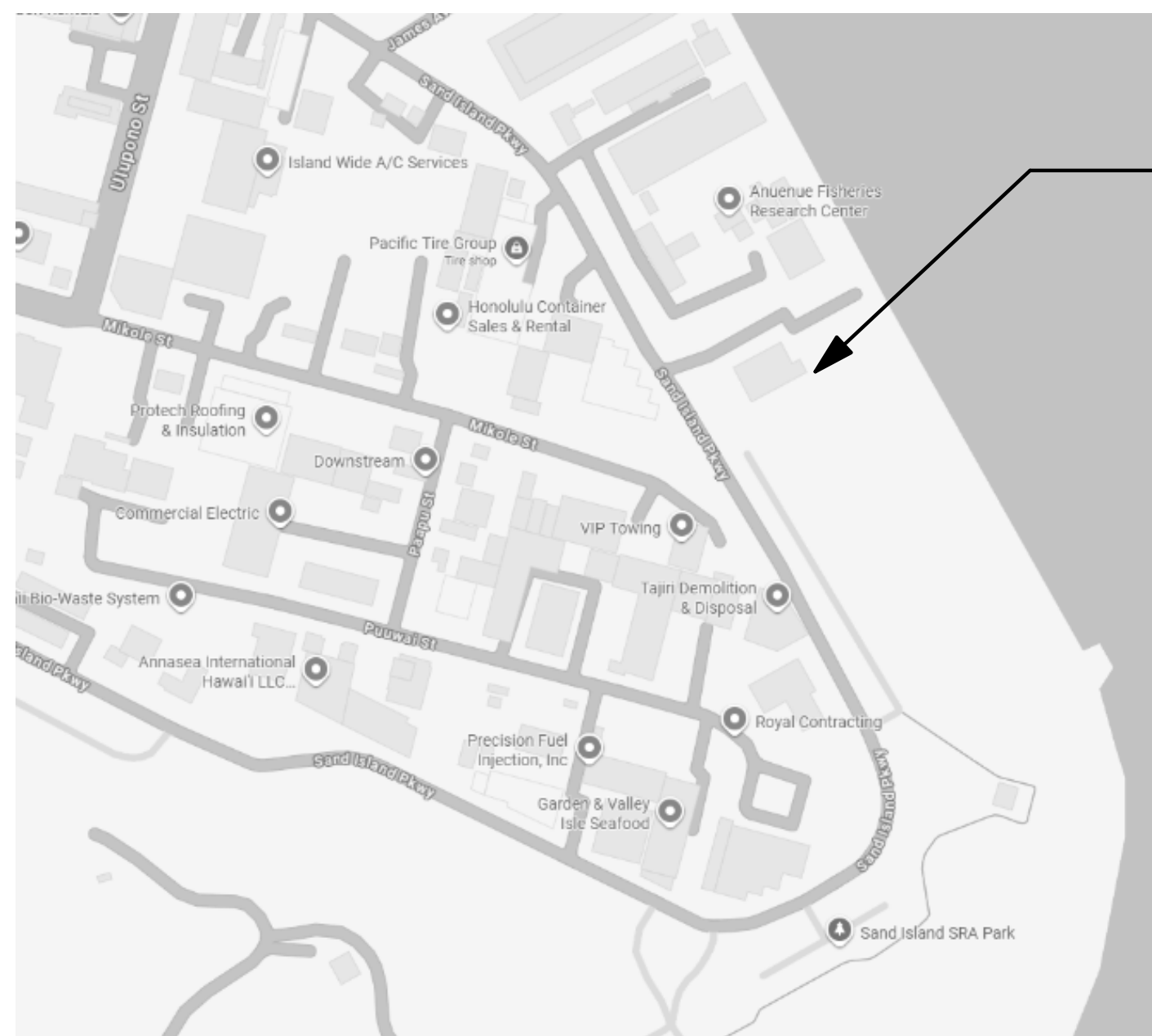


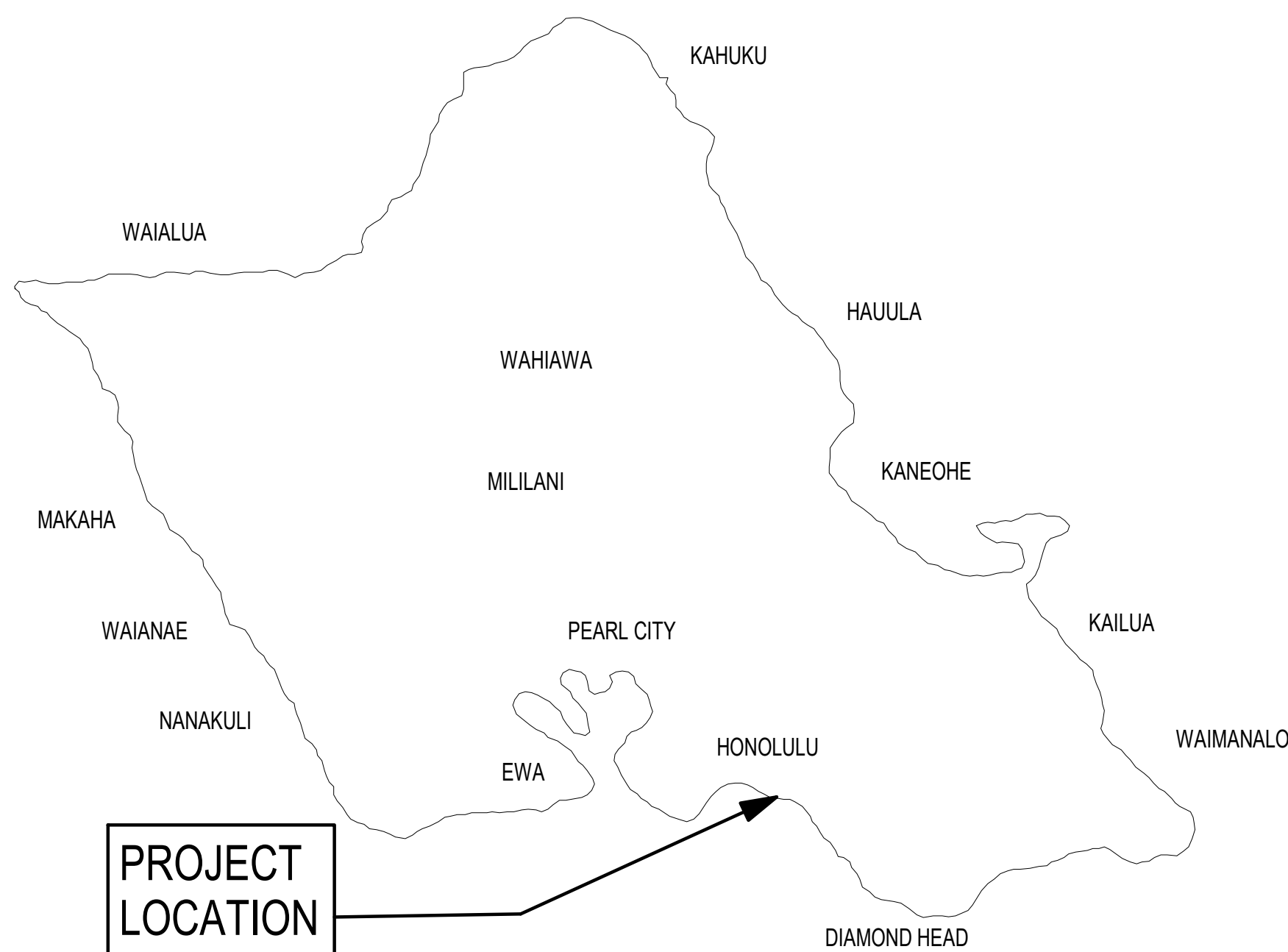
**LOCATION MAP**



**PROJECT LOCATION**

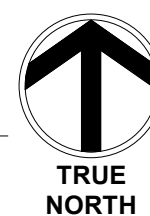
TAX MAP KEY: (1) 1-5-041:333

**VICINITY MAP**



**PROJECT LOCATION**

1 ISLAND OF OAHU  
NTS



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

FOR  
DIVISION OF AQUATIC RESOURCES  
JOB NO. C00BO91B

**ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A (BUILDING IMPROVEMENTS)**

SAND ISLAND, O'AHU, HAWAII  
TAX MAP KEY: (1) 1-5-041:333

**SHEET INDEX**

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| 1         | 001         | TITLE SHEET, PROJECT TEAM, LOCATION, VICINITY MAP & SHEET INDEX        | 47               | E102        | ELECTRICAL PLAN - EXISTING / DEMO WORK |
| 2         | C001        | EXISTING SITE PLAN   | 48               | E201        | LIGHTING PLAN - EXISTING / NEW WORK    |
| 3         | SD101       | FOUNDATION DEMOLITION PLAN   | 49               | E202        | ELECTRICAL PLAN - EXISTING / NEW WORK  |
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| 5         | S001        | STRUCTURAL GENERAL NOTES   | 51               | E401        | LIGHT FIXTURE SCHEDULE                 |
| 6         | S002        | STRUCTURAL GENERAL NOTES   | 52               | E501        | PANEL SCHEDULE I                       |
| 7         | S101        | FOUNDATION PLAN  | 53               | E502        | PANEL SCHEDULE II                      |
| 8         | S102        | MEZZANINE FRAMING PLAN   | TOTAL SHEETS: 53 |             |  |
| 9         | S103        | ROOF FRAMING PLAN  |                  |             |  |
| 10        | S201        | BUILDING ELEVATIONS  |                  |             |  |
| 11        | S202        | BUILDING ELEVATIONS  |                  |             |  |
| 12        | S501        | STEEL REPAIR DETAILS   |                  |             |  |
| 13        | S602        | CANOPY DETAILS   |                  |             |  |
| 14        | S603        | CMU WALL DETAILS   |                  |             |  |
| 15        | S604        | WALL FRAMING DETAILS   |                  |             |  |
| 16        | S605        | WALL FRAMING DETAILS   |                  |             |  |
| 17        | S606        | CEILING FRAMING DETAILS  |                  |             |  |
| 18        | S601        | REPAIR SCHEDULES   |                  |             |  |
| 19        | S602        | PHOTOS   |                  |             |  |
| 20        | A001        | DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR) NOTES & GENERAL NOTES  |                  |             |  |
| 21        | A002        | CODE ANALYSIS AND BUILDING INFORMATION                                 |                  |             |  |
| 22        | AD101       | FIRST FLOOR DEMOLITION PLAN  |                  |             |  |
| 23        | AD111       | FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN                          |                  |             |  |
| 24        | AD121       | ROOF DEMOLITION PLAN   |                  |             |  |
| 25        | A101        | FIRST FLOOR PLAN   |                  |             |  |
| 26        | A102        | MEZZANINE FLOOR PLAN   |                  |             |  |
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| 46        | E101        | LIGHTING PLAN - EXISTING / DEMO WORK                                   |                  |             |  |

**SCOPE OF WORK:**

- REPAIR OF THE EXISTING ROOF, SIDING AND LOUVERS AT VARIOUS LOCATIONS
- EXTERIOR PAINTING OF EXISTING SIDING, EXTERIOR DOORS, DOOR FRAMES AND WINDOW FRAMES
- RECONSTRUCTION OF THE EXISTING RESTROOMS FOR ACCESSIBILITY COMPLIANCE
- ADDITION OF 2 ACCESSIBLE SHOWERS
- ADDITION OF REQUIRED HANDRAILS AT THE EXISTING METAL STAIRS
- REMOVAL AND REPLACEMENT OF FLOORING WITH NEW LUXURY VINYL TILE AND REPAINTING OF INTERIOR WALLS IN OFFICE 104, STORAGE 200 AND 201
- ADDITION OF NEW CASEWORK AT UTILITY CLOSET 103
- ASSOCIATED VARIOUS STRUCTURAL, MECHANICAL AND ELECTRICAL WORK

**APPROVED:**

*B. J. Neilson* Apr 29, 2026

ADMINISTRATOR  
BRIAN J. NEILSON  
DIVISION OF AQUATIC RESOURCES  
DEPARTMENT OF LAND AND NATURAL RESOURCES

*Dina U. Lau* Apr 29, 2026

DINA U. LAU  
ACTING CHIEF ENGINEER  
ENGINEERING DIVISION  
DEPARTMENT OF LAND AND NATURAL RESOURCES

CHIEF, ENVIRONMENTAL MANAGEMENT DIVISION  
DEPARTMENT OF HEALTH  
STATE OF HAWAII

**PROJECT TEAM**

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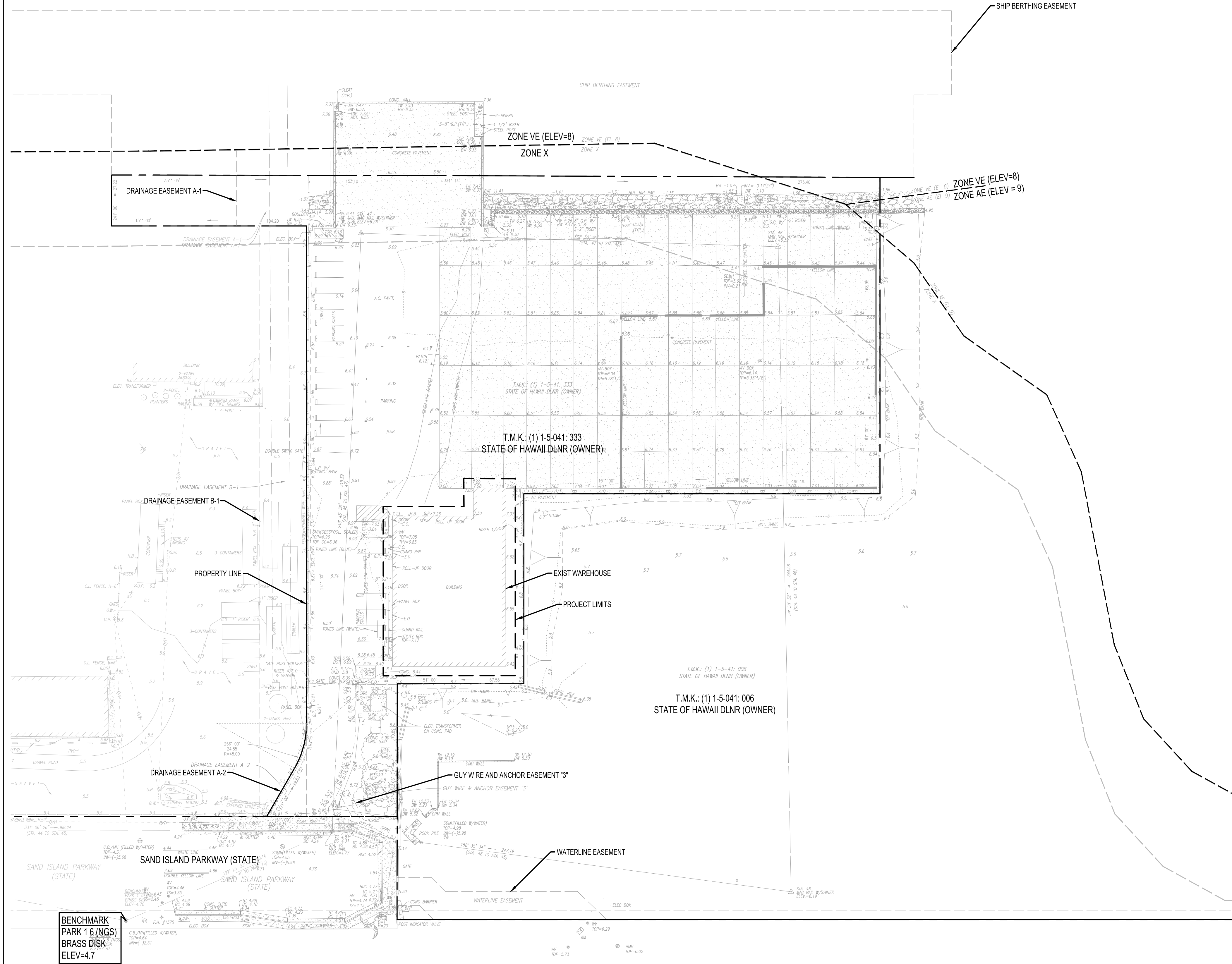
STRUCTURAL  
COMPANY: NAGAMINE OKAWA ENGINEERS INC.  
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ADDRESS: 1003 BISHOP STREET, PAUHI TOWER SUITE 2025,  
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WAIPAHU, HI 96797  
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T.M.K.: (1) 1-5-41: 003  
STATE OF HAWAII DLNR (OWNER)  
T.M.K.: (1) 1-5-041: 003  
STATE OF HAWAII DLNR (OWNER)



- LEGEND**
- — — — — PROPERTY LINE
  - - - - - PROPERTY EASEMENT
  - - - - - FLOOD ZONE BOUNDARY
  - - - - - PROJECT LIMITS
  - [Pattern] EXIST RIP RAP
  - [Pattern] EXIST CRM WALL
  - [Pattern] EXIST CONCRETE
  - - - - - EXIST CHAIN-LINK FENCE
  - — — — — EXIST DRAINLINE
  - — — — — EXIST WATERLINE
  - ⊙ EXIST LIGHTPOLE
  - ⊙ EXIST UTILITY MANHOLE
  - ⊙ EXIST UTILITY BOX
  - ⊙ EXIST TREE

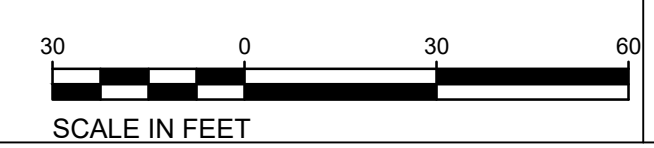
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STATE OF HAWAII DLNR (OWNER)

T.M.K.: (1) 1-5-41: 006  
STATE OF HAWAII DLNR (OWNER)  
T.M.K.: (1) 1-5-041: 006  
STATE OF HAWAII DLNR (OWNER)

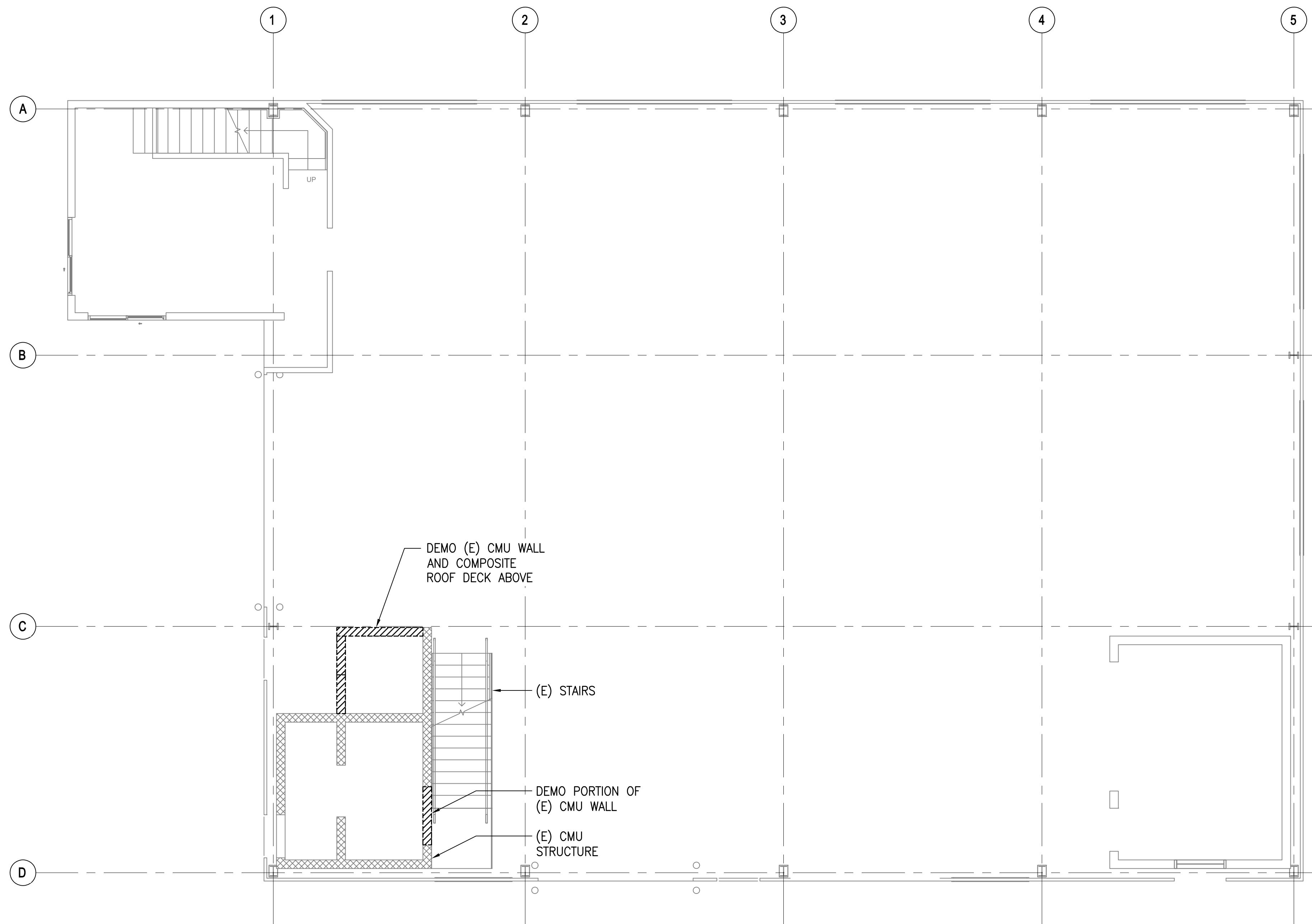
BENCHMARK  
PARK 16 (NGS)  
BRASS DISK  
ELEV=4.7



**EXISTING SITE PLAN**  
SCALE: 1"=30'



| REVISION NO.  | SYM.   | DESCRIPTION | SHT./OF    | DATE | APPROVED |
|---|--|-------------|------------|------|----------|
|   |  |             |            |      |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>EXISTING SITE PLAN |  |             |            |      |          |
| DESIGNED:   | JLG  | SUBMITTED:  | APRIL 2026 |      |          |
| DRAWN:  | JLT  | DATE:       | APRIL 2026 |      |          |
| CHECKED:  | X  | SCALE:      | AS NOTED   |      |          |
| APPROVED:   | Dina Lau   | RAWING NO.: | C001       |      |          |
| CHIEF ENGINEER:   | E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov |             |            |      |          |
| APRIL 30, 2028<br>EXPIRATION DATE OF THE LICENSE  |  |             |            |      |          |

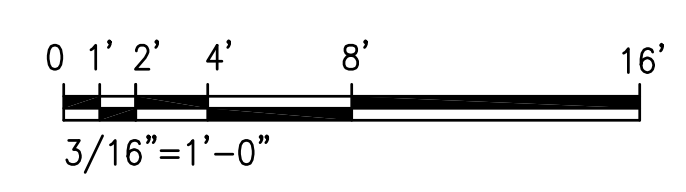


**A FOUNDATION DEMOLITION PLAN**  
 SCALE: 3/16" = 1'-0"

**EXISTING DEMOLITION NOTES**

- DEMOLITION DRAWINGS ARE BASED ON INFORMATION FROM AVAILABLE AS-BUILT AND RENOVATION DRAWINGS AND SITE INVESTIGATION TO LIMITED ACCESSIBLE AREAS. ALL EXISTING INFORMATION SHOWN ON DEMOLITION DRAWINGS SHALL BE VERIFIED BY CONTRACTOR IN FIELD PRIOR TO STARTING WORK. ANY DISCREPANCIES WITH DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION PRIOR TO STARTING WORK.
- SEE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AS AVAILABLE FOR NON-STRUCTURAL DEMOLITION.
- ALL DEMOLISHED MATERIAL SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CITY, STATE AND FEDERAL CODES AND REGULATIONS.
- CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING, PROTECTION AND BARRICADES AS NEEDED DURING DEMOLITION WORK. CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS AS NEEDED FROM SURFACE WATER AND/OR SEEPAGE.
- PROVIDE ADEQUATE PROTECTION FOR EXISTING STRUCTURES TO REMAIN. REPAIR AND/OR REPLACE AT CONTRACTOR'S EXPENSE ANY EXISTING SITE OR BUILDING FEATURES TO REMAIN THAT ARE DAMAGED DURING THE WORK TO PRE-EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE STATE.
- EXISTING CONCRETE SURFACES THAT INTERFACE WITH NEW CONSTRUCTION SHALL BE REMOVED OF ALL LOOSE OR UNSOUND MATERIALS AND OTHER CONDITIONS THAT WOULD INHIBIT BOND SUCH AS PLASTER, LAITANCE, DUST, DIRT, OIL, CURING COMPOUND, EXISTING PAINT OR COATINGS, EFFLORESCENCE AND OTHER MATTER THAT COULD INTERFACE WITH THE BOND OF NEW CONSTRUCTION.

**GRAPHIC SCALE**



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE 04/30/2028

*g. gutierrez*

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.)

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
 ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
 (BUILDING IMPROVEMENTS)  
 SAND ISLAND, O'AHU, HAWAII

FOUNDATION DEMOLITION PLAN

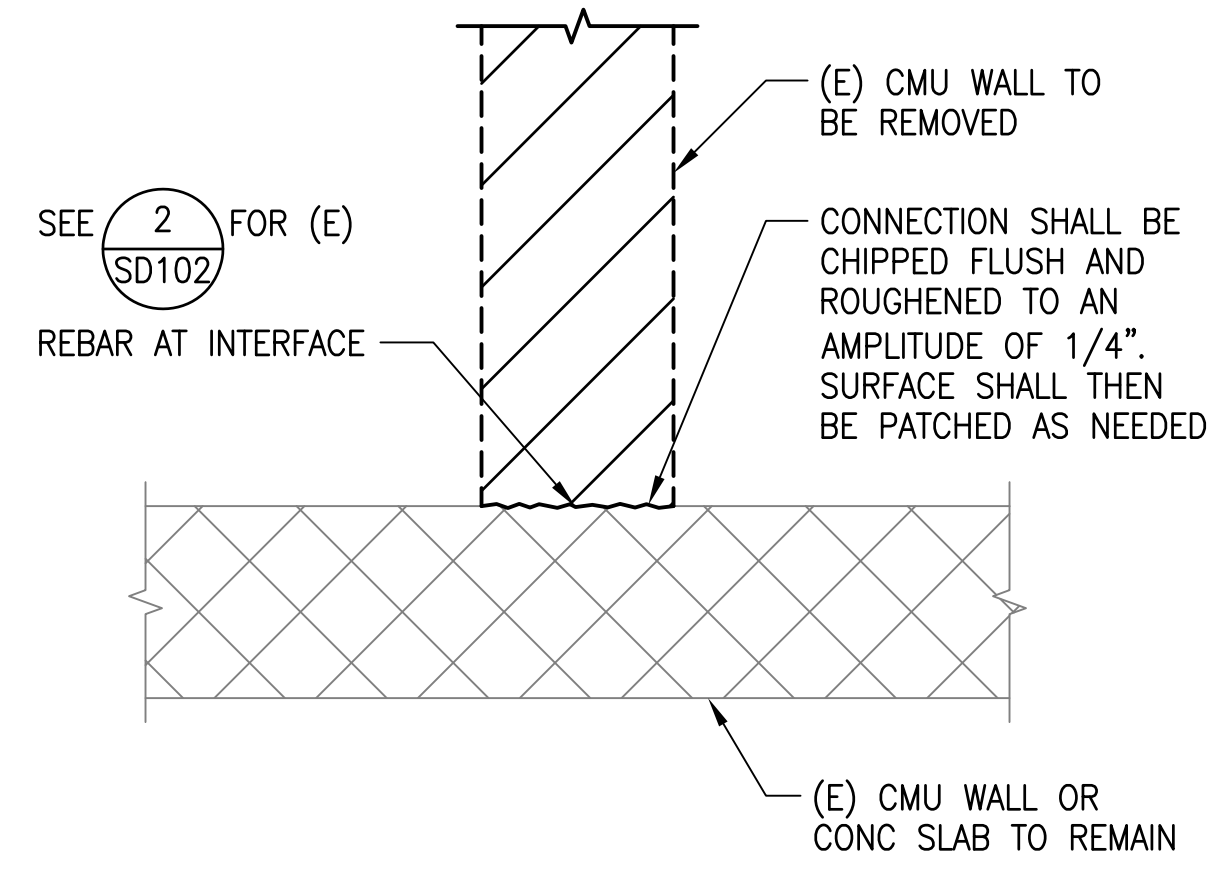
DESIGNED: DN      SUBMITTED: APRIL 2026 *GC*

DRAWN: LL      DATE: APRIL 2026

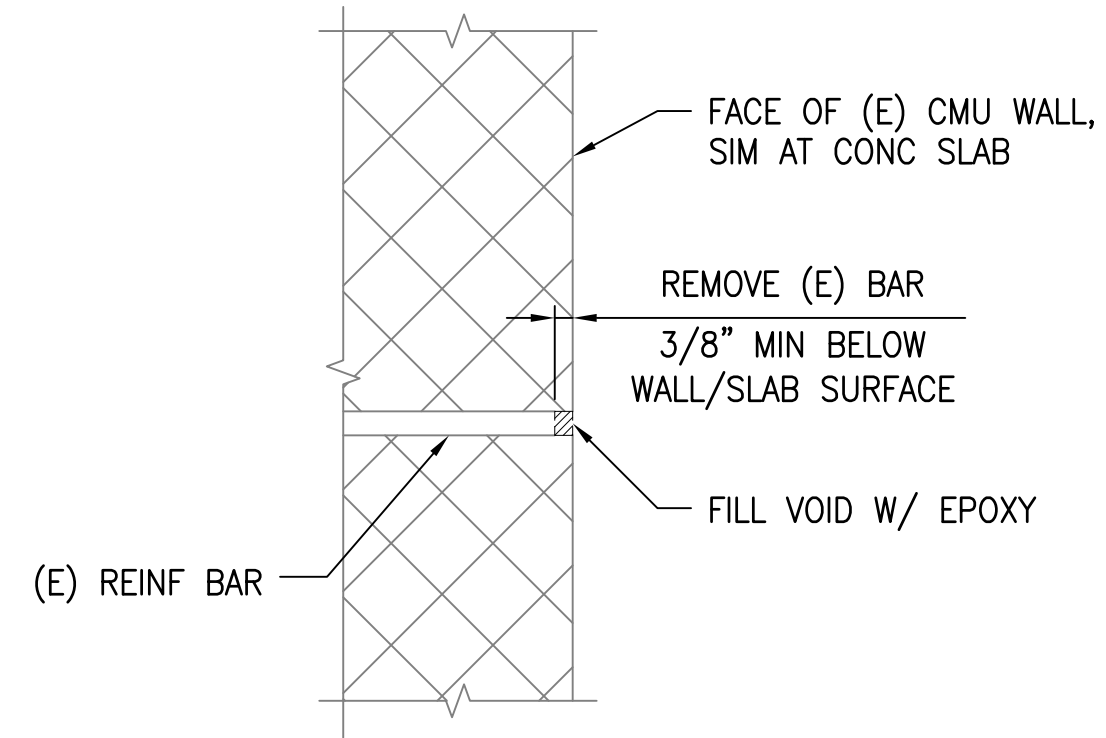
CHECKED: GG      SCALE: AS NOTED

APPROVED: Dina Lau      RAWING NO. **SD101**

E-signed 2026-04-29 01:15PM HST  
 dina.u.lau@hawaii.gov  
 CHIEF ENGINEER State of Hawaii  
 Civil Engineer



**1** **DETAIL - SURFACE REPAIR**  
NOT TO SCALE



**2** **EXISTING REINFORCEMENT BAR REMOVED**  
NOT TO SCALE

| REVISION NO.  | SYM. | DESCRIPTION  | SHT./OF | DATE                        | APPROVED |
|---|------|--|---------|-----------------------------|----------|
|   |      |  |         |                             |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>DEMOLITION DETAILS |      |  |         |                             |          |
|   |      | DESIGNED: DN<br>DRAWN: LL<br>CHECKED: GG<br>APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>CHIEF ENGINEER State of Hawaii<br>Civil Engineer |         |                             |          |
|   |      | SUBMITTED: APRIL 2026 <i>GC</i><br>DATE: APRIL 2026<br>SCALE: AS NOTED   |         | DRAWING NO.<br><b>SD102</b> |          |

**GENERAL**

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS.
2. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, WIND AND SEISMIC LOADING. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS NOR RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATIONS, DUTIES AND RESPONSIBILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING DEWATERING, LAGGING, SHORING AND PROTECTION OF PROPERTY AND UTILITIES.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE CONTRACTING OFFICER AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. SHOULD THERE BE ANY CONFLICTS BETWEEN THE REQUIREMENTS OF THE DRAWINGS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO PERFORMING THE WORK.
7. THE CONTRACTOR IS RESPONSIBLE FOR SCAFFOLDING, BARRICADES, WORK PLATFORMS AND SAFETY AT THE JOB SITE. TEMPORARY BRACING AND SHORING OF ELEMENTS UNDER REPAIR AS REQUIRED FOR STRUCTURAL STABILITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL PROTECT EXISTING SURFACES AND OBJECTS TO REMAIN FROM DAMAGE. ANY ITEMS DAMAGED DURING CONSTRUCTION AS A RESULT OF THE CONTRACTOR'S WORK SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CONTRACTING OFFICER AND AT NO ADDITIONAL COST.
9. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, SIZE AND LOCATION OF ALL FLOOR AND WALL OPENINGS, FLOOR SLOPES AND FINISHES, ETC.
10. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS REQUIRED FOR DUCTS, PIPES AND ALL PIPE SLEEVES, ELECTRICAL CONDUITS AND OTHER ITEMS TO BE EMBEDDED IN CONCRETE OR OTHERWISE INCORPORATED IN STRUCTURAL WORK.
11. STRUCTURAL SPECIAL INSPECTION REQUIREMENTS:

ALL SPECIAL INSPECTIONS SHALL BE DONE PER IBC SPECIAL INSPECTIONS PROVISIONS OF SECTION 1705 OF THE 2018 INTERNATIONAL BUILDING CODE GOVERNING PORTIONS OF THE STRUCTURAL WORK SHOWN IN THE STRUCTURAL DRAWINGS.

THE OWNER SHALL HIRE AND PAY FOR ALL THIRD PARTY STRUCTURAL SPECIAL INSPECTIONS. CONTRACTOR SHALL HIRE AND PAY FOR CERTIFIED TESTING SERVICES COMPANY. THE CONTRACTOR SHALL NOTIFY SPECIAL INSPECTOR AND TESTING AGENCY AT LEAST 3 WORKING DAYS IN ADVANCE FOR WORK TO BE PERFORMED REQUIRING SPECIAL INSPECTION. THE CONSTRUCTION OF THE FOLLOWING STRUCTURAL WORK SHALL REQUIRE SPECIAL INSPECTION:

- A. INFILL CAST-IN-PLACE CONCRETE = REQUIRED
- B. INFILL REINFORCING STEEL = REQUIRED
- C. HIGH STRENGTH BOLTING = REQUIRED
- D. FIELD WELDING = REQUIRED
- E. EPOXY EMBEDS = REQUIRED

SPECIAL INSPECTIONS DO NOT TAKE THE PLACE OF CONTRACTOR'S QUALITY CONTROL MEASURES. SPECIAL INSPECTION DOES NOT RELIEVE THE GENERAL CONTRACTOR OF HIS RESPONSIBILITIES TO PERFORM QUALITY ASSURANCE AND QUALITY CONTROL, TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND TO PROVIDE SAFETY ON THE JOB SITE. CONTRACTOR SHALL PROVIDE ACCESS FOR THE SPECIAL INSPECTOR SUCH AS LADDERS, SCAFFOLDING, FALL PROTECTION, MANLIFT, ETC. CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE CONTRACTING OFFICER AND PAY FOR ANY RE-INSPECTIONS ON NON-CONFORMING WORK.

**DEMOLITION NOTES**

1. CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING FOR ALL DEMOLITION WORK.
2. DRAWINGS ARE BASED ON INFORMATION FROM AVAILABLE RECORD DRAWINGS AND SITE INVESTIGATION TO LIMITED ACCESSIBLE AREAS. ALL EXISTING DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR IN FIELD PRIOR TO STARTING WORK. ANY DISCREPANCIES WITH DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION PRIOR TO STARTING WORK.
3. DO NOT DAMAGE EXISTING REINFORCING BARS TO REMAIN IN CONCRETE. ALL REINFORCING SHALL BE LOCATED BY NON-DESTRUCTIVE METHODS PRIOR TO DRILLING, CHIPPING AND CUTTING. REPAIR AREAS SHALL NOT BE OVERCUT.
4. ALL DEMOLISHED MATERIAL SHALL BE PROPERLY DISPOSED OF OFF SITE BY CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CITY, STATE AND FEDERAL CODES AND REGULATIONS.
5. PROVIDE ADEQUATE PROTECTION FOR EXISTING STRUCTURES TO REMAIN. REPAIR AND/OR REPLACE AT CONTRACTOR'S EXPENSE ANY EXISTING SITE FEATURES TO REMAIN THAT ARE DAMAGED DURING THE WORK TO PRE-EXISTING CONDITIONS OR BETTER.

**CONCRETE**

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 318, UON.
2. ALL CONCRETE UNLESS OTHERWISE NOTED SHALL BE NORMAL WEIGHT HARD ROCK TYPE (150#/CU. FT.) PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY AND SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW.
3. SCHEDULE OF STRUCTURAL CONCRETE 28-DAY STRENGTH AND TYPES:  
ALL CONCRETE, UON = 4,000 PSI (W/C = 0.50 MAX)
4. CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE AS FOLLOWS, UON:
  - A. SLAB ON GRADE = 1-1/2" CLEAR AT TOP
  - B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER, UON = 2" CLEAR TO TIES
  - C. INTERIOR SURFACES NOT EXPOSED TO EARTH OR WEATHER, UON = 2" CLEAR TO TIES
  - D. CONCRETE POURED DIRECTLY AGAINST EARTH = 3"
5. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
6. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN. NOTIFY THE CONTRACTING OFFICER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
7. CONTRACTOR SHALL PROVIDE THE CONTRACTING OFFICER, STRUCTURAL ENGINEER AND SPECIAL INSPECTOR A SCHEDULE SPECIFYING CONCRETE POURS IN UPCOMING THREE WEEKS.
8. CONCRETE ADMIXTURES CONTAINING CHLORIDE OR CHLORIDE SALTS SHALL NOT BE USED.
9. ALL ROUGHENED SURFACES IN CONCRETE SHALL BE MADE WITH A MINIMUM AMPLITUDE OF 1/4".
10. PROVIDE CHAMFER AT ALL EXPOSED EDGES.

**REINFORCING STEEL**

1. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 REQUIREMENTS.
2. REINFORCING SPLICES SHALL BE MADE ONLY WHERE INDICATED ON THE DRAWINGS.
3. ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED.
4. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
5. ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE "ACI DETAILING MANUAL - LATEST EDITION" (SP-66) AS MODIFIED BY THE PROJECT DRAWINGS.
6. CONTRACTOR SHALL SUBMIT REINFORCING BAR LAYOUTS AND DETAILS FOR CONTRACTING OFFICER'S REVIEW PRIOR TO FABRICATION. FABRICATE FROM REVIEWED DRAWINGS ONLY. PHOTO COPIES AND DUPLICATES OF CONSTRUCTION DOCUMENTS SUBMITTED AS SHOP DRAWINGS WILL BE REJECTED.
7. DOWELS BETWEEN FOOTING AND WALL OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING OR NUMBERS AS THE VERTICAL REINFORCING RESPECTIVELY, UON.
8. WLDING OF REINFORCING STEEL IS NOT PERMITTED UNLESS OTHERWISE SHOWN ON THE DRAWINGS. WELDING OF REINFORCING STEEL SHALL CONFORM TO AWS D1.4 "AWS STRUCTURAL WELDING CODE - REINFORCING STEEL" OF THE AMERICAN WELDING SOCIETY, LATEST EDITION.

**EPOXY MATERIAL FOR EPOXY EMBEDDED CONNECTIONS**

1. REFER TO DRAWINGS FOR AREAS THAT REQUIRE EPOXY EMBEDDED CONNECTIONS.
2. EPOXY SHALL BE INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER INSTALLATION INSTRUCTIONS. HOLES SHALL BE PROPERLY CLEANED BY AIR HOSE AND/OR MANUFACTURER AIR NOZZLES.
3. DO NOT OVER DRILL DEPTH OF HOLE BEYOND WHAT IS REQUIRED BY THE EPOXY MANUFACTURER'S RECOMMENDATIONS. THE DIAMETER OF THE HOLE SHALL FOLLOW THE EPOXY MANUFACTURER'S RECOMMENDATIONS.
4. CONFIRM EPOXY EXPIRATION DATE SHOWN ON PACKAGING.
5. CONTRACTOR SHALL SUBMIT PRODUCT DATA OF PROPOSED PRODUCT INCLUDING INTERNATIONAL CODE COUNCIL EVALUATION REPORTS FOR ENGINEER'S REVIEW PRIOR TO CONSTRUCTION.
6. TO PREVENT DAMAGE, LOCATE EXISTING STEEL REINFORCING BY NON-DESTRUCTIVE METHODS PRIOR TO DRILLING HOLES. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF EXISTING REINFORCING IF DAMAGE IS CAUSED.
7. EPOXY ADHESIVE SHALL BE SIMPSON SET-3G EPOXY, HILTI HIT-HY 200-R V3, OR PRE-REVIEWED EQUAL.

**STRUCTURAL STEEL**

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE "AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. STRUCTURAL STEEL SECTIONS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
  - TUBES = A500, GRADE C
  - CHANNELS, ANGLES, PLATES, MISC. STEEL = A36
  - ANCHOR BOLTS, THREADED RODS = F1554, GRADE 36
3. ALL BOLT ASSEMBLIES SHALL BE HIGH STRENGTH TENSION CONTROL "TWIST OFF" BOLTS PER ASTM F3125 (GRADE F1852) TYPE 1, UNLESS OTHERWISE NOTED. ALL BOLTS SHALL BE TORQUED PER ASTM F3125 UNTIL SPLINE END HAS PROPERLY SHEARED. ALL BOLT ASSEMBLIES SHALL BE PROVIDED WITH AN ASTM A563 DH NUT AND ASTM F436 TYPE 1 PLAIN WASHERS ON EACH FACE UNLESS OTHERWISE NOTED. EACH COMPONENT OF EXTERIOR EXPOSED BOLT ASSEMBLIES SHALL BE MECHANICALLY GALVANIZED PER ASTM B695 CLASS 55 MINIMUM TYPE I.
4. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS OF ALL STRUCTURAL STEEL FOR ENGINEER'S REVIEW BEFORE FABRICATION.
5. ALL EXPOSED STRUCTURAL STEEL AND MISCELLANEOUS METAL SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. ALL WELDS AFTER HOT-DIP GALVANIZING SHALL BE GROUND SMOOTH AND COATED WITH TWO COATS OF ZRC COLD GALVANIZING.
6. ANCHOR BOLTS, THREADED RODS, NUTS, AND WASHERS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
7. BOLT HOLES IN STEEL SHALL BE 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS OTHERWISE NOTED.
8. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PAINTING REQUIREMENTS.

| REVISION NO.  | SYM. | DESCRIPTION   | SHT./OF | DATE             | APPROVED |
|---|------|---|---------|------------------|----------|
|   |      |   |         |                  |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII   |      |   |         |                  |          |
| STRUCTURAL GENERAL NOTES  |      |   |         |                  |          |
| DESIGNED: DN  |      | SUBMITTED: APRIL 2026 <i>GC</i>   |         |                  |          |
| DRAWN: LL   |      | DATE: APRIL 2026  |         |                  |          |
| CHECKED: GG   |      | SCALE: AS NOTED   |         |                  |          |
| APPROVED: <i>George O. Gutierrez Jr.</i>  |      | Dina Lau  |         | DRAWING NO. S001 |          |
| THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.) |      | E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Civil Engineer |         | CHIEF ENGINEER   |          |

**COLD FORMED STEEL**


1. THE FOLLOWING COLD-FORMED STEEL FRAMING NOTES AND REQUIREMENTS APPLY ONLY TO STRUCTURAL FRAMING MEMBERS SHOWN ON STRUCTURAL DRAWINGS.
2. COLD-FORMED STEEL FRAMING SHALL CONFORM TO ASTM A1003 REQUIREMENTS. MEMBERS SHALL HAVE MINIMUM Fy=50 KSI.
3. FRAMING IS NOTED BY STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA) DESIGNATIONS. ALL FRAMING SHALL CONFORM TO STANDARDS AND SECTION PROPERTIES ESTABLISHED BY THE SSMA.
4. MATERIAL SHALL BE GALVANIZED TO ASTM A1003, G90 STANDARDS.
5. BOTTOM TRACKS IN STUD WALLS SHALL BE OVERSIZED WITH 2" FLANGES, UNLESS OTHERWISE NOTED. GAP BETWEEN STUD AND TRACK WEB SHALL NOT EXCEED 1/8".
6. DO NOT BORE OR NOTCH STUDS, TRACKS OR BEAMS, EXCEPT WHERE SHOWN IN DETAILS. OPENINGS NOT SHOWN ON THE DRAWINGS SHALL BE PROPOSED TO THE CONTRACTING OFFICER FOR REVIEW.
7. ALL SCREWED FASTENERS SHALL BE STANDARD THREADED, SELF DRILLING OR SELF-PIERCING FASTENERS. SCREWS WITH LOW-PROFILE HEADS SHALL BE USED WHEN COVERED WITH SHEATHING. ALL SCREWS SHALL BE #10 MINIMUM, UNLESS NOTED OTHERWISE.
8. ALL FABRICATED CONNECTORS AND BOLTS SHALL BE OF A36 STRUCTURAL STEEL AND SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
9. WALLS STUDS SHALL ALIGN WITH JOISTS ABOVE.
10. GIRTS SHALL BE "Z" SHAPED PRECISION ROLL FORMED, MINIMUM 10 GAGE, UNLESS OTHERWISE INDICATED.
11. PURLINS SHALL BE "C" SHAPED PRECISION ROLL FORMED, MINIMUM 10 GAGE, UNLESS OTHERWISE INDICATED.

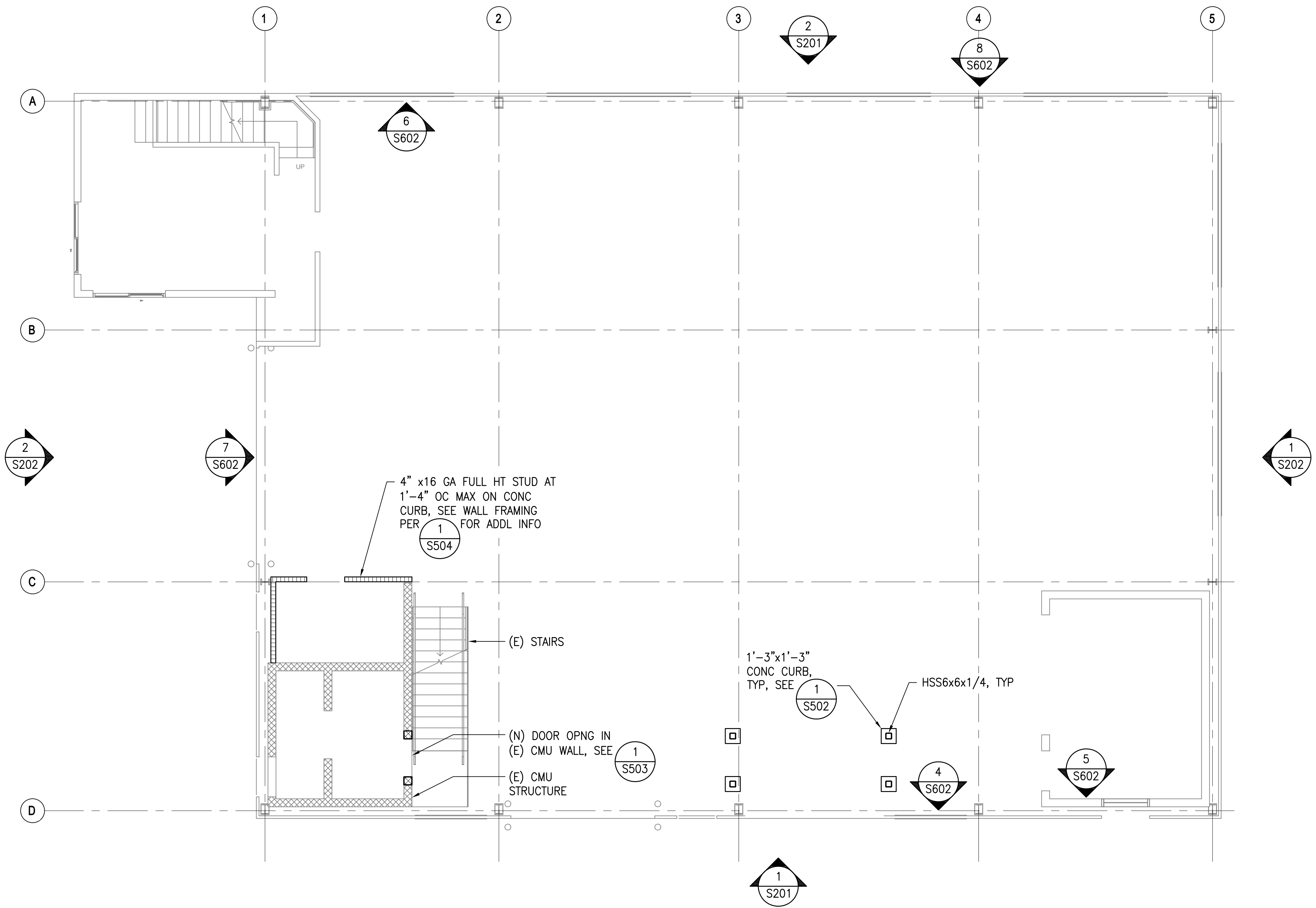
**ABBREVIATION**

- AB ANCHOR BOLT
- ADDL ADDITIONAL
- ARCH ARCHITECTURAL
- BM BEAM
- BOT BOTTOM
- CC CENTER TO CENTER
- CLR CLEAR
- COL COLUMN
- CONC CONCRETE
- CONT CONTINUOUS
- (D) DEEP
- DEG DEGREE
- DIA DIAMETER
- DWG(S) DRAWING(S)
- (E) EXISTING
- EA EACH
- ES EACH SIDE
- EQ EQUAL
- FIN FINISH
- FTG FOOTING
- HDG HOT DIP GALVANIZED
- HORIZ HORIZONTAL
- HT HEIGHT
- LLV LONG LEG VERTICAL
- MAX MAXIMUM
- MECH MECHANICAL
- MIN MINIMUM
- (N) NEW
- OC ON CENTER
- OD OUTSIDE DIAMETER
- OPNG OPENING
- PEMB PRE-ENGINEERED METAL BUILDING
- PL PLATE
- REINF REINFORCING
- REQD REQUIRED
- SCHED SCHEDULE
- SOG SLAB-ON-GRADE
- SS STAINLESS STEEL
- STD STANDARD
- T&B TOP AND BOTTOM
- T&G TONGUE AND GROOVE
- THK THICK
- TYP TYPICAL
- UON UNLESS OTHERWISE NOTED
- VERT VERTICAL
- VIF VERIFY IN FIELD
- W/ WITH

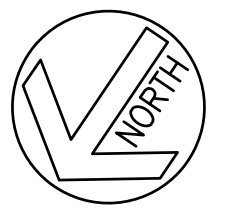
**WELDING**

1. ALL WELDS SHALL BE IN CONFORMITY WITH THE STRUCTURAL WELDING CODE AWS D1.1 OF THE AMERICAN WELDING SOCIETY; USE E70XX ELECTRODES, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. WELDS SHALL BE FULL LENGTH OF JOINT WITH RETURNS UNLESS LENGTH OF WELD IS NOTED ON WELD SYMBOL.
3. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
4. NEW WELDING TO EXISTING FRAMING SHALL BE INSTALLED SLOWLY TO MINIMIZE BUILD-UP OF HEAT IN STEEL. CONTINUOUS WELDS SHALL BE INSTALLED IN INTERMITTENT, STAGGERED WELDS OF 2 INCH MAXIMUM LENGTHS. 2 INCH WELDS SHALL BE ALLOWED TO COOL TO TOUCH BEFORE PROCEEDING WITH NEXT SEGMENT. THE FINAL COMPLETED WELD SHALL BE A CONTINUOUS WELD WITH NO GAPS BETWEEN SEGMENTS.
5. TOUCH-UP COAT ALL WELDS WITH TWO COATS OF "ZRC" OR REVIEWED EQUAL.

| REVISION NO.   | SYM.                            | DESCRIPTION | SHT./OF    | DATE | APPROVED |
|--|---------------------------------|-------------|------------|------|----------|
|  |                                 |             |            |      |          |
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| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII  |                                 |             |            |      |          |
| STRUCTURAL GENERAL NOTES   |                                 |             |            |      |          |
| DESIGNED: DN   | SUBMITTED: APRIL 2026           |             | GC         |      |          |
| DRAWN: LL  | DATE: APRIL 2026                |             |            |      |          |
| CHECKED: GG  | SCALE: AS NOTED                 |             |            |      |          |
| APPROVED: Dina Lau   | E-signed 2026-04-29 01:15PM HST |             | RAWING NO. |      |          |
| CHIEF ENGINEER   | dina.u.lau@hawaii.gov           |             | 0002       |      |          |
| <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.</small> |                                 |             |            |      |          |



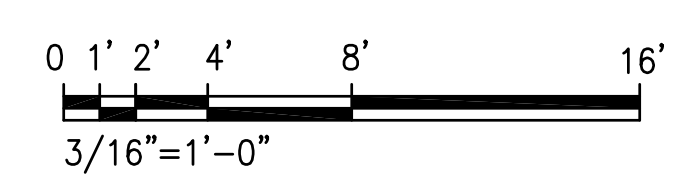
**A FOUNDATION PLAN**  
SCALE: 3/16" = 1'-0"



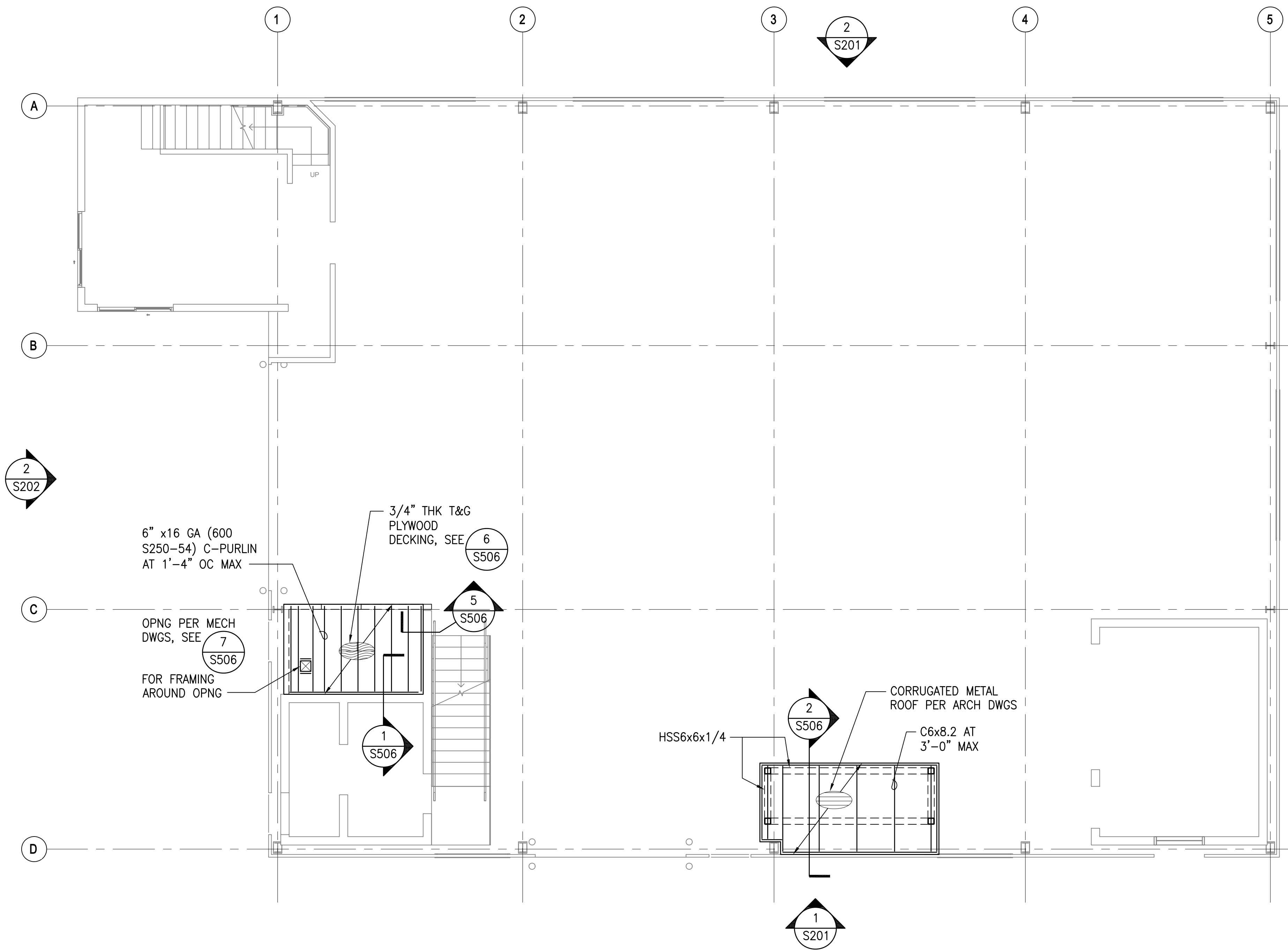
**NOTES**

1. REFER TO GENERAL NOTES ON SHEET S001 FOR STRUCTURAL NOTES AND ADDITIONAL INFORMATION.
2. STRUCTURAL DRAWINGS ARE BASED ON INFORMATION FROM AVAILABLE EXISTING DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR IN FIELD PRIOR TO STARTING WORK. ANY DISCREPANCIES WITH DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION PRIOR TO STARTING WORK.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SLOPES, LOCATIONS OF OPENINGS AND EXISTING INFORMATION NOT SHOWN ON STRUCTURAL DRAWINGS.
4. CONTRACTOR SHALL NOT DAMAGE AND SHALL PROTECT EXISTING OBJECTS SUCH AS BUT NOT LIMITED TO DOWNSPOUTS, HOSE BIBS, FIRE ALARMS, BACKBOARDS AND SIDING PANELS. ALL THESE ITEMS SHALL BE PROPERLY REINSTALLED WHERE AFFECTED BY NEW CONSTRUCTION.
5. ALL NEW STRUCTURAL FRAMING AND CONNECTORS SHALL BE HOT DIPPED GALVANIZED.

**GRAPHIC SCALE**



| REVISION NO.   | SYM. | DESCRIPTION   | SHT./OF | DATE                      | APPROVED |
|--|------|---|---------|---------------------------|----------|
|  |      |   |         |                           |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>FOUNDATION PLAN |      |   |         |                           |          |
|  |      | DESIGNED: DN<br>DRAWN: LL<br>CHECKED: GG<br>APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Chief Engineer |         |                           |          |
| EXPIRATION DATE 04/30/2028<br>   |      | SUBMITTED: APRIL 2026<br>DATE: APRIL 2026<br>SCALE: AS NOTED  |         | RAWING NO.<br><b>S101</b> |          |

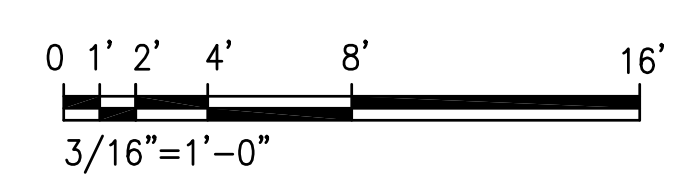


**A MEZZANINE FRAMING PLAN**  
 SCALE: 3/16" = 1'-0"  
 NORTH

**NOTES**

1. REFER TO GENERAL NOTES ON SHEET S001 FOR STRUCTURAL NOTES AND ADDITIONAL INFORMATION.
2. STRUCTURAL DRAWINGS ARE BASED ON INFORMATION FROM AVAILABLE EXISTING DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR IN FIELD PRIOR TO STARTING WORK. ANY DISCREPANCIES WITH DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION PRIOR TO STARTING WORK.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SLOPES, LOCATIONS OF OPENINGS AND EXISTING INFORMATION NOT SHOWN ON STRUCTURAL DRAWINGS.
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5. ALL NEW STRUCTURAL FRAMING AND CONNECTORS SHALL BE HOT DIPPED GALVANIZED.

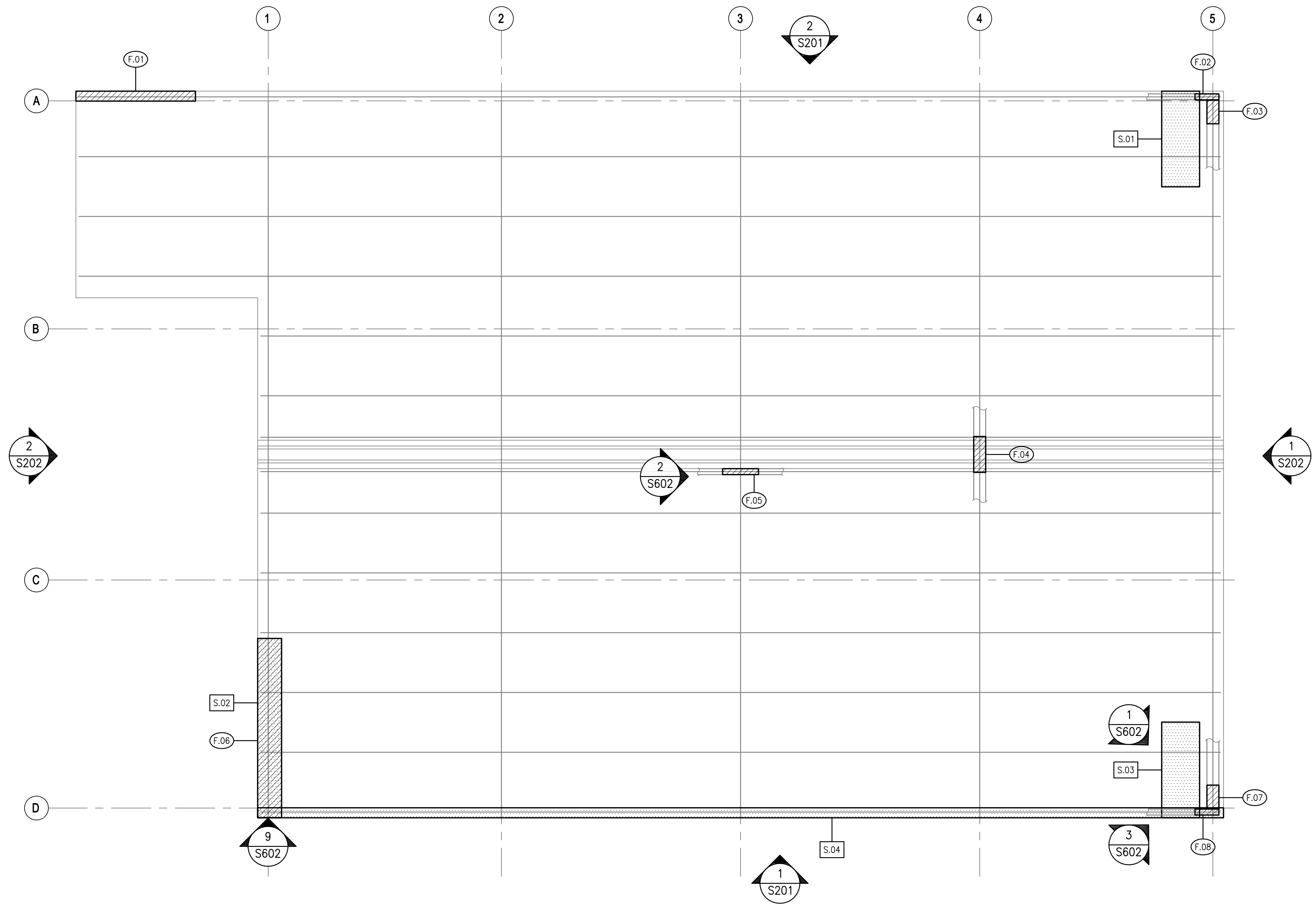
**GRAPHIC SCALE**



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
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|                        |  | STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION  |    |
|                        |  | ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII |    |
| MEZZANINE FRAMING PLAN |  |  |    |
| DESIGNED: DN           | SUBMITTED: APRIL 2026  |  | GC |
| DRAWN: LL              | DATE: APRIL 2026   |  |    |
| CHECKED: GG            | SCALE: AS NOTED  |  |    |
| APPROVED:              | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | DRAWING NO.<br><b>S102</b>   |    |
| CHIEF ENGINEER         | State of Hawaii<br>Civil Engineer                                    |  |    |



**A ROOF FRAMING PLAN**  
 SCALE: 3/16" = 1'-0"

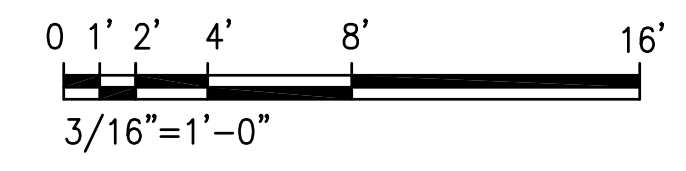
**NOTES**

1. REFER TO GENERAL NOTES ON SHEET S001 FOR STRUCTURAL NOTES AND ADDITIONAL INFORMATION.
2. STRUCTURAL DRAWINGS ARE BASED ON INFORMATION FROM AVAILABLE EXISTING DRAWINGS. ALL EXISTING DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR IN FIELD PRIOR TO STARTING WORK. ANY DISCREPANCIES WITH DRAWINGS SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION PRIOR TO STARTING WORK.
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SLOPES, LOCATIONS OF OPENINGS AND EXISTING INFORMATION NOT SHOWN ON STRUCTURAL DRAWINGS.
4. CONTRACTOR SHALL NOT DAMAGE AND SHALL PROTECT EXISTING OBJECTS SUCH AS BUT NOT LIMITED TO DOWNSPOUTS, HOSE BIBS, FIRE ALARMS, BACKBOARDS AND SIDING PANELS. ALL THESE ITEMS SHALL BE PROPERLY REINSTALLED WHERE AFFECTED BY NEW CONSTRUCTION.
5. ALL NEW STRUCTURAL FRAMING AND CONNECTORS SHALL BE HOT DIPPED GALVANIZED.

**LEGEND**

- (F.XX) STEEL FRAMING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- (S.XX) SIDING / ROOFING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- [Hatched Box] APPROXIMATE AREA OF STEEL FRAMING REPAIR
- [Dotted Box] APPROXIMATE AREA OF SIDING / ROOFING REPAIR

**GRAPHIC SCALE**



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE 04/30/2028

*George O. Gutierrez, Jr.*

**STATE OF HAWAII**  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

**ANUENUE FISHERIES RESEARCH CENTER  
 ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
 (BUILDING IMPROVEMENTS)  
 SAND ISLAND, O'AHU, HAWAII**

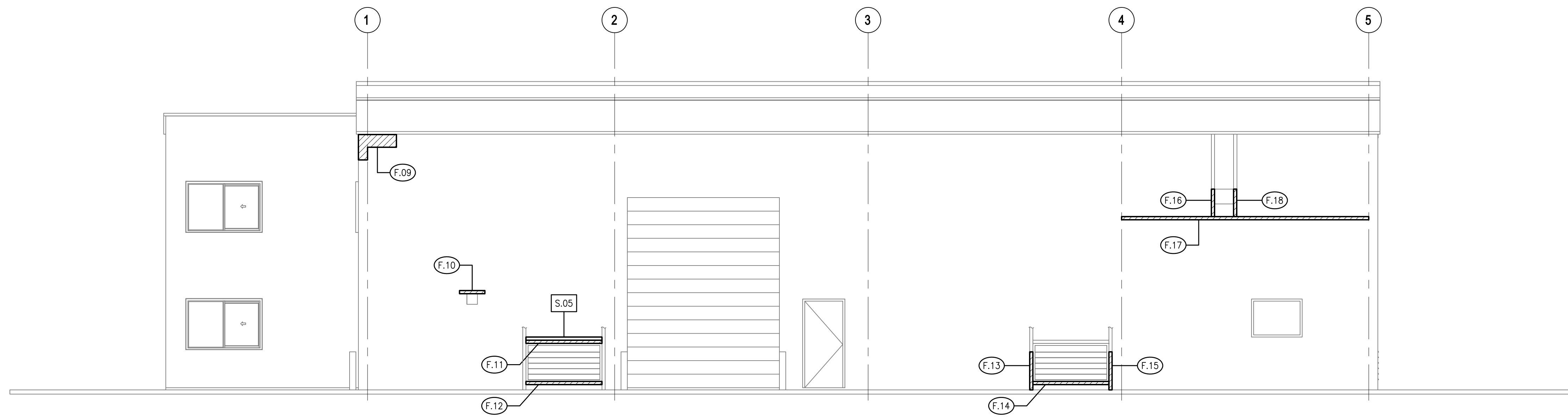
**ROOF FRAMING PLAN**

|              |                                 |
|--------------|---------------------------------|
| DESIGNED: DN | SUBMITTED: APRIL 2026 <i>GC</i> |
| DRAWN: LL    | DATE: APRIL 2026                |
| CHECKED: GG  | SCALE: AS NOTED                 |

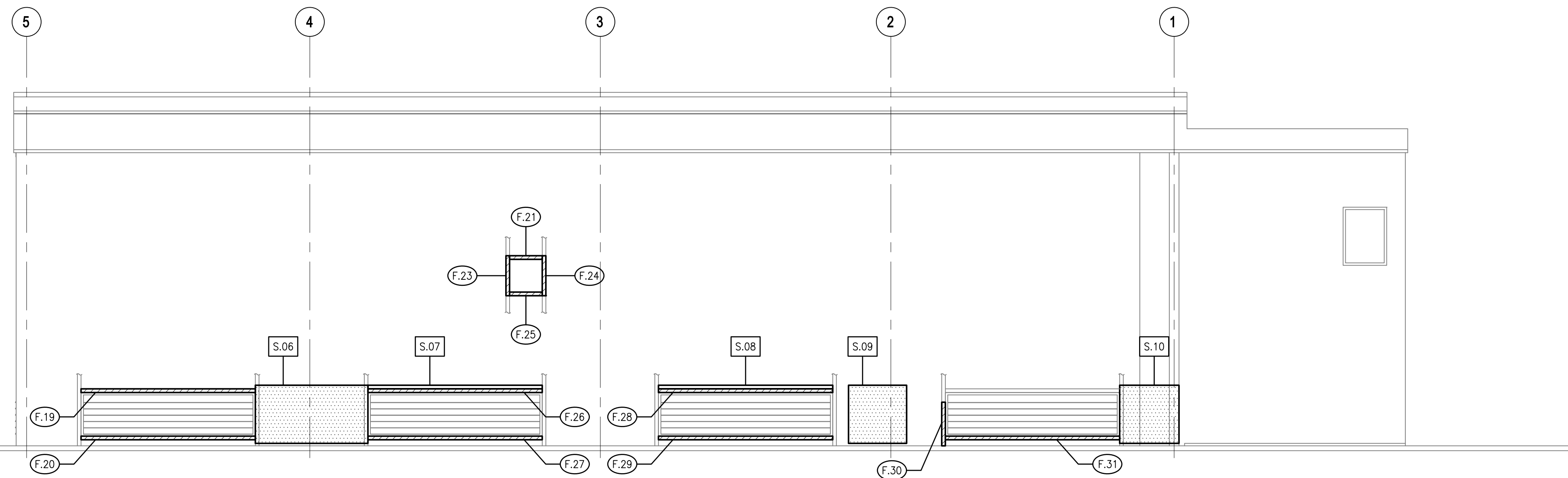
APPROVED: *Dina Lau*  
 E-signed 2026-04-29 01:15PM HST  
 dina.u.lau@hawaii.gov  
 CHIEF ENGINEER State of Hawaii

DRAWING NO.  
**S103**

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.)

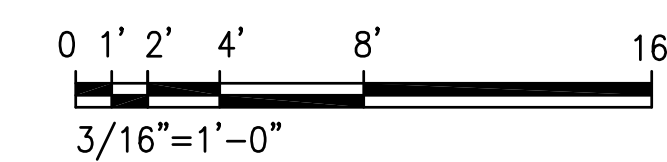


**1 NORTH EXTERIOR ELEVATION**  
SCALE: 3/16" = 1'-0"



**2 SOUTH EXTERIOR ELEVATION**  
SCALE: 3/16" = 1'-0"

GRAPHIC SCALE



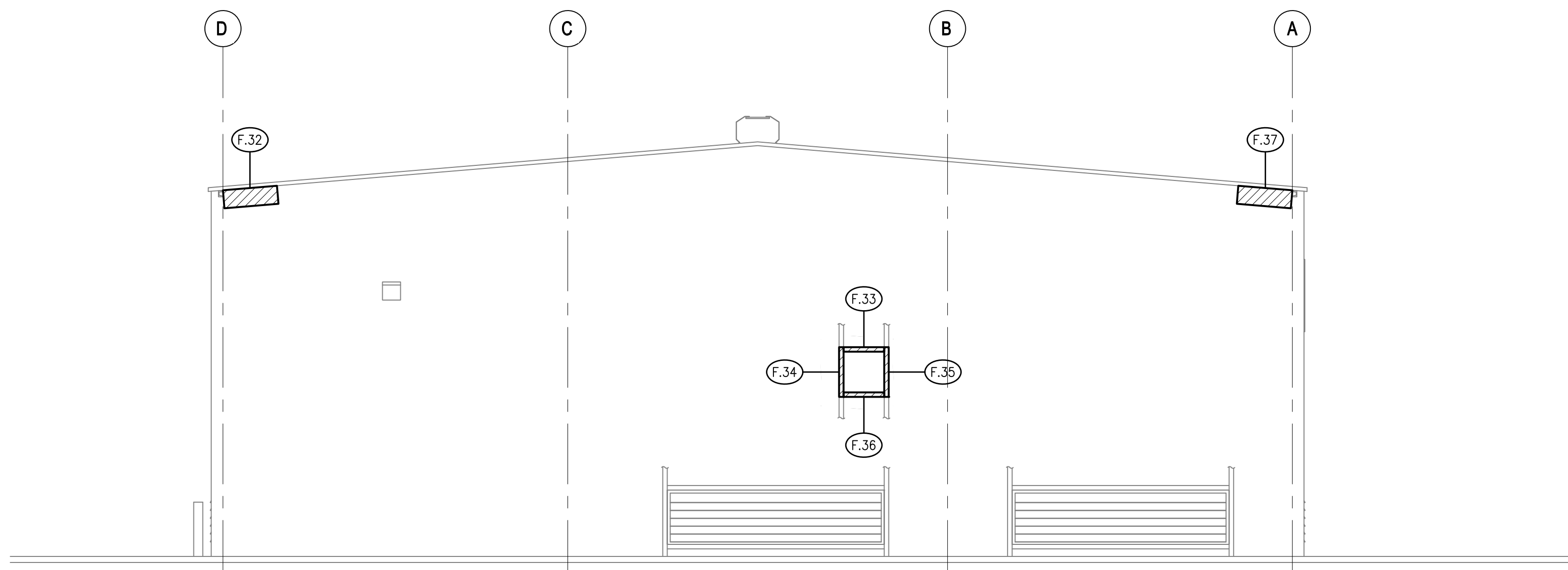
**LEGEND**

- (F.XX) STEEL FRAMING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- [S.XX] SIDING / ROOFING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- [Hatched Box] APPROXIMATE AREA OF STEEL FRAMING REPAIR
- [Stippled Box] APPROXIMATE AREA OF SIDING / ROOFING REPAIR

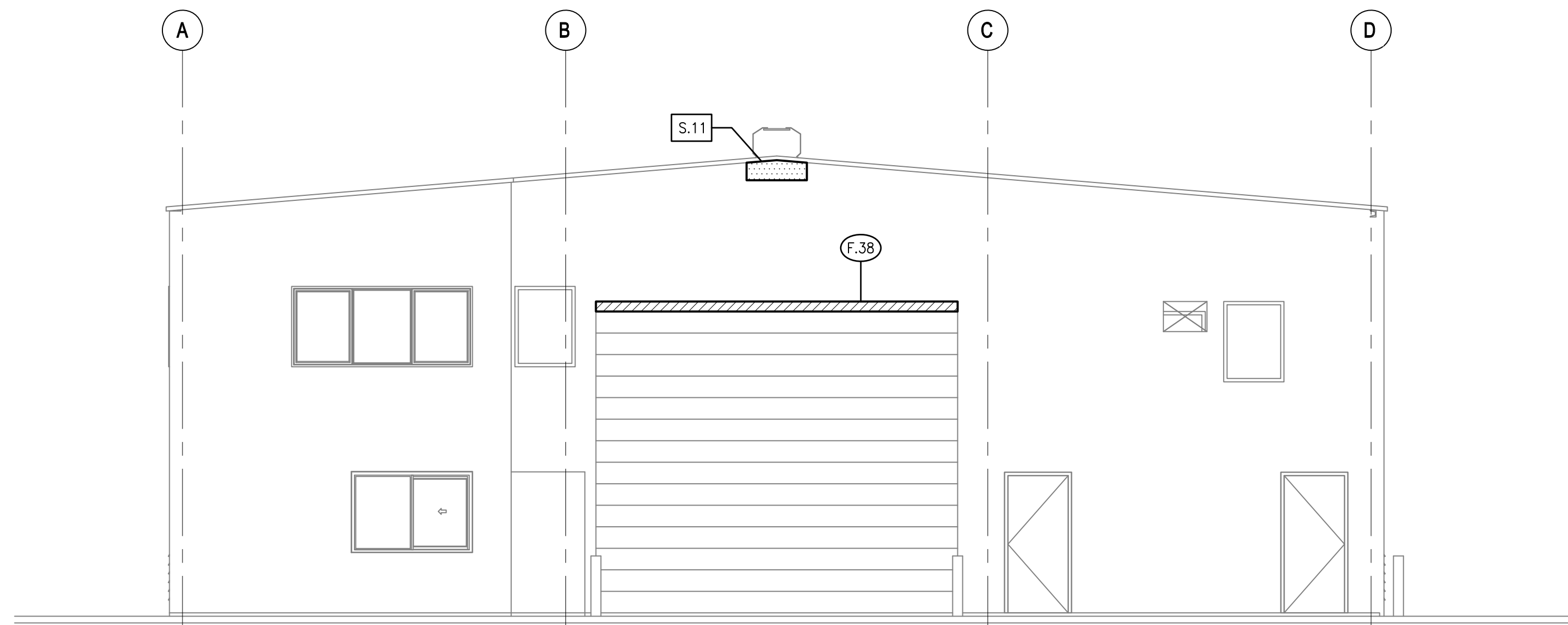
| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
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|   |                       | STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII |                 |
| EXPIRATION DATE 04/30/2028<br>                      |                       | BUILDING ELEVATIONS   |                 |
| DESIGNED: DN  | SUBMITTED: APRIL 2026 | DATE: APRIL 2026  | SCALE: AS NOTED |
| DRAWN: LL   | CHECKED: GG           | APPROVED: Dina Lau  | RAWING NO. S201 |
| CHIEF ENGINEER<br>State of Hawaii<br>Civil Engineer |                       | E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov  |                 |



**1 WEST EXTERIOR ELEVATION**  
SCALE: 3/16" = 1'-0"

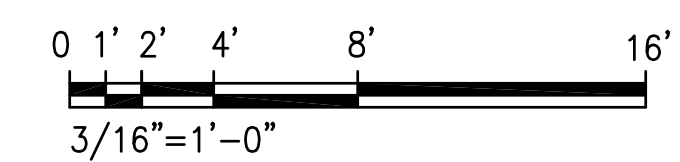


**2 EAST EXTERIOR ELEVATION**  
SCALE: 3/16" = 1'-0"

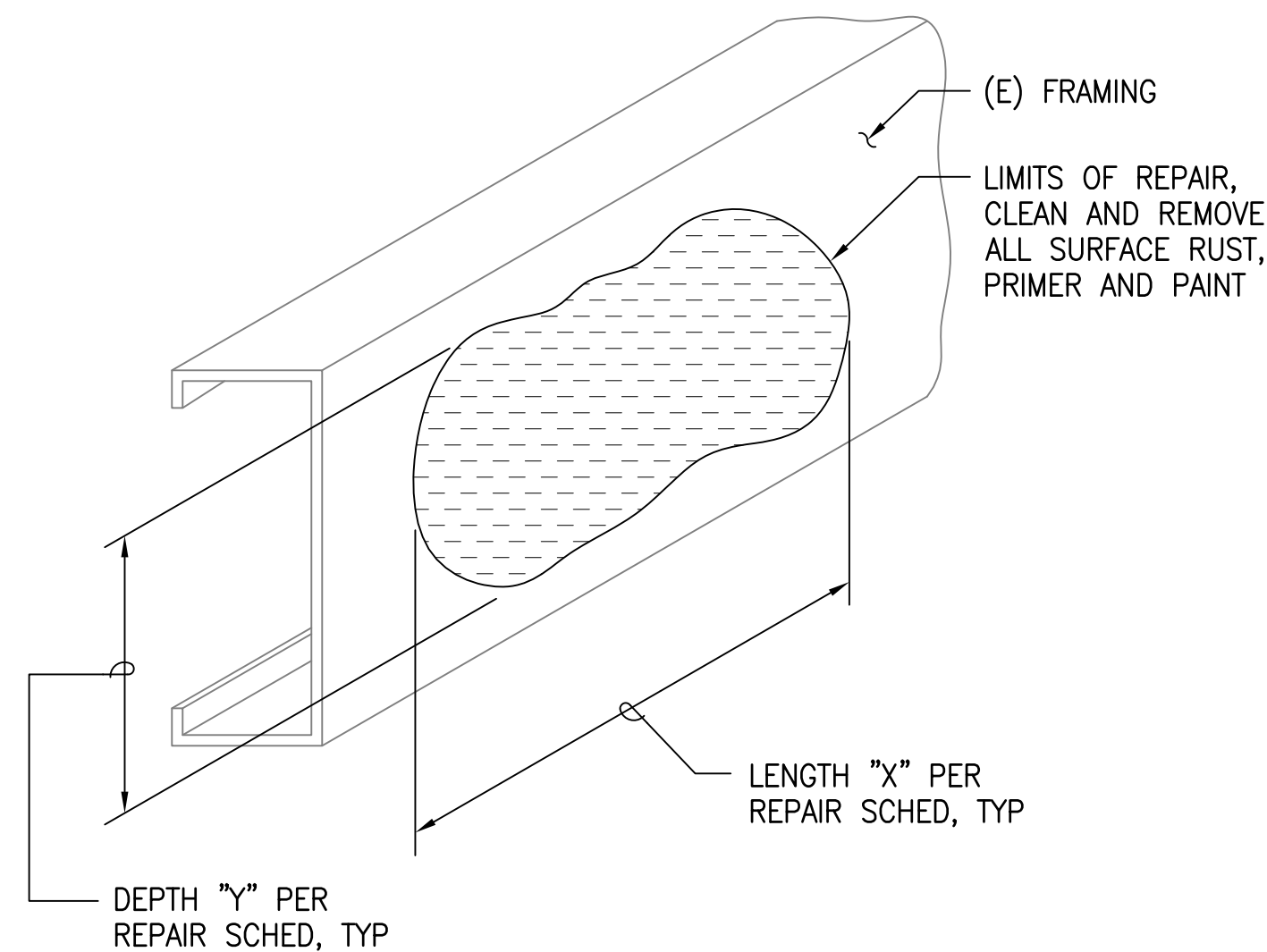
**LEGEND**

- (F.XX) STEEL FRAMING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- [S.XX] SIDING / ROOFING REPAIR NO. CORRESPONDING TO REPAIR SCHEDULE ON SHEET S601
- [Hatched Box] APPROXIMATE AREA OF STEEL FRAMING REPAIR
- [Dotted Box] APPROXIMATE AREA OF SIDING / ROOFING REPAIR

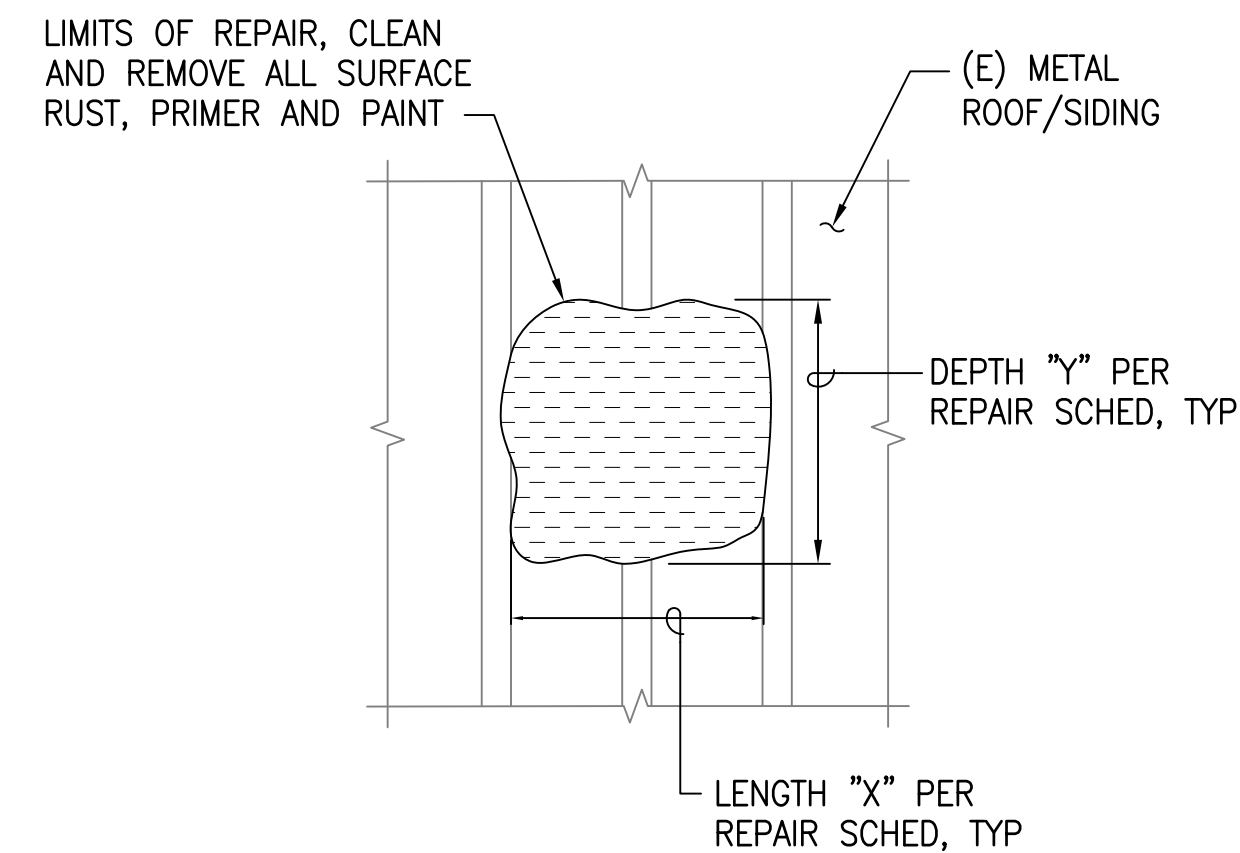
**GRAPHIC SCALE**



| REVISION NO.  | SYM. | DESCRIPTION   | SHT./OF | DATE   | APPROVED |
|---|------|---|---------|--|----------|
|   |      |   |         |  |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>BUILDING ELEVATIONS  |      |   |         |  |          |
|   |      | DESIGNED: DN<br>DRAWN: LL<br>CHECKED: GG  |         | SUBMITTED: APRIL 2026 <i>GC</i><br>DATE: APRIL 2026<br>SCALE: AS NOTED |          |
| APPROVED: <i>g. gutierrez</i><br>CHIEF ENGINEER<br><small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.</small> |      | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Civil Engineer |         | RAWING NO.<br><b>S202</b>  |          |

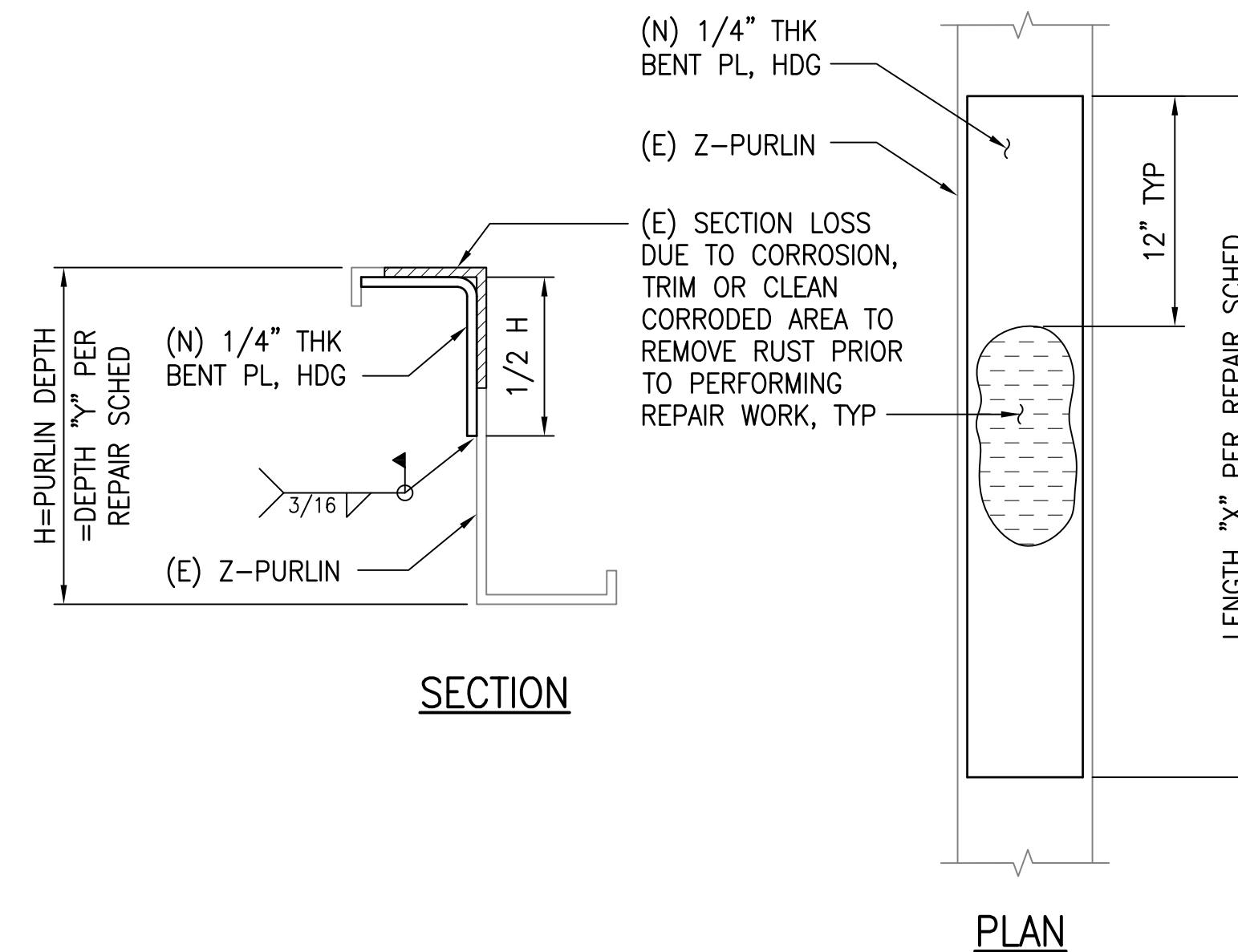


**1 STEEL REPAIR DETAIL - CLEAN AND COAT**  
NOT TO SCALE

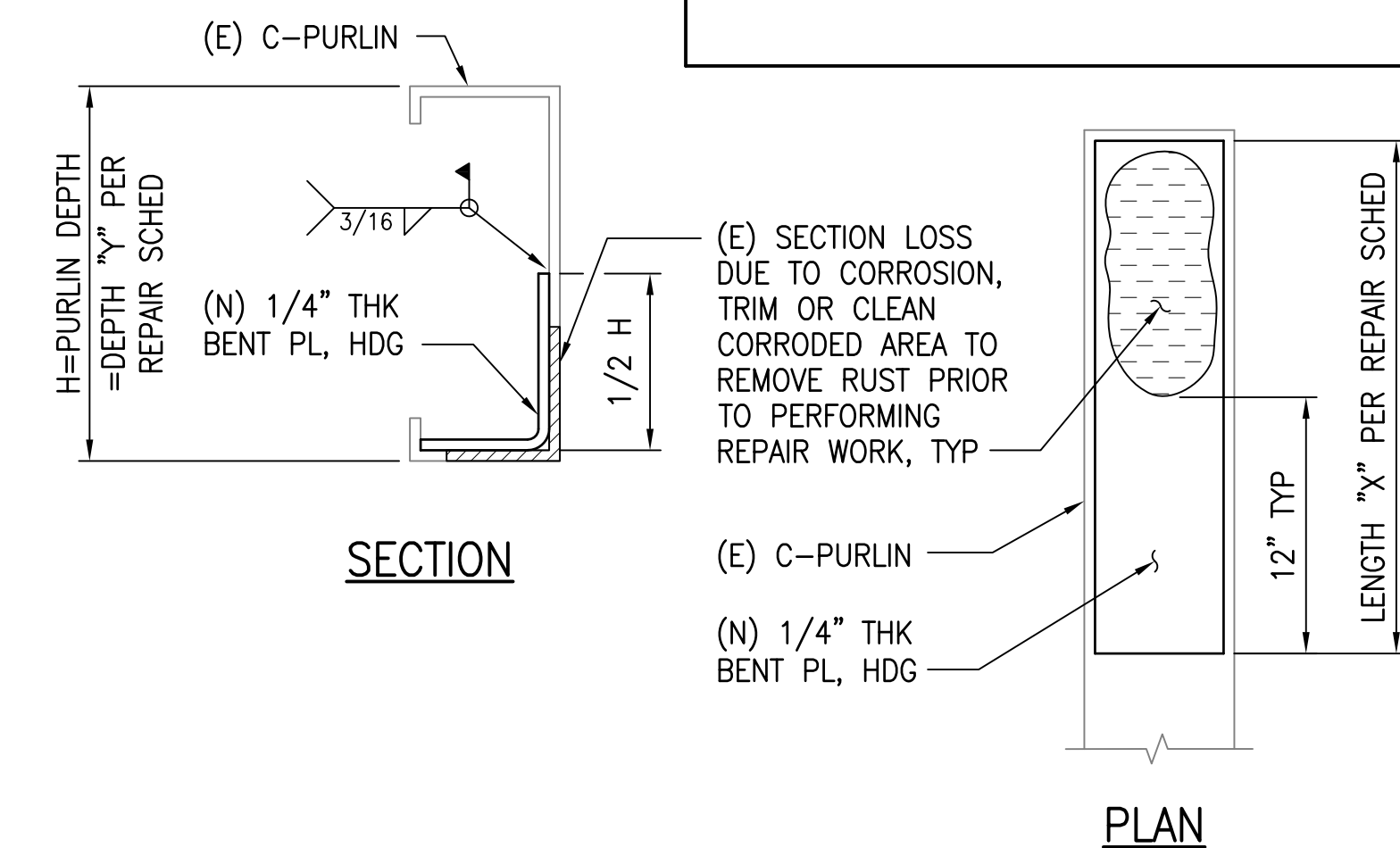


**2 METAL ROOF / SIDING REPAIR DETAIL - CLEAN AND COAT / REMOVE AND REPLACE**  
NOT TO SCALE

NOTE:  
FOR "REMOVE AND REPLACE" CONDITIONS,  
REMOVE AND REPLACE ENTIRE AFFECTED  
PANEL, UNLESS OTHERWISE NOTED.



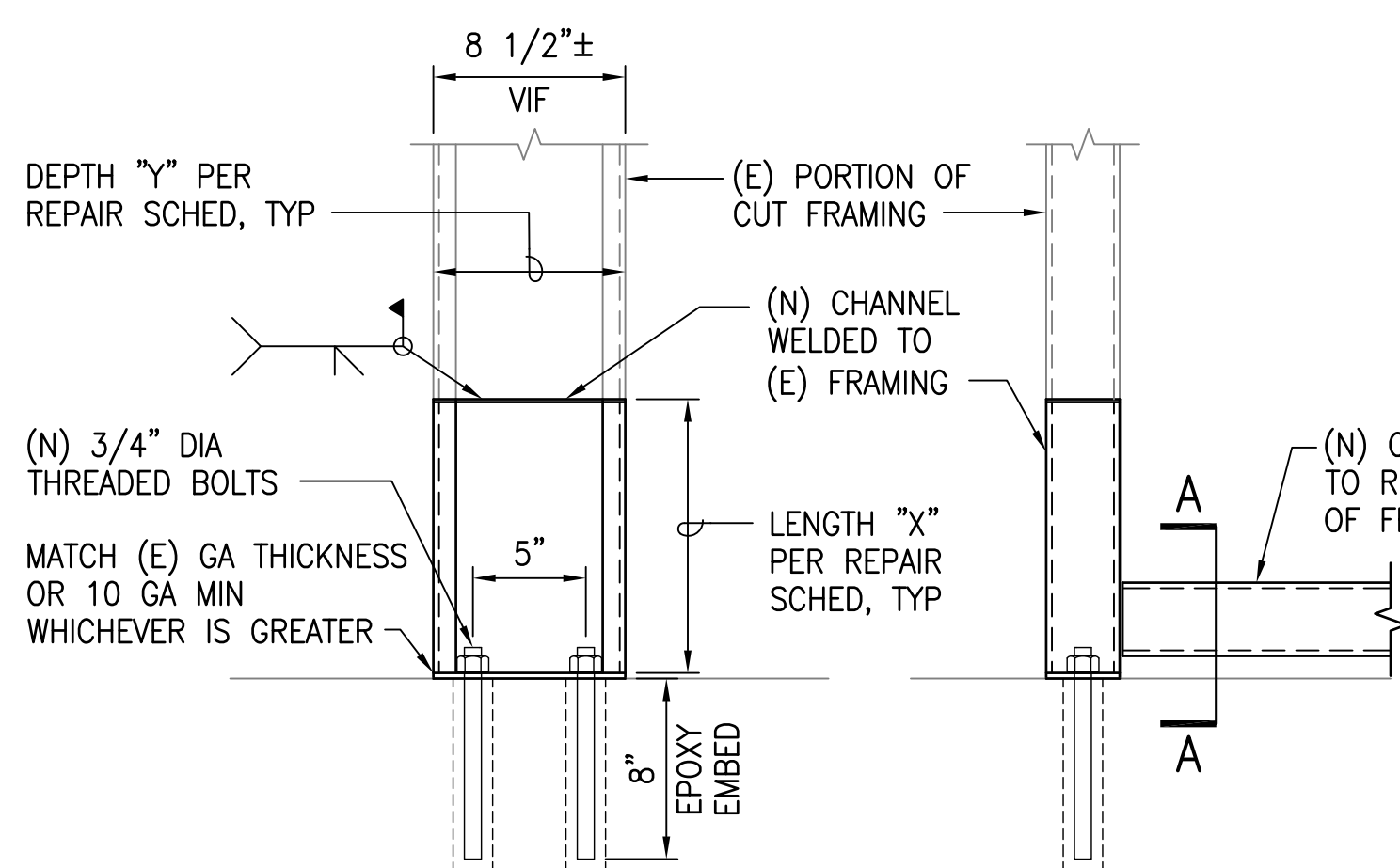
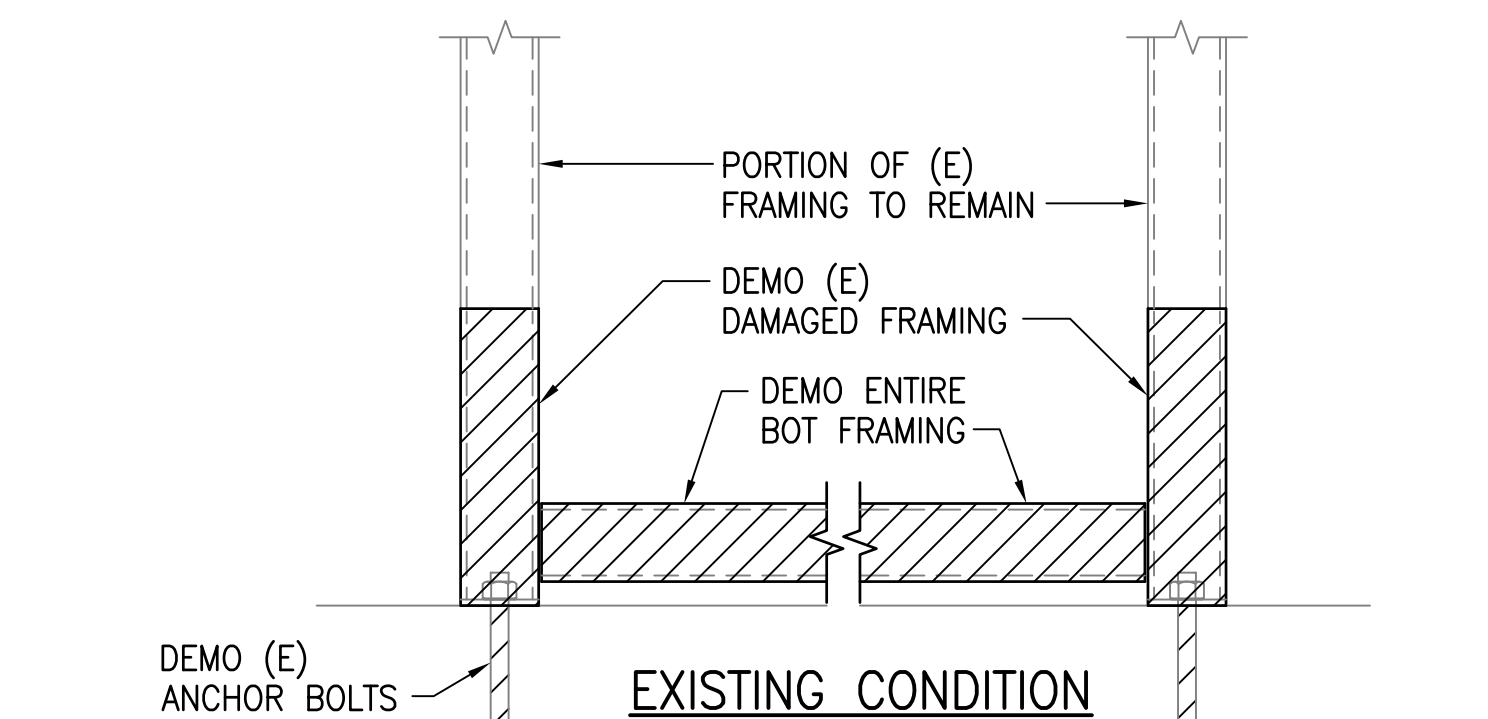
**3 STEEL REPAIR DETAIL**  
NOT TO SCALE



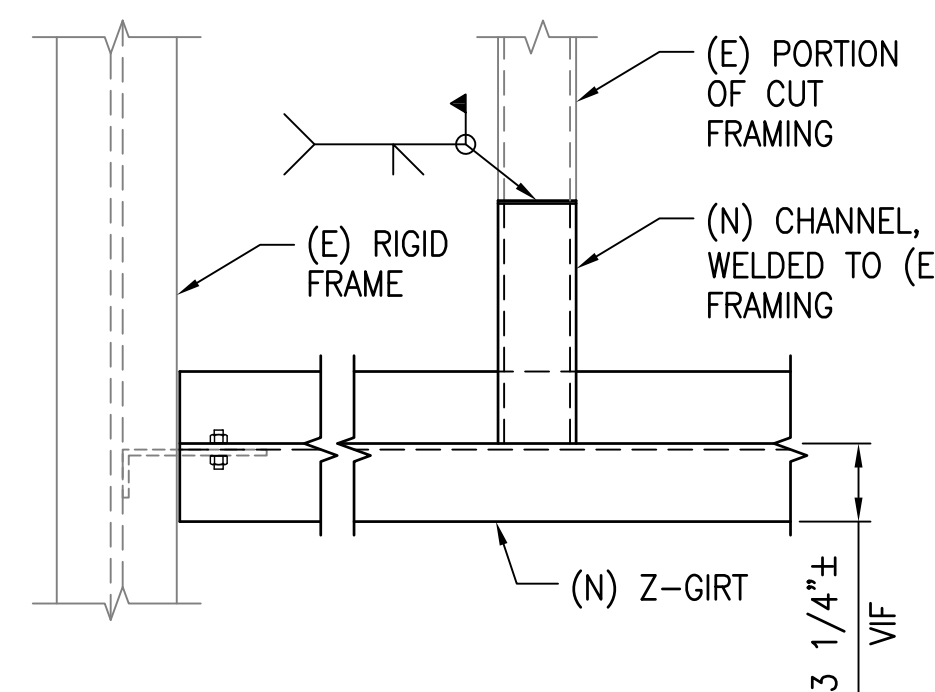
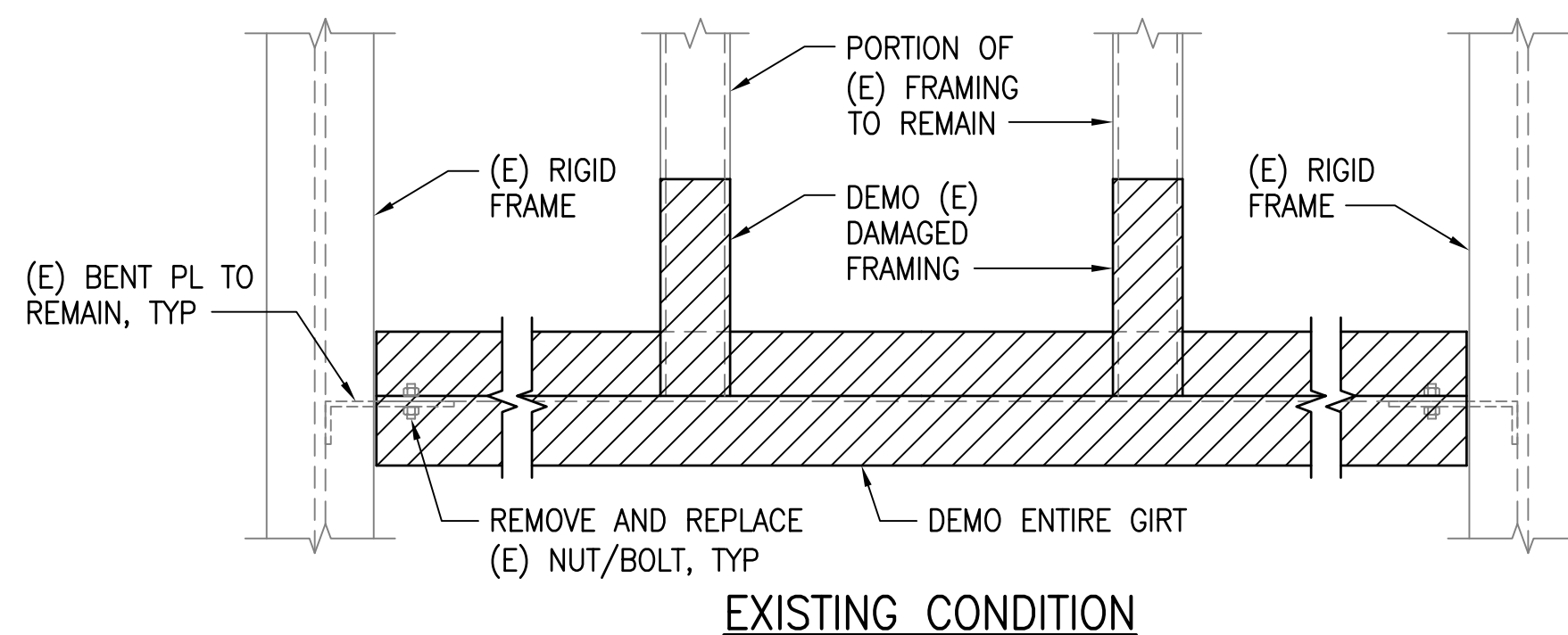
**4 STEEL REPAIR DETAIL**  
NOT TO SCALE

**STEEL FRAMING REPAIR NOTES**

1. REMOVE RUST AND PROVIDE STEEL REPAIRS AS REQUIRED.
2. ALL REPAIRS SHALL BE MADE AFTER RUST HAS BEEN REMOVED TO BARE METAL. ALL RUST AND SCALE SHALL BE REMOVED BY USING HAND TOOLS (EG. WIRE BRUSHES, SCRAPING TOOLS, OR SANDPAPER) OR OTHER CONTRACTING OFFICER APPROVED METHODS.
3. AFTER RUST HAS BEEN REMOVED TO BARE METAL, THE CONTRACTOR SHALL INSPECT FOR UNDETECTED DEFICIENCIES OF THE UNDERLYING METAL. THE CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER OF ANY UNFORESEEN CONDITIONS.
4. WELDING REPAIRS SHALL ADHERE STRICTLY TO WELDING NOTE 4 ON SHEET S001.
5. CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF REPAIR PRIOR TO FABRICATION OF REPAIR MATERIAL.
6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY SHORING AND BRACING NEEDED TO PROTECT STRUCTURE DURING REPAIR WORK.
7. SEE STRUCTURAL GENERAL NOTES ON SHEETS S001 AND S002 FOR MATERIAL GRADES OF REPAIR MATERIAL.
8. BARE METAL REPAIR SHALL BE COATED WITH TWO COATS OF ZRC COLD GALVANIZING. SEE ARCHITECTURAL DRAWINGS FOR PAINT REQUIREMENTS.
9. REPAIRS SHALL MATCH EXISTING MEMBER SIZES AND EXISTING CONNECTION DETAILS, UNLESS OTHERWISE NOTED.
10. ALL GALVANIZED STRUCTURAL MEMBERS SHALL BE COATED WITH EPOXY IF CONNECTING TO OR IN CONTACT WITH ALUMINUM, STAINLESS STEEL, OR OTHER DISSIMILAR METALS.
11. SEALANTS (AS REQUIRED AT STEEL FRAMING REPAIRS) SHALL BE MARINE GRADE.

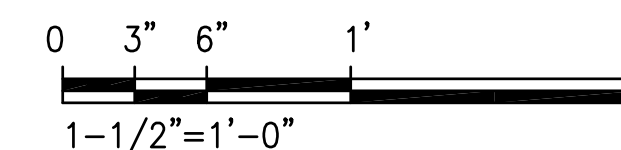


**5 STEEL REPAIR DETAIL**  
SCALE: 1-1/2" = 1'-0"

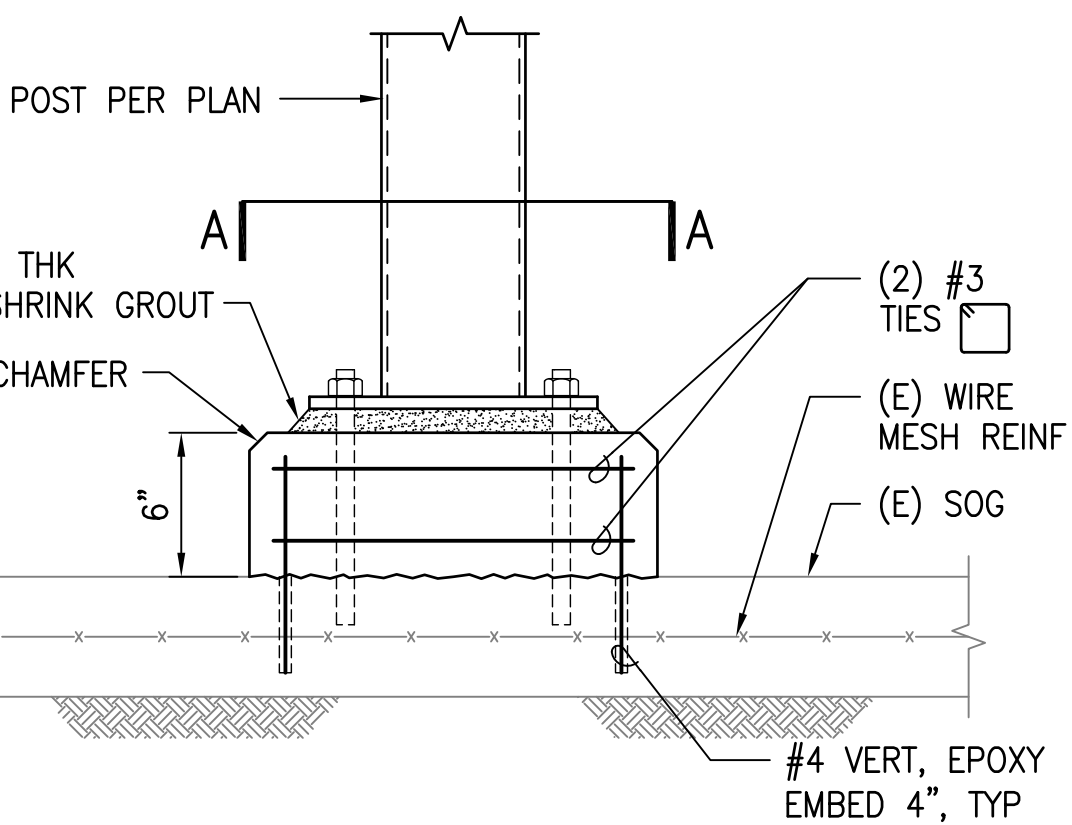
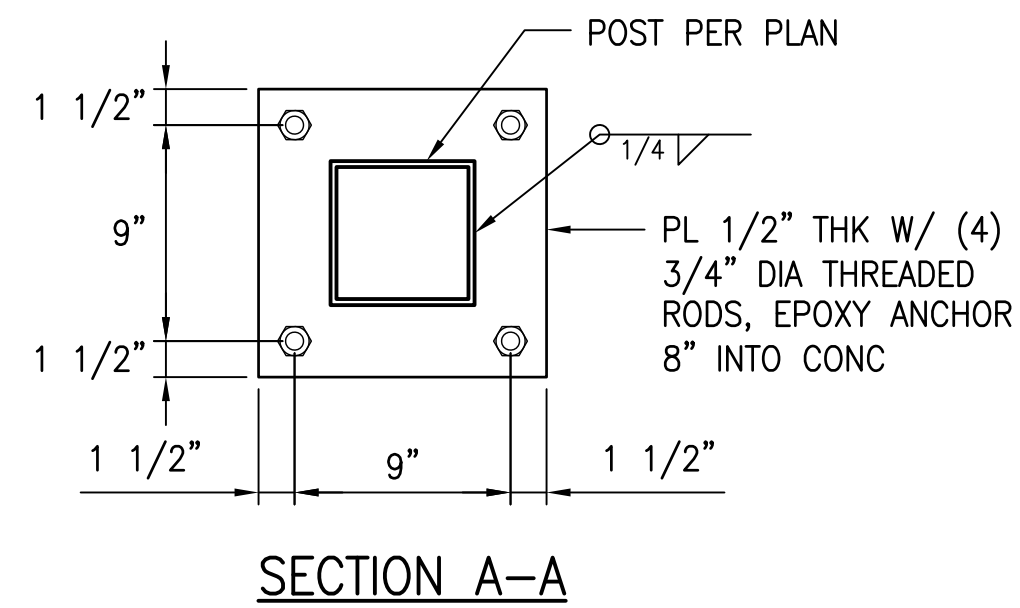


**6 STEEL REPAIR DETAIL**  
SCALE: 1-1/2" = 1'-0"

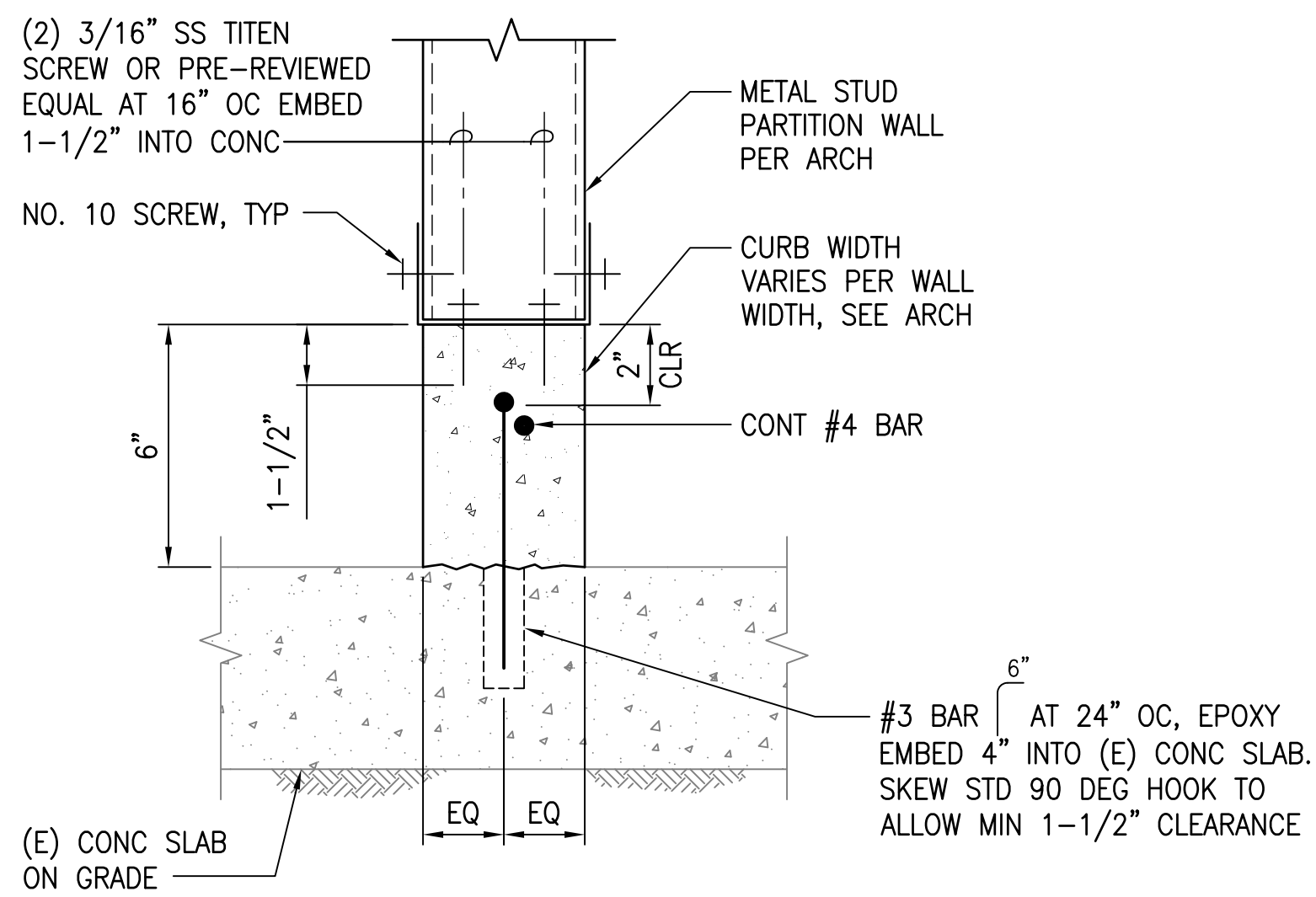
**GRAPHIC SCALE**



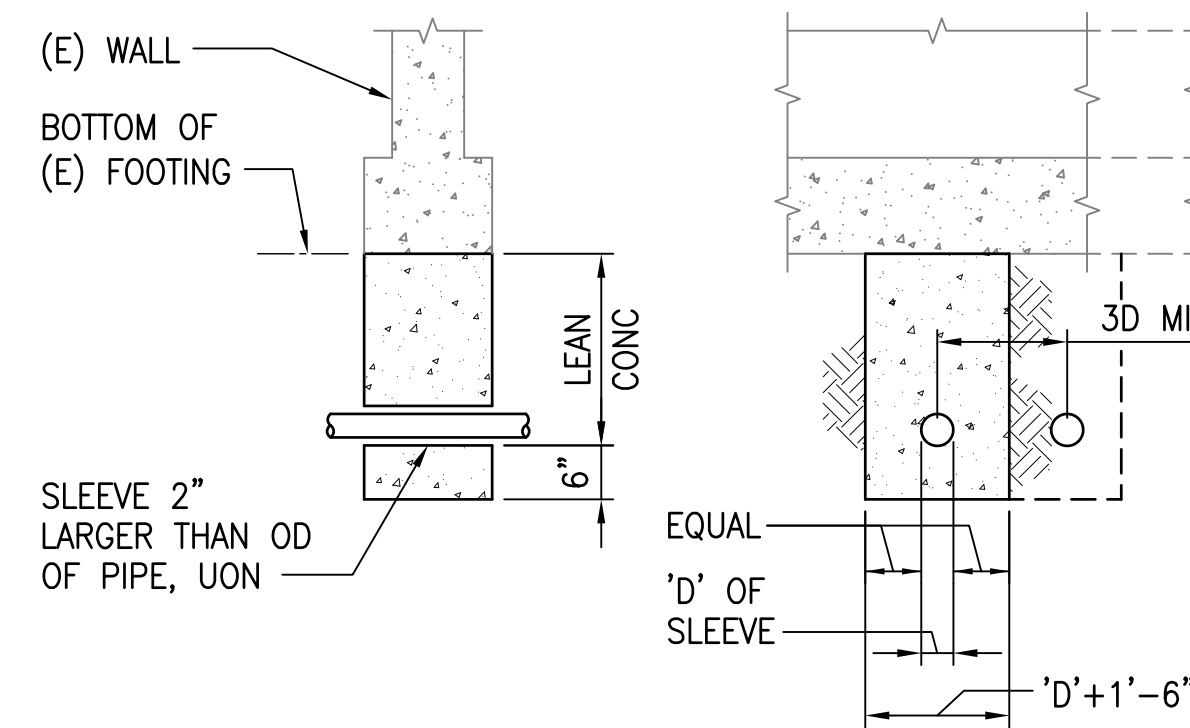
| REVISION NO.  | SYM.                  | DESCRIPTION | SHT./OF                                | DATE | APPROVED |
|---|-----------------------|-------------|--|------|----------|
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII |                       |             |  |      |          |
| STEEL REPAIR DETAILS  |                       |             |  |      |          |
| DESIGNED: DN  | SUBMITTED: APRIL 2026 |             | RAWING NO.                             |      |          |
| DRAWN: LL   | DATE: APRIL 2026      |             | S501                                   |      |          |
| CHECKED: GG   | SCALE: AS NOTED       |             | APPROVED: Dina Lau                     |      |          |
| CHIEF ENGINEER  |                       |             | E-signed 2026-04-29 01:15PM HST        |      |          |
| State of Hawaii   |                       |             | dina.u.lau@hawaii.gov                  |      |          |
| Civil Engineer  |                       |             | 16-115-2 DEPARTMENT, EFFECTIVE 6/29/04 |      |          |



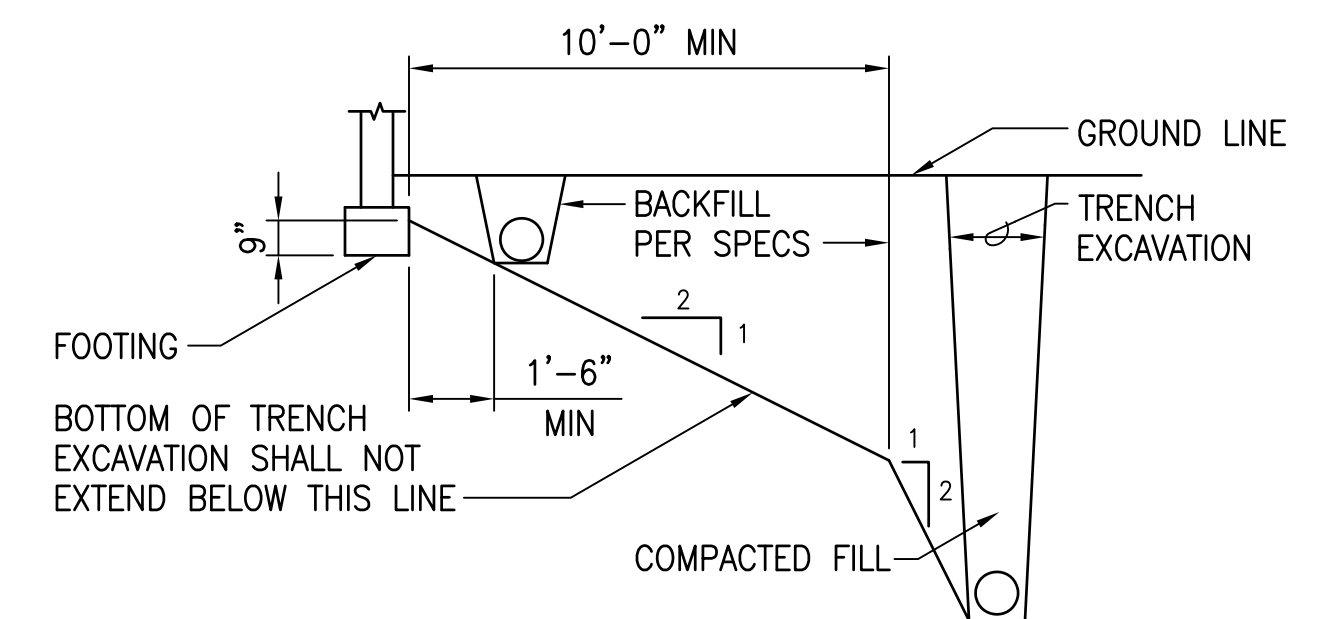
**1 POST FOOTING**  
SCALE: 1-1/2" = 1'-0"



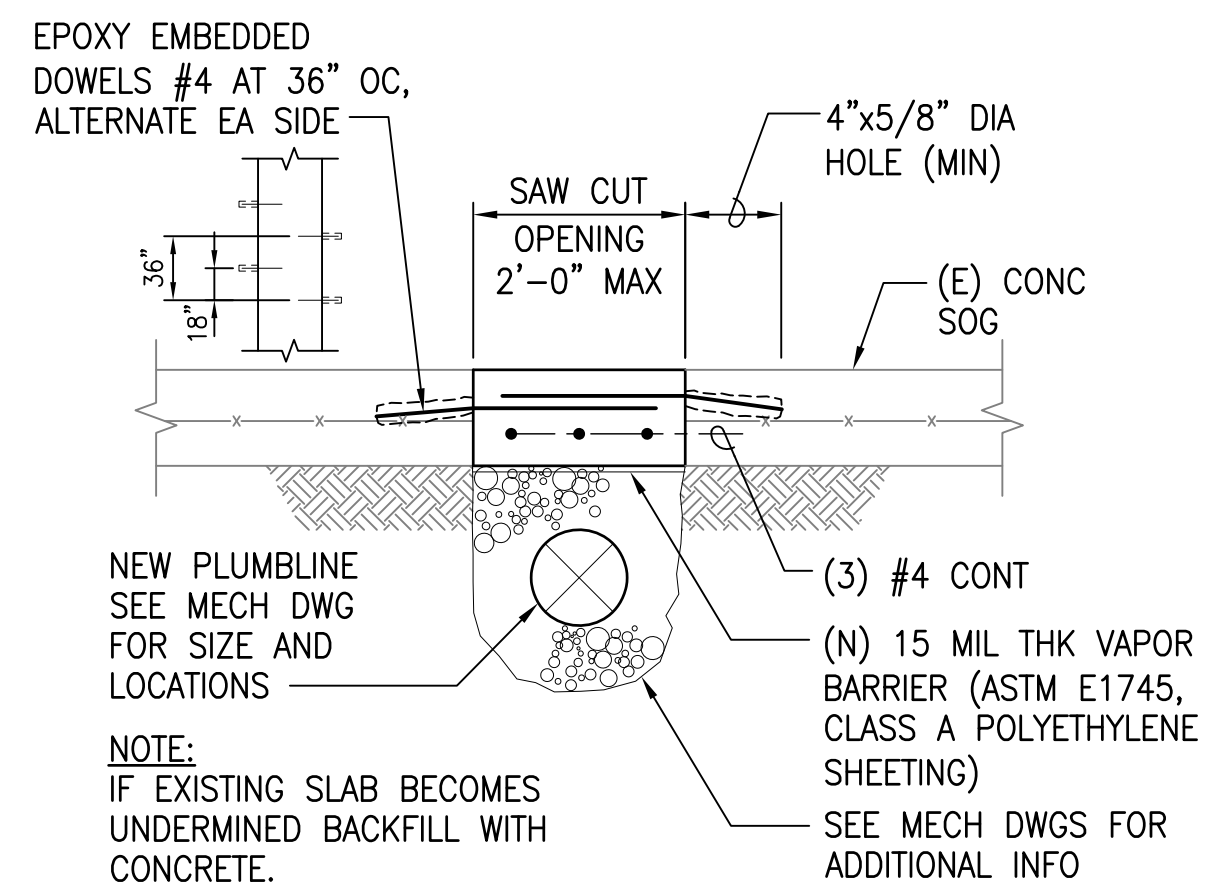
**2 CURB DETAIL**  
SCALE: 3" = 1'-0"



**3 PIPE BELOW EXISTING FOOTING**  
NOT TO SCALE

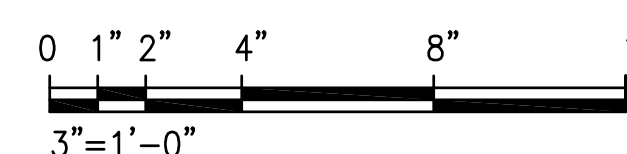
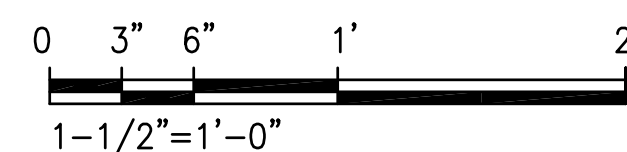


**4 EXCAVATIONS PARALLEL TO FTG**  
NOT TO SCALE



**5 TRENCH DETAIL**  
NOT TO SCALE

GRAPHIC SCALE



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE 04/30/2028

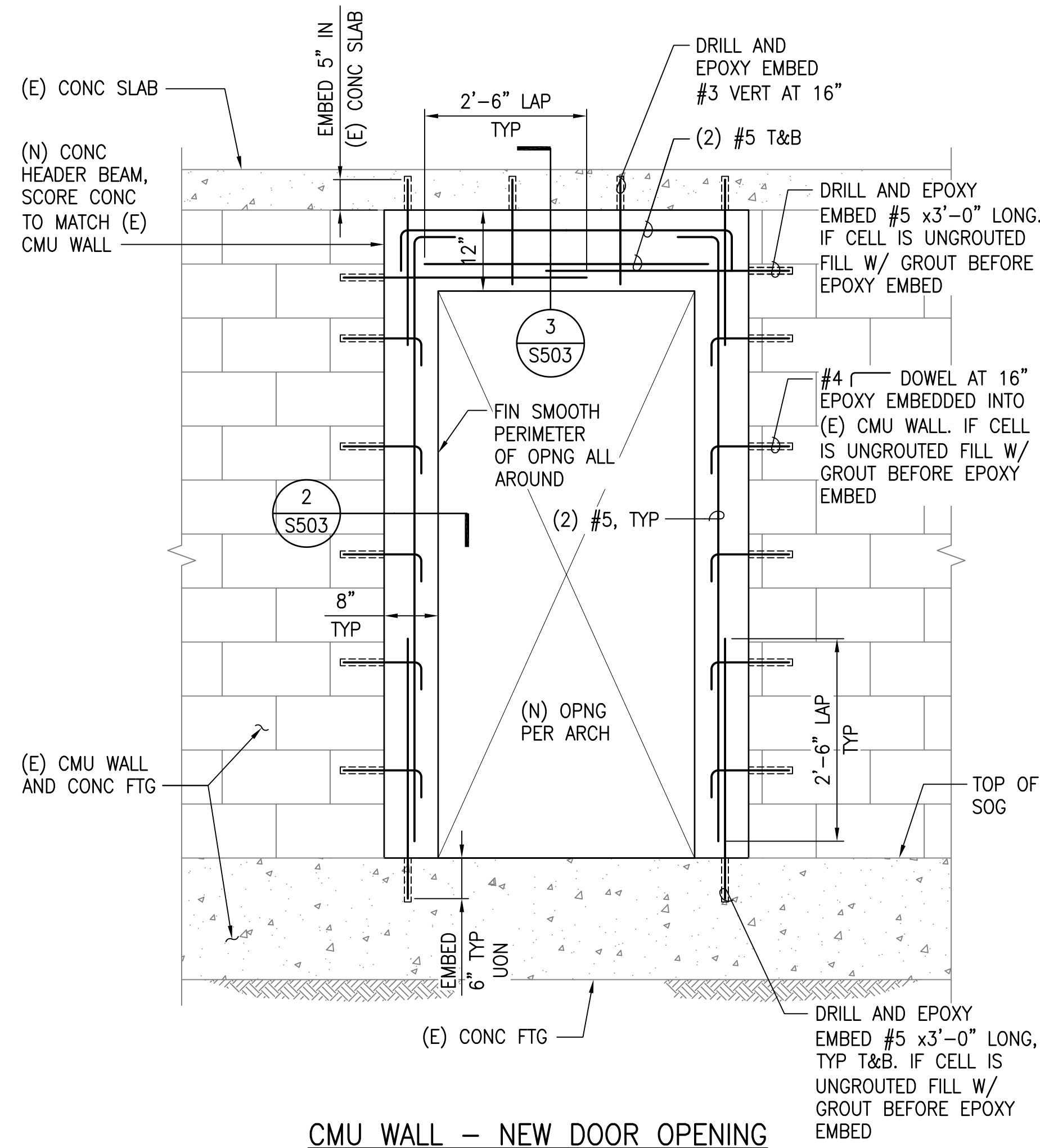
*George O. Gutierrez, Jr.*

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

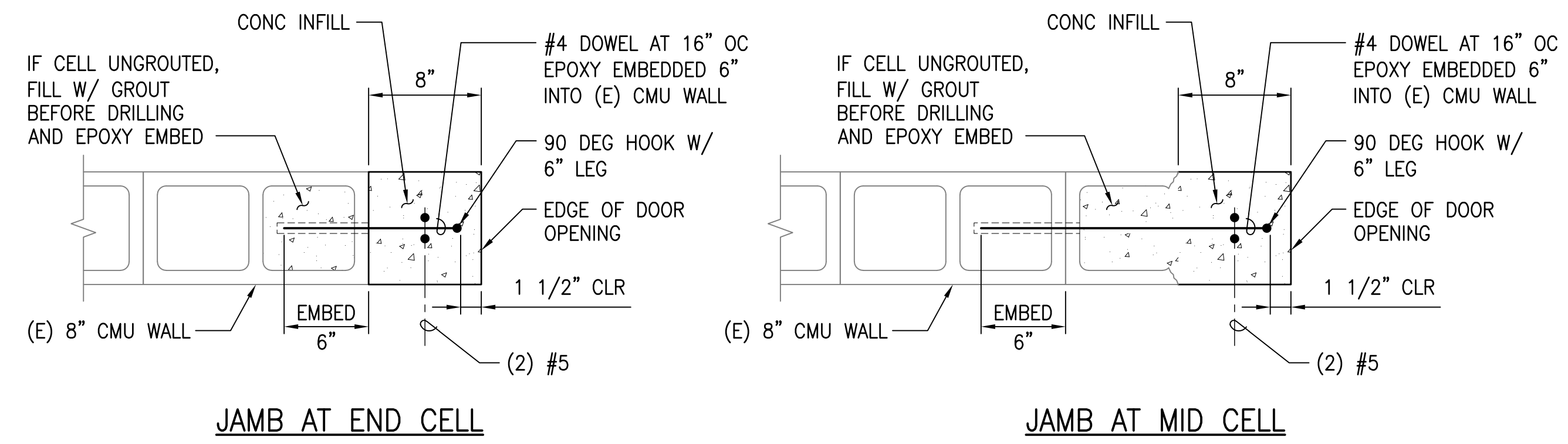
CANOPY DETAILS

|  |                                 |
|--|---------------------------------|
| DESIGNED: DN   | SUBMITTED: APRIL 2026 <i>GC</i> |
| DRAWN: LL  | DATE: APRIL 2026                |
| CHECKED: GG  | SCALE: AS NOTED                 |
| APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | RAWING NO.<br><b>5502</b>       |
| CHIEF ENGINEER<br>State of Hawaii<br>Civil Engineer                            |                                 |

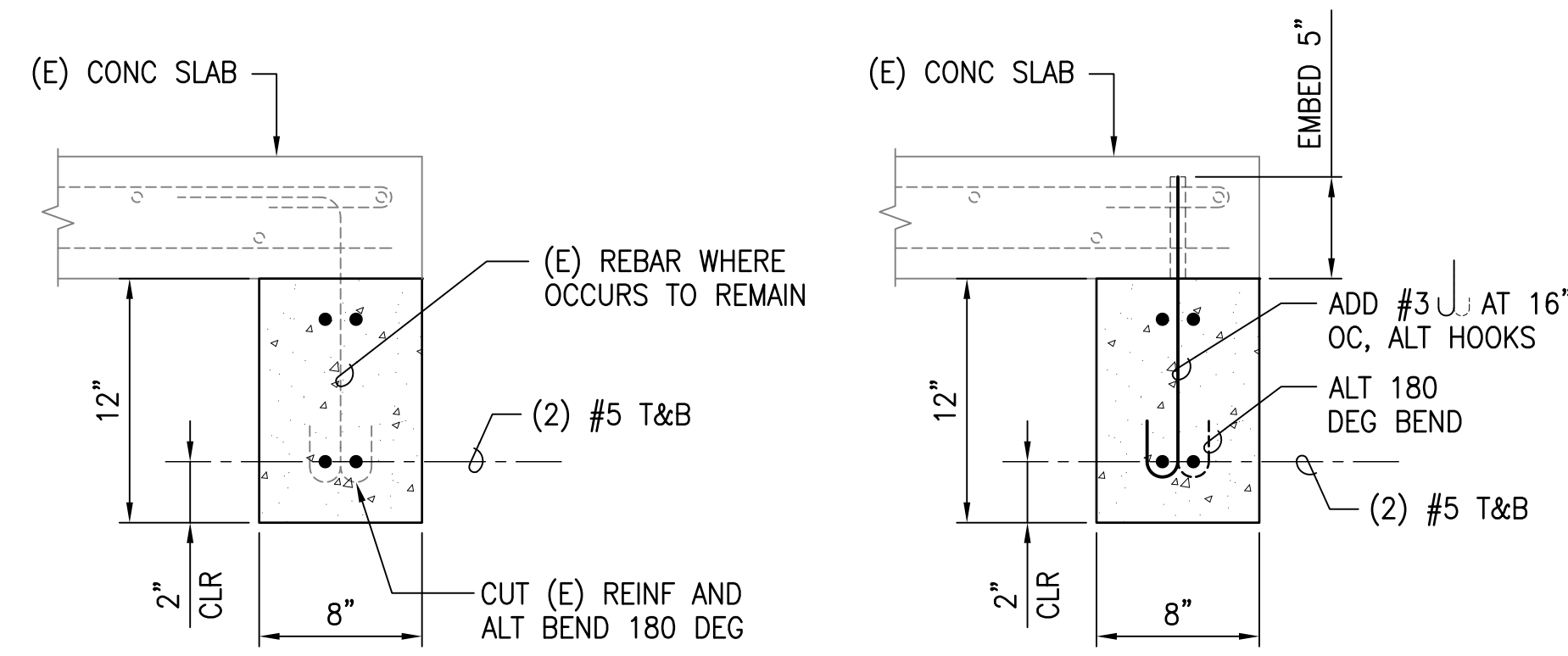


CMU WALL - NEW DOOR OPENING

**1** ELEVATION - NEW DOOR OPENING IN EXISTING CMU WALL  
SCALE: 3/4" = 1'-0"

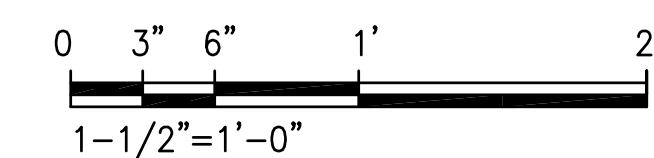
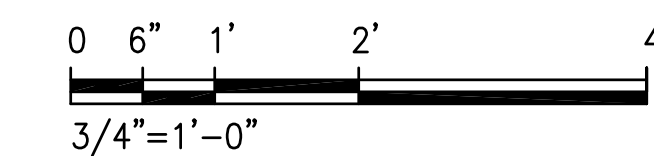


**2** CONCRETE INFILL AT EXISTING CMU WALL  
SCALE: 1-1/2" = 1'-0"

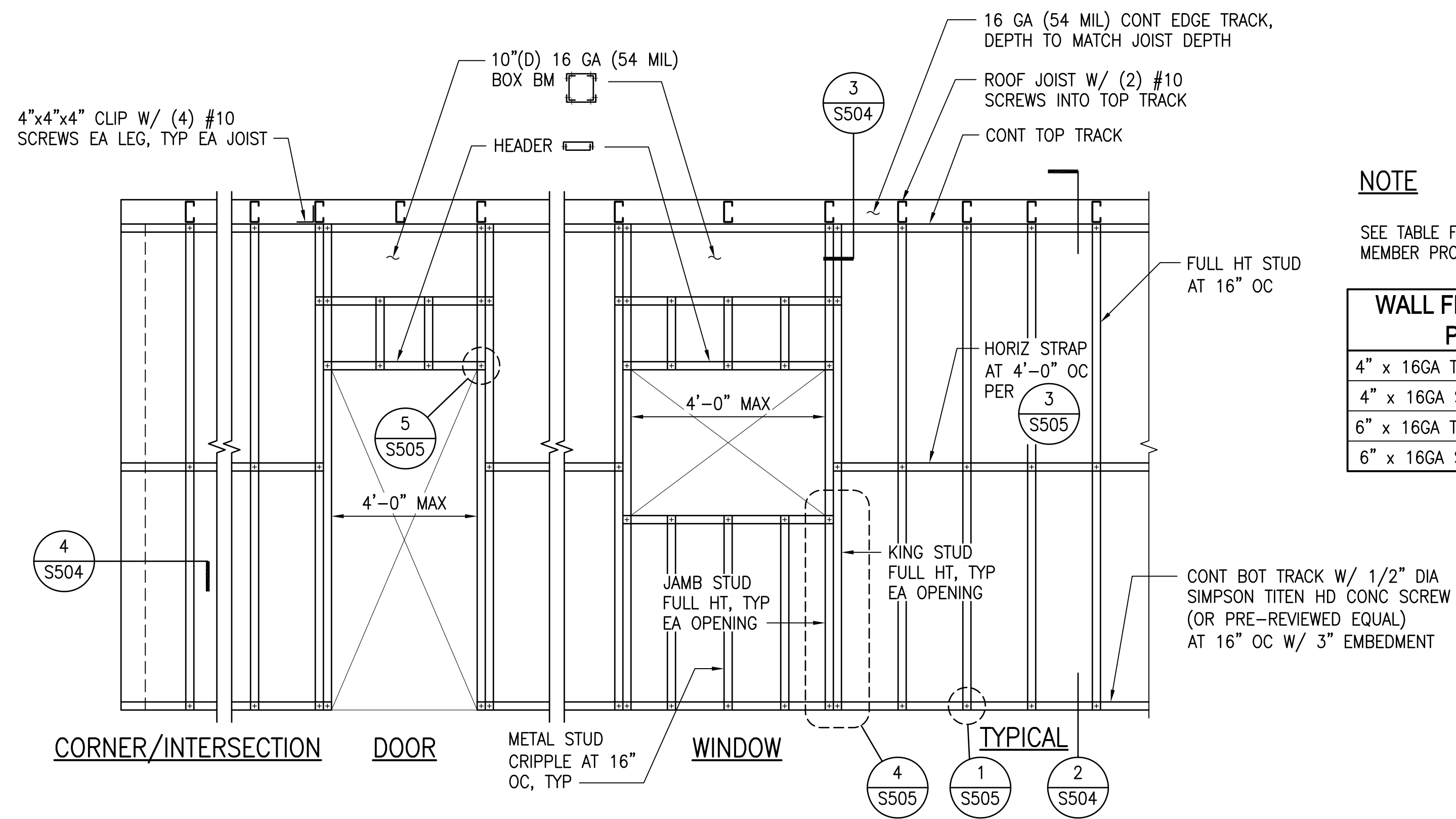


**3** CONCRETE INFILL AT EXISTING CMU WALL  
SCALE: 1-1/2" = 1'-0"

GRAPHIC SCALE



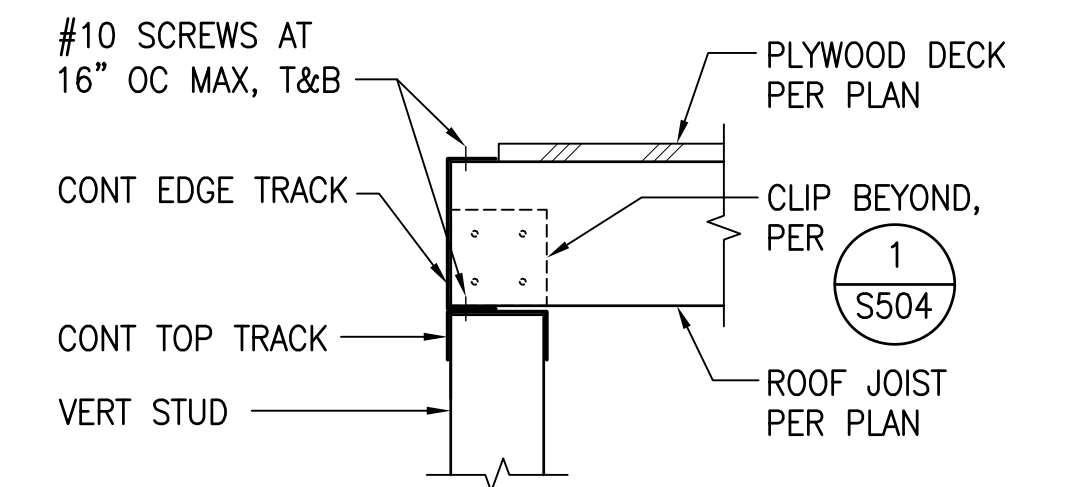
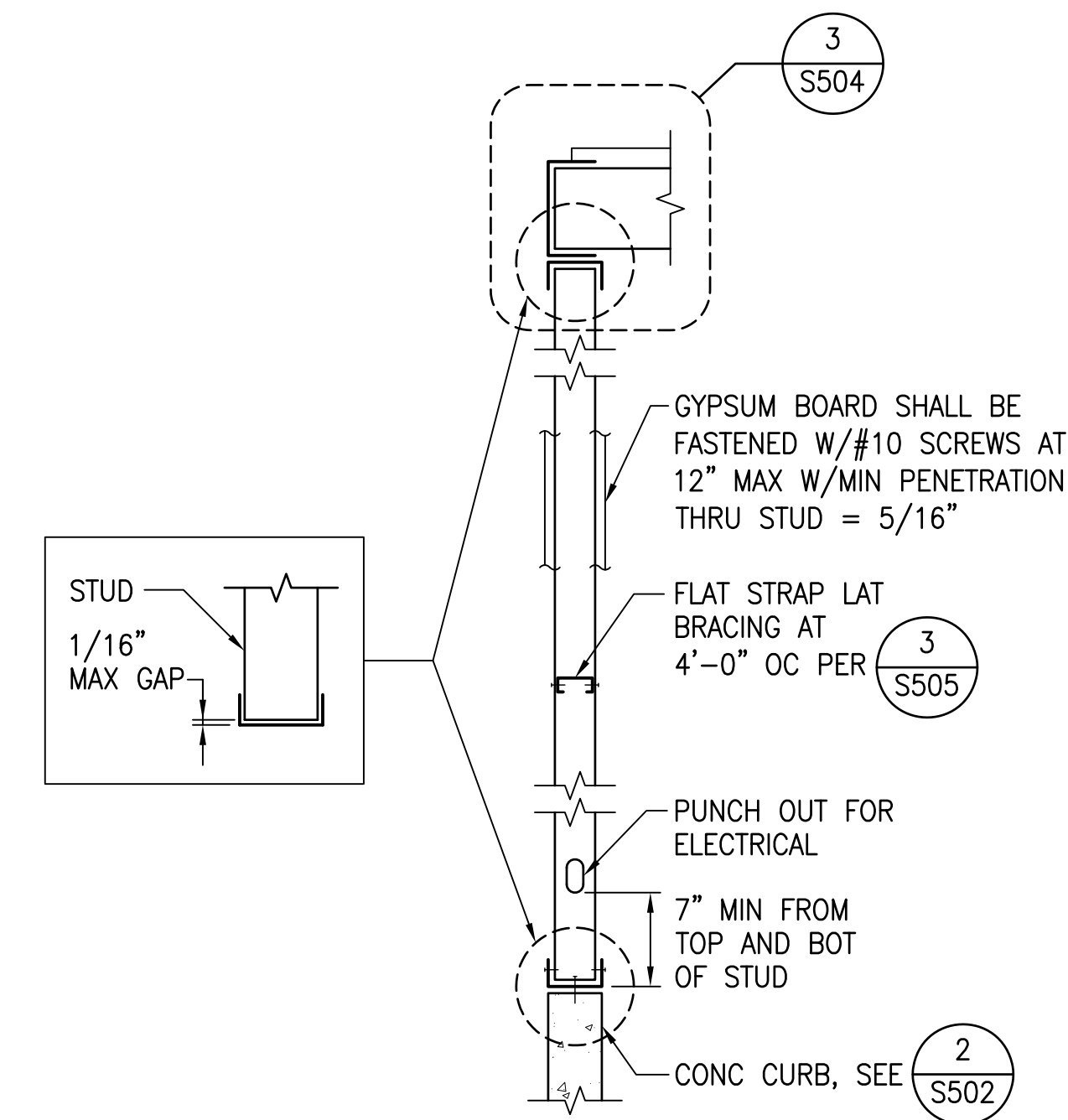
| REVISION NO.  | SYM.   | DESCRIPTION | SHT./OF                   | DATE | APPROVED |
|---|--|-------------|---------------------------|------|----------|
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>CMU WALL DETAILS |  |             |                           |      |          |
| DESIGNED: DN  | SUBMITTED: APRIL 2026  |             | AC                        |      |          |
| DRAWN: LL   | DATE: APRIL 2026   |             |                           |      |          |
| CHECKED: GG   | SCALE: AS NOTED  |             |                           |      |          |
| APPROVED: <i>George O. Gutierrez Jr.</i>  | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov |             | RAWING NO.<br><b>S503</b> |      |          |
| CHIEF ENGINEER<br>State of Hawaii<br>Civil Engineer   |  |             |                           |      |          |



**NOTE**

SEE TABLE FOR WALL FRAMING MEMBER PROPERTIES.

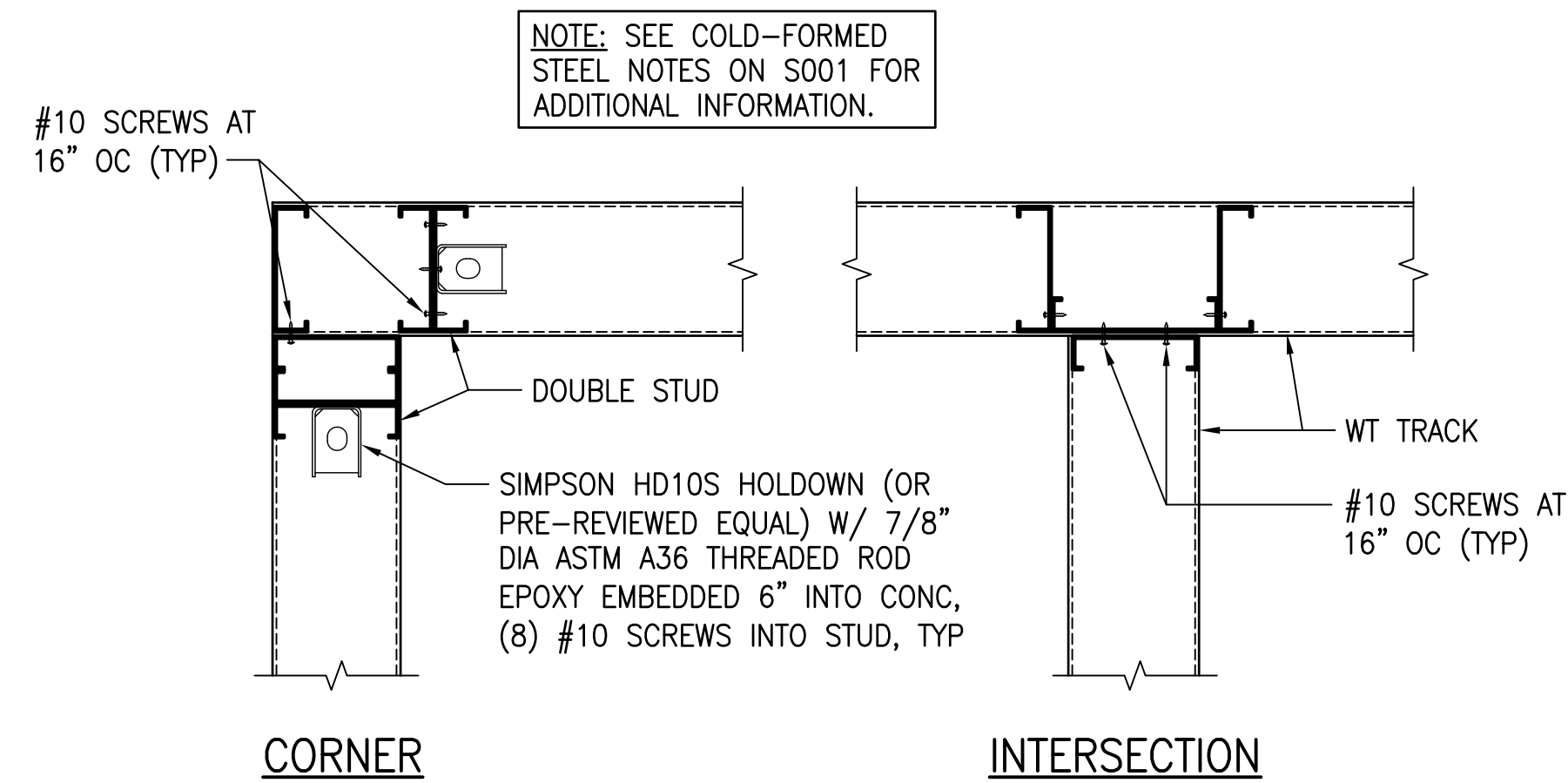
| WALL FRAMING MEMBERS PROPERTIES |               |
|---------------------------------|---------------|
| 4" x 16GA TRACKS                | 400 T200 - 54 |
| 4" x 16GA STUDS                 | 400 S200 - 54 |
| 6" x 16GA TRACKS                | 600 T200 - 54 |
| 6" x 16GA STUDS                 | 600 S200 - 54 |



**1 WALL FRAMING DETAIL**  
NOT TO SCALE

**2 SECTION**  
NOT TO SCALE

**3 ROOF CONNECTION**  
SCALE: 1-1/2" = 1'-0"



**4 FRAMING DETAILS**  
NOT TO SCALE

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

WALL FRAMING DETAILS

DESIGNED: DN  
DRAWN: LL  
CHECKED: GG

APPROVED: Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov

CHIEF ENGINEER  
Civil Engineer

RAWING NO. **S504**

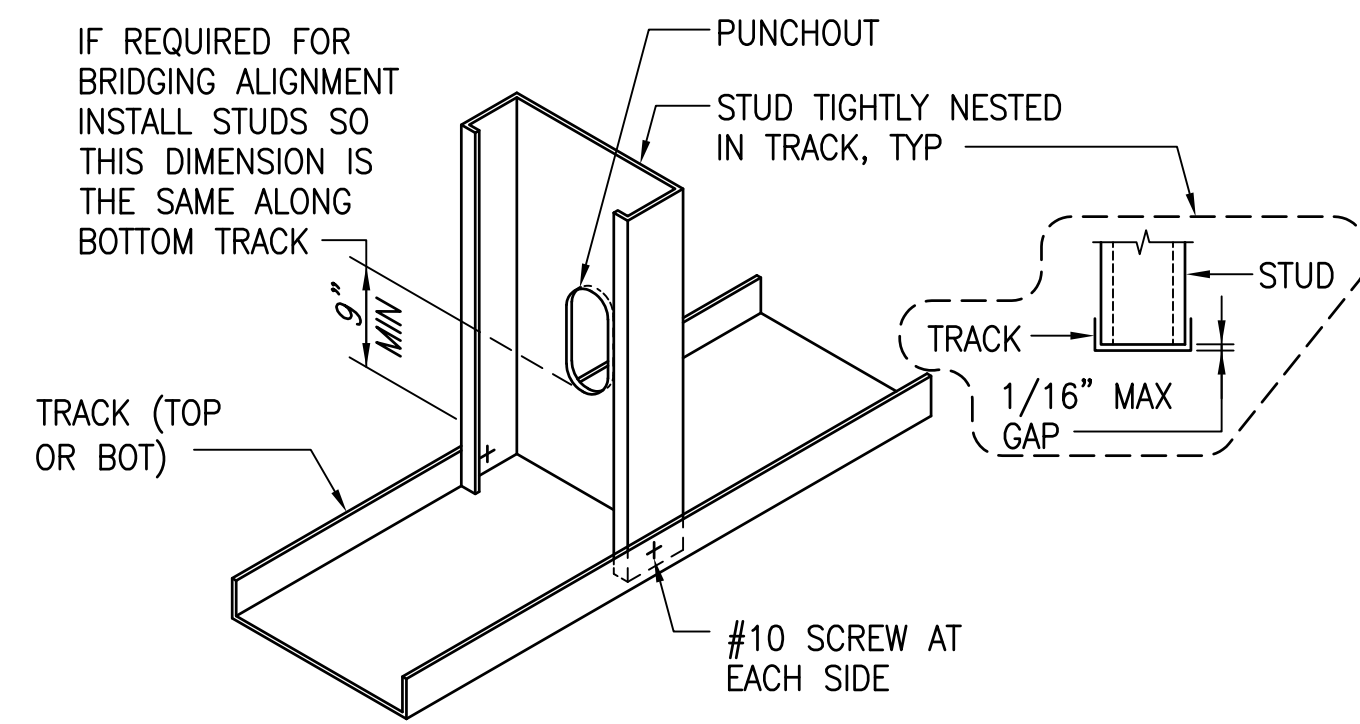
EXPIRATION DATE 04/30/2028

SUBMITTED: APRIL 2026 *GC*

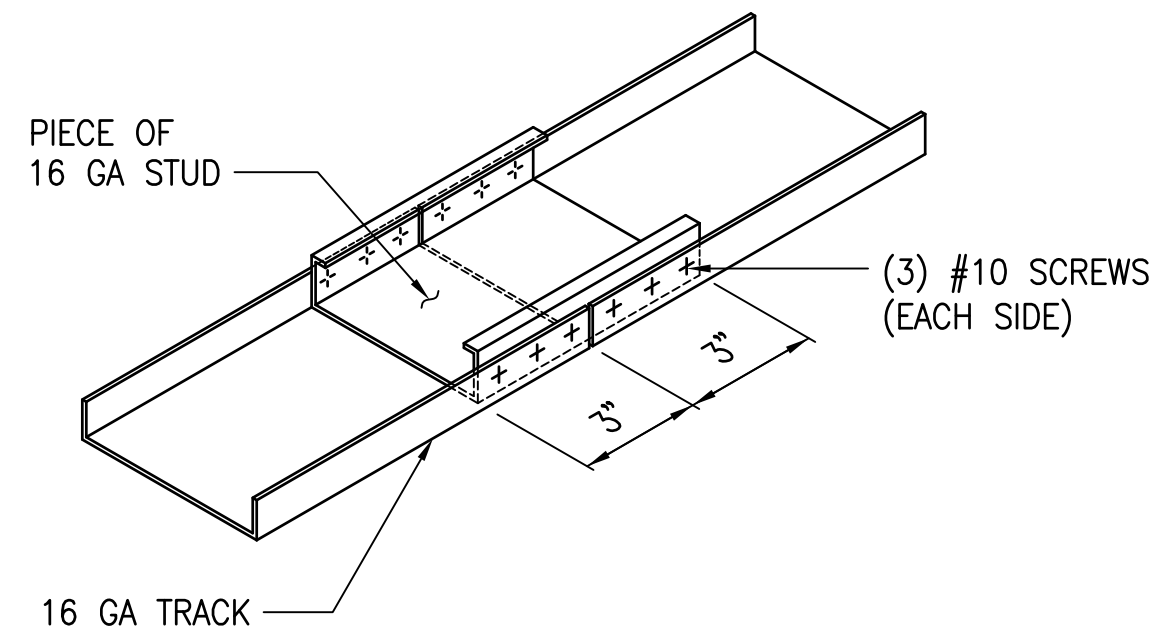
DATE: APRIL 2026

SCALE: AS NOTED

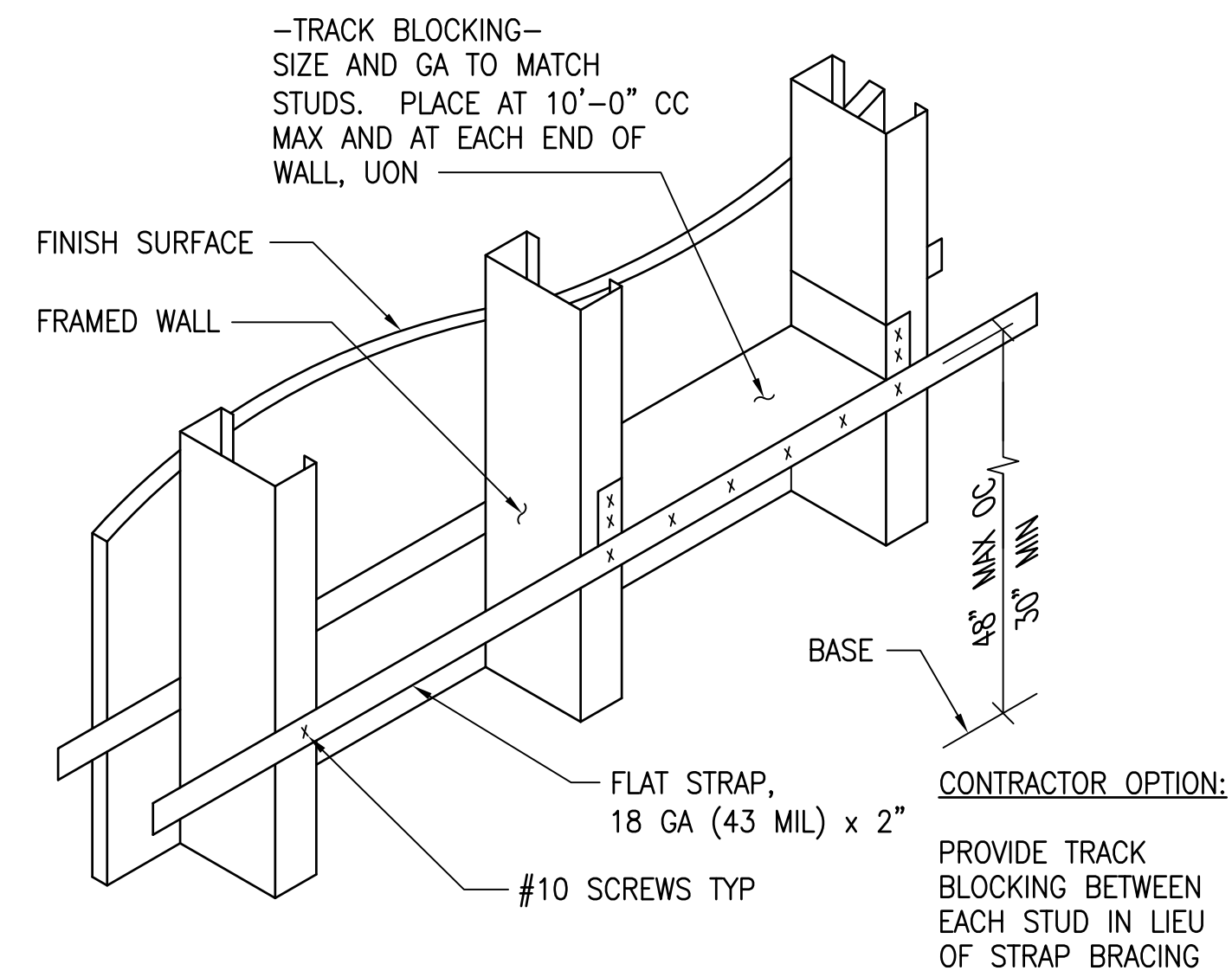
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.)



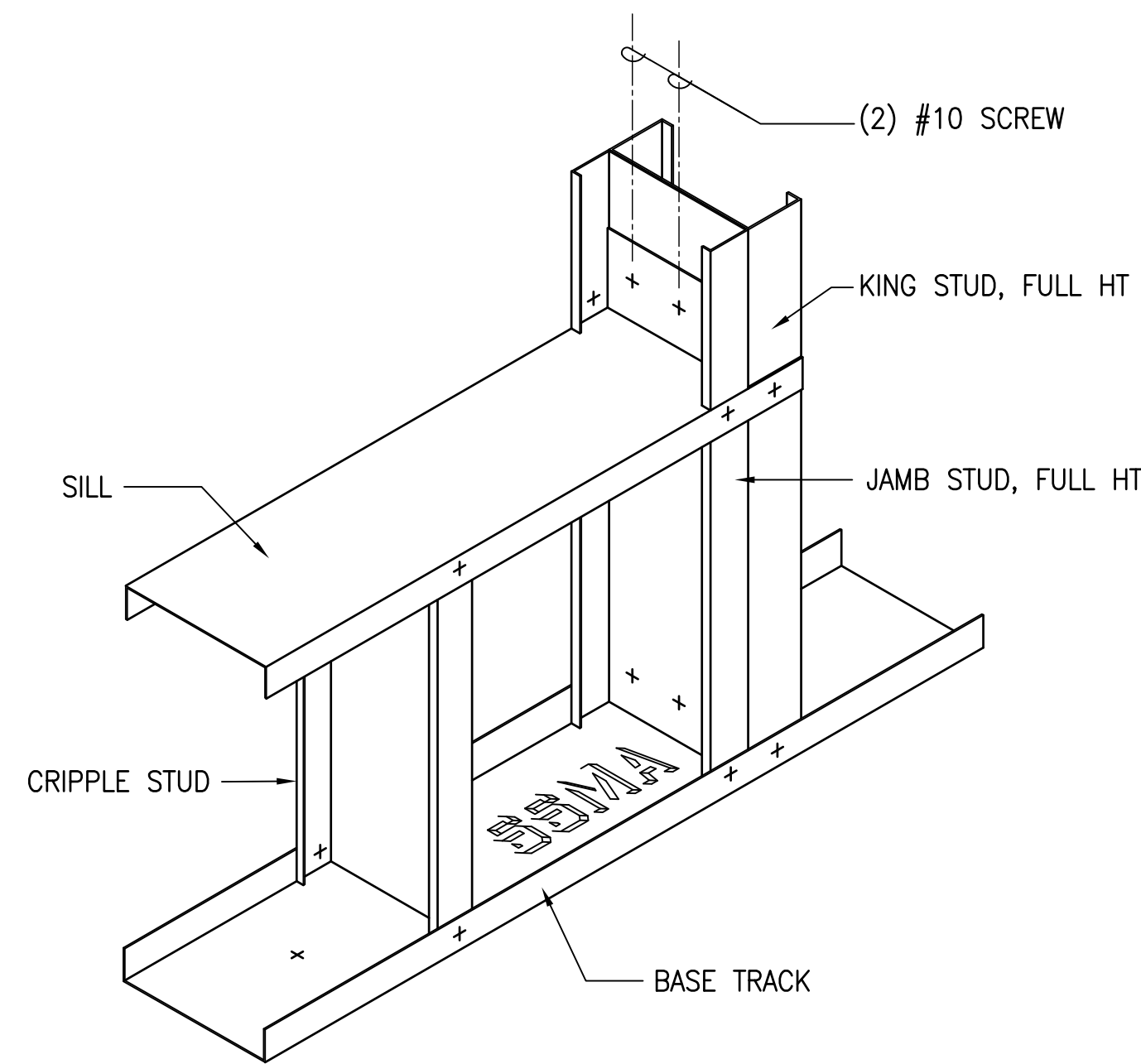
**1** **STUD TO TRACK CONNECTION**  
NOT TO SCALE



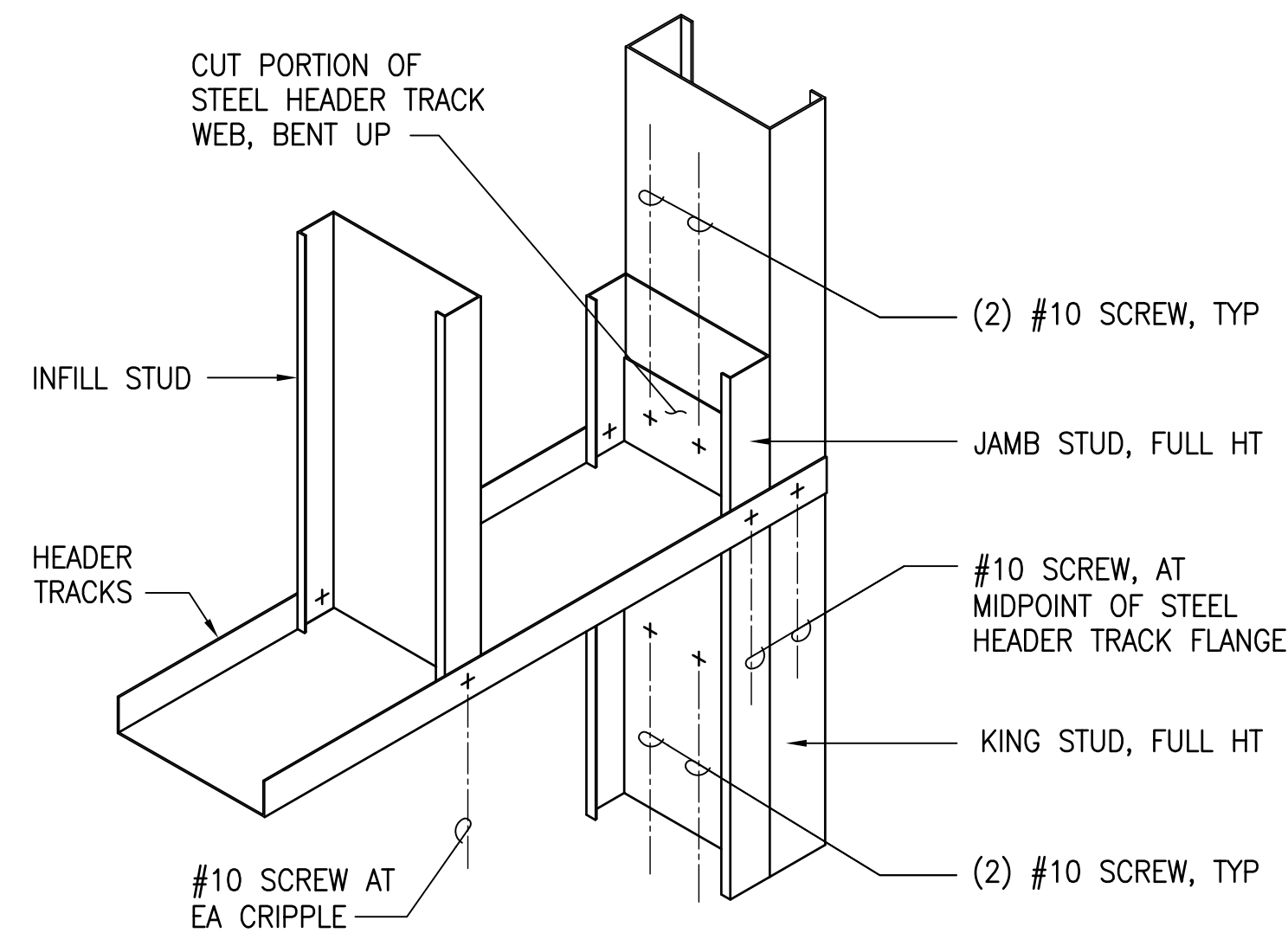
**2** **TOP AND BOTTOM TRACK SPLICE**  
NOT TO SCALE



**3** **FLAT STRAP LATERAL BRACING**  
NOT TO SCALE

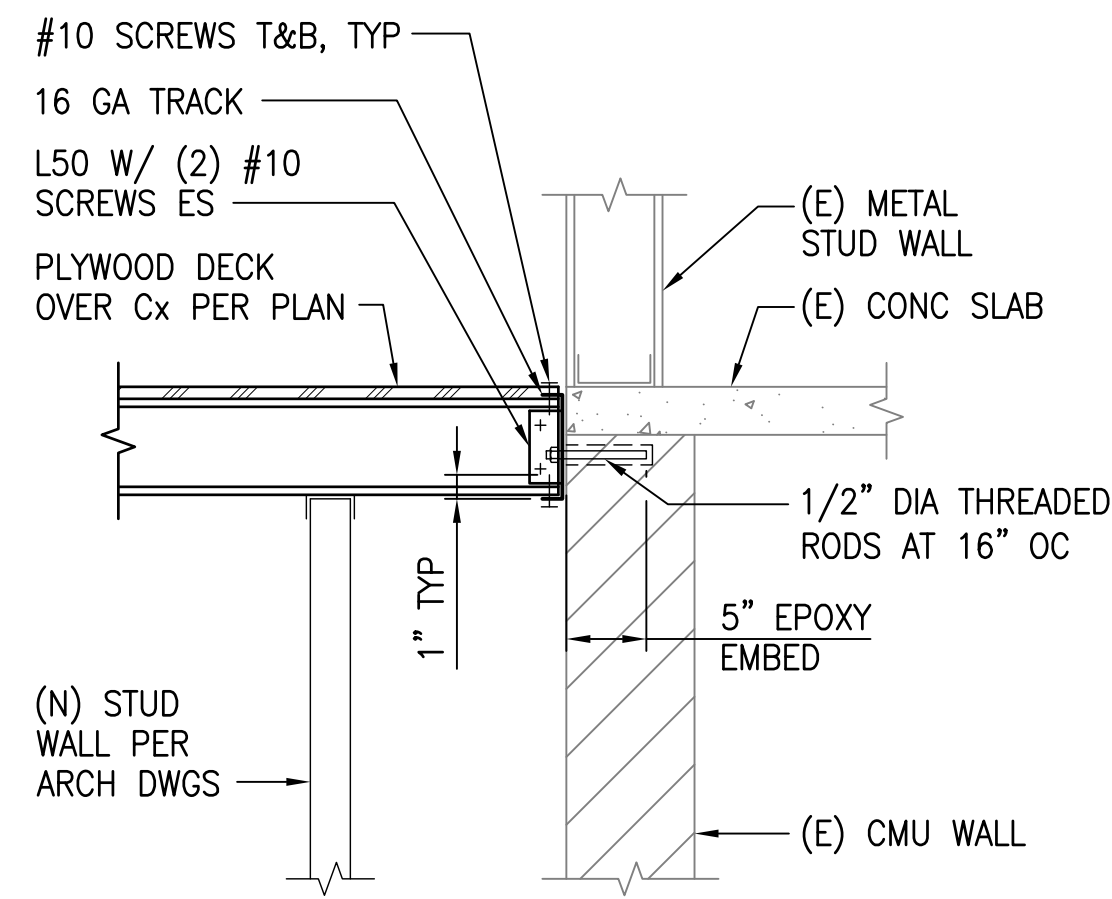


**4** **CONNECTION DETAIL**  
NOT TO SCALE

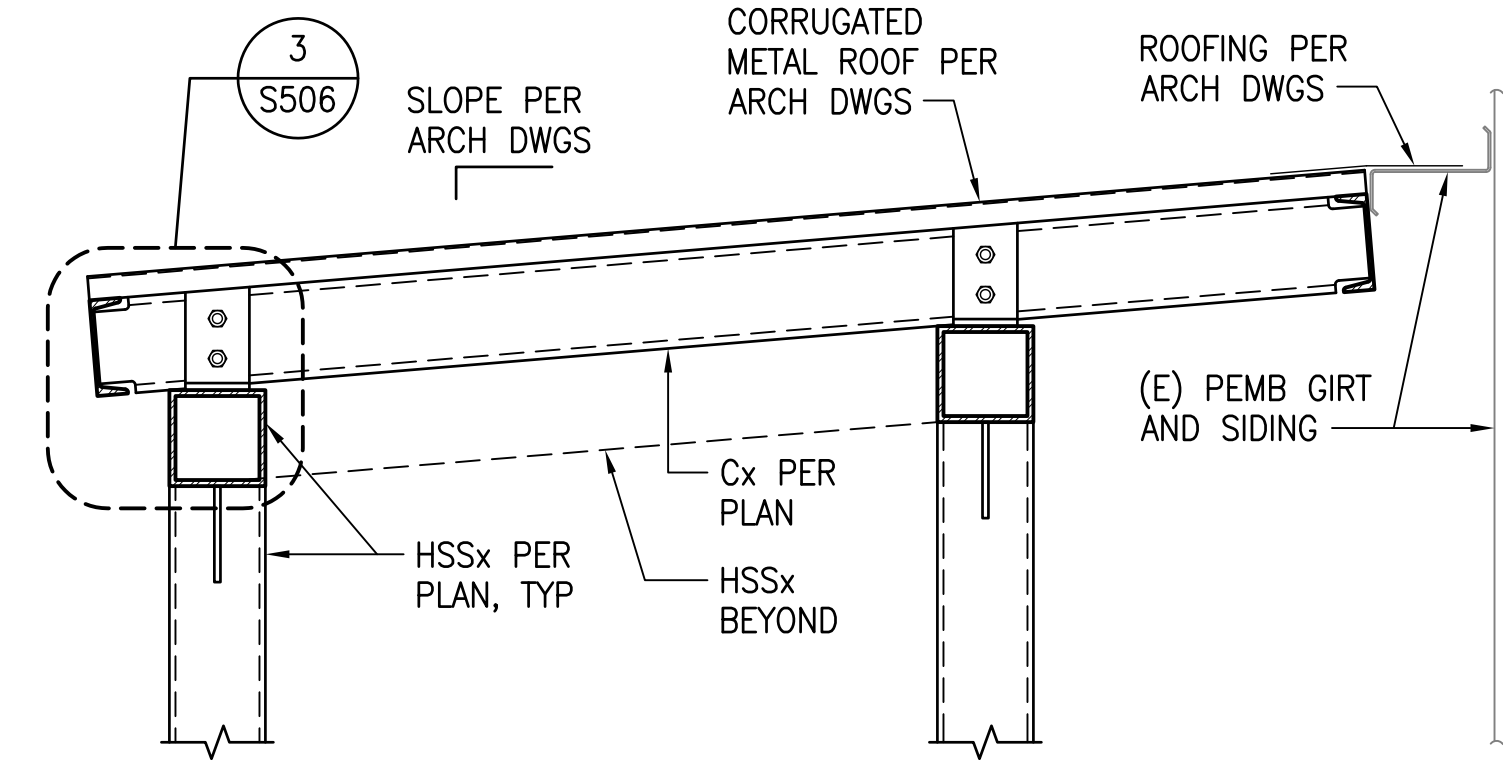


**5** **CONNECTION DETAIL**  
NOT TO SCALE

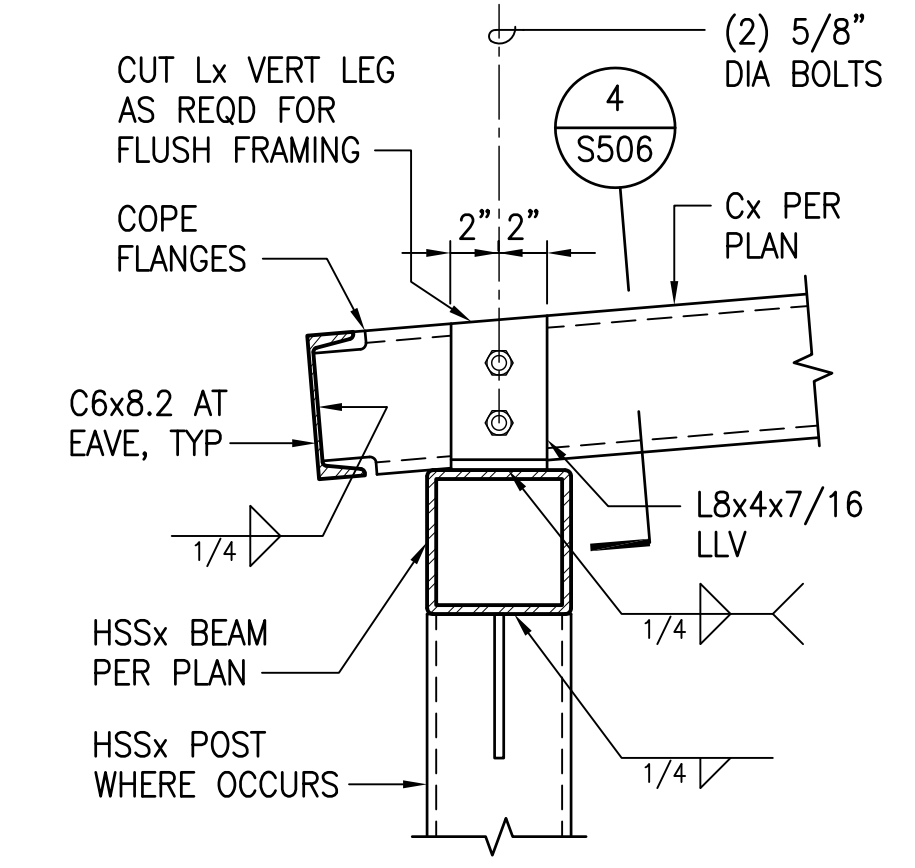
| REVISION NO.  | SYM. | DESCRIPTION                     | SHT./OF | DATE           | APPROVED |
|---|------|---------------------------------|---------|----------------|----------|
|   |      |                                 |         |                |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>WALL FRAMING DETAILS |      |                                 |         |                |          |
| DESIGNED: DN  |      | SUBMITTED: APRIL 2026 <i>GC</i> |         |                |          |
| DRAWN: LL   |      | DATE: APRIL 2026                |         |                |          |
| CHECKED: GG   |      | SCALE: AS NOTED                 |         |                |          |
| APPROVED: <i>g. gutierrez</i>   |      | Dina Lau                        |         | RAWING NO.     |          |
| E-signed 2026-04-29 01:15PM HST   |      | dina.u.lau@hawaii.gov           |         | 5505           |          |
| CHIEF ENGINEER  |      | State of Hawaii                 |         | Civil Engineer |          |



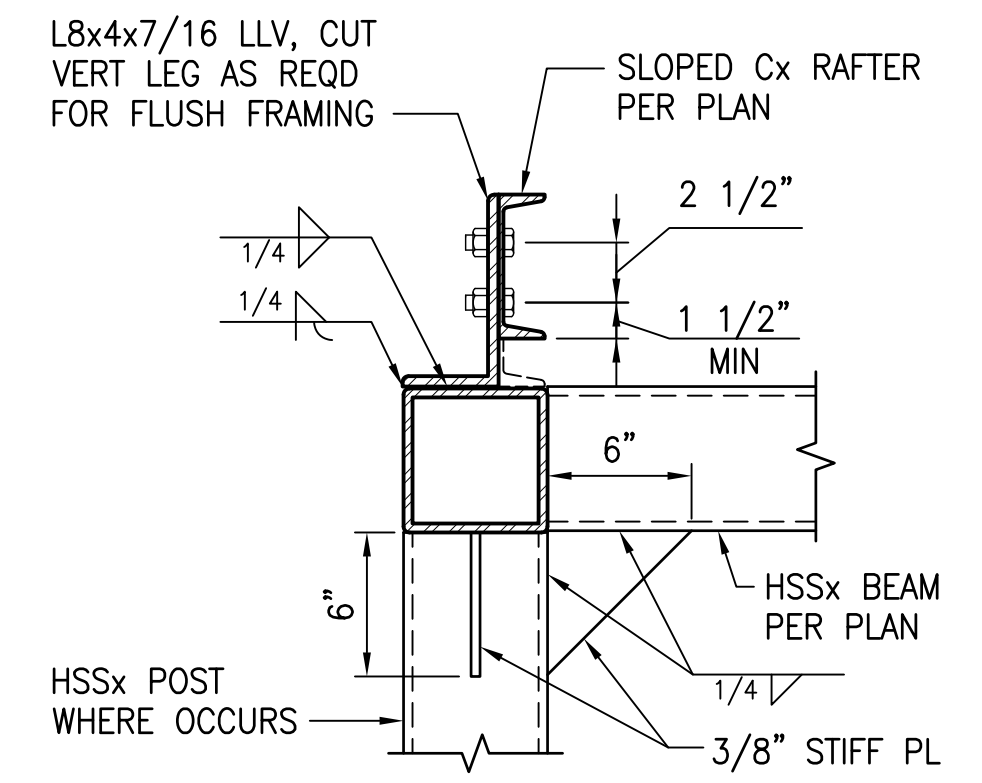
**1 SECTION**  
SCALE: 1" = 1'-0"



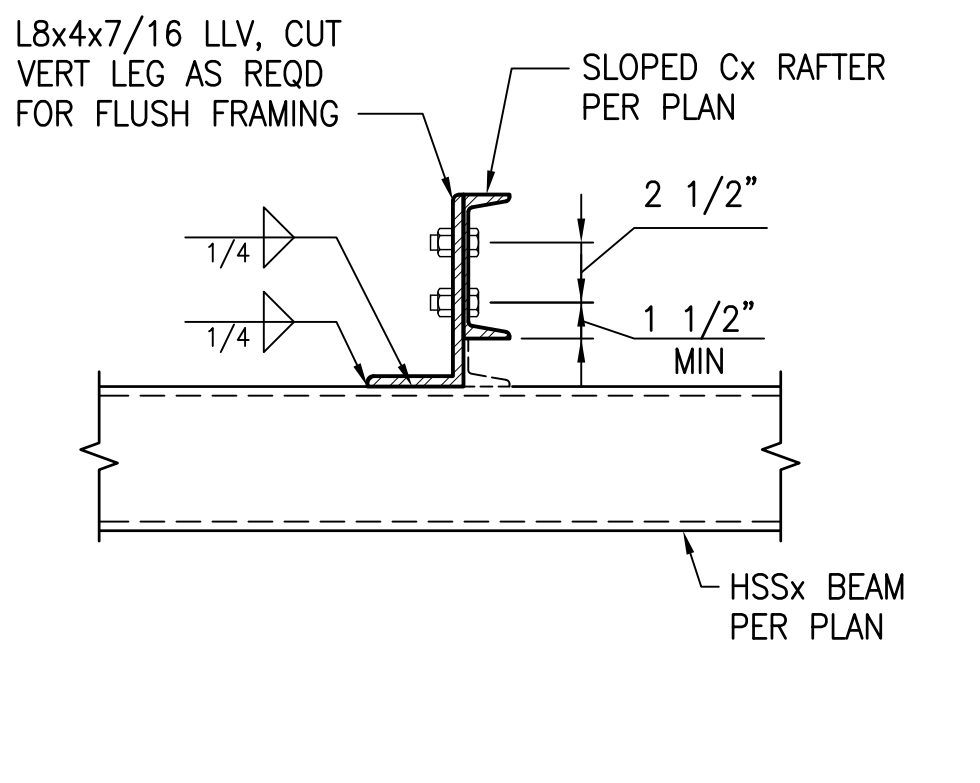
**2 SECTION**  
SCALE: 1" = 1'-0"



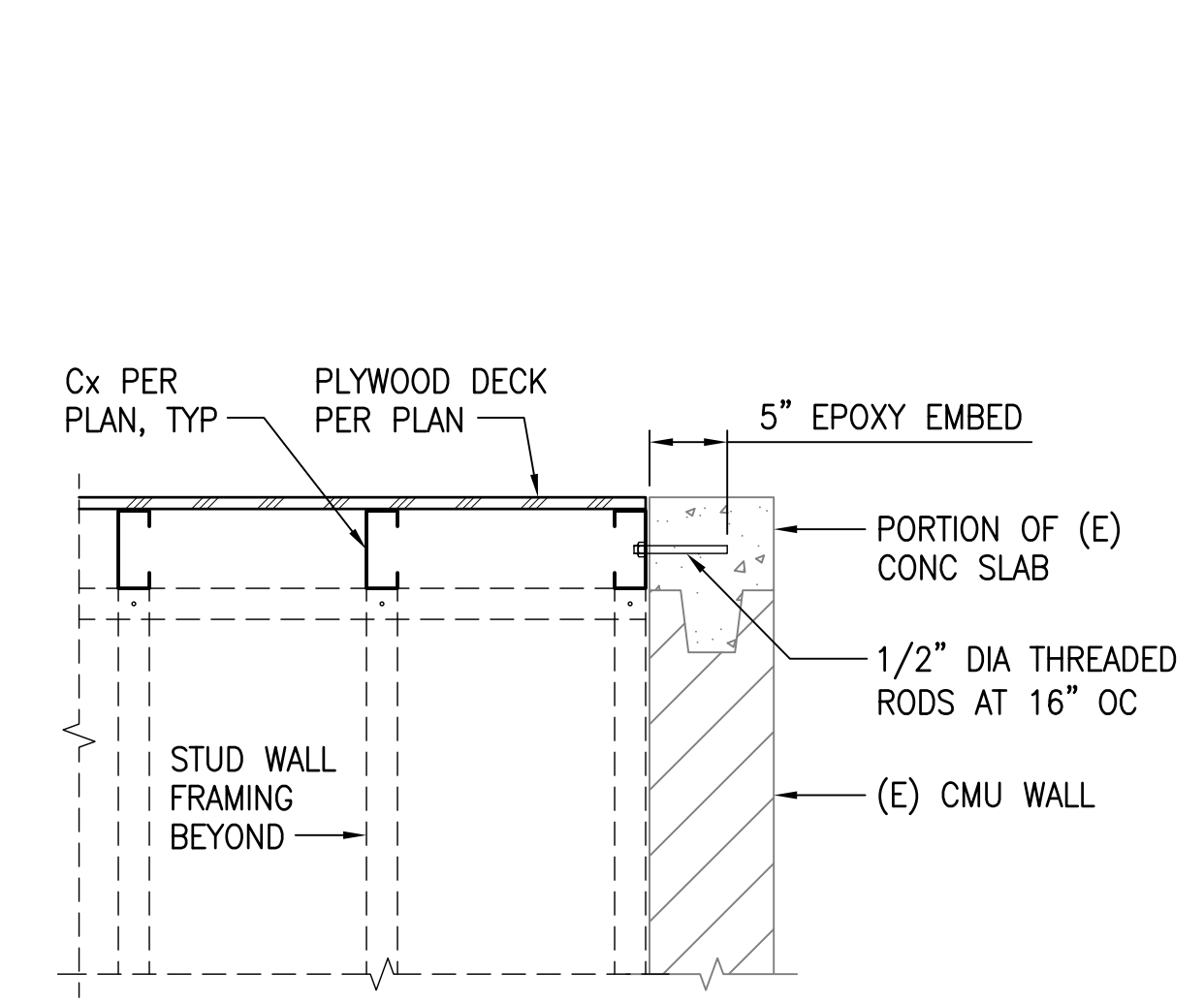
**3 TRACK PURLIN AT EAVE**  
SCALE: 1-1/2" = 1'-0"



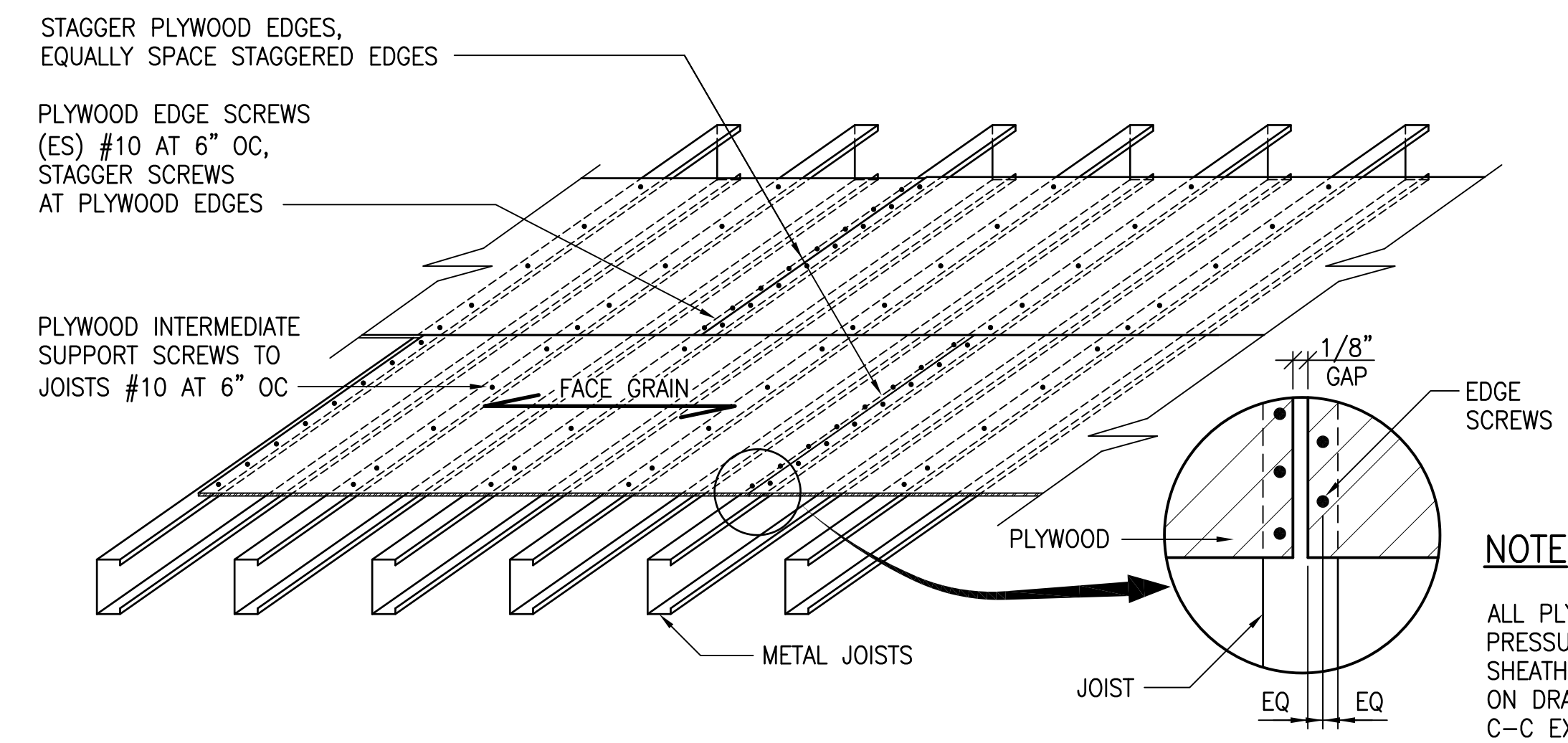
**4 Cx RAFTER CONNECTION**  
SCALE: 1-1/2" = 1'-0"



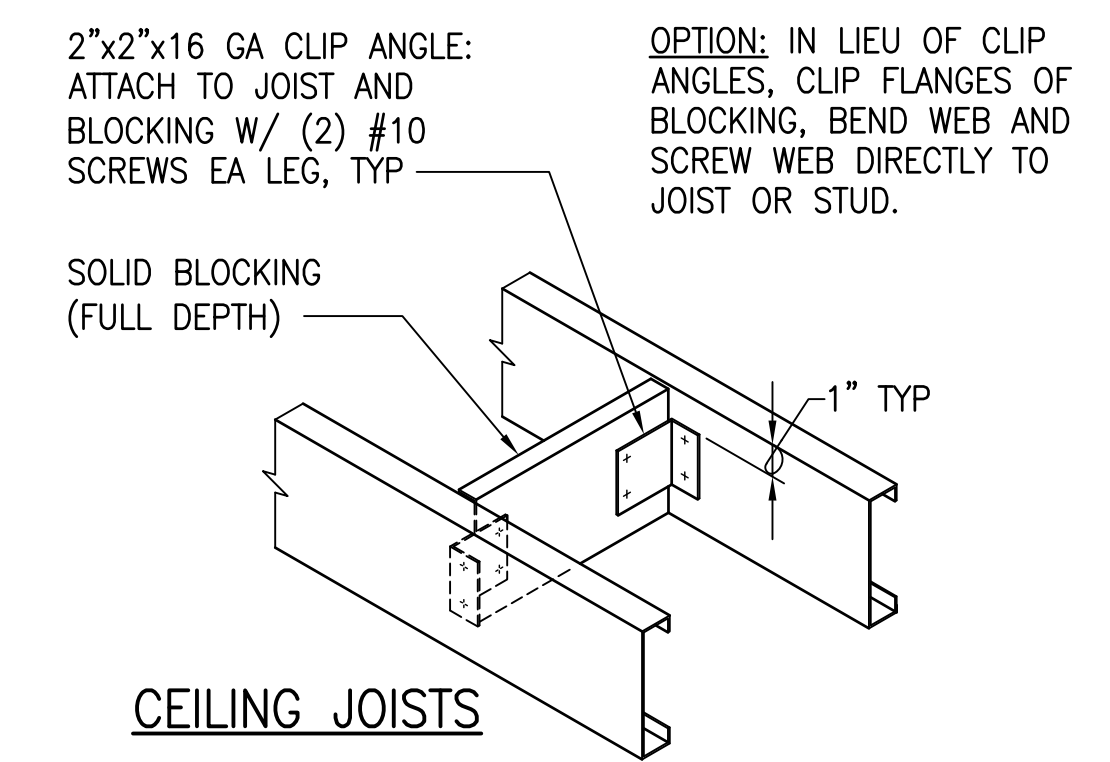
**AT INTERIOR**



**5 SECTION**  
SCALE: 1" = 1'-0"



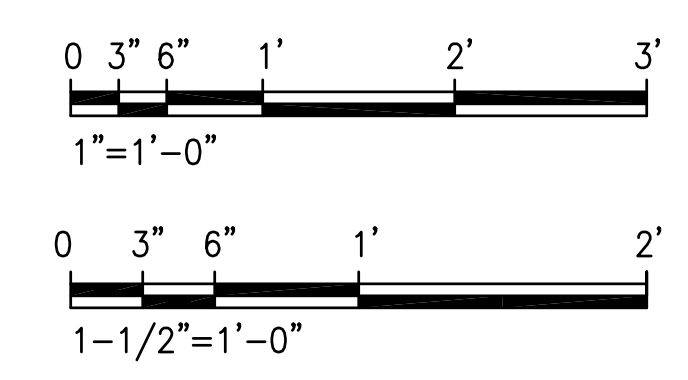
**6 TYPICAL PLYWOOD DIAPHRAGM SHEATHING AT CEILING**  
NOT TO SCALE



**7 TYP SOLID BLOCKING AROUND OPNG**  
NOT TO SCALE

**NOTE**  
ALL PLYWOOD PRODUCTS SHALL BE PRESSURE-PRESERVATIVE-TREATED. SHEATHING SHALL BE THICKNESS NOTED ON DRAWINGS, TONGUE-AND-GROOVE, C-C EXTERIOR GRADE PLYWOOD. PANEL JOINTS SHALL BE STAGGERED.

GRAPHIC SCALE



| REVISION NO.   | SYM.   | DESCRIPTION | SHT./OF    | DATE | APPROVED |
|--|--|-------------|------------|------|----------|
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII<br>CEILING FRAMING DETAILS   |  |             |            |      |          |
| DESIGNED:  | DN   | SUBMITTED:  | APRIL 2026 | GC   |          |
| DRAWN:   | LL   | DATE:       | APRIL 2026 |      |          |
| CHECKED:   | GG   | SCALE:      | AS NOTED   |      |          |
| APPROVED:  | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | RAWING NO.  | S506       |      |          |
| <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("CERTIFICATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.</small> |  |             |            |      |          |

| STEEL FRAMING REPAIR SCHEDULE |          |          |             |               |        |  |
|-------------------------------|----------|----------|-------------|---------------|--------|--|
| REPAIR NUMBER                 | SIZE "X" | SIZE "Y" | REPAIR TYPE | REPAIR DETAIL | PHOTO  | COMMENTS   |
| F.01                          | 10'-0"   | 3"       | C&C         | 1/S501        |        | FRAMING UNDER PANEL  |
| F.02                          | 2'-0"    | 1'-0"    | R&R         | 4/S501        |        | PORTION OF ROOF EAVE PURLIN, T&B FLANGE  |
| F.03                          | 2'-0"    | 1'-0"    | C&C         | 1/S501        |        | TOP FLANGE OF RIGID FRAME  |
| F.04                          | 3'-0"    | 1'-0"    | C&C         | 1/S501        |        | TOP FLANGE OF RIGID FRAME  |
| F.05                          | 3'-0"    | 8"       | R&R         | 3/S501        | 2/S602 | PORTION OF ROOF PURLIN   |
| F.06                          | 15'-0"   | 2'-0"    | C&C         | 1/S501        |        | FRAMING UNDER PANEL  |
| F.07                          | 2'-0"    | 1'-0"    | C&C         | 1/S501        | 1/S602 | TOP FLANGE OF RIGID FRAME  |
| F.08                          | 2'-0"    | 1'-0"    | R&R         | 4/S501        | 1/S602 | PORTION OF ROOF EAVE PURLIN, T&B FLANGE  |
| F.09                          | 3'-0"    | 1'-0"    | R&R         |               | 9/S602 | METAL FASCIA   |
| F.10                          | 2'-0"    | 3"       | C&C         | 1/S501        |        | FRAMING  |
| F.11                          | 6'-0"    | 9"       | C&C         | 1/S501        |        | TOP GIRT   |
| F.12                          | 6'-0"    | 9"       | R&R         | 5/S501        |        | BOTTOM GIRT  |
| F.13                          | 3'-0"    | 9"       | R&R         | 5/S501        |        | PORTION OF VERT FRAMING  |
| F.14                          | 6'-0"    | 9"       | R&R         | 5/S501        | 4/S602 | BOTTOM GIRT  |
| F.15                          | 3'-0"    | 9"       | R&R         | 5/S501        |        | PORTION OF VERT FRAMING  |
| F.16                          | 2'-0"    | 9"       | R&R         | 6/S501        | 5/S602 | PORTION OF VERT FRAMING  |
| F.17                          | 20'-0"   | 9"       | R&R         | 6/S501        | 5/S602 | GIRT   |
| F.18                          | 2'-0"    | 9"       | R&R         | 6/S501        | 5/S602 | PORTION OF VERT FRAMING  |
| F.19                          | 12'-0"   | 9"       | C&C         | 1/S501        |        | TOP GIRT   |
| F.20                          | 12'-0"   | 9"       | C&C         | 1/S501        |        | BOTTOM GIRT  |
| F.21                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.23                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.24                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.25                          | 2'-3"    | 9"       | R&R         | 5/S501 SIM    |        | FRAMING  |
| F.26                          | 12'-0"   | 9"       | R&R         | 5/S501        |        | TOP GIRT   |
| F.27                          | 12'-0"   | 9"       | C&C         | 1/S501        |        | BOTTOM GIRT  |
| F.28                          | 12'-0"   | 9"       | R&R         | 5/S501        |        | TOP GIRT   |
| F.29                          | 12'-0"   | 9"       | R&R         | 5/S501        |        | BOTTOM GIRT  |
| F.30                          | 12'-0"   | 9"       | R&R         | 5/S501        |        | BOTTOM PORTION OF VERT FRAMING   |
| F.31                          | 12'-0"   | 9"       | R&R         | 5/S501        | 6/S602 | BOTTOM GIRT  |
| F.32                          | 3'-0"    | 1'-0"    | R&R         |               |        | PORTION OF METAL FASCIA  |
| F.33                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.34                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.35                          | 2'-3"    | 9"       | C&C         | 1/S501        |        | FRAMING  |
| F.36                          | 2'-3"    | 9"       | R&R         | 5/S501 SIM    |        | FRAMING  |
| F.37                          | 3'-0"    | 1'-0"    | R&R         | 1/S501        |        | PORTION OF METAL FASCIA  |
| F.38                          | 20'-0"   | 6"       | C&C         | 1/S501        | 7/S602 | FRAMING, HOLES IN SIDING. CLEAN AND COAT RUSTED HOLES. REFASTEN SIDING AT LOCATIONS WITHOUT SECTION LOSS |

| STEEL FRAMING REPAIR TOTALS |                  |                |
|-----------------------------|------------------|----------------|
| REPAIR TYPE                 | FIELD QUANTITIES | BID QUANTITIES |
| C&C                         | 100 SF           | 120 SF         |
| R&R                         | 100 SF           | 120 SF         |

| SIDING / ROOFING REPAIR SCHEDULE |          |          |             |               |        |  |
|----------------------------------|----------|----------|-------------|---------------|--------|--|
| REPAIR NUMBER                    | SIZE "X" | SIZE "Y" | REPAIR TYPE | REPAIR DETAIL | PHOTO  | COMMENTS                               |
| S.01                             | 3'-2"    | 8"       | R&R         | 2/S501        |        | CORRUGATED ROOF PANEL                  |
| S.02                             | 15'-0"   | 2'-0"    | R&R         | 2/S501        |        | CORRUGATED ROOF EDGE PANEL             |
| S.03                             | 3'-2"    | 8"       | R&R         | 2/S501        | 3/S602 | CORRUGATED ROOF PANEL                  |
| S.04                             | 80'-0"   | 3"       | C&C         | 2/S501        |        | CORROSION UNDERSIDE OF ROOF THROUGHOUT |
| S.05                             | 6'-0"    | 3"       | C&C         | 2/S501        |        | PORTION OF SIDING                      |
| S.06                             | 8'-0"    | 4'-0"    | R&R         | 2/S501        | 8/S602 | PORTION OF SIDING                      |
| S.07                             | 12'-0"   | 3"       | C&C         | 2/S501        |        | PORTION OF SIDING                      |
| S.08                             | 12'-0"   | 3"       | C&C         | 2/S501        |        | PORTION OF SIDING                      |
| S.09                             | 4'-0"    | 4'-0"    | R&R         | 2/S501        |        | PORTION OF SIDING                      |
| S.10                             | 4'-0"    | 4'-0"    | R&R         | 2/S501        |        | PORTION OF SIDING                      |
| S.11                             | 3'-0"    | 3"       | C&C         | 2/S501        |        | PORTION OF SIDING                      |

| SIDING / ROOFING REPAIR TOTALS |                  |                |
|--------------------------------|------------------|----------------|
| REPAIR TYPE                    | FIELD QUANTITIES | BID QUANTITIES |
| C&C                            | 30 SF            | 40 SF          |
| R&R                            | 100 SF           | 120 SF         |


**NOTES**

- REPAIR DRAWINGS AND SCHEDULE ARE SHOWN TO PROVIDE AN ESTIMATE OF THE TYPE AND EXTENT OF REPAIRS THAT EXIST.
- REPAIR INFORMATION SHOWN BASED ON FIELD OBSERVATIONS. CONTACT ENGINEER FOR DIRECTION IF REPAIR DETAILS ARE NOT COMPATIBLE WITH FIELD CONDITIONS. ANY REVISIONS TO DETAILS SHALL BE PROVIDED BY ENGINEER.
- USE BID QUANTITIES FOR BIDDING PURPOSES.
- ADDITIONAL STEEL REPAIRS NOT INDICATED ON THE DRAWINGS OR QUANTITIES EXCEEDING THE BID QUANTITIES INDICATED MAY OCCUR DUE TO UNFORESEEN CONDITIONS. REPAIRS WILL BE PAID FOR ON A UNIT PRICE BASIS NOT TO EXCEED THE UNIT PRICE AMOUNT IN THE BID PROPOSAL. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

**LEGEND**

C&C = CLEAN AND COAT  
R&R = REMOVE AND REPLACE / PATCH

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



EXPIRATION DATE 04/30/2028

*George O. Gutierrez, Jr.*

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

REPAIR SCHEDULES

|  |                                 |
|--|---------------------------------|
| DESIGNED: DN   | SUBMITTED: APRIL 2026 <i>GC</i> |
| DRAWN: LL  | DATE: APRIL 2026                |
| CHECKED: GG  | SCALE: AS NOTED                 |
| APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | RAWING NO. <b>S601</b>          |
| CHIEF ENGINEER<br>State of Hawaii<br>Civil Engineer                            |                                 |



**1 PHOTO**  
NOT TO SCALE



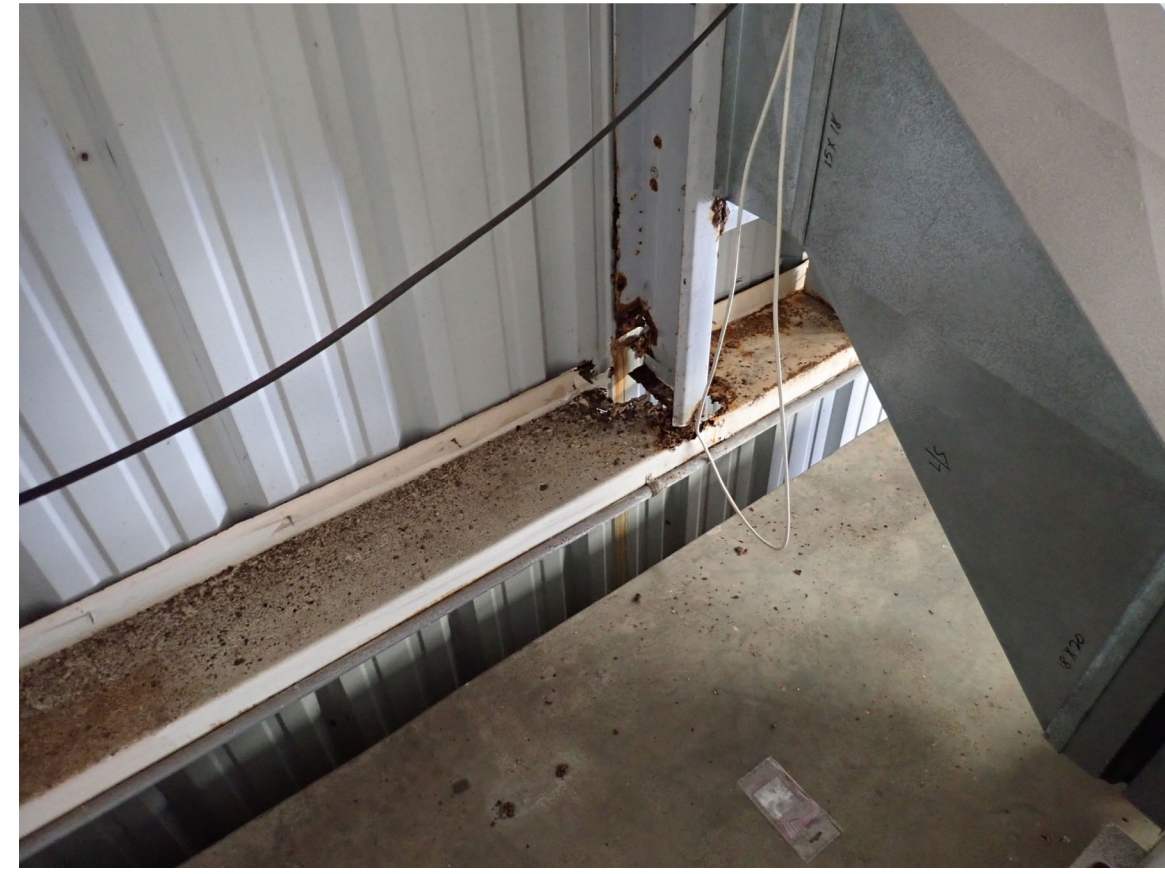
**2 PHOTO**  
NOT TO SCALE



**3 PHOTO**  
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**4 PHOTO**  
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**5 PHOTO**  
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**6 PHOTO**  
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**7 PHOTO**  
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**8 PHOTO**  
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**9 PHOTO**  
NOT TO SCALE

| REVISION NO.   | SYM. | DESCRIPTION   | SHT./OF | DATE   | APPROVED |
|--|------|---|---------|--|----------|
|  |      |   |         |  |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, O'AHU, HAWAII  |      |   |         |  |          |
| PHOTOS   |      |   |         |  |          |
| DESIGNED: DN   |      | SUBMITTED: APRIL 2026 <i>GC</i>   |         |  |          |
| DRAWN: LL  |      | DATE: APRIL 2026  |         |  |          |
| CHECKED: GG  |      | SCALE: AS NOTED   |         |  |          |
| APPROVED: <i>g. gutierrez</i>  |      | Dina Lau  |         | RAWING NO.   |          |
| <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION") SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 6/29/04.</small> |      | E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Civil Engineer |         | <br><b>S602</b> |          |

## DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR) NOTES

1. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", DATED 2005; THE CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII, DEPARTMENT OF PUBLIC WORKS "STANDARD SPECIFICATION FOR PUBLIC WORK CONSTRUCTION", SEPTEMBER 1986 AND "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", SEPTEMBER 1984 WHERE APPLICABLE AND THE APPLICABLE STATE BUILDING CODES AS ADOPTED BY THE STATE BUILDING CODE COUNCIL.
2. VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DIRECTION.
3. DURING THE PERFORMANCE PERIOD OF THIS CONTRACT, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE CONTROL AND RESPONSIBILITY OF THE JOBSITE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE SITE SAFETY CONDITIONS FOR ALL PERSONS ENTERING THE JOBSITE, THE CONDITION OF THE SITE AND ALL EXISTING IMPROVEMENTS, AND FOR ALL MATERIAL AND EQUIPMENT STORED AT THE PROJECT SITE.
4. BLASTING IS NOT ALLOWED.
5. IN THE EVENT HISTORIC REMAINS, SUCH AS ARTIFACTS, BURIALS, OR CONCENTRATIONS OF SHELL OR CHARCOAL ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY CEASE IN THE VICINITY OF THE ENCOUNTER, NOTIFY THE STATE HISTORIC PRESERVATION DIVISION AT (808) 692-8015, FOR AN ASSESSMENT OF THE ENCOUNTER AND RECOMMENDATIONS ON MITIGATION MEASURES.
6. CONSTRUCT TEMPORARY BARRICADES DURING CONSTRUCTION, FOR SAFETY AND THE PROTECTION OF LIFE AND PROPERTY.
7. THE DEPARTMENT OF LAND AND NATURAL RESOURCES, DIVISION OF AQUATIC RESOURCES SHALL REMAIN OPEN DURING THE CONSTRUCTION PERIOD. PROVIDE TEMPORARY BARRICADES AND WARNING SIGNS FOR THE SAFETY AND PROTECTION OF THE PUBLIC AND MAINTAIN SAFE PEDESTRIAN AND VEHICLE ACCESS TO THE FACILITY AS REQUIRED. PROVIDE AND MAINTAIN ALL NECESSARY SIGNS AND PROTECTIVE FACILITIES AND TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
8. EXISTING PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN A PASSABLE CONDITION OR PROVIDE FOR ALTERNATE/TEMPORARY ACCESSIBLE PEDESTRIAN ACCESS ROUTES AND FACILITIES PER THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2, ADAAG 201.3, AND ADAAG 206.1.
9. DO NOT PERFORM ANY CONSTRUCTION ACTIVITIES THAT CAUSE ROCKS, SOIL, OR DEBRIS IN ANY FORM TO FALL, SLIDE, OR FLOW ONTO ADJOINING PROPERTIES, STREETS, OR NATURAL WATER COURSES. FINES DUE TO VIOLATIONS AND ANY NECESSARY REMEDIAL ACTIONS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
10. AS APPLICABLE, COORDINATE CONSTRUCTION ACTIVITIES WITH ADJACENT CONSTRUCTION SITE(S). AVOID CAUSING ANY DELAYS OR HINDERANCE OF WORK OR PERFORMANCE TO THE ADJACENT CONSTRUCTION SITE(S). REFERENCE CONDITIONS OF THE CONTRACT AND/OR GENERAL REQUIREMENTS FOR ANY OCCUPANCY RESTRICTIONS OR REQUIREMENTS DURING CONSTRUCTION.
11. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA.
12. COORDINATE ALL SITE UTILITY WORK WITH "THE ONE CALL CENTER" AT (866) 423-7287 AT LEAST 5 WORKING DAYS PRIOR TO THE START OF EXCAVATION OR TRENCHING.
13. VERIFY AND COORDINATE THE ACTUAL LOCATION OF ALL SITE UTILITIES WITH THE RELATED AGENCIES AND UTILITY COMPANIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
14. WHEN CONNECTING NEW UTILITIES TO EXISTING, EXPOSE THE EXISTING UTILITY LINES AT THE DENOTED CONNECTION POINT TO VERIFY CHARACTERISTICS PRIOR TO COMPLETING EXCAVATION FOR NEW UTILITIES.
15. VERIFY AND COORDINATE THE ACTUAL LOCATION OF ALL SITE UTILITIES WITH THE RELATED AGENCIES AND UTILITY COMPANIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
16. IF WATER, SEWAGE OR ELECTRICAL SERVICES ARE PLANNED TO BE INTERRUPTED FOR MORE THAN 1 HOUR, PROVIDE FOR TEMPORARY WATER, SEWAGE, AND ELECTRICAL SERVICES DURING THE INTERRUPTION AT NO ADDITIONAL COST TO THE STATE.
17. ALL EXISTING UTILITIES, SHOWN ON THE PLANS OR UNCOVERED, SHALL BE PROTECTED AT ALL TIMES DURING CONSTRUCTION.
18. ANY DAMAGED UTILITIES, AS A RESULT OF CONTRACTOR OPERATIONS, SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE STATE.
19. ADJUST MANHOLE AND /OR VALVE BOX FRAMES AND COVERS AS REQUIRED BY THE UTILITY COMPANIES AND AGENCIES.

21. CONFORM WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
  22. PLAN, CONSTRUCT AND UTILIZE ALL BEST MANAGEMENT PRACTICES (BMP) AS REQUIRED TO COMPLY WITH THE LAWS, STANDARDS, RULES, AND /OR POLICIES OF THE COUNTY, STATE, OR FEDERAL REGULATORY AGENCIES.
  23. OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNMENT AGENCIES.
  24. IF REQUIRED, THE CONTRACTOR SHALL PROVIDE THE SERVICES OF AN ESCP (EROSION AND SEDIMENT CONTROL PLAN) COORDINATOR. THE DESIGNEE SHALL HOLD A CURRENT ESCP COORDINATOR CERTIFICATE FROM THE CITY'S DEPARTMENT OF PLANNING AND PERMITTING.
  25. RESTORE ALL AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES, TO EQUAL OR BETTER CONDITION(S), INCLUDING BUT NOT LIMITED TO VEGETATION, PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALKWAYS, FENCES, ETC. UNLESS SPECIFICALLY NOTED OTHERWISE.
  26. PROVIDE THERMOPLASTIC TYPE PAVEMENT STRIPING.
  27. PROVIDE THEFT-RESISTANT FASTENERS FOR ALL MOUNTING ACCESSORIES.
  28. PROVIDE STAINLESS STEEL, THEFT-RESISTANT FASTENERS IN ALL PUBLICLY EXPOSED AREAS.
  29. PROVIDE ALL INCIDENTAL AND NECESSARY MATERIALS AND LABOR TO COMPLETE THE PROJECT.
  30. THE JOB SITE SHALL BE LEFT IN A SAFE AND SECURE CONDITION AT THE END OF EACH WORKDAY. CLEAN UP AND REMOVE ALL RUBBISH FROM THE JOB SITE ON A DAILY BASIS. MAINTAIN THE WORK AREA AND PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
  31. PRIOR TO ACCEPTANCE OF THE PROJECT BY THE STATE, CLEAN UP AND REMOVE ALL RUBBISH AND DEBRIS FROM THE ENTIRE JOB SITE.
- SPECIAL INSPECTIONS
32. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SPECIAL INSPECTIONS BY HIRING AN INDEPENDENT THIRD PARTY TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE BUILDING CODE AT THE APPROPRIATE TIME AT NO ADDITIONAL COST TO THE STATE. FREQUENCY OF INSPECTIONS IS DEFINED IN THE IBC, SECTION 1704 TABLES, AS AMENDED BY THE COUNTY. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE STATE AND PAY FOR RE-INSPECTION AS REQUIRED.

## GENERAL NOTES

1. CONSTRUCTION DOCUMENTS REASONABLY DESCRIBE THE INTENT OF THE QUALITY AND SCOPE OF THE CONSTRUCTION FOR THE PROJECT. WHERE DETAILS ARE NOT SHOWN, THE CONTRACTOR SHALL PROCEED WITH THE WORK WITH AN ACCEPTED QUALITY DEPICTED FROM CONTRACTOR STANDARDS AND PROCEDURES OF THE CONSTRUCTION INDUSTRY IN THE STATE OF HAWAII AS WELL AS THE GENERAL INTENT OF THE CONSTRUCTION DOCUMENTS. CLARIFICATION MAYBE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW BEFORE PROCEEDING.
  2. CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND COORDINATE THE WORK OF THE VARIOUS TRADES TO FIT ACTUAL CONDITIONS AND MAKE INTERFACING ADJUSTMENTS AS REQUIRED.
  3. QUANTITIES SHOWN AND/OR SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS SHALL BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR ALL QUANTITIES.
  4. SOME NOTES ON THE ARCHITECTURAL SHEETS MAY REQUIRE CIVIL, LANDSCAPING, STRUCTURAL, MECHANICAL, AND/OR ELECTRICAL WORKS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE FOR COMPLETE WORK.
  5. WHERE WARRANTIES ARE SPECIFIED, CONTRACTOR'S BID SHALL INCLUDE FULL COMPLIANCE OF ALL CONDITIONS REQUIRED BY THE WARRANTIES. WHERE THE MANUFACTURER'S WARRANTY REQUIREMENTS AND/OR RECOMMENDATION VARY FROM THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR IS EXPECTED TO COMPLY WITH THE STRICTER OF THE TWO PROVIDING REQUIREMENTS DO NOT VOID WARRANTY. CONTRACTOR SHALL INFORM THE CONTRACTING OFFICER IN WRITING WHERE PROPOSED CONSTRUCTION WILL DEVIATE FROM THE CONSTRUCTION DOCUMENTS.
  6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL BLOCKING, BACKING, BRACKETS, ETC. AS REQUIRED FOR THE PROPER AND SECURED INSTALLATION OF ALL MATERIALS AND PRODUCTS.
  7. CONTRACTOR SHALL REVIEW THE PROJECT FOR ANY LONG LEAD ITEMS AND PROVIDE SPECIAL CONSIDERATIONS TO AVOID UNNECESSARY DELAYS TO THE COMPLETION OF THE PROJECT.
  8. THE CONTRACT, ADDENDA, SUPPLEMENTAL CONDITIONS, GENERAL REQUIREMENTS, GENERAL CONDITIONS, AND TECHNICAL SPECIFICATIONS SHALL HAVE PRECEDENCE OVER THESE GENERAL NOTES. ANY CONFLICT BETWEEN THESE GENERAL NOTES AND LANGUAGE FOUND IN THE ABOVE DOCUMENTS OR IN THE DRAWINGS OR IN ANY OTHER CONTRACT DOCUMENT SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IMMEDIATELY FOR FURTHER CLARIFICATION.
  9. CONTRACTOR SHALL PROVIDE COMPLETE SYSTEMS AND ASSEMBLIES THAT INCLUDE ALL COMPONENTS NECESSARY FOR A FULLY FUNCTIONAL ASSEMBLY SATISFYING THE DESIGN INTENT, COMPLY WITH THE REQUIREMENTS INDICATED IN THE CONTRACT DOCUMENTS AND READY FOR THE INTENDED USE. REFERENCE CONDITIONS OF THE CONTRACT AND/OR GENERAL REQUIREMENTS FOR ADDITIONAL INFORMATION.
  10. REFERENCE CONDITIONS OF THE CONTRACT AND/OR GENERAL REQUIREMENTS FOR ANY OCCUPANCY RESTRICTIONS OR REQUIREMENTS DURING CONSTRUCTION.
  11. REFERENCE CONDITIONS OF THE CONTRACT AND/OR GENERAL REQUIREMENTS REGARDING REQUIREMENTS FOR DOCUMENTATION AND REPORTING OF FIELD CONDITIONS BY THE CONTRACTOR AND COORDINATION WITH THE CONTRACT DOCUMENTS.
  12. REFERENCE CONDITIONS OF THE CONTRACT AND/OR GENERAL REQUIREMENTS REGARDING COORDINATION OF THE WORK OR OTHER SPECIAL COORDINATION REQUIREMENTS.
  13. DIMENSIONS ARE INDICATED TO THE CENTERLINE OF STRUCTURAL GRID, FACE OF CAST-IN-PLACE CONCRETE WALL, FACE OF UNIT MASONRY WALL, AND/OR TO THE FINISH FACE OF INTERIOR WALLS AND PARTITIONS AS SCHEDULED, UNLESS NOTED OTHERWISE.
  14. FLOOR ELEVATIONS ARE INDICATED TO THE TOP SURFACE OF THE "STRUCTURAL" SLAB, UNLESS NOTED OTHERWISE.
  15. CEILING HEIGHTS ARE INDICATED FROM FLOOR ELEVATIONS TO THE FINISH FACE OF SUSPENDED CEILING SYSTEMS OR FACE OF FINISH MATERIALS, AS INDICATED OR SCHEDULED.
  16. DIMENSIONS SHOWN ON THE DRAWINGS SHALL INDICATE THE REQUIRED SIZES, CLEARANCES, AND DIMENSIONAL RELATIONSHIPS BETWEEN PROJECT SYSTEMS, ASSEMBLIES AND COMPONENTS. DIMENSIONS SHALL NOT BE DETERMINED BY SCALING THE DRAWINGS.
  17. WHERE EQUIPMENT OR COMPONENTS HAVE DIMENSIONAL VARIATION DEPENDENT ON THE SELECTED MANUFACTURER, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ADJOINING CONSTRUCTION TO ACCOMMODATE THE SELECTED MANUFACTURER'S REQUIREMENTS.
  18. REFERENCE DIVISION 01 OF THE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS FOR COORDINATION OF DRAWINGS AND DIMENSIONS.
21. "REPLACE" MEANS TO REMOVE EXISTING AND TO PROVIDE AND INSTALL ITEM TO MATCH THE EXISTING DESIGN SUCH AS MATERIAL, THICKNESS, COLOR, QUALITY, CONSTRUCTION, ETC., UNLESS OTHERWISE DETAILED OR NOTED. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITION AND DESIGN PRIOR TO REMOVAL.
  22. ALL MATERIALS, ITEMS, NOTED IN THE DRAWINGS ARE "NEW" UNLESS NOTED OTHERWISE.
  23. CONTRACTOR SHALL PATCH ALL SURFACES EXPOSED FROM CUTTING, AND OR REMOVAL WORK. PATCH SHALL MATCH THE MATERIAL AND FINISH OF ADJACENT SURFACES.
  24. CONTRACTOR SHALL PROTECT ALL ITEMS, IN ADJACENT AREAS WITHIN THE PROJECT SITE FROM DAMAGE. DAMAGE TO BUILDINGS, LANDSCAPING, LAWN, HOSE BIBS, ETC., BY THE CONTRACTOR, THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND EQUIPMENT, SHALL BE REPLACED AND/OR REPAIRED AT NO EXTRA COST TO THE STATE.
  25. ALL EXISTING ITEMS AND/OR FINISHES SCHEDULED TO REMAIN, BUT DAMAGED DURING CONSTRUCTION, SHALL BE CORRECTED TO MATCH THE EXISTING MATERIAL AND FINISHES AT NO EXTRA COST TO THE STATE.
  27. CONTRACTOR SHALL PROTECT ALL EXISTING SURFACES DURING CONSTRUCTION. THE COST FOR MATERIAL, LABOR, INSTALLATION AND REMOVAL SHALL BE INCLUDED IN THE SCOPE OF WORK. ALL DAMAGES SHALL BE REPAIRED AND/OR REPLACED TO MATCH ADJACENT SURFACES AND TO THE SATISFACTION OF THE STATE'S REPRESENTATIVE.
  28. CONTRACTOR WITH THE SUPERVISION OF THE STATE'S REPRESENTATIVE SHALL INSPECT AND NOTE ALL EXISTING DAMAGES PRIOR TO THE START OF WORK. ANY NEW DAMAGES RESULTING FROM THE CONSTRUCTION SHALL BE CORRECTED AT THE CONTRACTOR'S COST.
  29. CONTRACTOR SHALL VISIT THE SITE, COMPARE THE DRAWINGS AND SPECIFICATIONS AND VERIFY ALL CONDITIONS IN ORDER TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE INTENT OF THE DRAWINGS.
  30. BEFORE ANY SERVICE IS DISCONNECTED OR INTERRUPTED, THE CONTRACTOR SHALL VERIFY USAGE AND ASSURE THAT REQUIRED SERVICES ARE NOT DISCONNECTED OR INTERRUPTED. ANY REQUIRED SERVICE DISCONNECTED OR INTERRUPTED SHALL BE RESTORED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
  31. CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUEST FOR MODIFICATION TO THE PLANS AND SPECIFICATIONS. UNLESS CHANGES ARE SUBMITTED IN WRITING AND APPROVED BY THE STATE, CHANGES OR MODIFICATIONS TO THE PLANS AND SPECIFICATIONS BECOME THE RESPONSIBILITY OF THE PERSON INITIATING SUCH CHANGES.
  32. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND THIS CHAPTER. 2012 NFPA 1.
  33. SECTION 18-5.2 RETENTION OF PLANS: ONE SET OF APPROVED PLANS, SPECIFICATION, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN, AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT, AND SAID SET SHALL BE KEPT ON THE SITE OF THE BUILDING OR WORK AT ALL TIMES DURING WHICH THE WORK AUTHORIZED THEREBY IS IN PROGRESS (SEC. 18-5.2 R.O. 1978 (1983 ED); AM. ORD. 93-59)
  34. CONTRACTOR SHALL PROTECT ALL ITEMS IN AND ABOVE GROUND WITHIN THE PROJECT SITE AND ADJACENT PROPERTIES FROM DAMAGES. DAMAGES TO BUILDINGS, SIDEWALKS, UTILITY LINES (PLUMBING, ELECTRICAL, TELEPHONE, DATA, ETC.), LANDSCAPING, LAWN, HOSE BIBS, ETC., BY THE CONTRACTOR, THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, AND EQUIPMENT SHALL BE REPLACED AND/OR REPAIRED AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR IS ALSO RESPONSIBLE TO RESTORE THE GROUNDS (GRASSING AND LANDSCAPE IRRIGATION) AND CONCRETE WALKWAYS USED FOR PARKING AND STAGING.
  36. THIS PROJECT CONFORMS TO ADA PROJECT GUIDELINES. AMENDMENTS SECTION 1101.2. THIS PROJECT CONFORMS WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AS ADOPTED BY THE UNITED STATES DEPARTMENT OF JUSTICE. THE PROJECT IS SUBJECT TO THE CONFORMANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES ADMINISTERED BY THE DEPARTMENT GUIDE LINES ADMINISTERED BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT SHALL BE EQUIVALENT TO MEETING THE ACCESSIBILITY CODE.

### FINISH NOTES:


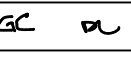

1. ALL CONDUIT, JUNCTION BOXES, RACEWAYS, AND OTHER EXPOSED ELECTRICAL ITEMS TO BE PAINTED - MATCH ADJACENT SURFACE.
2. ALL STRUCTURAL SUPPORTS AND ATTACHMENTS, I.E.: UNISTRUT, ATTACHMENTS, BOLTS, WOOD/STEEL SUPPORTS, ETC. TO BE PAINTED - MATCH ADJACENT SURFACE.
3. ALL EXPOSED MECHANICAL DUCTS/ENCLOSURES TO BE PAINTED TO MATCH ADJACENT SURFACES.
4. ALL ITEMS INDICATED ABOVE ARE TO BE PAINTED TO MATCH ADJACENT SURFACE UNLESS NOTED OTHERWISE ON THE DRAWING OR COME PRE-FINISHED.

### DEFINITIONS:

1. "TYPICAL" OR "TYP." INDICATES IDENTICAL COMPLETE SYSTEM, ASSEMBLY OR COMPONENT SHALL BE PROVIDED FOR EACH OCCURRENCE OF THE CONDITION NOTED.
2. "SIMILAR" INDICATES COMPLETE SYSTEM, ASSEMBLY AND COMPONENTS SHALL BE PROVIDED, INCLUDING ANY ADJUSTMENTS REQUIRED DUE TO VARIATION AT A PARTICULAR CONDITION, RESULTING IN COMPARABLE CHARACTERISTICS FOR THE "SIMILAR" CONDITION NOTED. THE CONTRACTING OFFICER SHALL BE THE SOLE JUDGE OF A SIMILAR CONDITION'S COMPLIANCE WITH THE DESIGN INTENT.
3. "AS REQUIRED" INDICATES ITEMS OF WORK REQUIRED TO PROVIDE FOR A COMPLETE SYSTEM, ASSEMBLY OR COMPONENT AS INDICATED IN THE CONTRACT DOCUMENTS. ALL COMPONENTS OF THE NOTED SYSTEM SHALL BE PROVIDED, INSTALLED, COMPLETE AND READY FOR THE INTENDED USE.
4. "ALIGN" INDICATES ACCURATELY PROVIDE FINISH FACES OF MATERIALS IN STRAIGHT, TRUE, LEVEL AND/OR PLUMB RELATION TO ADJACENT SURFACES WITHIN TOLERANCES DEFINED IN THE TECHNICAL SPECIFICATIONS.
5. REFERENCE DIVISION 01 OF THE PROJECT MANUAL FOR ADDITIONAL DEFINITIONS AND CLARIFICATIONS.

### DIMENSIONS:

1. SHALL HAVE PRECEDENCE OVER SCALE. DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH THE WORK.
2. ALL ± (PLUS OR MINUS) DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO RENOVATION/FABRICATION.
3. (E) MEANS "EXISTING". CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS AND CONFIRM SIZES PRIOR TO RENOVATION/FABRICATION.
4. OTHER DIMENSIONS AND SIZES PROVIDED IN THE DRAWINGS ARE TO INDICATE GENERAL SCOPE OF WORK. CONTRACTOR SHALL VERIFY DIMENSIONS AND SIZES FOR PROPER FIT, CONSTRUCTION, INSTALLATION AND OPERATION.

| REVISION NO.   | SYM. | DESCRIPTION                     | SHT. OF. | DATE  | APPROVED: |
|--|------|---------------------------------|----------|---|-----------|
|   |      |                                 |          |   |           |
| <b>STATE OF HAWAII</b><br><b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b><br><b>ENGINEERING DIVISION</b>   |      |                                 |          |   |           |
| <b>ANUENUE FISHERIES RESEARCH CENTER</b><br><b>ANNEX FACILITY IMPROVEMENTS</b><br><b>- PHASE 1A (BUILDING IMPROVEMENTS)</b><br>SAND ISLAND, OAHU, HAWAII |      |                                 |          |   |           |
| DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR) NOTES & GENERAL NOTES  |      |                                 |          |   |           |
| DESIGNED: JV   |      | SUBMITTED: KR                   |          |              |           |
| DRAWN: KR  |      | DATE: APRIL 2026                |          |   |           |
| CHECKED: CO  |      | SCALE: AS NOTED                 |          |   |           |
| APPROVED: <b>Dina Lau</b>  |      | E-signed 2026-04-29 01:15PM HST |          | DRAWING NO.   |           |
| CHIEF ENGINEER   |      | dina.u.lau@hawaii.gov           |          |  <b>A001</b> |           |

**CODE INFORMATION**

**BUILDING CODE:**  
2018 INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL CODE COUNCIL WITH STATE OF HAWAII AND CITY AND COUNTY OF HONOLULU AMENDMENTS

**FIRE CODE:**  
2024 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 1, FIRE CODE WITH STATE OF HAWAII AND CITY AND COUNTY OF HONOLULU AMENDMENTS

**ELECTRICAL CODE:**  
2018 NATIONAL ELECTRICAL CODE (NEC) NFPA 70-2020

**ENERGY CODE:**  
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) WITH STATE OF HAWAII AND CITY AND COUNTY OF HONOLULU AMENDMENTS

**HVAC CODE:**  
DEPARTMENT OF HEALTH, HAWAII ADMINISTRATIVE RULES TITLE 11 ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, CHAPTER 39, AIR CONDITIONING AND VENTILATING REQUIREMENTS

**PLUMBING CODE:**  
2021 UNIFORM PLUMBING CODE (UPC)

**ADA:**  
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

**BUILDING INFORMATION**

PROJECT OWNER: STATE OF HAWAII

PROJECT LOCATION: DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR)  
1001 SAND ISLAND PARKWAY, OAHU, HAWAII, 96819

TMK: TMK: (1) 1-5-041-333

LOT AREA: XX ACRES

BUILDING AREA: 5,614 SQ FT

NUMBER OF STORIES: TWO STORIES

ZONE DESIGNATION: XX

FLOOD ZONE: X

HEIGHT LIMITS: 75'-0"

LOT RESTRICTIONS: NONE

SPECIAL MANAGEMENT AREA: NOT IN SMA

SPECIAL DISTRICT: CONSERVATION DISTRICT

STATE LAND USE: URBAN DISTRICT

STREET SETBACKS: NONE

TYPE OF CONSTRUCTION: TYPE IIB

OCCUPANCY GROUP: B & S-2

FIRE SPRINKLER: NO, NOT REQUIRED

**FIRE PROTECTION REQUIREMENTS**

**FIRE RATED SEPARATION:**  
IBC OCCUPANCY IS BASED ON MIXED USE, NON-SEPARATED OCCUPANCY. NO FIRE RATED WALLS ARE REQUIRED S-1 AND S-2 OCCUPANCIES.

**FIRE WALLS:**  
THERE ARE NO FIRE WALL REQUIREMENTS FOR THIS PROJECT.

**FIRE BARRIERS:**  
THERE ARE NO FIRE BARRIER REQUIREMENTS FOR THIS PROJECT.

**FIRE PARTITIONS AND SMOKE PARTITIONS:**  
THERE ARE NO SMOKE PARTITIONS REQUIREMENTS FOR THIS PROJECT. THERE ARE NO FIRE PARTITIONS REQUIREMENTS FOR THIS PROJECT EXCEPT AT THE EXTERIOR WALLS AT THE EXTERIOR EXIT STAIRWAYS.  
IBC 2018 SECTION 1027.5 LOCATION, EXTERIOR EXIT STAIRWAYS AND RAMPS SHALL HAVE A MINIMUM FIRE SEPARATION DISTANCE OF 10 FEET (3048 MM) MEASURED AT RIGHT ANGLES FROM THE EXTERIOR EDGE OF THE STAIRWAY OR RAMPS, INCLUDING OTHER PORTIONS OF THE BUILDING.

**FIRE DEPARTMENT ACCESS:**  
PORTABLE FIRE EXTINGUISHERS, NFPA 1, SECTION 13.6.12:  
NFPA 1 REQUIRES PORTABLE FIRE EXTINGUISHERS IN STORAGE OCCUPANCIES.

**BUILDING ACCESS SECTION 18.2.3.2:**  
NFPA 1 REQUIRES AT LEAST ONE DOOR TO BE WITHIN 50 FEET OF THE FIRE DEPARTMENT ACCESS ROAD, 18.2.3.2.1.

NFPA 1, SECTION 18.2.3.2.1 A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FT OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM THE OUTSIDE AND THAT PROVIDES ACCESS TO THE INTERIOR OF THE BUILDING.

NFPA 1, SECTION 18.2.3.2.2 FIRE DEPARTMENT ACCESS ROADS SHALL BE PROVIDED SUCH THAT ANY PORTION OF THE FACILITY OR ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY OF THE BUILDING IS LOCATION NOT MORE THAN 150 FT FROM FIRE DEPARTMENT ACCESS ROADS AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY.

**BUILDING CODE ANALYSIS**

**CHAPTER 3: OCCUPANCY CLASSIFICATION AND USE**

OCCUPANCY SCHEDULE

**OFFICE:**  
BUSINESS GROUP B

**LOW HAZARD STORAGE ACCESSORY:**  
STORAGE GROUP S-2

**CHAPTER 5: GENERAL BUILDING HEIGHT AND AREAS**

SECTION 504 BUILDING HEIGHT AND NUMBER OF STORIES  
TABLE 504.3 ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE  
TABLE 504.4 ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

| OCCUPANCY GROUP | ALLOWABLE (NS)     | PROPOSED (NS)   |
|-----------------|--------------------|-----------------|
| B               | 75'-0" / 4 STORIES | 24'-6" EXISTING |
| S-2             | 75'-0" / 4 STORIES | 24'-6" EXISTING |

SECTION 506 BUILDING AREAS (IN SF)  
TABLE 506.2 ALLOWABLE AREA FACTOR

| OCCUPANCY GROUP | ALLOWABLE (NS) | PROPOSED (NS)   |
|-----------------|----------------|-----------------|
| B               | 69,000         | 22,504/EXISTING |
| S-2             | 117,000        | 22,504/EXISTING |

\*\*NS = NON-SPRINKLED

**CHAPTER 6: TYPES OF CONSTRUCTION**

TYPE IIB  
TABLE 601 FIRE - RESISTANCE REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

| BUILDING ELEMENT (TYPE IIB)              | REQUIRED (TYPE IIB) | PROPOSED (TYPE IIB) |
|--|---------------------|---------------------|
| PRIMARY STRUCTURAL FRAME                 | 0                   | 0                   |
| BEARING WALLS- EXTERIOR                  | 0                   | 0                   |
| BEARING WALLS AND PARTITIONS- EXTERIOR   | 0, PER TABLE 602    | 0                   |
| FLOOR CONSTRUCTION AND SECONDARY MEMBERS | 0                   | 0                   |
| ROOF CONSTRUCTION AND SECONDARY MEMBERS  | 0                   | 0                   |

TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

**CHAPTER 8 : INTERIOR FINISHES**

SECTION 803 WALL AND CEILING FINISHES  
TABLE 803.13 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

| GROUP | INTERIOR EXIT STAIRWAYS 7 RAMPS & EXIT PASSAGEWAYS | NONSPRINKLERED (NS) CORRIDORS & ENCLOSURE FOR EXIT ACCESS STAIRWAYS & RAMPS | ROOMS & ENCLOSED SPACES |
|-------|--|---|-------------------------|
| B     | A  | B   | C                       |
| S-2   | B  | B   | C                       |

**CHAPTER 10 MEANS OF EGRESS**

SECTION 1004 OCCUPANT LOAD  
TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT  
FUNCTION OF SPACE OCCUPANT LOAD FACTOR - FLOOR AREA SQUARE FEET (SF) PER OCCUPANT

|               |           |
|---------------|-----------|
| BUSINESS AREA | 150 GROSS |
| STORAGE       | 300 GROSS |

OCCUPANT LOAD

| 1ST FLOOR     | AREA (SF)    | OCCUPANT LOAD     |
|---------------|--------------|-------------------|
| BUSINESS AREA | 301/150 GSF  | 3 PERSONS         |
| STORAGE       | 5313/300 GSF | 18 PERSONS        |
| <b>TOTAL</b>  | <b>5614</b>  | <b>21 PERSONS</b> |

**PLUMBING FIXTURE ANALYSIS**

**CHAPTER 29 PLUMBING SYSTEMS**

SECTION 2902.1.1 FIXTURE CALCULATIONS  
TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

WATER CLOSETS: (TABLE 2902.1)

| BUSINESS (B) STORAGE (S-2) | 1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50 |                    |
|----------------------------|---|--------------------|
| OCCUPANCY GROUP            | TOTAL REQUIRED  | REQUIRED MEN WOMEN |
| B                          | 2   | 1 1                |
| S-2                        | 2   | 1 1                |

LAVATORIES: (TABLE 2902.1)

| BUSINESS (B) STORAGE (S-2) | 1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80 |          |
|----------------------------|---|----------|
| OCCUPANCY GROUP            | REQUIRED  | PROVIDED |
| B                          | 2   | 2        |
| S-2                        | 2   | 2        |

DRINKING FOUNTAINS: (TABLE 2902.1)

| BUSINESS (B) STORAGE (S-2) | 1 PER 100 |          |
|----------------------------|-----------|----------|
| OCCUPANCY GROUP            | REQUIRED  | PROVIDED |
| B                          | 1         | 1        |
| S-2                        | 1         | 1        |

SERVICE SINK: (TABLE 2902.1)

| BUSINESS (B) STORAGE (S-2) | 1 SERVICE SINK |          |
|----------------------------|----------------|----------|
| OCCUPANCY GROUP            | REQUIRED       | PROVIDED |
| B                          | 1              | 1        |
| S-2                        | 1              | 1        |

**SCOPE OF WORK**

THE PROJECT CONSISTS OF REPAIRS, ALTERATIONS, AND UPGRADES TO THE EXISTING PRE-ENGINEERED METAL BUILDING AT THE ANUENUE ANNEX FACILITY. STRUCTURAL WORK INCLUDES REPAIRS TO THE EXISTING STEEL RIGID FRAMES, PURLINS, EAVE STRUTS, GIRTS AT LOUVERS AND OPENINGS, AND THE CORRUGATED METAL ROOFING AND SIDING. STRUCTURAL MEMBERS EXHIBITING MINOR SURFACE CORROSION WILL BE CLEANED AND RECOATED, WHILE MEMBERS WITH SIGNIFICANT SECTION LOSS DUE TO CORROSION WILL BE REINFORCED OR REMOVED AND REPLACED AS REQUIRED. PORTIONS OF THE EXISTING TOILET AREA WILL BE SELECTIVELY DEMOLISHED TO ALLOW FOR AN EXPANSION UTILIZING NEW COLD-FORMED STEEL FRAMING. A NEW STRUCTURAL STEEL CANOPY WILL ALSO BE INSTALLED WITHIN THE FACILITY TO PROVIDE PROTECTION FOR ELECTRICAL EQUIPMENT. ARCHITECTURAL WORK INCLUDES REPAIRS AND IMPROVEMENTS TO BOTH THE INTERIOR AND EXTERIOR OF THE EXISTING BUILDING. INTERIOR WORK INCLUDES REMOVAL AND REPLACEMENT OF FLOORING WITH NEW LUXURY VINYL TILE AND REPAINTING OF WALLS IN OFFICE 104 AND STORAGE ROOMS 200 AND 201. INSTALLATION OF NEW CASEWORK IN THE UTILITY CLOSET 103. THE SCOPE OF WORK ALSO INCLUDED ADA COMPLIANCE UPGRADES, CONSISTING OF THE ADDITION OF TWO ACCESSIBLE SHOWERS AND INSTALLATION OF REQUIRED HANDRAILS AT THE EXISTING METAL STAIRS. MECHANICAL WORK INCLUDES MODIFICATIONS AND UPGRADES TO PLUMBING SYSTEMS TO SUPPORT THE NEW ADA-COMPLIANT SHOWERS AND EXPANDED RESTROOM AREAS, AS WELL AS ANY REQUIRED VENTILATION IMPROVEMENTS ASSOCIATED WITH THE RENOVATED SPACES. ELECTRICAL WORK INCLUDES MODIFICATIONS TO SUPPORT THE RELOCATED OR PROTECTED ELECTRICAL EQUIPMENT, IMPROVEMENTS ASSOCIATED WITH THE NEW CANOPY PROTECTION, AND ELECTRICAL UPGRADES REQUIRED TO SUPPORT THE RESTROOM EXPANSION AND ADA IMPROVEMENTS, REPLACEMENT OF HIGH BAY LIGHTING WITH LED FIXTURE, AND NEW RECEPTACLES, LIGHTING, CONTROLS, AND EMERGENCY LIGHTING IN RENOVATED AREAS.

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED: |
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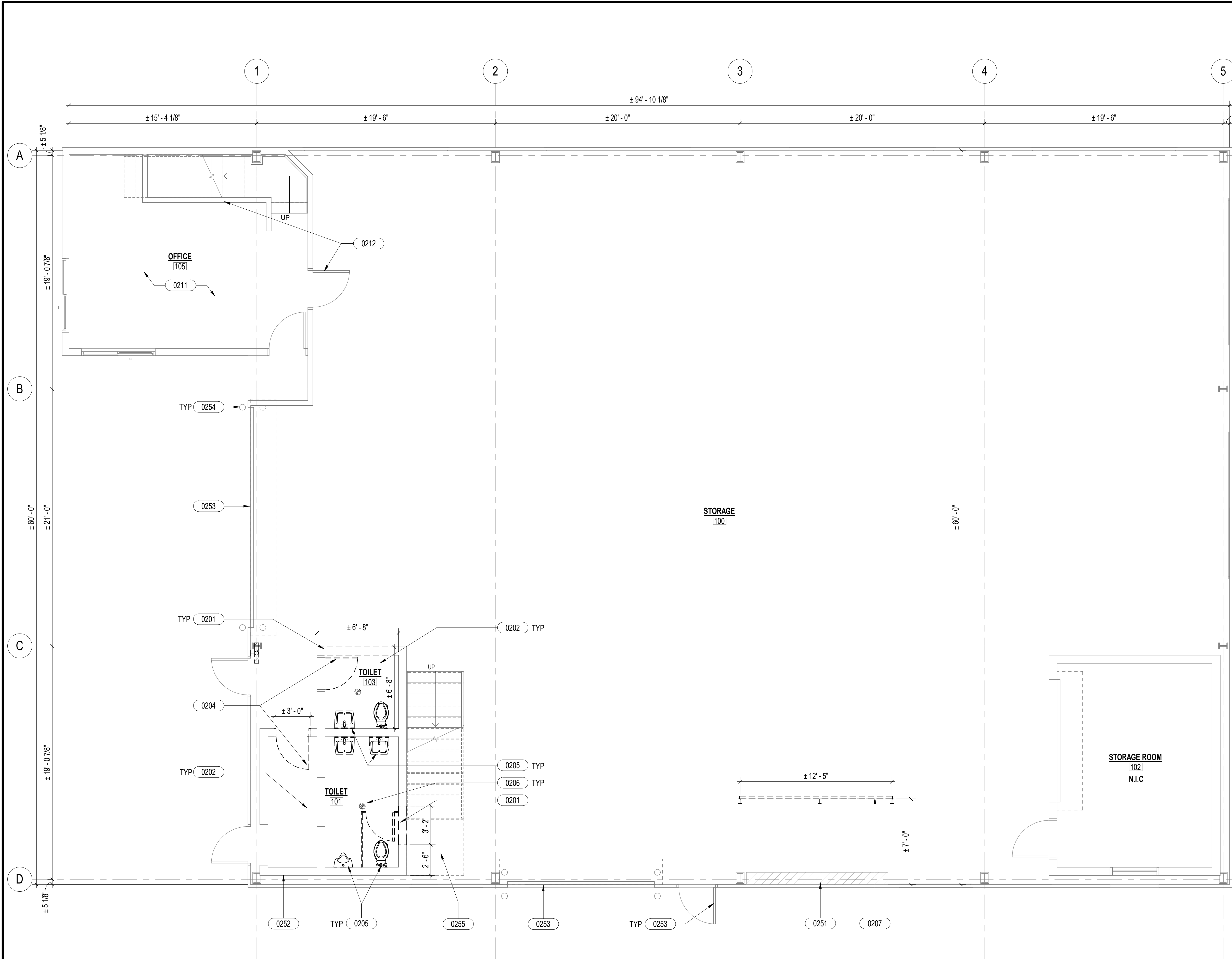
EXPIRATION DATE 04/30/2028

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**ENGINEERING DIVISION**

**ANUENUE FISHERIES RESEARCH CENTER**  
**ANNEX FACILITY IMPROVEMENTS**  
**- PHASE 1A (BUILDING IMPROVEMENTS)**  
SAND ISLAND, OAHU, HAWAII

CODE ANALYSIS AND BUILDING INFORMATION

|                           |  |                         |
|---------------------------|--|-------------------------|
| DESIGNED: JV              | SUBMITTED: KR  | AC                      |
| DRAWN: KR                 | DATE: APRIL 2026   |                         |
| CHECKED: CO               | SCALE: AS NOTED  |                         |
| APPROVED: <i>Dina Lau</i> | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | DRAWING NO. <b>A002</b> |
| CHIEF ENGINEER            | State of Hawaii  | Civil Engineer          |



**SHEET NOTES**

- COORDINATE ALL CONSTRUCTION ACTIVITIES, SCHEDULES, AND SITE ACCESS WITH OTHER ACTIVE CONSTRUCTION AT THE FACILITY TO PREVENT CONFLICTS AND MINIMIZE DISRUPTION TO ONGOING FACILITY OPERATIONS.

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION  |
|---------|--|
| 0201    | DEMO EXISTING WALL AND WALL TILES                                    |
| 0202    | DEMO EXISTING TILE FLOORING AND TILE BASE                            |
| 0204    | DEMO EXISTING DOOR AND DOOR FRAME                                    |
| 0205    | DEMO EXISTING PLUMBING FIXTURE, SEE MECHANICAL                       |
| 0206    | DEMO EXISTING FLOOR DRAIN, SEE MECHANICAL                            |
| 0207    | DEMO EXISTING BARRICADE  |
| 0211    | DEMO EXISTING FLOORING   |
| 0212    | PREPARE INTERIOR WALLS AND DOORS FOR PAINTING                        |
| 0251    | EXISTING ELECTRICAL EQUIPMENT TO REMAIN, PROTECT DURING CONSTRUCTION |
| 0252    | EXISTING WALL TO REMAIN  |
| 0253    | EXISTING DOOR TO REMAIN  |
| 0254    | EXISTING BOLLARD TO REMAIN   |
| 0255    | EXISTING STAIRS ABOVE TO REMAIN                                      |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
 ANNEX FACILITY IMPROVEMENTS  
 - PHASE 1A (BUILDING IMPROVEMENTS)  
 SAND ISLAND, OAHU, HAWAII

FIRST FLOOR DEMOLITION PLAN

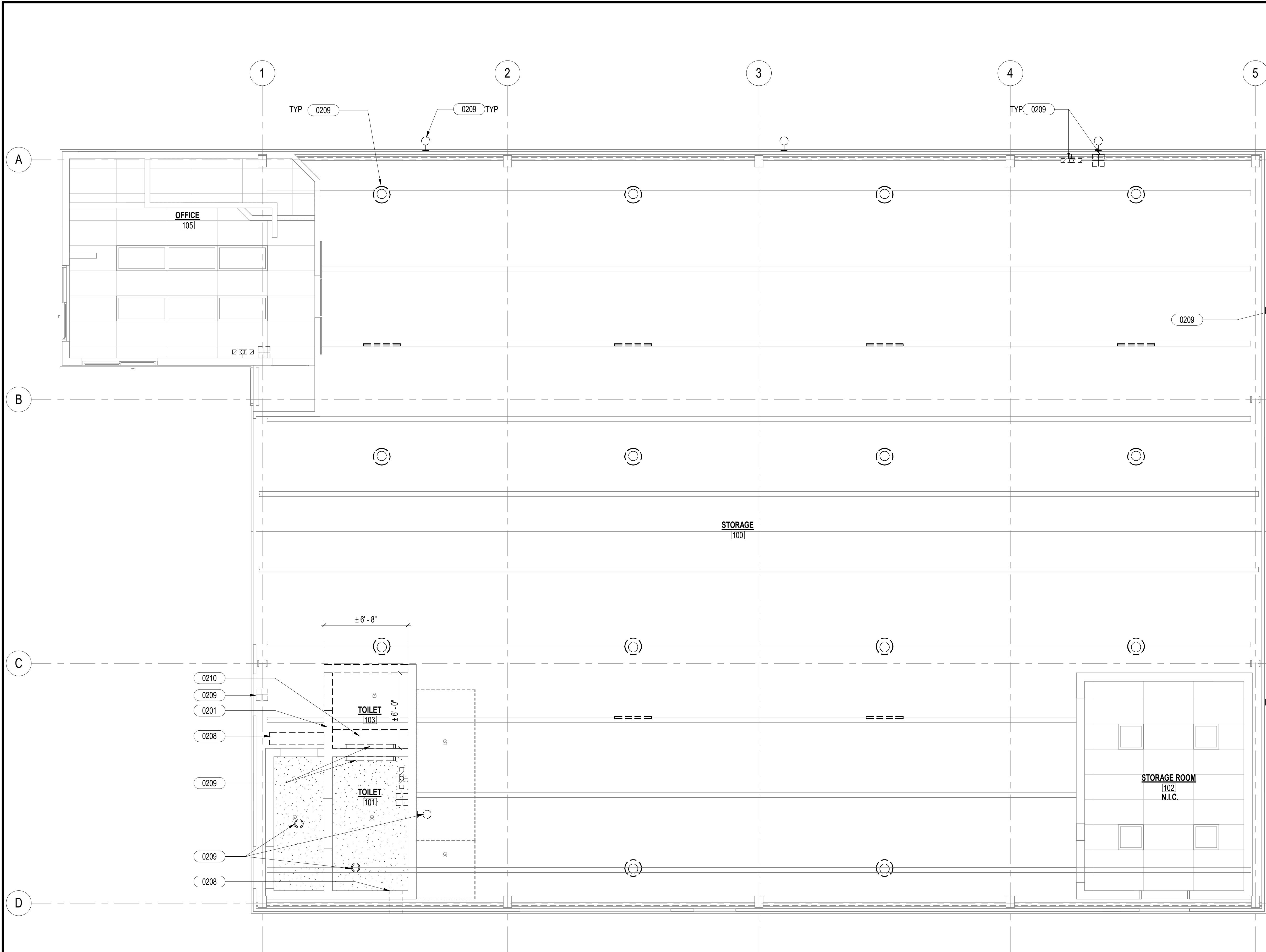
DESIGNED: JV      SUBMITTED: KR      *gc* *u*  
 DRAWN: KR      DATE: APRIL 2026  
 CHECKED: CO      SCALE: AS NOTED

APPROVED: *Dina Lau*  
 Dina Lau  
 E-signed 2026-04-29 01:15PM HST  
 dina.u.lau@hawaii.gov  
 State of Hawaii  
 CHIEF ENGINEER

DRAWING NO. **AD101**

**1 FIRST FLOOR DEMOLITION PLAN**  
 1/4" = 1'-0"





**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION   |
|---------|---|
| 0201    | DEMO EXISTING WALL AND WALL TILES                           |
| 0208    | DEMO EXISTING MECHANICAL AND PLUMBING ITEMS, SEE MECHANICAL |
| 0209    | DEMO EXISTING ELECTRICAL ITEMS, SEE ELECTRICAL              |
| 0210    | DEMO EXISTING CEILING AND SOFFIT                            |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**ENGINEERING DIVISION**

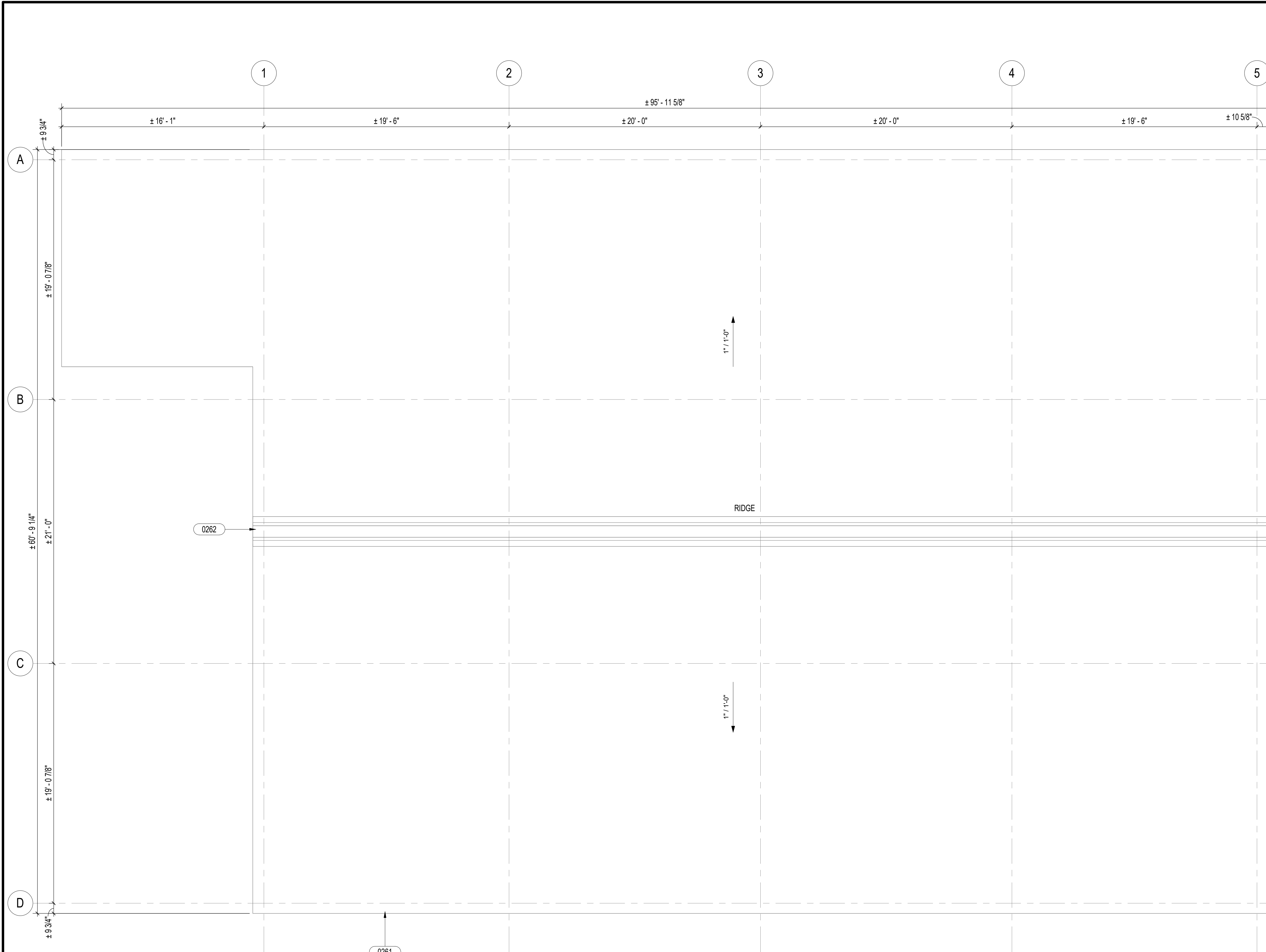
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**ANNEX FACILITY IMPROVEMENTS**  
**- PHASE 1A (BUILDING IMPROVEMENTS)**  
 SAND ISLAND, OAHU, HAWAII

FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN

|                           |                                 |             |    |
|---------------------------|---------------------------------|-------------|----|
| DESIGNED: JV              | SUBMITTED: KR                   | GC          | AL |
| DRAWN: KR                 | DATE: APRIL 2026                |             |    |
| CHECKED: CO               | SCALE: AS NOTED                 |             |    |
| APPROVED: <i>Dina Lau</i> | Dina Lau                        | DRAWING NO. |    |
|                           | E-signed 2026-04-29 01:15PM HST | AD111       |    |
|                           | dina.u.lau@hawaii.gov           |             |    |
|                           | State of Hawaii                 |             |    |
|                           | Civil Engineer                  |             |    |

**1** FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN  
 1/4" = 1'-0"





**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION |
|---------|-------------|
| 0261    |             |
| 0262    |             |

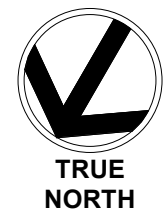
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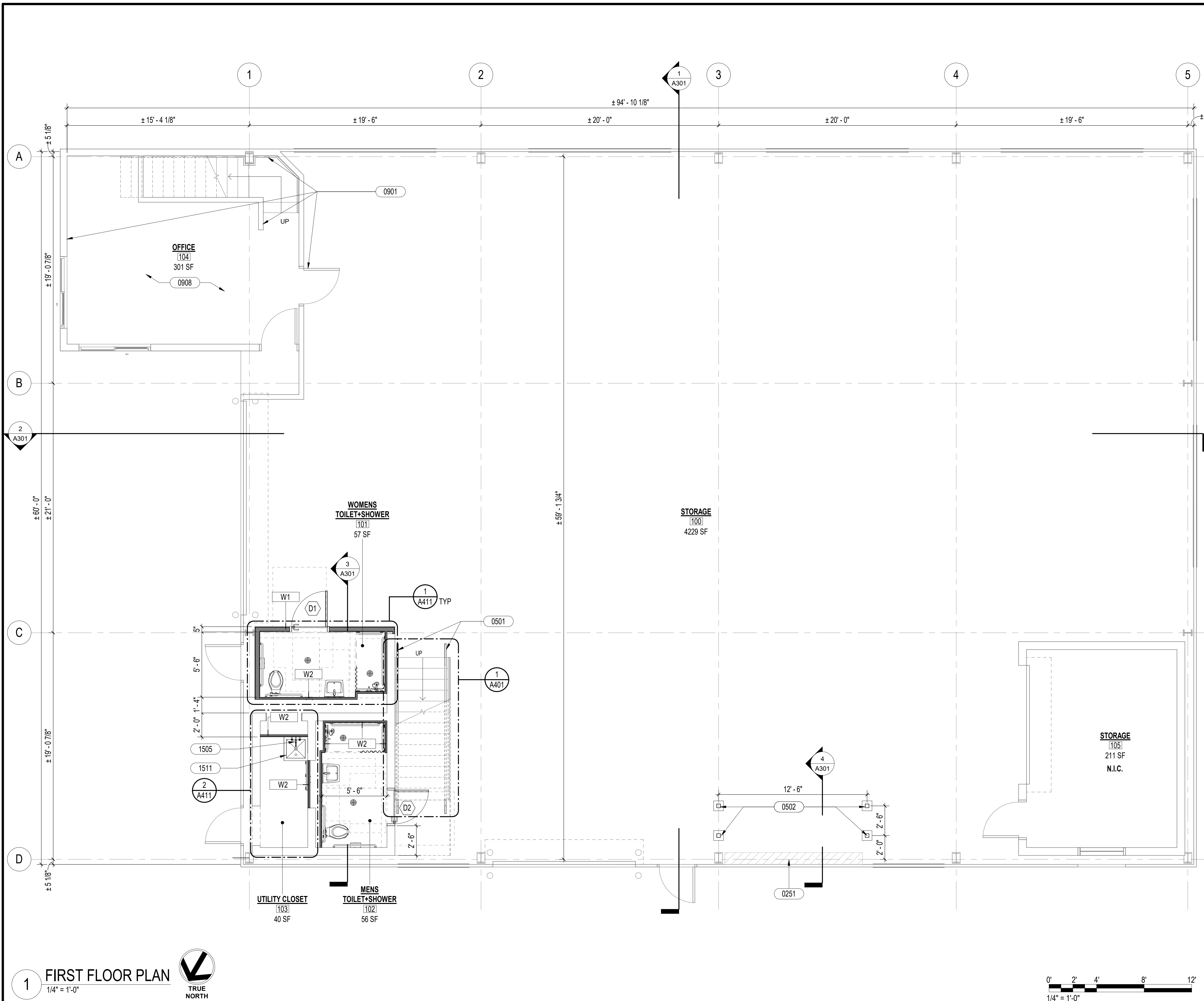


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 ANNEX FACILITY IMPROVEMENTS  
 - PHASE 1A (BUILDING IMPROVEMENTS)  
 SAND ISLAND, OAHU, HAWAII  
 ROOF DEMOLITION PLAN

|                    |                                 |    |   |
|--------------------|---------------------------------|----|---|
| DESIGNED: JV       | SUBMITTED: KR                   | GC | W |
| DRAWN: KR          | DATE: APRIL 2026                |    |   |
| CHECKED: CO        | SCALE: AS NOTED                 |    |   |
| APPROVED: Dina Lau | E-signed 2026-04-29 01:15PM HST |    |   |
| CHIEF ENGINEER     | dina.u.lau@hawaii.gov           |    |   |

**1 ROOF DEMOLITION PLAN**  
 1/4" = 1'-0"





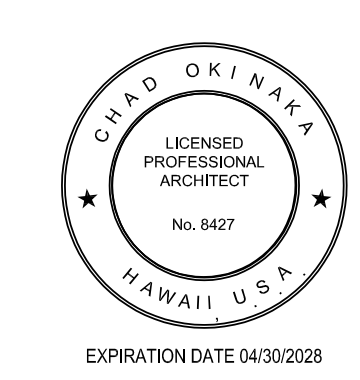
**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION  |
|---------|--|
| 0251    | EXISTING ELECTRICAL EQUIPMENT TO REMAIN, PROTECT DURING CONSTRUCTION |
| 0501    | METAL HANDRAIL, PAINT AS SCHEDULED                                   |
| 0502    | STEEL POST ON CONCRETE FOOTING, PAINT AS SCHEDULED, SEE STRUCTURAL   |
| 0901    | PAINT AS SCHEDULED   |
| 0908    | VINYL FLOORING AS SCHEDULED  |
| 1505    | PLUMBING FIXTURE, SEE MECHANICAL                                     |
| 1511    | SERVICE SINK AS SCHEDULED, SEE MECHANICAL                            |

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|              |      |             |         |      |          |



STATE OF HAWAII  
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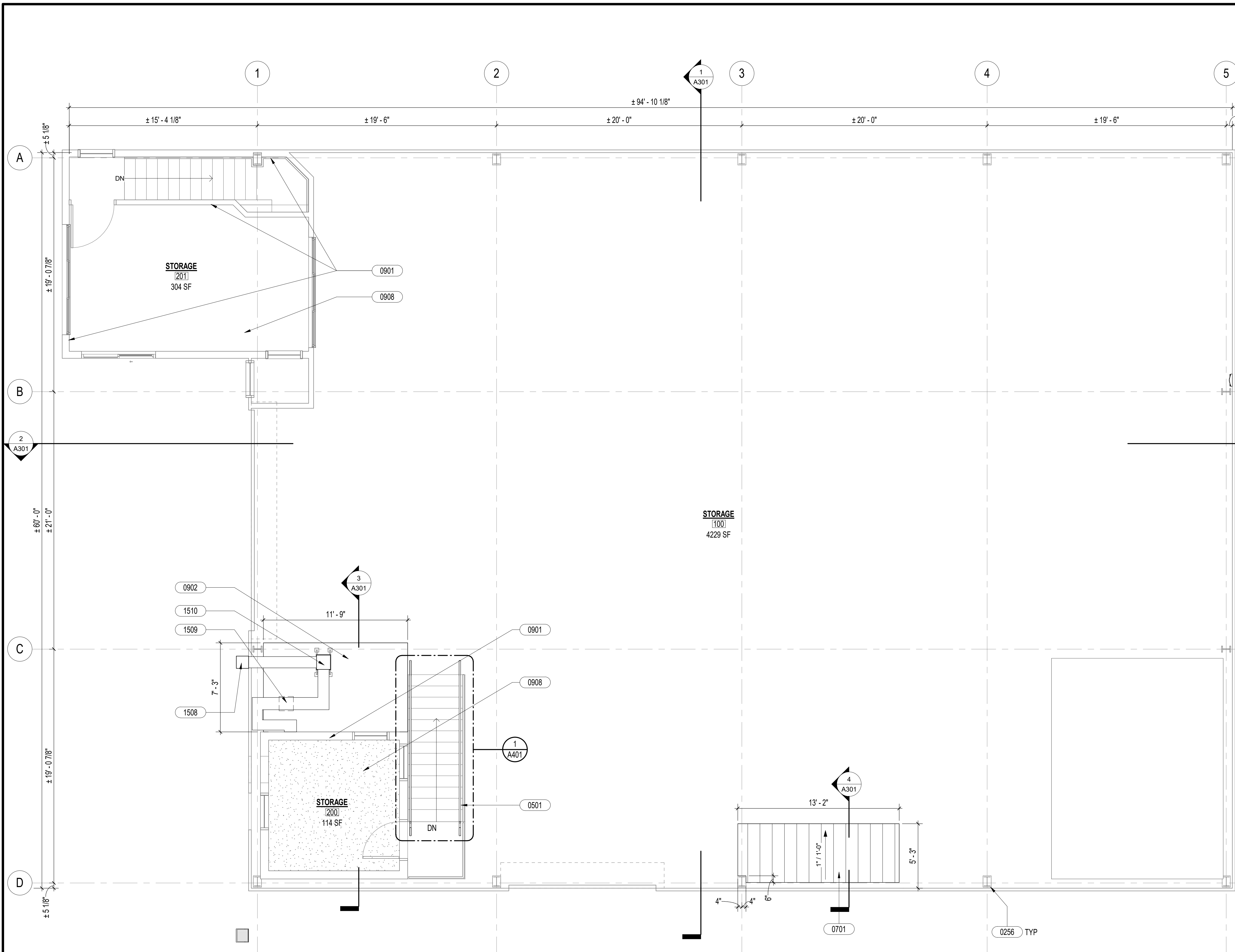
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 ANNEX FACILITY IMPROVEMENTS  
 - PHASE 1A (BUILDING IMPROVEMENTS)  
 SAND ISLAND, OAHU, HAWAII

FIRST FLOOR PLAN

|                    |                                 |                  |
|--------------------|---------------------------------|------------------|
| DESIGNED: JV       | SUBMITTED: KR                   | SCALE: AS NOTED  |
| DRAWN: KR          | DATE: APRIL 2026                |                  |
| CHECKED: CO        |                                 |                  |
| APPROVED: Dina Lau | E-signed 2026-04-29 01:15PM HST | DRAWING NO. A101 |
| CHIEF ENGINEER     | dina.u.lau@hawaii.gov           |                  |
|                    | State of Hawaii                 |                  |

**1 FIRST FLOOR PLAN**  
 1/4" = 1'-0"





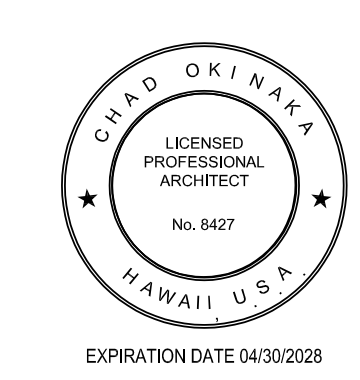
**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION                         |
|---------|-------------------------------------|
| 0256    | LINE OF WALL BELOW                  |
| 0501    | METAL HANDRAIL, PAINT AS SCHEDULED  |
| 0701    | PREFINISHED CORRUGATED METAL ROOF   |
| 0901    | PAINT AS SCHEDULED                  |
| 0902    | GYPSON CEILING AS SCHEDULED         |
| 0908    | VINYL FLOORING AS SCHEDULED         |
| 1508    | WALL CAP, SEE MECHANICAL            |
| 1509    | REGISTERS AND DUCTS, SEE MECHANICAL |
| 1510    | EXHAUST FAN, SEE MECHANICAL         |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



STATE OF HAWAII  
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 ENGINEERING DIVISION

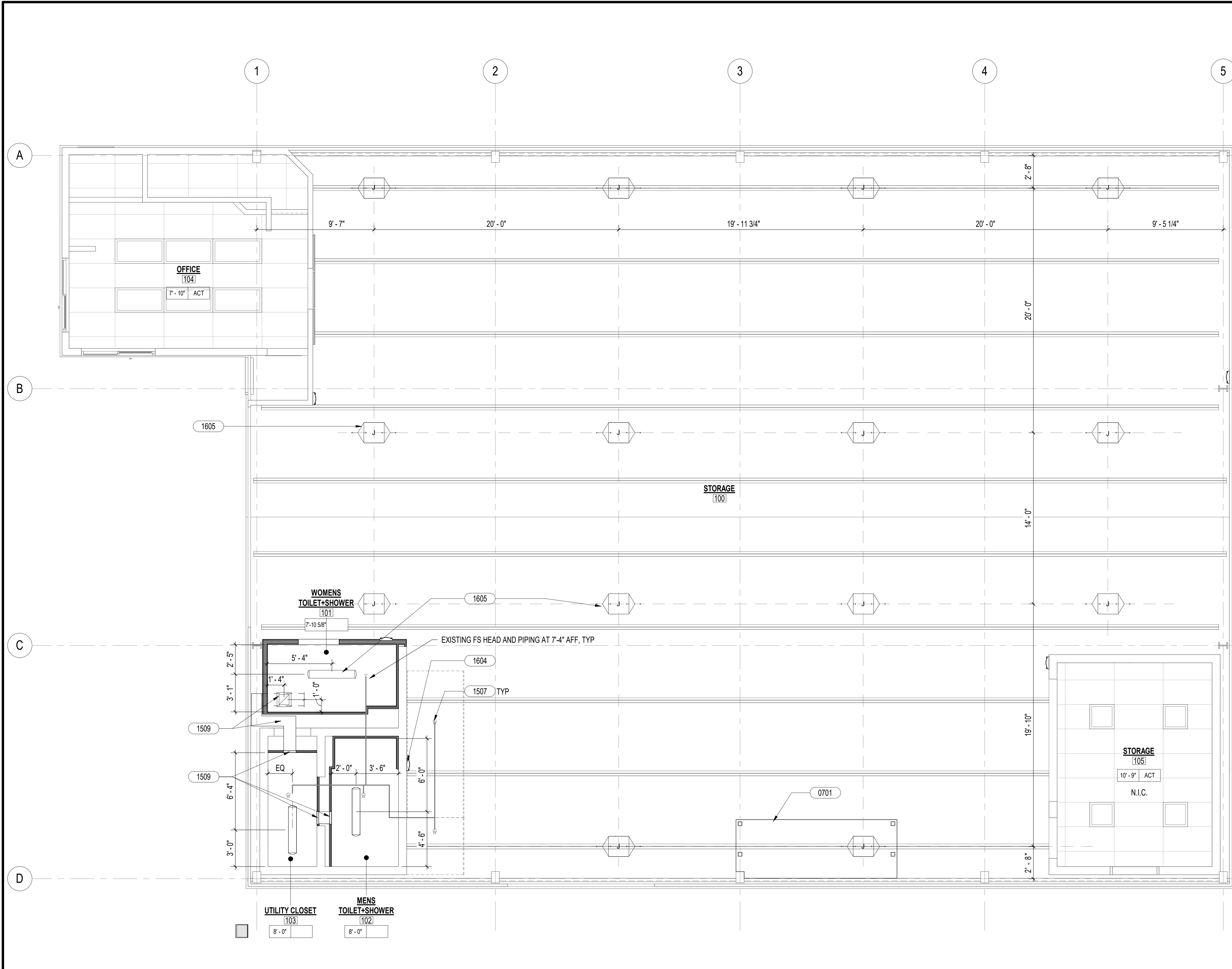
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 SAND ISLAND, OAHU, HAWAII

MEZZANINE FLOOR PLAN

|                    |                                 |                  |
|--------------------|---------------------------------|------------------|
| DESIGNED: JV       | SUBMITTED: KR                   | SCALE: AS NOTED  |
| DRAWN: KR          | DATE: APRIL 2026                |                  |
| CHECKED: CO        |                                 |                  |
| APPROVED: Dina Lau | E-signed 2026-04-29 01:15PM HST | DRAWING NO. A102 |
| CHIEF ENGINEER     | dina.u.lau@hawaii.gov           |                  |

**1 MEZZANINE FLOOR PLAN**  
 1/4" = 1'-0"





### SHEET NOTES

- REFER TO FIRST FLOOR PLAN FOR GRID DIMENSIONS.
- FOR COMPLETE SCOPE OF WORK, SEE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.

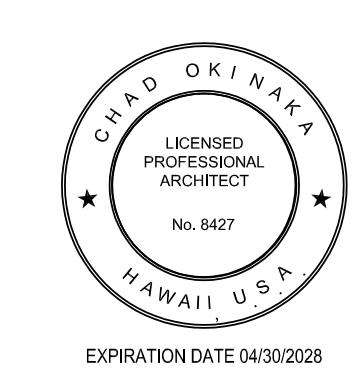
### LEGEND

- CEILING LIGHT, SEE ELEC
- 2' X 2' RECESSED LIGHT, SEE ELEC
- 2' X 4' RECESSED LIGHT, SEE ELEC
- SUSPENDED HEAVY BAY LIGHT, SEE ELEC
- EMERGENCY LIGHT, SEE ELEC
- WALL FAN, SEE ELEC

### KEYNOTES

| KEYNOTE | DESCRIPTION  |
|---------|--|
| 0701    | PREFINISHED CORRUGATED METAL ROOF                                      |
| 1507    | EXISTING FIRE SPRINKLER, SEE MECHANICAL                                |
| 1509    | REGISTERS AND DUCTS, SEE MECHANICAL                                    |
| 1604    | MOUNT LIGHT FIXTURE 8'-0" ABOVE MEZZANINE LANDING, SEE ELECTRICAL      |
| 1605    | COORDINATE LOCATION OF LIGHT FIXTURE WITH EXISTING FIRE SPRINKLER, TYP |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
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**STATE OF HAWAII**  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

**ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS  
- PHASE 1A (BUILDING IMPROVEMENTS)**  
SAND ISLAND, OAHU, HAWAII

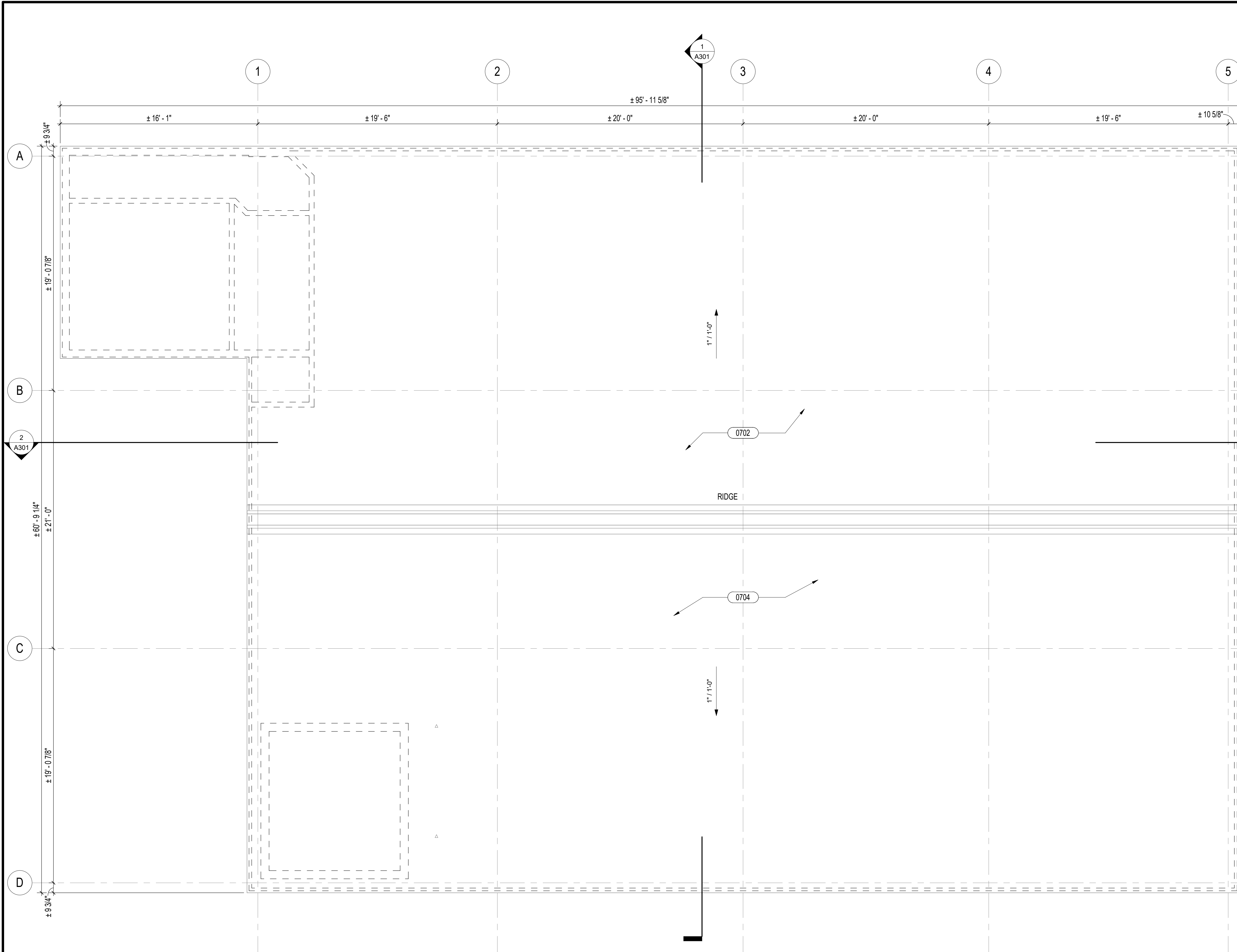
FIRST FLOOR REFLECTED CEILING PLAN

|                           |   |
|---------------------------|---|
| DESIGNED: JV              | SUBMITTED: KR   |
| DRAWN: KR                 | DATE: APRIL 2026  |
| CHECKED: CO               | SCALE: AS NOTED   |
| APPROVED: <i>Dina Lau</i> | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Civil Engineer |

DRAWING NO. **A111**

**1 FIRST FLOOR REFLECTED CEILING PLAN**  
1/4" = 1'-0"





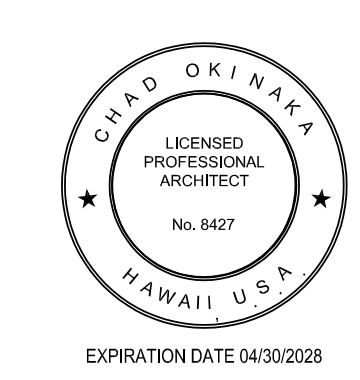
**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION   |
|---------|---|
| 0702    | REPAIR EXISTING ROOF AT VARIOUS LOCATIONS, SEE STRUCTURAL |
| 0704    | FLUID APPLIED ROOFING ON EXISTING ROOF                    |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



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- PHASE 1A (BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

ROOF PLAN

DESIGNED: JV  
DRAWN: KR  
CHECKED: CO

SUBMITTED: KR  
DATE: APRIL 2026  
SCALE: AS NOTED

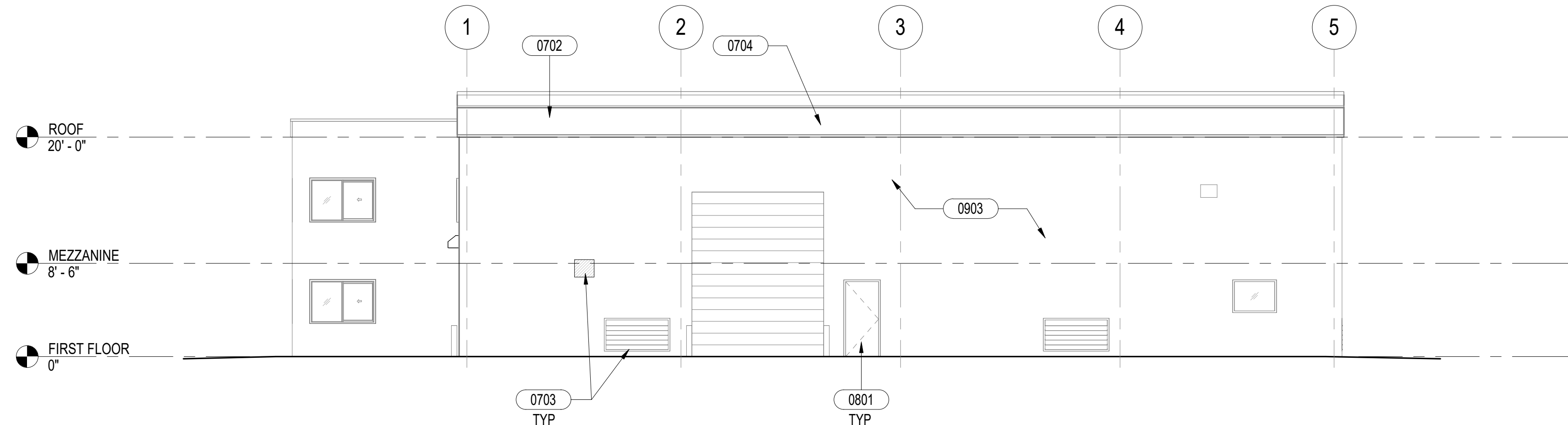
THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION SHALL BE DEFINED IN CHAPTER 16, HAWAII CONSTRUCTION RULES FOR PROFESSIONAL ARCHITECTS, ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS, STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-115-2 DEFINITIONS, EFFECTIVE 8/29/2014.

APPROVED: Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer  
SHEET NO. 28 OF 53 SHEETS

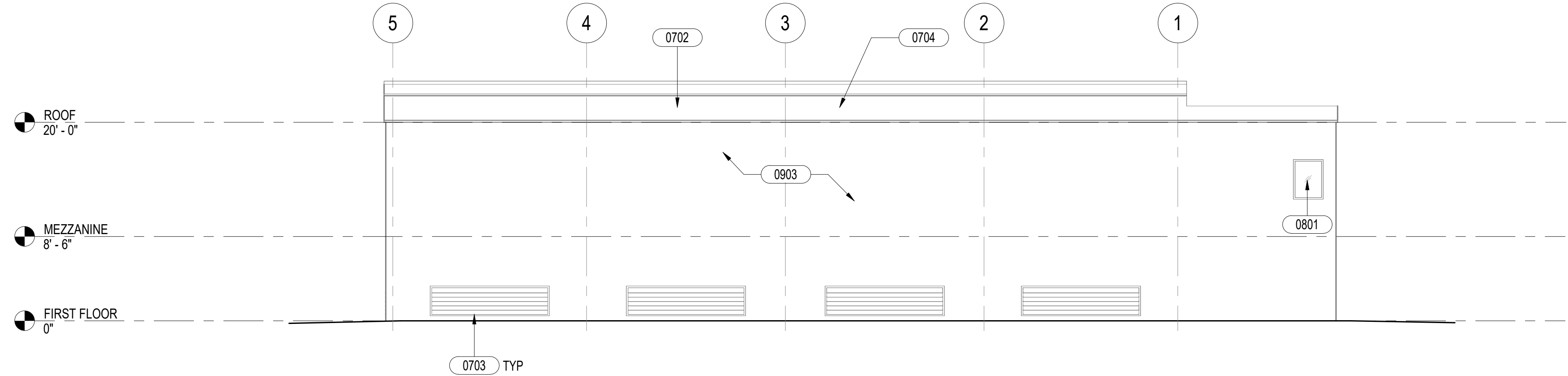
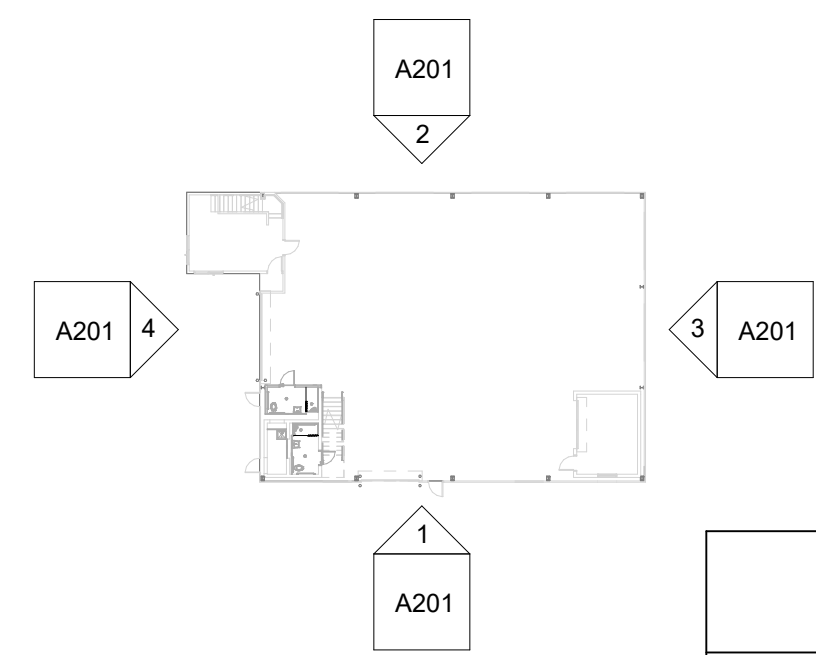
DRAWING NO. A121

1 ROOF PLAN  
1/4" = 1'-0"  
TRUE NORTH

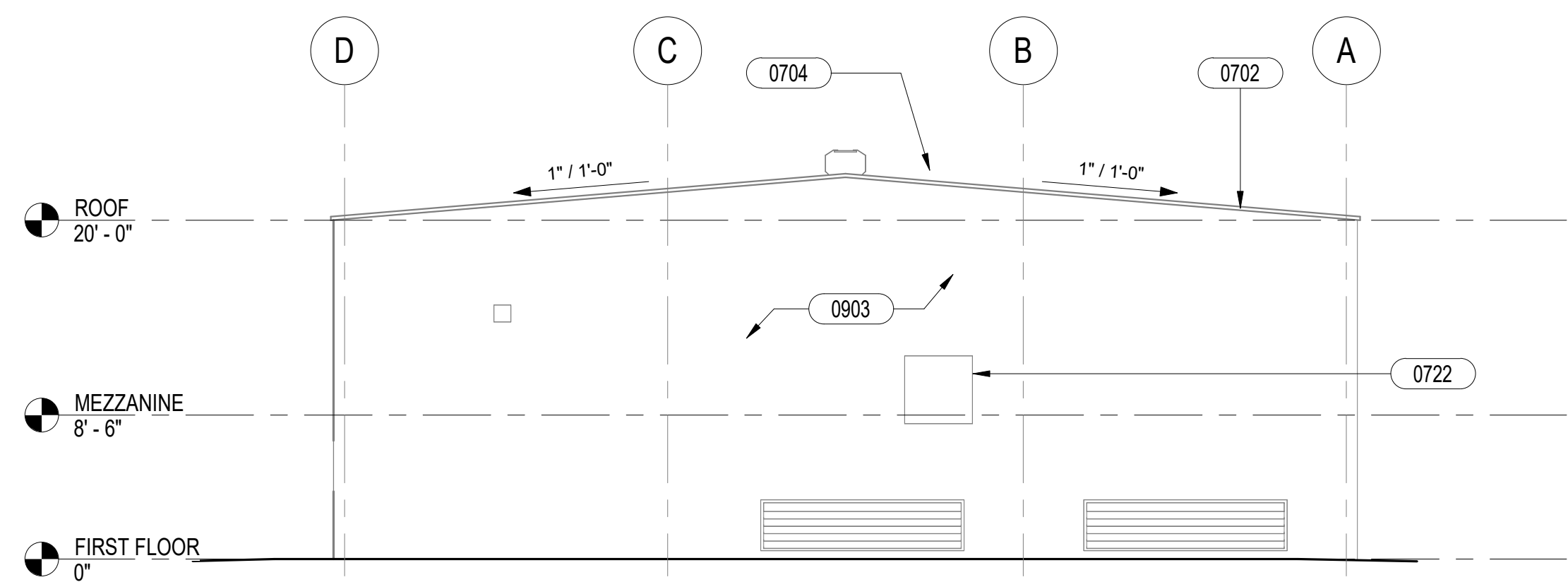




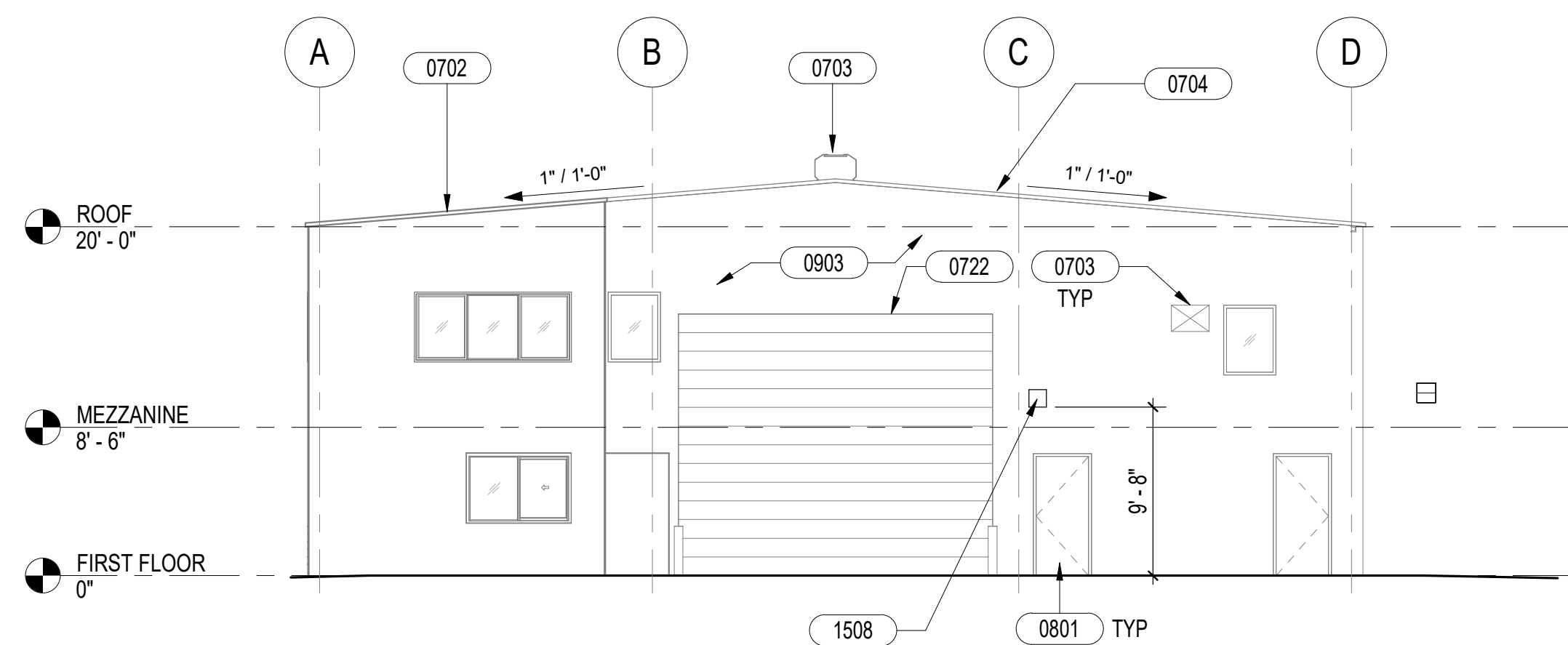
**1 NORTH ELEVATION**  
1/8" = 1'-0"



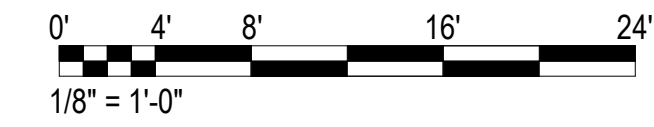
**2 SOUTH ELEVATION**  
1/8" = 1'-0"



**3 EAST ELEVATION**  
1/8" = 1'-0"



**4 WEST ELEVATION**  
1/8" = 1'-0"



**SHEET NOTES**

1. FOR COMPLETE SCOPE OF WORK, SEE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. SEE MATERIAL FINISH FOR ADDITIONAL INFORMATION.
3. SEE WALL TYPES FOR ADDITIONAL INFORMATION.

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION   |
|---------|---|
| 0702    | REPAIR EXISTING ROOF AT VARIOUS LOCATIONS, SEE STRUCTURAL               |
| 0703    | REPAIR EXISTING SIDING AND LOUVERS AT VARIOUS LOCATIONS, SEE STRUCTURAL |
| 0704    | FLUID APPLIED ROOFING ON EXISTING ROOF                                  |
| 0722    | REPAIR EXISTING FRAMING AT VARIOUS LOCATIONS, SEE STRUCTURAL            |
| 0801    | PAINT EXISTING EXTERIOR DOOR, DOOR FRAME AND WINDOW FRAME AS SCHEDULED  |
| 0903    | PAINT EXISTING SIDING AS SCHEDULED                                      |
| 1508    | WALL CAP, SEE MECHANICAL  |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

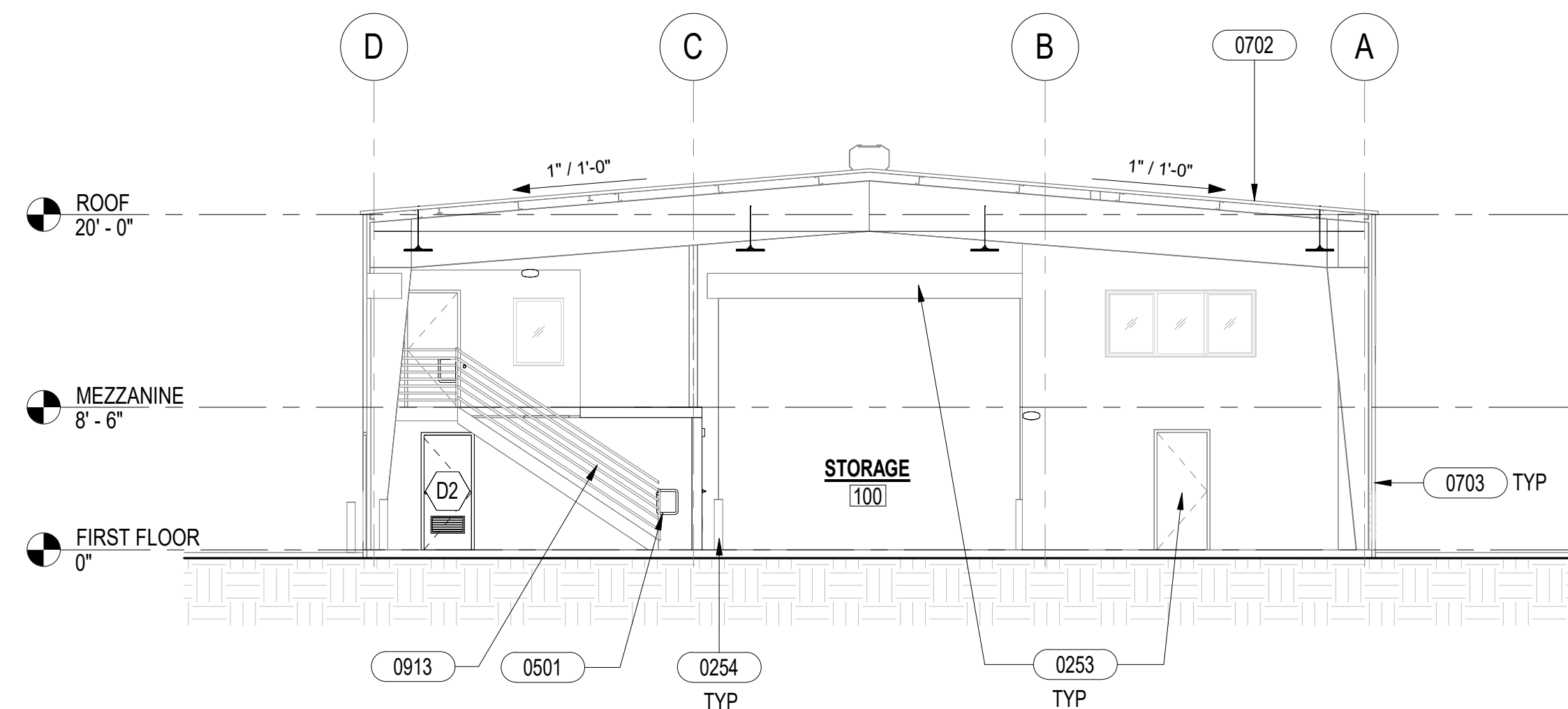


STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

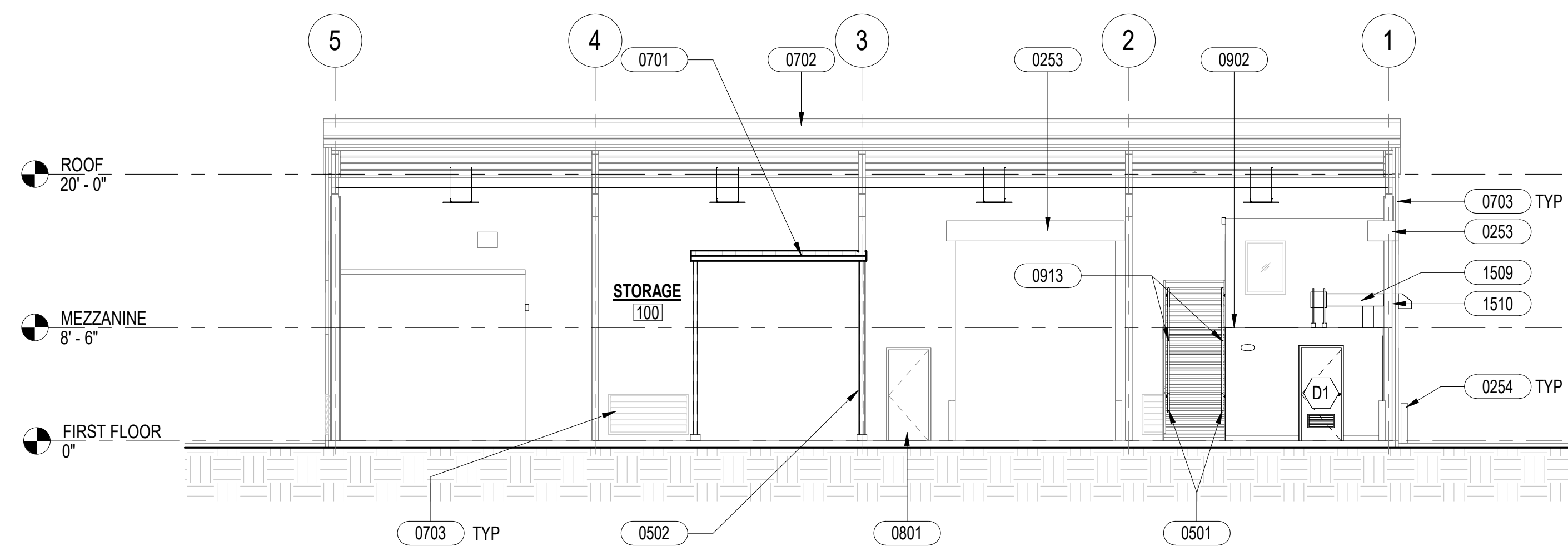
ANUENUE FISHERIES RESEARCH CENTER  
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- PHASE 1A (BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

EXTERIOR ELEVATIONS

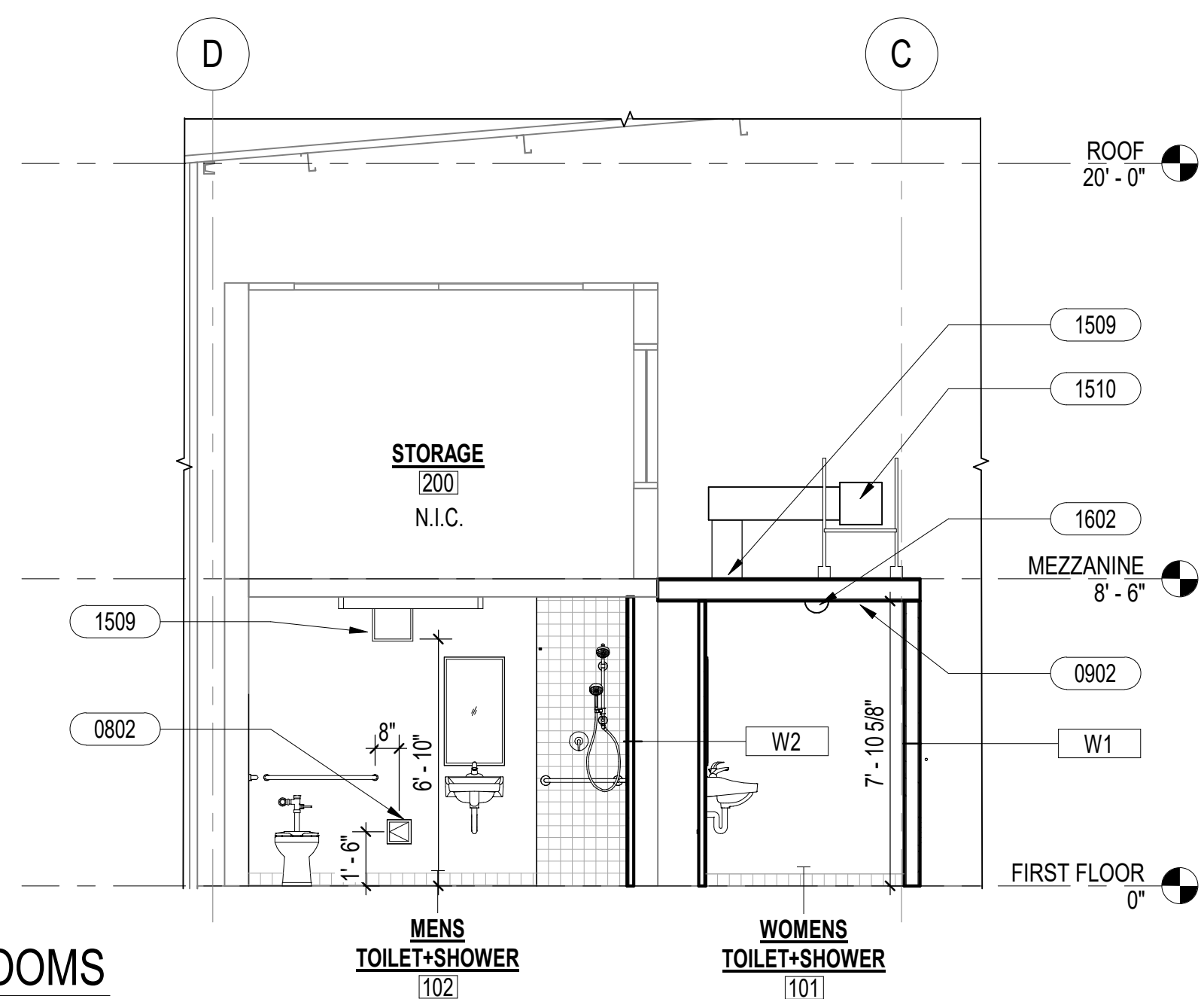
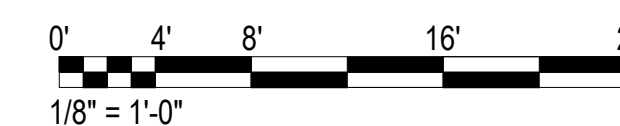
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| DESIGNED: JV       | SUBMITTED: KR                   | SCALE: AS NOTED  |
| DRAWN: KR          | DATE: APRIL 2026                |                  |
| CHECKED: CO        |                                 |                  |
| APPROVED: Dina Lau | E-signed 2026-04-29 01:15PM HST | DRAWING NO. A201 |
| CHIEF ENGINEER     | dina.u.lau@hawaii.gov           |                  |
|                    | State of Hawaii                 |                  |



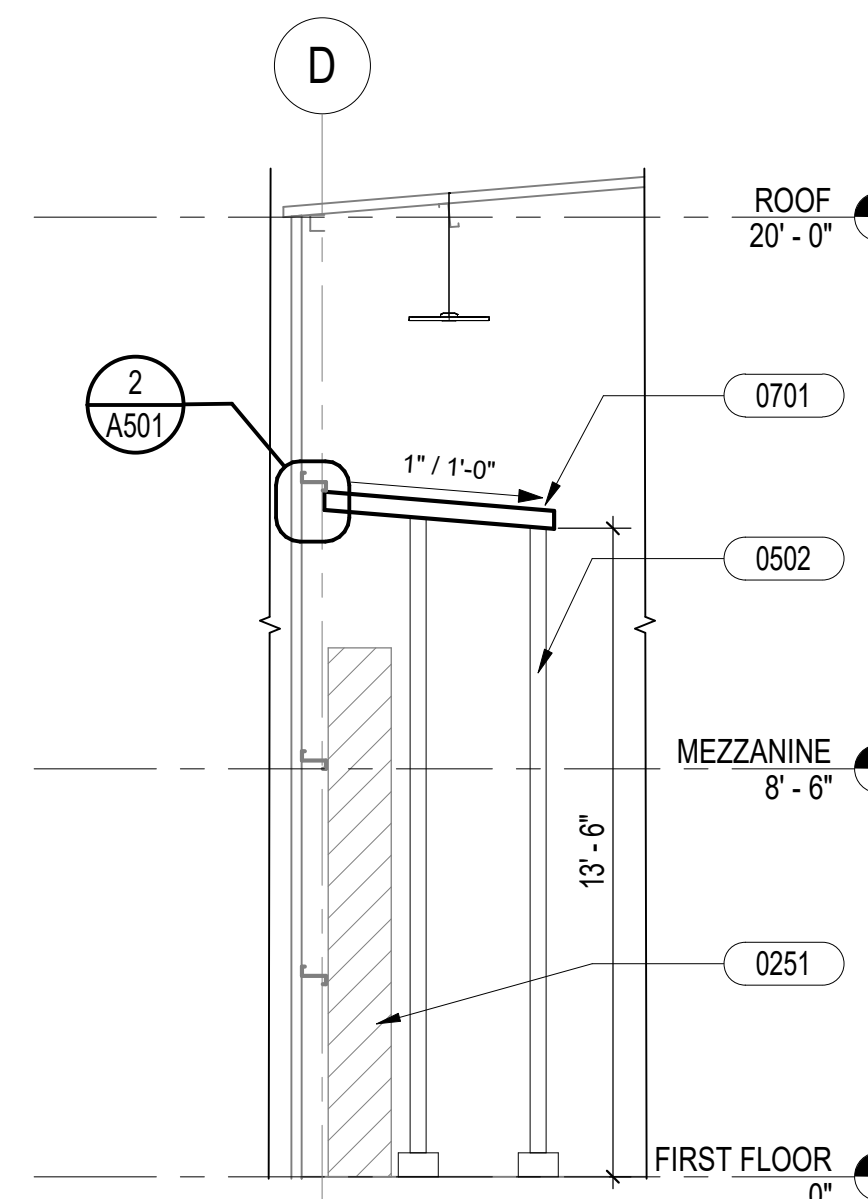
**1** CROSS SECTION  
1/8" = 1'-0"



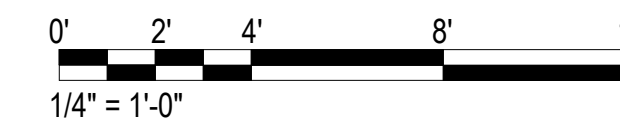
**2** LONGITUDINAL SECTION  
1/8" = 1'-0"



**3** SECTION AT BATHROOMS  
1/4" = 1'-0"



**4** SECTION AT ELECTRIC SWITCH COVER  
1/4" = 1'-0"



**SHEET NOTES**

- FOR COMPLETE SCOPE OF WORK. SEE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- SEE MATERIAL FINISH FOR ADDITIONAL INFORMATION.
- SEE WALL TYPES FOR ADDITIONAL INFORMATION.

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION   |
|---------|---|
| 0251    | EXISTING ELECTRICAL EQUIPMENT TO REMAIN, PROTECT DURING CONSTRUCTION    |
| 0253    | EXISTING DOOR TO REMAIN   |
| 0254    | EXISTING BOLLARD TO REMAIN  |
| 0501    | METAL HANDRAIL, PAINT AS SCHEDULED                                      |
| 0502    | STEEL POST ON CONCRETE FOOTING, PAINT AS SCHEDULED, SEE STRUCTURAL      |
| 0701    | PREFINISHED CORRUGATED METAL ROOF                                       |
| 0702    | REPAIR EXISTING ROOF AT VARIOUS LOCATIONS, SEE STRUCTURAL               |
| 0703    | REPAIR EXISTING SIDING AND LOUVERS AT VARIOUS LOCATIONS, SEE STRUCTURAL |
| 0801    | PAINT EXISTING EXTERIOR DOOR, DOOR FRAME AND WINDOW FRAME AS SCHEDULED  |
| 0802    | 8x8 PREFINISHED ACCESS PANEL AT ALL SHOWERS, COORDINATE WITH MECHANICAL |
| 0902    | GYPSUM CEILING AS SCHEDULED   |
| 0913    | EXISTING RAILING, PAINT AS SCHEDULED                                    |
| 1509    | REGISTERS AND DUCTS, SEE MECHANICAL                                     |
| 1510    | EXHAUST FAN, SEE MECHANICAL   |
| 1602    | CEILING MOUNTED LIGHT FIXTURE, SEE ELECTRICAL                           |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

STATE OF HAWAII  
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SAND ISLAND, OAHU, HAWAII

SECTIONS

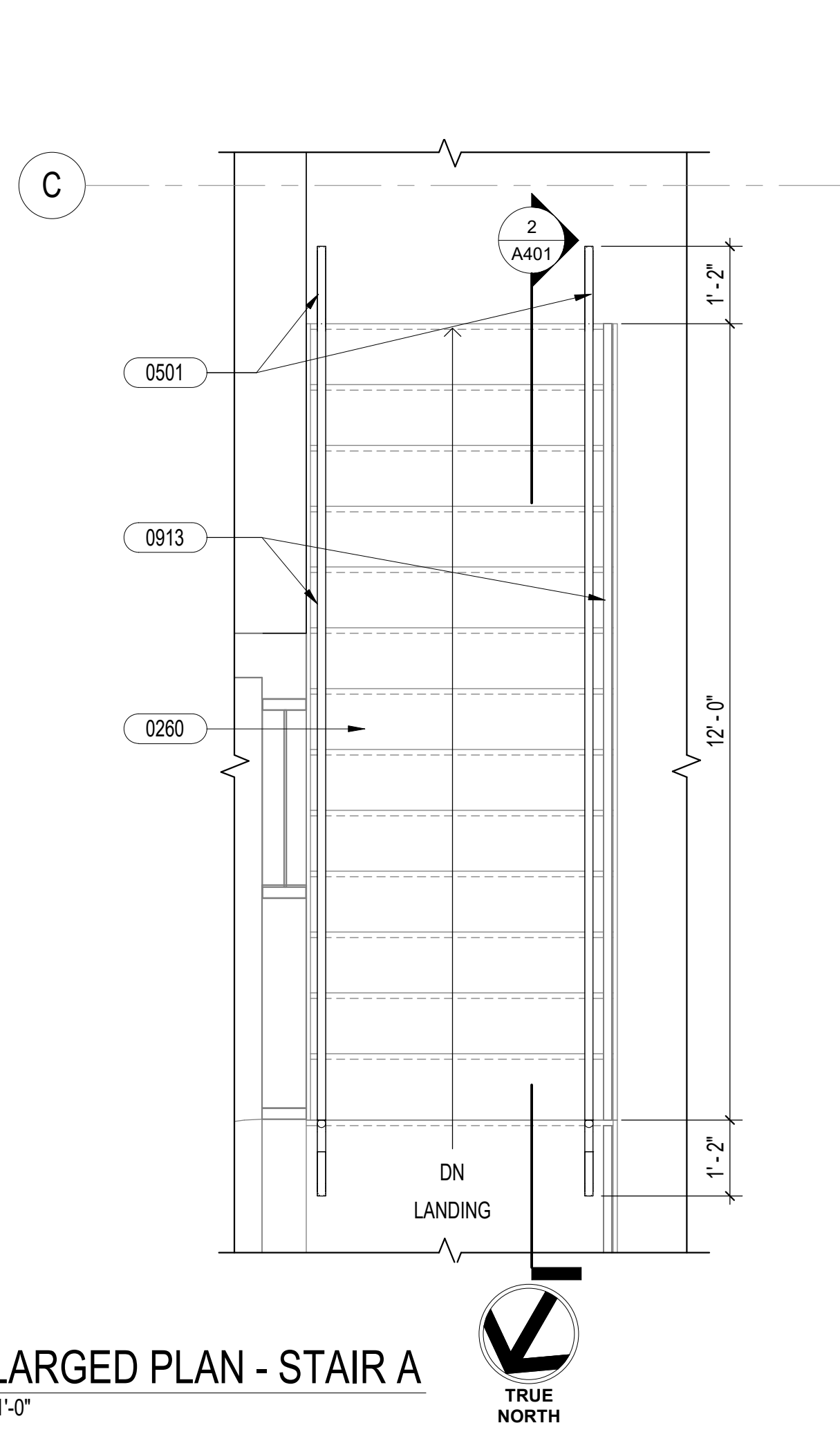
DESIGNED: JV      SUBMITTED: KR  
DRAWN: KR      DATE: APRIL 2026  
CHECKED: CO      SCALE: AS NOTED

APPROVED: *Dina Lau*  
Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer

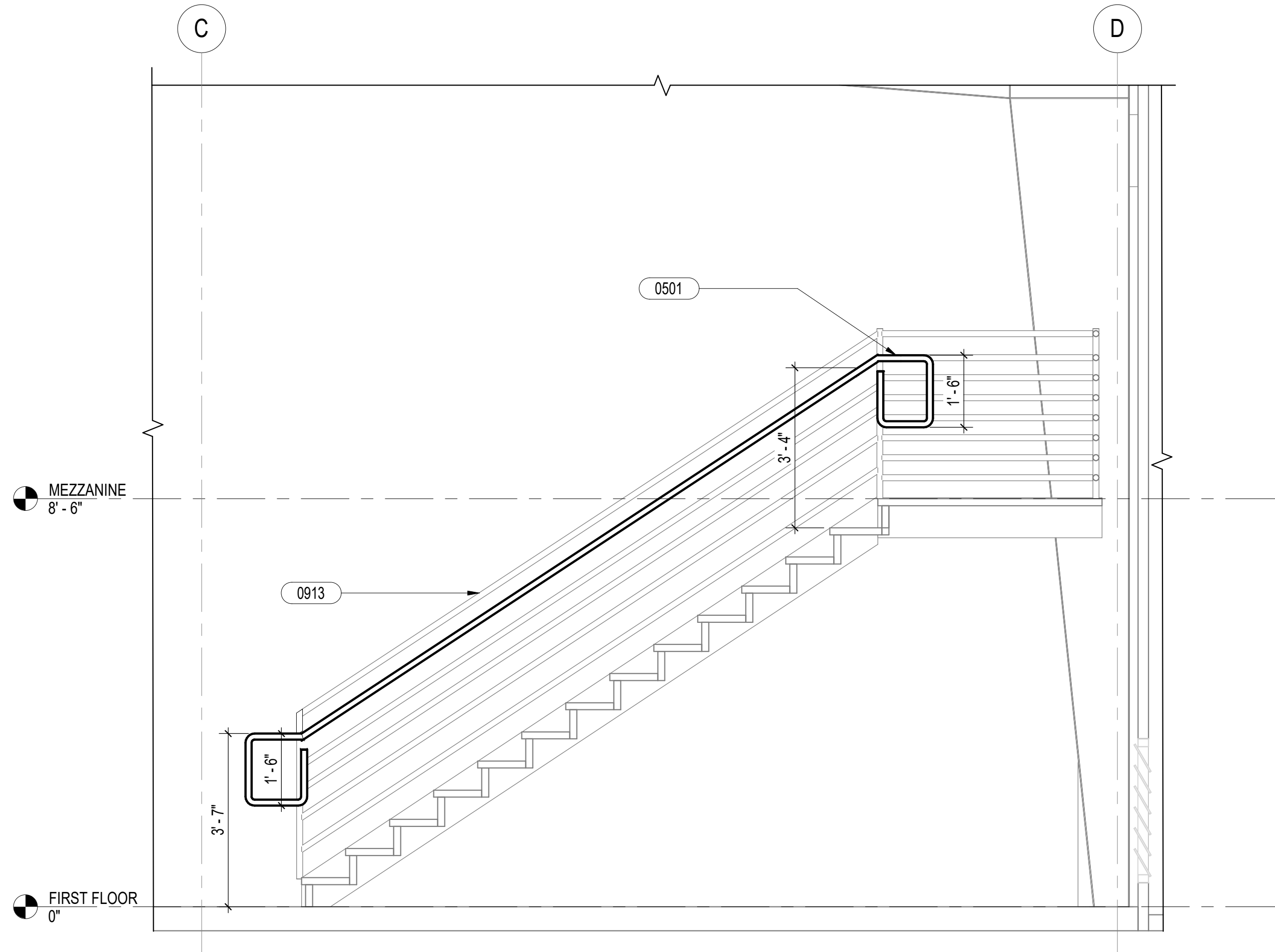
DRAWING NO. **A301**

JOB NO: C00B091B

SHEET NO. 30 OF 53 SHEETS



**1 ENLARGED PLAN - STAIR A**  
1/2" = 1'-0"



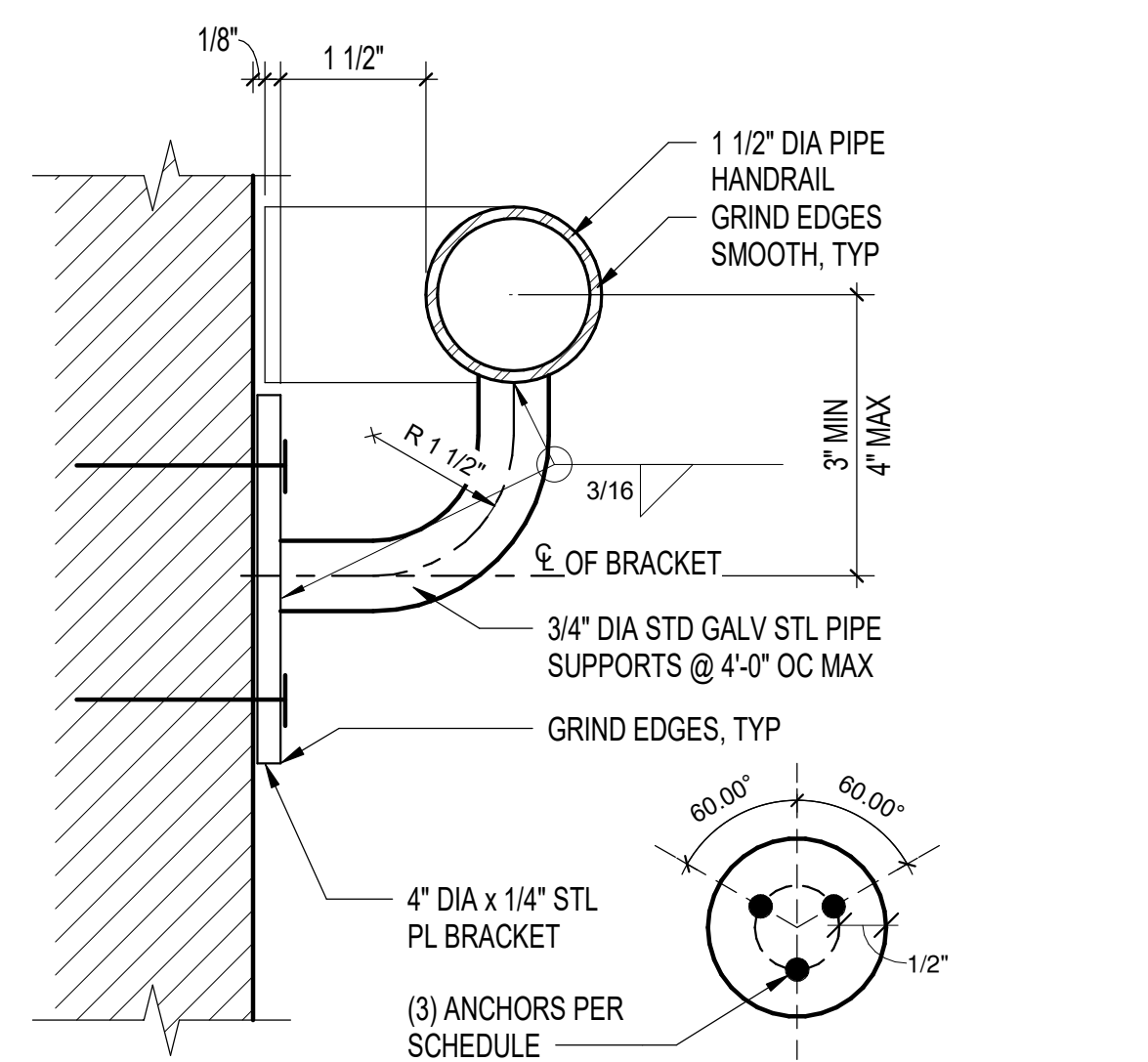
**2 STAIR A SECTION**  
1/2" = 1'-0"

**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| KEYNOTE | DESCRIPTION                          |
|---------|--------------------------------------|
| 0260    | EXISTING METAL STAIRS                |
| 0501    | METAL HANDRAIL, PAINT AS SCHEDULED   |
| 0913    | EXISTING RAILING, PAINT AS SCHEDULED |



- EXISTING CMU**
- (3) 1/4" DIA 'HILTI' KWIK-CON II W/ 1 3/4" EMBED
- METAL STUDS**
- (3) #14 SDST SCREWS
- EXISTING METAL GUARD RAIL**
- WELDED

**3 HANDRAIL MOUNTING**  
6" = 1'-0"

| REVISION NO. | SYM. | DESCRIPTION | SHR. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



**STATE OF HAWAII**  
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**ENGINEERING DIVISION**

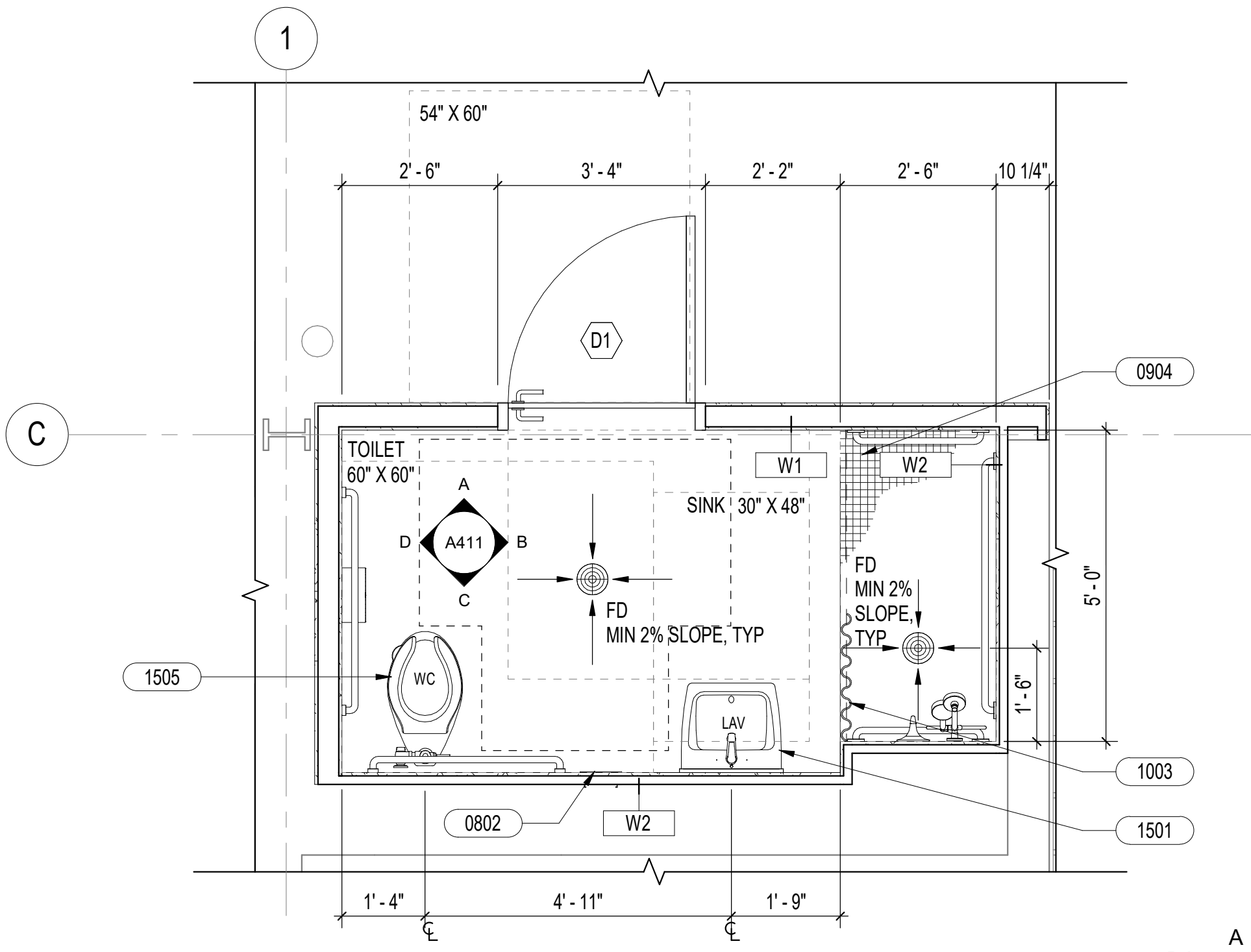
**ANUENUE FISHERIES RESEARCH CENTER**  
**ANNEX FACILITY IMPROVEMENTS**  
**- PHASE 1A (BUILDING IMPROVEMENTS)**  
SAND ISLAND, OAHU, HAWAII

**STAIR A DETAILS**

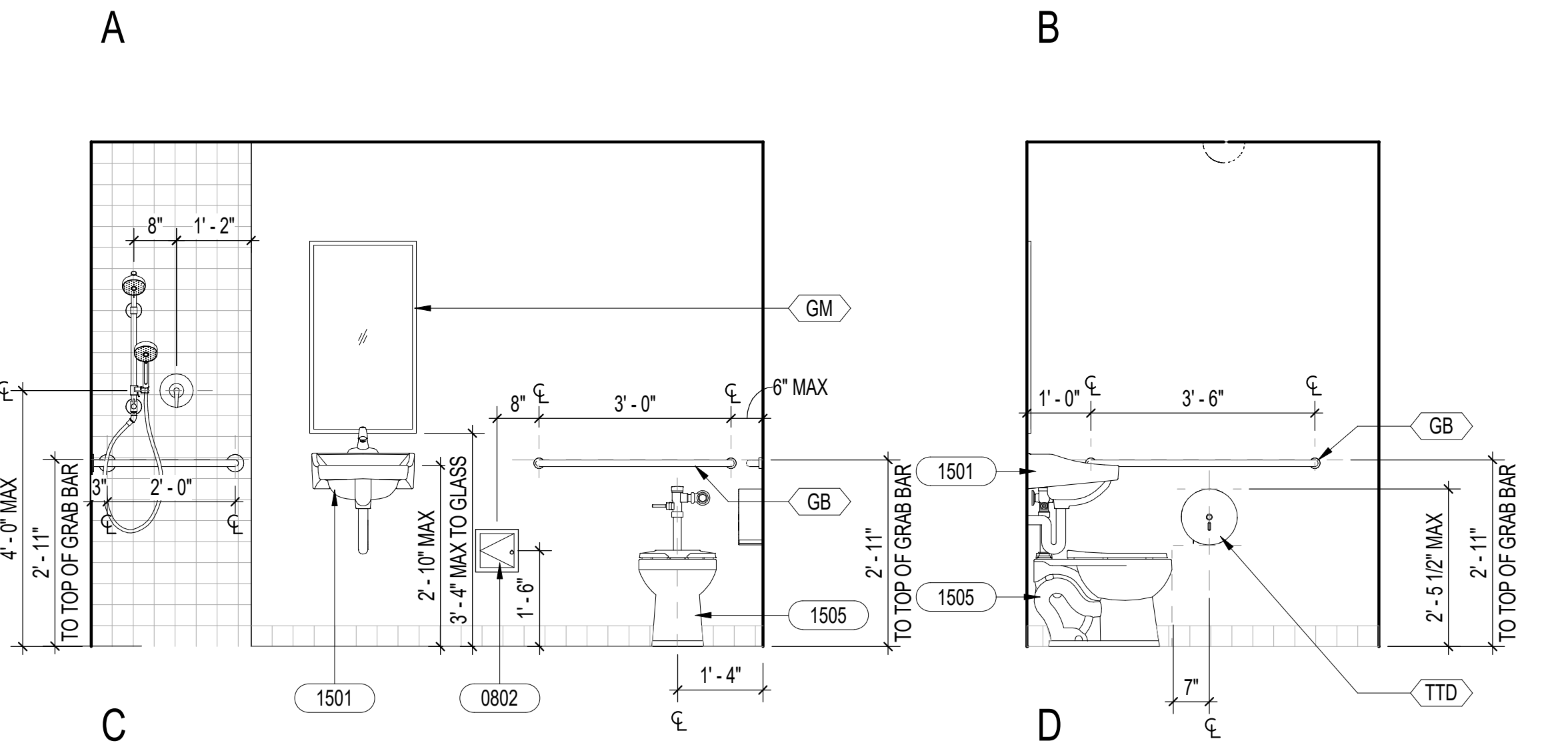
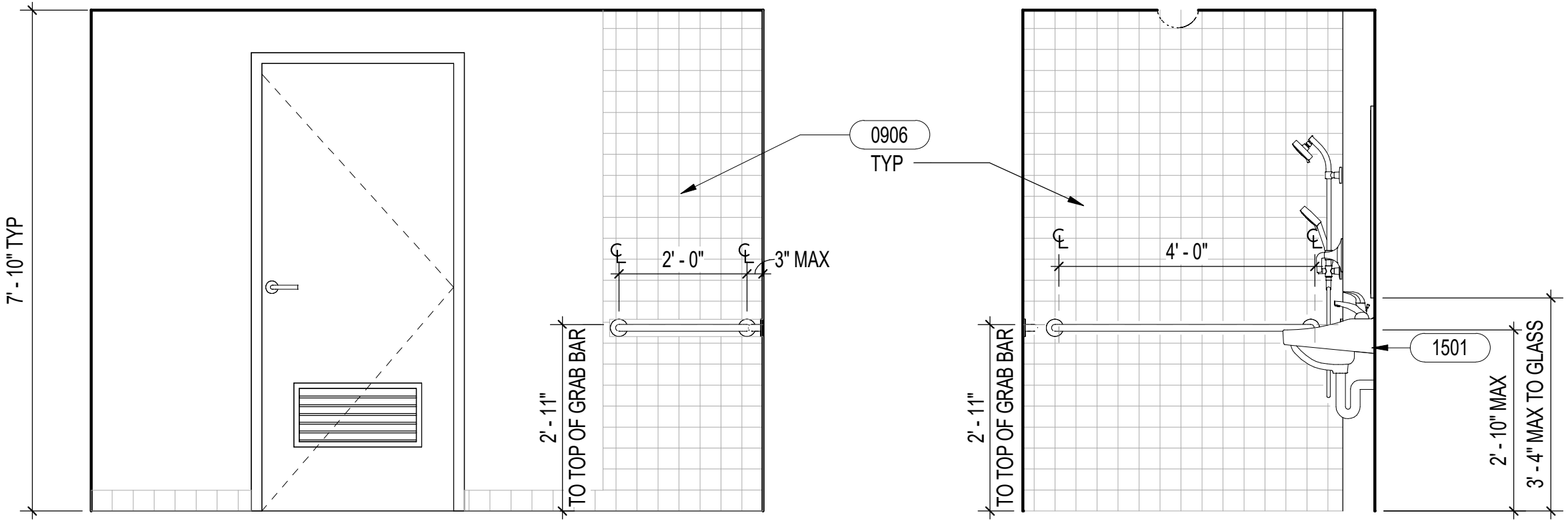
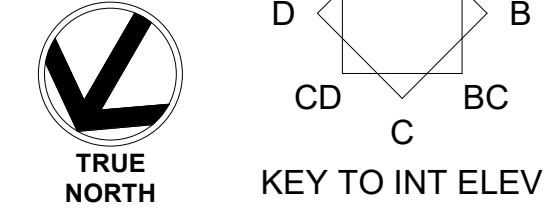
DESIGNED: JV      SUBMITTED: KR      *GC* *W*  
DRAWN: KR      DATE: APRIL 2026

CHECKED: CO      SCALE: AS NOTED

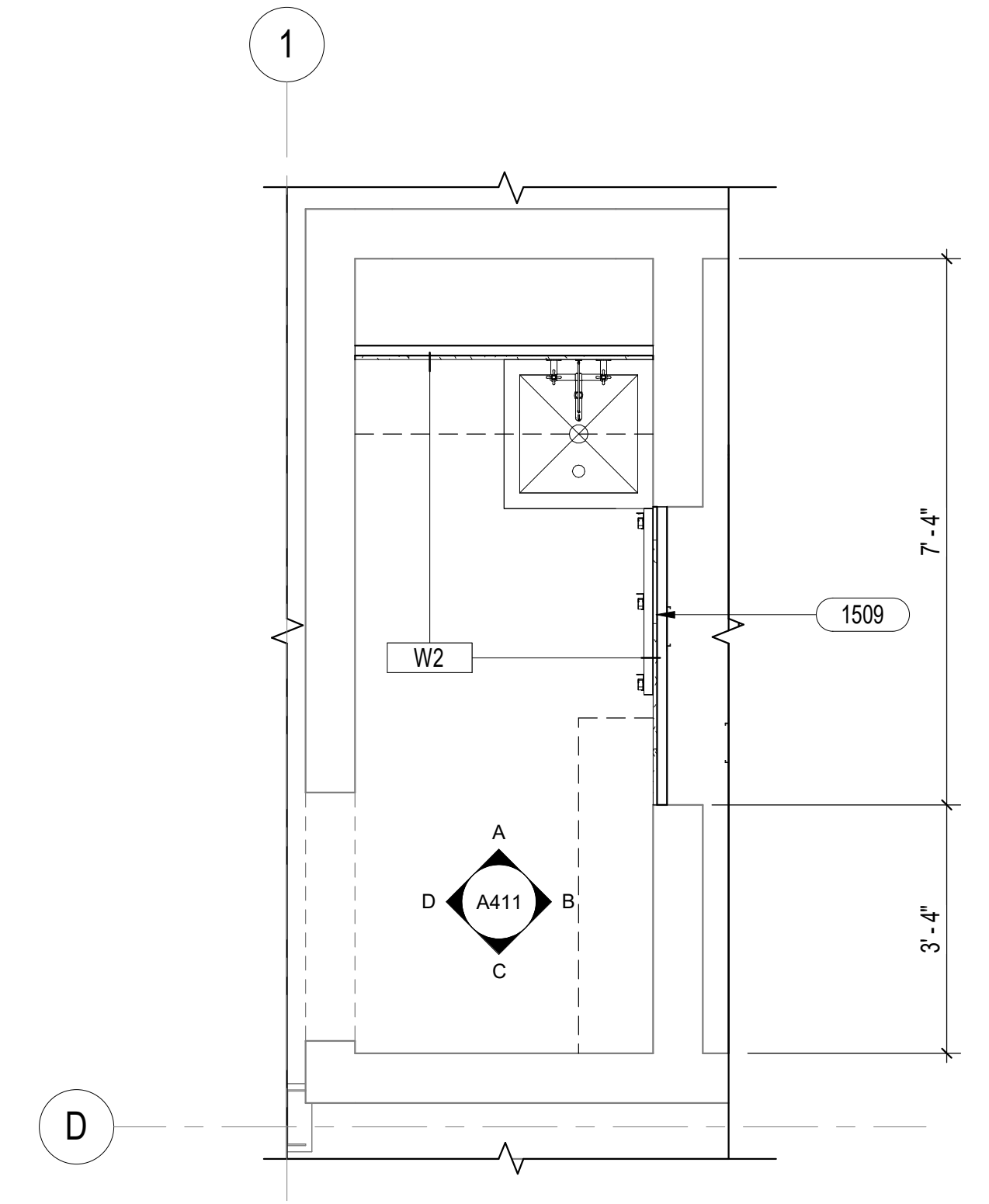
APPROVED: *Dina Lau*      DRAWING NO. **A401**  
Dina Lau      E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
State of Hawaii  
Civil Engineer



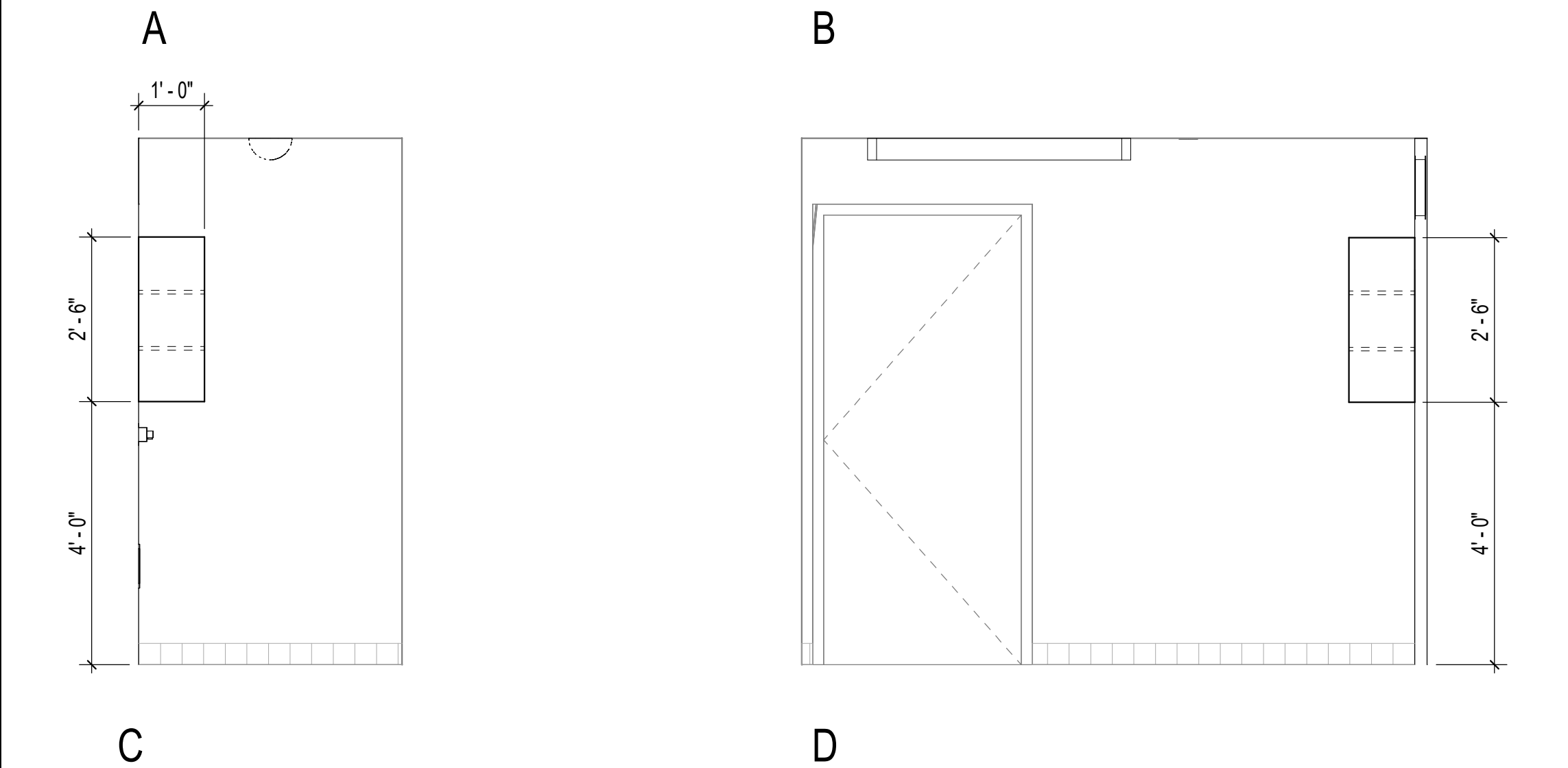
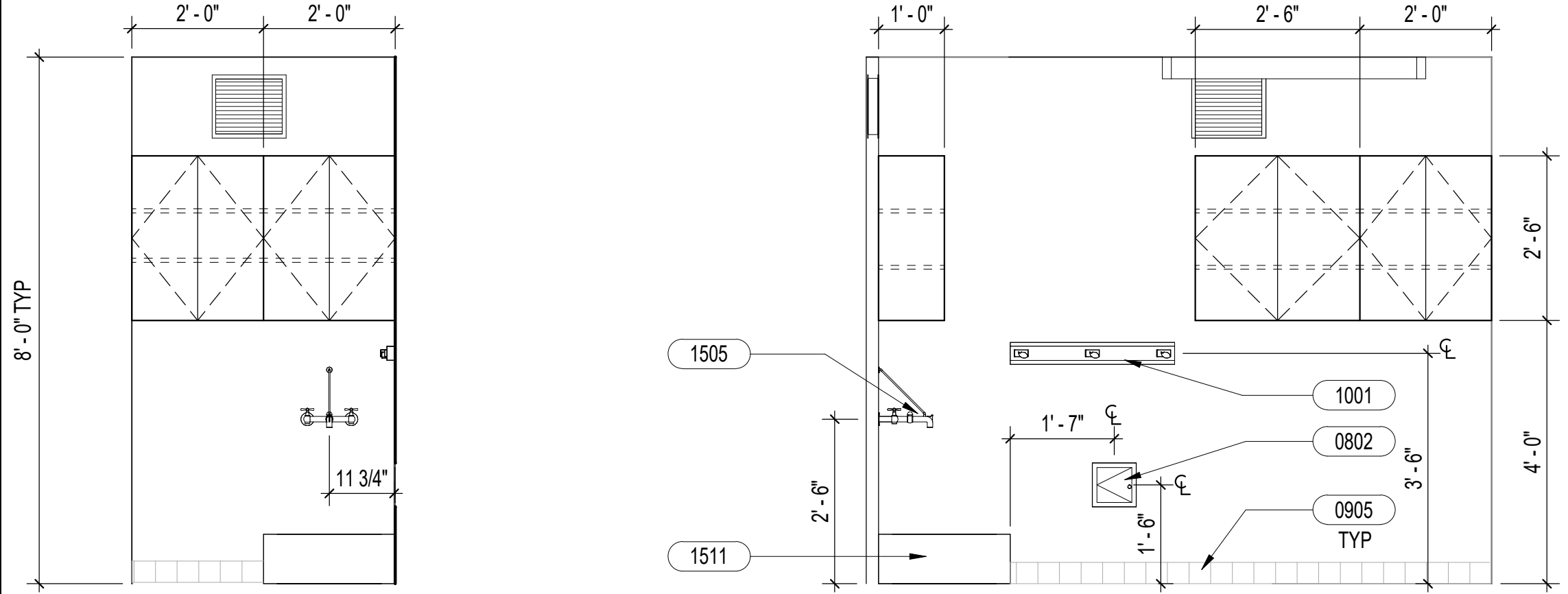
**1 ENLARGED PLAN - WOMENS ACCESSIBLE TOILET & SHOWER**  
1/2" = 1'-0"



**WOMENS ACCESSIBLE TOILET & SHOWER**  
1/2" = 1'-0"



**2 ENLARGED PLAN - UTILITY CLOSET**  
1/2" = 1'-0"

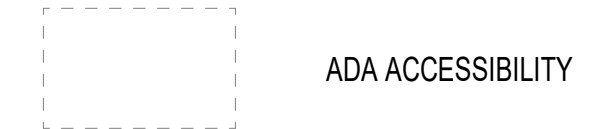


**UTILITY CLOSET**  
1/2" = 1'-0"

**SHEET NOTES**

- FOR COMPLETE SCOPE OF WORK, SEE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- SEE MATERIAL FINISH FOR ADDITIONAL INFORMATION.
- SEE WALL TYPES FOR ADDITIONAL INFORMATION.

**LEGEND**



**KEYNOTES**

| KEYNOTE | DESCRIPTION   |
|---------|---|
| 0802    | 8x8 PREFINISHED ACCESS PANEL AT ALL SHOWERS, COORDINATE WITH MECHANICAL |
| 0904    | SHOWER FLOOR TILE (PT-1)  |
| 0905    | COVE BASE (PT-2)  |
| 0906    | SHOWER WALLTILE (PT-3)  |
| 1001    | BROOM HOLDER  |
| 1003    | SHOWER ROD AND CURTAIN  |
| 1501    | LAVATORY, SEE MECHANICAL  |
| 1505    | PLUMBING FIXTURE, SEE MECHANICAL  |
| 1509    | REGISTERS AND DUCTS, SEE MECHANICAL                                     |
| 1511    | SERVICE SINK AS SCHEDULED, SEE MECHANICAL                               |

**TOILET ACCESSORY LEGEND**

| KEYNOTE | DESCRIPTION            |
|---------|------------------------|
| GB      | GRAB BAR               |
| GM      | GLASS MIRROR           |
| TTD     | TOILET PAPER DISPENSER |

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

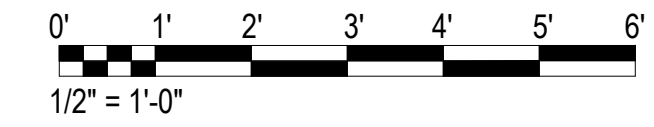
ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS  
- PHASE 1A (BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

ENLARGED PLANS AND INTERIOR ELEVATIONS

|              |                  |    |
|--------------|------------------|----|
| DESIGNED: JV | SUBMITTED: KR    | GC |
| DRAWN: KR    | DATE: APRIL 2026 |    |
| CHECKED: CO  | SCALE: AS NOTED  |    |

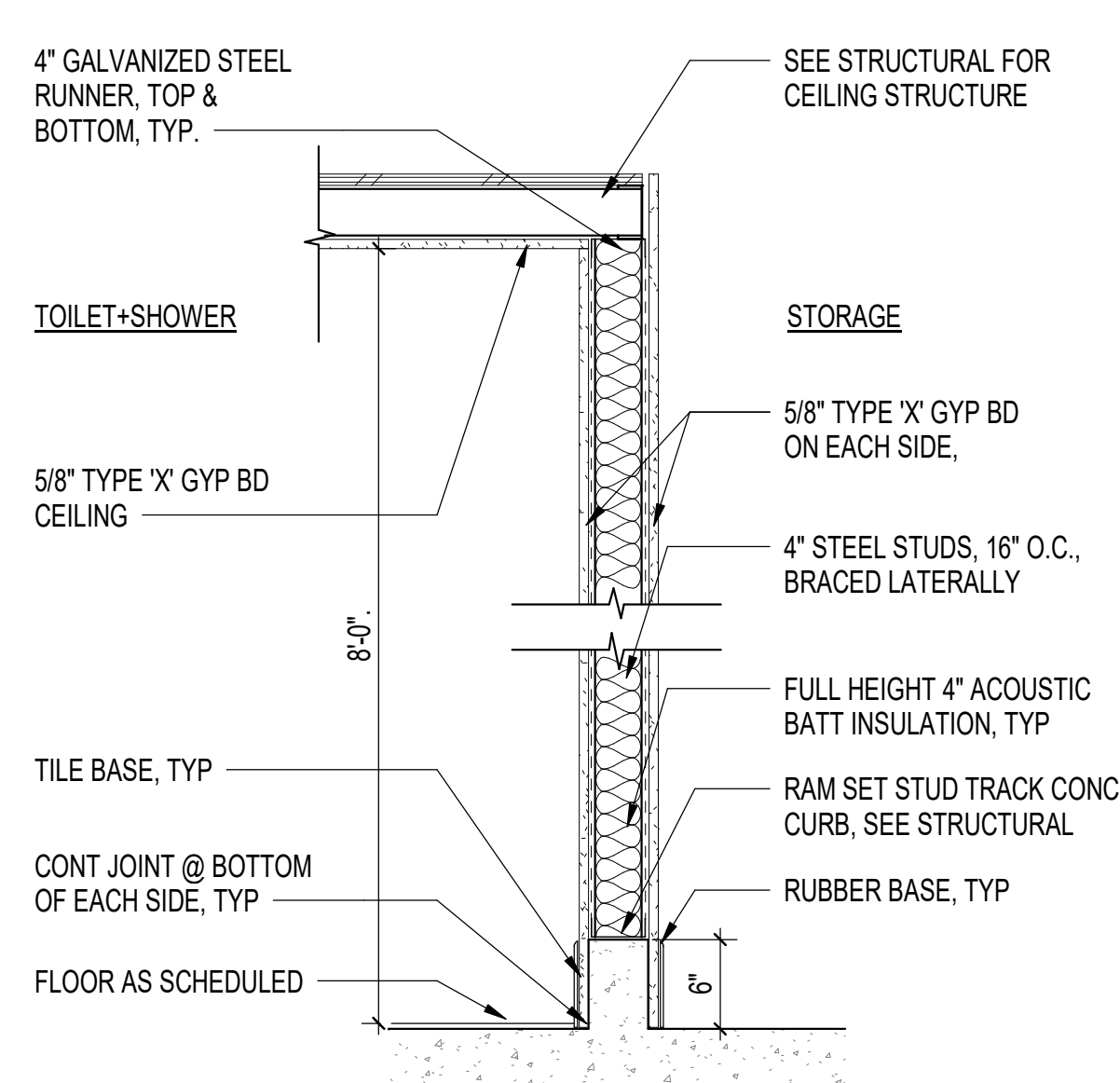
APPROVED: Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
CHIEF ENGINEER  
Civil Engineer  
STATE OF HAWAII

DRAWING NO. **A411**

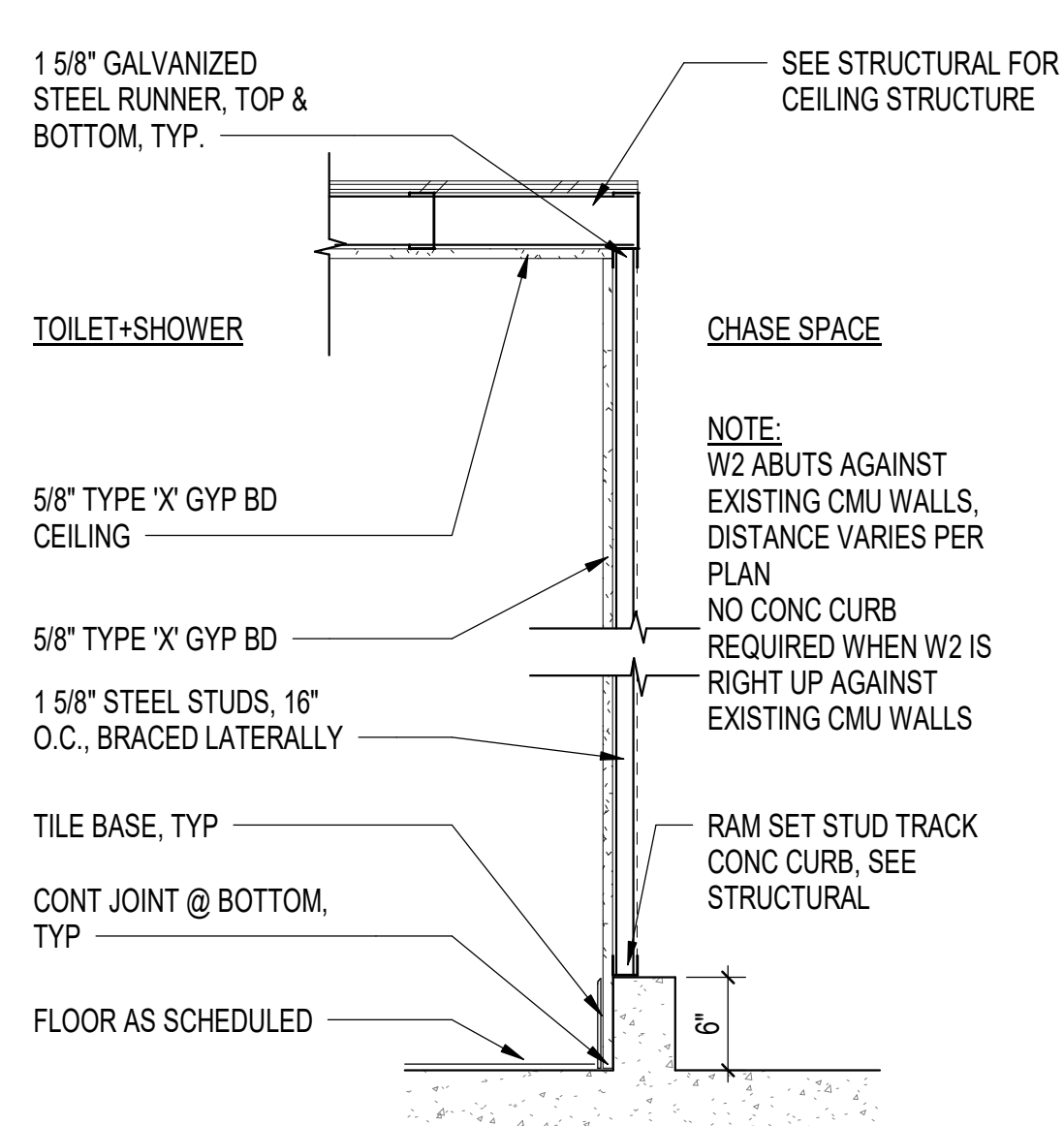


# MATERIAL FINISH SCHEDULE

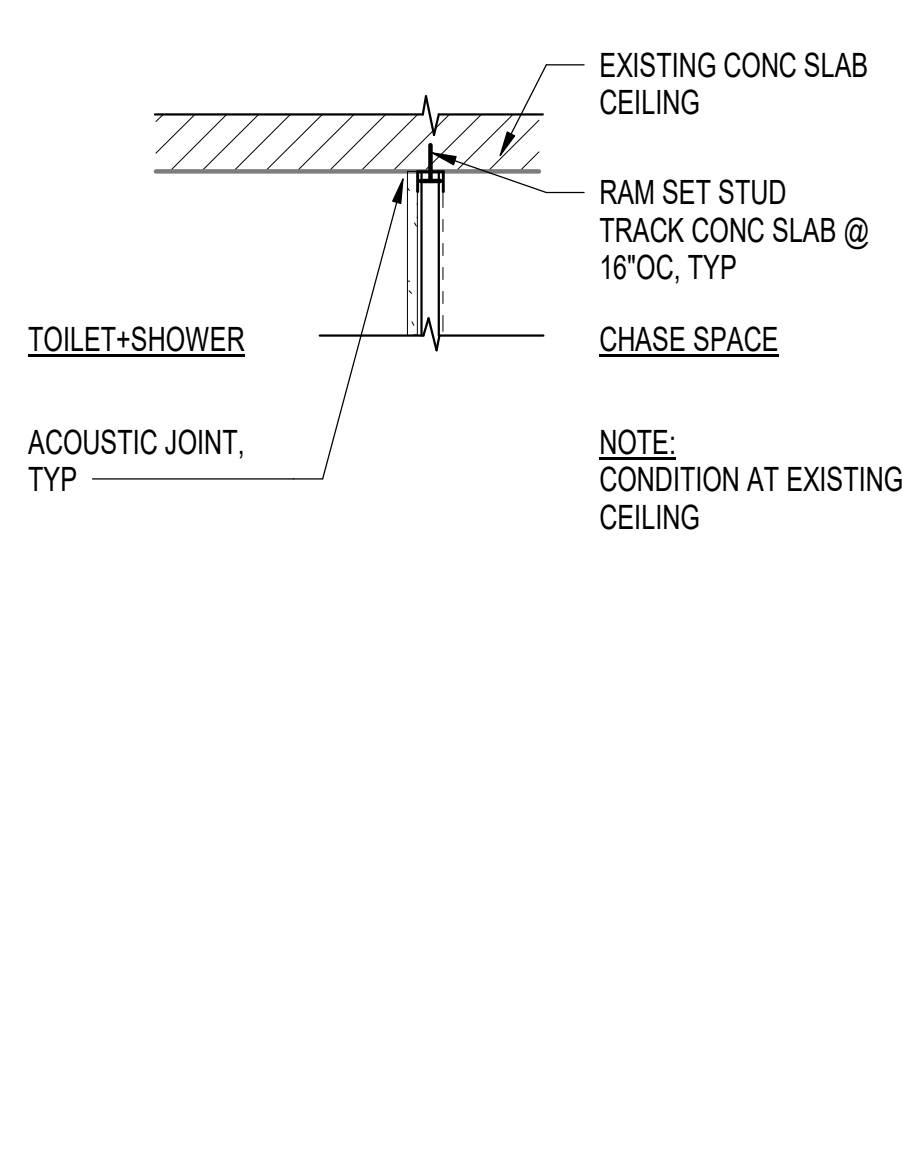
| FINISH NO. | MATERIAL                     | MANUFACTURER                            | PATTERN, COLOR, MODEL  | LOCATIONS AND ADDITIONAL NOTES                                 | COMMENTS                      |
|------------|------------------------------|---|--|--|-------------------------------|
| P-1        | PAINT (FIELD COLOR)          | SHERWIN WILLIAMS                        | COLOR: HIGH REFLECTIVE WHITE<br>FINISH: SATIN  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| P-2        | PAINT (CEILING COLOR)        | SHERWIN WILLIAMS                        | COLOR: HIGH REFLECTIVE WHITE<br>FINISH: FLAT   | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| P-3        | PAINT (DOOR)                 | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | FOR EXISTING DOORS & NEW DOORS                                 | PRE-APPROVED EQUAL OR GREATER |
| P-4        | PAINT (DOOR FRAME COLOR)     | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: SEMI-GLOSS   | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| P-5        | PAINT (DOOR COLOR-COATING)   | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| EXPT-1     | EXTERIOR PAINT (FIELD COLOR) | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| EXPT-2     | EXTERIOR PAINT (FIELD COLOR) | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| EXPT-3     | EXTERIOR PAINT (GUTTER)      | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| EXPT-4     | EXTERIOR PAINT (BEAMS)       | SHERWIN WILLIAMS                        | COLOR: TBD<br>FINISH: TBD  | PRE-APPROVED EQUAL OR GREATER                                  | PRE-APPROVED EQUAL OR GREATER |
| PT-1       | PORCELAIN TILES              | MILESTONE                               | COLLECTION: AREA 51<br>COLOR: CLAY<br>FINISH: MATTE<br>SIZE: 12"x12" MOSAIC (2"x2") (#1104039) | SHOWER FLOOR TILE & REFER TO INTERIOR ELEVATIONS FOR LOCATIONS | PRE-APPROVED EQUAL OR GREATER |
| PT-2       | PORCELAIN TILES              | MILESTONE                               | COLLECTION: AREA 51<br>COLOR: CLAY<br>FINISH: MATTE<br>SIZE: 6"x12" (#1105490)                 | COVE BASE & REFER TO INTERIOR ELEVATIONS FOR LOCATIONS         | PRE-APPROVED EQUAL OR GREATER |
| PT-3       | PORCELAIN TILES              | MILESTONE                               | COLLECTION: 4EARTH<br>COLOR: SKY<br>SIZE: 3"x12"   | SHOWER WALL TILE & REFER TO INTERIOR ELEVATION FOR LOCATION    | PRE-APPROVED EQUAL OR GREATER |
| G-1        | GROUT                        | MAPEI                                   | COLOR: #103 COBBLESTONE  | GROUT FOR ALL TILE LOCATIONS                                   | PRE-APPROVED EQUAL OR GREATER |
| LVT-1      | LUXURY VINYL TILE            | SHOW CONTRACT<br>COLLECTION: TERRAIN II | COLOR: TAUN 00660 / 30 MIL   | SEE A101 & A102 FOR LOCATION                                   | PRE-APPROVED EQUAL OR GREATER |
| RB-1       | RUBBER BASE                  | FLEXCO                                  | COLOR: 071 BLACK/BROWN   | NEW VINYL FLOORING LOCATION                                    | PRE-APPROVED EQUAL OR GREATER |



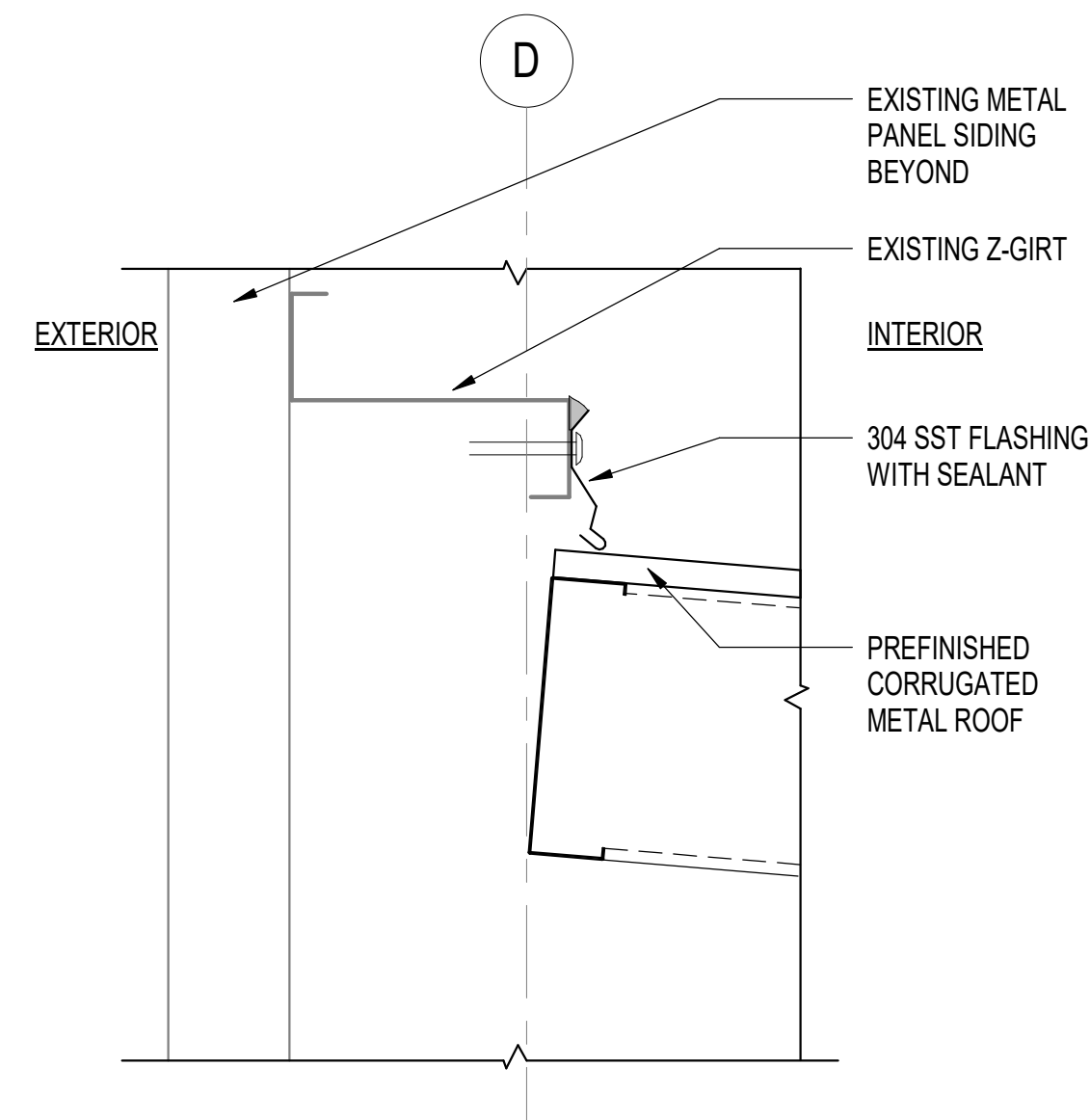
**WALL TYPE 1 - W1**



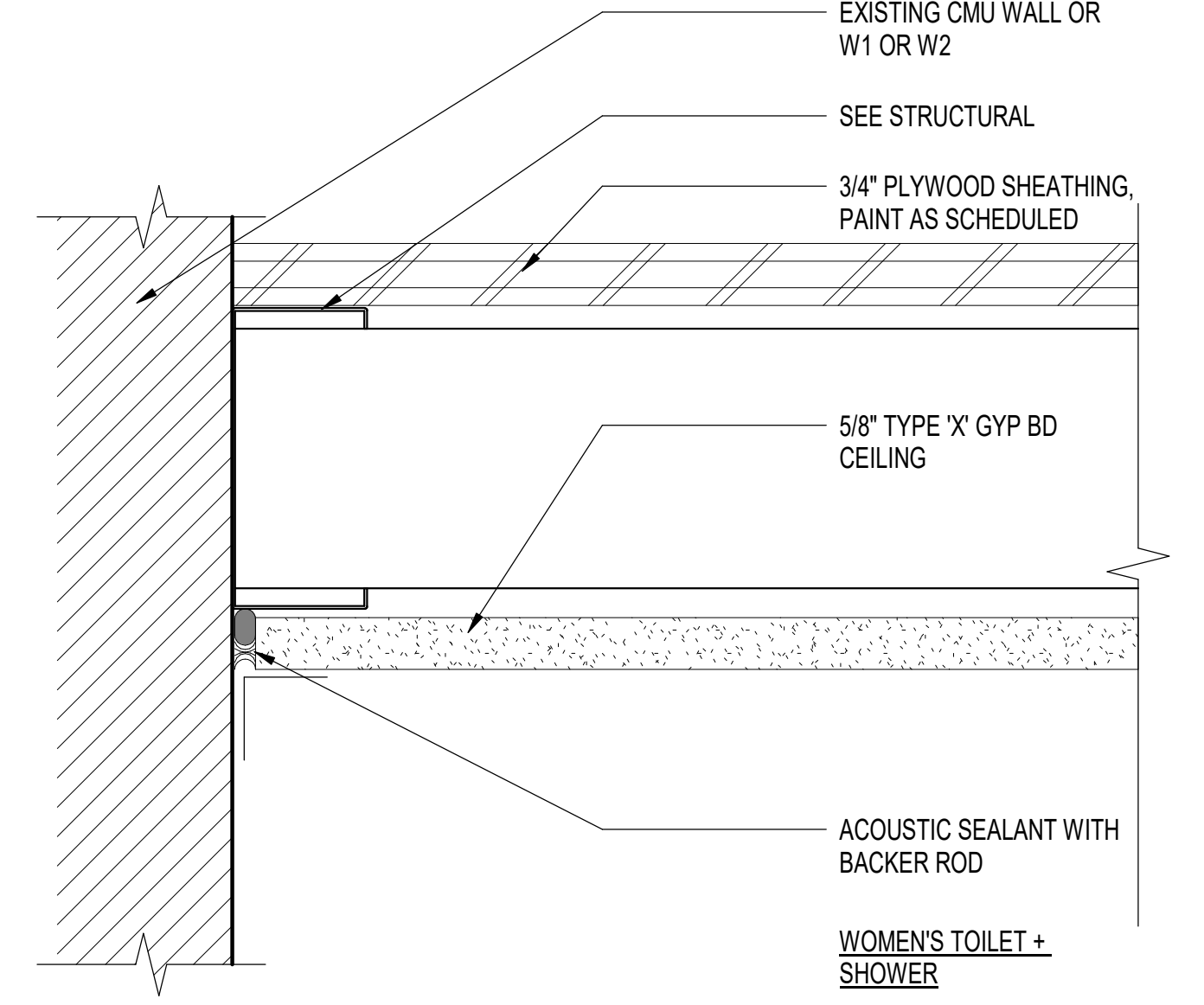
**WALL TYPE 2 - W2**



**WALL TYPE 2 - W2**

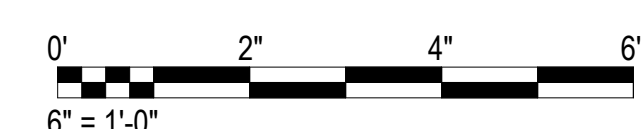
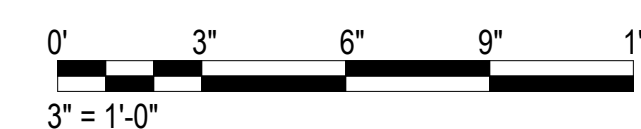
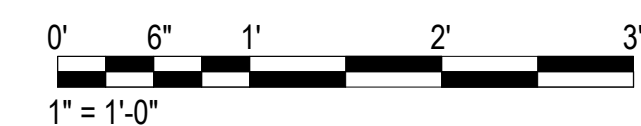


**2 FLASHING AT EXISTING Z-GIRT**  
3" = 1'-0"



**3 CEILING DETAIL**  
6" = 1'-0"

**1 INTERIOR PARTITION WALL TYPES**  
1" = 1'-0"



| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE 04/30/2028

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**ENGINEERING DIVISION**

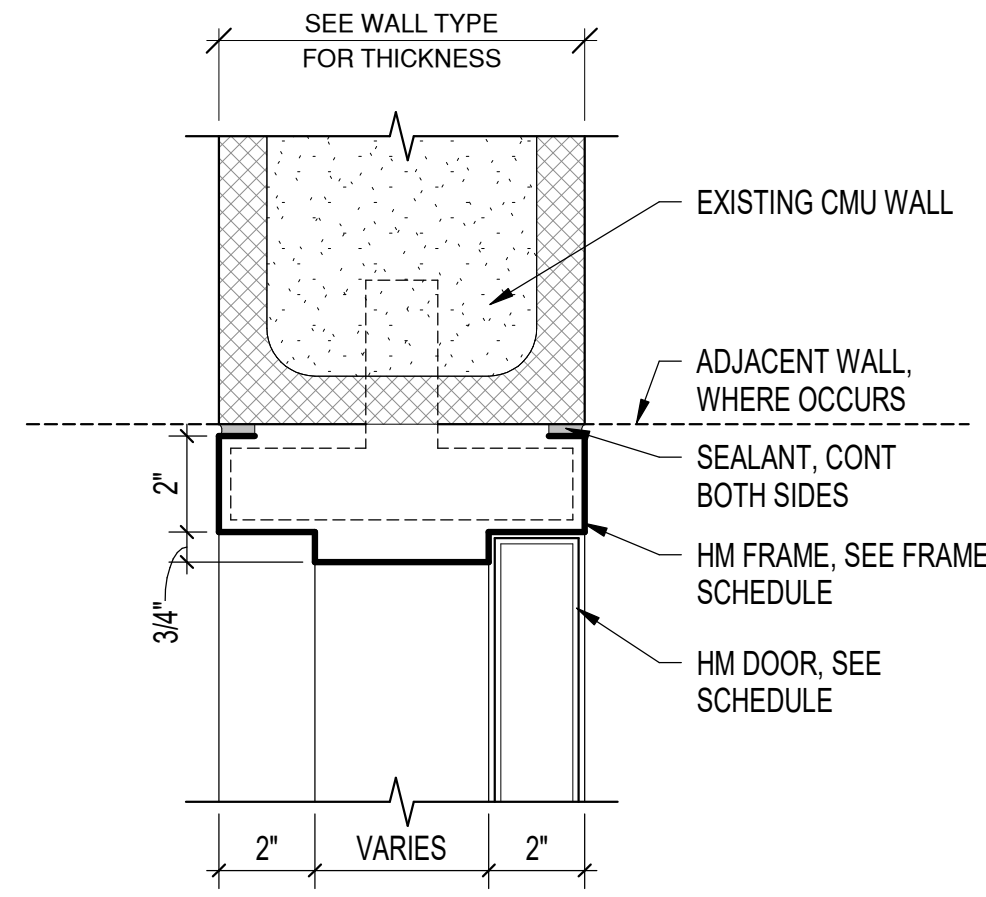
**ANUENUE FISHERIES RESEARCH CENTER**  
**ANNEX FACILITY IMPROVEMENTS**  
**- PHASE 1A (BUILDING IMPROVEMENTS)**  
SAND ISLAND, OAHU, HAWAII

MATERIALS FINISH SCHEDULE, INTERIOR PARTITION WALL TYPES & DETAILS

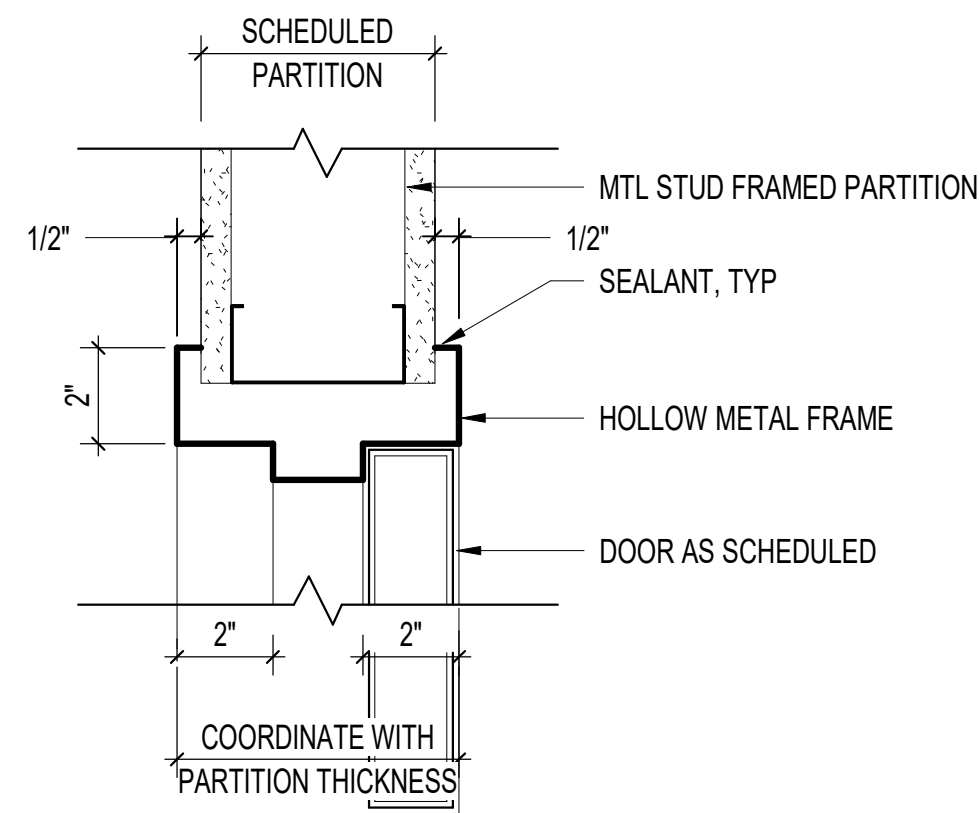
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|---------------------------------|------------------|-------------|
| DESIGNED: JV                    | SUBMITTED: KR    | AC          |
| DRAWN: KR                       | DATE: APRIL 2026 |             |
| CHECKED: CO                     | SCALE: AS NOTED  |             |
| APPROVED: <i>Dina Lau</i>       | Dina Lau         | DRAWING NO. |
| E-signed 2026-04-29 01:15PM HST |                  | <b>A501</b> |
| dina.u.lau@hawaii.gov           |                  |             |
| State of Hawaii                 |                  |             |
| Civil Engineer                  |                  |             |

# DOOR SCHEDULE

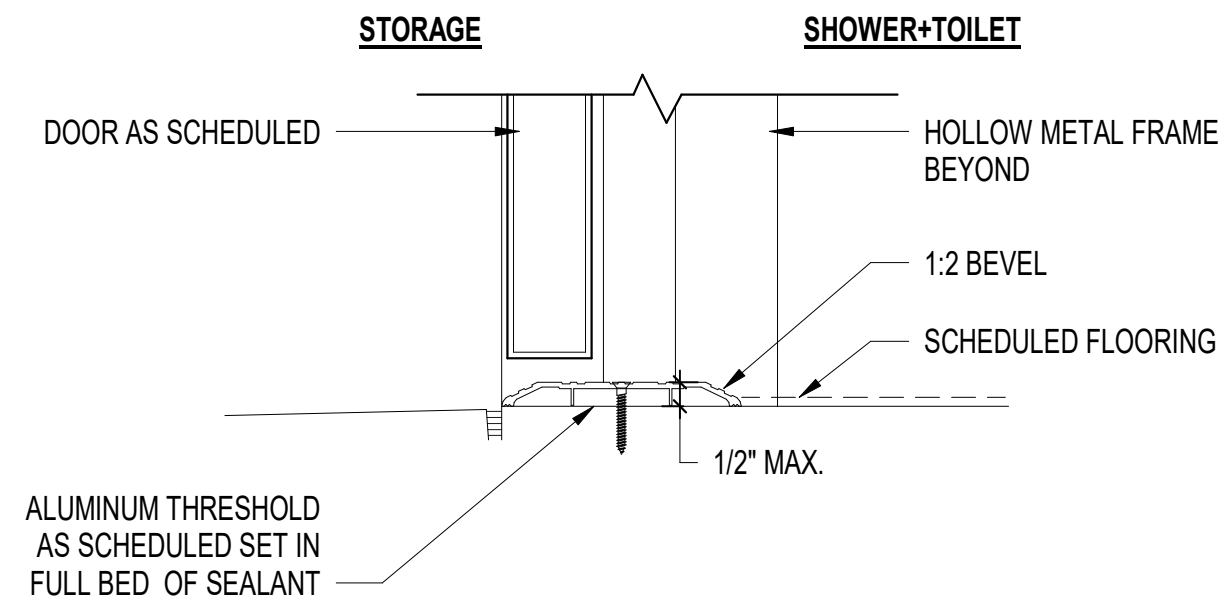
| BUILDING    | FLOOR | DOOR NO. | ROOM NO. | LOCATION               | DOOR SIZE<br>(Width x Height)<br>VERIFY | THICK       | DOOR          |        |                |                 | FRAME  |        |                | DETAILS             |  |  | NOTES |
|-------------|-------|----------|----------|------------------------|---|-------------|---------------|--------|----------------|-----------------|--------|--------|----------------|---------------------|--|--|-------|
|             |       |          |          |                        |   |             | DOOR MATERIAL | RATING | FRAME MATERIAL | FINISH MATERIAL | HEAD   | JAMB   | HARDWARE GROUP |                     |  |  |       |
| STORAGE 100 | FIRST | 2        | 102      | MEN'S TOILET + SHOWER  | 2'-10" x 6'-10"                         | 1' - 0 3/4" | HM            | N/A    | HM             | PAINT           | 1/A601 | 2/A601 | 1              | WITH 24"x24" LOUVER |  |  |       |
| STORAGE 100 | FIRST | 1        | 101      | WOMENS TOILET + SHOWER | 3'-0" x 7'-0"                           | 1' - 0 3/4" | HM            | N/A    | HM             | PAINT           | 1/A601 | 2/A601 | 1              | WITH 24"x24" LOUVER |  |  |       |



**1** DOOR HEAD/ JAMB DETAIL - CMU  
3" = 1'-0"



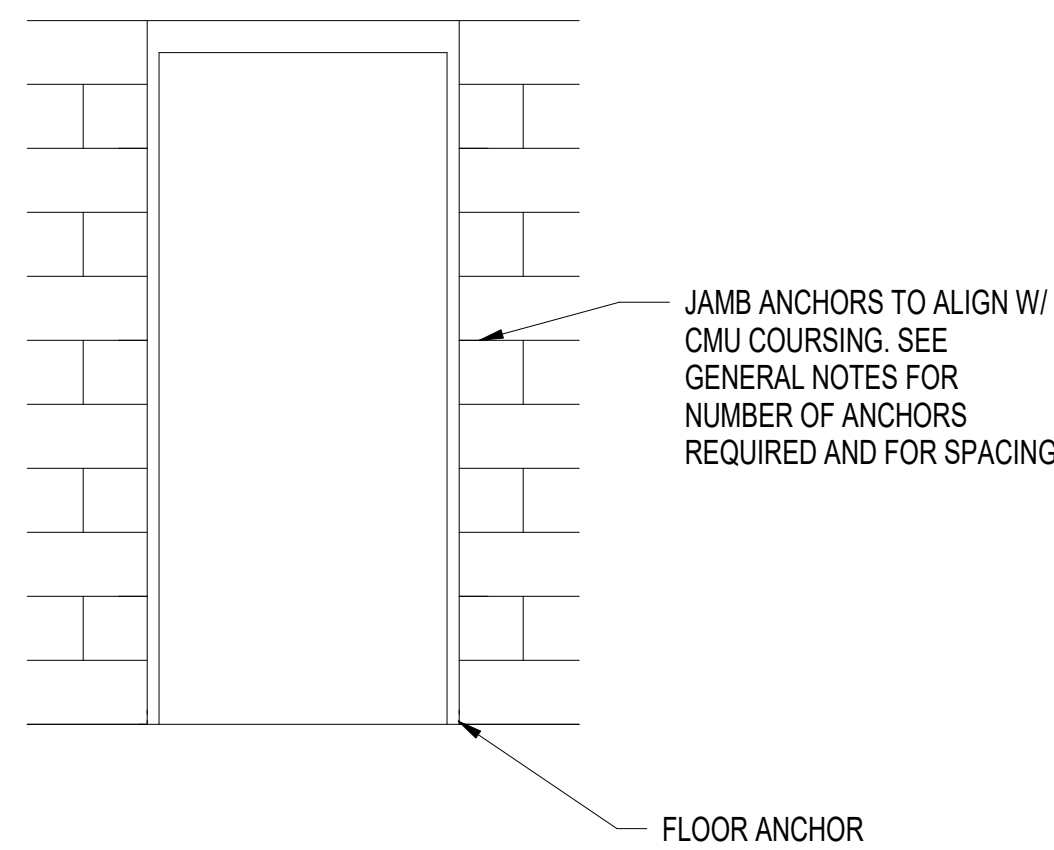
**2** DOOR HEAD/ JAMB DETAIL - MTL STUD  
3" = 1'-0"



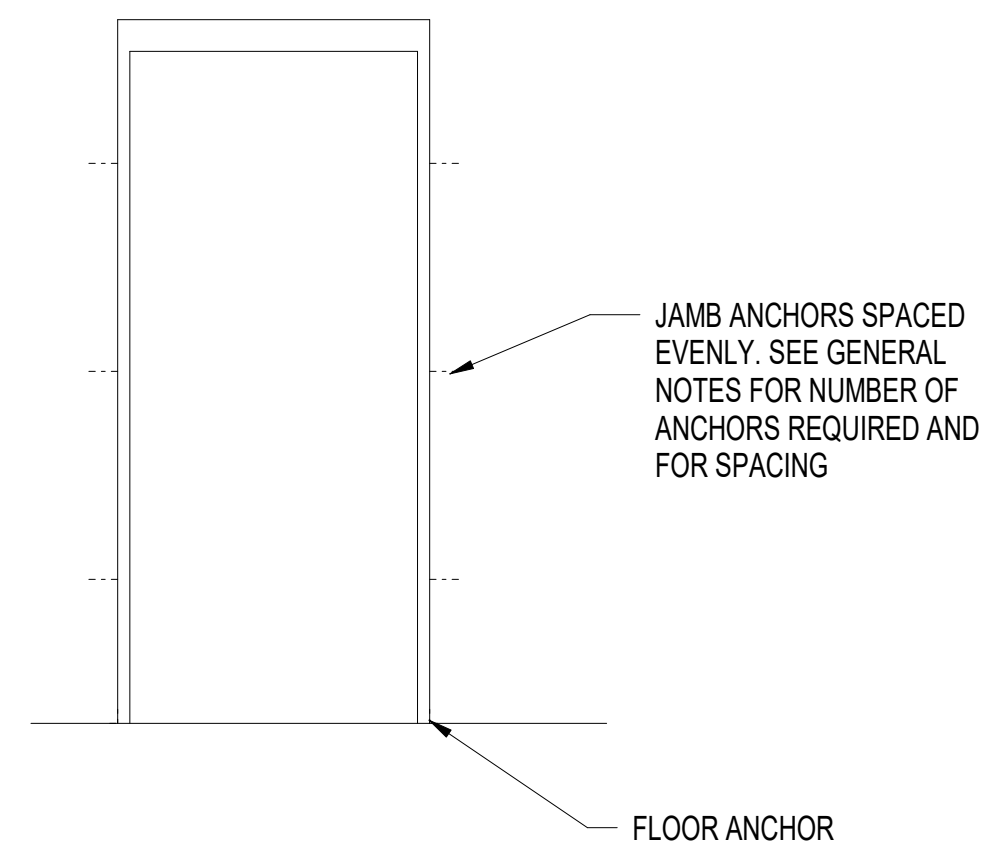
**NOTE:**

1. THRESHOLDS AT DOORWAYS SHALL BE PROVIDED & INSTALLED IN COMPLIANCE WITH ADAAG 4.13.8.

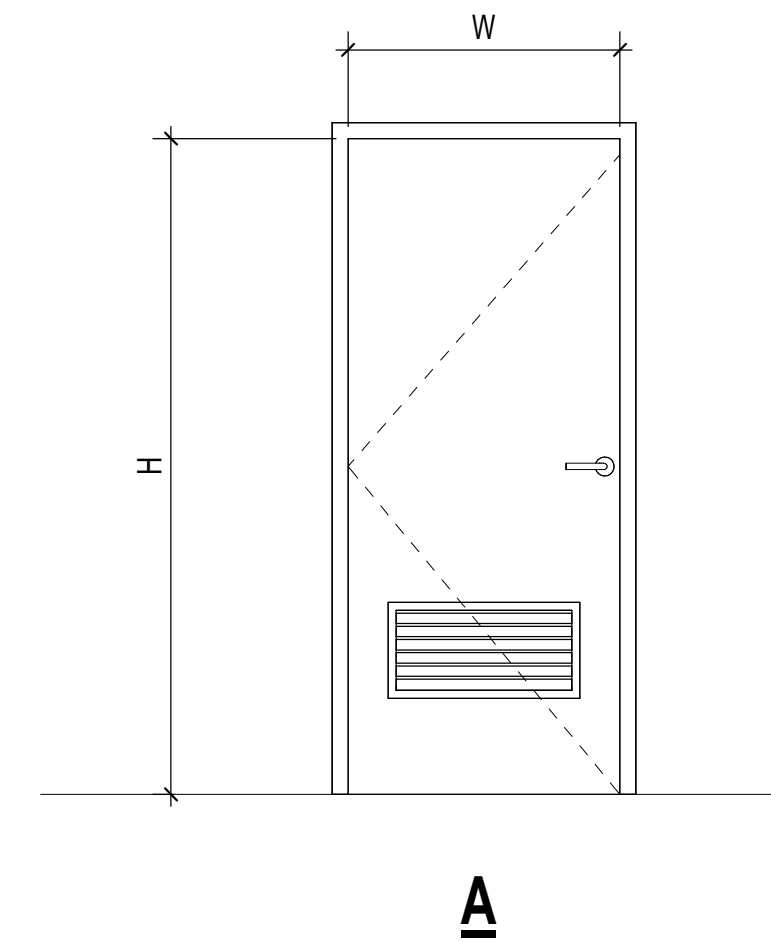
**3** THRESHOLD DETAIL  
3" = 1'-0"



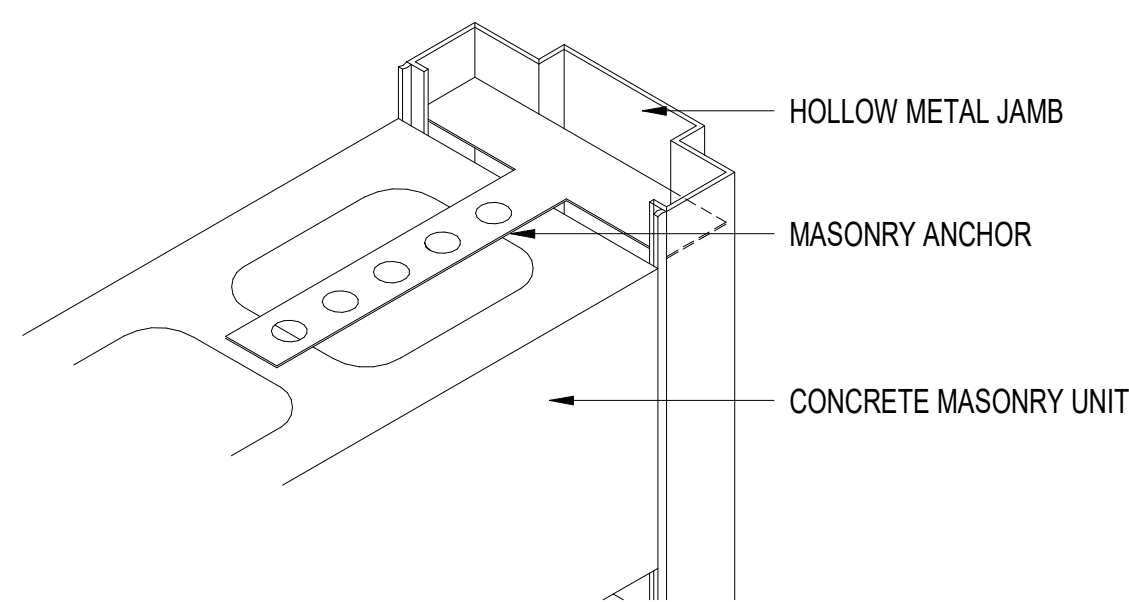
**4** CMU ANCHOR LOCATIONS  
1/2" = 1'-0"



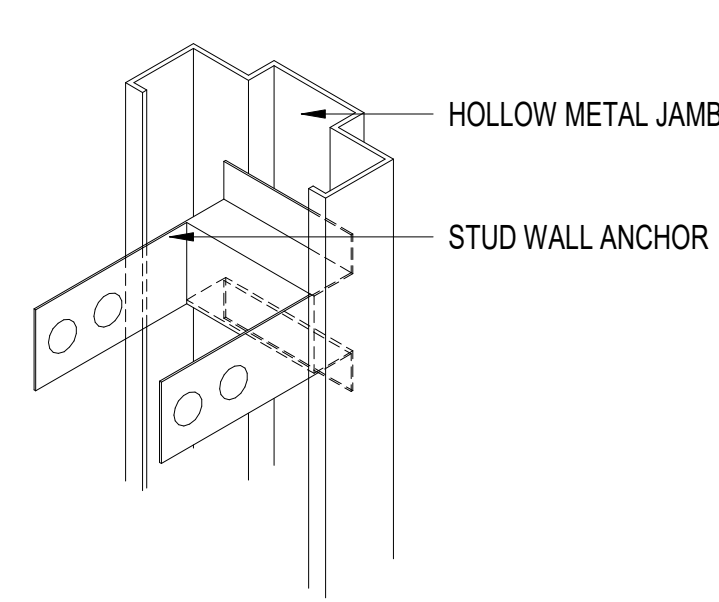
**5** MTL STUD JAMB ANCHOR ELEVATION  
1/2" = 1'-0"



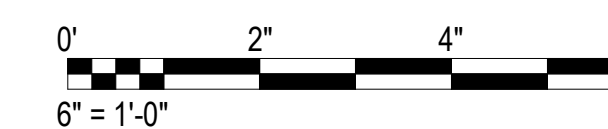
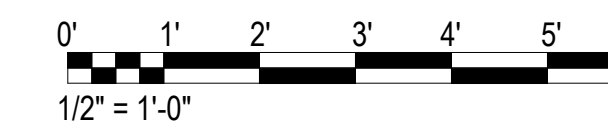
**6** DOOR TYPE  
1/2" = 1'-0"  
FLUSH PANEL WITH LOUVER



**7** CMU JAMB ANCHOR AXON  
3" = 1'-0"



**8** MTL STUD JAMB ANCHOR AXON  
3" = 1'-0"



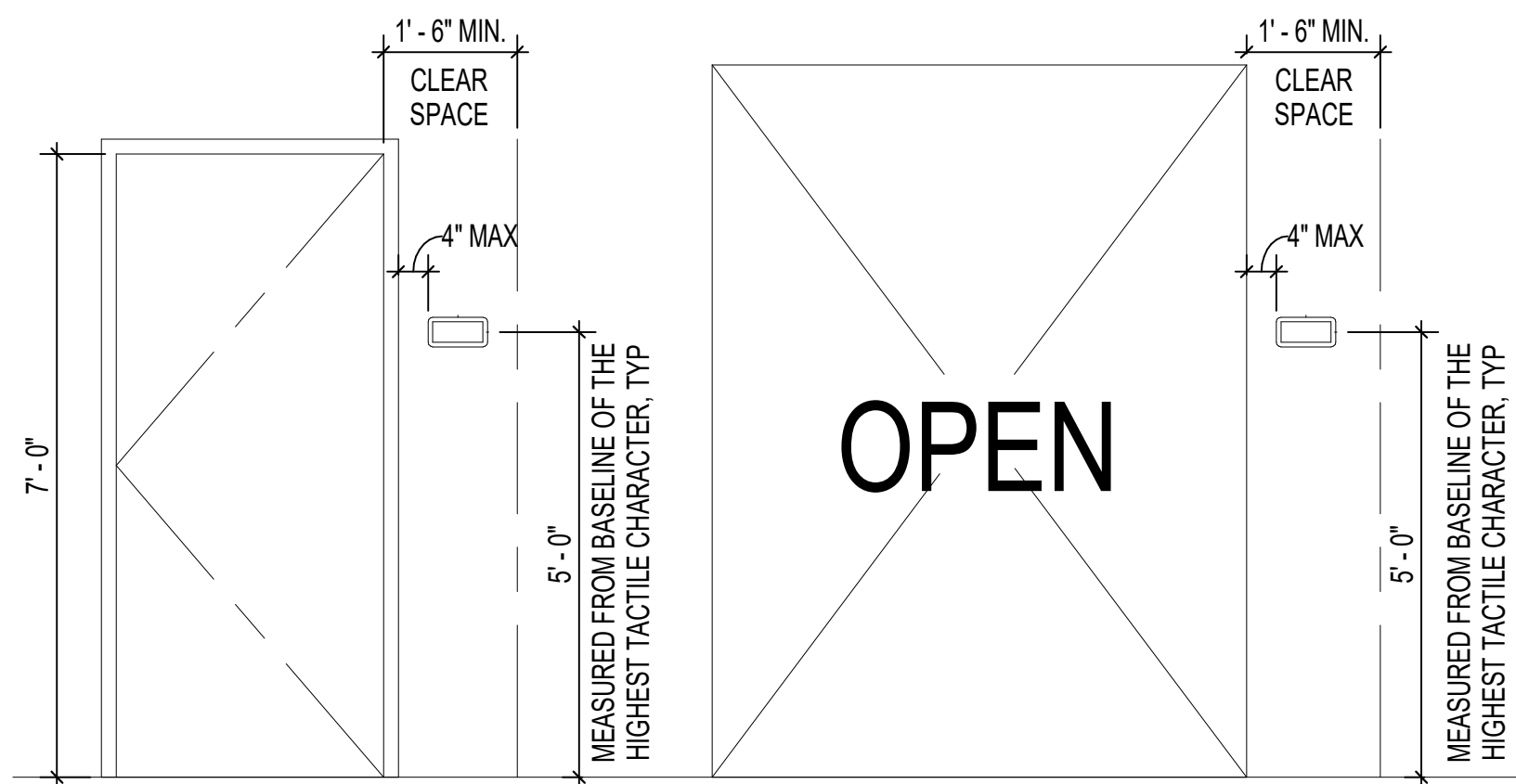
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**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**ENGINEERING DIVISION**

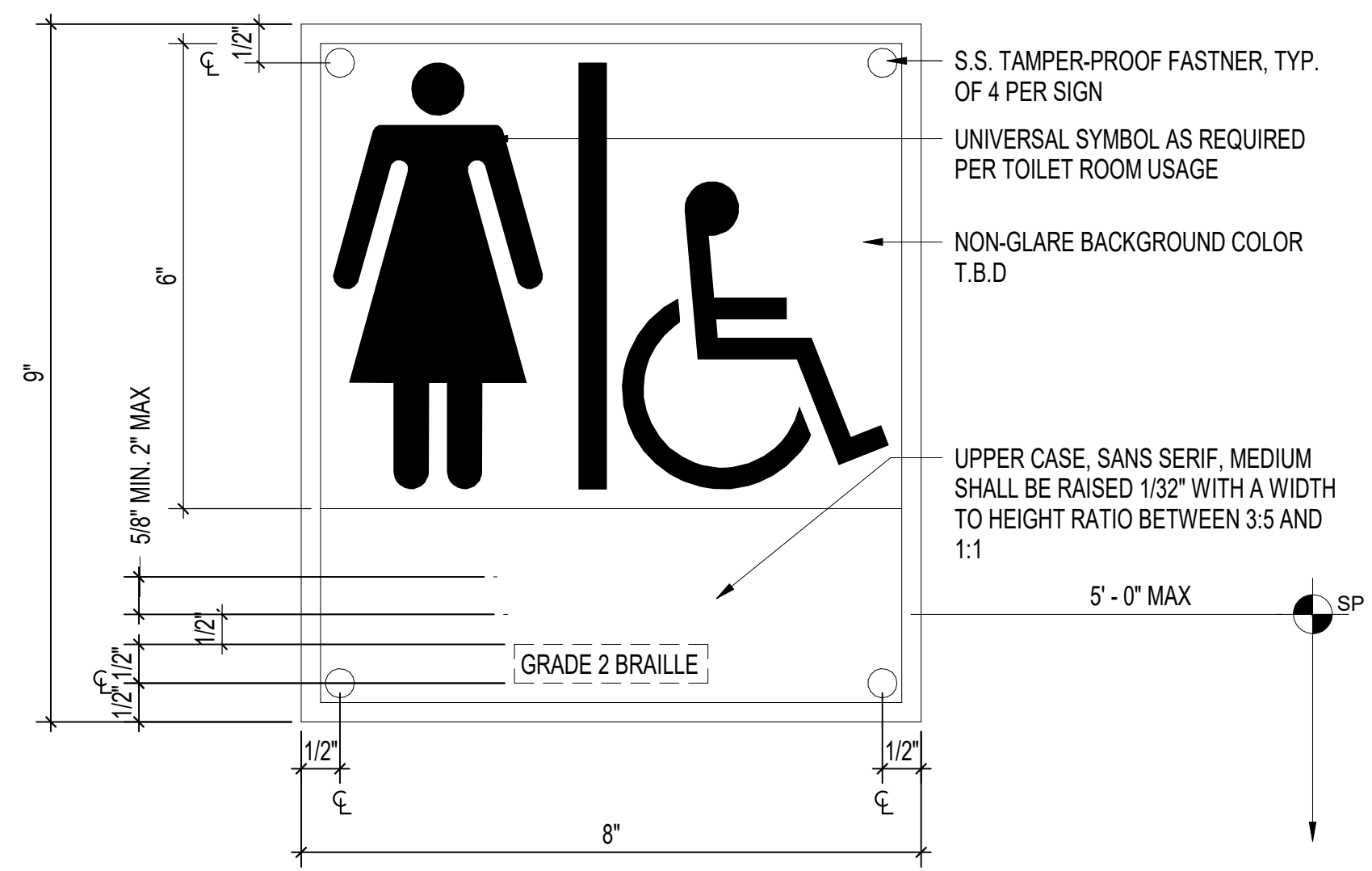
ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS  
- PHASE 1A (BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

DOOR SCHEDULE, DOOR TYPE & DOOR DETAILS

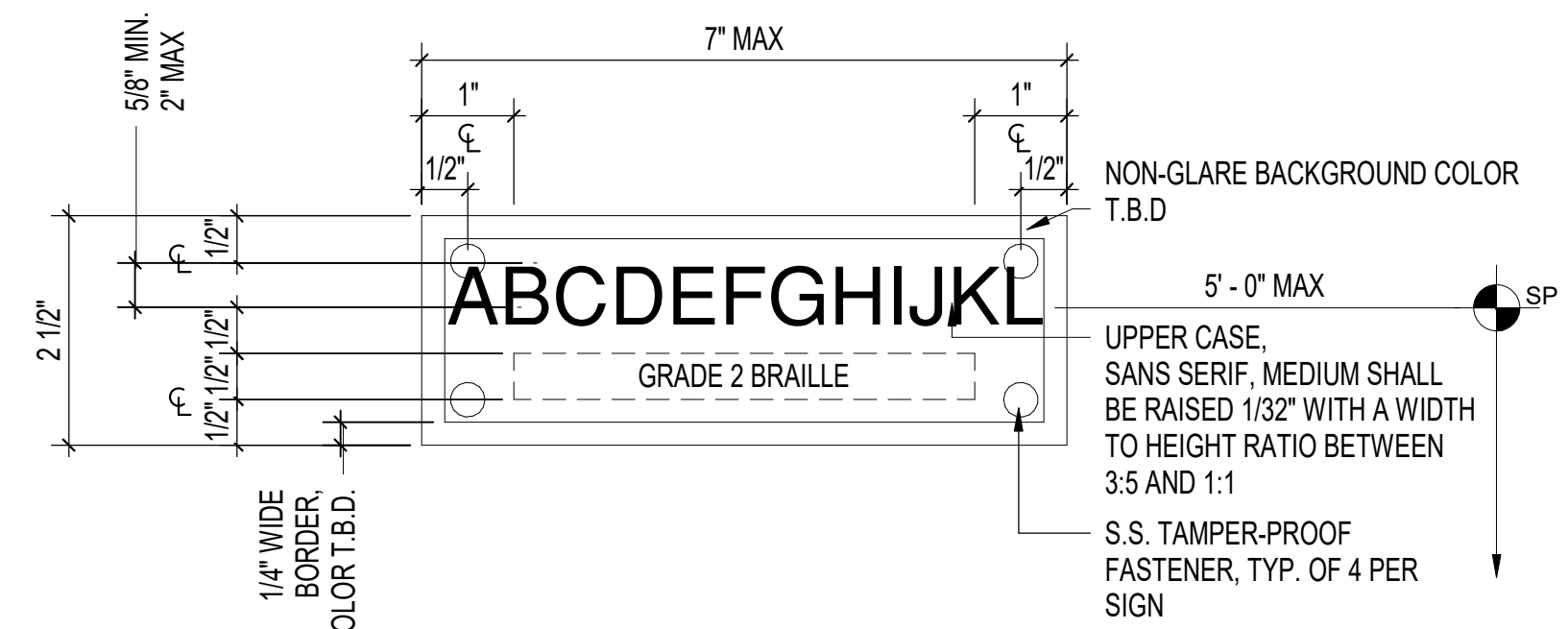
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|---------------------------|---|-------------------------|
| DESIGNED: JV              | SUBMITTED: KR   | SCALE: AS NOTED         |
| DRAWN: KR                 | DATE: APRIL 2026  |                         |
| CHECKED: CO               |   |                         |
| APPROVED: <i>Dina Lau</i> | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii | DRAWING NO. <b>A502</b> |



**1 SIGNAGE MOUNTING HEIGHT**  
1/2" = 1'-0"



**2 PICTOGRAM**  
6" = 1'-0"



**3 INTERIOR- SINGLE LINE**  
6" = 1'-0"

**SIGN INSTALLATION/MOUNTING NOTES**

- MOUNT ALL SIGNS IN CONFORMANCE WITH 2010 ADAAG 703 SIGNS, AS SET FORTH IN THE SPECIFICATIONS, AS SET FORTH IN THE DRAWINGS (PLANS, SPECIFIC DETAILS, TYPICAL DETAILS AND NOTES) AND IN ACCORDANCE WITH THE SIGN MANUFACTURE'S RECOMMENDATIONS/ INSTRUCTIONS.
- MOUNTING SIGNS 4" CLEAR FROM NEAREST APPROPRIATE DOORWAY, TRIM, CASED OPENING, WALL CORNER OR SIMILAR DETERMINANT CONDITION. WHERE DOING SO RESULTS IN AN OFF-CENTERED APPLICATION DUE TO ANOTHER DOORWAY, CHANGE IN WALL DIRECTION, MATERIAL OR SIMILAR OCCURRENCES, CENTER SIGN BETWEEN APPROPRIATE CONDITIONS BUT ONLY AFTER REVIEW AND APPROVAL OF CONTRACTING OFFICER.
- NOTIFY THE CONTRACTING OFFICER IMMEDIATELY OF ANY CONDITIONS THAT ADVERSELY AFFECT PROPER AND THE AESTHETIC INSTALLATION OF SIGNS. DO NOT INSTALL AFFECTED SIGNS UNTIL SATISFACTORY RESOLUTION IS GIVEN BY THE CONTRACTING OFFICER.
- ALL SIGNS, UNLESS SPECIFICALLY NOTED OTHERWISE (I.E. AT GLASS OR OTHER PREFINISHED SURFACES), SHALL BE SECURED TO SUBSTRATE WITH ONE-WAY TAMPERPROOF FASTENERS IN QUANTITY AND LOCATION SHOWN ON SIGN TYPES.
- ALL FASTENERS, STUDS, SPACERS AND APPURTENANCES SHALL BE STAINLESS STEEL, UNLESS OTHERWISE NOTED AND SHALL BE OF TYPE AND SIZE BEST SUITED FOR SIGN AND CORRESPONDING SUBSTRATE FASTENED TO.
- PROVIDE UV RESISTANT CAULKING ALL AROUND SIGNS TO WATERTIGHT CONDITIONS, UNLESS OTHERWISE NOTED.
- WHERE SIGN DRAWINGS OR DETAILS CONFLICT WITH CONFORMANCE TO ADAAG REQUIRED CONTRACTOR SHALL NOTIFY CONTRACTING OFFICER IMMEDIATELY AND REFRAIN FROM INSTALLING SIGNS AT SAID CONDITIONS UNTIL SATISFACTORY RESOLUTION IS AGREED UPON.
- MOUNT ALL SIGNS TRUE AND LEVEL EXCEPT WHERE MOUNTED ADJACENT TO EXISTING DOORS, TRIMS, WALL EDGES OR SIMILAR CONDITIONS, ALIGN WITH EXISTING LINES AS CLOSE AS POSSIBLE WITHIN REASONABLE LIMITS. COORDINATE ALIGNMENT WITH CONTRACTING OFFICER.

**SIGN NOTES**

- THE CONTRACTOR SHALL REPAIR ALL SURFACES (EXISTING AND NEW) SCHEDULED TO RECEIVE NEW SIGNS TO LIKE-NEW CONDITION PRIOR TO INSTALLATION OF REQUIRED SIGN. CONTRACTOR SHALL ALSO REPAIR ALL SURFACES WHERE EXISTING SIGNS ARE REMOVED BUT NOT REPLACED. SAID WORK SHALL BE CONSIDERED APPURTENANT TO SIGN INSTALLATION AND SHALL NOT BE PAID FOR SEPARATELY.
- ALL TEXT SHALL BE "SANS SERIF" AND IN ACCORDANCE WITH STANDARDS SET FORTH IN 2010 ADAAG 703.2 AND 703.4 AND AS SET FORTH IN THE SPECIFICATIONS OF HEIGHT NOTED ON SIGN TYPES AND OF COPY NOTED ON SIGN SCHEDULE.
- ALL BRAILLE TEXT SHALL BE GRADE II BRAILLE AND IN ACCORDANCE WITH 2010 ADAAG 703.3.
- INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) AS REQUIRED FOR AND ON THE SIGN TYPES SHALL BE IN ACCORDANCE WITH 2010 ADAAG 703.7.2.1. ISA SHALL BE PROPORTIONED IN ACCORDANCE WITH 2010 ADAAG FIGURE 703.6.1.
- PICTOGRAMS (I.E., MALE, FEMALE, ETC.) SHALL BE AS BEST REPRESENTED BY MANUFACTURER'S STANDARD SYMBOLS OF HEIGHT AND WEIGHT. PROPORTION AS SUITED TO FIT SIGN SIZE. SYMBOL HEIGHTS NOTED ON SIGN TYPES.
- ALL SIGNS' FACES, EDGES, TEXT,

**SHEET NOTES**

**LEGEND**

**KEYNOTES**

| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
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**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
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SIGNAGE DETAIL

|  |                         |
|--|-------------------------|
| DESIGNED: JV   | SUBMITTED: KR           |
| DRAWN: KR  | DATE: APRIL 2026        |
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JOB NO: C00B091B SHEET NO. 35 OF 53 SHEETS

**GENERAL NOTES**

- THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE STATE OF HAWAII'S CODES, THE CITY AND COUNTY OF HONOLULU'S CODES, AND ALL AGENCIES HAVING JURISDICTION.
 

| STATE OF HAWAII'S CODES        | CITY AND COUNTY OF HONOLULU'S CODES |
|--------------------------------|-------------------------------------|
| BUILDING CODE (IBC 2018)       | BUILDING CODE (IBC 2018)            |
| PLUMBING CODE (UPC 2018)       | PLUMBING CODE (UPC 2021)            |
| ENERGY CODE (IECC 2018)        | ENERGY CODE (IECC 2018)             |
| FIRE CODE (NFPA 1 2024)        | FIRE CODE (NFPA 1 2021)             |
| ELECTRICAL CODE (NFPA 70 2020) | ELECTRICAL CODE (NFPA 70 2020)      |
- PENETRATIONS OF FIRE-RESISTANCE-RATED WALLS, PARTITIONS, FLOORS, FLOOR/CEILING ASSEMBLIES, ROOF/CEILING ASSEMBLIES, OR SHAFT ENCLOSURES SHALL BE FIRE-STOPPED/SEALED TO MAINTAIN FIRE-RATING REQUIREMENTS IN ACCORDANCE WITH SECTION 714 - PENETRATIONS OF 2018 IBC.
- DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL FIELD CONDITIONS PERMIT. REASONABLE MODIFICATIONS TO SUIT JOB CONDITIONS SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL COMPENSATION.
- PROMPTLY NOTIFY AND COORDINATE WITH THE CONTRACTING OFFICER OF DISCREPANCIES OR MAJOR DEVIATIONS FROM THE PLANS OR SPECIFICATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS THAT PREVENT THE TERMS OF THE CONTRACT FROM BEING FULFILLED. COORDINATE THE WORK AMONGST THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO ENSURE THE INSTALLATION OF WORK WITHIN THE AVAILABLE SPACE.
- OBTAIN AND PAY FOR ALL APPLICABLE PERMITS, FEES, CERTIFICATES AND INSPECTIONS.
- DIMENSIONS SHOWN ON DESIGN DRAWINGS ARE BASED ON A COMBINATION OF FIELD MEASUREMENTS AND ORIGINAL/REVISION PRINT REFERENCE DRAWINGS (PROJECT TITLE: SAND ISLAND MARINE TERMINAL, HONOLULU, OAHU, HAWAII, TMK: 1-5-41:03, SI-88-6, DATED: SEPTEMBER 1988; PROJECT TITLE: SAND ISLAND MARINE TERMINAL 1993 ADDITION, HONOLULU, OAHU, HAWAII, TMK: 1-5-41:03, SI-93-3, DATED: APRIL 1993). FIELD VERIFY ALL CONDITIONS AND DIMENSIONS RELATED TO THE PROJECT BEFORE ORDERING MATERIALS OR COMMENCING WITH THE REQUIRED WORK.
- FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT INCLUDING CUTTING AND PATCHING AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. ALL MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND CONFORM TO CODE.
- PATCH ALL SURFACES EXPOSED FROM CUTTING AND/OR REMOVAL WORK. PATCHING SHALL MATCH THE FINISH AND QUALITY OF ADJACENT SURFACES TO THE SATISFACTION OF THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE STATE.
- "REPLACE" MEANS REMOVE EXISTING WORK AND PROVIDE NEW WORK AS DETAILED, NOTED OR SPECIFIED ON THE DRAWINGS/SPECIFICATIONS.
- ALL WORK INDICATED SHALL BE NEW WORK UNLESS OTHERWISE INDICATED "EXISTING".
- ALL ITEMS AND MATERIALS TO BE REMOVED SHALL BE DONE IN SUCH A MANNER AS TO PREVENT DAMAGE TO ITEMS AND MATERIALS TO REMAIN. ALL SUCH DAMAGES SHALL BE REPAIRED TO THE SATISFACTION OF THE CONTRACTING OFFICER AT NO ADDITIONAL COST TO THE STATE.
- ALL WASTE MATERIALS SHALL BE PROMPTLY REMOVED AND DISPOSED OF OUTSIDE THE LIMITS OF THE STATE'S PROPERTY DAILY.
- ALL OVERHEAD WORK SHALL BE A MINIMUM OF 80-INCHES ABOVE FINISHED FLOOR IN ACCORDANCE WITH ADAAG 307.4.

**GENERAL DEMOLITION/CONSTRUCTION PHASING NOTES**

- CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS IN ORDER TO COMPLETE THE PROJECT. CONTRACTOR SHALL SUBMIT DEMOLITION/CONSTRUCTION PHASING PLAN FOR APPROVAL. PHASING PLAN SHALL INCLUDE, BUT NOT BE LIMITED TO, PLANNED UTILITY OUTAGES, DISRUPTION OF HVAC SERVICE, TEMPORARY DISRUPTION OF NORMAL FACILITY OPERATIONS AND PROPOSED EQUIPMENT TRANSPORT PATHS THROUGH THE FACILITY. PHASING PLAN SHALL BE APPROVED A MINIMUM OF THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF ON-SITE WORK.
- GENERAL: THE FACILITY WILL BE OPERATIONAL AND ACCESSIBLE TO BUILDING USERS DURING NORMAL BUSINESS HOURS FOR THE DURATION OF THE PROJECT. THIS CONTINUING OPERATION OF THE FACILITY MAY RESTRICT THE CONTRACTOR'S WORK. NO ADDITIONAL COMPENSATION OR TIME WILL BE MADE FOR FAILURE TO ACKNOWLEDGE AND ACCOUNT FOR THE PROJECT REQUIREMENTS IN THE BID. COORDINATE, SCHEDULE AND PERFORM WORK IN SUCH A MANNER AS TO MINIMIZE INCONVENIENCES, HAZARDS AND DISTURBANCES UPON THE FACILITY'S OCCUPANTS TO ENSURE THEIR SAFETY AND TO ACCOMMODATE THE FACILITY'S DAILY OPERATIONS AND ACTIVITIES.
- SEE DRAWINGS AND SPECIFICATIONS FOR COMPLETE SCOPE OF WORK.
- DO NOT DISRUPT NORMAL FACILITY FUNCTIONS. OBTAIN SCHEDULES AND AN EVENT CALENDAR PRIOR TO DEVELOPING PHASING PLAN.
- COORDINATE SCHEDULE FOR ALL HVAC AND PLUMBING WORK (REMOVAL, INSTALLATION AND TESTING) WITH THE CONTRACTING OFFICER.

**GENERAL DEMOLITION/CONSTRUCTION PHASING NOTES (CONT.)**

- VERIFY LOCATION OF EXISTING UTILITIES IN THE PROJECT AREA PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY UTILITIES IN THE EVENT OF DAMAGE CAUSED BY HIS WORK.
- DISRUPTIONS TO UTILITY SERVICE WILL NOT BE ALLOWED DURING NORMAL BUSINESS HOURS. NO EXCEPTIONS. SCHEDULE INTERRUPTION OF UTILITY SERVICE A MINIMUM OF THIRTY (30) DAYS IN ADVANCE OF INTERRUPTION.
- CONTACT THE CONTRACTING OFFICER AND ANUENUE ANNEX FACILITY IMMEDIATELY SHOULD AN UNPLANNED UTILITY SERVICE OUTAGE OCCUR.
- NOT ALL EXISTING UTILITIES INCLUDING PLUMBING, IRRIGATION, ELECTRICAL CONDUITS, CABLES, ETC. ARE SHOWN. PROTECT EXISTING UTILITIES IN PLACE.
- EXISTING OVERHEAD PLUMBING, FIRE ALARM WIRING, CONTROL WIRING, ETC. IN CEILING AREAS ARE NOT SHOWN. PROTECT EXISTING PIPING, CONDUITS AND WIRING IN PLACE. RELOCATE OR INSTALL NEW HANGERS IF NECESSARY.
- MAKE ARRANGEMENTS WITH THE CONTRACTING OFFICER TO TEST THE FACILITY'S ENTIRE FIRE ALARM SYSTEM LOCATED WITHIN THE PROJECT LIMITS BEFORE AND AFTER CONSTRUCTION. TEST(S) SHALL BE SCHEDULED TO AVOID DISRUPTION OF NORMAL FACILITY OPERATIONS. NOTIFY THE CONTRACTING OFFICER OF ANY FAILURES. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO THE FIRE ALARM SYSTEM CAUSED BY HIS WORK. CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH THE TESTS. COSTS SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE BASE BID. CONTRACTOR MAY SCHEDULE MULTIPLE TESTS TO COINCIDE WITH WORK PROGRESS.
- TAKE PRECAUTION(S) TO AVOID NUISANCE FIRE ALARMS. ALL COSTS ASSOCIATED WITH FALSE FIRE ALARMS DUE TO CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
- TEST EXISTING IRRIGATION SYSTEM LOCATED WITHIN THE PROJECT LIMITS, STAGING AREA, PARKING AREA, AND/OR IN DELIVERY PATHS BEFORE AND AFTER CONSTRUCTION. NOTIFY THE CONTRACTING OFFICER OF ANY PREEXISTING DAMAGES. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE IRRIGATION SYSTEM CAUSED BY HIS WORK. CONTRACTOR SHALL PAY FOR ALL COSTS ASSOCIATED WITH THE TESTS. COST SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE BASE BID.

**VENTILATING NOTES**

- FURNISH AND INSTALL ALL EQUIPMENT, ACCESSORIES, CONNECTIONS, MATERIALS AND INCIDENTAL ITEMS NECESSARY TO FULLY COMPLETE THE INSTALLATION OF THE AIR CONDITIONING AND VENTILATING SYSTEM SHOWN ON THESE DRAWINGS.

**PLUMBING NOTES**

- SNAKE ALL EXISTING AND NEW SEWER PIPING DEDICATED TO NEW FIXTURES AND EQUIPMENT IN THIS PROJECT AFTER WORK HAS BEEN COMPLETED.
- PIPE SUPPORT SPACING FOR ALL NEW AND EXISTING PIPING WITHIN THE PROJECT LIMITS SHALL NOT EXCEED SUPPORT SPACING SPECIFIED IN THE TECHNICAL SPECIFICATIONS DURING ALL PHASES OF CONSTRUCTION.

**MAINTENANCE NOTES**

- PROVIDE 1-YEAR GUARANTEE AND MAINTENANCE SERVICE CONTRACT IN ACCORDANCE WITH SECTION 15011 - GENERAL MECHANICAL PROVISIONS, ATTACHMENT NO. 1.

**FIRE PROTECTION SYSTEM NOTES**

- FIRE SPRINKLER HEADS SHALL BE UPRIGHT TYPE.
- MODIFY EXISTING PIPING AND HEADS TO MEET THE NEW CONDITIONS IN ACCORDANCE WITH NFPA 13, 2019.
- INSTALL SPRINKLER HEADS IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. FIELD VERIFY THE THERMAL SENSITIVITY AND TEMPERATURE RATING OF THE EXISTING SPRINKLER HEADS, AND PROVIDE THE SAME TYPE OF SPRINKLER HEADS AS REQUIRED.
- ALL DEVICES AND EQUIPMENT SHALL BE UL LISTED OR FM APPROVED.
- NEW SPRINKLER PIPING SHALL CONNECT TO EXISTING SPRINKLER SYSTEM IN THE BUILDING.
- PROVIDE EARTHQUAKE BRACING IN ACCORDANCE WITH IBC 1613.1 AND NFPA 13, CHAPTER 18.
- OCCUPANCY HAZARD CLASSIFICATION: ORDINARY HAZARD GROUP 1 (OFFICE) AND LOW HAZARD STORAGE ACCESSORY (STORAGE).
- OCCUPANCY GROUP CATEGORY: TYPE B (OFFICE) AND S-2 (STORAGE).
- DESIGN DENSITY: 0.21 GPM/SF.
- CEILING HEIGHT: 8'-0"
- THE SPRINKLER SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13 - CHAPTER 29, AS REQUIRED BY FIRE CODE 13.3.1 & IBC 903.5. HYDROSTATIC TESTING AND COMPLETION OF CONTRACTOR'S MATERIAL AND TEST CERTIFICATE IS REQUIRED.

**FIRE PROTECTION SYSTEM NOTES (CONT.)**

- AUTOMATIC FIRE SPRINKLER SYSTEM MATERIALS AND INSTALLATION SHALL COMPLY WITH NFPA 13, REVISED ORDINANCES OF HONOLULU CHAPTER 16 AND IBC 903.
- CLEAN, PRE-TREAT, PRIME, AND PAINT NEW SPRINKLER PIPING. APPLY COATINGS TO CLEAN DRY SURFACES USING CLEAN BRUSHES. CLEAN THE SURFACES TO REMOVE DUST, DIRT, RUST, AND LOOSE MILL SCALE. IMMEDIATELY AFTER CLEANING, PROVIDE THE METAL SURFACE WITH ONE COAT OF PRETREATMENT PRIMER APPLIED TO A MINIMUM DRY FILM THICKNESS OF 0.3 MIL AND ONE COAT OF PRIMER APPLIED TO A MINIMUM DRY FILM THICKNESS OF ONE MIL. EXERCISE CARE TO AVOID PAINTING OF SPRINKLER HEADS. REPLACE HEADS WHICH ARE PAINTED WITH NEW CLEAN SPRINKLER HEADS OF THE PROPER TYPE. PROVIDE PRIMED SURFACES WITH THE FOLLOWING:
  - SPRINKLER PIPING IN UNFINISHED AREAS: UNFINISHED AREAS ARE DEFINED AS ATTIC SPACES, SPACES ABOVE SUSPENDED CEILINGS, CRAWL SPACES, PIPE CHASES, AND SPACES WHERE WALLS OR CEILINGS ARE NOT PAINTED OR NOT CONSTRUCTED OF PRE-FINISHED MATERIAL. PROVIDE PRIMED SURFACES WITH ONE COAT OF RED ENAMEL APPLIED TO A MINIMUM DRY FILM THICKNESS OF ONE MIL.
  - SPRINKLER PIPING IN ALL OTHER AREAS: PROVIDE PRIMED SURFACES WITH TWO COATS OF PAINT TO MATCH ADJACENT SURFACES, EXCEPT PROVIDE VALVES AND OPERATING ACCESSORIES WITH ONE COAT OF RED ENAMEL.
- MINIMIZE THE TIME WHICH THE EXISTING SYSTEM IS OUT OF SERVICE. NOTIFY THE HONOLULU FIRE DEPARTMENT PRIOR TO IMPAIRMENT OF THE EXISTING SYSTEM. THE FIRE PROTECTION SYSTEM SHALL NOT BE OUT OF SERVICE FOR MORE THAN 8 (EIGHT) HOURS. COMPLY WITH OSHA 29CFR1910.36 AND 29CFR1910.37.
- THE EXISTING 4-INCH DETECTOR CHECK METER (METER NUMBER: 90129607; PREMISE ID NUMBER: 1512052882) IS ADEQUATE TO SERVICE THE AUTOMATIC FIRE SPRINKLER SYSTEM; INCLUSIVE OF THIS PROJECT'S SCOPE OF WORK.
- TWO (2) SETS OF COMPLETE WORKING PLANS AND HYDRAULIC CALCULATIONS STAMPED AND SIGNED BY A HAWAII LICENSED MECHANICAL ENGINEER SHALL BE SUBMITTED, AS APPLICABLE, TO THE FIRE PROTECTION SPECIAL INSPECTOR (FPSI) FOR CODE COMPLIANCE REVIEW. ONE (1) SET WITH THE FPSI APPROVAL STAMP SHALL BE SUBMITTED TO THE DPP BUILDING DIVISION ALONG WITH THE FPSI FINAL REPORT/LETTER PRIOR TO CLOSING OF THE BUILDING PERMIT.

**RETENTION OF PLANS**

- ONE SET OF APPROVED PLANS, SPECIFICATIONS, AND COMPUTATIONS SHALL BE RETAINED BY THE BUILDING OFFICIAL FOR A PERIOD OF NOT LESS THAN 90 DAYS FROM DATE OF COMPLETION OF THE WORK COVERED THEREIN, AND ONE SET OF APPROVED PLANS SHALL BE RETURNED TO THE APPLICANT, AND SAID SET SHALL BE KEPT ON THE SITE OF THE BUILDING OR WORK AT ALL TIMES DURING WHICH THE WORK AUTHORIZED THEREBY IS IN PROGRESS. (SEC. 18-5.2 R.O. 1978 (1983 ED.); AM. ORD. 93-59).

**RESTORATION NOTES**

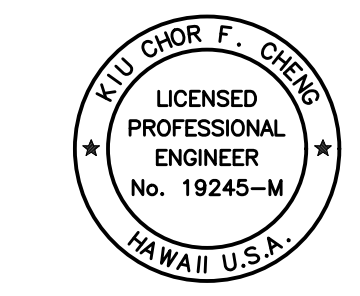
- RESTORE TO THEIR ORIGINAL CONDITION ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENT, EMBANKMENTS, CURBS, SIDEWALKS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE BID.

**FIRE SAFETY NOTES**

- 1.3.6.3 REPAIRS, RENOVATIONS, ALTERATIONS, RECONSTRUCTION, CHANGE OF OCCUPANCY, AND ADDITIONS TO BUILDINGS SHALL CONFORM TO THIS CODE, NFPA 101, AND THE BUILDING CODE.
- 1.9.4 THIS CODE SHALL NOT BE CONSTRUED TO RELIEVE FROM OR LESSEN THE RESPONSIBILITY OF ANY PERSON OWNING, OPERATING, OR CONTROLLING ANY BUILDING OR STRUCTURE FOR ANY DAMAGES TO PERSONS OR PROPERTY CAUSED BY DEFECTS, NOR SHALL THE CODE ENFORCEMENT AGENCY OR ITS PARENT JURISDICTION BE HELD AS ASSUMING ANY SUCH LIABILITY BY REASON OF THE INSPECTIONS AUTHORIZED BY THIS CODE OR ANY PERMITS OR CERTIFICATES ISSUED UNDER THIS CODE.
- 1.14.4 REVIEW AND APPROVAL BY THE AHJ SHALL NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY OF COMPLIANCE WITH THIS CODE.
- 4.5.1.1 THE AHJ SHALL DETERMINE WHETHER THE PROVISIONS OF THIS CODE ARE MET.
- 4.5.1.2 WHERE IT IS EVIDENT THAT A REASONABLE DEGREE OF SAFETY IS PROVIDED, ANY REQUIREMENT SHALL BE PERMITTED TO BE MODIFIED IF ITS APPLICATION WOULD BE HAZARDOUS UNDER NORMAL OCCUPANCY CONDITIONS IN THE JUDGMENT OF THE AHJ.
- 10.1.1 EVERY NEW AND EXISTING BUILDING OR STRUCTURE SHALL BE CONSTRUCTED, ARRANGED, EQUIPPED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THIS CODE SO AS TO PROVIDE A REASONABLE LEVEL OF LIFE SAFETY, PROPERTY PROTECTION, AND PUBLIC WELFARE FROM THE ACTUAL AND POTENTIAL HAZARDS CREATED BY FIRE, EXPLOSION, AND OTHER HAZARDOUS CONDITIONS.
- 13.1.1 THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT CONSTRUCTION DOCUMENTS FOR ALL FIRE PROTECTION SYSTEMS BE SUBMITTED FOR REVIEW AND APPROVAL AND A PERMIT BE ISSUED PRIOR TO THE INSTALLATION, REHABILITATION, OR MODIFICATION. (FOR ADDITIONAL INFORMATION CONCERNING CONSTRUCTION DOCUMENTS, SEE SECTION 1.14.) FURTHER, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE THAT FULL ACCEPTANCE TESTS OF THE SYSTEMS BE PERFORMED IN THE AHJ'S PRESENCE PRIOR TO FINAL SYSTEM CERTIFICATION.

**FIRE SAFETY DURING ALTERATION NOTES**

- 16.1.1 STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS, AND THIS CHAPTER, 2021 NFPA 1.
- 16.5.3.1.1 A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES.
- 16.5.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.
- 16.5.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.
- 16.5.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.
- 16.5.4.4 THE FIRE DEPARTMENT SHALL BE NOTIFIED WHEN THE SYSTEM IS SHUT DOWN AND WHEN THE SYSTEM IS RETURNED TO SERVICE.
- 10.7.1.1 AS NECESSARY DURING EMERGENCIES, MAINTENANCE, DRILLS, PRESCRIBED TESTING, ALTERATIONS, OR RENOVATIONS, PORTABLE OR FIXED FIRE-EXTINGUISHING SYSTEMS OR DEVICES OR ANY FIRE-WARNING SYSTEM SHALL BE PERMITTED TO BE MADE INOPERATIVE OR INACCESSIBLE.
- 13.1.9 WHENEVER IMPAIRMENTS, CRITICAL DEFICIENCIES, OR NON-CRITICAL DEFICIENCIES ARE IDENTIFIED IN WATER-BASED FIRE PROTECTION SYSTEMS MAINTAINED IN ACCORDANCE WITH NFPA 25, THEY SHALL BE CORRECTED IN A TIME FRAME APPROVED BY THE AHJ.
- 13.1.10 THE AHJ SHALL BE NOTIFIED WHEN ANY FIRE PROTECTION SYSTEM IS OUT OF SERVICE AND ON RESTORATION OF SERVICE.
- 18.1 GENERAL. FIRE DEPARTMENT ACCESS AND WATER SUPPLIES SHALL COMPLY WITH THIS CHAPTER.
- 18.2.1 FIRE DEPARTMENT ACCESS AND FIRE DEPARTMENT ACCESS ROADS SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 18.2.

|  |      |  |         |      |          |
|--|------|--|---------|------|----------|
| REVISION NO.   | SYM. | DESCRIPTION  | SHT./OF | DATE | APPROVED |
|   |      | STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br><br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, OAHU, HAWAII I |         |      |          |
| MECHANICAL NOTES   |      |  |         |      |          |
| DESIGNED: EK/LS  |      | SUBMITTED: APRIL 2026 <i>EC</i>  |         |      |          |
| DRAWN: EK/LS   |      | DATE: APRIL 2026   |         |      |          |
| CHECKED: KFC   |      | SCALE: AS NOTED  |         |      |          |
| APPROVED: <i>Dina Lau</i>  |      | RAWING NO. <b>M001</b>   |         |      |          |
| CHIEF ENGINEER<br>Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov |      | State of Hawaii<br>Civil Engineer  |         |      |          |

### MECHANICAL LEGEND

| SYMBOLS   | ABBR.    | DESCRIPTION  |
|-----------|----------|--|
| —————     |          | EXISTING TO REMAIN   |
| ///////   |          | EXISTING TO BE REMOVED   |
|           | (E)      | EXISTING   |
| —————     |          | NEW MECHANICAL WORK  |
|           | (N)      | NEW  |
| - - - - - | S OR W   | SOIL OR WASTE, BELOW FLOOR                                       |
| —————     | S OR W   | SOIL OR WASTE ABOVE FLOOR  |
| -----     | V        | VENT   |
| -----     | CW       | COLD WATER   |
| -----     | HW       | HOT WATER  |
|           |          | DUCTWORK: 1ST FIGURE - SIDE SHOWN<br>2ND FIGURE - SIDE NOT SHOWN |
|           | EA/TA    | DUCT SECTION - EXHAUST AIR/TRANSFER AIR                          |
|           | ER<br>TG | EXHAUST AIR REGISTER<br>TRANSFER AIR GRILLE                      |
|           |          | TURNING VANE   |
|           | ER       | EXHAUST AIR REGISTER   |
|           | CO       | CLEAN-OUT, WCO-WALL, FCO-FLOOR, COTG-GRADE                       |
|           | VD       | MANUAL VOLUME DAMPER   |
|           | FD       | FLOOR DRAIN  |
|           | FSPK     | FIRE SPRINKLER HEAD - EXISTING TO REMAIN                         |
|           | FSPK     | FIRE SPRINKLER HEAD - NEW  |
|           | BV       | BALL VALVE   |
|           | VTR      | VENT THRU ROOF   |
|           | WC       | WATER CLOSET   |
|           | L        | LAVATORY   |
|           | SH       | SHOWER   |
|           | TP       | TRAP PRIMER  |
|           | MS       | MOP SINK   |
|           | HB       | HOSE BIBB  |
|           | SS       | SERVICE SINK   |
|           | UR       | URINAL   |
|           | WHA      | WATER HAMMER ARRESTOR  |
|           | AFF      | ABOVE FINISHED FLOOR   |

### EXHAUST FAN SCHEDULE

| SYMBOL | AREA SERVED  | TYPE   | AIRFLOW (CFM) | ESP (IN W.G.) | ELECTRICAL |    |    |     |      |     |      |        | SONES <sup>A</sup> | OPERATING WEIGHT (LBS) | REMARKS*   |
|--------|--|--------|---------------|---------------|------------|----|----|-----|------|-----|------|--------|--------------------|------------------------|--|
|        |  |        |               |               | V          | PH | HZ | HP  | BHP  | MCA | MOCP | DRIVE  |                    |                        |  |
|        | WOMENS TOILET+SHOWER,<br>MENS TOILET+SHOWER,<br>SHOWER | INLINE | 620           | 0.85          | 115        | 1  | 60 | 1/2 | 0.16 | 8.2 | 15   | DIRECT | 8.3                | 48                     | DESIGN BASED ON GREENHECK MODEL SQ-7-M1-VG.<br>FURNISH WITH BACKDRAFT DAMPER AND SPEED CONTROLLER.<br>INTERLOCK WITH CORRESPONDING LIGHT SWITCHES. |

<sup>A</sup>SONES MEASURED IN ACCORDANCE WITH ANSI/AMCA STANDARD 301.

### PLUMBING FIXTURE SCHEDULE

| SYMBOL | FIXTURE                  | TYPE   | PIPE SIZE |        |      |      | GAL/FLUSH | GPM  | REMARKS                                  |
|--------|--------------------------|--|-----------|--------|------|------|-----------|------|--|
|        |                          |  | S         | V      | CW   | HW   |           |      |  |
|        | WATER CLOSET, ACCESSIBLE | FLOOR MOUNTED, FLUSH VALVE                                   | 4"        | 2"     | 1"   | -    | 1.28      | -    | FURNISH WITH OPEN FRONT SEAT. SEE DETAIL |
|        | LAVATORY, ACCESSIBLE     | WALL HUNG, VITREOUS CHINA WITH METERING FAUCET               | 2"        | 1-1/2" | 1/2" | -    | -         | 0.5  | SEE DETAIL                               |
|        | SHOWER                   | WALL MOUNTED   | -         | -      | 1/2" | 1/2" | -         | 2.5  | ADA COMPLIANT, FURNISH WITH HAND SHOWER  |
|        | FLOOR DRAIN              | CAST IRON, BRONZE FACE PLATE                                 | 2"        | 2"     | -    | -    | -         | -    | SEE DETAIL                               |
|        | TRAP PRIMER              | AUTOMATIC, FLOW ACTIVATED TRAP PRIMER WITH ANTI-SIPHON PORTS | -         | -      | 1/2" | -    | -         | -    | SEE DETAIL                               |
|        | HOSE BIBB, INTERIOR      | NON-REMOVABLE VACUUM BREAKER, CHROME PLATED                  | -         | -      | 3/4" | -    | -         | -    | SEE DETAIL                               |
|        | MOP SINK                 | FLOOR MOUNTED, STAINLESS STEEL                               | 2"        | 2"     | 1/2" | 1/2" | -         | 6.48 | SEE DETAIL                               |

### MECHANICAL EQUIPMENT SCHEDULE

| SYMBOL | DESCRIPTION   | REMARKS*   |
|--------|---|--|
|        | ELECTRIC WATER HEATER:<br>VERTICAL TALL TANK<br><br>RATED TANK CAPACITY: 55 GALLONS<br>FIRST HOUR RATING: 72 GALLONS<br>INPUT: 4,500 WATTS<br>RECOVERY RATE: 21 GPH @ 90° F RISE<br>ELECTRICAL DATA: 240V/1φ/60HZ<br><br>WEIGHT (FILLED): 604 LBS<br><br>TEMPERATURE SET POINT: 120°F | DESIGN BASED ON AO SMITH, MODEL ENT-55, SEE DETAIL |

#### CITY AND COUNTY OF HONOLULU REVISED ORDINANCES OF HONOLULU 2021 CHAPTER 16B

To the best of my knowledge, this project's design substantially conforms to the Building Energy Code for:

- Building Component Systems
- Electrical Component Systems
- Mechanical Component Systems

Signature: Date: 04-02-2026  
Name: KIU CHOR F. CHENG  
Title: PROJECT ENGINEER  
License No.: 19245-M

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

(EXPIRES 4/30/2028)

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

MECHANICAL LEGEND, MECHANICAL EQUIPMENT AND PLUMBING FIXTURE SCHEDULE

DESIGNED: EK/LS      SUBMITTED: APRIL 2026

DRAWN: EK/LS      DATE: APRIL 2026

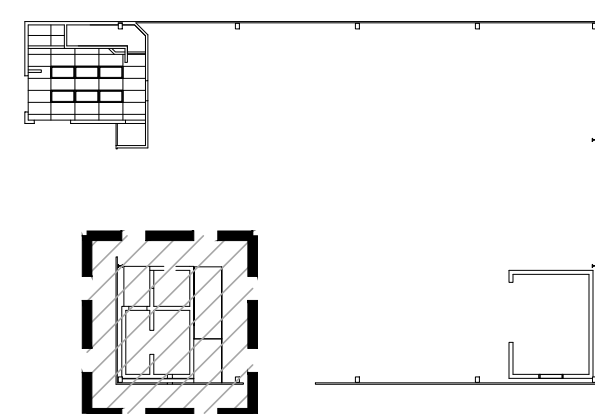
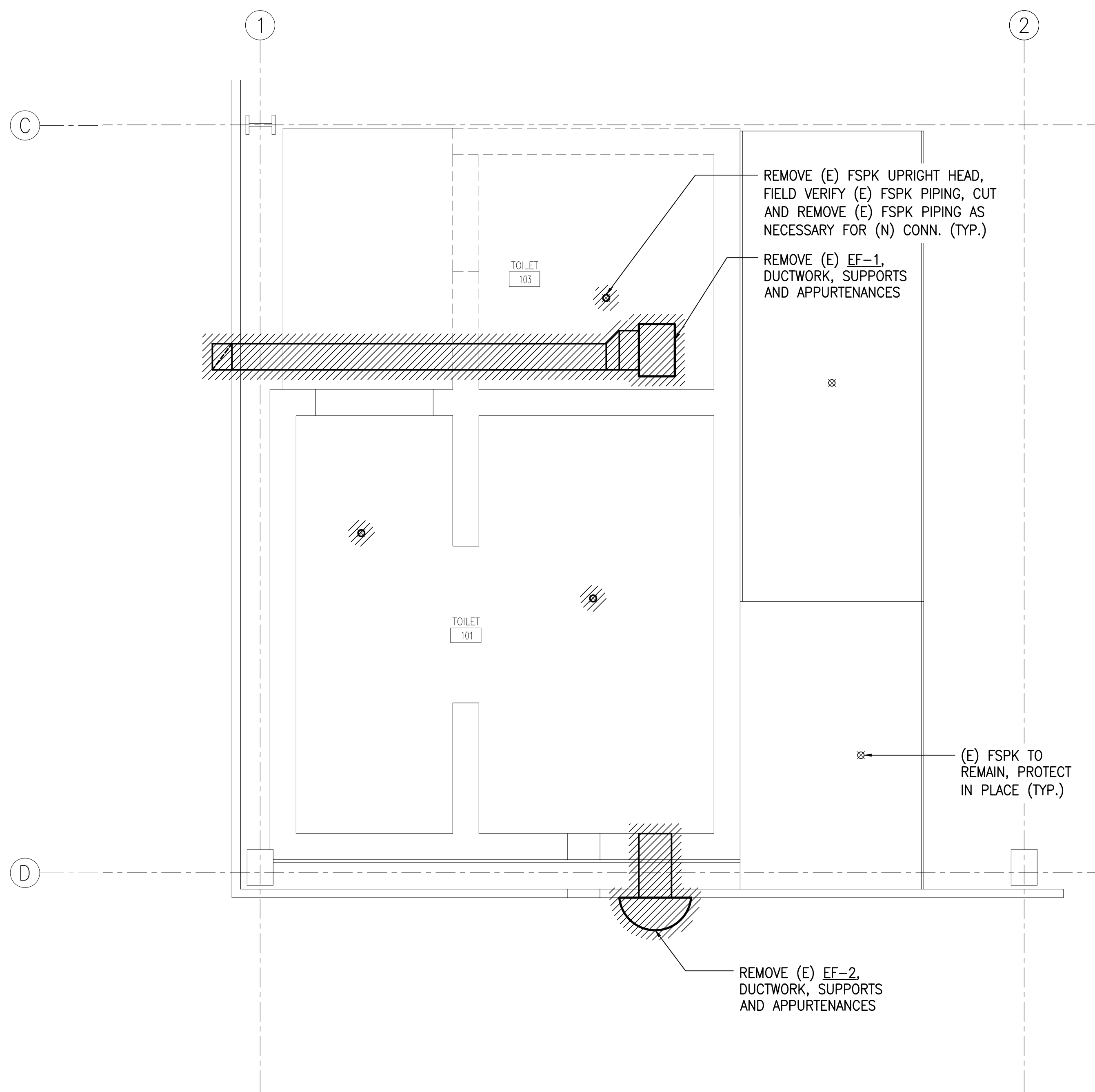
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APPROVED: Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov

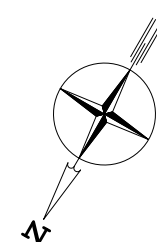
CHIEF ENGINEER  
State of Hawaii  
Civil Engineer

RAWING NO.  
**M002**

\*LISTED DESIGN "BASED ON" EQUIPMENT MANUFACTURERS/MODELS ARE NOT INTENDED TO LIMIT CHOICES OF MANUFACTURERS/MODELS (I.E., SUBJECT TO APPROVAL VIA SUBMITTALS/SUBSTITUTION REQUESTS, OTHER MANUFACTURERS/MODELS THAT MEET BIDDING REQUIREMENTS ARE ACCEPTABLE).



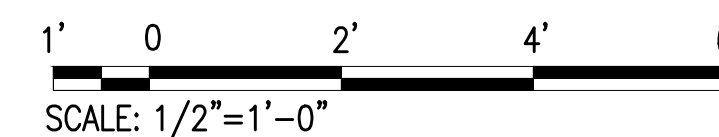
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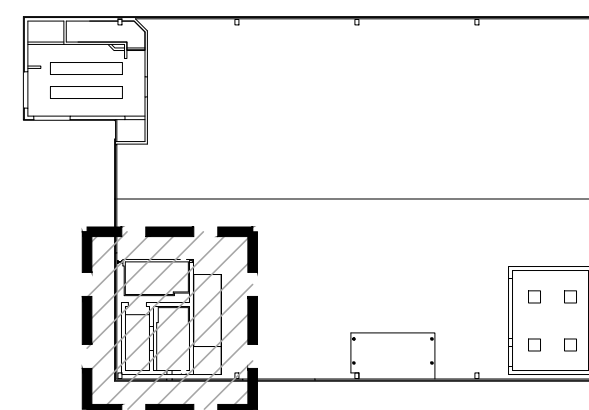
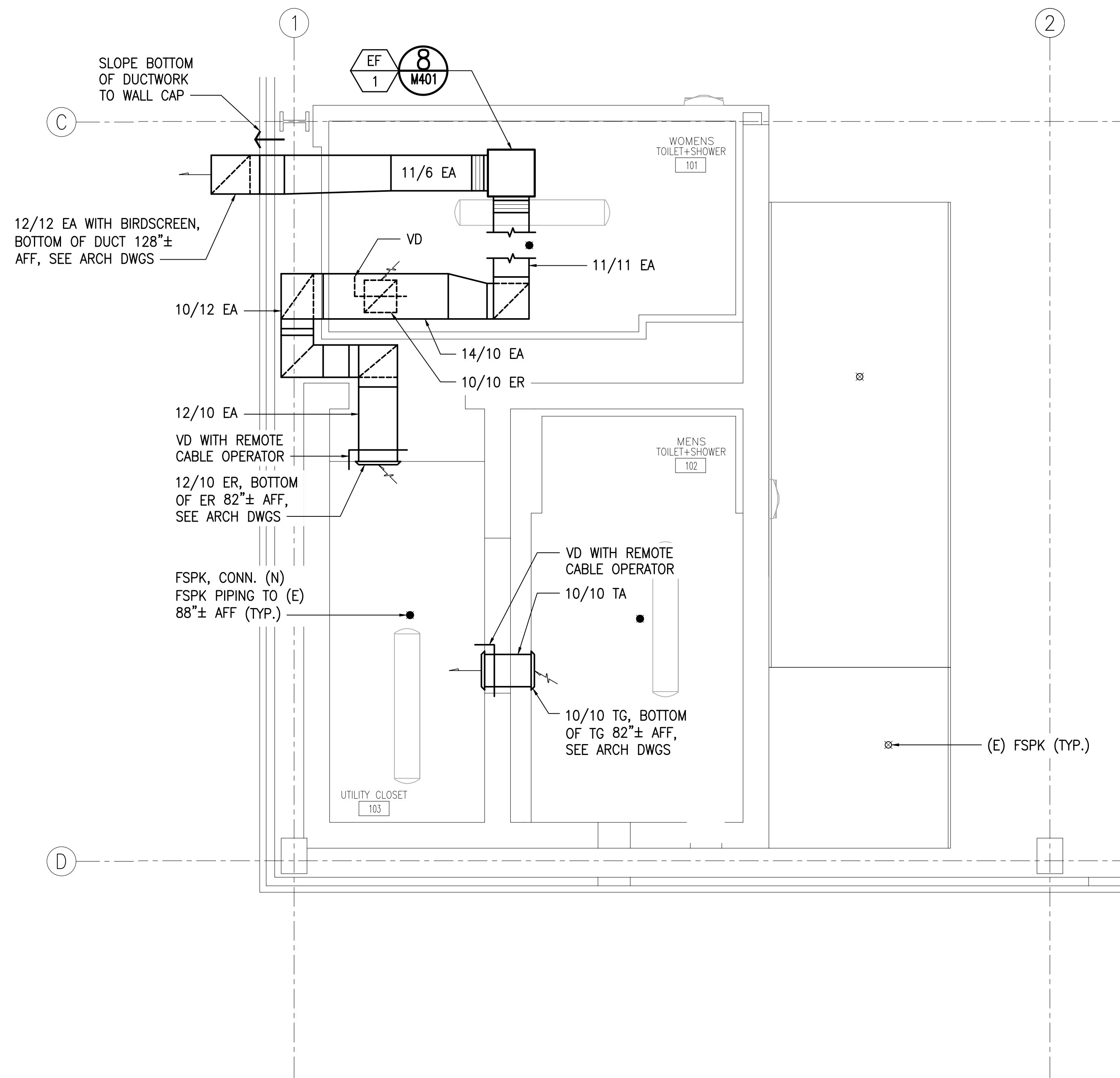
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M111

**MECHANICAL DEMOLITION PARTIAL PLAN**

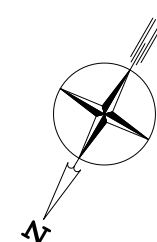
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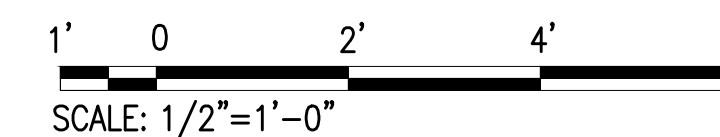
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| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, OAHU, HAWAII |      |   |         |      |          |
| MECHANICAL DEMOLITION PARTIAL PLAN   |      |   |         |      |          |
| DESIGNED: EK/LS  |      | SUBMITTED: APRIL 2026 <i>EC</i>   |         |      |          |
| DRAWN: EK/LS   |      | DATE: APRIL 2026  |         |      |          |
| CHECKED: KFC   |      | SCALE: AS NOTED   |         |      |          |
| APPROVED: <i>Dina Lau</i>  |      | RAWING NO. <b>M111</b>  |         |      |          |
| CHIEF ENGINEER<br>Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>State of Hawaii<br>Civil Engineer  |      | <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. ("OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 15, HAWAII ADMINISTRATIVE RULES FOR ARCHITECTS, PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-152.2 DEFINITIONS, EFFECTIVE 8/20/04.)</small> |         |      |          |



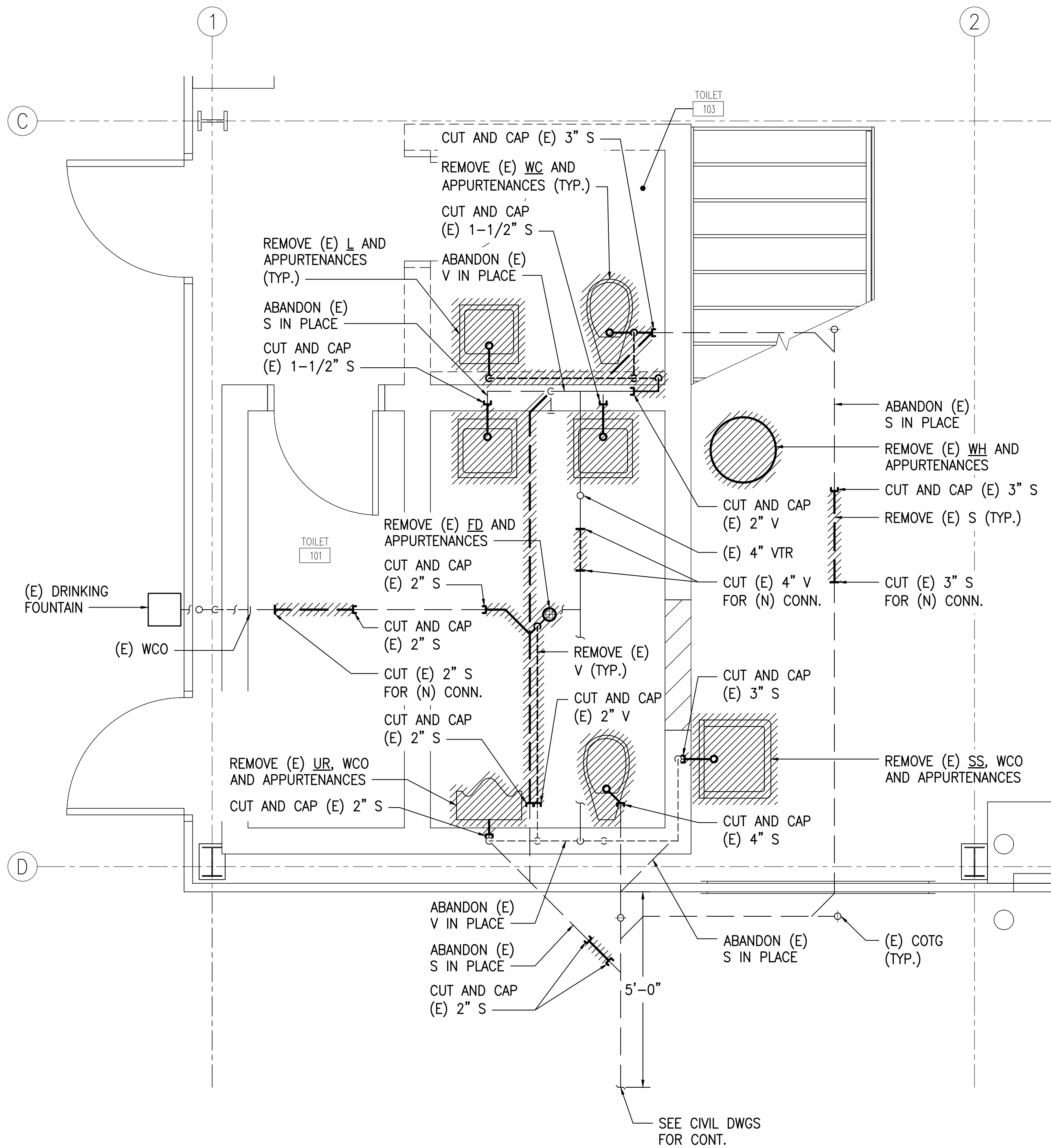
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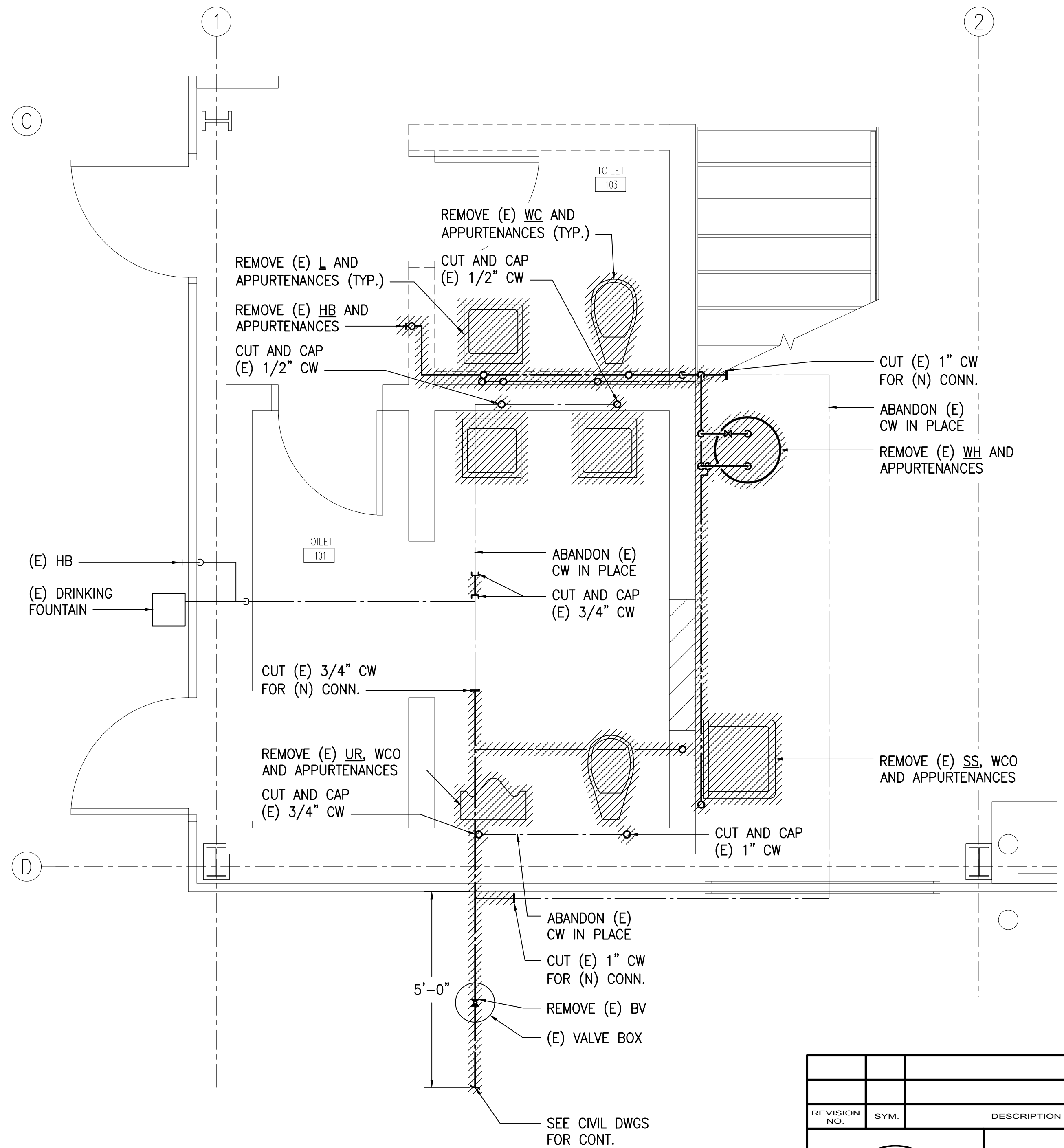
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M121  
**MECHANICAL PARTIAL PLAN**  
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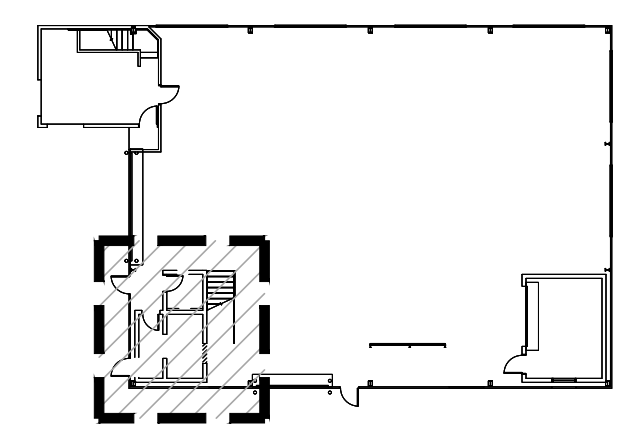
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| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, OAHU, HAWAII |                                 |             |            |      |          |
| MECHANICAL PARTIAL PLAN  |                                 |             |            |      |          |
| DESIGNED: EK/LS  | SUBMITTED: APRIL 2026           |             | GC         |      |          |
| DRAWN: EK/LS   | DATE: APRIL 2026                |             |            |      |          |
| CHECKED: KFC   | SCALE: AS NOTED                 |             |            |      |          |
| APPROVED: <i>Dina Lau</i>  | E-signed 2026-04-29 01:15PM HST |             | RAWING NO. |      |          |
| CHIEF ENGINEER   | dina.u.lau@hawaii.gov           |             | M121       |      |          |
|  | State of Hawaii                 |             |            |      |          |



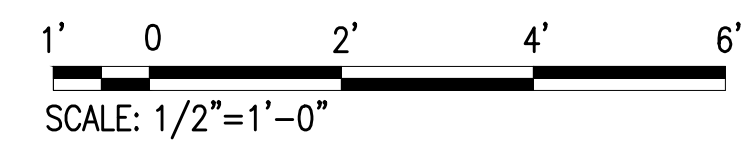
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**PLUMBING SANITARY  
DEMOLITION PARTIAL PLAN**  
SCALE: 1/2" = 1'-0"



**2**  
M211  
**PLUMBING WATER  
DEMOLITION PARTIAL PLAN**  
SCALE: 1/2" = 1'-0"



KEY PLAN



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |
|              |      |             |         |      |          |

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION SHALL BE DEFINED IN CHAPTER 15, HAWAII ADMINISTRATIVE RULES FOR ARCHITECTS, PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-15.2 DEFINITIONS, EFFECTIVE 8/20/04.

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

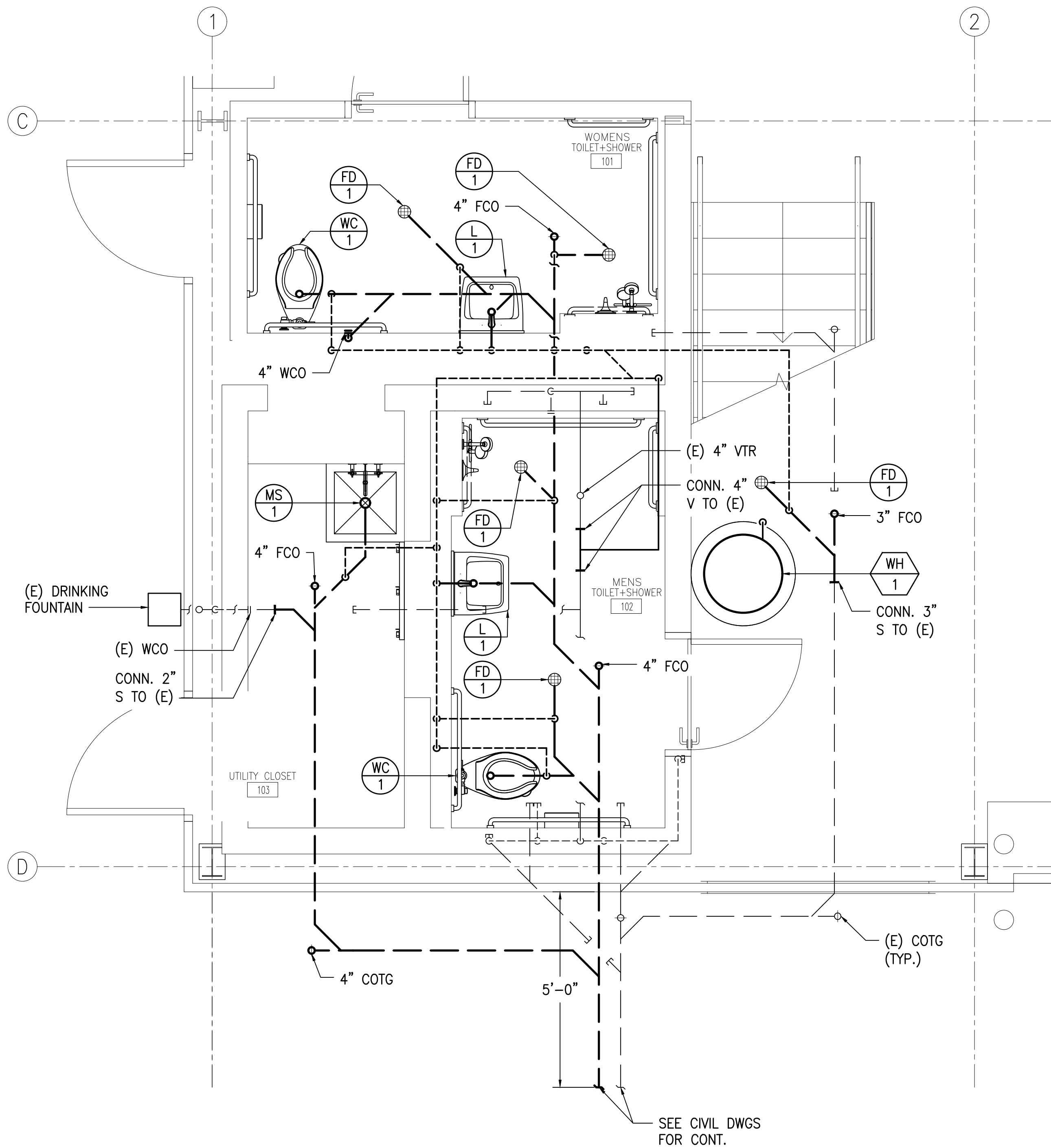
ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O AHU, HAWAII I

PLUMBING DEMOLITION PARTIAL PLAN

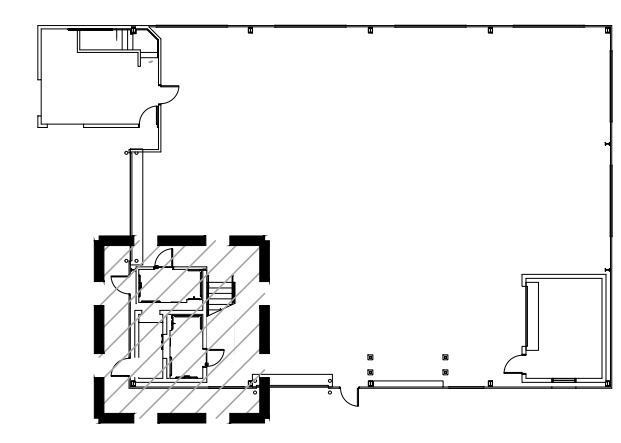
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| DESIGNED: EK/LS | SUBMITTED: APRIL 2026 |
| DRAWN: EK/LS    | DATE: APRIL 2026      |
| CHECKED: KFC    | SCALE: AS NOTED       |

APPROVED: *Dina Lau*  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
CHIEF ENGINEER State of Hawaii  
Civil Engineer

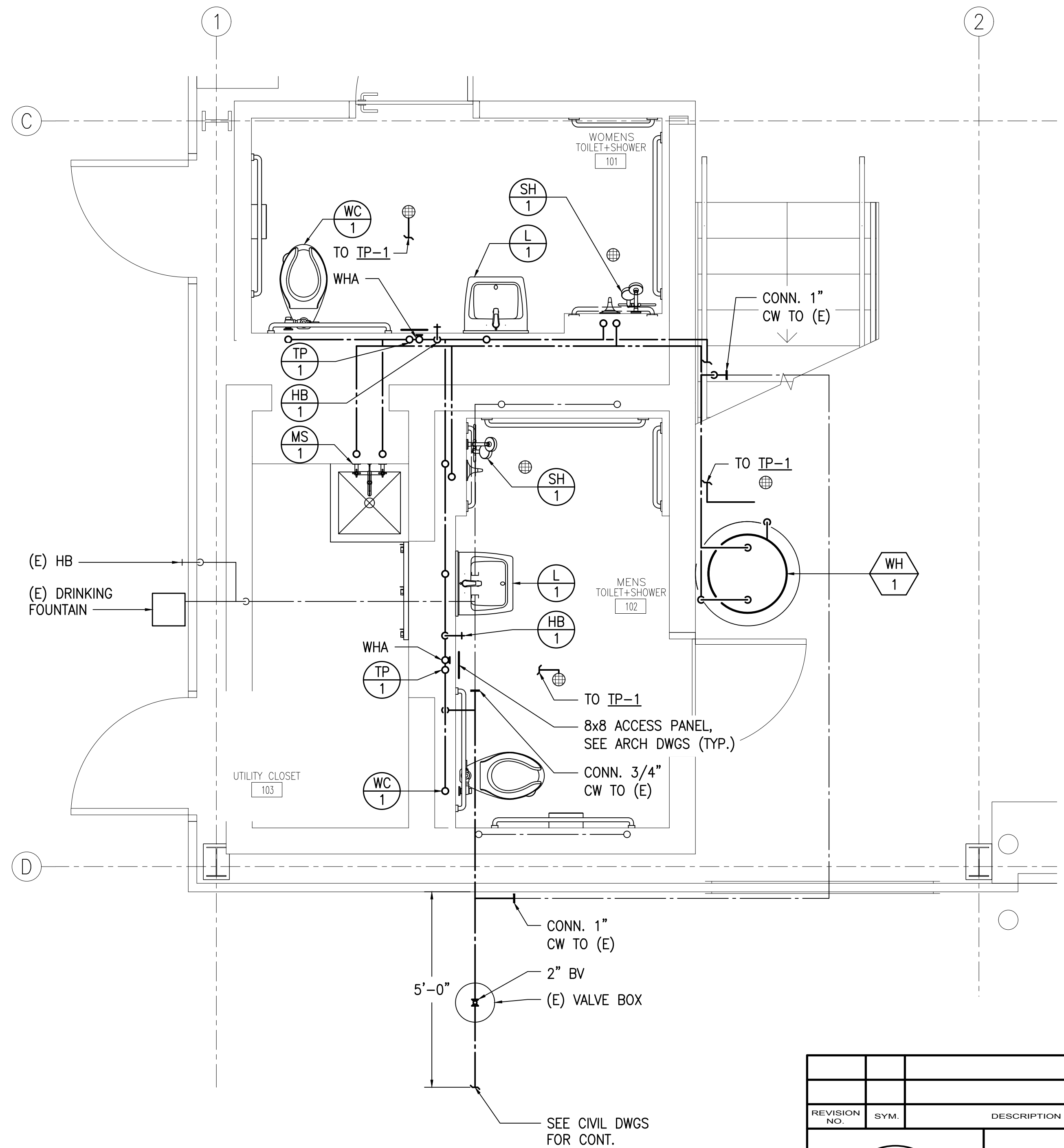
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**M211**



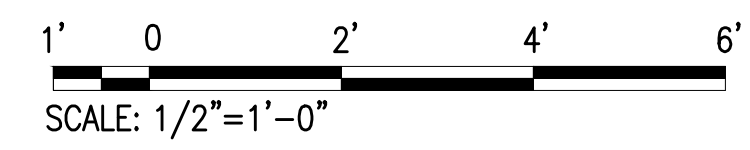
**1**  
M221  
**PLUMBING SANITARY  
PARTIAL PLAN**  
SCALE: 1/2" = 1'-0"



KEY PLAN



**2**  
M221  
**PLUMBING WATER  
PARTIAL PLAN**  
SCALE: 1/2" = 1'-0"



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
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(EXPIRES 4/30/2028)

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

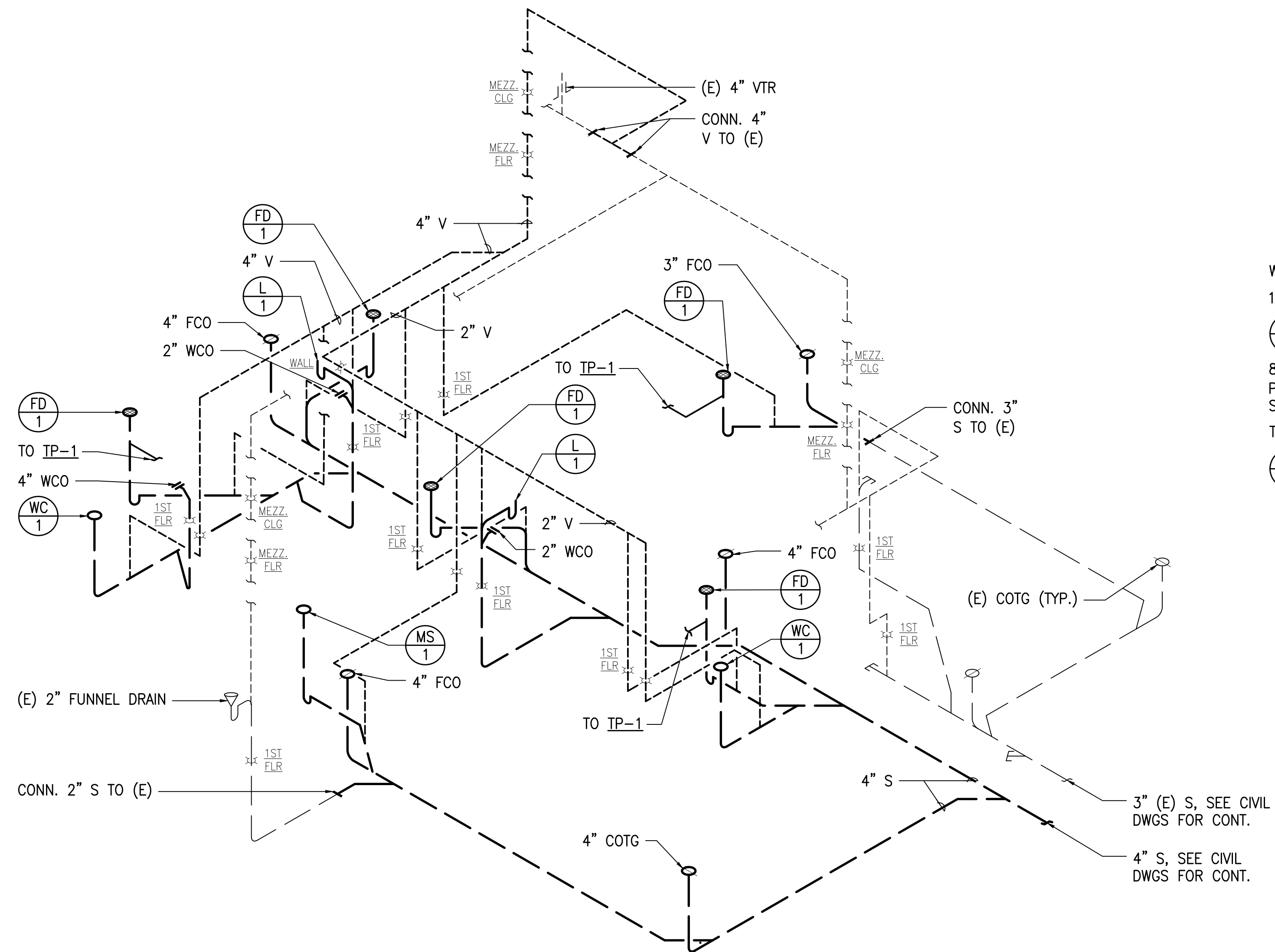
ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

PLUMBING PARTIAL PLAN

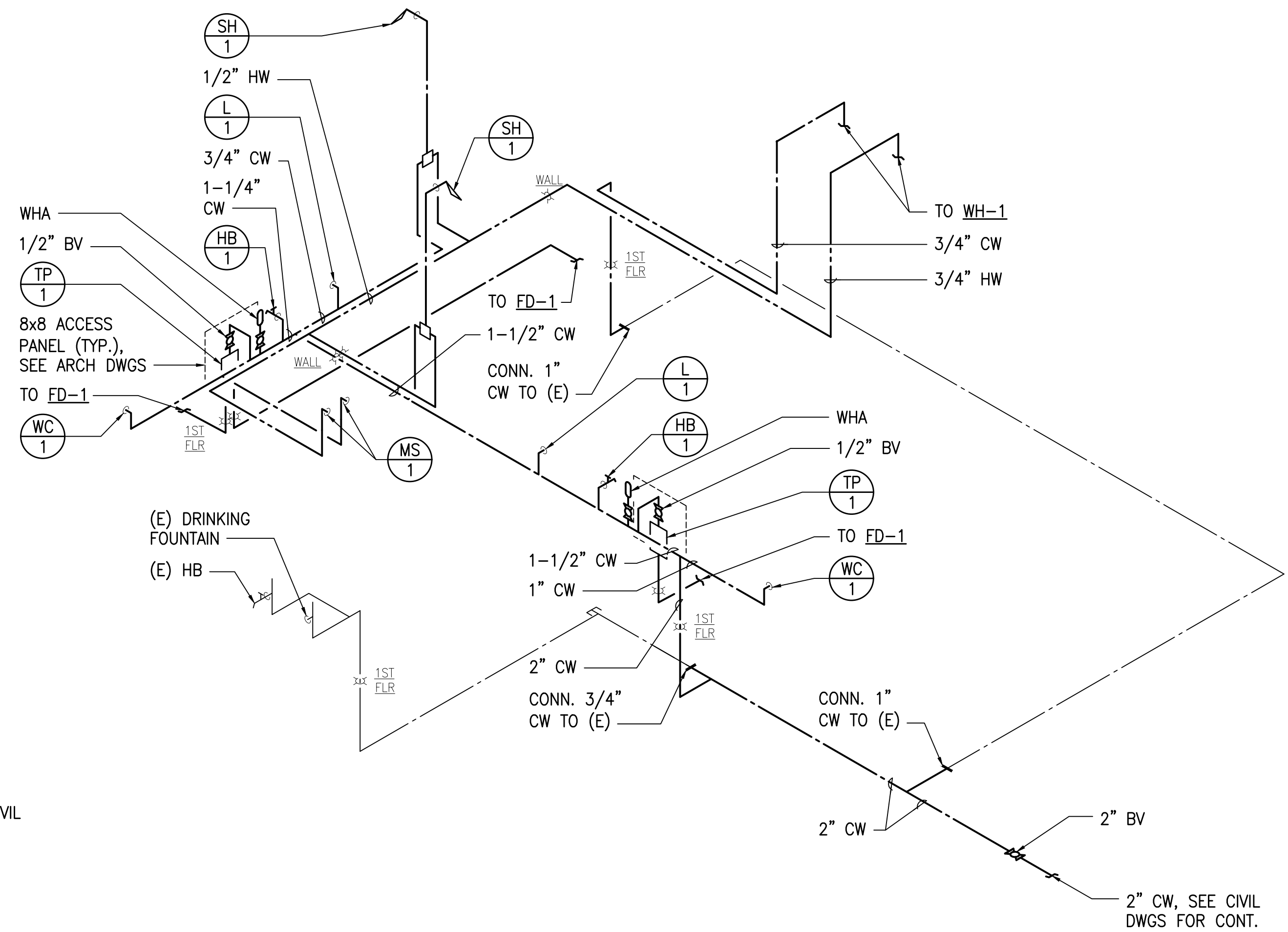
DESIGNED: EK/LS  
DRAWN: EK/LS  
CHECKED: KFC  
APPROVED: Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
CHIEF ENGINEER

SUBMITTED: APRIL 2026  
DATE: APRIL 2026  
SCALE: AS NOTED  
RAWING NO.  
**M221**

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION SHALL BE DEFINED IN CHAPTER 15, HAWAII ADMINISTRATIVE RULES FOR ARCHITECTS, PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-15.2 DEFINITIONS, EFFECTIVE 8/20/04.

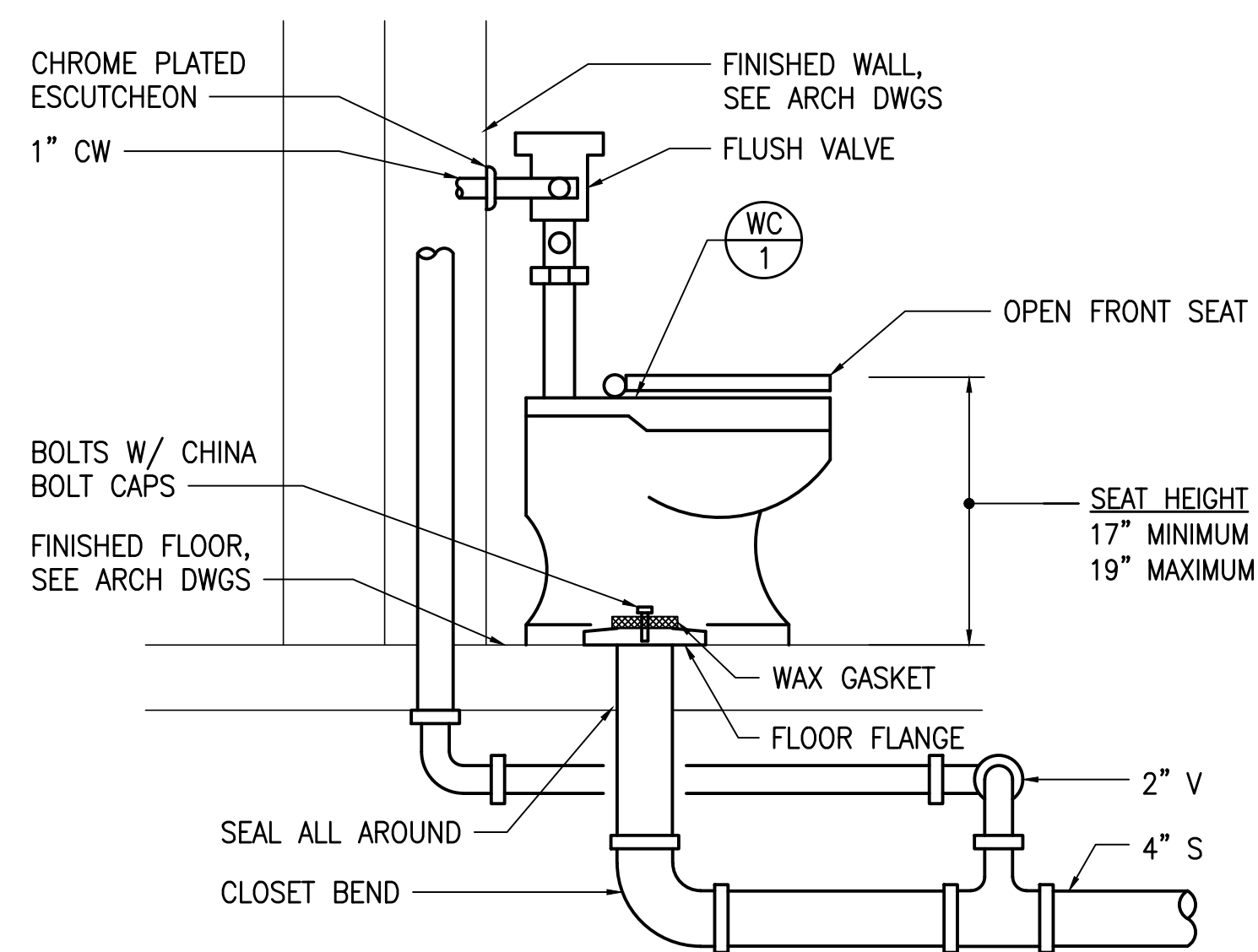


**1** SANITARY PIPING DIAGRAM  
M301 NOT TO SCALE

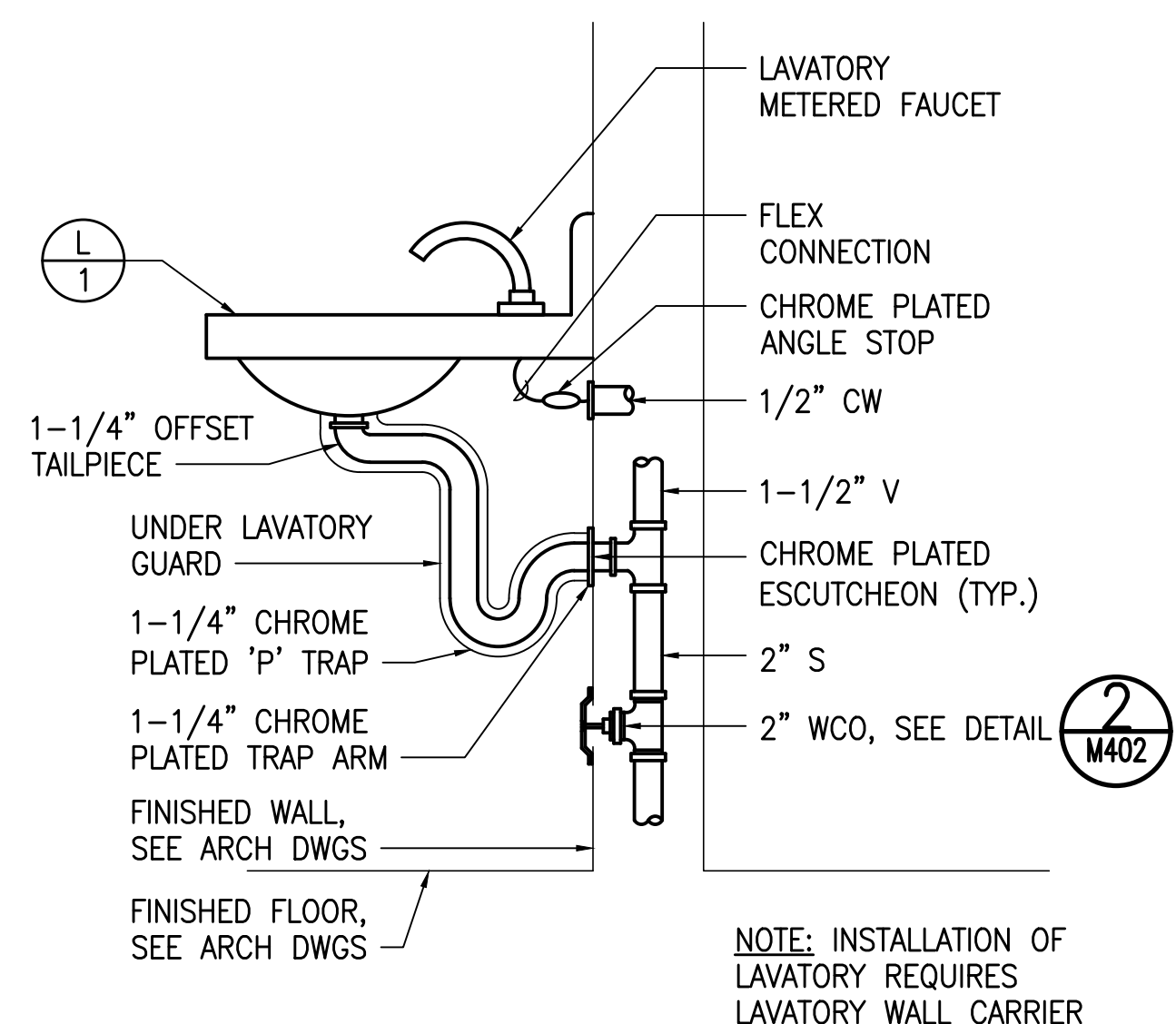


**2** WATER PIPING DIAGRAM  
M301 NOT TO SCALE

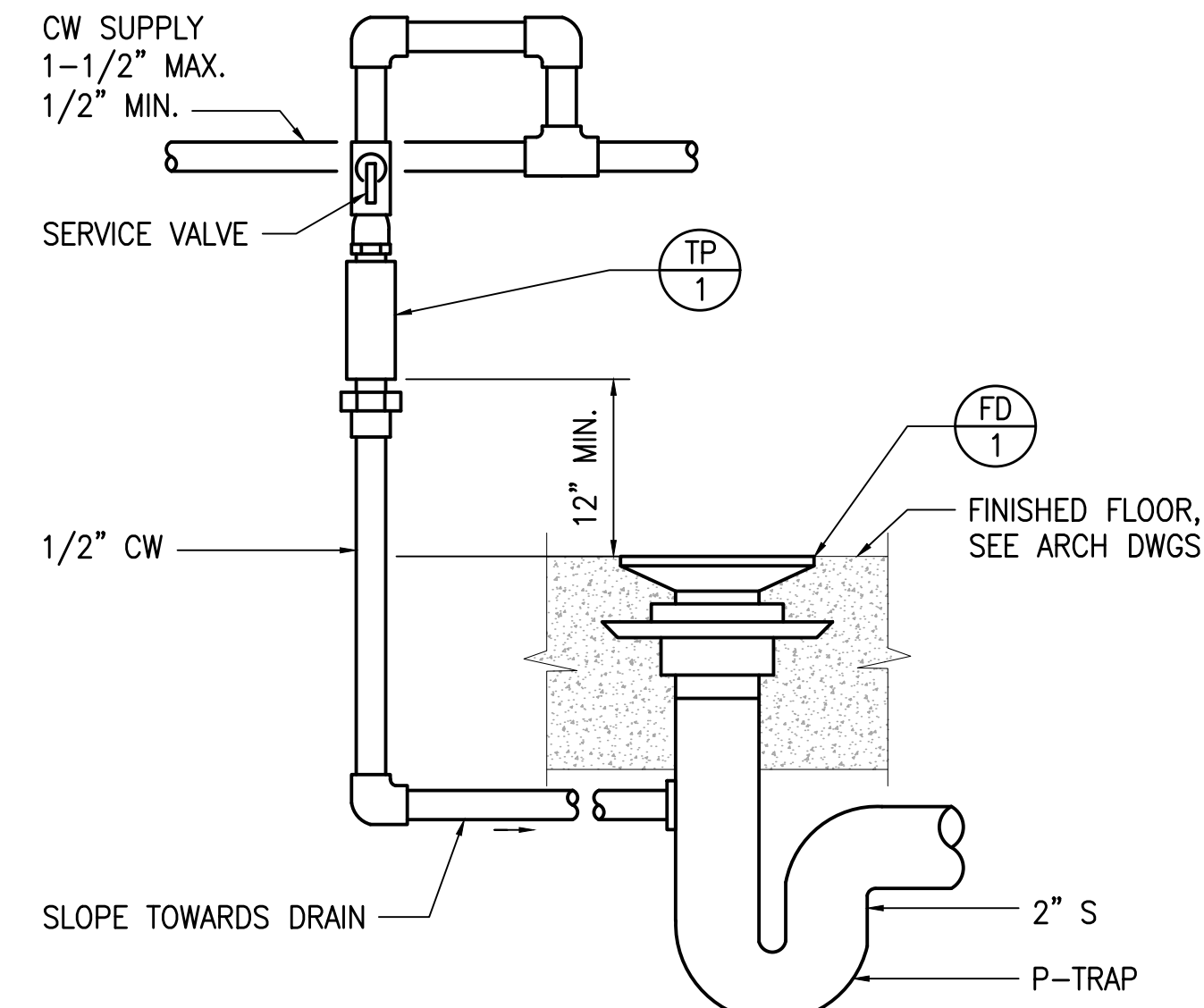
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|  |      |  |         |      |          |
| STATE OF HAWAII<br>DEPARTMENT OF LAND AND NATURAL RESOURCES<br>ENGINEERING DIVISION<br>ANUENUE FISHERIES RESEARCH CENTER<br>ANNEX FACILITY IMPROVEMENTS - PHASE 1A<br>(BUILDING IMPROVEMENTS)<br>SAND ISLAND, OAHU, HAWAII |      |  |         |      |          |
| PIPING DIAGRAMS  |      |  |         |      |          |
| DESIGNED: EK/LS  |      | SUBMITTED: APRIL 2026 <i>EC</i>                          |         |      |          |
| DRAWN: EK/LS   |      | DATE: APRIL 2026   |         |      |          |
| CHECKED: KFC   |      | SCALE: AS NOTED  |         |      |          |
| APPROVED: <i>Dina Lau</i>  |      | DRAWING NO. M301   |         |      |          |
| CHIEF ENGINEER   |      | E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov |         |      |          |



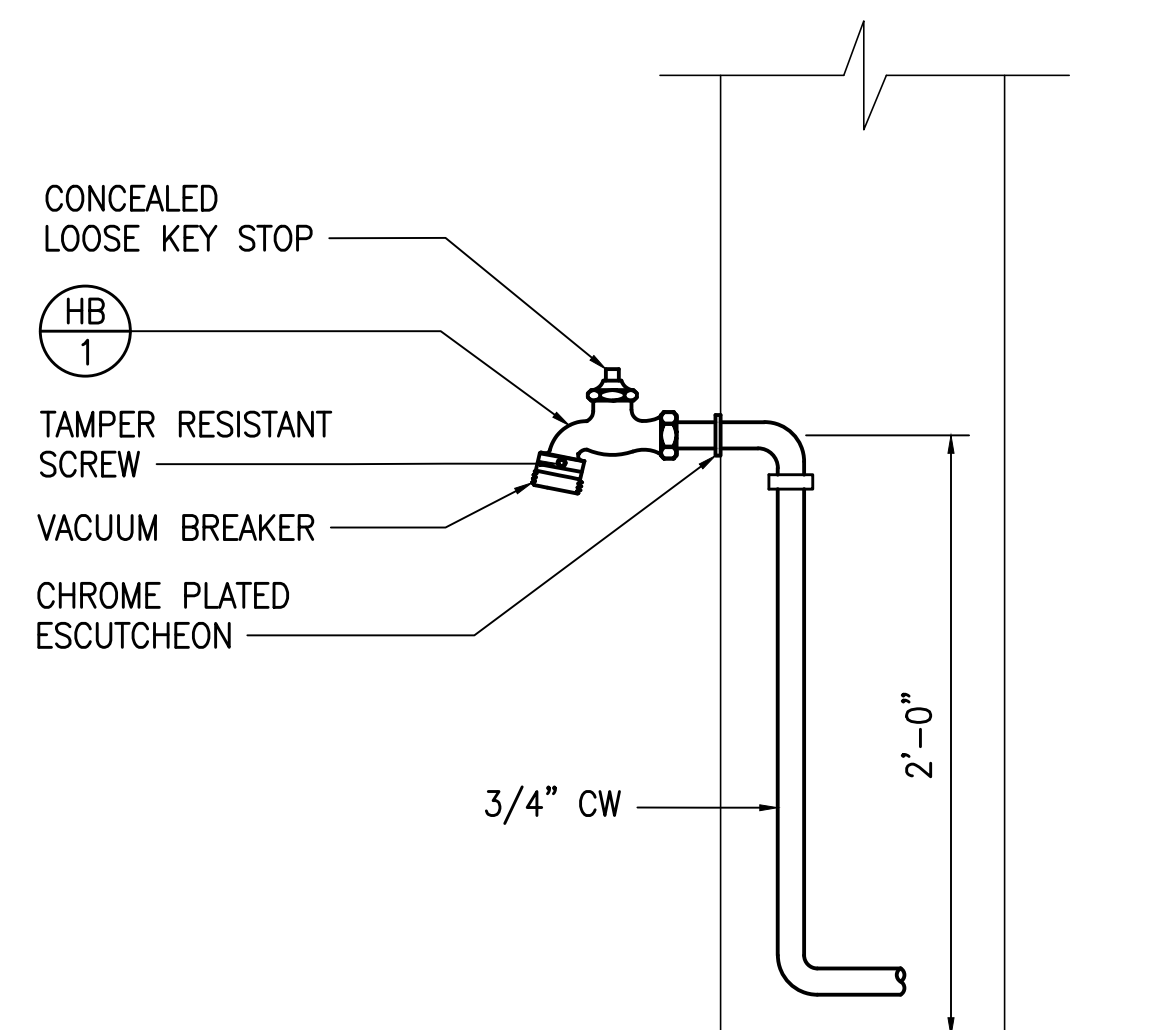
**1** ACCESSIBLE WATER CLOSET DETAIL  
M401 NOT TO SCALE



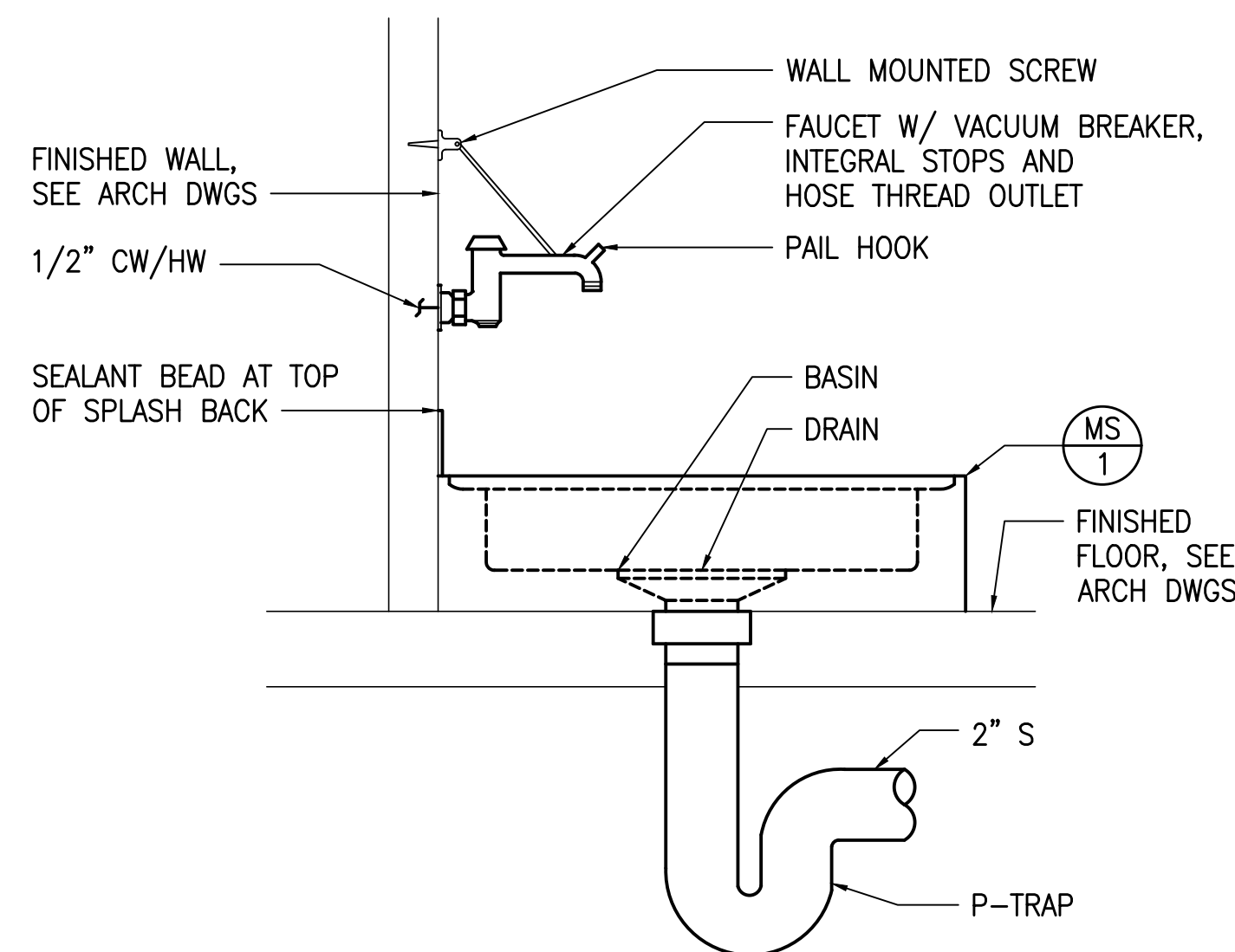
**2** ACCESSIBLE LAVATORY DETAIL  
M401 NOT TO SCALE



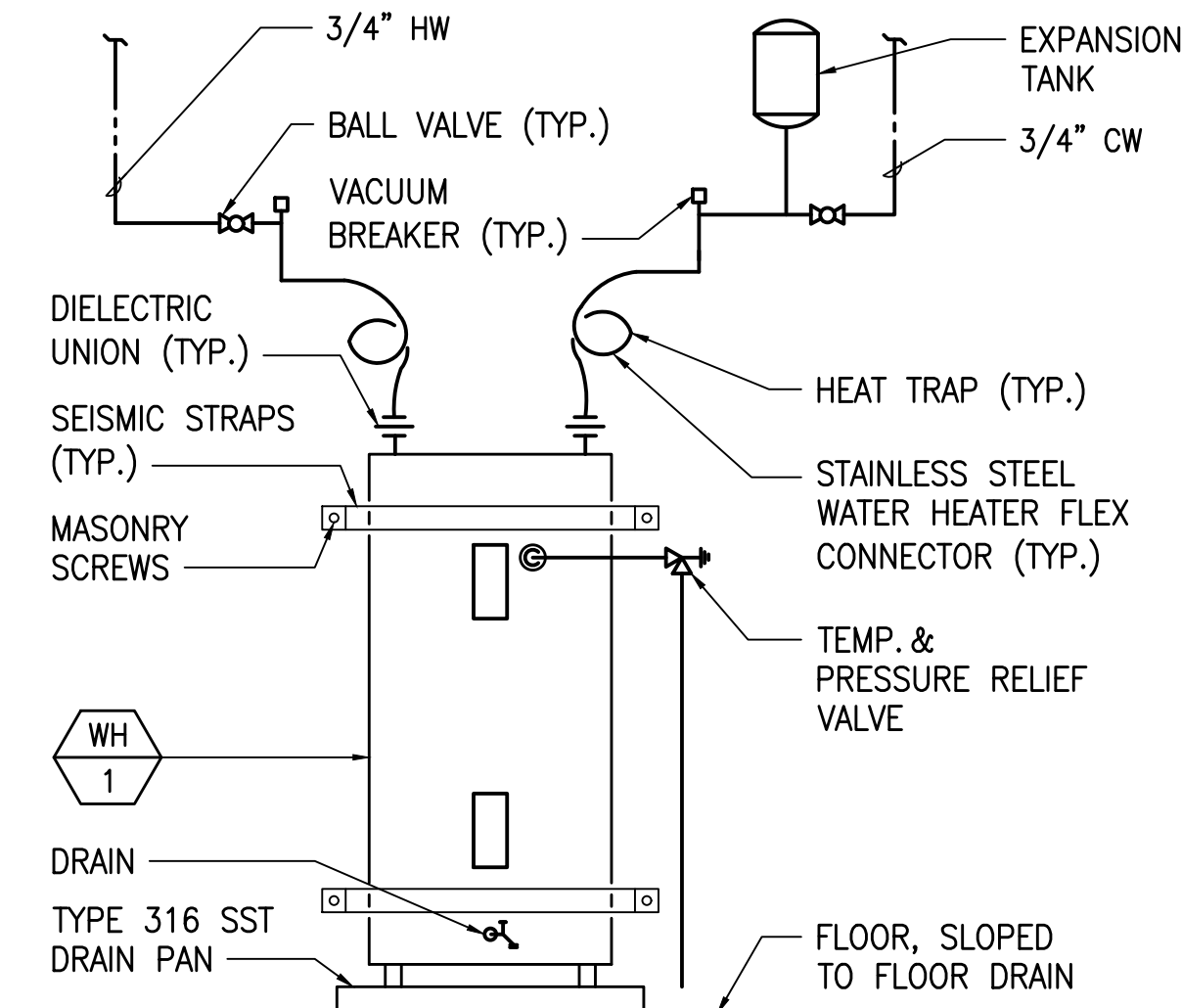
**3** TRAP PRIMER DETAIL  
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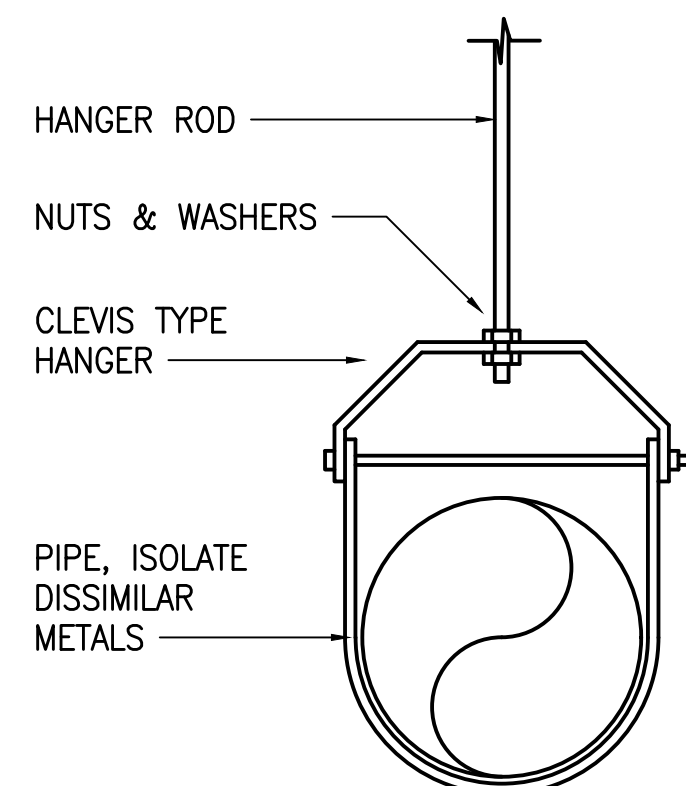
**4** HOSE BIBB DETAIL  
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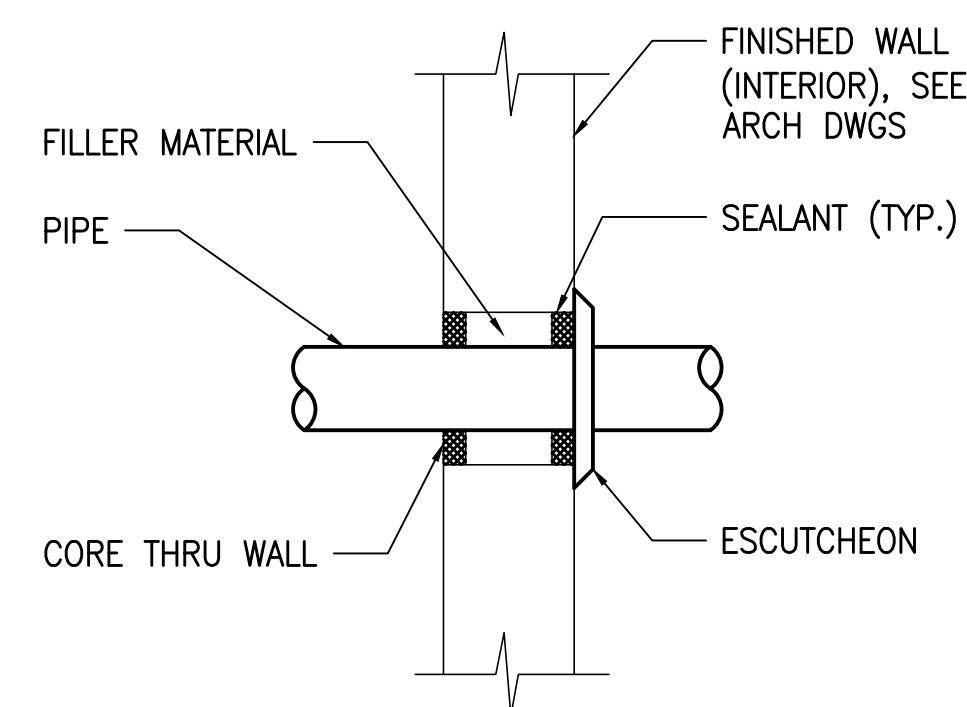
**5** MOP SINK DETAIL  
M401 NOT TO SCALE



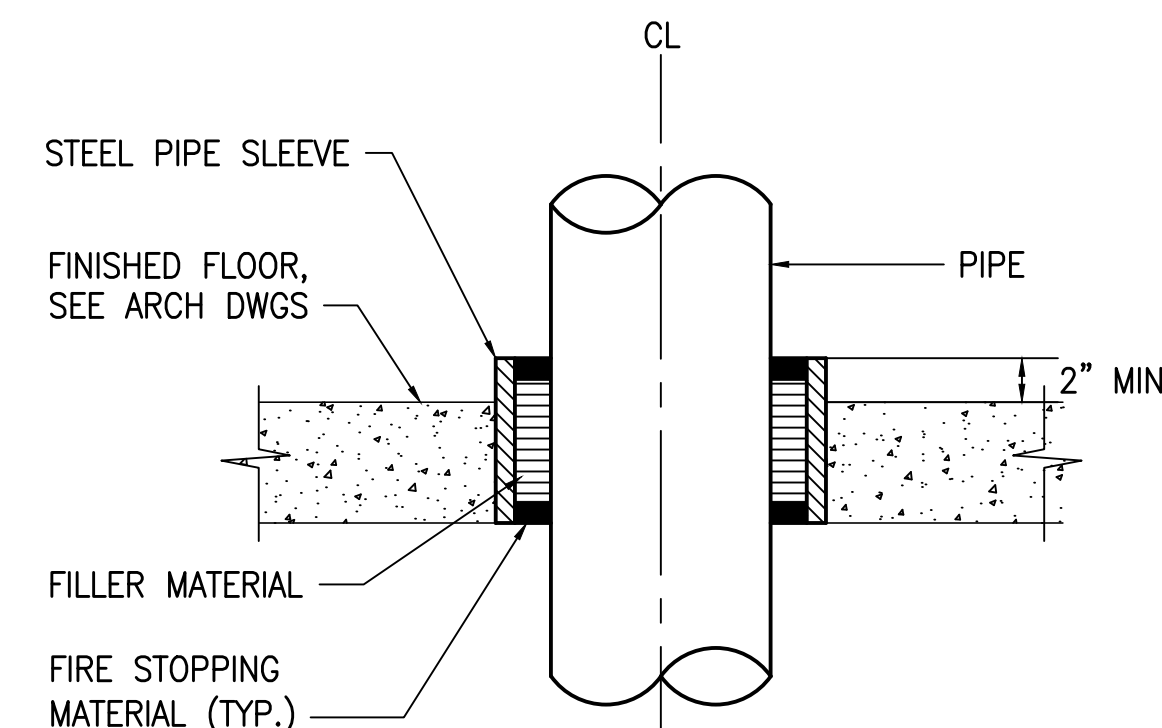
**6** WATER HEATER DETAIL  
M401 NOT TO SCALE



**7** PIPE HANGER DETAIL  
M401 NOT TO SCALE



**8** PIPE THRU WALL DETAIL  
M401 NOT TO SCALE



**9** PIPE THRU FLOOR DETAIL  
M401 NOT TO SCALE

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
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STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII I

MECHANICAL DETAILS

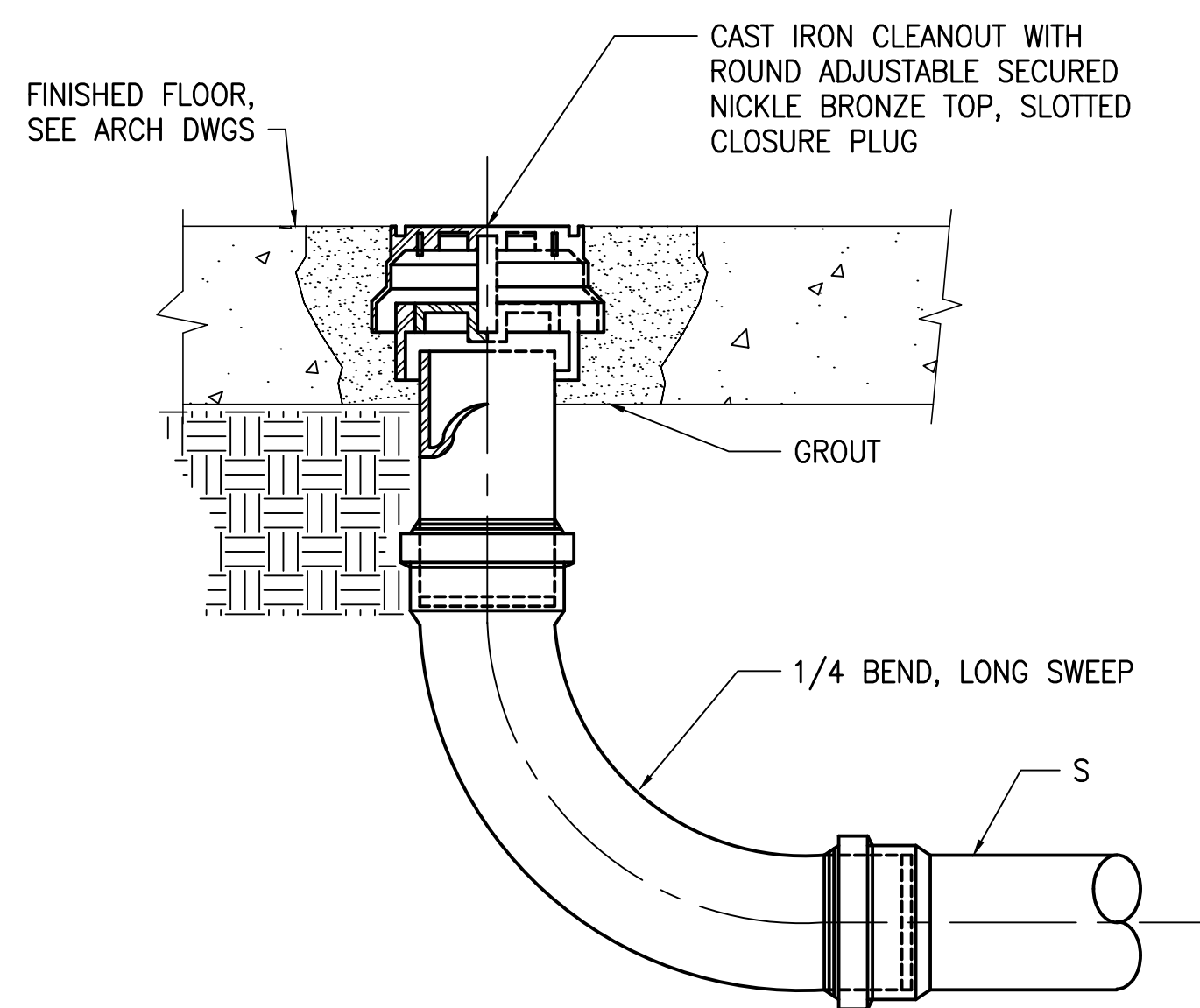
DESIGNED: EK/LS  
DRAWN: EK/LS  
CHECKED: KFC  
APPROVED: Dina Lau  
Civil Engineer

SUBMITTED: APRIL 2026  
DATE: APRIL 2026  
SCALE: AS NOTED

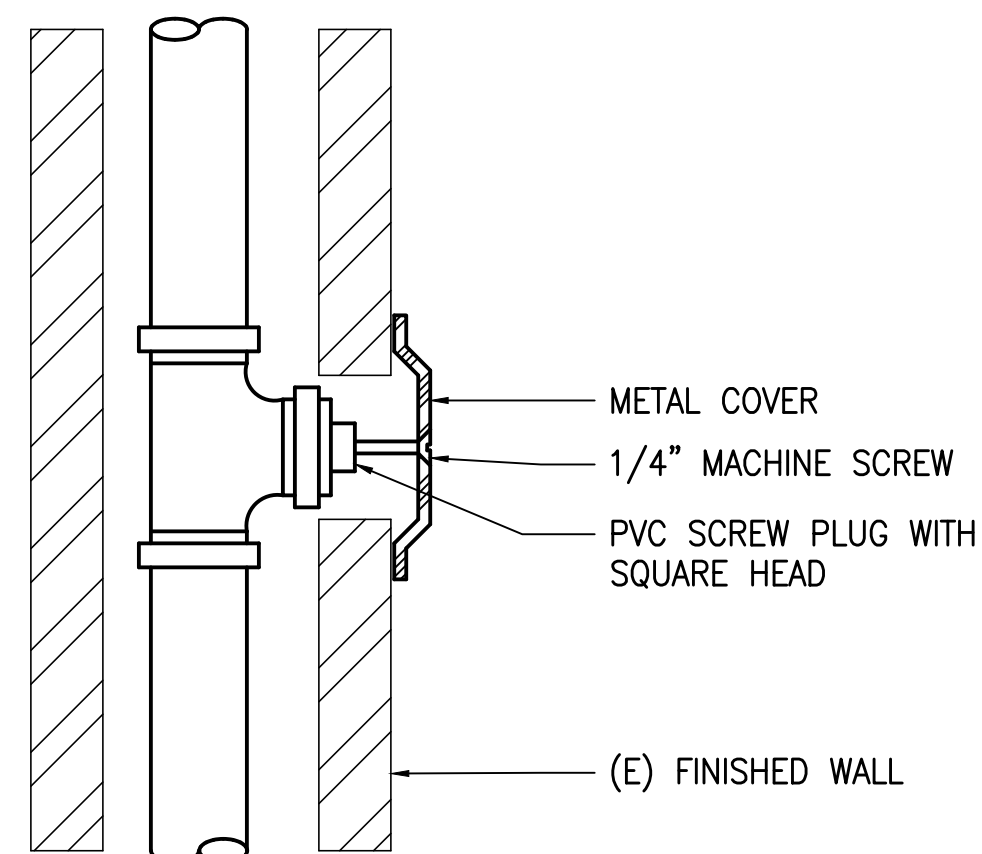
RAWING NO. M401

(EXPIRES 4/30/2028)

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. OBSERVATION OF CONSTRUCTION SHALL BE DEFINED BY CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR ARCHITECTS, PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-152.4 DEFINITIONS, EFFECTIVE 8/20/04.

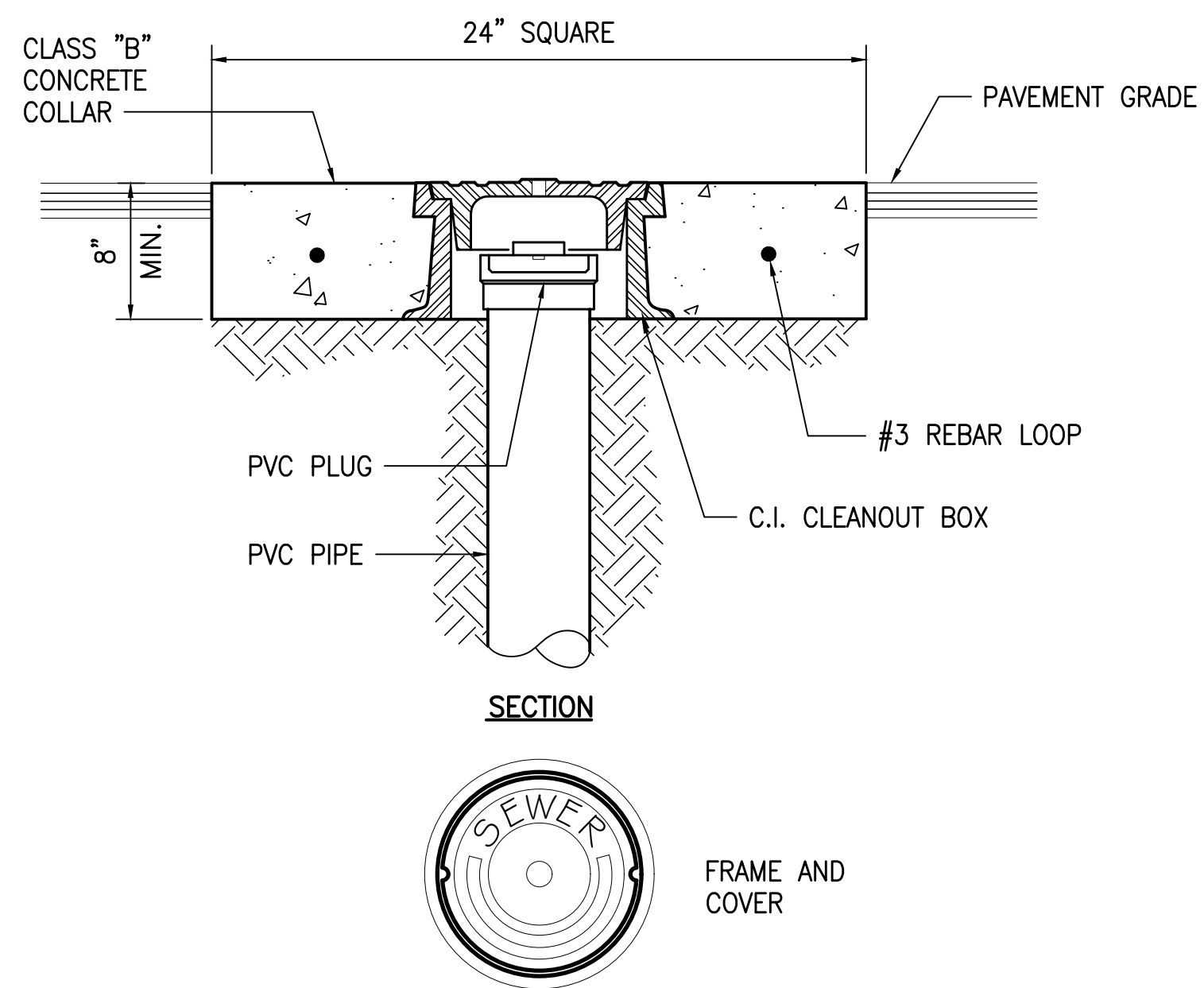


**1 FLOOR CLEANOUT DETAIL**  
NOT TO SCALE  
M402

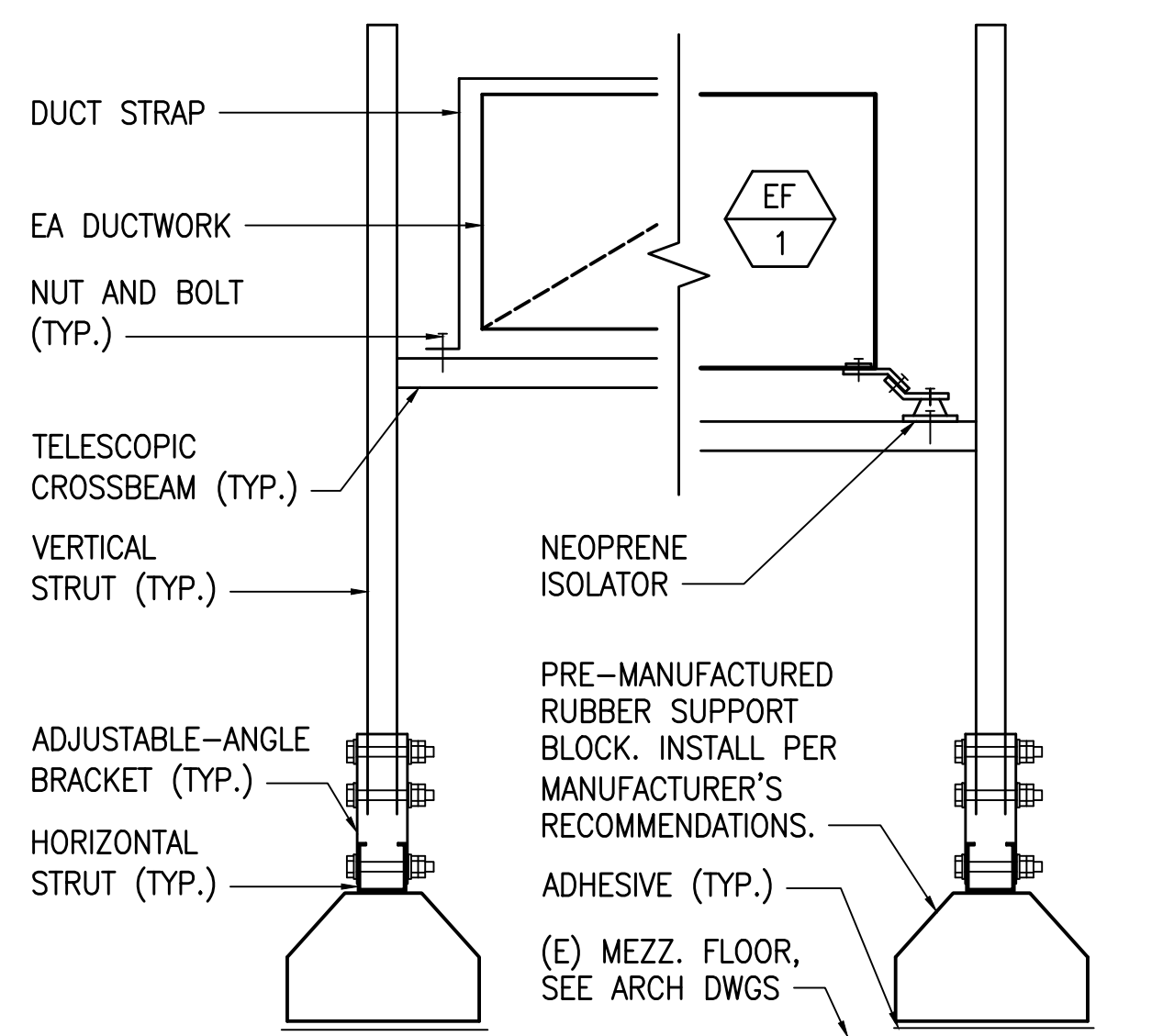


**NOTE:**  
1. INSTALL A 8x8 RECESSED DRYWALL PANEL ACCESS DOOR IN PLACE OF A COVER PLATE IF WALL CLEANOUT LOCATED IN A VISUALLY APPARENT LOCATION.

**2 WALL CLEANOUT DETAIL**  
NOT TO SCALE  
M402



**3 GRADE CLEANOUT DETAIL**  
NOT TO SCALE  
M402



**NOTES:**  
1. ALL METAL SUPPORTS SHALL BE TYPE 316 STAINLESS STEEL.  
2. ALL DUCTWORK SHALL BE PAINTED TO MATCH EXISTING ADJACENT SURFACES.

**4 DUCT/EQUIPMENT SUPPORT DETAIL**  
NOT TO SCALE  
M402

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

(EXPIRES 4/30/2028)

*KFC*

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, OAHU, HAWAII

MECHANICAL DETAILS

|  |                       |
|--|-----------------------|
| DESIGNED: EK/LS  | SUBMITTED: APRIL 2026 |
| DRAWN: EK/LS   | DATE: APRIL 2026      |
| CHECKED: KFC   | SCALE: AS NOTED       |
| APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov | RAWING NO. M402       |

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 15, HAWAII ADMINISTRATIVE RULES FOR ARCHITECTS, PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-15.2 DEFINITIONS, EFFECTIVE 8/20/04.

**GENERAL ELECTRICAL NOTES:**

- ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS PRIOR TO BIDDING. BID SUBMISSION SHALL BE CONSIDERED AS CONFIRMATION THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS REGARDING THE WORK. NO EXTRA PAYMENT WILL BE GIVEN FOR WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO VISIT THE SITE.
- ALL RACEWAYS AND OUTLETS SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- CONDUIT SIZES INDICATED ON THE DRAWINGS ARE NOT NECESSARILY BASED ON THE MINIMUM SIZE ALLOWED BY THE NATIONAL ELECTRICAL CODE AND MAY BE PURPOSELY OVERSIZED FOR FUTURE CONDUCTORS OR TO AVOID CONDUIT HEATING. CONDUIT SIZES NOT CALLED OUT ON THE DRAWINGS SHALL BE SIZED BY THE CONTRACTOR, BASED ON THE ACTUAL NUMBER OF CONDUCTORS TO BE INSTALLED, USING THE NATIONAL ELECTRICAL CODE AS A GUIDE. IN NO CASE SHALL CONDUIT SIZES BE SMALLER THAN 3/4" DIAMETER.
- ALL WIRING SHALL INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER TABLE 250.122 OF THE NATIONAL ELECTRICAL CODE. THIS CONDUCTOR SHALL BE CARRIED IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LEGS AND SHALL BE ATTACHED TO THE DEVICE, LIGHT FIXTURE, OR EQUIPMENT HOUSING USING A SUITABLE GROUNDING LUG.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZING OF THESE BOXES SHALL BE PER THE NATIONAL ELECTRICAL CODE.
- ALL PENETRATIONS THROUGH FIRE RATED WALLS AND SLABS SHALL BE SEALED TO MAINTAIN THE INTEGRITY OF THE FIRE RATING USING A U.L. LISTED FIRE STOPPING SYSTEM.
- THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE CONTRACTING OFFICER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALLS AND SLABS.
- PROJECT CONDITIONS MAY REQUIRE REARRANGEMENT OF ELECTRICAL WORK, THE CONTRACTOR SHALL MAKE CHANGES ON THE AS-BUILT DRAWINGS AND SUBMIT TO THE CONTRACTING OFFICER. WHERE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUBMIT DRAWINGS SHOWING THE PROPOSED METHOD FOR APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL APPROVAL IS OBTAINED FROM THE CONTRACTING OFFICER.
- EXISTING CONDITION SHOWN ON DRAWINGS ARE TAKEN FROM PAST DESIGN DRAWINGS AND VISUAL FIELD INVESTIGATION. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS SHOWN. DEVIATIONS SHALL BE SHOWN ON AS-BUILT DRAWINGS.
- THE CONTRACTOR SHALL PAINT ALL NEW EXPOSED RACEWAYS (INCLUDING SURFACE METAL RACEWAYS) AND BOXES TO MATCH SURROUNDING FINISH, UNLESS OTHERWISE APPROVED OR DIRECTED.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
- REFINISH AND PATCH TO MATCH ALL EXISTING WALL AND CEILING SURFACES DAMAGED OR SCRATCHED BY ELECTRICAL REMOVAL AND INSTALLATION WORK. NEW TOUCH-UP PAINT WORK SHALL BLEND INTO AND MATCH EXISTING FINISH.
- ALL NEW WIRES SHALL BE # 12 AWG, UNLESS OTHERWISE NOTED.
- ALL MATERIAL, EQUIPMENT, AND WIRING LOCATED OUTDOORS SHALL BE RATED FOR WET LOCATIONS.
- AVOID CORING OR DRILLING THROUGH RE-BARS WHEN PENETRATING THROUGH EXISTING CONCRETE WALL, CEILING OR FLOOR. ALL EXTERIOR WALL PENETRATIONS SHALL BE WATERTIGHT.
- THE CONTRACTOR SHALL LABEL EACH RECEPTACLE WITH PANEL NAME AND CIRCUIT NUMBER. USE ADHESIVE LABELS - BLACK LETTERING ON CLEAR BACKGROUND.
- THE CONTRACTOR SHALL FILL-IN THE PANEL SCHEDULES OF ELECTRIC PANEL USING A TYPEWRITER. PROVIDE CIRCUIT DESCRIPTIONS BASED ON PANEL SCHEDULE DESCRIPTIONS FOR NEW AND EXISTING CIRCUITS.
- REROUTE EXISTING RACEWAYS AND RELOCATE EXISTING JUNCTION BOXES AS REQUIRED TO AVOID CONFLICTS WITH MECHANICAL DUCTS/PIPING.
- ALL NEW RACEWAYS IN CEILING SPACE SHALL BE PROPERLY SUPPORTED WITH STEEL CHANNEL SUPPORTS. NEW STEEL CHANNEL SUPPORTS SHALL BE KEPT AS HIGH AS POSSIBLE TO AVOID CONFLICT WITH AIR CONDITIONING DUCTWORK/PIPING.
- CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT RATINGS WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING ELECTRICAL EQUIPMENT. CONTRACTOR SHALL RESIZE CIRCUIT BREAKERS ACCORDING TO EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND RESIZE WIRES AT NO ADDITIONAL COST TO THE STATE. ALL CHANGES SHALL BE SHOWN ON "AS-BUILT" DRAWINGS.
- ALL MULTIWIRE BRANCH CIRCUITS SHALL BE IN ACCORDANCE WITH NEC ARTICLE 210.4. ALL CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS.
- CONTRACTOR SHALL PROVIDE ACCESS TO ALL OUTLET BOXES MOUNTED ABOVE GYPBOARD CEILINGS. ACCESS SHALL EITHER BE BY REMOVAL OF LIGHT FIXTURE OR BY PROVIDING CEILING ACCESS PANEL(S). COORDINATE WITH MECHANICAL AND GENERAL CONTRACTORS.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION AND PULL BOXES REQUIRED FOR THE INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZING OF THESE BOXES SHALL BE PER THE NATIONAL ELECTRICAL CODE.
- THE TERM "WIRING" SHALL INCLUDE RACEWAY, CONDUCTORS, EQUIPMENT, AND WIRING.
- THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- ALL EXTERIOR RACEWAYS SHALL BE GALVANIZED RIGID STEEL.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED WIRING AND CONNECTIONS FOR ALL MECHANICAL EQUIPMENT, WHETHER OR NOT SHOWN ON THE ELECTRICAL DRAWINGS. WIRING SHALL INCLUDE DISCONNECT SWITCHES, MOTOR DISCONNECTS, OUTLET BOXES, CIRCUIT BREAKERS, RACEWAYS, WIRES, ETC. FOR A COMPLETE MECHANICAL SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF MECHANICAL CONTRACTOR FURNISHED MOTOR STARTERS, VARIABLE FREQUENCY DRIVES, DUCT SMOKE DETECTORS, AND OTHER MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.

**NOTE:**

CONTRACTOR SHALL PROVIDE EVIDENCE AND LETTER OF CERTIFICATION THAT THE LIGHTING CONTROL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURERS' INSTRUCTIONS. FUNCTIONAL TESTING MUST BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 THROUGH C408.3.1.1.1 FOR THE APPLICABLE CONTROL TYPE. CONTRACTOR SHALL SUBMIT THE EVIDENCE AND LETTER OF CERTIFICATION TO THE ENGINEER PRIOR TO THE ELECTRICAL INSPECTION OF THE LIGHTING CONTROL SYSTEM. THE ENGINEER WILL REVIEW THE EVIDENCE AND UPON APPROVAL, FORWARD THE EVIDENCE AND LETTER OF CERTIFICATION TO THE ELECTRICAL INSPECTOR. ONLY AFTER THE ELECTRICAL INSPECTOR RECEIVES THE EVIDENCE AND LETTER OF CERTIFICATION SHALL THE CONTRACTOR SCHEDULE FOR THE ELECTRICAL INSPECTION OF THE LIGHTING CONTROL SYSTEM.

**ELECTRICAL SYMBOL LIST**

| EXISTING | NEW | DESCRIPTION  |
|----------|-----|--|
|          | □   | LIGHT, LED, CEILING STEM MOUNTED.  |
| ☐        |     | LIGHT, CEILING RECESSED MOUNTED.   |
| ☐        |     | LIGHT, CEILING SURFACE MOUNTED.  |
| ⚡        | ⚡   | SWITCH, 3-WAY, WALL MOUNTED.   |
| ☐        |     | LIGHT, WALL SURFACE MOUNTED.   |
| ☐        |     | LIGHT, CEILING SURFACE MOUNTED.  |
| ☐        |     | LIGHT, WALL MOUNTED.   |
| ☐        | ●   | NIGHT LIGHT, WALL MOUNTED.   |
| ☐        | ☐   | EMERGENCY LIGHT, WALL MOUNTED.   |
|          | ☐   | LIGHT, CEILING SURFACE MOUNTED, WITH EMERGENCY BATTERY PACK.   |
|          | ☐   | EXIT SIGN, SINGLE FACE, WALL SURFACE MOUNTED.  |
| ⚡        | ⚡   | SWITCH, FLUSH TUMBLER, WALL MOUNTED.   |
| ⚡        |     | SWITCH, 3-WAY, WALL MOUNTED.   |
|          | ⊙   | OCCUPANCY SENSOR, CEILING MOUNTED.   |
| "a"      | "a" | INDICATES FIXTURE OR DEVICE CONTROLLED BY SW. "a", OTHER LETTERS SIMILAR.  |
| ☐        | ☐   | OUTLET/JUNCTION BOX, CEILING MOUNTED, 2-GANG BOX, UNLESS OTHERWISE SPECIFIED.  |
| ☐        | ☐   | OUTLET/JUNCTION BOX, WALL MOUNTED, 2-GANG BOX, UNLESS OTHERWISE SPECIFIED.   |
| ☐        | ☐   | RECEPTACLE, DUPLEX, WALL MOUNTED, 20A, 125V, NEMA 5-20.  |
| ☐        | ☐   | RECEPTACLE, DUPLEX, ISOL. GROUND TYPE, WALL MTD., 20A, 125V, NEMA 5-20I.   |
| ☐        | ☐   | RECEPTACLE, SINGLE, WALL MOUNTED, 30A, 125V, NEMA 5-30.  |
| ☐        | ☐   | RECEPTACLE, SINGLE, WALL MOUNTED, 30A, 250V, NEMA 6-30.  |
| ☐        | ☐   | TIME CLOCK, WALL MOUNTED.  |
| ☐        | ☐   | TRANSFORMER, WALL MOUNTED.   |
| ☐        | ☐   | PUSHBUTTON STATION, WALL MOUNTED.  |
| ☐        | ☐   | WALL PHONE, WALL MOUNTED.  |
| ☐        | ⊕   | EQUIPMENT CONNECTION.  |
| ☐        | ⊕   | WATER HEATER CONNECTION.   |
| ☐        | ⊕   | MOTOR CONNECTION.  |
| ☐        | ☐   | FIRE SPRINKLER SUPERVISORY TAMPER SWITCH CONNECTION.   |
| ☐        | ☐   | FIRE SPRINKLER PRESSURE SWITCH CONNECTION.   |
|          | ☐   | END-OF-LINE RESISTOR   |
| ☐        | ☐   | EQUIPMENT DISCONNECT SWITCH, HORSEPOWER RATED.   |
| ☐        | ☐   | MOTOR STARTER, FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR.   |
| ☐        | ☐   | ELECTRIC PANEL.  |
| ☐        | ☐   | TELEPHONE CABINET.   |
|          | ☐   | AUTOMATIC FIRE SPRINKLER PANEL   |
| ☐        | ☐   | ELECTRICAL EQUIPMENT.  |
| — e —    |     | RACEWAY, CONCEALED, NUMBER OF HASHMARKS INDICATE NUMBER OF WIRES WITHIN. NO HASHMARKS INDICATES TWO WIRES WITHIN.                    |
| — e —    |     | RACEWAY, CONCEALED ABOVE FINISH FLOOR, NUMBER OF HASHMARKS INDICATE NUMBER OF WIRES WITHIN. NO HASHMARKS INDICATES TWO WIRES WITHIN. |
| — e —    |     | EXPOSED RACEWAY.   |
| ~ ~ ~    |     | FLEXIBLE RACEWAY.  |
| — e —    |     | ARROW, HOMERUN TO PANEL OR CABINET, NUMBER OF HASHMARKS INDICATE NUMBER OF WIRES WITHIN. NO HASHMARKS INDICATES TWO WIRES WITHIN.    |
| — t —    |     | TELEPHONE RACEWAY, CONCEALED.  |
| ②        | ②   | ELECTRICAL NOTE INDICATOR.   |
| ⊕        | ⊕   | FIXTURE INDICATOR UPPER HALF: FIXTURE TYPE. LOWER HALF: WATTS.   |
| ⊕        | ⊕   | DETAIL INDICATOR UPPER HALF: DETAIL NUMBER. LOWER HALF: SHEET NUMBER, DETAIL LOCATION.   |

**MOUNTING HEIGHT SCHEDULE**

| DEVICE ON PLAN | MOUNTING HEIGHT | REFERENCE POINT |         |    |    |        | REMARKS   |
|----------------|-----------------|-----------------|---------|----|----|--------|---|
|                |                 | FLOOR           | CEILING | TO | CL | TOP    |   |
| ⚡              | 45"             | •               |         |    |    | •      | MOUNTING HEIGHT SHALL BE TO TOP OF OPERABLE PART. |
| ☐              | 18" *           | •               |         |    |    | BOTTOM | MOUNTING HEIGHT SHALL BE TO BOTTOM OF PLATE.      |

\* SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN.

CITY AND COUNTY OF HONOLULU  
REVISED ORDINANCE OF HONOLULU 2021  
CHAPTER 16B

To the best of my knowledge, this project's design substantially conforms to the Building Energy Conservation Code for:

Building Component Systems  
X Electrical Component Systems  
Mechanical Component Systems

Signature: Brian T. Itozaki Date: 04-03-26  
Name: BRIAN ITOZAKI  
Title: ELECTRICAL ENGINEER  
License No.: 9058-E

**INTERIOR LIGHTING POWER ALLOWANCE**

ILPA = ULPA x GLA  
WHERE  
ILPA = INTERIOR LIGHTING POWER ALLOWANCE (W)  
ULPA = UNIT POWER LIGHTING ALLOWANCE (W/FT<sup>2</sup>)  
GLA = GROSS LIGHTED AREA (FT<sup>2</sup>)  
ILPA = 0.72 W/FT<sup>2</sup> x 12,045 FT<sup>2</sup> = 8,672.4 W  
INSTALLED = 185 W LED: (42 FIXT. x 185 WATTS/FIXT.) = 7,700 W

**BUILDING ENERGY EFFICIENCY STANDARDS**

INTERIOR LIGHTING POWER ALLOWANCE 8,672.4 W INSTALLED 7,700 W  
EXTERIOR LIGHTING POWER ALLOWANCE - 0 - W INSTALLED - 0 - W

**BASIS OF DESIGN**

THIS ELECTRICAL DESIGN IS BASED ON THE NATIONAL ELECTRICAL CODE (NEC), 2020 EDITION, AS ADOPTED AND ENFORCED BY THE REVISED ORDINANCES OF HONOLULU (ROH) §18-4.3, INCLUDING ALL APPLICABLE LOCAL AMENDMENTS.

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

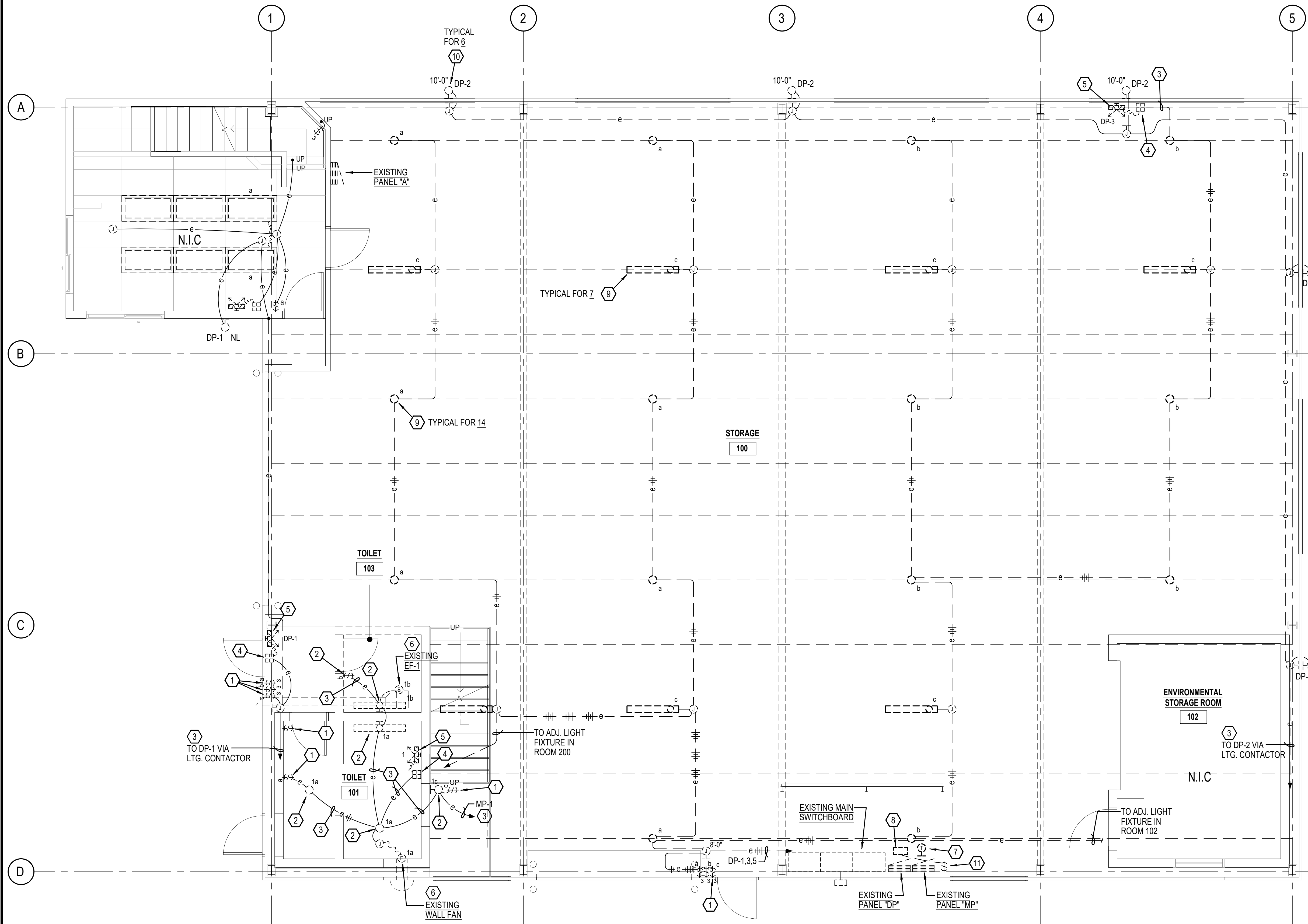
ELECTRICAL GENERAL NOTES & SYMBOL LIST

DESIGNED: NE SUBMITTED: APRIL 2026  
DRAWN: AG DATE: APRIL 2026  
CHECKED: BI SCALE: AS NOTED

APPROVED: Dina Lau E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
CHIEF ENGINEER State of Hawaii

RAWING NO. **E001**

\*ALL ITEMS SHOWN TO REMAIN UNLESS OTHERWISE NOTED



**ELECTRICAL NOTES: REMOVAL WORK**

- ① DISCONNECT AND REMOVE EXISTING LIGHT SWITCH, OUTLET BOX, AND WIRING.
- ② DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE, OUTLET BOX, AND WIRING.
- ③ DISCONNECT AND REMOVE EXISTING CONCEALED WIRING.
- ④ DISCONNECT AND REMOVE EXISTING EM LIGHT FIXTURE RECEPTACLE, OUTLET BOX, AND WIRING.
- ⑤ DISCONNECT AND REMOVE EXISTING EM LIGHT FIXTURE.
- ⑥ DISCONNECT AND REMOVE EXISTING EXHAUST FAN CONNECTION AND WIRING.
- ⑦ DISCONNECT AND REMOVE EXISTING TIMECLOCK ABOVE EXISTING PANEL "DP".
- ⑧ DISCONNECT AND RELOCATE EXISTING LIGHTING CONTACTOR AND WIRING.
- ⑨ DISCONNECT AND REMOVE EXISTING CEILING MOUNTED LIGHT FIXTURE. EXISTING OUTLET BOX AND WIRING.
- ⑩ DISCONNECT, REMOVE, AND HANDOVER EXISTING EXTERIOR WALL MOUNTED LIGHT FIXTURES TO OWNERS. EXISTING OUTLET BOXES AND WIRING TO REMAIN.
- ⑪ EXISTING SWITCH TO REMAIN.

**NOTE:**  
 EXISTING CONDITIONS SHOWN ON PLAN ARE BASED ON AS-BUILT DRAWINGS AND VISUAL OBSERVATIONS ONLY. CONTRACTOR SHALL TRACE AND VERIFY ALL EXISTING CIRCUITS PRIOR TO STARTING ANY WORK. OUTDATED EXISTING FIELD CONDITIONS SHALL BE MARKED ON CONTRACTOR AS-BUILT DRAWINGS.

**1 LIGHTING PLAN - EXISTING/DEMO WORK**  
 SCALE: 1/4" = 1'-0"

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE  
04/30/2026

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
 ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
 (BUILDING IMPROVEMENTS)  
 SAND ISLAND, OAHU, HAWAII

LIGHTING PLAN - EXISTING/DEMO WORK

|              |                       |
|--------------|-----------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 |
| DRAWN: AG    | DATE: APRIL 2026      |
| CHECKED: BI  | SCALE: AS NOTED       |

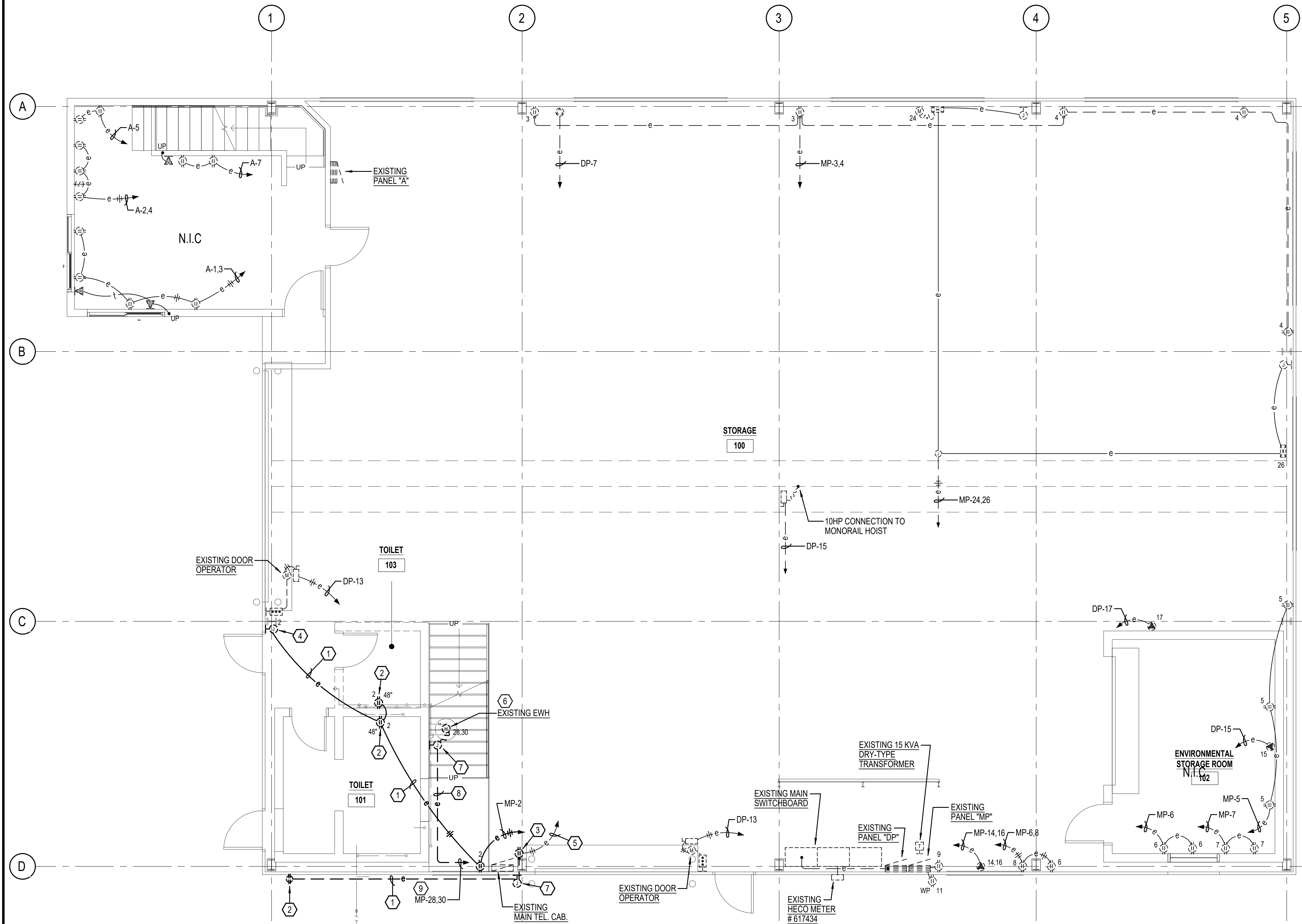
APPROVED: Dina Lau  
 E-signed 2026-04-29 01:15PM HST  
 dina.u.lau@hawaii.gov  
 CHIEF ENGINEER State of Hawaii

RAWING NO.  
**E101**

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-152.2 DEFINITIONS, EFFECTIVE 8/28/94.

JOB NO. C00B091B SHEET NO. 46 OF 53 SHEETS

\*ALL ITEMS SHOWN TO REMAIN UNLESS OTHERWISE NOTED

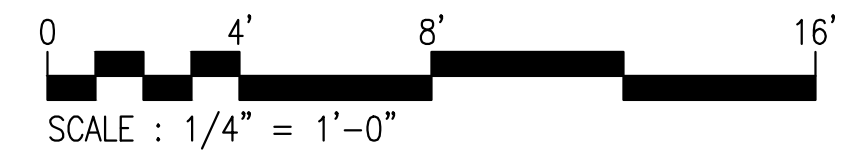


**ELECTRICAL NOTES: REMOVAL WORK**

- 1 DISCONNECT AND REMOVE EXISTING EXPOSED RACEWAY AND WIRES. IF RACEWAY IS CONCEALED, REMOVE WIRES AND ABANDON IN PLACE.
- 2 DISCONNECT AND REMOVE EXISTING RECEPTACLE, OUTLET BOX, AND WIRING.
- 3 DISCONNECT AND REMOVE EXISTING RECEPTACLE AND OUTLET BOX. EXISTING HOMERUN WIRING TO REMAIN.
- 4 DISCONNECT AND REMOVE EXISTING OUTLET BOX. CUT EXISTING RACEWAY BELOW FINISH FLOOR, FILL WITH GROUT AND ABANDON IN PLACE.
- 5 TRACE AND VERIFY EXISTING CIRCUIT.
- 6 DISCONNECT AND REMOVE EXISTING EWH CONNECTION, RACEWAY AND WIRES.
- 7 DISCONNECT AND REMOVE EXISTING OUTLET BOX, RACEWAY AND WIRES.
- 8 REMOVE EXISTING RACEWAY AND WIRES.
- 9 DISCONNECT AND REMOVE EXISTING WIRES FROM EXISTING BREAKER 24, 26 FROM PANEL "MP". LABEL AS "SPARE".

**NOTE:**  
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**1 ELECTRICAL PLAN - EXISTING/DEMO WORK**  
 SCALE: 1/4" = 1'-0"



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE: 04/30/2028

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
 ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
 (BUILDING IMPROVEMENTS)  
 SAND ISLAND, O'AHU, HAWAII

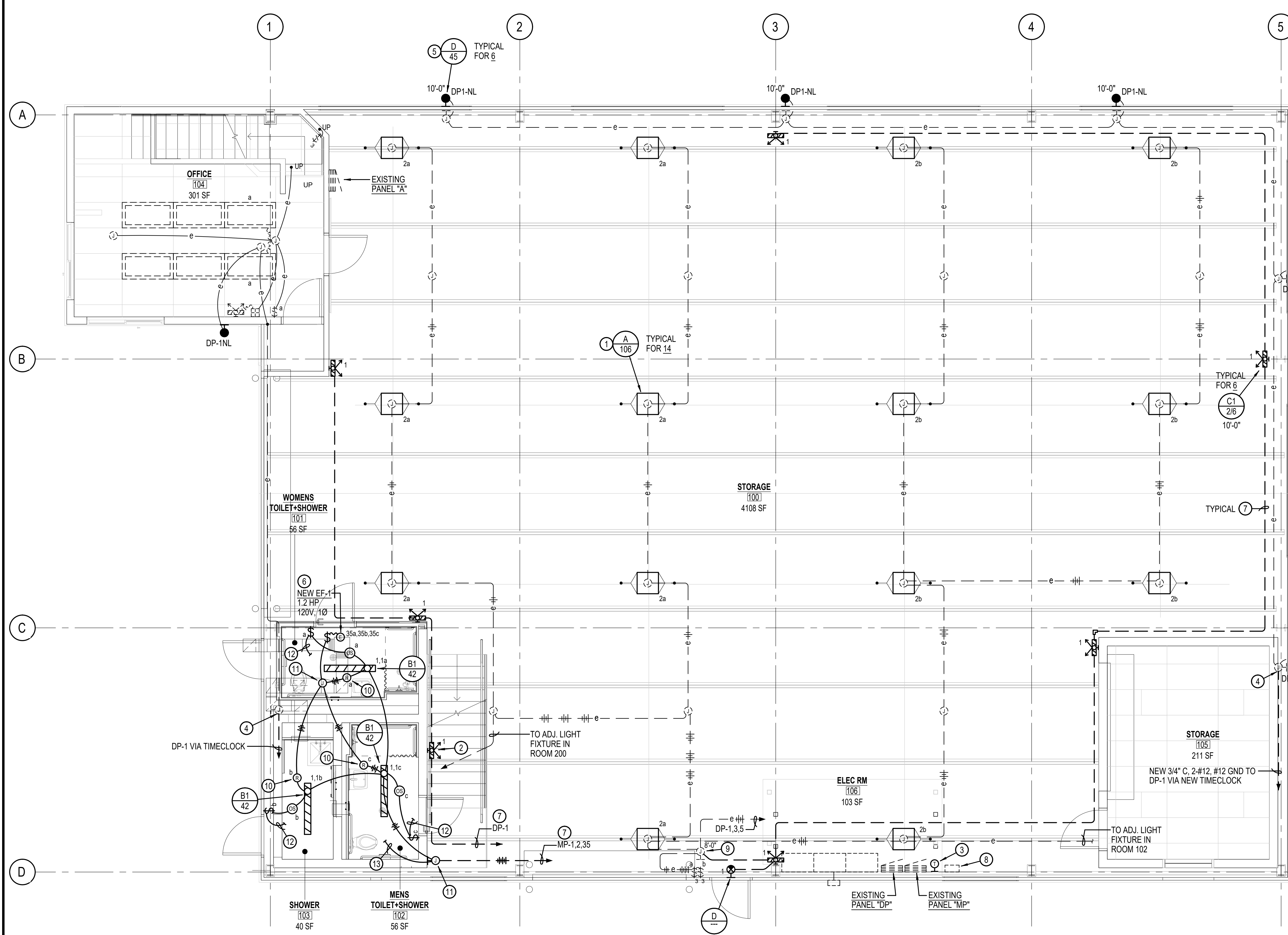
ELECTRICAL PLAN - EXISTING/DEMO WORK

|              |                       |
|--------------|-----------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 |
| DRAWN: AG    | DATE: APRIL 2026      |
| CHECKED: BI  | SCALE: AS NOTED       |

APPROVED:   
 Dina Lau  
 E-signed 2026-04-29 01:15PM HST  
 dina.u.lau@hawaii.gov  
 CHIEF ENGINEER

RAWING NO.  
**E102**

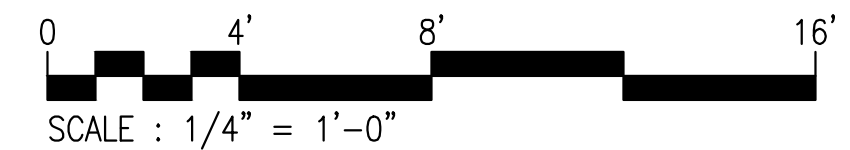
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 15-152.2 DEFINITIONS, EFFECTIVE 8/28/94.



**ELECTRICAL NOTES: NEW WORK**

- 1 MOUNT NEW PENDANT MOUNTED LIGHT FIXTURE ON EXISTING OUTLET BOX. CONNECT TO EXISTING LIGHTING CIRCUIT. PROVIDE ADDITIONAL WIRES AS REQUIRED. REPLACE EXISTING OUTLET BOX AS REQUIRED.
- 2 MOUNT LIGHT FIXTURE @ 8'-0" ABOVE MEZZANINE LANDING.
- 3 PROVIDE NEW TIMECLOCK AND MOUNT TO LEFT OF PANEL "MP". PROVIDE WIRING TO RECONNECT TO PANEL "DP" AND TO EXISTING AND NEW NIGHT LIGHTS. PROVIDE FRAMING MEMBERS AS REQUIRED FOR MOUNTING.
- 4 PROVIDE NEW WIRING AND CONNECT TO EXISTING OUTLET BOX. EXTEND EXISTING LIGHTING CIRCUIT TO RELOCATED TIMECLOCK.
- 5 MOUNT NEW LIGHT FIXTURE ON EXISTING OUTLET BOX AND CONNECT TO EXISTING LIGHTING CIRCUIT. PROVIDE ADDITIONAL WIRES AS REQUIRED. REPLACE EXISTING OUTLET BOX AS REQUIRED.
- 6 PROVIDE ELECTRICAL CONNECTION TO EQUIPMENT WITH FLEXIBLE CONDUIT.
- 7 ROUTE NEW EXPOSED WIRING HIGH ON WALL/CEILING. PROVIDE HANGERS AND SUPPORTS PER N.E.C.
- 8 REINSTALL RELOCATED LIGHTING CONTACTOR. PROVIDE NEW WIRING TO RECONNECT TO PANEL "DP", EXISTING LIGHT POLES AND SWITCH. PROVIDE FRAMING MEMBERS AS REQUIRED FOR MOUNTING.
- 9 CONNECT NEW WIRING TO EXISTING OUTLET BOX.
- 10 PROVIDE NEW RELAY WITHIN NEMA 1 ENCLOSURE AND WIRING.
- 11 PROVIDE NEW SURFACE METAL RACEWAY OUTLET BOX WITH BLANK DEVICE PLATE.
- 12 TO RECEPTACLE BELOW. SEE ELECTRICAL PLAN.
- 13 TO RECEPTACLES. SEE ELECTRICAL PLAN.

**1 LIGHTING PLAN - EXISTING/NEW WORK**  
SCALE: 1/4" = 1'-0"



| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE: 04/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

LIGHTING PLAN - EXISTING/NEW WORK

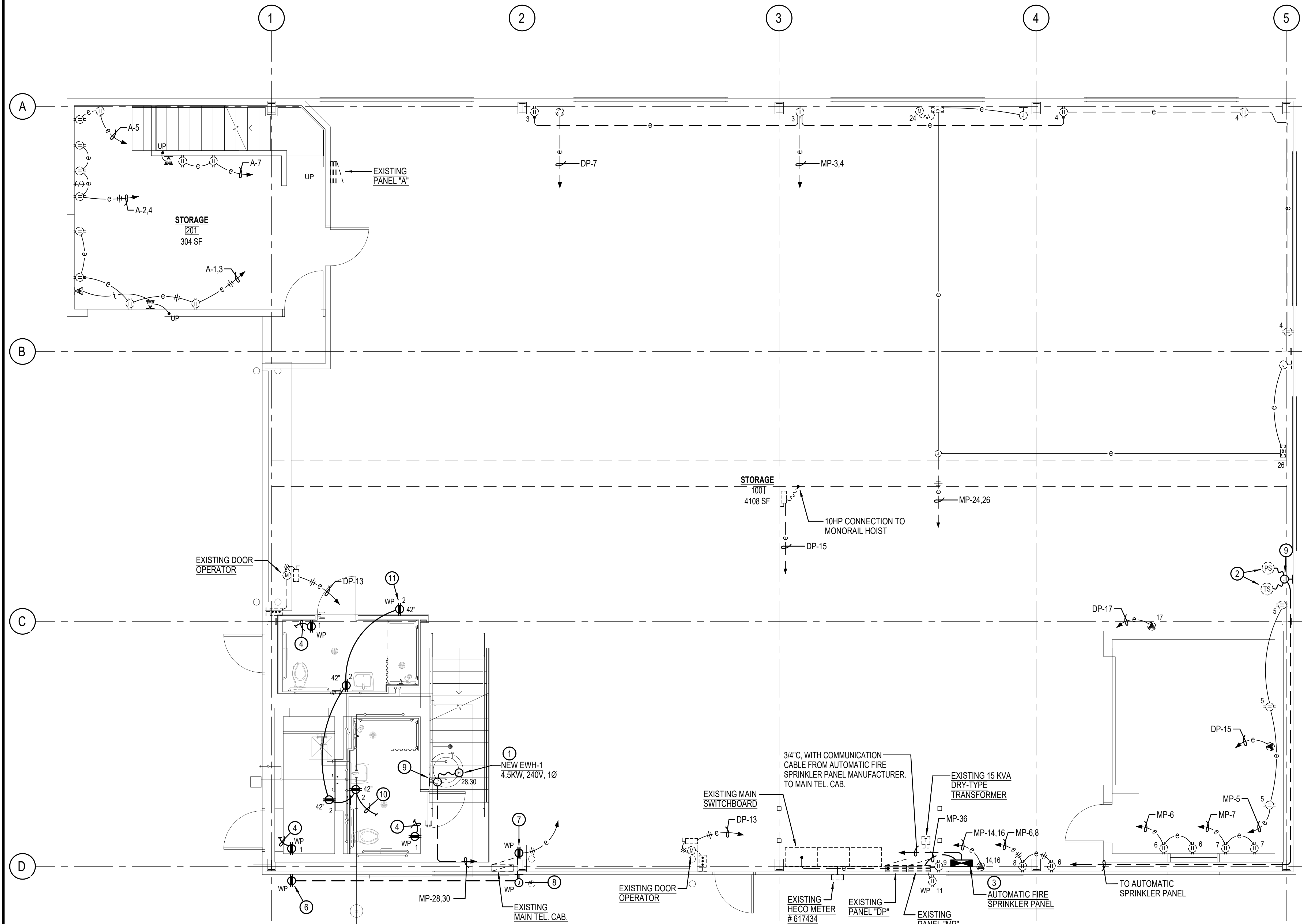
|              |                       |
|--------------|-----------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 |
| DRAWN: AG    | DATE: APRIL 2026      |
| CHECKED: BI  | SCALE: AS NOTED       |

APPROVED:

Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
CHIEF ENGINEER  
State of Hawaii  
Civil Engineer

RAWING NO.  
**E201**

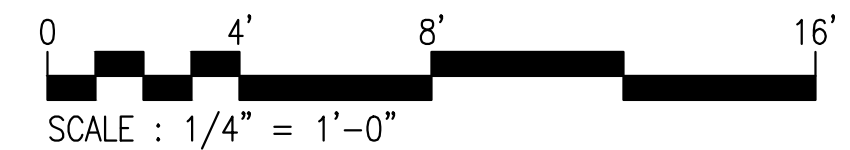
JOB NO. C00B091B SHEET NO. 48 OF 53 SHEETS



**ELECTRICAL NOTES: NEW WORK**

- 1 PROVIDE ELECTRICAL CONNECTION TO EQUIPMENT WITH FLEXIBLE CONDUIT.
- 2 PROVIDE ELECTRICAL CONNECTION TO FIRE SPRINKLER PRESSURE SWITCH AND TAMPER SWITCH WITH FLEXIBLE RACEWAY AND WIRES. VERIFY EXACT LOCATION WITH MECH. CONTRACTOR.
- 3 PROVIDE ENGRAVED LABEL AT AUTOMATIC FIRE SPRINKLER PANEL INDICATING "THIS AUTOMATIC FIRE SPRINKLER PANEL IS FED FROM PANEL "MP" LOCATED NEXT TO PANEL".
- 4 TO LIGHT SWITCH ABOVE. SEE LIGHTING PLAN.
- 5 ROUTE NEW EXPOSED WIRING HIGH ON WALL/CEILING. PROVIDE HANGERS AND SUPPORTS PER N.E.C.
- 6 PROVIDE NEW CAST METAL OUTLET BOX, WEATHER-RESISTANT GFCI TYPE RECEPTACLE, EXTRA-DUTY RATED, CAST METAL, WEATHERPROOF WHILE-IN-USE TYPE COVER AND EXPOSED WIRING.
- 7 PROVIDE NEW CAST OUTLET BOX, GFCI TYPE RECEPTACLE AND EXPOSED WIRING. CONNECT TO EXISTING HOMERUN.
- 8 PROVIDE NEW WALL SURFACE MOUNTED CAST OUTLET BOX WITH GASKETED BLANK DEVICE PLATE.
- 9 PROVIDE NEW SURFACE METAL RACEWAY OUTLET BOX WITH BLANK DEVICE PLATE.
- 10 TO OUTLET BOX. SEE LIGHTING PLAN.
- 11 VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH USER.

**1 ELECTRICAL PLAN - EXISTING/NEW WORK**  
SCALE: 1/4" = 1'-0"



| REVISION NO. | SYM. | DESCRIPTION | SHT. OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE  
04/30/2028

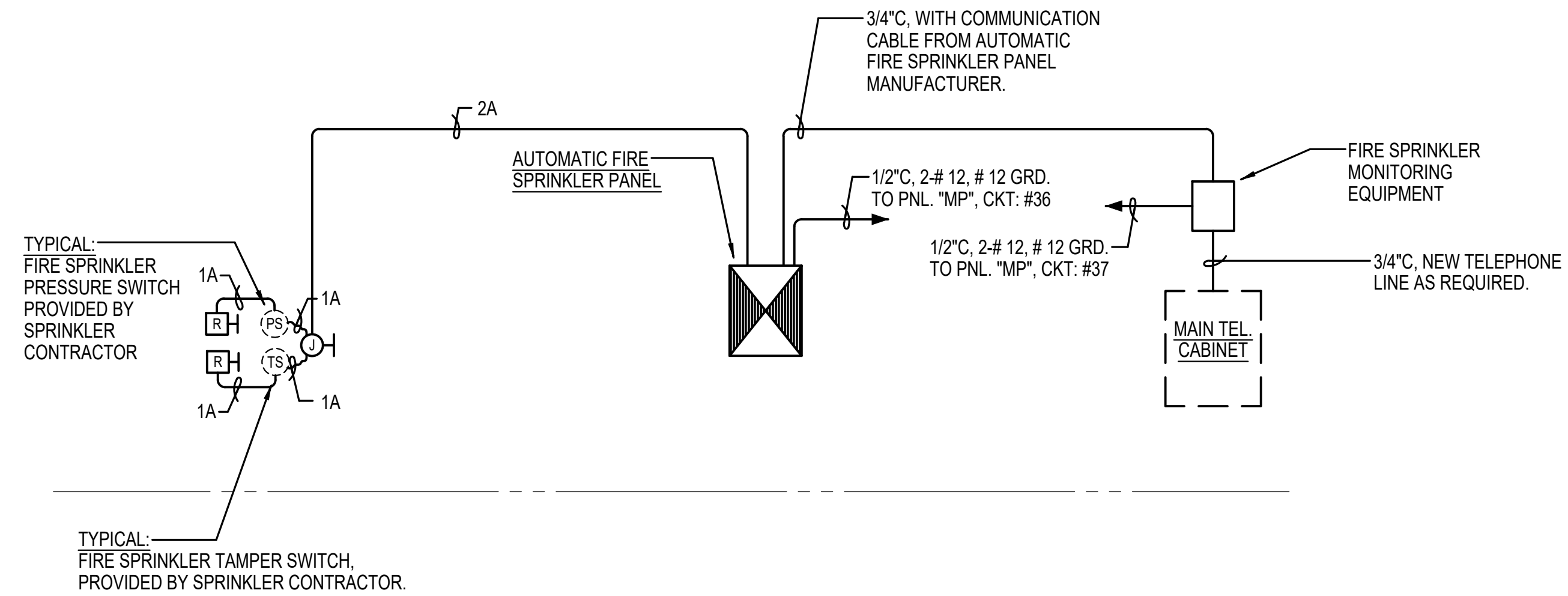
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

ELECTRICAL PLAN - EXISTING/NEW WORK

|  |                           |  |
|--|---------------------------|--|
| DESIGNED: NE   | SUBMITTED: APRIL 2026     | <br><small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-152.2 DEFINITIONS, EFFECTIVE 8/28/94.</small> |
| DRAWN: AG  | DATE: APRIL 2026          |  |
| CHECKED: BI  | SCALE: AS NOTED           |  |
| APPROVED: Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov<br>CHIEF ENGINEER | RAWING NO.<br><b>E202</b> |  |

JOB NO. C00B091B SHEET NO. 49 OF 53 SHEETS



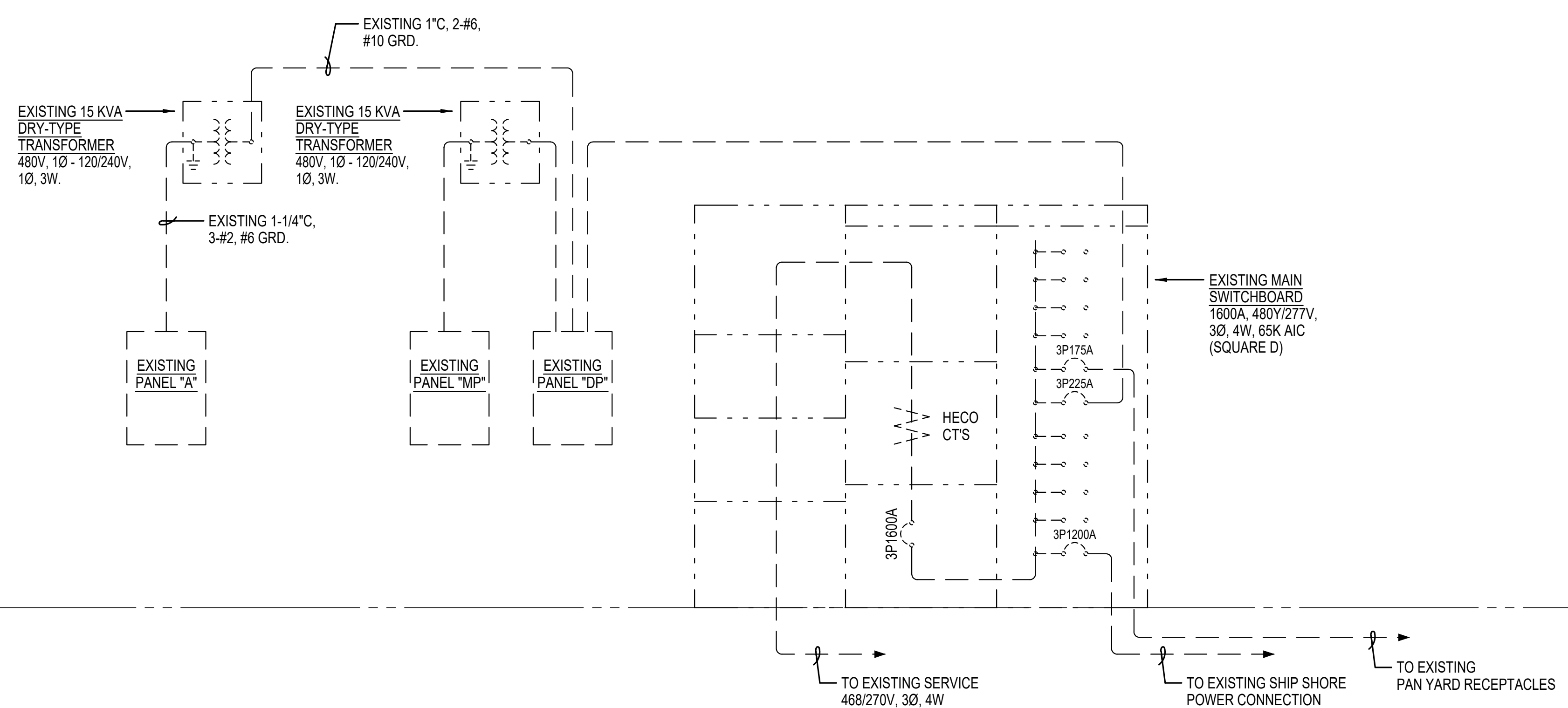
| LEGEND |  |
|--------|--|
| Ⓟ      | FIRE SPRINKLER PRESSURE SWITCH CONNECTION.           |
| Ⓢ      | FIRE SPRINKLER SUPERVISORY TAMPER SWITCH CONNECTION. |
| Ⓜ      | END-OF-LINE RESISTOR.                                |

| WIRING SCHEDULE |                 |
|-----------------|-----------------|
| LABEL           | WIRE TYPE       |
| A               | 2-# 14 AWG THHN |

**FIRE SPRINKLER SYSTEM MONITORING**

- FIRE SPRINKLER SYSTEM MONITORING SHALL BE ACHIEVED BY CONNECTING COMMUNICATION WIRING FROM THE DIGITAL ALARM COMMUNICATOR TRANSMITTER (DACT) IN THE AUTOMATIC FIRE SPRINKLER PANEL TO A MONITORING PANEL OF A CERTIFIED CENTRAL MONITORING STATION (LIKE ALERT ALARM). THE WORK TO INSTALL THE RACEWAY (AND WIRES) AND CONENCTION TO THE MONITORING PANEL SHALL BE DONE BY THE CONTRACTOR. THE COST TO SET UP THE MONITORING CONTRACT WITH THE MONITORING COMPANY, INCLUDING ANY MONITORING COMPANY EQUIPMENT (AND 120V POWER FOR EQUIPMENT) THAT MAY BE REQUIRED AT THE INITIAL INSTALLATION SHALL ALSO BE PART OF THE PROJECT. FOR PRICING, MONITORING EQUIPMENT SHALL BE BASED ON AES INTELLINET 7744 / 7788 RF SUBSCRIBER UNIT.
- THE COST TO MAINTAIN THE MONITORING SHALL BE RESPONSIBILITY OF THE OWNER. THIS MUST BE MADE CLEAR TO THE OWNER, SO THEY CAN PREPARE FOR THE PAYMENTS.

**2 FIRE SPRINKLER RISER DIAGRAM**  
SCALE: NOT TO SCALE



**1 ONE LINE DIAGRAMS**  
SCALE: NOT TO SCALE

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE: 04/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

ONE LINE DIAGRAMS

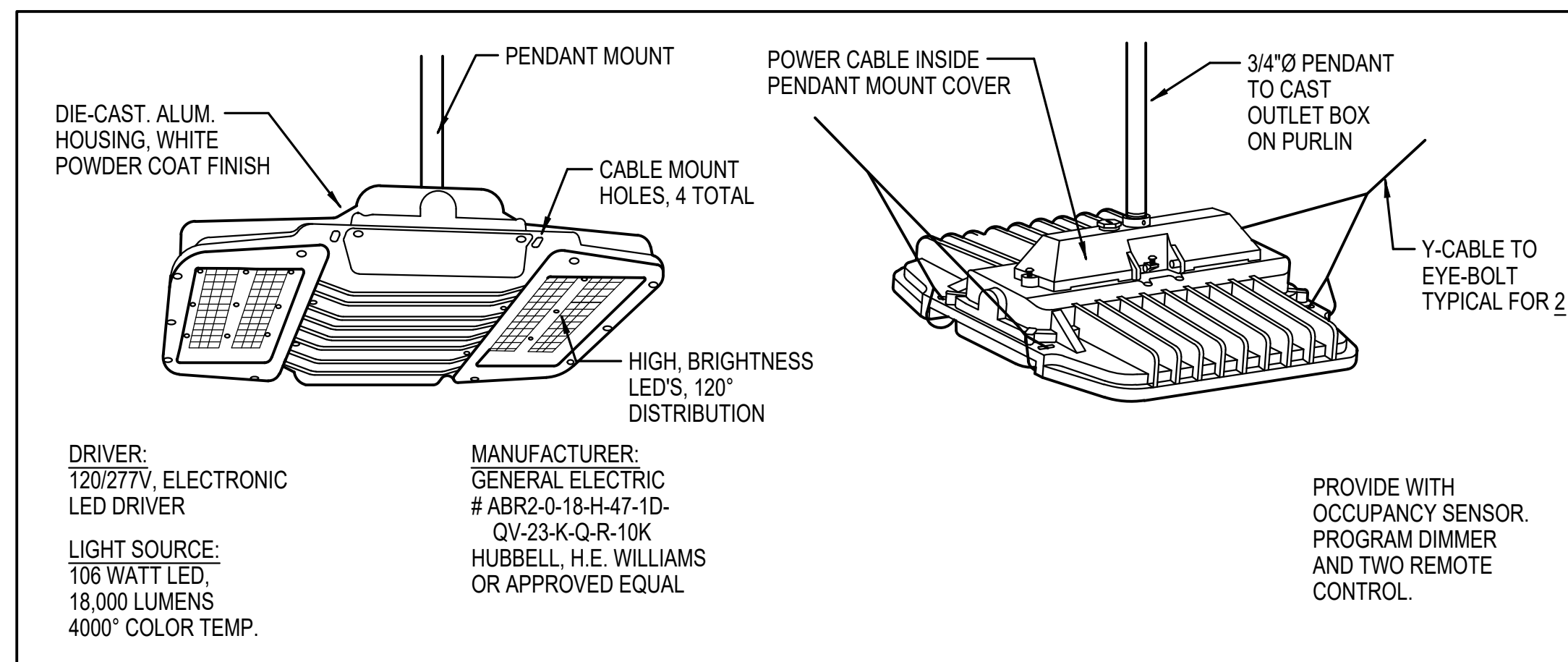
|              |                       |
|--------------|-----------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 |
| DRAWN: AG    | DATE: APRIL 2026      |
| CHECKED: BI  | SCALE: AS NOTED       |

APPROVED:

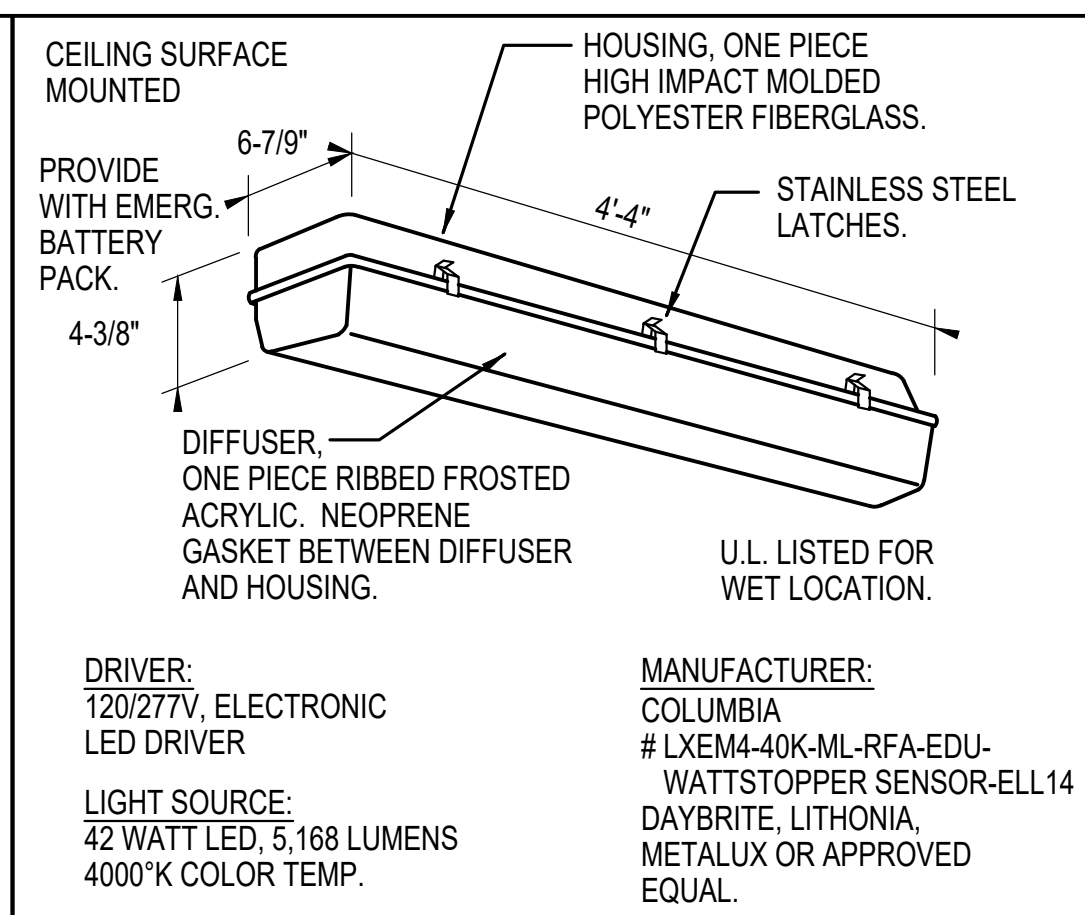
Dina Lau  
E-signed 2026-04-29 01:15PM HST  
dina.u.lau@hawaii.gov  
Civil Engineer

RAWING NO.  
**E301**

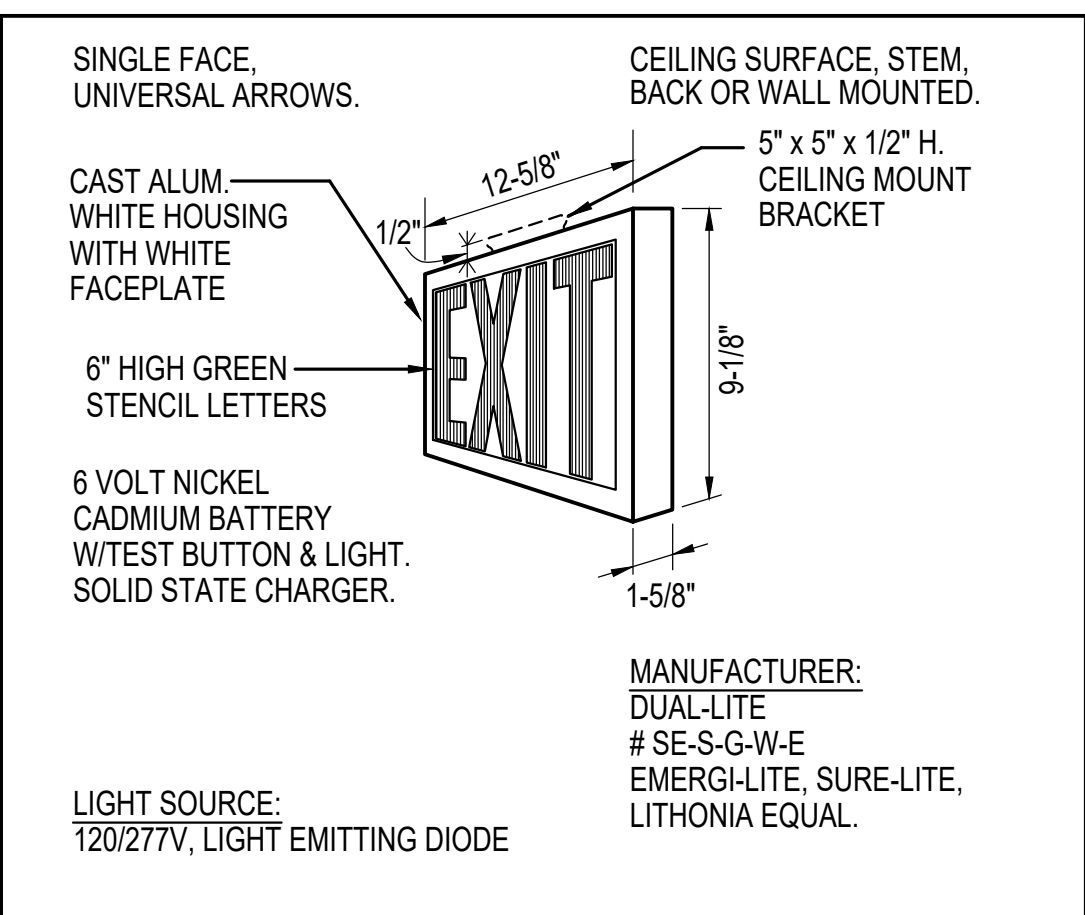
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" SHALL BE DEFINED IN CHAPTER 115, HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, SURVEYORS AND LANDSCAPE ARCHITECTS STATE OF HAWAII, SUBCHAPTER 1, SECTION 16-152 DEFINITIONS, EFFECTIVE 8/28/94.



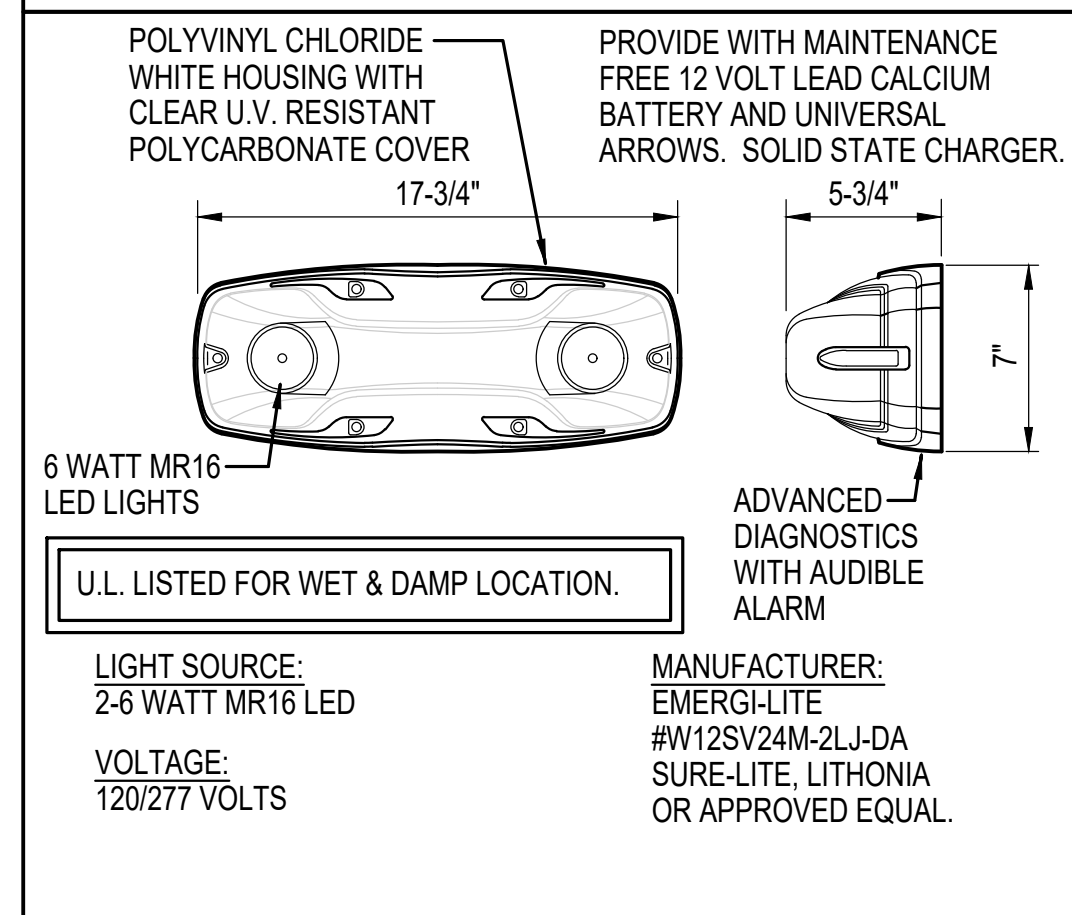
FIXTURE TYPE "A"



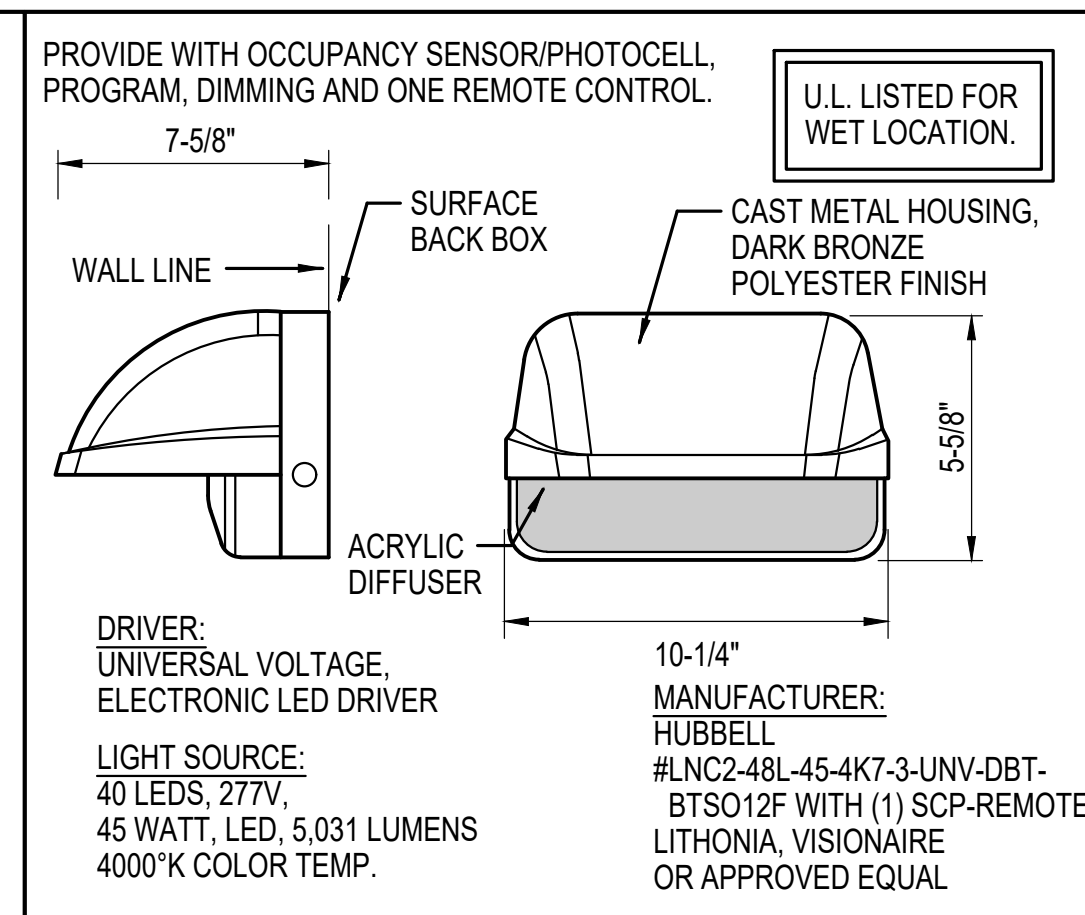
FIXTURE TYPE "B1" (EMERG.)



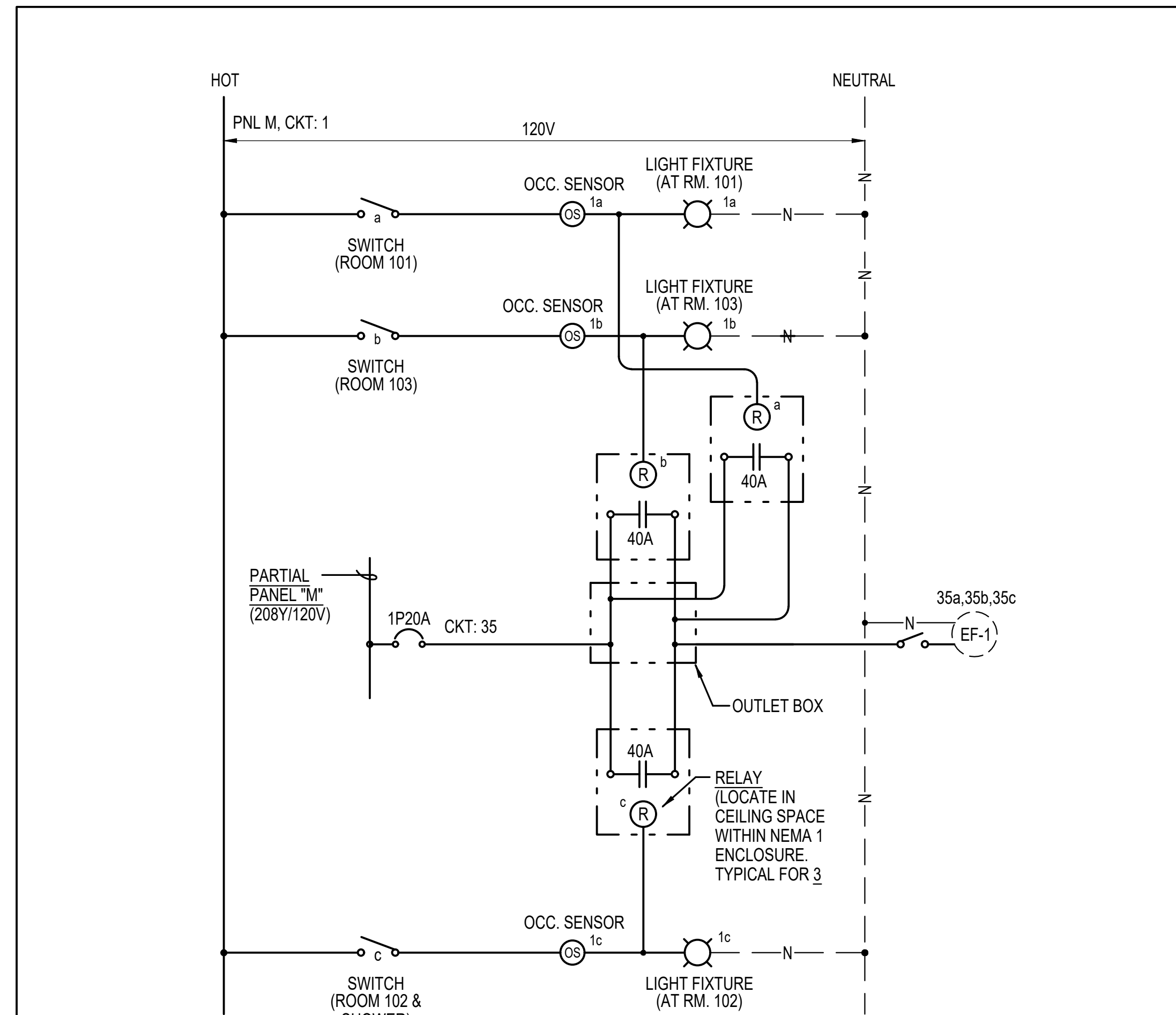
FIXTURE TYPE "D"



FIXTURE TYPE "C1"



FIXTURE TYPE "D"



1 TOILET ROOM LIGHTS AND EXHAUST FAN CONTROL DIAGRAM  
SCALE: NOT TO SCALE

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |

EXPIRATION DATE OF LICENSE  
04/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

LIGHT FIXTURE SCHEDULE

|               |  |
|---------------|--|
| DESIGNED: NE  | SUBMITTED: APRIL 2026  |
| DRAWN: AG     | DATE: APRIL 2026   |
| CHECKED: BI   | SCALE: AS NOTED  |
| APPROVED:     | Dina Lau<br>E-signed 2026-04-29 01:15PM HST<br>dina.u.lau@hawaii.gov |
| CHEF ENGINEER | RAWING NO. <b>E401</b>   |

JOB NO. C00B091B SHEET NO. 51 OF 53 SHEETS

**EXISTING PANEL "MP"**  
(GENERAL ELECTRIC)

120/240 VOLTS, 1 PHASES, 3 WSN  
BREAKER MIN. A.I.C. 10,000  
SURFACE MTG. 125A MAIN BREAKER

| CKT. NO.   | USE                    | CIRCUIT BREAKER |      | CONNECTED LOAD (KVA) |      |      | WIRE SIZE |
|--|------------------------|-----------------|------|----------------------|------|------|-----------|
|  |                        | POLES           | AMPS | A                    | B    | C    |           |
| 1  | LIGHTING & FAN RM. 101 | 1               | 20   | 1.0                  |      |      | 12        |
| * 2  | RECEP.                 | 1               | 20   | 0.5                  |      |      | 12        |
| 3  | RECEP.                 | 1               | 20   |                      | 0.5  |      | 12        |
| 4  | RECEP.                 | 1               | 20   |                      | 0.5  |      | 12        |
| 5  | RECEP.                 | 1               | 20   | 0.5                  |      |      | 12        |
| 6  | RECEP.                 | 1               | 20   | 0.2                  |      |      | 12        |
| 7  | RECEP.                 | 1               | 20   |                      | 0.4  |      | 12        |
| 8  | RECEP.                 | 1               | 20   |                      | 0.2  |      | 12        |
| 9  | RECEP.                 | 1               | 20   | 0.2                  |      |      | 12        |
| 10   | GATE HOUSE             | 1               | 20   | 0.2                  |      |      | 12        |
| 11   | RECEP.                 | 1               | 20   |                      | 0.2  |      | 12        |
| 12   | RECEP.                 | 1               | 20   |                      | 0.4  |      | 12        |
| 13   | RECEP.                 | 2               | 20   | 1.2                  |      |      | 12        |
| 14   | RECEP.                 | 2               | 30   | 2.0                  |      |      | 10        |
| 15   | RECEP.                 | ---             | ---  |                      | 1.2  |      | 12        |
| 16   | RECEP.                 | ---             | ---  |                      | 2.0  |      | 10        |
| 17   | SPARE                  | 2               | 30   | ---                  |      |      | ---       |
| 18   | SPARE                  | 2               | 30   | ---                  |      |      | ---       |
| 19   | SPARE                  | ---             | ---  |                      |      |      | ---       |
| 20   | SPARE                  | ---             | ---  |                      |      |      | ---       |
| 21   | RECEP.                 | 1               | 20   | 0.5                  |      |      | 12        |
| 22   | SPARE                  | 1               | 20   | ---                  |      |      | ---       |
| 23   | RECEP.                 | 1               | 20   |                      | 0.5  |      | 12        |
| 24   | EXHAUST FAN (1/4 HP)   | 1               | 20   |                      | 0.7  |      | 12        |
| 25   | GATE CONTROLLERS       | 1               | 20   | 0.5                  |      |      | 12        |
| 26   | SPARE                  | 1               | 20   | ---                  |      |      | ---       |
| 27   | RECEP.                 | 2               | 20   |                      | 1.1  |      | 12        |
| * 28   | WATER HEATER           | 2               | 30   |                      | 2.2  |      | 10        |
| 29   | RECEP.                 | ---             | ---  | 1.1                  |      |      | 12        |
| * 30   | WATER HEATER           | ---             | ---  | 2.2                  |      |      | 10        |
| 31   | RECEP.                 | 2               | 20   |                      | 1.1  |      | 12        |
| 32   | A/C                    | 2               | 15   |                      | 0.7  |      | 12        |
| 33   | RECEP.                 | ---             | ---  | 1.1                  |      |      | 12        |
| 34   | A/C                    | ---             | ---  | 0.7                  |      |      | 12        |
| 35   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 36   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 37   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 38   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 39   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 40   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 41   | PFB                    | ---             | ---  |                      |      |      | ---       |
| 42   | PFB                    | ---             | ---  |                      |      |      | ---       |
| PFB - PROVISION FOR FUTURE BREAKER                   |                        |                 |      | TOTAL LOAD/ PHASE    | 11.9 | 11.7 |           |
| * REMOVE EXISTING WIRES. SEE REVISED PANEL SCHEDULE. |                        |                 |      | TOTAL LOAD           | 23.6 | KVA  |           |
|  |                        |                 |      | DEMAND FACTOR        | 0.8  |      |           |
|  |                        |                 |      | DEMAND LOAD          | 18.9 | KVA  |           |

**REVISED PANEL "MP"**  
(GENERAL ELECTRIC)

120/240 VOLTS, 1 PHASES, 3 WSN  
BREAKER MIN. A.I.C. 10,000  
SURFACE MTG. 125A MAIN BREAKER

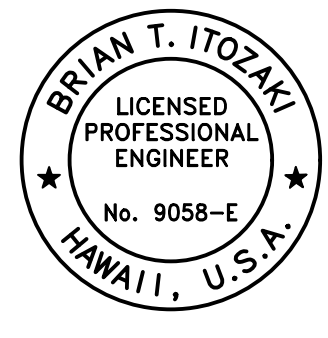
| CKT. NO.  | USE                                 | CIRCUIT BREAKER |      | CONNECTED LOAD (KVA) |      |      | WIRE SIZE |
|---|-------------------------------------|-----------------|------|----------------------|------|------|-----------|
|   |                                     | POLES           | AMPS | A                    | B    | C    |           |
| 1   | LIGHTING & FAN RM. 101              | 1               | 20   | 0.8                  |      |      | 12        |
| * 2   | RECEP.                              | 1               | 20   | 0.8                  |      |      | 12        |
| 3   | RECEP.                              | 1               | 20   |                      | 0.5  |      | 12        |
| 4   | RECEP.                              | 1               | 20   |                      | 0.5  |      | 12        |
| 5   | RECEP.                              | 1               | 20   | 0.5                  |      |      | 12        |
| 6   | RECEP.                              | 1               | 20   | 0.2                  |      |      | 12        |
| 7   | RECEP.                              | 1               | 20   |                      | 0.4  |      | 12        |
| 8   | RECEP.                              | 1               | 20   |                      | 0.2  |      | 12        |
| 9   | RECEP.                              | 1               | 20   | 0.2                  |      |      | 12        |
| 10  | GATE HOUSE                          | 1               | 20   | 0.2                  |      |      | 12        |
| 11  | RECEP.                              | 1               | 20   |                      | 0.2  |      | 12        |
| 12  | RECEP.                              | 1               | 20   |                      | 0.4  |      | 12        |
| 13  | RECEP.                              | 2               | 20   | 1.2                  |      |      | 12        |
| 14  | RECEP.                              | 2               | 30   | 2.0                  |      |      | 10        |
| 15  | RECEP.                              | ---             | ---  |                      | 1.2  |      | 12        |
| 16  | RECEP.                              | ---             | ---  |                      | 2.0  |      | 10        |
| 17  | SPARE                               | 2               | 30   | ---                  |      |      | ---       |
| 18  | SPARE                               | 2               | 30   | ---                  |      |      | ---       |
| 19  | SPARE                               | ---             | ---  |                      |      |      | ---       |
| 20  | SPARE                               | ---             | ---  |                      |      |      | ---       |
| 21  | RECEP.                              | 1               | 20   | 0.5                  |      |      | 12        |
| 22  | SPARE                               | 1               | 20   | ---                  |      |      | ---       |
| 23  | RECEP.                              | 1               | 20   |                      | 0.5  |      | 12        |
| 24  | EXHAUST FAN (1/4 HP)                | 1               | 20   |                      | 0.7  |      | 12        |
| 25  | GATE CONTROLLERS                    | 1               | 20   | 0.5                  |      |      | 12        |
| 26  | SPARE                               | 1               | 20   | ---                  |      |      | ---       |
| 27  | RECEP.                              | 2               | 20   |                      | 1.1  |      | 12        |
| * 28  | WH-1                                | 2               | 30   |                      | 2.2  |      | 10        |
| 29  | RECEP.                              | ---             | ---  | 1.1                  |      |      | 12        |
| * 30  | WH-1                                | ---             | ---  | 30                   | 2.2  |      | 10        |
| 31  | RECEP.                              | 2               | 20   |                      | 1.1  |      | 12        |
| 32  | A/C                                 | 2               | 15   |                      | 0.7  |      | 12        |
| 33  | RECEP.                              | ---             | ---  | 1.1                  |      |      | 12        |
| 34  | A/C                                 | ---             | ---  | 0.7                  |      |      | 12        |
| * 35  | EF-1                                | 1               | 15   |                      | 0.8  |      | 12        |
| * 36  | AUTOMATIC FIRE SPRINKLER PANEL      | 1               | 20   |                      | 0.2  |      | 12        |
| * 37  | FIRE SPRINKLER MONITORING EQUIPMENT | 1               | 20   |                      | 0.2  |      | 12        |
| 38  | PFB                                 | ---             | ---  |                      |      |      | ---       |
| 39  | PFB                                 | ---             | ---  |                      |      |      | ---       |
| 40  | PFB                                 | ---             | ---  |                      |      |      | ---       |
| 41  | PFB                                 | ---             | ---  |                      |      |      | ---       |
| 42  | PFB                                 | ---             | ---  |                      |      |      | ---       |
| PFB - PROVISION FOR FUTURE BREAKER                        |                                     |                 |      | TOTAL LOAD/ PHASE    | 12.2 | 12.7 |           |
| * RE-USE EXISTING CIRCUIT BREAKER. UPDATE PANEL SCHEDULE. |                                     |                 |      | TOTAL LOAD           | 24.9 | KVA  |           |
|   |                                     |                 |      | DEMAND FACTOR        | 0.8  |      |           |
|   |                                     |                 |      | DEMAND LOAD          | 19.9 | KVA  |           |

\*\* PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE. UPDATE PANEL SCHEDULE.

**NOTE:**

PER N.E.C. ARTICLE 408.6 SHORT-CIRCUIT CURRENT RATING, CONTRACTOR SHALL PROVIDE FIELD MARKING ON PANEL ENCLOSURE (AT POINT OF SUPPLY) INDICATING THE AVAILABLE FAULT CURRENT AND THE DATE THE CALCULATION WAS PERFORMED. FIELD MARKING SHALL COMPLY WITH N.E.C. 110.21 (B) (3).

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



EXPIRATION DATE OF LICENSE  
04/30/2028

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

PANEL SCHEDULES I

|              |                                 |
|--------------|---------------------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 <i>GC</i> |
| DRAWN: AG    | DATE: APRIL 2026                |
| CHECKED: BI  | SCALE: AS NOTED                 |

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APPROVED: *Dina Lau*  
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E-signed 2026-04-29 01:15PM HST  
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CHIEF ENGINEER  
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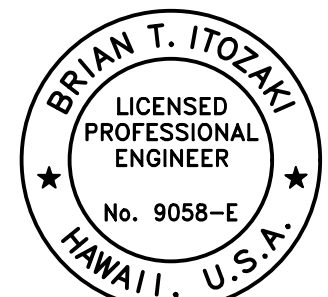
RAWING NO.  
**E501**

**EXISTING PANEL "A"**  
(GENERAL ELECTRIC)

120/240 VOLTS, 1 PHASE, 3 WSN  
BREAKER MIN. A.I.C. 10,000  
SURFACE MTG. 100A MAIN BREAKER

| OKT. NO.                           | USE                      | CIRCUIT BREAKER |      | CONNECTED LOAD (KVA) |      |     | WIRE SIZE |
|------------------------------------|--------------------------|-----------------|------|----------------------|------|-----|-----------|
|                                    |                          | POLES           | AMPS | A                    | B    | C   |           |
| 1                                  | RECEP. RM. 105           | 1               | 20   | 0.4                  |      |     | 12        |
| 2                                  | RECEP. RM. 105           | 1               | 20   | 0.4                  |      |     | 12        |
| 3                                  | RECEP. RM. 105           | 1               | 20   |                      | 0.7  |     | 12        |
| 4                                  | RECEP. FOR REFRIG.       | 1               | 20   |                      | 0.6  |     | 12        |
| 5                                  | RECEP. RM. 105           | 1               | 20   | 0.7                  |      |     | 12        |
| 6                                  | DISPOSER 3/4 HP          | 1               | 20   | 1.6                  |      |     | 12        |
| 7                                  | RECEP. RM. 105           | 1               | 20   |                      | 0.7  |     | 12        |
| 8                                  | RECEP. RM. 201           | 1               | 20   |                      | 0.4  |     | 12        |
| 9                                  | RECEP. RM. 201           | 1               | 20   | 0.5                  |      |     | 12        |
| 10                                 | RECEP. RM. 100           | 1               | 20   | 0.2                  |      |     | 12        |
| 11                                 | SUMP PUMP 1/3 HP         | 1               | 20   |                      | 1.2  |     | 12        |
| 12                                 | SPARE                    | 1               | 20   |                      | 0.4  |     | 12        |
| 13                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 14                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 15                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 16                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 17                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 18                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 19                                 | A/C FAN COIL UNIT 1/3 HP | 2               | 15   |                      | 0.4  |     | 12        |
| 20                                 | EWB                      | 2               | 30   |                      | 2.3  |     | 10        |
| 21                                 | A/C FAN COIL UNIT 1/3 HP | 2               | ---  | 0.4                  |      |     | 12        |
| 22                                 | EWB                      | 2               | ---  | 2.3                  |      |     | 10        |
| 23                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 24                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 25                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 26                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 27                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 28                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 29                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 30                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 31                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 32                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 33                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 34                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 35                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 36                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 37                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 38                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | 12        |
| 39                                 | MAIN BREAKER             | 2               | 100  | ---                  | ---  | --- | 2         |
| 40                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| 41                                 | MAIN BREAKER             | ---             | 100  | ---                  | ---  | --- | 2         |
| 42                                 | PFB                      | ---             | ---  | ---                  | ---  | --- | ---       |
| PFB - PROVISION FOR FUTURE BREAKER |                          |                 |      | TOTAL LOAD/ PHASE    | 6.5  | 6.7 |           |
|                                    |                          |                 |      | TOTAL LOAD           | 13.2 | KVA |           |
|                                    |                          |                 |      | DEMAND FACTOR        | 0.8  |     |           |
|                                    |                          |                 |      | DEMAND LOAD          | 10.6 | KVA |           |

| REVISION NO. | SYM. | DESCRIPTION | SHT./OF | DATE | APPROVED |
|--------------|------|-------------|---------|------|----------|
|              |      |             |         |      |          |



EXPIRATION DATE OF LICENSE  
04/30/2026

*Brian T. Itozaki*

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STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

ANUENUE FISHERIES RESEARCH CENTER  
ANNEX FACILITY IMPROVEMENTS - PHASE 1A  
(BUILDING IMPROVEMENTS)  
SAND ISLAND, O'AHU, HAWAII

PANEL SCHEDULES II

|              |                                 |
|--------------|---------------------------------|
| DESIGNED: NE | SUBMITTED: APRIL 2026 <i>GC</i> |
| DRAWN: AG    | DATE: APRIL 2026                |
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CHIEF ENGINEER State of Hawaii

DRAWING NO.  
**E502**