## PROJECT TEAM

ARCHITECT:
ARCHITECTS HAWAII, LTD.
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
808.523.9636

SURVEY:
CONTROL POINT SURVEYING, INC.
1150 S. KING ST. SUITE 1200
HONOLULU, HAWAII 96814
808.591.2022

CIVIL SITE:
BELT COLLINS HAWAII
2153 NORTH KING STREET, SUITE 200
HONOLULU, HAWAII 96819
808.521.5361

ENVIRONMENTAL & SOILS:
MASA FUJIOKA & ASSOCIATES
2006 KALIHI STREET
HONOLULU, HAWAII 96819
808.841.5064

GEOTECHNICAL:
HIRATA & ASSOCIATES
99-1433 KOAHA PLACE
AIEA, HAWAII 96701
808.486.0787

STRUCTURAL ENGINEER:
SHIGEMURA, LAU, SAKANASHI, HIGUCHI & ASSOCIATES
1916 YOUNG STREET, SUITE 200
HONOLULU, HAWAII 96826
808.942.9100

ATFP/BLAST:
HINMAN CONSULTING ENGINEERS, INC.
ONE BUSH STREET, SUITE 510
SAN FRANCISCO, CA., 94104
415.621.4423

MECHANICAL ENGINEER:
THERMAL ENGINEERING CORPORATION
512 KALIHI STREET
HONOLULU, HAWAII 96819
808.848.6966

ELECTRICAL ENGINEER:
ECS, INC.
615 PIIKOI STREET, SUITE 207
HONOLULU, HAWAII 96814
808.591.8181

TELCOMMUNICATIONS:
FUTURE COMMUNICATIONS CONSULTING, INC.
95-1109 AHOKA STREET
MILILANI, HI 96789
808.744.9748

COST ESTIMATOR:
RIDER LEVETT BUCKNALL
1001 BISHOP STREET, SUITE 1340
HONOLULU, HI 96813
808.521.2641

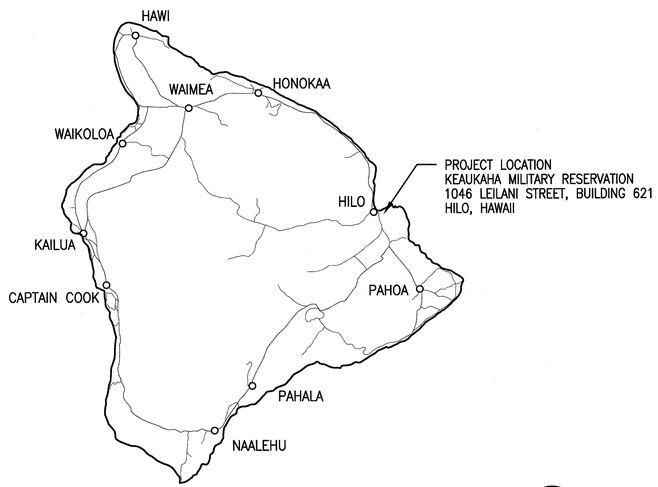
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2
## KEAUKAHA MILITARY RESERVATION (KMR)
## 1046 LEILANI STREET, BUILDING 621
## TMK: (3) 2-1-012: 003
## HILO, HAWAI'I, HAWAI'I

## FOR THE

## STATE OF HAWAI'I DEPARTMENT OF DEFENSE
## STATE JOB NO. CA-1212-C2

# FINAL SUBMITTAL
# 06/30/2016

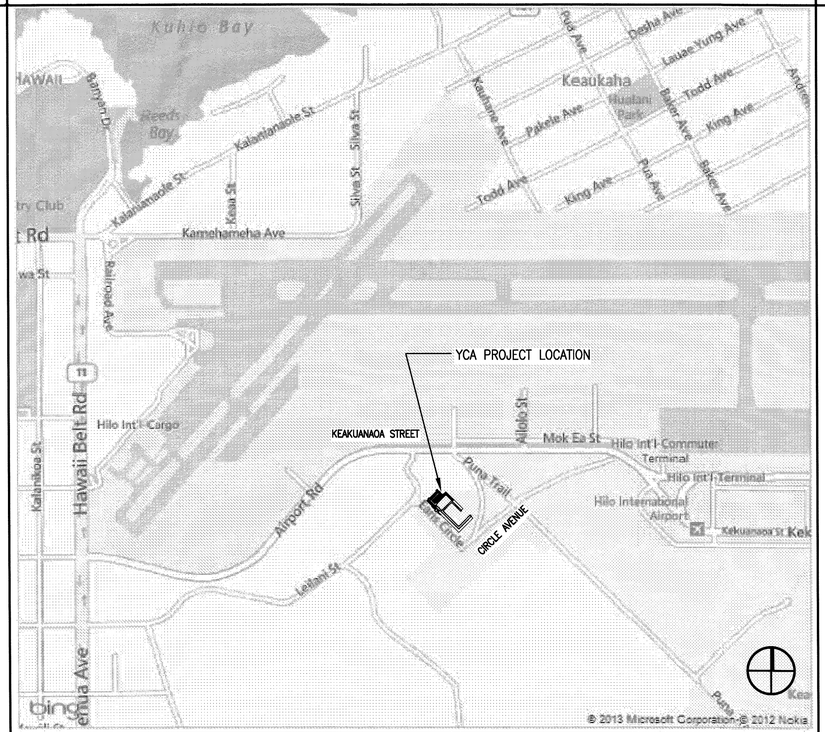
## LOCATION MAP




PROJECT LOCATION
KEAUKAHA MILITARY RESERVATION
1046 LEILANI STREET, BUILDING 621
HILO, HAWAII

**ISLAND OF HAWAII**

## VICINITY MAP




## APPROVALS

12 JUL 2016
ADJUTANT GENERAL
DEPARTMENT OF DEFENSE
STATE OF HAWAII
DATE

1 July 2016
DIRECTOR
YOUTH CHALLENGE ACADEMY
STATE OF HAWAII
DATE

7 JUL 16
CHIEF ENGINEERING OFFICER
DEPARTMENT OF DEFENSE
STATE OF HAWAII
DATE

Youth Challenge Academy — Hawaii National Guard


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES AHL | DRW AHL | CHK AHL

STATE OF HAWAI'I
HAWAII ARMY NATIONAL GUARD
DEPARTMENT OF DEFENSE
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TITLE SHEET, PROJECT TEAM, LOCATION MAP, VICINITY MAP

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 1 OF 131
G-001

# ABBREVIATIONS

## SYMBOLS

| | |
|---|---|
| & | AND |
| ∠ | ANGLE |
| @ | AT |
| ℄ | CENTERLINE |
| [ | CHANNEL |
| ∅ | DIAMETER, ROUND |
| % | PERCENT |
| # | POUND, NUMBER |
| PL | PROPERTY LINE |

## A

| | |
|---|---|
| AB | ANCHOR BOLT |
| ABV | ABOVE |
| A/C | AIR CONDITIONING |
| AC | ASPHALTIC CONCRETE |
| ACOUS | ACOUSTICAL |
| AD | AREA DRAIN |
| ADA | AMERICANS WITH DISABILITIES ACT |
| ADJ | ADJUSTABLE, ADJACENT |
| AFF | ABOVE FINISH FLOOR |
| AGGR | AGGREGATE |
| ALUM | ALUMINUM |
| ALT | ALTERNATE |
| ANOD | ANODIZED |
| APPROX | APPROXIMATE |
| ARCH | ARCHITECT, ARCHITECTURAL |
| ASPH | ASPHALT |
| ACT | ACOUSTICAL CEILING TILE |

## B

| | |
|---|---|
| BC | BOTTOM OF CURB |
| BD | BOARD |
| BLDG | BUILDING |
| BLKG | BLOCKING |
| BM | BEAM, BENCHMARK |
| BOT | BOTTOM |
| BW | BOTTOM OF WALL |

## C

| | |
|---|---|
| CAB | CABINET |
| CAL | CALIPER |
| CT | CERAMIC TILE |
| CG | CORNER GUARD |
| CI | CAST IRON |
| CJ | CONTROL JOINT |
| CLG | CEILING |
| CLO | CLOSET |
| CLR | CLEAR, CLEARANCE |
| CMU | CONCRETE MASONRY UNIT(S) |
| CNTR | COUNTER |
| CO | CLEAN OUT |
| COL | COLUMN |
| CONC | CONCRETE |
| COND | CONDITION |
| CONN | CONNECTION |
| CONSTR | CONSTRUCTION |
| CONT | CONTINUOUS |
| CONTR | CONTRACTOR |
| COORD | COORDINATE |
| CORR | CORRIDOR, CORRUGATED |
| CSD | CERAMIC SOAP DISH |

## D

| | |
|---|---|
| D | DEEP, DEPTH |
| DA | DOUBLE–ACTING |
| DBL | DOUBLE |
| DEFS | DIRECT APPLIED EXTERIOR FINISH |
| DET | DETAIL |
| DF | DRINKING FOUNTAIN |
| DI | DRAIN INLET |
| DIA | DIAMETER |
| DIAG | DIAGONAL |
| DIM | DIMENSION |
| DISP | DISPENSER |
| DN | DOWN |
| DS | DOWNSPOUT |
| DSP | DRY STANDPIPE |
| DWG | DRAWING |
| DWR | DRAWER |

## E

| | |
|---|---|
| E | EAST |
| EA | EACH |
| EC | EXPOSED CEILING |
| EFS | DIRECT APPLIED EXTERIOR FINISH SYSTEM |
| EIFS | EXTERIOR INSULATION & FINISH SYSTEM |
| EJ | EXPANSION JOINT |
| EL | ELEVATION |
| ELEC | ELECTRICAL |
| ELEV | ELEVATOR |
| EMER | EMERGENCY |
| ENCL | ENCLOSURE |
| EPB | ELECTRICAL PANELBOARD |
| EQ | EQUAL |
| EQUIP | EQUIPMENT |
| EWC | ELECTRIC WATER COOLER |
| EWH | ELECTRICAL WATER HEATER |
| EXH | EXHAUST |
| EXP | EXPANSION |
| EXIST OR (E) | EXISTING |
| EXT | EXTERIOR |

## F

| | |
|---|---|
| FA | FIRE ALARM, FRESH AIR |
| FB | FLAT BAR |
| FCU | FAN COIL UNIT |
| FD | FLOOR DRAIN |
| FE | FIRE EXTINGUISHER |
| FEC | FIRE EXTINGUISHER CABINET |
| FFEL | FINISH FLOOR ELEVATION |
| FIN | FINISH, FINISHED |
| FL | FLOOR |
| FLASH | FLASHING |
| FLDG | FOLDING |
| FLRG | FLOORING |
| FLUOR | FLUORESCENT |
| FOF | FACE OF FINISH |
| FOS | FACE OF STUD(S) |
| FP | FIREPROOFING |
| FR | FRAME |
| FRTW | FIRE RETARDANT TREATED WOOD |
| FSS | FOLDING SHOWER SEAT |
| FT | FOOT, FEET |
| FTG | FOOTING |

## G

| | |
|---|---|
| GA | GAUGE |
| GALV | GALVANIZED |
| GB | GRAB BAR |
| GL | GLASS |
| GND | GROUND |
| GR | GRADE |
| GYP | GYPSUM |
| GRT | GROUT |

## H

| | |
|---|---|
| H | HIGH |
| HB | HOSE BIBB |
| HC | HOLLOW CORE |
| HDWD | HARDWOOD |
| HDW | HARDWARE |
| HM | HOLLOW METAL |
| HORIZ | HORIZONTAL |
| HP | HIGH POINT |
| HR | HOUR |
| HT | HEIGHT |
| HVLS | HIGH VOLUME LOW SPEED |

## I

| | |
|---|---|
| ID | INSIDE DIAMETER / DIMENSION |
| INCL | INCLUDE, INCLUDED, INCLUDING, INCLUSIVE |
| INSUL | INSULATION |
| INT | INTERIOR |
| INV | INVERT |
| IWH | INSTANT WATER HEATER |

## J

| | |
|---|---|
| JAN | JANITOR |
| JT | JOINT |

## K

| | |
|---|---|
| KD | KNOCKED DOWN |
| KO | KNOCK–OUT |

## L

| | |
|---|---|
| L | LENGTH, LONG |
| LAB | LABORATORY |
| LAM | LAMINATE |
| LAV | LAVATORY |
| LKR | LOCKER |
| LT | LIGHT |
| LSGB | LEFT–SIDE GRAB BAR |

## M

| | |
|---|---|
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MEMB | MEMBRANE |
| MFR | MANUFACTURER |
| MIN | MINIMUM |
| MIRR | MIRROR |
| MISC | MISCELLANEOUS |
| MO | MASONRY OPENING |
| MOD | MODIFIED |
| MR | MOISTURE RESISTANT |
| MTD | MOUNTED |
| MTG | MOUNTING |
| MTL | METAL |
| MULL | MULLION |

## N

| | |
|---|---|
| N | NORTH |
| NIC | NOT IN CONTRACT |
| NO | NUMBER |
| NOM | NOMINAL |
| NTS | NOT TO SCALE |

## O

| | |
|---|---|
| OA | OVERALL |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER / DIMENSION |
| ORD | OVERFLOW ROOF DRAIN |
| OFCI | OWNER FURNISHED CONTRACTOR INSTALLED |
| OFOI | OWNER FURNISHED OWNER INSTALLED |
| OFF | OFFICE |
| OPNG | OPENING |
| OPP | OPPOSITE |
| O/S | OFFSET |

## P

| | |
|---|---|
| P | PAINT |
| PL | PROPERTY LINE |
| PLAM | PLASTIC LAMINATE |
| PLAS | PLASTER |
| PLBG | PLUMBING |
| PLYWD | PLYWOOD |
| PNL | PANEL |
| PR | PAIR |
| PRCST | PRECAST |
| PROP | PROPERTY |
| PT | PORCELAIN TILE |
| PTD | PAPER TOWEL DISPENSER |
| PTD/R | PAPER TOWEL DISPENSER W/RECEPTACLE |
| PTN | PARTITION |
| PTR | PAPER TOWEL RECEPTACLE |

## Q

| | |
|---|---|
| QT | QUARRY TILE |

## R

| | |
|---|---|
| R | RISER, RADIUS |
| RB | RUBBER BASE |
| RH | ROBE HOOK |
| RD | ROOF DRAIN |
| REF | REFERENCE, REFRIGERATOR |
| REFL | REFLECTED, REFLECTANCE |
| REINF | REINFORCES, REINFORCING |
| REQD | REQUIRED |
| RESIL | RESILIENT |
| RM | ROOM |
| RND | ROUND |
| RO | ROUGH OPENING |

## S

| | |
|---|---|
| S | SOUTH |
| SB | SPLASH BLOCK |
| SC | SOLID CORE |
| SCD | SEAT COVER DISPENSER |
| SCR | SHOWER CURTAIN ROD |
| SCHED | SCHEDULE |
| SD | SOAP DISPENSER/DISH |
| SECT | SECTION |
| SHV | SHELVING |
| SHR | SHOWER |
| SHT | SHEET |
| SIM | SIMILAR |
| SL | SLOPE |
| SLDG | SLIDING |
| SLNT | SEALANT |
| SMH | SEWER MANHOLE |
| SND | SANITARY NAPKIN DISPENSER |
| SPD | SPREAD |
| SPEC | SPECIFICATION(S) |
| SQ | SQUARE |
| SERS | SERVICE SINK |
| SS | SOLID SURFACE |
| SST | STAINLESS STEEL |
| STA | STATION |
| STC | SOUND TRANSMISSION CLASS |

## T

| | |
|---|---|
| T | TREAD |
| TC | TOP OF CURB |
| TEL | TELEPHONE |
| TH | TOWEL HOOK |
| THK | THICK |
| TMPD | TEMPERED |
| TOP | TOP OF PLATE |
| TOS | TOP OF SLAB |
| TOW | TOP OF WALL |
| TPD | TOILET PAPER DISPENSER |
| TRP | TRANSLUCENT RESIN PANEL |
| TV | TELEVISION |
| TW | TOP OF WALL |
| TYP | TYPICAL |
| TPT | TOILET PARTITION |

## U

| | |
|---|---|
| UL | UNDERWRITER'S LABORATORIES INC |
| UNF | UNFINISHED |
| UON | UNLESS OTHERWISE NOTED |
| UR | URINAL |

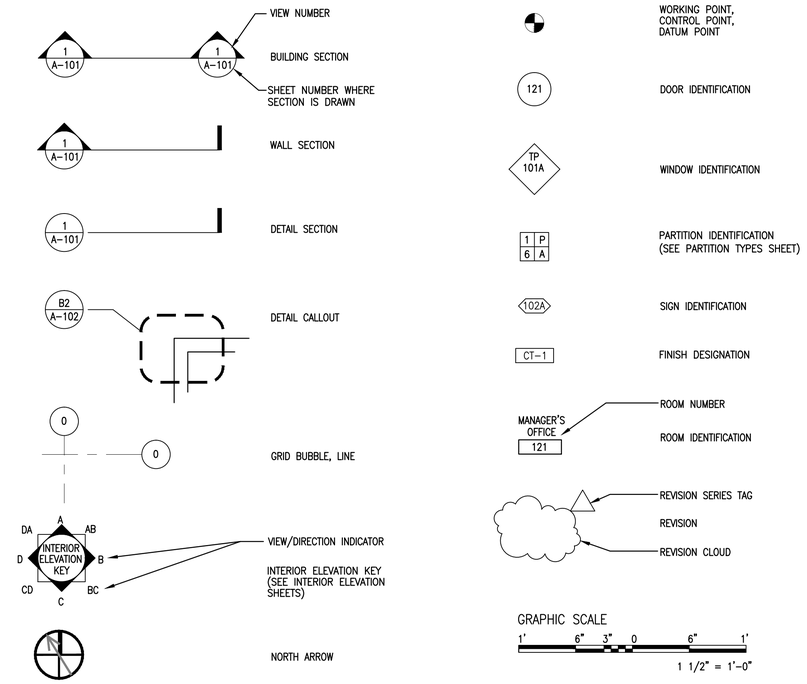
## V

| | |
|---|---|
| VERT | VERTICAL |
| VEST | VESTIBULE |

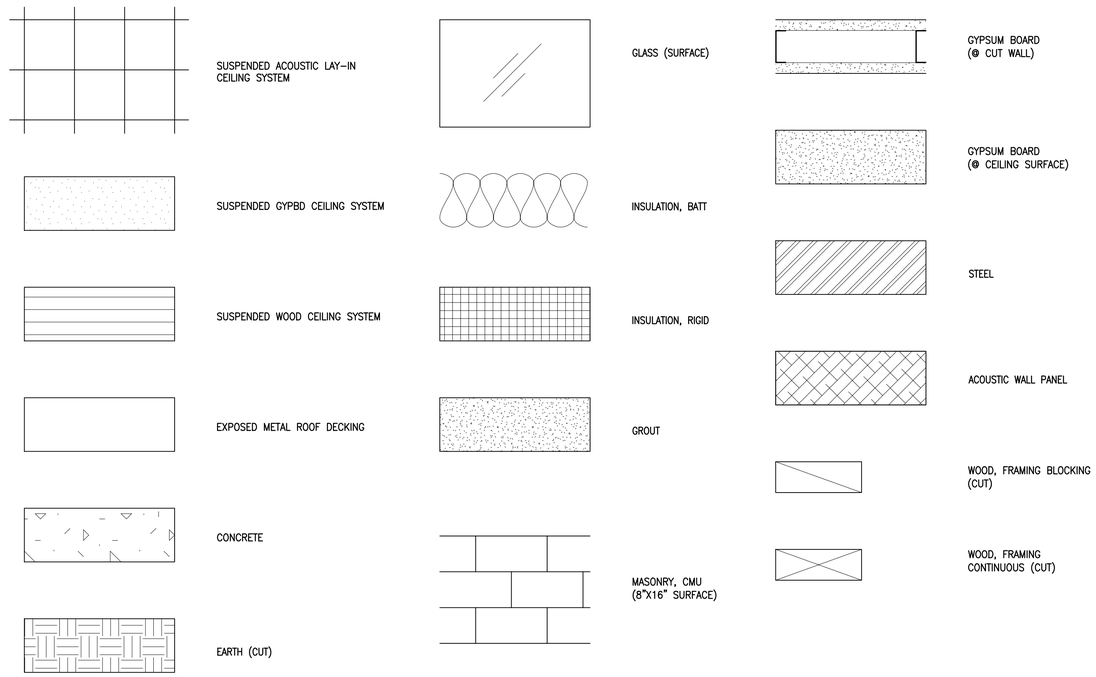
## W

| | |
|---|---|
| W | WEST, WIDE, WIDTH, WATER |
| W/ | WITH |
| W/O | WITHOUT |
| WC | WATER CLOSET |
| WD | WOOD |
| WDW | WINDOW |
| WH | WATER HEATER |
| WP | WATERPROOF(ING) |
| WR | WATER RESISTANT, WASTE RECEPTACLE |
| WB | WEATHER BARRIER |
| WSCT | WAINSCOT |
| WO | WHERE OCCURS |
| WWF | WELDED WIRE FABRIC |

# SYMBOLS




# MATERIALS AND PARTITIONS




Youth Challenge Academy — Hawaii National Guard


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND — LICENSED PROFESSIONAL ARCHITECT — No. 7418 — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAII ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

ABBREVIATIONS, SYMBOLS AND LEGEND

SCALE: AS NOTED

STATE JOB NO. CA–1212–C2

FEDERAL PROJECT NO. –

SHEET 2 OF 131

G-002

# INDEX OF DRAWINGS

| SHEET NO | DWG NO | DESCRIPTION OF DRAWINGS |
|---|---|---|
| 1 | G-001 | TITLE SHEET, PROJECT TEAM, LOCATION MAP, VICINITY MAP |
| 2 | G-002 | ABBREVIATIONS, SYMBOLS AND LEGEND |
| 3 | G-003 | INDEX OF DRAWINGS |
| 4 | G-004 | CODE SUMMARY |
| 5 | G-005 | BUILDING 621 LIFE SAFETY PLAN |
| 6 | G-006 | PHASING PLAN |
| 7 | G-007 | STAGING PLAN |
| 8 | H-001 | HAZARDOUS MATERIALS NOTES AND SAMPLED LOCATIONS |
| 9 | C-001 | CIVIL LOCATION MAP, INDEX OF DRAWINGS AND CONSTRUCTION NOTES |
| 10 | C-002 | CIVIL CONSTRUCTION NOTES |
| 11 | CD101 | CIVIL SITE DEMOLITION AND EROSION CONTROL PLAN |
| 12 | CS100 | CIVIL GENERAL SITE AND BORING LOCATION PLAN |
| 13 | CS101 | CIVIL SITE LAYOUT AND UTILITY PLAN |
| 14 | C-501 | CIVIL SEWER DETAILS |
| 15 | C-502 | CIVIL MISCELLANEOUS DETAILS |
| 16 | S-001 | GENERAL NOTES |
| 17 | S-002 | TYPICAL DETAILS |
| 18 | S-101 | PARTIAL FLOOR PLAN |
| 19 | S-102 | PARTIAL ROOF FRAMING PLAN AND SECTIONS |
| 20 | S-301 | ROOF FRAMING SECTIONS AND DETAILS |
| 21 | S-302 | ROOF FRAMING DETAILS |
| 22 | AS101 | YCA – ARCHITECTURAL SITE PLAN |
| 23 | AD101 | YCA – OVERALL DEMOLITION PLAN |
| 24 | AD102 | YCA – DEMOLITION FLOOR PLANS |
| 25 | AD103 | YCA – OVERALL REFLECTED CEILING DEMOLITION PLAN |
| 26 | AD104 | YCA – CLERESTORY DEMOLITION PLAN |
| 27 | AD105 | YCA – OVERALL ROOF DEMOLITION PLAN |
| 28 | A-101 | YCA – OVERALL FLOOR PLAN |
| 29 | A-102 | YCA – OVERALL REFLECTED CEILING PLAN |
| 30 | A-103 | YCA – OVERALL ROOF PLAN |
| 31 | A-201 | YCA – EXTERIOR ELEVATIONS |
| 32 | A-202 | YCA – EXTERIOR ELEVATIONS |
| 33 | A-301 | YCA – BUILDING SECTIONS |
| 34 | A-401 | YCA – ENLARGED PARTIAL FLOOR PLANS |
| 35 | A-402 | YCA – ENLARGED PARTIAL FLOOR PLANS |
| 36 | A-403 | YCA – ENLARGED MULTI-PURPOSE CLERESTORY PLAN |
| 37 | A-404 | YCA – ENLARGED PARTIAL REFLECTED CEILING PLAN |
| 38 | A-405 | YCA – ENLARGED PARTIAL REFLECTED CEILING PLAN |
| 39 | A-406 | YCA – ENLARGED MULTI-PURPOSE REFLECTED CEILING PLAN |
| 40 | A-407 | YCA – INTERIOR ELEVATIONS |
| 41 | A-408 | YCA – INTERIOR ELEVATIONS |
| 42 | A-409 | YCA – INTERIOR ELEVATIONS |
| 43 | A-410 | YCA – INTERIOR ELEVATIONS |
| 44 | A-411 | YCA – INTERIOR ELEVATIONS |
| 45 | A-501 | YCA – TYPICAL MOUNTING HEIGHTS |
| 46 | A-502 | YCA – DETAILS |
| 47 | A-503 | YCA – DETAILS |
| 48 | A-504 | YCA – DETAILS |
| 49 | A-505 | YCA – PARTITION TYPES AND WALL DETAILS |
| 50 | A-601 | YCA – DOOR TYPES, SCHEDULE AND DETAILS |
| 51 | A-602 | YCA – WINDOW TYPES AND SCHEDULE |
| 52 | A-603 | YCA – WINDOW DETAILS |
| 53 | A-604 | YCA – ROOM FINISH AND COLOR / MATERIAL SCHEDULES |
| 54 | A-701 | YCA – SIGNAGE PLAN, SIGN TYPES AND SCHEDULE |
| 55 | FX001 | FIRE SUPRESSION NOTES, LEGEND AND ABBREVIATIONS |
| 56 | FX401 | PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN |
| 57 | FX402 | PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN |
| 58 | FX501 | DETAILS |
| 59 | FX502 | DETAILS |
| 60 | FA001 | FIRE ALARM NOTES, LEGEND AND ABBREVIATIONS |
| 61 | FA401 | PARTIAL YCA BUILDING 621 FIRE ALARM PLANS |
| 62 | FA402 | PARTIAL YCA BUILDING 621 FIRE ALARM PLANS |
| 63 | FA501 | DETAILS |
| 64 | FA601 | FIRE ALARM RISER DIAGRAM AND MATRIX |
| 65 | P-001 | LEGEND & ABBREVIATIONS AND PLUMBING NOTES |
| 66 | P-002 | BWS FLOW REQUIREMENTS AND NOTES, FIXTURE SCHEDULES |
| 67 | PD101 | OVERALL PLUMBING DEMOLITION PLAN |
| 68 | PD401 | PARTIAL YCA BLDG 621 PLUMBING DEMOLITION PLAN |
| 69 | P-101 | OVERALL PLUMBING PLAN |
| 70 | P-401 | PARTIAL YCA BLDG 621 PLUMBING PLAN |
| 71 | P-501 | DETAILS |
| 72 | P-502 | DETAILS |
| 73 | P-601 | EQUIPMENT SCHEDULE, HOT WATER SCHEMATIC DIAGRAM AND SEQUENCE OF OPERATION |
| 74 | P-901 | WATER PIPING DIAGRAM |
| 75 | P-902 | WATER AND SANITARY PIPING DIAGRAM |
| 76 | M-001 | LEGEND & ABBREVIATIONS AND GENERAL NOTES |
| 77 | MD101 | OVERALL MECHANICAL DEMOLITION PLAN |
| 78 | MD401 | PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN |
| 79 | MD402 | PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN |
| 80 | MD403 | PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN |
| 81 | MD404 | PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN |
| 82 | MD405 | PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN |
| 83 | M-101 | OVERALL MECHANICAL PLAN |
| 84 | M-102 | OVERALL MECHANICAL ROOF PLAN |
| 85 | M-301 | SECTIONS |
| 86 | M-401 | PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 87 | M-402 | PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 88 | M-403 | PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 89 | M-404 | PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 90 | M-405 | PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 91 | M-406 | DEDUCTIVE BID ITEM 05 – PARTIAL YCA BLDG 621 MECHANICAL PLAN |
| 92 | M-407 | MECHANICAL ROOF PLAN |
| 93 | M-501 | DETAILS |
| 94 | M-601 | AIRSIDE SCHEMATIC DIAGRAM AND SEQUENCE OF OPERATION |
| 95 | M-602 | CONTROL DIAGRAM |
| 96 | M-603 | EQUIPMENT SCHEDULES |
| 97 | M-604 | EQUIPMENT SCHEDULES |
| 98 | M-901 | REFRIGERANT PIPING DIAGRAM |
| 99 | M-902 | REFRIGERANT PIPING DIAGRAM |
| 100 | E-001 | ELECTRICAL SYMBOL LIST |
| 101 | E-002 | LUMINAIRE SCHEDULE |
| 102 | ES101 | ELECTRICAL SITE PLAN |
| 103 | ES102 | DUCT SECTION DETAILS |
| 104 | ED101 | OVERALL ELECTRICAL DEMOLITION PLAN |
| 105 | ED102 | POWER DEMOLITION PLAN – 1 |
| 106 | ED103 | POWER DEMOLITION PLAN – 2 |
| 107 | ED104 | LIGHTING DEMOLITION PLAN – 1 |
| 108 | ED105 | LIGHTING DEMOLITION PLAN – 2 |
| 109 | E-101 | PARTIAL POWER PLAN – 1 |
| 110 | E-102 | PARTIAL POWER PLAN – 2 |
| 111 | E-103 | PARTIAL LIGHTING PLAN – 1 |
| 112 | E-104 | PARTIAL LIGHTING PLAN – 2 |
| 113 | E-105 | HVAC POWER PLAN – 1 |
| 114 | E-106 | HVAC POWER PLAN – 2 |
| 115 | E-107 | EXISTING BILLET POWER PLAN |
| 116 | E-401 | YCA ONE-LINE DIAGRAM |
| 117 | E-402 | LIGHTING CONTROL DIAGRAMS |
| 118 | E-501 | TYPICAL HANDHOLE DETAILS |
| 119 | E-502 | ELECTRICAL ELEVATIONS |
| 120 | E-601 | PANEL SCHEDULES |
| 121 | T-001 | TELECOMMUNICATIONS SYMBOL LIST AND GENERAL NOTES |
| 122 | TD100 | BLDG 621 OVERALL YCA TELECOM DEMOLITION PLAN |
| 123 | TD101 | PARTIAL BLDG 621 YCA COMM DEMOLITION PLANS |
| 124 | T-100 | BLDG 621 OVERALL YCA TELECOMMUNICATIONS PLAN |
| 125 | T-101 | PARTIAL BLDG 621 YCA COMM PLANS – TEL/DATA/CATV |
| 126 | T-102 | BLDG 621 HIARNG ENLARGED COMM ROOM PLANS |
| 127 | T-501 | TELECOMMUNICATIONS DETAILS |
| 128 | T-502 | TELECOMMUNICATIONS DETAILS |
| 129 | T-503 | TELECOMMUNICATIONS DETAILS |
| 130 | T-601 | TELECOMMUNICATIONS DISTRIBUTION DIAGRAMS |
| 131 | T-602 | TELECOMMUNICATIONS DISTRIBUTION DIAGRAMS |

# DEDUCTIVE ALTERNATES

1. INTERIOR ELECTRICAL, ADMINISTRATIVE (LIGHTS, RECEPTACLES, SWITCHES, BRANCH CIRCUITS, RACEWAYS, ETC.) WEST/SOUTH WING.
2. INTERIOR ELECTRICAL, CLASSROOMS (LIGHTS, RECEPTACLES, SWITCHES, BRANCH CIRCUITS, RACEWAYS, ETC.).
3. REPLACEMENT OF WATER LINE THAT FEEDS B621.
4. ATFP WINDOW FOR "WEST WING" AND CLASSROOMS IN SCOPE
5. HIGH VOLUME LOW SPEED FANS FOR THE MULTIPURPOSE ROOM


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

APPR | DATE | SHEET OF | DESCRIPTION | SYM

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITAL DATE: 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

INDEX OF DRAWINGS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. -

SHEET 3 OF 131

G-003

# CODE SUMMARY (PER HAWAII COUNTY REQUIREMENTS)

EXISTING PARKING

| FACILITY | USE | FLOOR AREA OR QUANTITIES | NO OF SPACES REQUIRED | SPACES PROVIDED |
|---|---|---|---|---|
| EXISTING YCA BILLET | SCHOOL (HIGH)<br>1 SPACE PER 10 STUDENTS | 100 STUDENTS | 100 / 10 = 10 SPACES | 26 EXIST SPACES AT EXISTING YCA BILLET PARKING, 2 EXISTING ADAAG STALLS |
| | ACCESSIBLE<br>1 SPACE PER 400 SF<br>OF OFFICE USE | 556 SF | 556 / 400 = 1.4 = 2 SPACES | |
| YCA PORTION BUILDING 621 | ACCESSIBLE<br>1 SPACE PER 400 SF<br>OF OFFICE USE | 3,971 SF | 3,971 / 400 = 9.9 = 10 SPACES | 6 EXIST SPACES FRONTING BLDG 621, 1 EXIST ACCESSIBLE FRONT BLDG 621 |
| | | | TOTAL MINIMUM 22 PARKING SPACES REQUIRED | TOTAL 35 PARKING SPACES PROVIDED |

APPLICABLE CODES:
2006 INTERNATIONAL BUILDING CODE, AS AMENDED BY HAWAII COUNTY
2012 NFPA 1 UNIFORM FIRE CODE, AS AMENDED BY HAWAII COUNTY
2006 UNIFORM PLUMBING CODE, AS AMENDED BY HAWAII COUNTY
2008 NATIONAL ELECTRICAL CODE, AS AMENDED BY HAWAII COUNTY
2006 INTERNATIONAL ENERGY CONSERVATION CODE
STATE MODEL ENERGY CODE, AUGUST 1999
ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES, 2004

OCCUPANCY CLASSIFICATION:
MIXED OCCUPANCY: GROUP A-3 (GYMNASIUM), GROUP B (BUSINESS), GROUP E (EDUCATION)

CONSTRUCTION CLASSIFICATION:
TYPE VB (NON-FIRE RATED, COMBUSTIBLE)

ALLOWABLE AREA:
TABULAR AREAS FOR THE FOLLOWING OCCUPANCIES IN TYPE VB CONSTRUCTION (TABLE 503):
GROUP A-3: 6,000 SF
GROUP B: 9,000 SF
GROUP E: 9,500 SF

INCREASE FOR FRONTAGE: 75% FOR 30 FEET AROUND ENTIRE BUILDING PERIMETER (PARAGRAPH 506.2)
INCREASE FOR FIRE SPRINKLERS: 300% FOR ONE STORY BUILDING (PARAGRAPH 506.3)
TOTAL ALLOWABLE AREA (EQUATION 5-1) FOR EACH OCCUPANCY
GROUP A-3: {6,000 + [6,000 X 0.75] + 6,000 X 3] } = 28,500 SF
GROUP B: {9,000 + [9,000 X 0.75] + 9,000 X 3] } = 42,750 SF
GROUP E: {9,500 + [9,500 X 0.75] + 9,500 X 3] } = 45,125 SF

TOTAL ALLOWABLE AREA FOR SEPARATED OCCUPANCIES IS CALCULATED BY ADDING THE RATIOS OF THE ACTUAL BUILDING AREAS DIVIDED BY THE ALLOWABLE AREA FOR EACH OCCUPANCY WITH THE TOTAL PERMITTED TO EXCEED ONE (PARAGRAPH 508.3.3.2):

| GROUP A-3 | GROUP B | GROUP E | |
|---|---|---|---|
| 8,479/28,500 | + 18,582/42,750 + | 12.179/45,125 | = 1.00 |

ALLOWABLE HEIGHT:
TABULAR HEIGHTS FOR THE FOLLOWING OCCUPANCIES IN TYPE VB CONSTRUCTION (TABLE 503.8):
GROUP A-3: 40 FT, 1 STORY
GROUP B: 40 FT, 2 STORIES
GROUP E: 40 FT, 1 STORY

INCREASE FOR FIRE SPRINKLERS: 20 FEET, ONE STORY (PARAGRAPH 504.2)

| | ALLOWABLE HEIGHT | ACTUAL HEIGHT |
|---|---|---|
| GROUP A-3: | 60 FT, 2 STORIES | 33.3 FT, 1 STORY |
| GROUP B: | 60 FT, 3 STORIES | 16.0 FT, 1 STORY |
| GROUP E: | 60 FT, 2 STORIES | 17.5 FT, 1 STORY |

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (TABLE 601) FOR TYPE II CONSTRUCTION:

| | |
|---|---|
| STRUCTURAL FRAME | 0 HOURS |
| BEARING WALLS - EXTERIOR | 0 HOURS |
| BEARING WALLS - INTERIOR | 0 HOURS |
| NONBEARING WALLS AND PARTITIONS - EXTERIOR | 0 HOURS |
| NONBEARING WALLS AND PARTITIONS - INTERIOR | 0 HOURS |
| FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS) | 0 HOURS |
| ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS) | 0 HOURS |

FIRE RESISTIVE SUBSTITUTION (TABLE 601 FOOTNOTE E):
NOT USED

FIRE RATED SEPARATION OF OCCUPANCIES IN A SPRINKLERED BUILDING (TABLE 508.3.3):
GROUP A-3 AND GROUP B: 1 HOUR
GROUP A-3 AND GROUP E: NONE
GROUP B AND GROUP E: 1 HOUR

NOTE: GROUP A-3 AND GROUP B ARE NOT ADJACENT AND THEREFORE WILL NOT REQUIRE FIRE RATED SEPARATION.

MAXIMUM AREA OF EXTERIOR WALL OPENINGS (TABLE 704.8):
UNLIMITED UNPROTECTED OPENINGS PER FOOTNOTE i SINCE EXTERIOR BEARING WALL, EXTERIOR NONBEARING WALL, AND EXTERIOR STRUCTURAL FRAME ARE NOTE REQUIRED TO BE FIRE-RESISTANCE RATED BY TABLE 601 OR 602.

OPENING PROTECTIVES:
1-HOUR FIRE BARRIER (OTHER THAN SHAFT, EXIT ENCLOSURE, EXIT PASSAGEWAY) 3/4 HOUR FIRE DOOR

THROUGH PENETRATIONS (SECTION 712):
PIPE, CONDUIT AND DUCT PENETRATIONS THROUGH FIRE RATED WALLS WILL BE FIRESTOPPED WITH A UL LISTED THROUGH PENETRATION FIRE STOP SYSTEM (PARAGRAPH 712.3.1.2)

FIRE DAMPERS:
FIRE BARRIER - NOT REQUIRED IF 1-HOUR OR LESS (PARAGRAPH 716.5.2 EXCEPTION 3)

SMOKE DAMPERS:
REQUIRED FOR DUCT PENETRATIONS THROUGH CORRIDOR WALLS (PARAGRAPH 716.5.4.1)

INTERIOR WALL AND CEILING FINISH IN SPRINKLERED BUILDING (TABLE 803.5):

| | |
|---|---|
| GROUP A-3: | |
| EXIT ENCLOSURES AND EXIT PASSAGEWAYS | CLASS B |
| CORRIDORS | CLASS B |
| ROOMS AND ENCLOSED SPACES | CLASS C |
| GROUP AND E: | |
| EXIT ENCLOSURES AND EXIT PASSAGEWAYS | CLASS B |
| CORRIDORS | CLASS C |
| ROOMS AND ENCLOSED SPACES | CLASS C |

INTERIOR FLOOR FINISH:
CLASS II OR DOC FF-1 COMPLIANT MATERIALS IN BUILDINGS WITH FIRE SPRINKLERS (PARAGRAPH 804.4.1 EXCEPTION)

FIRE SPRINKLERS:
PROVIDED.

FIRE ALARM:
GROUP A: MANUAL FIRE ALARM BOXES NOT REQUIRED WHERE BUILDING FIRE SPRINKLER SYSTEM WILL ACTIVATE FIRE ALARM NOTIFICATION APPLIANCES (PARAGRAPH 907.2.1 EXCEPTION)
GROUP E: MANUAL FIRE ALARM SYSTEM REQUIRED (PARAGRAPH 907.2.3)

FIRE EXTINGUISHERS:
REQUIRED FOR DORMITORIES PER NFPA 1 TABLE 13.6.2.

MAXIMUM TRAVEL DISTANCE TO A FIRE EXTINGUISHER 75 FT (NFPA 1 TABLE 13.6.6.2.1)

FIRE DEPARTMENT ACCESS:
FIRE DEPARTMENT ACCESS ROAD REQUIRED TO EXTEND WITHIN 50 FT OF AT LEAST ONE EXTERIOR DOOR THAT CAN BE OPENED FROM OUTSIDE AND PROVIDE ACCESS TO INTERIOR OF BUILDING (NFPA 1 PARAGRAPH 18.2.3.2.1)

ALL PORTIONS OF EXTERIOR WALLS SHALL BE WITHIN 300 FT OF FIRE DEPARTMENT ACCESS ROADS FOR BUILDINGS WITH FIRE SPRINKLERS (NFPA 1 PARAGRAPH 18.2.3.2.2.1 AS AMENDED BY HAWAII COUNTY)

MEANS OF EGRESS:

OCCUPANT LOAD:
OCCUPANT LOAD FACTOR (TABLE 1004.1):
ASSEMBLY, UNCONCENTRATED: 15 SF NET PER OCCUPANT
EDUCATIONAL, CLASSROOM: 20 NET PER OCCUPANT

CALCULATED OCCUPANT LOAD:
ASSEMBLY: 8,479 SF / 15 SF PER OCCUPANT = 566 OCCUPANTS
ASSEMBLY: 12,179 SF / 20 SF PER OCCUPANT = 610 OCCUPANTS

MEANS OF EGRESS COMPONENTS:
EXIT DOORS AND STAIRS LEADING TO THE EXTERIOR

NUMBER OF MEANS OF EGRESS:
THREE MEANS OF EGRESS REQUIRED FOR THE MULTIPURPOSE/DINING SINCE THE CALCULATED OCCUPANT LOAD EXCEEDS 500 (TABLE 1019.1).

ONE MEANS OF EGRESS REQUIRED FOR EACH ROOM (OTHER THAN MULTI-PURPOSE/DINING) SINCE OCCUPANT LOAD DOES NOT EXCEED 49 IN EACH ROOM (TABLE 1015.1).

EGRESS WIDTH IN BUILDING WITH FIRE SPRINKLERS (TABLE 1005.1):
STAIRWAYS 0.2 INCHES PER OCCUPANT
OTHER EGRESS COMPONENTS 0.15 INCHES PER OCCUPANT

BUILDING:
CALCULATED EGRESS WIDTH REQUIRED = 1,362 OCCUPANTS X 0.20 INCHES PER OCCUPANT = 272.4 INCHES (22.7 FT)
THE EXISTING STAIRS HAVE A COMBINED WIDTH OF APPROXIMATELY 53 FEET.

MULTI-PURPOSE DINING:
CALCULATED EGRESS WIDTH REQUIRED = 610 OCCUPANTS X 0.15 INCHES PER OCCUPANT = 91.5 INCHES
CALCULATED EGRESS WIDTH REQUIRED FOR CLASSROOMS EXITING THROUGH MULTI-PURPOSE DINING:
= 176 OCCUPANTS (BASED ON NUMBER OF CHAIRS IN CLASSROOMS) X 0.15 INCHES PER OCCUPANT = 26.4 INCHES
TOTAL CALCULATED EGRESS WIDTH REQUIRED = 91.5 + 26.4 = 117.9 INCHES
THREE DOUBLE DOORS WILL PROVIDE 192 INCHES (64 INCHES X 3) OF CLEAR EXIT WIDTH.

MEANS OF EGRESS ILLUMINATION:
REQUIRED (PARAGRAPH 1006.1)

EMERGENCY LIGHTING:
REQUIRED FOR AISLES IN ROOMS THAT REQUIRE TWO MEANS OF EGRESS (PARAGRAPH 1006.3.1)
REQUIRED FOR CORRIDORS IN BUILDINGS THAT REQUIRE TWO MEANS OF EGRESS (PARAGRAPH 1006.3.2)

ACCESSIBLE MEANS OF EGRESS:
ACCESSIBLE EXITING WILL BE PROVIDED BY EXTERIOR RAMPS LEADING TO THE PARKING AREA OF PUBLIC WAY

COMMON PATH OF TRAVEL:
GROUP A-3: 75 FT (PARAGRAPH 1014.3)
GROUP E: 75 FT (PARAGRAPH 1014.3)

DEAD END CORRIDOR:
GROUP A-3: 20 FT (PARAGRAPH 1017.3)
GROUP E: 20 FT (PARAGRAPH 1017.3)

TRAVEL DISTANCE IN A BUILDING WITH FIRE SPRINKLERS (TABLE 1016.1):
GROUP A-3: 250 FT
GROUP E: 250 FT

EXIT DISCHARGE:
EXIT DISCHARGE WILL BE PROVIDED BY SIDEWALKS LEADING FROM EXTERIOR STAIRS TO THE PUBLIC WAY.

NOTES:
SEE SHEET G-005 FOR LIFE SAFETY PLAN


Youth Challenge Academy
Hawaii National Guard Challenge Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE


| SYM | DESCRIPTION | SHEET-ISS- | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES XXX | DRW XXX | CHK XXX

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
CODE SUMMARY

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 4 OF 131
G-004

EXIT STAIR
EGRESS WIDTH PER OCCUPANT REQUIRED: 0.20 INCHES
CLEAR EXIT WIDTH: 106 INCHES
EXIT CAPACITY: 530 OCCUPANTS

EXIT RAMP
EGRESS WIDTH PER OCCUPANT REQUIRED: 0.15 INCHES
CLEAR EXIT WIDTH: 36 INCHES
EXIT CAPACITY: 240 OCCUPANTS

GROUP E
MAXIMUM COMMON PATH
OF TRAVEL = 56 FT

1 HOUR FIRE
RATED WALL (E)

GROUP A-3
MAXIMUM TRAVEL
DISTANCE = 155 FT

GROUP E
MAXIMUM TRAVEL
DISTANCE = 166 FT

EXIT STAIR
EGRESS WIDTH PER OCCUPANT
REQUIRED: 0.20 INCHES
CLEAR EXIT WIDTH: 119 INCHES
EXIT CAPACITY: 595 OCCUPANTS

EXIT STAIR
EGRESS WIDTH PER OCCUPANT REQUIRED: 0.20 INCHES
CLEAR EXIT WIDTH: 180 INCHES
EXIT CAPACITY: 900 OCCUPANTS

OPEN
TO
ABOVE

EXIT STAIR
EGRESS WIDTH PER OCCUPANT
REQUIRED: 0.20 INCHES
CLEAR EXIT WIDTH: 53 INCHES
EXIT CAPACITY: 626 OCCUPANTS

GROUP E
13,565 SF

EXIT STAIR
EGRESS WIDTH PER OCCUPANT REQUIRED: 0.20 INCHES
CLEAR EXIT WIDTH: 189 INCHES
EXIT CAPACITY: 945 OCCUPANTS

EXIT RAMP
EGRESS WIDTH PER OCCUPANT REQUIRED: 0.15 INCHES
CLEAR EXIT WIDTH: 42 INCHES
EXIT CAPACITY: 280 OCCUPANTS

GROUP A-3
8,479 SF

GROUP B
18,582 SF

## LEGEND

- 1 HOUR FIRE RATED WALL
- DESIGNATED EXITS
- FCP — FIRE ALARM CONTROL PANEL
- FEC — FIRE EXTINGUISHER, 4A:60B:C IN CABINET
- ⊗ABC — FIRE EXTINGUISHER, 4A:60B:C ON BRACKET
- WET PIPE SPRINKLER RISER
- GROUP E OCCUPANCY
- GROUP A-3 OCCUPANCY
- GROUP B OCCUPANCY

# BUILDING 621 LIFE SAFETY PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

NOTES:
1. GROUP A-3 DOES NOT HAVE A COMMON PATH OF TRAVEL.
2. BUILDING DOES NOT HAVE DEAD END CORRIDORS.

0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

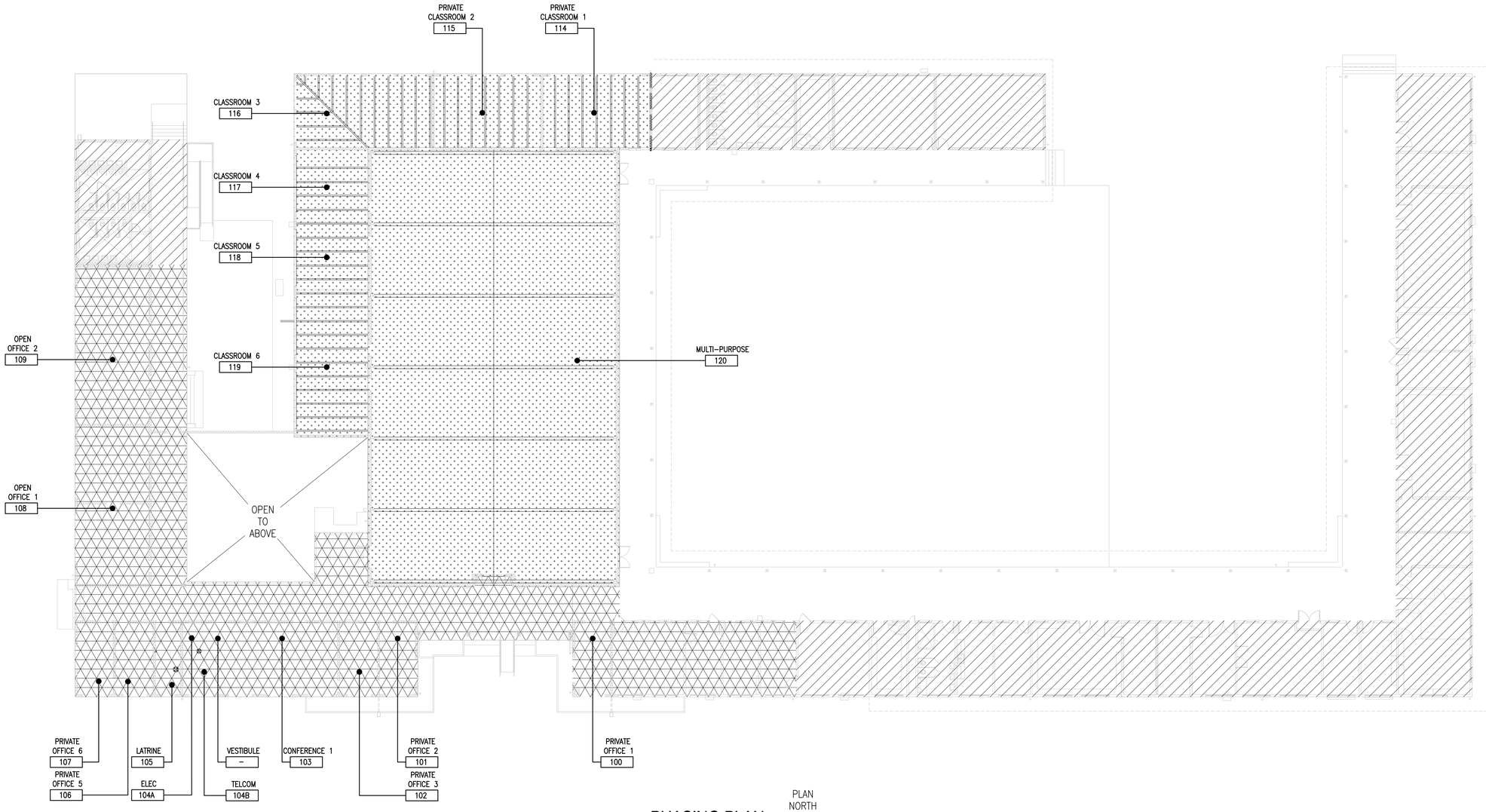

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
BUILDING 621 LIFE SAFETY PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 5 OF 131
G-005




## PHASING PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

### LEGEND

- PHASE 1
- PHASE 2
- NOT IN CONTRACT

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ (#)_ | DATE | APPR |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

PHASING PLAN

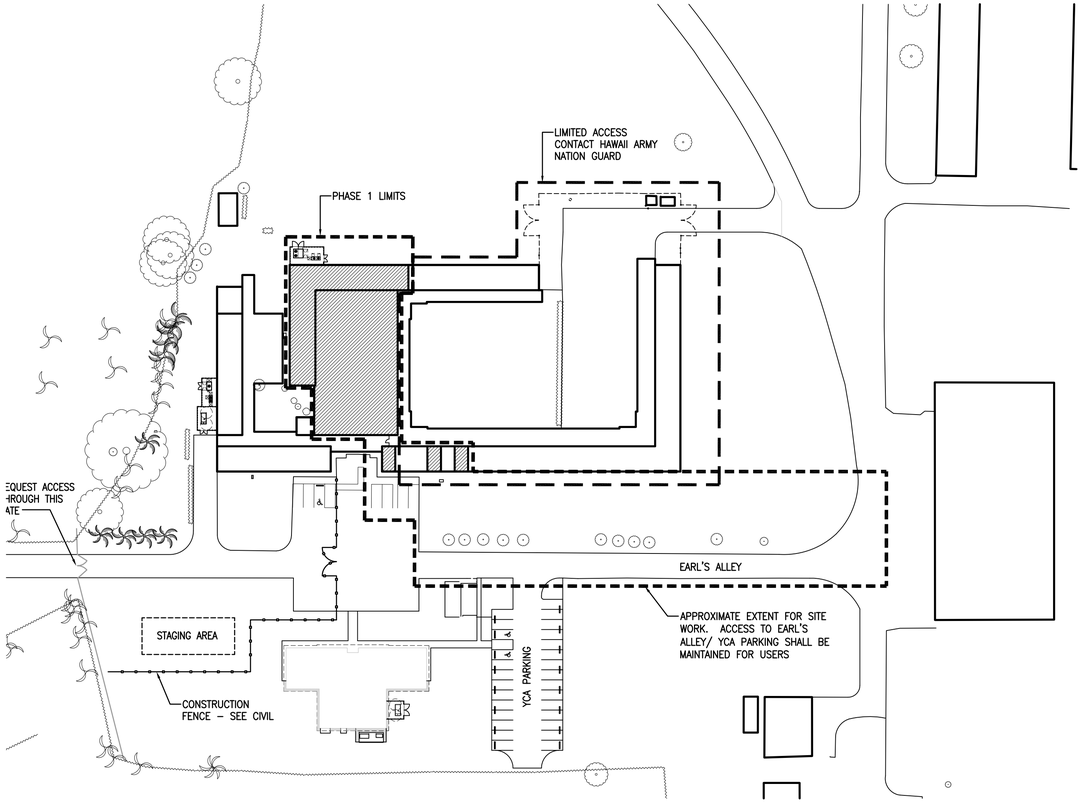
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 6 OF 131

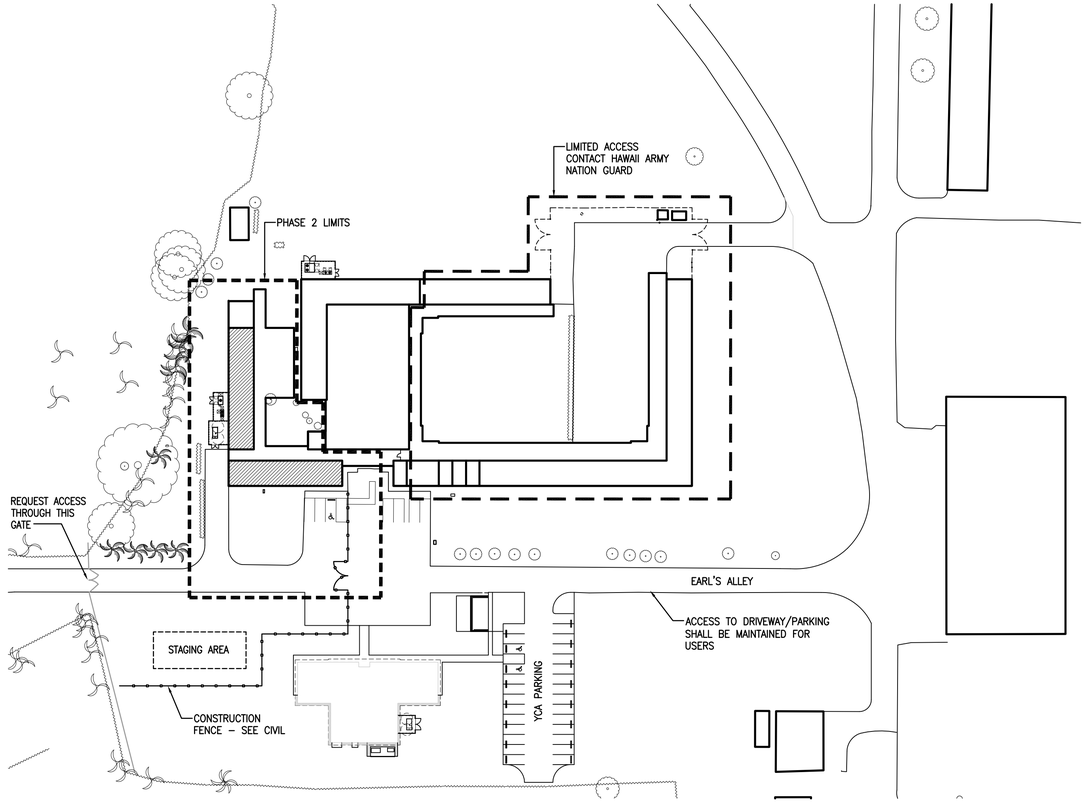
G-006




STAGING PLAN (PHASE 1 - MULTI-PURPOSE ROOM / CLASSROOMS)

SCALE: N.T.S.

PLAN NORTH




STAGING PLAN (PHASE 2 - OFFICES)

SCALE: N.T.S.

PLAN NORTH

## LEGEND:

CONSTRUCTION FENCE

APPROXIMATE AREA OF WORK


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE

FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

STAGING PLAN

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 7 OF 131

G-007

## HAZARDOUS MATERIALS NOTES FOR THE YCA PORTION OF BUILDING 621

A HAZARDOUS MATERIALS SURVEY HAS BEEN CONDUCTED TO IDENTIFY POTENTIALLY HAZARDOUS MATERIALS THAT ARE EXPECTED TO BE DISTURBED DURING THE SUBJECT PROJECT. SUSPECT MATERIALS WHICH WERE EVALUATED INCLUDED THOSE WHICH MAY CONTAIN: ASBESTOS, ARSENIC, AND LEAD.

THE RESULTS OF THE SURVEY ARE CONTAINED IN THE REPORT: "REPORT OF FINDINGS, HAZARDOUS MATERIALS TESTING SERVICES, PROJECT NUMBERS: FEDERAL: 15130007; STATE: CA-1212-C, KEAUKAHA MILITARY RESERVATION, BUILDING 621, HAWAII YOUTH CHALLENGE ACADEMY (YCA) (PHASE 2-3), 1046 LEILANI STREET, HILO, HAWAII ISLAND, HAWAII," DATED JANUARY 25, 2013.

SHOULD THE SCOPE OF THE PLANNED PROJECT CHANGE OR IF HIDDEN MATERIALS ARE ENCOUNTERED DURING THE DEMOLITIONS/RENOVATIONS WHICH HAVE NOT BEEN PREVIOUSLY CHARACTERIZED, SUSPECT MATERIALS SHOULD BE ASSUMED TO BE HAZARDOUS UNLESS TESTING PROVES OTHERWISE. SPECIFICALLY, SEVERAL ROOMS WERE INACCESSIBLE AT THE TIME OF THE SURVEY. ROOMS WHICH WERE NOT SURVEYED ARE LABELED AS 'LOCKED'. SUSPECT MATERIALS MAY BE PRESENT IN THOSE ROOMS NOT SURVEYED.

THE CONTRACTOR SHALL REFER TO THE ABOVE-MENTIONED HAZARDOUS MATERIALS REPORT PRIOR TO DISTURBING ANY MATERIALS.

### ASBESTOS

ASBESTOS HAS BEEN IDENTIFIED IN THE FOLLOWING HOMOGENOUS SAMPLE SETS / MATERIALS:

FLOOR TILE AND MASTIC:
1. SAMPLES A1-A3 & A7-A9, GREEN FLOOR TILE WITH BLACK MASTIC, B621 ROOMS 3,6,7,8,9 (6% CHRYSOTILE IN GREEN TILE AND 4-5% CHRYSOTILE IN BLACK MASTIC),
~3,670 SF TOTAL, BUILDING WIDE (THIS ASSUMES THAT ROOMS 2, 4, AND 5, INACCESSIBLE AT THE TIME OF OUR VISIT, ALSO CONTAIN THE SAME TILE)

THE CONTRACTOR SHALL ABATE THE TILE/MASTIC LOCATED IN ROOM 6 (THE LATRINE BETWEEN ROOMS 5 AND 7), AS SHOWN IN THE DRAWING HATCHED AREA. ADDITIONALLY, THE CONTRACTOR SHALL ALSO ABATE THE FLOOR TILE IN ROOM 7, WITHIN THE FOOTPRINT OF THE NEW WALLS TO BE BUILT, SO THAT THE NEW WALLS WILL BE INSTALLED UPON THE CONCRETE SUBSTRATE: A TOTAL OF ~140 SF FOR BOTH AREAS. THE NEW WALLS ARE CIRCLED. THE REST OF THE TILE IN ROOM 7 SHALL REMAIN.

WINDOW CAULK:
2. SAMPLES A16-A18, WINDOW CAULKING AT GLASS PANE AND METAL FRAME, B621, ROOMS 1-9 EXTERIOR (2% CHRYSOTILE),
~800 LF

3. SAMPLES A19-A21, WINDOW CAULKING AT METAL FRAME AND CONCRETE WALL, B621, ROOMS 1-9 EXTERIOR (3% CHRYSOTILE),
~400 LF

THE CONTRACTOR SHALL ABATE THIS MATERIAL TO THE EXTENT NECESSARY TO FULFILL THE REQUIREMENTS OF THE PROJECT SCOPE.

WHERE SUSPECT OR CONFIRMED ACM IS ENCOUNTERED, A QUALIFIED ASBESTOS ABATEMENT CONTRACTOR POSSESSING A VALID C-19 LICENSE SHOULD BE RETAINED TO REMOVE ANY ACM THAT WILL BE AFFECTED BEFORE DEMOLITION OR RENOVATION OPERATIONS BEGIN THAT COULD DISTURB THE MATERIAL. CONTRACTORS THAT REMOVE DISTURB, OR DISPOSE ACM MUST COMPLY WITH ALL CURRENT FEDERAL AND STATE REGULATIONS AND CONTRACT SPECIFICATIONS.

### LEAD

LEAD-BASED SURFACES/PAINTS HAVE BEEN IDENTIFIED IN THE FOLLOWING SAMPLES:

1. SAMPLE L4, BROWN WOOD DOOR / FRAME, B621, ALL (1.2000%)

2. SAMPLE L5, BROWN METAL POST, B621, EXTERIOR (1.4000%)

LEAD-CONTAINING SURFACES/PAINTS HAVE BEEN IDENTIFIED IN THE FOLLOWING SAMPLES:

1. SAMPLE L1, WHITE CANEC CEILING PANEL, B621, ROOMS 3,6,7,8,9 (0.0830%)

2. SAMPLE L2, WHITE BRICK WALL, B621, ALL INTERIOR (0.0590%)

3. SAMPLE L3, GREEN WOOD DOOR / FRAME, B621, ROOM 6 (RESTROOM) (0.0210%)

4. SAMPLE L6, BROWN BRICK COLUMN, B621, EXTERIOR (0.4000%)

5. SAMPLE L7, OFF-WHITE BRICK WALL, B621, EXTERIOR (0.0190%)

6. SAMPLE L12, GREEN BRICK WALL, B621, ROOM 42 (0.0410%)

7. SAMPLE L13, WHITE METAL COLUMN, B621, GYM (0.2500%)

ALTHOUGH THE LEAD CONTENT OF ANY PAINTED/COATED SURFACE CAN VARY FROM AREA TO AREA, THOSE SURFACES ENCOUNTERED BY THE CONTRACTOR THAT APPEAR HOMOGENEOUS WITH THE SURFACES DESCRIBED IN TABLE 2, OF THE ABOVE-MENTIONED REPORT, SHOULD BE EVALUATED WITH DISCRETION AS THEY MAY CONTAIN COMPARABLE AMOUNTS OF LEAD.

DURING ANY WORK WHICH DISTURBS PAINTED/COATED SURFACES, PAINT CHIPS SHALL NOT BE ALLOWED TO FALL TO UNPROTECTED GROUND. PROTECT THE GROUND AND OTHER AREAS WHERE PAINT CHIPS ARE LIKELY TO FALL, WITH PLASTIC SHEETING. WHERE WIND IS LIKELY TO DISPERSE PAINT CHIPS UPON DISTURBANCE, THE CONTRACTOR SHALL REMOVE ALL LOOSE AND FLAKING PAINT WITH A HEPA VACUUM POSITIONED AT THE POINT OF REMOVAL AND SUCH THAT NO PAINT CHIPS ARE ALLOWED TO ESCAPE THE LEAD-CONTROL AREA TO THE SURROUNDING ENVIRONMENT.

DURING ALL CONSTRUCTION WORK WHERE AN PERSON MAY BE OCCUPATIONALLY EXPOSED TO LEAD OR WHERE LEAD-BASED/CONTAINING SURFACES ARE EXPECTED TO BE DISTURBED, CONTROLLED, OR DISPOSED, CONTRACTORS MUST COMPLY WITH ALL CURRENT FEDERAL AND STATE REGULATIONS, AND CONTRACT SPECIFICATIONS.

### LIGHTING

CONTRACTORS SHOULD VISUALLY INSPECT ALL LIGHT FIXTURES TO DETERMINE THE PROPER DISPOSAL METHOD. BALLASTS MANUFACTURED SINCE 1979 THAT DO NOT CONTAIN PCBS ARE USUALLY LABELED WITH A STICKER TO THAT EFFECT. BALLASTS THAT DO NOT HAVE THE STICKER SHOULD BE SEGREGATED AND TREATED AS IF THEY DO CONTAIN PCBS FOR PROPER DISPOSAL. IF PCB BALLASTS HAVE BEEN PUNCTURED OR ARE LEAKING, THEY MUST BE HANDLED AND DISPOSED OF PROPERLY. WHERE BALLASTS ARE HANDLED AND/OR DISPOSED IN ANY WAY, THE CONTRACTOR MUST COMPLY WITH ALL CURRENT FEDERAL AND STATE REGULATIONS, AND CONTRACT SPECIFICATIONS, INCLUDING THE DISPOSAL REQUIREMENTS FOR FLUORESCENT LIGHT BALLASTS FROM THE TSCA WHEN DISPOSING OF ANY LIGHTING BALLAST.

LAMPS IN THE LIGHTING STANDARDS FOUND IN THE BUILDINGS SURVEYED MAY FALL UNDER THE CATEGORY OF "UNIVERSAL WASTE." EXAMPLES OF COMMON UNIVERSAL WASTE ELECTRIC LAMPS INCLUDE, BUT ARE NOT LIMITED TO, FLUORESCENT, HIGH INTENSITY DISCHARGE, NEON, MERCURY VAPOR, HIGH PRESSURE SODIUM, AND METAL HALIDE LAMPS. THE CONTRACTOR IS RESPONSIBLE FOR CHARACTERIZING WHICH TYPE OF LAMP WILL BE DEMOLISHED AS PART OF THE SUBJECT PROJECT.

CONTRACTORS MUST COLLECT, PROPERLY HANDLE, AND DISPOSE OF UNIVERSAL WASTE IN ACCORDANCE WITH ALL CURRENT FEDERAL AND STATE REGULATIONS, AND CONTRACT SPECIFICATIONS, INCLUDING EPA 40 CFR 273, STANDARDS FOR UNIVERSAL WASTE MANAGEMENT. THE PROVISIONS FOUND IN EPA 40 CFR 260-268 MAY ALSO APPLY.

### ARSENIC

LABORATORY ANALYSIS OF THE CANEC PANEL SAMPLES ARE AS FOLLOWS:

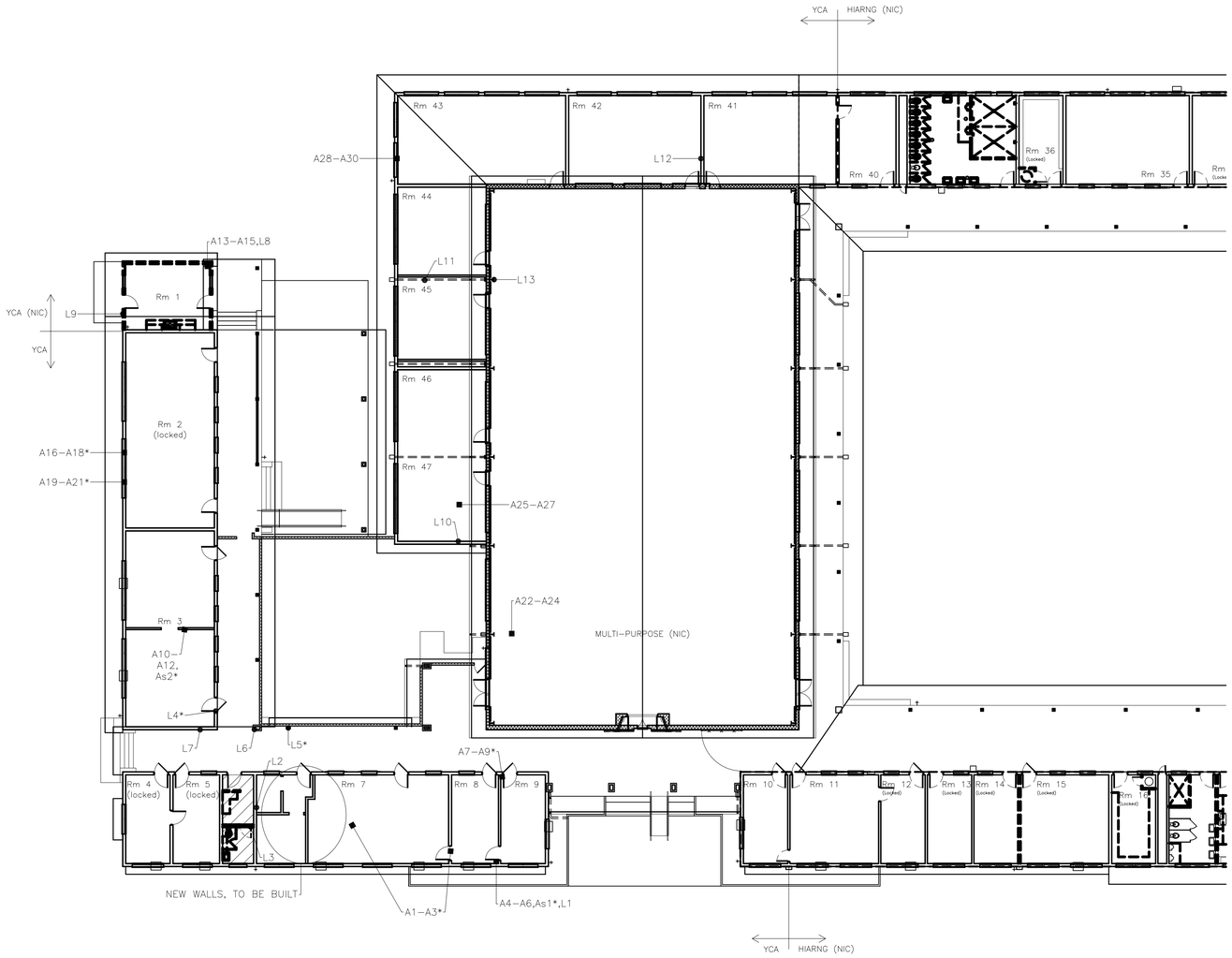
1. AS1 - WHITE CEILING PANEL, BROWN INNER, B621, ROOMS 3,6,7,8,9 (1800.0 MG/KG)

2. AS2 - WHITE WALL PANEL, BROWN INNER, B621, ROOM 3 SEPARATOR WALL (350.0 MG/KG)

BASED ON THE LABORATORY RESULTS, THE DISTURBANCE OF THESE PANELS COULD RESULT IN AN ARSENIC DUST HAZARD. THE CONTRACTOR SHALL ASSUME THAT ALL "CANEC-TYPE" MATERIALS PRESENT CONTAIN MEASURABLE ARSENIC. WORK THAT INVOLVES THE DISTURBANCE OF ARSENIC-CONTAINING MATERIALS SHALL BE CONDUCTED IN A WAY THAT DOES NOT PRODUCE VISIBLE DUST.

WHERE THE CONTRACTOR ENCOUNTERS MATERIALS CONTAINING ARSENIC, THE PROVISIONS, INCLUDING BUT NOT LIMITED TO THOSE, FOUND IN OSHA 29 CFR 1910.1018, 29 CFR 1910 & 1926 SUBPART Z, TOXIC AND HAZARDOUS SUBSTANCES AND HIOSH 12-202 HEALTH STANDARDS, TOXIC MATERIALS AND HARMFUL PHYSICAL AGENTS, SHALL BE FOLLOWED. THESE REGULATIONS APPLY TO ALL CONSTRUCTION WORK WHERE AN EMPLOYEE MAY BE OCCUPATIONALLY EXPOSED TO ARSENIC. CONTRACTORS WHO DISTURB ARSENIC-CONTAINING BUILDING MATERIALS MUST COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND CONTRACT SPECIFICATIONS TO MANAGE ARSENIC-CONTAINING MATERIALS IN SUCH A WAY THAT DOES NOT RESULT IN WORKER OR PUBLIC EXPOSURE OF ARSENIC-CONTAMINATED DUST OR DEBRIS.

WITH RESPECT TO DISPOSAL OF SUCH MATERIALS, A REGULATORY EXCLUSION FOR ARSENICALLY TREATED WOOD PRODUCTS EXISTS UNDER FEDERAL HAZARDOUS WASTE REGULATIONS, BUT THE MATERIAL SHOULD BE DISPOSED OF APPROPRIATELY AND IN ACCORDANCE WITH ANY ADDITIONAL REQUIREMENTS A STATE-LICENSED LANDFILL MAY IMPOSE.




## YCA - HAZARDOUS MATERIALS NOTES AND SAMPLED LOCATIONS

SCALE: 1/16" = 1'-0"

PLAN NORTH

LEGEND
- A1 Building material sample ID and approximate location * = ACM
- ACM floor tile, to be abated
- L1 Paint chip sample ID and approximate location * = LBP
- As1 Conec-type material sample ID and approximate location * = contains arsenic

0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"

Youth Hawaii ChalleNGe National Guard Academy


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MASANOBU R. FUJIOKA
LICENSED PROFESSIONAL ENGINEER
No. 4357-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION 4/30/2018
SIGNATURE EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

| DES | DJM | DRW | DJM | CHK | MRF |
|---|---|---|---|---|---|

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
HAZARDOUS MATERIALS NOTES AND SAMPLED LOCATIONS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 8 OF 131
H-001

# ABBREVIATIONS

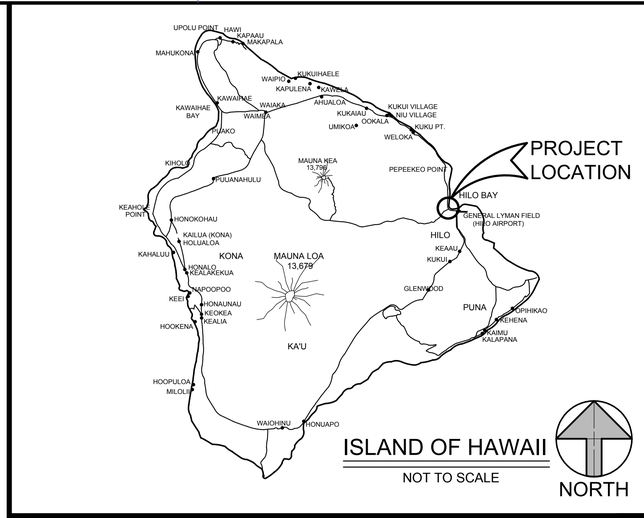
| | |
|---|---|
| AC | ASPHALTIC CONCRETE PAVEMENT |
| BL | BASE LINE |
| BMP | BEST MANAGEMENT PRACTICES |
| CL | CENTERLINE, CLASS |
| CO | CLEANOUT |
| CONC | CONCRETE |
| CONN | CONNECTION |
| CONT | CONTINUATION |
| COTG | CLEANOUT TO GRADE |
| CY | CUBIC YARD |
| D | DIAMETER/DRAIN |
| DI | DUCTILE IRON |
| DIA | DIAMETER |
| DTL | DETAIL |
| DWG | DRAWING |
| DWS | DEPARTMENT OF WATER SUPPLY |
| ELEC | ELECTRICAL |
| ELEV | ELEVATION |
| EPA | ENVIRONMENTAL PROTECTION AGENCY |
| EXIST | EXISTING |
| FFE | FINISH FLOOR ELEVATION |
| FTG | FOOTING |
| FT | FEET |
| GA | GAUGE |
| GALV | GALVANIZED |
| GPM | GALLONS PER MINUTE |
| GV | GATE VALVE |
| H | HEIGHT, HORIZONTAL |
| HIARNG | HAWAII ARMY NATIONAL GUARD |
| HIARNG–ENV | HAWAII ARMY NATIONAL GUARD ENVIRONMENTAL OFFICE |
| HORIZ | HORIZONTAL |
| ID | INSIDE DIAMETER |
| INV | INVERT |
| L | LENGTH |
| LBS | POUNDS |
| LF | LINEAL FEET |
| LT | LEFT TANGENT |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MH | MANHOLE |
| MIN | MINIMUM |
| NIC | NOT IN CONTRACT |
| N/A | NOT APPLICABLE |
| ND | NOMINAL DIAMETER |
| NO | NUMBER |
| NPDES | NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM |
| O/H | OVERHEAD |
| O/S | OFFSET |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| PL | PROPERTY LINE |
| POC | POINT OF CONNECTION |
| PSI | POUNDS PER SQUARE INCH |
| PVC | POLYVINYL CHLORIDE |
| R | RADIUS |
| RC | REINFORCED CONCRETE |
| RD | ROAD |
| REF | REFERENCE |
| ROW | RIGHT–OF–WAY |
| RT | RIGHT TANGENT |
| S | SLOPE, SEWER |
| SSF | SQUARE FEET |
| SHT | SHEET |
| SL | SEWER LINE |
| SMH | SEWER MANHOLE |
| SPEC | SPECIFICATIONS |
| SQ | SQUARE |
| STA | STATION |
| STD | STANDARD |
| SWPPP | STORM WATER POLLUTION PREVENTION PLAN |
| T | TOP |
| TEL | TELEPHONE |
| TMK | TAX MAP KEY |
| TYP | TYPICAL |
| UICS | UNDERGROUND INJECTION CONTROLS |
| UP | UTILITY POLE |
| VB | VALVE BOX |
| W | WIDE, WATER |
| W/ | WITH |
| WM | WATER METER |
| WV | WATER VALVE |
| WWF | WELDED WIRE FABRIC |
| YCA | YOUTH CHALLENGE ACADEMY |

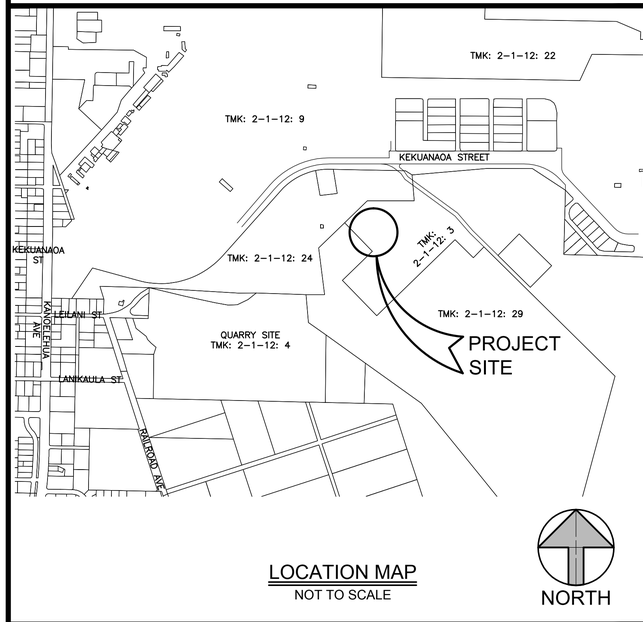
# GENERAL NOTES

1. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," SEPTEMBER 1986, AND "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION," SEPTEMBER 1984, OF THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF HAWAII, AND INCLUDING SUPPLEMENTS AND AMENDMENTS MADE THERETO.
2. TOPOGRAPHIC SURVEY WORK COMPLETED BY CONTROL POINT SURVEYING, INC. DATED SEPTEMBER 6, 2012.
3. ALL COORDINATES AND AZIMUTHS ARE REFERRED TO GOVERNMENT TRIANGULATION STATION "HALAI." ELEVATIONS ARE REFERENCED TO MEAN SEA LEVEL.
4. ALL ELEVATIONS AND DISTANCES SHOWN ON PLANS ARE IN FEET.
5. FOR BENCH MARK, SEE SHEET CS100.
6. DIMENSIONS TAKE PRECEDENCE OVER SCALE.
7. WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO ON THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR.
8. ALL EXISTING UTILITY LOCATIONS SHOWN ON PLANS AND PROFILES ARE BASED ON AVAILABLE SOURCES. THE CONTRACTOR SHALL VERIFY PRIOR TO ITS CONSTRUCTION, THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGE DUE TO HIS CONSTRUCTION PRACTICES. BEFORE DISRUPTING SERVICE OF ANY UTILITY, THE CONTRACTOR SHALL CONTACT AND COORDINATE ITS WORK WITH THE RESPONSIBLE UTILITY AUTHORITY.
9. THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
10. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM APPROPRIATE GOVERNMENT AGENCIES, EXCEPT THE NPDES PERMIT COVERAGE AUTHORIZING DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHICH HAS BEEN OBTAINED BY THE OWNER.
11. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE NPDES PERMIT AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY NEW NPDES PERMITS OR UPDATES TO THE NPDES PERMITS AND SWPPP AFTER CONSTRUCTION CONTRACT HAS BEEN EXECUTED. THE CONTRACTOR SHALL MAINTAIN (1) A COPY OF THE NPDES PERMIT ON SITE AND (2) ORIGINAL SWPPP. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE NPDES PERMIT AND SWPPP, INCLUDING TRAINING, MONITORING, AND REPORTING. ALL COSTS INCURRED IN COMPLYING WITH THE CONDITIONS OF THE NPDES PERMIT AND SWPPP SHALL BE BORNE BY THE CONTRACTOR.
12. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR UTILITIES SUCH AS ELECTRICITY, WATER, ETC. REQUIRED FOR ITS OPERATIONS AND ALL COST SHALL BE BORNE BY THE CONTRACTOR.
13. THE CONTRACTOR SHALL CONDUCT ALL TESTS AS REQUESTED BY THE PROJECT MANAGER AND BE RESPONSIBLE FOR EXPENSES INCURRED IN CONDUCTING THESE TESTS.
14. IF DIMENSIONAL ERRORS OR CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AND SHALL WAIT FOR CLARIFICATION BEFORE RESUMING OR COMMENCING WORK ON THE DISCREPANCY ITEM.
15. THE CONTRACTOR SHALL COORDINATE THE STORAGE OF ITS MATERIAL AND EQUIPMENT WITH THE PROJECT MANAGER.
16. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," AND TO THE SATISFACTION OF THE ENGINEER.
17. CONTRACT LIMITS ARE 5 FEET OUTSIDE THE PROJECT AND DEMOLITION LIMITS DELINEATED ON PLAN. THE CONTRACTOR SHALL RESTRICT ITS WORK ACTIVITIES, EQUIPMENT AND MATERIALS TO WITHIN THE CONTRACT LIMITS, UNLESS PERMITTED BY THE PROJECT MANAGER.
18. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER "AS–BUILT" DRAWINGS OF ALL NEW AND/OR RELOCATED UTILITIES, TRAFFIC CONTROL DEVICES, AND ALL STRUCTURES UPON COMPLETION OF WORK.
19. THE CONTRACTOR SHALL PROTECT ALL EXISTING PAVEMENT FROM DAMAGE DUE TO ITS CONSTRUCTION PRACTICES. IN THE EVENT OF DAMAGE, THE CONTRACTOR SHALL CONTACT AND COORDINATE ITS WORK WITH THE RESPONSIBLE AUTHORITY.
20. THE CONTRACTOR SHALL ERECT AND MAINTAIN A CONSTRUCTION FENCE IN THE GENERAL ALIGNMENT SHOWN. FENCE SHALL BE INSTALLED AT THE START OF CONSTRUCTION AND BE REMOVED UPON COMPLETION OF THE CONTRACT. MINIMUM HEIGHT OF FENCE SHALL BE EIGHT (8) FEET. FENCE SHALL BE DESIGNED BY THE CONTRACTOR AND BE ADEQUATE FOR WIND LOADS AND OTHER SITE CONDITIONS. SUBMIT SHOP DRAWING OF PROPOSED FENCE IDENTIFYING MATERIAL OF CONSTRUCTION AND FINISH OF FENCING.

# SOLID WASTE CONSTRUCTION NOTES

1. UNLESS OTHERWISE SPECIFIED THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER HANDLING, STORAGE AND/OR DISPOSAL OF ALL WASTE GENERATED BY THIS CONSTRUCTION, INCLUDING GRUBBING AND EXCESS EXCAVATED MATERIAL. ANY MATERIAL BROUGHT TO THE COUNTY LANDFILLS WILL BE SUBJECTED TO THE INSTITUTED TIPPING FEE SYSTEM, WITH NO EXCEPTIONS OR EXEMPTIONS.
2. ALL WASTES GENERATED BY CONSTRUCTION, INCLUDING GRUBBING, DEMOLITION AND EXCESS EXCAVATION MATERIAL MAY BE BROUGHT TO THE WEST HAWAII OR THE HILO LANDFILL. THE CONTRACTOR SHALL CHECK WITH THE SOLID WASTE DIVISION FOR DISCLOSURE OF THE CURRENT LANDFILL FEE AND CONSIDERATION OF THAT FEE SHALL BE INCLUDED IN THE CONTRACTOR'S BID SUM.
3. CONSTRUCTION, DEMOLITION AND GRUBBING MATERIAL SHALL NOT BE DEPOSITED AT ANY OF THE COUNTY TRANSFER STATIONS, BUT SHALL BE TRANSPORTED FOR DISPOSAL TO EITHER THE WEST HAWAII OR HILO LANDFILL.
4. ASBESTOS MATERIAL MUST BE SEPARATED, DOUBLE BAGGED AND LANDFILLED IN ACCORDANCE WITH REGULATIONS OF THE SOLID WASTE DIVISION, DEPARTMENT OF PUBLIC WORKS. INFORMATION MAY BE OBTAINED BY CALLING THE DIVISION AT (808) 961–8339 BETWEEN 7:00 A.M. AND 4:00 P.M. MONDAY THROUGH FRIDAY.




# INDEX OF CIVIL DRAWINGS:

| DRAWING NO. | DESCRIPTION |
|---|---|
| C–001 | CIVIL LOCATION MAP, INDEX OF DRAWINGS AND CONSTRUCTION NOTES |
| C–002 | CIVIL CONSTRUCTION NOTES |
| CD101 | CIVIL SITE DEMOLITION PLAN |
| CS100 | CIVIL GENERAL SITE AND BORING LOCATION PLAN |
| CS101 | CIVIL SITE LAYOUT AND UTILITY PLAN |
| C–501 | CIVIL SEWER DETAILS |
| C–502 | CIVIL MISCELLANEOUS DETAILS |


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523–9636
FAX: (808) 521–3280
www.ahldesign.com

ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787–C
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE


| | APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|---|
| | | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
CIVIL LOCATION MAP, INDEX OF DRAWINGS AND CONSTRUCTION NOTES

SCALE:
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 9 OF 131
C-001

# SEWER NOTES (PRIVATE SYSTEM)

1. ALL CONSTRUCTION DETAILS AND SPECIFICATIONS NOT SHOWN ON THE PLANS SHALL CONFORM TO THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INVESTIGATION, INSPECTION AND VERIFICATION OF ALL EXISTING UTILITIES SUPPLEMENTED BY ACTUAL DIGGING IN THE FIELD IF NECESSARY, TO DETERMINE THE ACTUAL LOCATION OF SUCH UTILITIES WITH THEIR BRANCH AND SERVICE LINES, WHETHER INDICATED ON PLANS OR NOT.
3. THE CONTRACTOR SHALL BE REQUIRED TO TAKE OUT AND PAY FOR ALL NECESSARY PERMITS AND LICENSES REQUIRED BY LOCAL ORDINANCES FOR THE PROSECUTION OF THIS WORK.
4. WORKMANSHIP SHALL BE FIRST CLASS. ALL WORK SHALL BE PERFORMED BY THE RESPECTIVE TRADE PERSON IN ACCORDANCE WITH APPLICABLE COUNTY ORDINANCE AND STATE REGULATION.
5. THE CONTRACTOR SHALL REPAIR, AT ITS EXPENSE, ALL DAMAGES SUSTAINED DURING THE COURSE OF ITS WORK AND LEAVE COMPLETED WORK IN ITS ORIGINAL OR BETTER CONDITION.
6. ALL DEBRIS RESULTING FROM THE SEWER CONSTRUCTION WORK SHALL NOT BE ALLOWED TO ENTER THE EXISTING SEWER SYSTEM. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BARRIERS AND COLLECTION DEVICES TO PREVENT DEBRIS FROM ENTERING THE SEWER. THE CONTRACTOR SHALL FLUSH ALL NEWLY CONSTRUCTED SEWER PIPE BEFORE CONNECTION TO THE EXISTING SEWER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL DEBRIS THAT ENTERS THE EXISTING SEWER SYSTEM AS A RESULT OF THE CONSTRUCTION WORK.
7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD ANY EXISTING SEWER LINE BE DAMAGED. THE CONTRACTOR SHALL REPAIR THE SEWER LINE AND ANY ROCKS OR DEBRIS THAT ENTERED THE SEWER SYSTEM SHALL BE PHYSICALLY REMOVED FROM THE SEWER TO THE SATISFACTION OF THE ENGINEER. THE WORK MAY INCLUDE FLUSHING AND/OR USE OF A PIPE PIG.
8. UNLESS OTHERWISE APPROVED OR NOTED, ALL SEWER PIPES AND FITTINGS SHALL BE PVC SDR-26 BELL(S) AND SPIGOT. PIPE COUPLINGS SHALL BE WITH AN APPROVED SOLID BODY PVC SLEEVE OR NON-SHEAR RUBBER COUPLING (DFW/HPI OR EQUAL). MATERIALS FOR CLASS B PIPE BEDDING SHALL BE 3/4" AGGREGATE BASE COURSE PLACED IN SUCCESSIVE HORIZONTAL LAYERS OF LOOSE MATERIAL NOT TO EXCEED 6 INCHES IN DEPTH, AND SHALL BE UNIFORMLY CONSILIDATED TO 95 PERCENT MAXIMUM DRY DENSITY. COMPACTION TESTING FOR COMPLIANCE SHALL BE ROUTINELY PERFORMED AND APPROVED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER. ALL TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR FINAL ACCEPTANCE.
9. ALL LATERAL CONNECTIONS TO THE SEWER MAIN SHALL BE MADE WITH A WYE FITTING ROTATED 45 DEGREES ABOVE THE SEWER SPRING LINE.
10. ALL CLEANOUTS SHALL BE EASILY ACCESSIBLE (I.E., NOT BE BURIED OR LOCATED UNDER OR CLOSE TO ROCK WALLS, FENCES OR OTHER OBSTRUCTIONS). IF A CLEANOUT IS DETERMINED INACCESSIBLE, IT SHALL BE RELOCATED AT THE CONTRACTOR'S EXPENSE. THE CLEANOUT SHALL BE OF THE SAME MATERIAL AND DIAMETER (TYPICAL, 6-INCH) AS THAT OF THE SEWER LATERAL PROVIDED. THE CLEANOUT SHALL BE PROVIDED A BRASS COUNTERSUNK CAP AND AN 18"X18"X8" CLASS B CONCRETE COLLAR REINFORCED WITH 1-#3 REINFORCEMENT STEEL LOOP. THE CLEANOUT SUBJECT TO VEHICULAR OR ABNORMAL LOADING SHALL BE PROVIDED A TRAFFIC RATED FRAME/COVER (MODEL SBF 1246 W, MANUFACTURED BY SOUTH BAY FOUNDRY, OR APPROVED EQUAL) INSTALLED TO GRADE WITH AN 24"X24"X8" CLASS B CONCRETE COLLAR REINFORCED 1-#3 REINFORCEMENT STEEL HOOP. SEE SEWER COTG DETAIL.
11. UNLESS OTHERWISE NOTED AND LOCATIONS DETAILED ON APPROVED PLANS, CONCRETE JACKETING OF NEW OR EXISTING SEWER MAINS AND SERVICE LATERALS SHALL NOT BE PERMITTED.
12. ALL SEWER LATERALS SHALL BE SLOPED AT 2.0% UNLESS OTHERWISE NOTED. MAINTAIN 18" VERTICAL CLEARANCE AT WATER LINE CROSSINGS.

# WATER NOTES

1. ALL WORK SHALL CONFORM TO THE DEPARTMENT OF WATER SUPPLY (DWS) WATER SYSTEM STANDARDS, STATE OF HAWAI'I, DATED 2002, AS AMENDED.

   ALL WORK MUST MEET THE APPLICABLE PORTIONS OF WATER SYSTEM STANDARDS, L8, L9, L10, M1, AND M2.
2. ALL TAPS TO THE EXISTING WATER LINES SHALL BE DONE BY DWS PERSONNEL AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL DO ALL EXCAVATION, BACKFILL, PAVEMENT REPAIR, TRAFFIC CONTROL, FURNISH AND INSTALL ALL MATERIALS INCLUDING METER BOX, FRAME AND COVERS, AND ALL APPURTENANT WORK REQUIRED.
3. ALL EXISTING WATER LINES, WATER LINE APPURTENANCES, AND OTHER UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE LATEST RELIABLE SOURCES. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES IN THE FIELD WHETHER SHOWN ON THE PLAN OR NOT, AND SHALL BEAR ALL COST FOR DAMAGES DONE UNTO THEM.
4. THE CONTRACTOR SHALL INFORM THE DWS ENGINEER 72 HOURS PRIOR TO THE BEGINNING OF WORK IN SERVICE LATERAL(S) AND PRIOR TO SERVICE LATERAL(S) TESTING.
5. ALL SERVICE LATERALS SHALL BE SOFT COPPER, TYPE "K" WITH BRASS FITTINGS.
6. THE SERVICE LATERALS SHALL BE TESTED AT MINIMUM OF 225 PSI BY THE CONTRACTOR, UNDER DWS SUPERVISION.
7. THE SERVICE LATERAL INSTALLATION(S) SHALL BE DONE BY A GENERAL CONTRACTOR OR PLUMBER LICENSED TO DO SO IN THE STATE OF HAWAII.
8. THE SERVICE LATERAL(S) SHALL BE FLUSHED BY THE CONTRACTOR UNDER DWS SUPERVISION.
9. SOLDER, 1/8-INCH DIAMETER, AND FLUX SHALL CONTAIN NOT MORE THAN 0.2 PERCENT LEAD.
10. PIPE CUSHION MATERIAL FOR COPPER PIPES SHALL BE FINE AGGREGATE AS SPECIFIED IN TABLE 200-12, IN SECTION 209.01B ON PAGE 209.2 DIVISION 200 OF THE WATER SYSTEM STANDARDS, STATE OF HAWAI'I, DATED 2002, AS AMENDED.

# HAWAII ARMY NATIONAL GUARD ENVIRONMENTAL COMPLIANCE NOTES

1. IN ORDER TO FACILITATE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) REPORTING REQUIREMENTS, PRIOR TO PROJECT START AND WITHIN 30 DAYS OF COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUBMIT TO HIARNG-ENV A HAZARDOUS MATERIAL INVENTORY LOG OF CHEMICAL PRODUCTS TO BE USED IN THE PROJECT, AND PROVIDE AN UPDATE NO LATER THAN 31 JANUARY OF EACH CALENDAR YEAR. THE LOG SHALL INCLUDE THE PRODUCT NAME AND MANUFACTURER ID NUMBER, CONTAINER SIZE, AMOUNT USED, AND MAXIMUM NUMBER OF CONTAINERS TO BE STORED ON SITE AT ANY GIVEN DAY DURING THE PROJECT. HIARNG-ENV MAY WAIVE THIS REQUIREMENT BASED UPON CONTRACTOR REQUEST. (SAMPLE INVENTORY LOG ATTACHED). SAFETY DATA SHEETS (SDSs) SHALL BE PROVIDED OR MADE AVAILABLE TO THE GOVERNMENT COR/PROJECT MANAGER AND HIARNG-ENV UPON REQUEST.
2. PRIOR TO PROJECT START, CONTRACTOR WILL PROVIDE TO HIARNG-ENV AND THE COR/PROJECT MANAGER AN ESTIMATE OF THE MAXIMUM AMOUNT OF HAZARDOUS WASTE, UNIVERSAL WASTE, AND OTHER REGULATED WASTE (E.G., ASBESTOS, LEAD PAINT CHIPS, FLUORESCENT LAMPS, PCB BALLASTS) EXPECTED TO BE GENERATED PER MONTH, AND THE TOTAL AMOUNT ANTICIPATED TO BE STORED ON-SITE AT ANY GIVEN TIME. CONTRACTOR SHALL ALSO PROVIDE NAME OF DISPOSAL/RECYCLING FACILITIES AND TRANSPORTERS TO BE USED FOR HAZARDOUS WASTE, INCLUDING THEIR EPA ID NUMBERS; DISPOSAL/RECYCLING FACILITIES AND TRANSPORTERS USED MUST BE LISTED ON DRMS'S LISTS OF QUALIFIED FACILITIES AND QUALIFIED TRANSPORTERS AT http://www.dispositionservices.dla.mil/newenv/hwdisposal.shtml. ALL WASTE WILL BE STORED IN A SECURED AREA PENDING REMOVAL FOR DISPOSAL, WITH SIGNAGE INDICATING CONTACT INFORMATION, AND SHALL BE MANAGED, PACKAGED, AND TRANSPORTED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. MONTHLY WASTE GENERATION REPORTS SHALL BE PROVIDED TO HIARNG-ENV AND THE COR/PROJECT MANAGER BY THE 5TH OF THE MONTH AFTER THE END OF THE MONTH BEING REPORTED. THE REPORTS SHALL INDICATE THE TYPE OF WASTE AND THE NUMBER OF POUNDS OF EACH TYPE GENERATED IN EACH CONTAINER EACH MONTH. (SAMPLE CONTAINER WASTE COLLECTION LOG AND WASTE GENERATION REPORT ATTACHED).
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS FOR DISPOSAL OF WASTE GENERATED FROM THIS PROJECT AND SHALL PROVIDE COPIES OF ALL WASTE DISPOSAL DOCUMENTATION (INCLUDING ANY REQUIRED LAB ANALYSES, WASTE PROFILES, AND ANY OTHER SUPPORTING DOCUMENTATION) TO THE HIARNG-ENV AND THE COR/PROJECT MANAGER, ALONG WITH DRAFT COPIES OF THE WASTE MANIFESTS FOR REVIEW PRIOR TO WASTE SHIPMENT OFF-SITE FOR DISPOSAL. THE APPLICABLE HIARNG EPA ID NUMBER SHALL BE USED ON WASTE MANIFESTS, AND MANIFESTS WILL ONLY BE SIGNED BY INDIVIDUALS AUTHORIZED BY HIARNG-ENV.
4. ALL CONSTRUCTION SITES ARE SUBJECT TO THE REGULATIONS OF 40 CFR 112 OIL POLLUTION PREVENTION AND ARE REQUIRED TO PREPARE A SITE SPECIFIC SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN IF STORING MORE THAN 1320 GALLONS (G) OF POL ON SITE. A COPY OF THE SPCC PLAN MUST BE SUBMITTED TO HIARNG-ENV BEFORE START OF THE PROJECT AND KEPT READILY AVAILABLE ON SITE. IF THE SITE IS STORING LESS THAN 1320 G OF POL NO SPCC PLAN IS REQUIRED, HOWEVER, THE CONTRACTOR SHALL IMPLEMENT THE APPLICABLE HIARNG SPCC PLAN.
5. CONTRACTOR, IN GENERAL, SHALL BE RESPONSIBLE FOR ASSESSING WHETHER THE PROJECT AND/OR PROJECT ACTIVITIES REQUIRE ENVIRONMENTAL PERMITS AND ARE RESPONSIBLE FOR OBTAINING, IMPLEMENTING AND MAINTAINING ALL APPLICABLE PERMIT REQUIREMENTS.
6. ALL PROJECTS THAT DISTURB MORE THAN 1 ACRE OF SOIL, INCLUDING PROJECTS THAT, CONSIDERED WITH OTHER RELATED PROJECTS (I.E., ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE), CUMULATIVELY DISTURB MORE THAN 1 ACRE OF SOIL, ARE REQUIRED TO OBTAIN AN APPLICABLE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT FROM THE HAWAII DEPARTMENT OF HEALTH (HDOH) AND IMPLEMENT ALL PERMIT REQUIREMENTS, PLANS, AND INSPECTIONS. SITES LESS THAN 1 ACRE ARE REQUIRED TO IMPLEMENT BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONTAMINATED STORMWATER FROM LEAVING THE SITE.
7. CONTRACTORS SHALL BE RESPONSIBLE FOR ASSESSING THE NEED FOR AND OBTAINING THE FOLLOWING PERMITS AS APPLICABLE: NPDES PERMITS FOR CONSTRUCTION ACTIVITY, UNDERGROUND INJECTION CONTROL WELL (UIC), OIL WATER SEPARATOR, GREASE TRAP, AND INDIVIDUAL WASTE WATER SYSTEM. THE ENV OFFICE SHALL BE COPIED ON ALL PERMIT CORRESPONDENCE, AND SHALL BE PROVIDED THE ORIGINAL COPY OF ALL PERMITS.
8. CONTRACTORS ARE REQUIRED TO INSTALL AND MAINTAIN STORMWATER BEST MANAGEMENT PRACTICES (BMPS) AND PROTECTIVE MEASURES (REGARDLESS OF PROJECT SIZE OR SCOPE) TO PREVENT THE POLLUTION OF STORMWATER TO THE MAXIMUM EXTENT PRACTICABLE (MEP).
9. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL EXISTING AND APPLICABLE HIARNG ENVIRONMENTAL PERMITS, E.G., NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS, UIC PERMITS, INDUSTRIAL WASTEWATER DISCHARGE PERMITS (IWDPs), INDIVIDUAL WASTEWATER SYSTEM (IWS) PERMITS, ETC.
10. CONTRACTOR SHALL POST EMERGENCY CONTACT SIGN INDICATING THE NAME AND PHONE NUMBER FOR THE GOVERNMENT COR/PROJECT MANAGER, THE CONTRACTOR EMERGENCY CONTACT, POLICE/FIRE DEPARTMENT 911, AND HIARNG ENV 672-1013. (SAMPLE SIGN ATTACHED). CONTRACTOR SHALL REPORT SPILLS IMMEDIATELY TO THE COR AND HIARNG-ENV AND COMPLETE THE HIARNG SPILL INCIDENT REPORT FORM AS REQUIRED. CONTRACTOR SHALL IMMEDIATELY CLEAN UP ALL SPILLS IAW FEDERAL AND STATE GUIDELINES AND TO THE SATISFACTION OF HIARNG-ENV. CONTRACTOR SHALL MAINTAIN ADEQUATE SPILL SUPPLIES COMMENSURATE WITH THE POTENTIAL FOR SPILLS, AND WILL CONTRACT OUT SPILL CLEANUP BEYOND THEIR CAPABILITIES. CONTRACTOR SHALL ACCOMPLISH ALL REGULATORY VERBAL AND WRITTEN NOTIFICATIONS TO THE STATE EMERGENCY RESPONSE COMMISSION, LOCAL EMERGENCY PLANNING COMMITTEE (LEPC), NATIONAL RESPONSE CENTER (NRC), ENVIRONMENTAL PROTECTION AGENCY (EPA), AS APPLICABLE, AND PROVIDE HIARNG-ENV COPIES OF ALL SPILL REPORTS SUBMITTED.

# HAWAII ARMY NATIONAL GUARD ENVIRONMENTAL COMPLIANCE NOTES (CONTINUED)

11. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING, VIA GENERATOR KNOWLEDGE (INCLUDING APPLICABLE SDS INFORMATION, ETC.), SAMPLING AND TESTING, ETC., THE CONSTITUENTS AND CONCENTRATIONS OF HAZARDOUS SUBSTANCES/MATERIALS (HS/M) RELEASED/SPILLED INTO THE ENVIRONMENT AND DETERMINING THE APPLICABLE AND REGULATORY COMPLIANT METHOD/PROCEDURE TO MITIGATE ANY RESULTING HAZARDOUS (TO HUMAN HEALTH AND THE ENVIRONMENT) CONDITION; APPROPRIATE CLEANUP (INCLUDING CLEANUP OF THE CONTAMINATED MEDIA); APPROPRIATE STORAGE AND MANAGEMENT OF ANY CONTAMINATED MATERIAL/MEDIA; AND PROPER DISPOSAL OF ALL CONTAMINATED MATERIAL/MEDIA. FOR CONTAMINATED WASTE DISPOSAL, THE CONTRACTOR SHALL DETERMINE WHETHER THE WASTE MATERIAL/MEDIA IS A RESOURCE, CONSERVATION AND RECOVERY ACT (RCRA) HAZARDOUS WASTE (HW), WHICH REQUIRES MANAGEMENT AND DISPOSAL PURSUANT TO ALL APPLICABLE RCRA REQUIREMENTS.
12. SEND TO HIARNG-ENV THE DATA FOR NON-HAZARDOUS RECYCLED/DIVERTED WASTE (I.E. WASTE THAT DOES NOT GO INTO THE LANDFILL OR H-POWER) AND NON-HAZARDOUS DISPOSED WASTE FOR ALL CONSTRUCTION PROJECTS. DATA CAN BE PROVIDED BY ANY MEANS (E.G. RECEIPT COPIES, EXCEL TABLE, EMAIL MESSAGE) DATA SHOULD INCLUDE:

    RECYCLED/DIVERTED WASTE
    - -TYPE OF MATERIAL
    - -NET WEIGHT
    - -RECYCLE FACILITY (E.G. SCHNITZER, ISLAND RECYCLING, REFRIGERANT RECYCLING)
    - -TICKET NUMBER (IF AVAILABLE)
    - -COST/REVENUE (IF APPLICABLE)

    DISPOSED WASTE
    - -NET WEIGHT
    - -DISPOSAL FACILITY (E.G. PVT, SCHNITZER)
    - -TICKET NUMBER (IF AVAILABLE)
    - -COST (IF APPLICABLE)
13. IF HAZARDOUS SUBSTANCES/MATERIALS (HAZMAT), E.G., LEAD-BASED PAINT (LBP), ASBESTOS, PCBS, MERCURY LAMPS, ETC., HAVE BEEN DETERMINED TO BE PRESENT WITHIN THE PROJECT SITE AND THE CONTRACT REQUIRES THAT THE CONTRACTOR DEMOLISH, REMOVE, MANAGE, TRANSPORT AND DISPOSED OF THE EXISTING HAZMAT, CONTRACTOR WILL CONDUCT/COMPLETE SUCH HAZMAT ACTIVITIES IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY REQUIREMENTS. SUCH ENVIRONMENTAL REQUIREMENTS INCLUDE, BUT IS NOT LIMITED TO, THE FEDERAL TOXIC SUBSTANCES CONTROL ACT (TSCA) AND THE STATE OF HAWAII DEPARTMENT OF HEALTH SOLID WASTE AND RECYCLING REQUIREMENTS.

Youth Hawaii Challenge Academy — National Guard

ARCHITECTSHAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
E. H. Tamashiro 4/30/2018
SIGNATURE EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | MJS |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION — HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

CIVIL CONSTRUCTION NOTES

SCALE:

STATE JOB NO.
CA-1212-C2

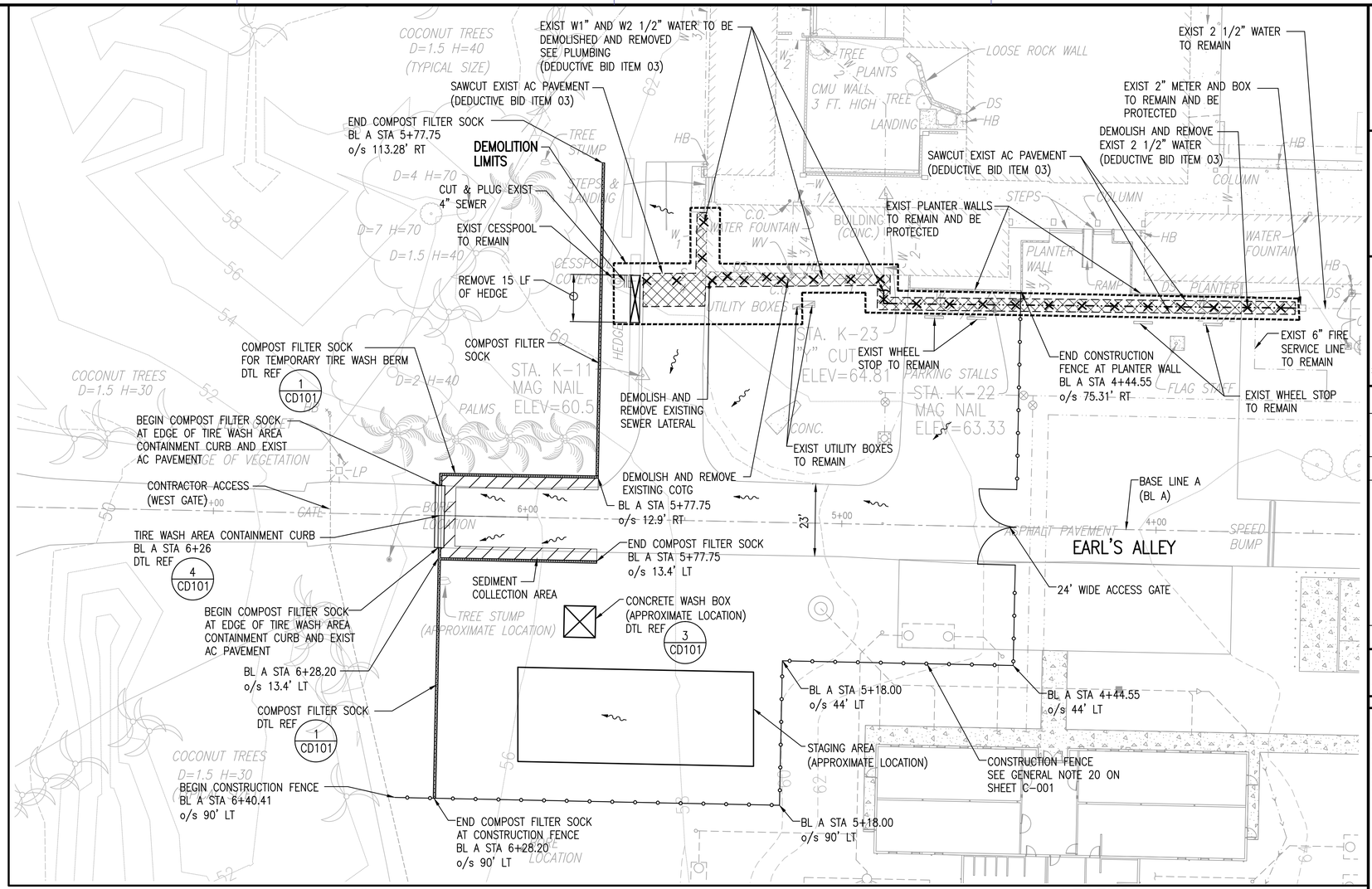
FEDERAL PROJECT NO.
-

SHEET 10 OF 131

C-002

# EROSION CONTROL AND BMP NOTES

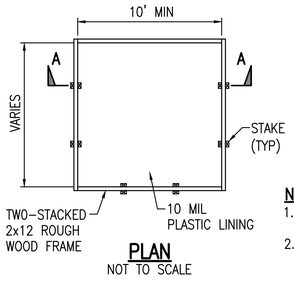
1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY DEMOLITION OR EARTH MOVING WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
2. ALL EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
3. STORM WATER FLOWING TOWARD THE CONSTRUCTION AREA SHALL BE DIVERTED BY USING APPROPRIATE CONTROL MEASURES AS PRACTICAL.
4. CONSTRUCT TEMPORARY CONSTRUCTION EGRESS/INGRESS AREA AT LOCATIONS SHOWN ON THIS DRAWING. ALL VEHICLES EXITING THE SITE ARE TO BE WASHED DOWN PRIOR TO EXIT. CONSTRUCTION ENTRANCE AREA MAY BE ADJUSTED TO FIT THE CONTRACTOR'S OPERATIONS.
5. CONSTRUCT PERIMETER PROTECTION (COMPOST FILTER SOCK) SEE DETAILS THIS DRAWING.
6. AT THE END OF THE GRADING OPERATION AND AT THE COMPLETION OF PROJECT, EXISTING DRAIN INLETS AND DRAIN MANHOLES SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE DRAIN INLETS AND DRAIN MANHOLES SHALL BE REMOVED. FLUSHING INTO THE DRAIN INLETS AND DRAIN MANHOLES IS PROHIBITED.
7. THE CONTRACTOR SHALL ENSURE THAT EXISTING ROADWAYS USED TO ACCESS THE PROJECT ARE CLEANED OF ALL DEBRIS, TRASH, DIRT, MUD, ETC. AT THE END OF EACH WORK DAY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SEWAGE SPILLS CAUSED DURING CONSTRUCTION. IN THE EVENT OF A SEWAGE SPILL THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENVIRONMENTAL OFFICE. THE CONTRACTOR SHALL NOT COMMUNICATE WITH REGULATORY AGENCIES ON BEHALF OF HIARNG WITHOUT PRIOR REVIEW AND APPROVAL OF CFMO AND ENV OFFICE. THE CONTRACTOR SHALL NOTIFY THE STATE DEPARTMENT OF HEALTH AND UTILIZE APPROPRIATE SAMPLING AND ANALYZING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC NOTIFICATIONS AND PRESS RELEASES.
9. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:
   - A. MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.
   - B. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE.
   - C. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
   - D. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   - E. WHENEVER POSSIBLE, THE ENTIRE CONTAINER CONTENTS WILL BE USED UP PRIOR TO DISPOSAL OF THE CONTAINER.
   - F. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
   - G. THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
   - H. CONCRETE TRUCK CHUTE WASH WATER WILL BE DISCHARGED TO A DESIGNATED AREA WHERE COMMINGLING WITH STORM WATER WILL BE PREVENTED BY CUT-OFF DITCH OR PERIMETER BERM. WATER SHALL NOT BE DISCHARGED IN THE DRAINAGE SYSTEM OR WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL CLEAN DISPOSAL SITE AS REQUIRED OR AS REQUESTED BY THE CONTRACTING OFFICER.
10. THE FINAL LIFT OF EACH DAY'S WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIAL.
11. ANY DIRT OR GRASSED AREA DISTURBED SHALL BE RESTORED BY SEEDED HYDROMULCH. THE GRASS SHALL BE FULLY ESTABLISHED AT COMPLETION OF PROJECT.
12. STABILIZATION SHALL BE ACCOMPLISHED BY TEMPORARILY OR PERMANENTLY PROTECTING THE DISTURBED SOIL SURFACE FROM RAINFALL IMPACTS AND RUNOFF WITH PLANTING OR GRAVEL. FOR STABILIZATION WITH PLANTING, TEMPORARY IRRIGATION SHALL BE INSTALLED TO FACILITATE GROWTH. DO NOT OVERWATER.
13. FERTILIZER AND PESTICIDE APPLICATION SHALL NOT OCCUR DURING HEAVY RAINS, OR IF HEAVY RAINS ARE ANTICIPATED DURING THE WORKDAY.
14. ALL CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, FOR EXAMPLE, WEEKLY IN DRY PERIODS AND WITHIN TWENTY-FOUR HOURS AFTER ANY RAINFALL OF 0.5 INCHES OR GREATER WITHIN A 24-HOUR PERIOD. DURING PROLONGED RAINFALL, DAILY CHECKING IS NECESSARY. THE CONTRACTOR SHALL MAINTAIN RECORDS OF CHECKS AND REPAIRS.
15. IF HEAVY RAINS ARE PROJECTED DURING A WORKDAY, ALL CONTROL STRUCTURES SHALL BE INSPECTED IMMEDIATELY AND REINFORCED AS NECESSARY.
16. THE CONTRACTOR SHALL MAINTAIN RECORDS OF THE DURATION AND ESTIMATED VOLUME OF STORM WATER DISCHARGE(S).
17. A SPECIFIC INDIVIDUAL SHALL BE DESIGNATED TO BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS ON THE PROJECT SITE.
18. CONTRACTORS AND SUBCONTRACTORS SHALL BE TRAINED ON THE BEST MANAGEMENT PRACTICES.
19. SANITARY AND SEPTIC WASTES SHALL BE COLLECTED FROM ON-SITE FACILITIES ON A REGULAR BASIS BY A LICENSED HAULER. SANITARY AND SEPTIC FACILITIES SHALL NOT BE LOCATED NEAR WATERCOURSES.
20. DUST CONTROL WITH WATER SPRAY (BY TRUCK OR TEMPORARY SPRINKLERS) SHALL BE INSTALLED AS NEEDED. DO NOT OVERWATER.
21. PERIMETER PROTECTION SHALL BE CLEARED OF SILT IMMEDIATELY FOLLOWING THE END OF ANY RAINFALL THAT CAUSES SILT BUILDUP.
22. LOCATE STOCKPILES, INCLUDING WASTE AND SOIL, MATERIALS, CONCRETE WASH, AND TIRE WASH AWAY FROM CONCENTRATED DRAINAGE FLOWS, DRAINAGE SWALES AND INLETS.



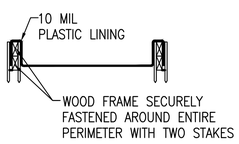

## SITE DEMOLITION AND EROSION CONTROL PLAN

1"=20"

SCALE: 0 10 20 40 60FT — 1" = 20'-0"

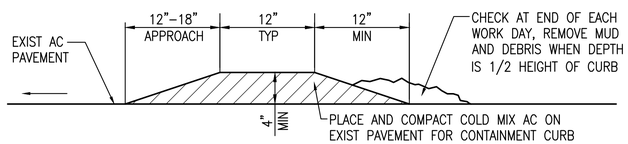



PLAN
NOT TO SCALE



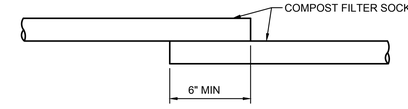

SECTION A-A
NOT TO SCALE

**NOTES:**
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT OF THE CONCRETE WASH BOX.

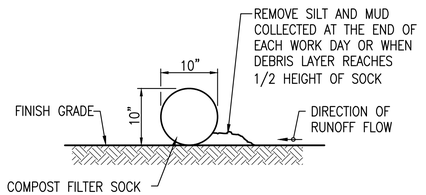



TIRE WASH AREA CONTAINMENT CURB DETAIL 4
NOT TO SCALE CD101

CONCRETE WASH BOX DETAIL 3
NOT TO SCALE CD101




COMPOST FILTER SOCK DETAIL 2
NOT TO SCALE CD101




COMPOST FILTER SOCK DETAIL 1
NOT TO SCALE CD101

## LEGEND

- EXISTING PROPERTY LINE
- EXISTING WATER LINE AND SIZE
- EXISTING FIRE SERVICE LINE AND SIZE
- EXISTING ELECTRICAL/ TELEPHONE/ CABLE TV LINES
- EXISTING SEWER LINE AND SIZE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING SEWER MANHOLE
- EXISTING LIGHT POLE
- EXISTING CHAIN LINK FENCE
- EXISTING BUILDING
- EXISTING AC PAVEMENT TO BE SAWCUT AND REMOVED
- EXISTING HEDGE TO BE REMOVE
- LIMITS OF DEMOLITION
- COMPOST FILTER SOCK
- CONSTRUCTION FENCE

**NOTES:**
1. FOR ABBREVIATIONS SEE SHEET C-001.
2. FOR ELECTRICAL DEMOLITION, SEE ELECTRICAL PLANS.


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

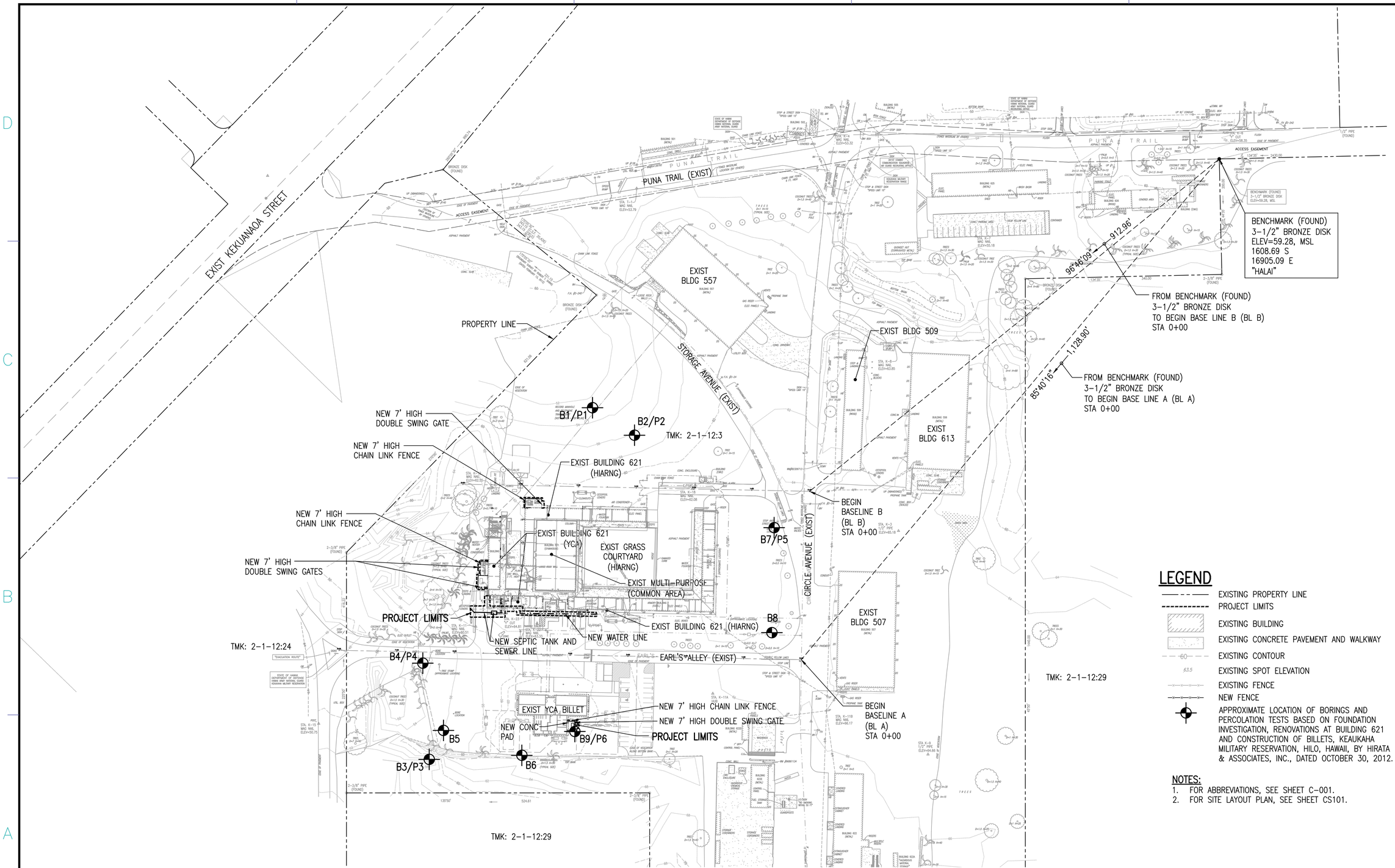
ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787-C
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE


| APPR | DATE | SHEET NO. | DESCRIPTION | SYMB |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
CIVIL SITE DEMOLITION AND EROSION CONTROL PLAN

SCALE:
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 11 OF 131
CD101




## LEGEND

- EXISTING PROPERTY LINE
- PROJECT LIMITS
- EXISTING BUILDING
- EXISTING CONCRETE PAVEMENT AND WALKWAY
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING FENCE
- NEW FENCE
- APPROXIMATE LOCATION OF BORINGS AND PERCOLATION TESTS BASED ON FOUNDATION INVESTIGATION, RENOVATIONS AT BUILDING 621 AND CONSTRUCTION OF BILLETS, KEAUKAHA MILITARY RESERVATION, HILO, HAWAII, BY HIRATA & ASSOCIATES, INC., DATED OCTOBER 30, 2012.

**NOTES:**

1. FOR ABBREVIATIONS, SEE SHEET C-001.
2. FOR SITE LAYOUT PLAN, SEE SHEET CS101.

GENERAL SITE LAYOUT AND BORING LOCATION PLAN
1"=80'

PLAN NORTH

0 40 80 160 240FT
SCALE: 1" = 80'-0"


Youth Hawaii Challenge National Guard Academy

ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787-C
HAWAII, U.S.A.


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

CIVIL GENERAL SITE AND BORING LOCATION PLAN

SCALE:

STATE JOB NO.
CA-1212-C2

FEDERAL PROJECT NO.
-

SHEET 12 OF 131

CS100

## LEGEND

- EXISTING PROPERTY LINE
- PROJECT LIMITS
- EXISTING BUILDING
- EXISTING CONCRETE PAVEMENT AND WALKWAYS
- 60 EXISTING CONTOUR
- 63.5 EXISTING SPOT ELEVATION
- EXISTING FECE
- NEW FENCE
- NEW GATE
- S4" NEW SEWER LINE AND SIZE
- NEW SEWER CLEAN OUT

**NOTES:**

1. FOR ABBREVIATIONS SEE SHEET C-001.
2. FOR SEWER LINE AND SEPTIC TANK DETAILS SEE SHEET C-501.
3. FOR CHAIN LINK FENCE AND GATE DETAILS SEE SHEET C-502.

PROJECT LIMITS

NEW 7' HIGH CHAIN LINK FENCE DTL REF 1/C-502

NEW 7' HIGH DOUBLE SWING GATE DTL REF 2/C-502

EXIST 2,500 GAL SEPTIC TANK

EXIST SEEPAGE PIT

EXIST FIRE HYDRANT

STA. K-18 MAG NAIL ELEV=62.08

BASE LINE B (BL B)

EXIST BUILDING 621 (YCA)

EXIST MULTI-PURPOSE (COMMON AREA)

2 1/2" REPLACEMENT WATER LINE (DEDUCTVE BID ITEM 03) DTL REF 3/C-502

EXIST FIRE DEPARTMENT CONNECTION ON SPRINKLER RISER ASSEMBLY (FS6" POC)

FIRE SERVICE LINE A

DAMAGED CURB

BL A STA 3+57.09 o/s 71.57' RT REPLACE EXIST 2 1/2" WATER LINE WITH NEW 2 1/2" WATER LINE. CONNECT TO EXIST 2" METER. (DEDUCTIVE BID ITEM 03)

EXIST WATER METER

EXIST WATER METER

EXIST SEEPAGE PIT

EXIST 8" FIRE SERVICE LINE

EXIST 6" FIRE SERVICE LINE

NEW 7' HIGH CHAIN LINK FENCE DTL REF 1/C-502

NEW 7' HIGH DOUBLE SWING GATES DTL REF 2/C-502

PROJECT LIMITS

BL A STA 5+21.08 o/s 74.44' RT S4" POC INV=58.5 (S4") SEE PLUMBING

37.32 LF 4" SEWER AT S=2%

CONNECT TO EXIST CESSPOOL INV=57.17 (S4") DTL REF 6/C-501

3.92 LF 4" SEWER AT S=2%

BL A STA 5+67.81 o/s 70.58' RT 1-1/8 BEND INV=57.31 (S4")

4" SEWER LINE DTL REF 5/C-501

8.81 LF 4" SEWER AT S=2%

BL A STA 4+88.22 o/s 74.43' RT W2 1/2" POC MATCH INVERT OF EXIST W2 1/2" SEE PLUMBING (DEDUCTIVE BID ITEM 03)

BL A STA 4+88.13 o/s 70.35' RT 1-1/4 BEND 1-CONC BLOCK (DEDUCTIVE BID ITEM 03)

EXIST FIRE HYDRANT

STA. K-23 "Y" CUT ELEV=64.81

STA. K-22 MAG NAIL ELEV=61.41

STA. K-11 MAG NAIL ELEV=60.51

BL A STA 5+21.08 o/s 70.52' RT 1-1/4 BEND AND COTG INV=58.34 (S4") DTL REF 2/C-501

NEW SEPTIC TANK INV=58.18 (S4" IN) INV=57.93 (S4" OUT) DTL REF 3/C-501

EXISITNG 6' HIGH CHAIN LINK FENCE

PROJECT LIMITS

NEW 7' HIGH DOUBLE SWING GATE DTL REF 2/C-502

NEW 7' HIGH CHAIN LINK FENCE DTL REF 1/C-502

TMK: 2-1-12:24

TMK: 2-1-12:3

"EVACUATION ROUTE"

STATE OF HAWAII DEPARTMENT OF DEFENSE HAWAII ARMY NATIONAL GUARD KEAUKAHA MILITARY RESERVATION

PROPERTY LINE

STA. K-15 MAG NAIL ELEV=50.75

STA. K-11A HUB

EARL'S ALLEY

BASE LINE A (BL A)

2-3/8" PIPE (FOUND)

PROPERTY LINE 135°50' 524.61

2-3/8" PIPE (FOUND)

SITE LAYOUT AND UTILITY PLAN
1"=30'

PLAN NORTH

0 15 30 60 90FT
SCALE: 1" = 30'-0"


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787-C
HAWAII, U.S.A.


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

CIVIL SITE LAYOUT AND UTILITY PLAN

SCALE:

STATE JOB NO.
CA-1212-C2

FEDERAL PROJECT NO.
-

SHEET 13 OF 131

CS101

# SEPTIC TANK NOTES

1. PRECAST REINFORCED CONCRETE SEPTIC TANK SHALL BE CAST MONOLITICALLY AND MEET THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO) MATERIAL AND PROPERTY STANDARDS FOR PREFABRICATED SEPTIC TANKS, IAPMO PS 1–2004.

2. PRECAST REINFORCED CONCRETE SEPTIC TANK SHALL BE APPROVED AND LISTED BY IAPMO. PRECAST REINFORCED CONCRETE TANK MANUFACTURES BY JENSEN PRECAST OR EQUAL AS ACCEPTED BY PROJECT MANAGER CAN BE USED PROVIDED THE TANK MEETS THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. THE MANUFACTURER'S ADDRESS, AND PHONE AND FACSIMILE NUMBERS ARE AS FOLLOWS:

   JENSEN PRECAST
   91–110 HANUA STREET, SUITE 202
   KAPOEI, HI 96707
   PHONE: (808)–528–1175
   FACSIMILE: (808)–528–1151

3. CONCRETE USED FOR SEPTIC TANK SHALL HAVE A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 4,000 PSI. AGGREGATE USED IN THE CONCRETE MIX SHALL CONFORM TO ASTM C–33. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150.

4. REINFORCING STEEL SHALL CONFORM TO ASTM A–615 OR A–706.

5. TANK SHALL BE COATED ON THE INTERIOR AND EXTERIOR SURFACES WITH AN APPROVED WATERPROOFING BITUMINOUS COATING. THE COATING SHALL COVER THE ENTIRE INTERIOR AND EXTERIOR SURFACES.

6. SEPTIC TANK MANUFACTURER SHALL SUBMIT SIX (6) SETS OF SHOP DRAWINGS STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF HAWAII TO THE PROJECT MANAGER AND DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO TANK FABRICATION. THE DRAWINGS SHALL SHOW DIMENSIONS OF TANK, MANHOLES, MANHOLE COVERS, BAFFLES, REINFORCEMENT DETAILS, PIPE PENETRATION, TEE, GRADE RINGS, AND RISERS. IN ADDITION, THE CONTRACTOR SHALL ALSO SUBMIT INSTALLATION PROCEDURES, MANUFACTURER'S NAME AND ADDRESS, AND A MANUFACTURER'S CERTIFICATE CERTIFYING THE SEPTIC TANK MEETS THE REQUIREMENTS OF HAWAII ADMINISTRATIVE RULES (HAR) 11–62–33.1 AND IS APPROVED AND LISTED BY IAPMO. SUBMIT VALID AND CURRENT IAPMO CERTIFICATES OF COMPLIANCE.

7. SEPTIC TANK SHALL BEAR ON AT LEAST 12 INCHES OF 3B FINE GRAVEL OVER COMPACTED LEVEL SUBGRADE. WHERE TANK EXCAVATION SUBGRADE IS UNEVEN WITH JAGGED ROCK SURFACES, OVEREXCAVATE THE JAGGED SURFACES BY A MINIMUM OF 8 INCHES AND LEVEL THE EXCAVATION SUBGRADE WITH 3B FINE GRAVEL.

8. COMPACT SUBGRADE TO A FIRM AND UNYIELDING SURFACE PRIOR TO PLACEMENT OF THE 12–INCH 3B FINE GRAVEL LAYER. 3B FINE GRAVEL SHALL BE COMPACTED WITH A LEAST 6 PASSES OF A VIBRATORY PLATE TO A DENSE AND UNYIELDING SURFACE PRIOR TO PLACING SEPTIC TANK.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION LIMITS, PROCEDURES, SHORING, COMPLIANCE WITH OSHA SAFETY REQUIREMENTS, TEMPORARY CUT SLOPE, AND PROTECTION OF EXISTING PROPERTIES AND UTILITIES.

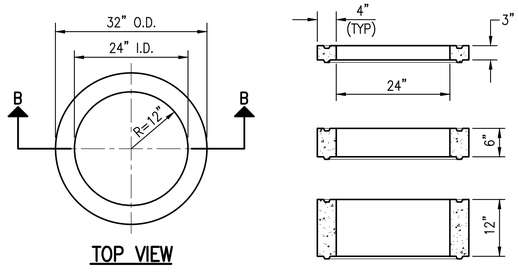
10. THE EXCAVATION TO RECEIVE SEPTIC TANK SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL ALSO BE LARGE ENOUGH TO PERMIT PROPER PLACEMENT OF TANK AND TO ALLOW ADEQUATE COMPACTION OF BACKFILL BEHIND SEPTIC TANK WALLS. BACKFILL BEHIND WALLS SHALL CONSIST OF GRANULAR SOILS AND SHALL BE PLACED IN 8–INCH LOOSE LIFT AND COMPACTED TO AT LEAST 95 PERCENT OF ITS MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557. PLACE AND COMPACT BACKFILL AROUND THE SEPTIC TANK SUCH THAT THE DIFFERENCE IN GRADE OF THE BACKFILL AT ANY TWO POINTS AROUND THE TANK SHALL NOT EXCEED 12 INCHES.

11. SEPTIC TANK SHALL BE LIFTED, PLACED, AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

12. PRIOR TO PERFORMING LEAKAGE (WATER–TIGHTNESS) TEST, PLACE AND COMPACT BACKFILL MATERIALS BEHIND THE SEPTIC TANK WALLS TO THE OUTLET PIPE ELEVATION. PERFORM LEAKAGE (WATER–TIGHTNESS) TEST TO CHECK FOR LEAKS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE TANK SHALL BE FILLED TO THE OPERATIONAL LIQUID LEVEL WITH WATER AND SOAKED FOR A LEAST 12 HOURS TO PERMIT COMPLETE CONCRETE ABSORPTION. AFTER THE ABSORPTION PERIOD, REFILL WATER LEVEL TO THE OPERATIONAL LIQUID LEVEL AND PERFORM LEAKAGE TEST IN ACCORDANCE WITH ASTM C–1227.

13. UPON APPROVAL BY THE ENGINEER AND NOTIFICATION BY THE STATE DEPARTMENT OF HEALTH, PLACE FINAL BACKFILL TO GRADE.

14. EFFLUENT FILTERS SHALL BE EQUIPPED WITH AN EXTENSION HANDLE AND ALLOW FOR REPLACEMENT FROM THE TOP OF THE MANHOLE. PRODUCT SUCH AS THOSE MANUFACTURED BY POLYLOCK, INC. MODELS PL–122 OR PL–525 OR EQUAL MAY BE SUITABLE PROVIDED THE FILTERS MEET THE MINIMUM FLOW–THROUGH CAPACITY INDICATED IN THE DETAIL.

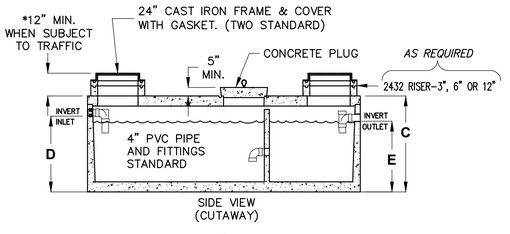



TOP VIEW

SECTION B–B

NOTE:
1. GRADE RING AND RISER SHALL CONFORM TO ASTM C–478 AND AASHTO M–199.
2. GRADE RING AND RISER SHALL BE TRAFFIC–RATED FOR HS–20 TRUCK.
3. MODEL 2432 AS MANUFACTURED BY JENSEN PRECAST OR CONTRACTING OFFICER ACCEPTED EQUAL MAY BE USED.

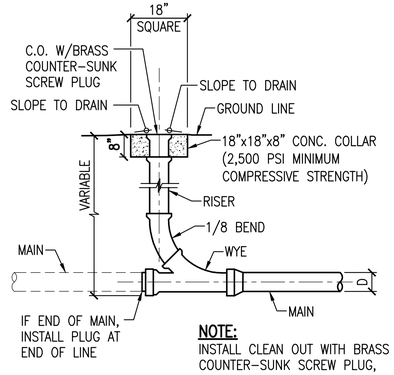
## GRADE RING/RISER DETAIL 1
NOT TO SCALE C–501




| MODEL NUMBER | LIQUID CAPACITY GALLONS | WIDTH 'A' | OVERALL LENGTH 'B' | TANK HEIGHT 'C' | INLET 'D' | OUTLET 'E' | MINIMUM EXCAVATION WIDTH | MINIMUM EXCAVATION LENGTH | *DEPTH OF BURY | TANK WEIGHT LBS. |
|---|---|---|---|---|---|---|---|---|---|---|
| HJ1000ST | 1000 | 6'–0" | 9'–4" | 4'–9" | 3'–9" | 3'–6" | 7'–0" | 11'–0" | 6' MAX. | 14,100 |

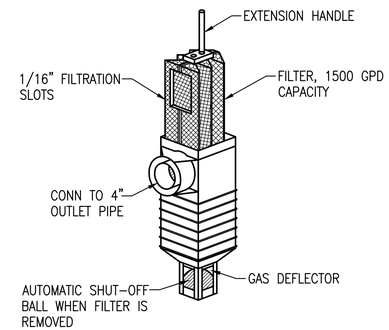
- TANK DESIGNED FOR H–20 TRAFFIC WHEEL LOAD WITH 1' TO 6' MAX. EARTH COVER AND WATER TABLE AT ONE FOOT BELOW GRADE.
- SUITABLE NATIVE SOIL OR GRANULAR SUB–BASE SHALL BE COMPACTED AND LEVELED TO HANDLE ANTICIPATED LOADS. SEE INSTALLATION PROCEDURES SHEET FOR ADDITIONAL INFO.
- EXTERIOR AND INTERIOR CONCRETE SURFACES TO BE COATED WITH AN APPROVED BITUMINOUS MATERIAL.
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

## SEPTIC TANK DETAIL 3
NOT TO SCALE CS102

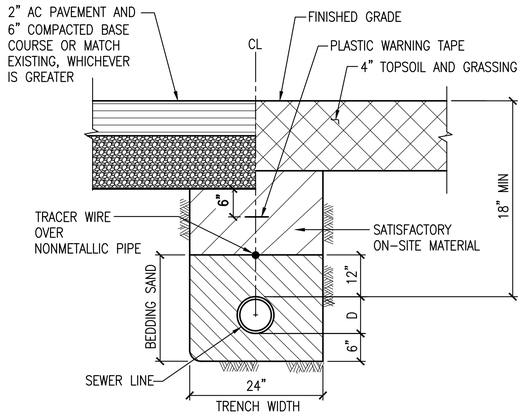



NOTE:
INSTALL CLEAN OUT WITH BRASS COUNTER–SUNK SCREW PLUG, FLUSH WITH GRADE.

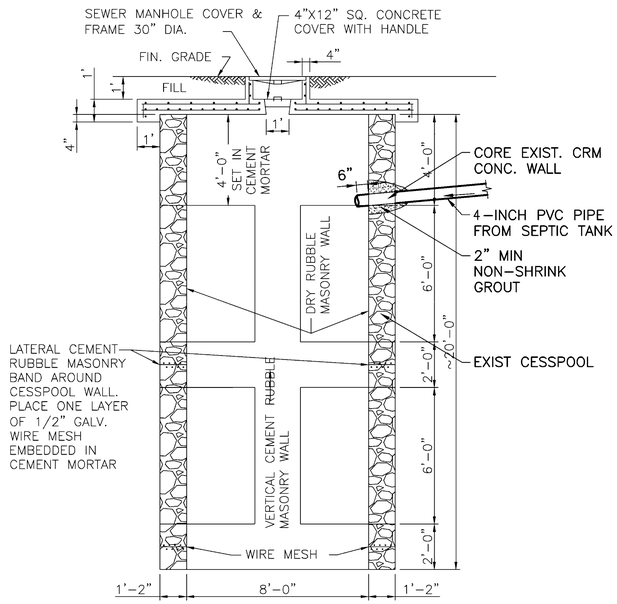
## SEWER COTG DETAIL 2
NOT TO SCALE CS101




## EFFLUENT FILTER 4
NOT TO SCALE C–501




## SEWER LINE TRENCH DETAIL 5
NOT TO SCALE CS101




## SEWER CONNECTION DETAIL 6
NOT TO SCALE CS101


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523–9636
FAX: (808) 521–3280
www.ahldesign.com


ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION |
|---|---|---|---|
| | | | |

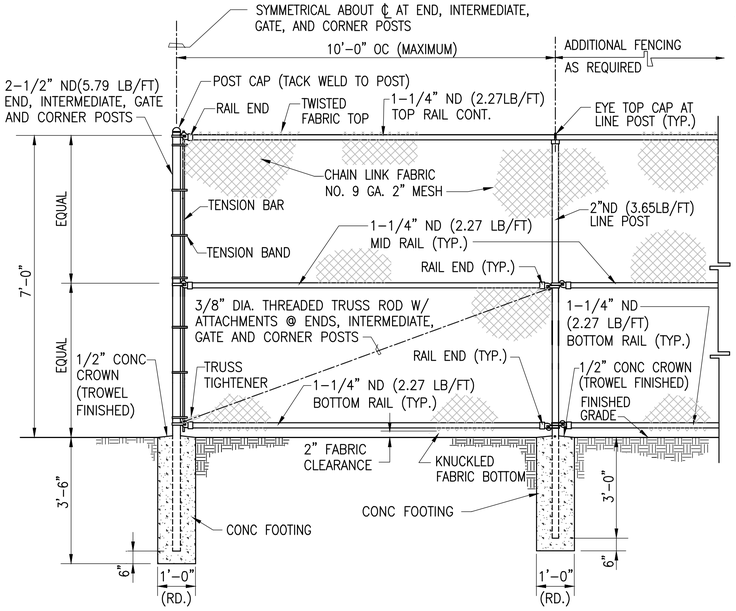
SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
CIVIL SEWER DETAILS

SCALE:
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 14 OF 131
C–501

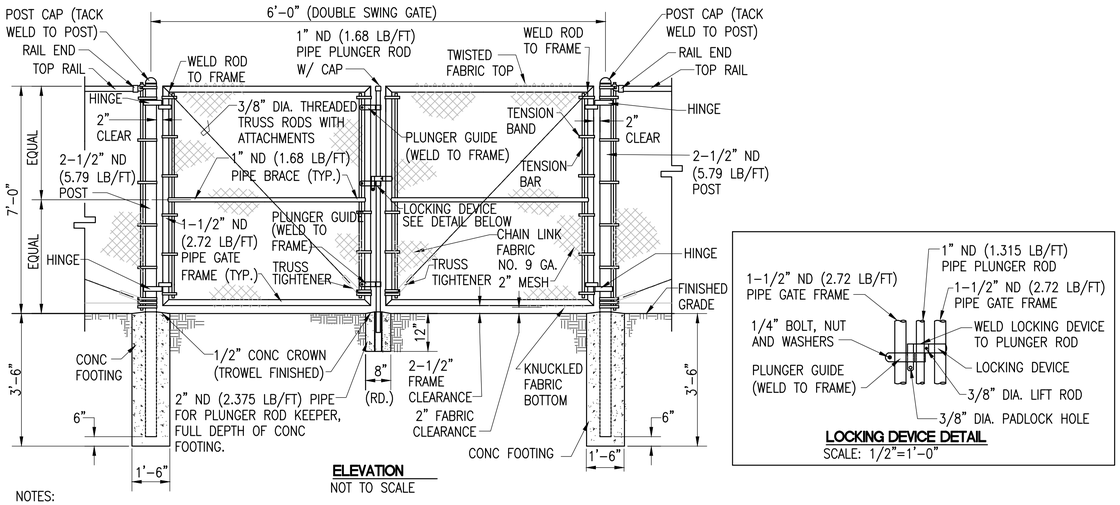



## 7'-0" HIGH CHAIN LINK FENCE DETAIL

NOT TO SCALE CS101 (1)

NOTES:

1. ALL PIPE AND POST SIZES ARE NOMINAL DIAMETER (ND).
2. CHAIN LINK FABRIC, PIPES, FITTING, FASTENERS, TRUSS ROD, POSTS, HOG RINGS AND TENSION WIRE SHALL BE HOT-DIP GALVANIZED.
3. CHAIN LINK FABRIC SHALL BE CONTINUOUS AND FASTENED TO END, INTERMEDIATE, GATE AND CORNER POSTS BY TENSION BARS WITH TENSION BANDS EVENLY SPACED AT 15" OC (MAX.).
4. WIRE FASTENINGS SHALL BE NO. 12 GAUGE GALVANIZED TIE WIRE.
5. CHAIN LINK FABRIC SHALL BE FASTENED TO LINE POSTS WITH WIRE FASTENINGS EVENLY SPACED AT 12" OC (MAX.).
6. CHAIN LINK FABRIC SHALL BE FASTENED TO HORIZONTAL RAILS WITH WIRE FASTENINGS EVENLY SPACED AT 12" OC (MAX.).
7. ALL WIRE FASTENING ENDS SHALL BE WRAPPED AROUND CHAIN LINK A MINIMUM OF ONE COMPLETE TURN. (HOOKING OF WIRE ENDS SHALL NOT BE PERMITTED).
8. CHAIN LINK FABRIC SHALL BE FASTENED TO TRUSS ROD WITH NO. 9 GAUGE HOG RINGS AT 12" OC
9. NO SPLICING SHALL BE ALLOWED ON ALL STRAIGHT-RUN PIPES.
10. TOP SELVAGE OF CHAIN LINK FABRIC SHALL BE TWISTED.
11. BOTTOM SELVAGE OF CHAIN LINK FENCE SHALL BE KNUCKLED.
12. INSTALL INTERMEDIATE POSTS AT 200' MAX. INTERVALS.
13. ALL FIELD WELDS AND DAMAGED GALVANIZED SURFACES SHALL BE PAINTED WITH TWO COATS OF Z.R.C. COLD GALVANIZING COMPOUND.
14. ALL FENCE POSTS SHALL BE INSTALLED EVENLY SPACED.
15. AFTER INSTALLATION, ALL BOLT ENDS SHALL BE CUT FLUSH WITH THE NUTS AND GROUND SMOOTH.




## ELEVATION

NOT TO SCALE




## LOCKING DEVICE DETAIL

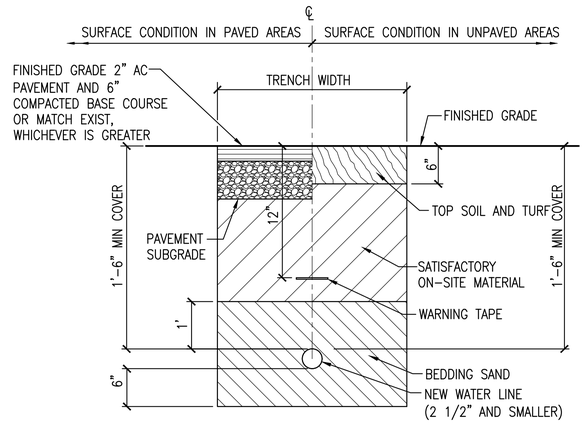
SCALE: 1/2"=1'-0"

NOTES:

1. ALL PIPES AND POST SIZES ARE NOMINAL DIAMETER (ND).
2. GATE FRAME SHALL BE OF WELDED PIPE CONSTRUCTION. ALL WELDING SHALL CONFORM TO THE SPECIFICATIONS OF THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE".
3. FOR ALL WELDED CONNECTIONS: CORNERS SHALL BE MITERED AND ALL PIPE BRACES PROPERLY COPED.
4. ALL WELDED CONNECTIONS SHALL BE PAINTED WITH TWO COATS OF Z.R.C. COLD GALVANIZING COMPOUND.
5. GATE HINGES SHALL BE TACK WELDED TO GATE POSTS AND FRAMES.
6. CHAIN LINK FABRIC, PIPES, FITTINGS, FASTENERS, TRUSS ROD, POSTS AND HOG RINGS SHALL BE HOT-DIP GALVANIZED.
7. WIRE FASTENINGS SHALL BE NO. 12 GAUGE GALVANIZED TIE WIRE.
8. CHAIN LINK FABRIC SHALL BE CONTINUOUS AND FASTENED TO SIDE FRAME PIPES BY TENSION BARS WITH TENSION BANDS EVENLY SPACED AT 15" OC (MAX.).
9. CHAIN LINK FABRIC SHALL BE FASTENED TO TOP AND BOTTOM FRAME PIPES WITH WIRE FASTENINGS EVENLY SPACED AT 12" OC (MAX.).
10. CHAIN LINK FABRIC SHALL BE FASTENED TO TRUSS RODS WITH NO. 9 GAUGE HOG RINGS EVENLY SPACED AT 12" OC.
11. TOP SELVAGE OF CHAIN LINK FABRIC SHALL BE TWISTED.
12. BOTTOM SELVAGE OF CHAIN LINK FENCE SHALL BE KNUCKLED.
13. ALL WIRE FASTENINGS SHALL BE WRAPPED AROUND CHAIN LINK A MINIMUM OF ONE COMPLETE TURN. (HOOKING OF WIRE ENDS SHALL NOT BE PERMITTED).
14. AFTER INSTALLATION, ALL BOLT ENDS SHALL BE CUT FLUSH WITH THE NUTS AND GROUND SMOOTH.

## 6'-0" DOUBLE SWING GATE DETAIL (7'-0" HIGH)

NOT TO SCALE CS101 (2)




(DEDUCTIVE BID ITEM 03)

## WATER LATERAL TRENCH DETAIL

NOT TO SCALE CS101 (3)


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

ERIC H. TAMASHIRO
LICENSED PROFESSIONAL ENGINEER
No.9787-C
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE EXPIRATION DATE


| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES | DRW | CHK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
CIVIL MISCELLANEOUS DETAILS

SCALE:
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 15 OF 131
C-502

## GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. ALL DISCREPANCIES SHALL BE PROMPTLY REPORTED TO THE PROJECT MANAGER.
2. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
3. ALL WORK SHALL CONFORM TO THE IBC 2006 AS AMENDED AND ADOPTED BY THE STATE BUILDING CODE.
4. UNLESS SPECIFICALLY DETAILED ELSEWHERE, CONTRACTOR SHALL FOLLOW TYPICAL DETAILS ON SHEETS S-001 THROUGH S-002.
5. WHERE CONDITIONS HAVE NOT BEEN SPECIFICALLY INDICATED BUT ARE SIMILAR TO DETAILS SHOWN ON SHEETS S-001 THROUGH S-002, MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
6. STRUCTURAL DRAWINGS WHERE INDICATED HAVE BEEN DRAWN TO APPROXIMATE SCALE. UNLESS DRAWING SPECIFICALLY PROVIDES A DIMENSION, THE CONTRACTOR SHALL NOT USE OR SCALE STRUCTURAL DRAWINGS TO DETERMINE DIMENSIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING FOR ALL STRUCTURAL MEMBERS AS REQUIRED FOR STRUCTURAL STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

## FOUNDATION NOTES:

1. FOUNDATION DESIGN IS BASED ON SOILS INVESTIGATION REPORT DONE BY HIRATA AND ASSOCIATES DATED OCTOBER 30, 2012. A COPY OF THE REPORT IS ON FILE WITH THE PROJECT MANAGER. THE CONTRACTOR SHALL OBTAIN A COPY OF THE REPORT AND BECOME FAMILIAR WITH THE CONTENTS OF THE REPORT.
2. CONVENTIONAL SHALLOW FOOTINGS WILL BE USED FOR ALL STRUCTURES. TO PROVIDE MORE UNIFORM SUPPORT, ALL FOUNDATIONS SHALL BE UNDERLAIN BY A MINIMUM OF 12 INCHES OF GRANULAR STRUCTURAL FILL. OVEREXCAVATION OF THE INSITU GRAVEL WILL BE REQUIRED FOR THE PLACEMENT OF THE GRANULAR STRUCTURAL FILL. AS AN ALTERNATIVE, ALL FOUNDATION MAY ALSO EXTEND THROUGH THE NEW FILL AND BE FOUNDED DIRECTLY ON THE INSITU GRAVEL. TO PROVIDE MORE UNIFORM SUPPORT, ALL FOUNDATIONS FOR A PARTICULAR STRUCTURE SHALL BE FOUNDED ON THE SAME MATERIAL.
3. THE TOP OF ALL FOUNDATIONS SHALL BE A MINIMUM OF 12 INCHES BELOW THE LOWEST ADJACENT FINISH GRADE. ALL FOOTING SHALL BE BEAR ON A LEVEL PLANE. WALL FOOTINGS SHALL BE STEPPED IN ACCORDANCE WITH THE STRUCTURAL DETAIL AS REQUIRED. FOOTINGS LOCATED ON, OR NEAR THE TOP OF SLOPES, SHALL BE EMBEDDED SUCH THAT A MAXIMUM HORIZONTAL DISTANCE OF 5 FEET IS MAINTAINED BETWEEN THE BOTTOM EDGE OF THE FOOTING AND FACE OF SLOPE.
4. THE BOTTOM OF FOOTING EXCAVATIONS SHALL BE THOROUGHLY TAMPED AND CLEANED OF LOOSE MATERIAL PRIOR TO PLACEMENT OF REINFORCING STEEL AND CONCRETE.
5. SLAB-ON-GRADE SHALL BE UNDERLAIN BY A 4-INCH CUSHION OF CLEAN GRAVEL, SUCH AS #3 FINE (ASTM C33 SIZE NO. 67). A VAPOR BARRIER OF 15 MIL POLYOLEFIN SHALL BE PLACED DIRECTLY BENEATH THE SLAB-ON-GRADE FOR INTERIOR SLABS. PRIOR TO PLACEMENT OF GRAVEL CUSHION, THE SLAB SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTENED TO ABOUT 2 PERCENT ABOVE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO A MINIMUM OF 95 PERCENT COMPACTION AS DETERMINED BY ASTM D 1557. THE GRAVEL CUSHION SHALL BE COMPACTED TO A LEVEL SURFACE USING A VIBRATORY COMPACTOR.
6. ONSITE FILL MATERIAL – THE ONSITE GRAVEL WILL BE ACCEPTABLE FOR REUSE IN STRUCTURAL FILLS AND BACKFILLS. ALL ROCK FRAGMENTS LARGER THAN 3 INCHES IN MAXIMUM DIMENSION SHALL BE REMOVED FROM THE ONSITE GRAVEL PRIOR TO REUSE. EXCAVATED BASALT MAY ALSO BE REUSED IN STRUCTURAL FILLS AND BACKFILLS PROVIDED THE MATERIAL IS CRUSHED AND PROCESSED TO A WELL-GRADED CONSISTENCY WITH A MAXIMUM PARTICLE SIZE OF 3 INCHES.
7. IMPORTED FILL MATERIAL – IMPORTED STRUCTURAL FILL SHALL BE WELL-GRADED, NON-EXPANSIVE GRANULAR MATERIAL. MAXIMUM PARTICLE SIZE SHALL BE 3 INCHES, WITH BETWEEN 8 AND 20 PERCENT OF SOIL BY WEIGHT SHALL PASS THE #200 SIEVE. IN ADDITION, THE PLASTICITY INDEX (P.I.) OF THAT PORTION OF THE SOIL PASSING THE #40 SIEVE SHALL NOT BE GREATER THAN 10. GRANULAR STRUCTURAL FILL SHALL ALSO HAVE A MINIMUM CBR VALUE OF 15 AND A CBR EXPANSION VALUES LESS THAN 1 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D 1883.
8. COMPACTION– STRUCTURAL FILL AND BACKFILL SHALL BE PLACED IN HORIZONTAL LIFTS RESTRICTED TO 8 INCHES IN LOOSE THICKNESS AND COMPACTED TO A MINIMUM OF 95 PERCENT COMPACTION AS DETERMINED BY ASTM D 1557. FILL PLACED IN AREAS WHICH SLOPE STEEPER THAN 5H:1V SHALL BE CONTINUALLY BENCHED AS THE FILL IS BROUGHT IN LIFTS.
9. DESIGN PARAMETERS ARE AS FOLLOWS:
   - ALLOWABLE BEARING PRESSURE ..... 2,500 PSF (FOR DEAD AND LIVE, WITH 1/3 INCREASE FOR WIND AND SEISMIC)
   - COEFFICIENT OF FRICTION ..... 0.4
   - PASSIVE PRESSURE ..... 250 PCF (WITH MAXIMUM OF 2,500 PSF, NEGLECT UPPER 12 UNLESS COVERED BY PAVEMENT OR CONCRETE SLAB)
   - SITE CLASS ..... B
10. A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF HAWAII SHALL BE HIRED BY THE CONTRACTOR FOR THE FOLLOWING:
    1) CHECK FOOTING EXCAVATIONS PRIOR TO PLACEMENT OF GRANULAR STRUCTURAL FILL, REINFORCING STEEL AND CONCRETE.
    2) REVIEW AND/OR PREFORM LABORATORY TESTING ON IMPORTED BORROW TO DETERMINE ITS ACCEPTABILITY FOR USE IN COMPACTED FILLS.
    3) OBSERVE STRUCTURAL FILL PLACEMENT AND PERFORM COMPACTION TESTING.
    4) PROVIDE GEOTECHNICAL CONSULTATION AS REQUIRED.
    5) ALL WORK REQUIRED OF THE GEOTECHNICAL SHALL BE COORDINATED DIRECTLY BETWEEN THE GEOTECHNICAL ENGINEER AND CONTRACTOR.

## REINFORCING STEEL:

1. UNLESS OTHERWISE INDICATED ON PLANS AND/OR SCHEDULE, ALL REINFORCING STEEL SHALL BE HIGH STRENGTH GRADE DEFORMED BARS WHICH SHALL CONFORM TO THE STANDARD SPECIFICATION OF ASTM A615 GRADE 60. ALL REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60.
2. LOW HYDROGEN WELDING RODS SHALL BE USED FOR ALL WELDING TO REINFORCING BARS.
3. REINFORCING SHALL BE SPLICED ONLY AS SHOWN OR NOTED. SPLICES AT OTHER LOCATIONS SHALL BE MADE AWAY FROM POINTS OF MAXIMUM STRESS AND APPROVED BY THE ENGINEER. SEE DETAILS FOR "LAP SPLICES".
4. BARS NOTED AS "CONT." VERTICAL AND HORIZONTAL WALL REINFORCING AND COLUMN REINFORCING SHALL HAVE A MINIMUM SPLICE EQUAL TO 48 BAR DIAMETERS BUT NOT LESS THAN 24 INCHES.
5. PROVIDE DOWELS IN FOOTINGS THE SAME SIZE AND NUMBER AND IN THE SAME LOCATION AS VERTICAL COLUMN REINFORCING. DOWELS SHALL HAVE A MINIMUM PROJECTION EQUAL TO 48 BAR DIAMETERS BUT NOT LESS THAN 24 INCHES.
6. ALL REINFORCING STEEL, ANCHOR BOLTS AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
7. MINIMUM CONCRETE PROTECTION FOR REINFORCING STEEL UNLESS OTHERWISE SHOWN:
   - CONCRETE CAST AGAINST EARTH (EXCEPT SLAB ON GRADE) ..... 3"
   - FORMED CONCRETE SURFACE EXPOSED TO EARTH OR WEATHER ..... 2"
   - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
     - SLABS ..... ¾" (TOP AT INTERIOR)
     - ..... 1" (TOP AT EXTERIOR)
     - WALLS ..... ¾"

   CONCRETE COVER TOLERANCE SHALL BE AS FOLLOWS:
   - FORMED SOFFITS OR MEMBERS 4" OR LESS IN THICKNESS ..... +⅜,-¼"
   - MEMBERS 12" THICK OR LESS ..... ±⅜"
   - MEMBERS GREATER THAN 12" THICK ..... ±½"

   FOR ALL CASES, THE COVER SHALL NOT BE LESS THAN ⅔ OF WHAT IS INDICATED AND REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.

## CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318-05.
2. SLEEVES EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. PIPE MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES BUT SHALL NOT BE EMBEDDED THEREIN.
3. SECURE ALL BOLTS, ANCHORS, INSERTS, ETC. AND VERIFY ALL GROOVES, SLOTS, AND FINISHES PRIOR TO PLACING CONCRETE.
4. VERIFY LOCATIONS AND DIMENSIONS OF SLOTS, ANCHORS, DUCTS, ETC., RELATING TO MECHANICAL, ELECTRICAL AND ARCHITECTURAL WORK BEFORE POURING CONCRETE.
5. ALL CONCRETE WORK SHALL BE THOROUGHLY CONSOLIDATED DURING PLACEMENT USING A MECHANICAL VIBRATOR. ALL CONCRETE SHALL BE CURED FOR A PERIOD OF NOT LESS THAN 7 DAYS.
6. LOCATIONS OF ALL CONSTRUCTION OR COLD JOINTS SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.
7. 48 HOURS PRIOR TO THE POURING OF ANY STRUCTURAL CONCRETE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO AN INSPECTION CAN BE MADE OF ALL FORMS AND REINFORCING STEEL.
8. THE 28-DAY COMPRESSIVE STRENGTH AND MAXIMUM AGGREGATE SIZE OF CONCRETE SHALL BE AS FOLLOWS:

| | STRENGTH (PSI) | MAX. AGGREGATE | W/C RATIO |
|---|---|---|---|
| ALL CONCRETE | 4,500 | 1½" | 0.45 |

## CONCRETE BLOCK MASONRY:

1. CONCRETE BLOCK SHALL BE HOLLOW LOAD BEARING UNITS CONFORMING TO ASTM C90.
2. MASONRY MORTAR SHALL BE TYPE "M", WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI CONFORMING TO ASTM C270.
3. MASONRY GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI.
4. ALL CELLS CONTAINING REINFORCING, ANCHORS AND INSERTS SHALL BE GROUTED SOLID. GROUT IN LIFTS NOT TO EXCEED 8'-0".
5. UNLESS NOTED OTHERWISE, ALL WALLS SHALL BE CONSTRUCTED IN CONVENTIONAL RUNNING BOND.
6. AT CMU WALLS PROVIDE HORIZONTAL JOINT REINFORCING AT 16"o.c.
7. WIRE POSITIONERS – CMU WALL REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT BY GALVANIZED NO. 9 GAUGE WIRE POSITIONERS AS SPECIFIED.

## WOOD:

1. ALL WOOD STRUCTURAL MEMBERS SHALL BE DOUGLAS FIR AND SHALL MEET THE FOLLOWING MINIMUM GRADES AS ESTABLISHED BY THE WEST COAST LUMBER INSPECTION BUREAU:
   - BEAMS ..... NO. 1
   - JOISTS/RAFTERS ..... NO. 2
   - BLOCKING, PLATES, STUDS, ETC. ..... CONSTRUCTION
2. PROVIDE 30# FELT BELOW ALL PLATES RESTING ON CONCRETE OR MASONRY.
3. PROVIDE STANDARD WASHERS AT ALL BOLTS AND NUTS BEARING ON WOOD.
4. HOLES THRU PLATES AND STUDS SHALL BE CENTERED IN THE MEMBER AND SHALL NOT EXCEED 1/3 THE PLATE WIDTH.
5. MINIMUM NAILING SHALL COMPLY WITH TABLE 23-II-B-1 OF THE UNIFORM BUILDING CODE.
6. ALL PREFABRICATED METAL HANGERS AND CONNECTORS NOTED IN THE DRAWINGS SHALL BE "SIMPSON STRONG-TIE" CONNECTORS OR APPROVED EQUALS.
7. ALL WOOD STRUCTURAL MEMBERS SHALL BE TREATED AGAINST ROT AND INSECT DAMAGE. SEE SPECIFICATIONS
8. PROVIDE 2X CONTINUOUS STRUCTURAL FASCIA AT ALL EAVES. FASCIA SUPPORTS HIPS AND LAST RAFTER ON GABLED ROOFS. DO NOT SPLICE FASCIA WITHIN 12'-0" OF CORNERS.
9. ALL PREFABRICATED METAL CONNECTORS SHALL BE BY SIMPSON STRONG-TIE COMPANY.
10. ALL METAL CONNECTORS NOT CONCEALED AND/OR EXPOSED TO THE ATMOSPHERE SHALL BE OUT OF "Z-MAX", STAINLESS STEEL OR HOT-DIPPED GALVANIZED.

## SAWN LUMBER DECKING:

1. THE 2"x6" NOMINAL, T&G ROOF DECKING SHALL BE DOUGLAS FIR, SELECT DEX GRADE AS SPECIFIED IN THE STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16, WEST COAST LUMBER INSPECTION BUREAU (WCLIB).
2. DECKING SHALL BE INSTALLED CONTINUOUS OVER 3 OR MORE SUPPORTS WITH DISTANCE BETWEEN END JOINTS IN ADJACENT COURSES AT LEAST 2 FEET APART. JOINTS IN THE SAME LINE SHALL BE SEPARATED BY AT LEAST TWO INTERVENING COURSES.
3. DECKING SHALL BE LAID WITH THE TONGUES UP ON THE SLOPED ROOF AND THE PATTERN FACE EXPOSED ON THE UNDERSIDE. EACH PIECE SHALL BE TOE-NAILED THROUGH THE TONGUE WITH A 16d NAIL AND ALSO FACE NAILED TO EACH SUPPORT USING 2-16d COMMON NAILS.

## STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AS PUBLISHED BY THE AISC.
2. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, GRADE 50.
3. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A-36.
4. ALL WELDS SHALL CONFORM TO THE "STANDARD CODE FOR ARC AND GAS WELDING" OF THE AMERICAN WELDING SOCIETY AND BE DONE BY CERTIFIED WELDERS.
5. UNLESS NOTED OTHERWISE, ALL BOLTED CONNECTIONS SHALL BE MADE WITH "MACHINE BOLTS" AND SHALL CONFORM TO ASTM A307.
6. GALVANIZE ALL SHAPES, PLATES, BOLTS, ANCHORS, INSETS, ETC. GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123.
7. PRIOR TO FABRICATION, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.
8. NO FIELD SPLICING OF MEMBER IS ALLOWED.

## DESIGN LOADS:

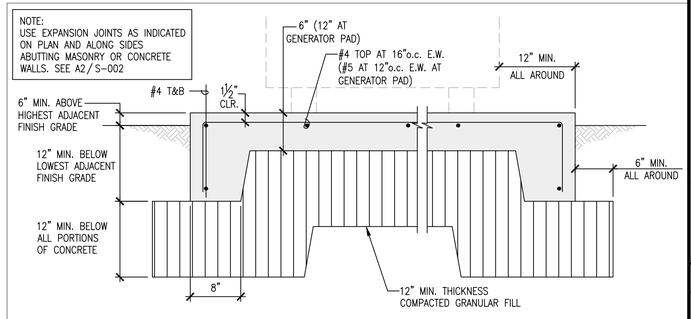
1. FLOOR LIVE LOADS ..... 100 PSF
2. ROOF LIVE LOADS ..... 20 PSF REDUCIBLE
3. WIND LOADS:
   - BASIC WIND SPEED (3-SEC GUST) ..... 105 MPH
   - WIND EXPOSURE ..... C
   - Kzt = 1.0
   - Kd = 0.75
   - Iw = 1.15
   - PARTIALLY ENCLOSED
   - BUILDING WAS NOT UPGRADED TO MEET CURRENT CODE FOR WIND. WIND UPLIFT ON SELECTED MEMBERS WERE ENHANCED.
4. SEISMIC LOADS:
   - MAPPED – MAXIMUM CONSIDERED EARTHQUAKE ACCELERATIONS
   - Ss (SHORT PERIOD) ..... 1.5
   - S1 (1 SEC. PERIOD) ..... 0.60
   - BUILDING WAS NOT UPGRADED SEISMICALLY TO MEET CURRENT CODE.

## SPECIAL INSPECTION REQUIREMENTS LIST BELOW

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR FOR WORK REQUIRING SPECIAL INSPECTION PER CHAPTER 17 OF THE 2006 IBC AS ADOPTED BY THE COUNTY OF HAWAII.
2. SPECIAL INSPECTION FIRM SHALL HAVE AT LEAST 6 YEARS OF EXPERIENCE AND SHALL BE CERTIFIED WITHIN THE BUILDING DEPARTMENT JURISDICTION OF CONSTRUCTION (IF SUCH CERTIFICATION EXIST).
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE SPECIAL INSPECTOR TO ENSURE THAT ALL ELEMENTS REQUIRING SPECIAL INSPECTION ARE INSPECTED.
4. SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING TYPES OF WORK:
   A. WELDING – PERIODIC INSPECTION
5. SPECIAL INSPECTOR SHALL BE IDENTIFIED ON SPECIAL INSPECTION FORM PROVIDED BY THE COUNTY OF HAWAII DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION. EACH ITEM AS REQUIRED IN ITEM 4 ABOVE SHALL BE SPECIALLY INSPECTED.

## ABBREVIATIONS

| | | | |
|---|---|---|---|
| A.B. | ANCHOR BOLT | JT | JOINT |
| ARCH. | ARCHITECTURAL OR ARCHITECT | KSF | KIPS PER SQUARE FOOT |
| @ | AT | LONG. | LONGITUDINAL |
| BAL. | BALANCE | MAX. | MAXIMUM |
| BOT. | BOTTOM | M.B. | MACHINE BOLT |
| BM. | BEAM | MECH. | MECHANICAL |
| B.T.B. | BASALTIC TERMITE BARRIER | MIN. | MINIMUM |
| C.F.S. or CFS | COLD FORMED STEEL | (N) | NEW |
| C.I.P. | CAST IN PLACE | N.T.S. | NOT TO SCALE |
| C.J. | CONSTRUCTION OR CONTROL JOINT | NO. | NUMBER |
| CL | CENTER LINE | O.C. | ON CENTER |
| CLR. | CLEAR | OPP. | OPPOSITE |
| CMU | CONCRETE MASONRY UNIT | PL. | PLATE |
| COL. | COLUMN | PSI. | POUNDS PER SQUARE INCH |
| CONC. | CONCRETE | PSF | POUNDS PER SQUARE FOOT |
| CONT. | CONTINUOUS | R.F. OR | REINFORCED OR |
| CONN. | CONNECTION | REINF. | REINFORCEMENT |
| DIA. OR ø | DIAMETER | REQ'D. | REQUIRED |
| DIAG. | DIAGONAL | SHT. | SHEET |
| DET. | DETAIL | SP. | SPACE OR SPACES |
| D.F. | DOUGLAS FIR | SIM. | SIMILAR |
| (E), EXIST'G | EXISTING | SQ. | SQUARE |
| EA. | EACH | STD. | STANDARD |
| E.J. | EXPANSION JOINT | T&B | TOP AND BOTTOM |
| E.F. | EACH FACE | T&G | TONGUE AND GROOVE |
| EL. | ELEVATOR | THK. | THICK |
| ELEV. | ELEVATION | T.O.C. | TOP OF CONCRETE |
| EQ. | EQUAL | T.O.F. | TOP OF FOOTING |
| EXP. | EXPANSION | T.O.S. | TOP OF SLAB |
| EXT. | EXTERIOR | T.O.W. | TOP OF WALL |
| E.W. | EACH WAY | TRANS. | TRANSVERSE |
| F.P. | FULL PENETRATION | TYP. | TYPICAL |
| FT. | FOOT OR FEET | VERT. | VERTICAL |
| FTG. | FOOTING | W/ | WITH |
| GA. | GAGE | W/O | WITH OUT |
| GALV. | GALVANIZE | W.J. | WALL JOINT |
| HORIZ. | HORIZONTAL | W.W.F. | WELDED WIRE FABRIC |
| HSB | HIGH STRENGTH BOLT | W.W.M. | WELDED WIRE MESH |
| INT. | INTERIOR | | |




EXTERIOR EQUIPMENT PAD

NOT TO SCALE

S-001 A4


Youth Hawaii ChalleNGE National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO

CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE EXPIRATION DATE


| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES C.S. DRW D.H. CHK C.S.

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

GENERAL NOTES

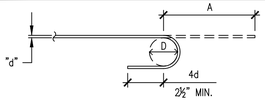
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

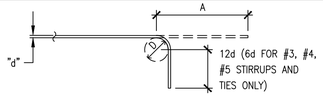
FEDERAL PROJECT NO.

SHEET 16 OF 131

S-001

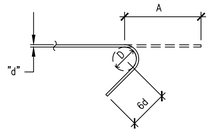



STANDARD HOOK 180°




BAR BEND 90°

| BAR SIZE | MINIMUM EXTENSION LENGTHS "A" | | | |
|---|---|---|---|---|
| | STANDARD HOOKS | | TIES AND STIRRUPS | |
| | 180° HOOKS | 90° HOOKS | 90° HOOKS | 135° HOOKS |
| #3 | 6" | 7" | 5" | 6" |
| #4 | 8" | 9" | 6" | 7" |
| #5 | 9" | 11" | 7" | 9" |
| #6 | 11" | 13" | 14" | 12" |
| #7 | 12" | 15" | 16" | 14" |
| #8 | 14" | 17" | 19" | 16" |
| #9 | 19" | 21" | NA | NA |
| #10 | 21" | 24" | NA | NA |
| #11 | 24" | 26" | NA | NA |
| #14 | 34" | 34" | NA | NA |
| #18 | 45" | 45" | NA | NA |

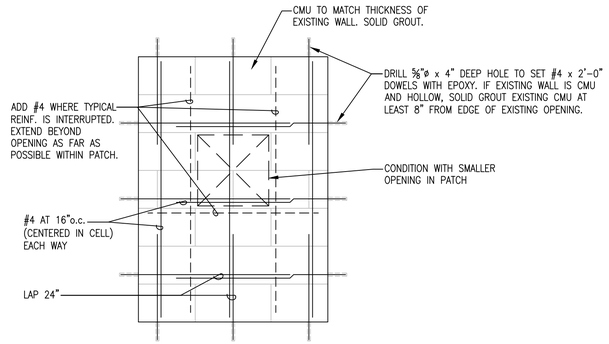



BAR BEND 135°

| BAR SIZE | D |
|---|---|
| #3,#4,#5 #6,#7,#8 | 6 d |
| #9,#10,#11 | 8 d |
| #14,#18 | 10 d |

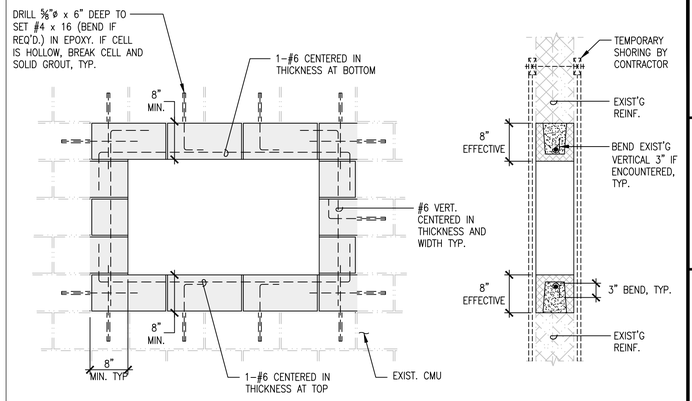
## TYP. REBAR BENDING

NOT TO SCALE — S-002 — C1



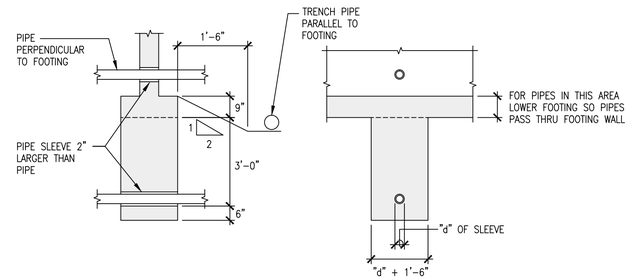

## PATCHING EXISTING WINDOW OPENING

NOT TO SCALE — S-002 — C4




## TYPICAL OPENING IN EXISTING CMU WALL

NOT TO SCALE — S-002 — C5

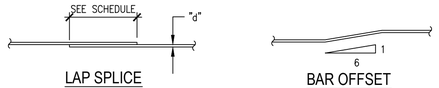



SECTION — ELEVATION

NOTE:
FOR PIPES 3'-0" OR LESS BELOW FOOTINGS, PROVIDE SLEEVE AND CONCRETE AS SHOWN. FOR PIPES MORE THAN 3'-0" BELOW FOOTINGS USE STEPPED FOOTING DETAIL TO STAY WITHIN 3'-0".

## TYP. PIPE SLEEVE BELOW FOOTING

NOT TO SCALE — S-002 — B1




LAP SPLICE



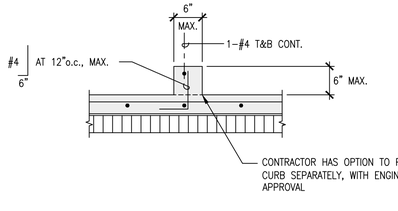

BAR OFFSET

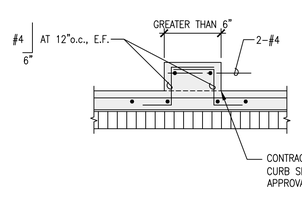
| BAR SIZE | f'c = 3000 PSI | | f'c = 4000 PSI | | f'c = 5000 PSI | | f'c = 6000 PSI | |
|---|---|---|---|---|---|---|---|---|
| | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS | TOP BARS | OTHER BARS |
| #3 | 24" | 24" | 24" | 24" | 24" | 24" | 24" | 24" |
| #4 | 29" | 24" | 25" | 24" | 24" | 24" | 24" | 24" |
| #5 | 36" | 28" | 31" | 24" | 28" | 24" | 26" | 24" |
| #6 | 43" | 33" | 37" | 29" | 34" | 26" | 31" | 24" |
| #7 | 63" | 48" | 54" | 42" | 49" | 38" | 45" | 34" |
| #8 | 72" | 55" | 62" | 48" | 56" | 43" | 51" | 39" |
| #9 | 81" | 62" | 70" | 54" | 63" | 48" | 57" | 44" |
| #10 | 91" | 70" | 79" | 61" | 70" | 54" | 64" | 50" |
| #11 | 101" | 78" | 87" | 67" | 78" | 60" | 71" | 55" |

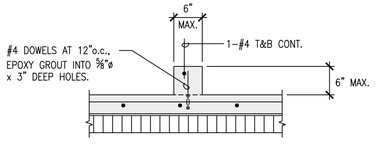
NOTES:
1. LAP SPLICE LENGTHS ARE FOR CLASS A LAP SPLICES ONLY.
2. LAP SPLICE LENGTHS ARE FOR GRADE 60 DEFORMED BARS.
3. LAP SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH THIS TABLE, UNLESS OTHERWISE SHOWN OR NOTED.
4. A "TOP" BAR IS HORIZONTAL REINFORCEMENT WHICH HAS MORE THAN 12" OF FRESH CONCRETE CAST BELOW THE SPLICE.

## TYP. LAP SPLICE DETAIL

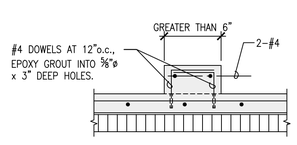
NOT TO SCALE — S-002 — B2



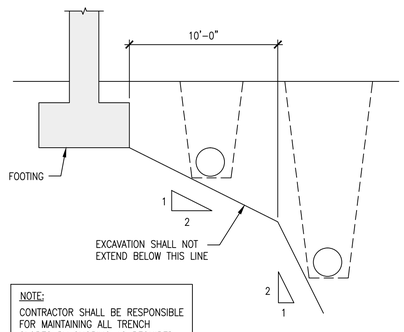

ALTERNATE AT INTERIOR PARTITION WALL ONLY




ALTERNATE AT INTERIOR PARTITION WALL ONLY

## TYP. CONCRETE CURB DETAIL

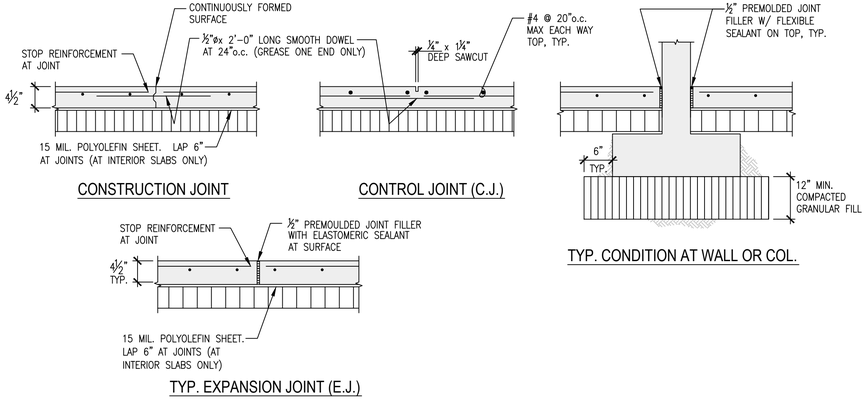
NOT TO SCALE — S-002 — B4




NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRENCH SLOPES BY SHORING AS REQUIRED.

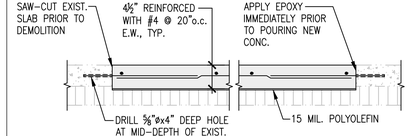
## TYP. TRENCH DETAIL

NOT TO SCALE — S-002 — A1




## TYP. SLAB-ON-GRADE DETAILS

NOT TO SCALE — S-002 — A2




## TYP. EXIST. SLAB REMOVAL & REPLACEMENT

NOT TO SCALE — S-002 — A4


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO

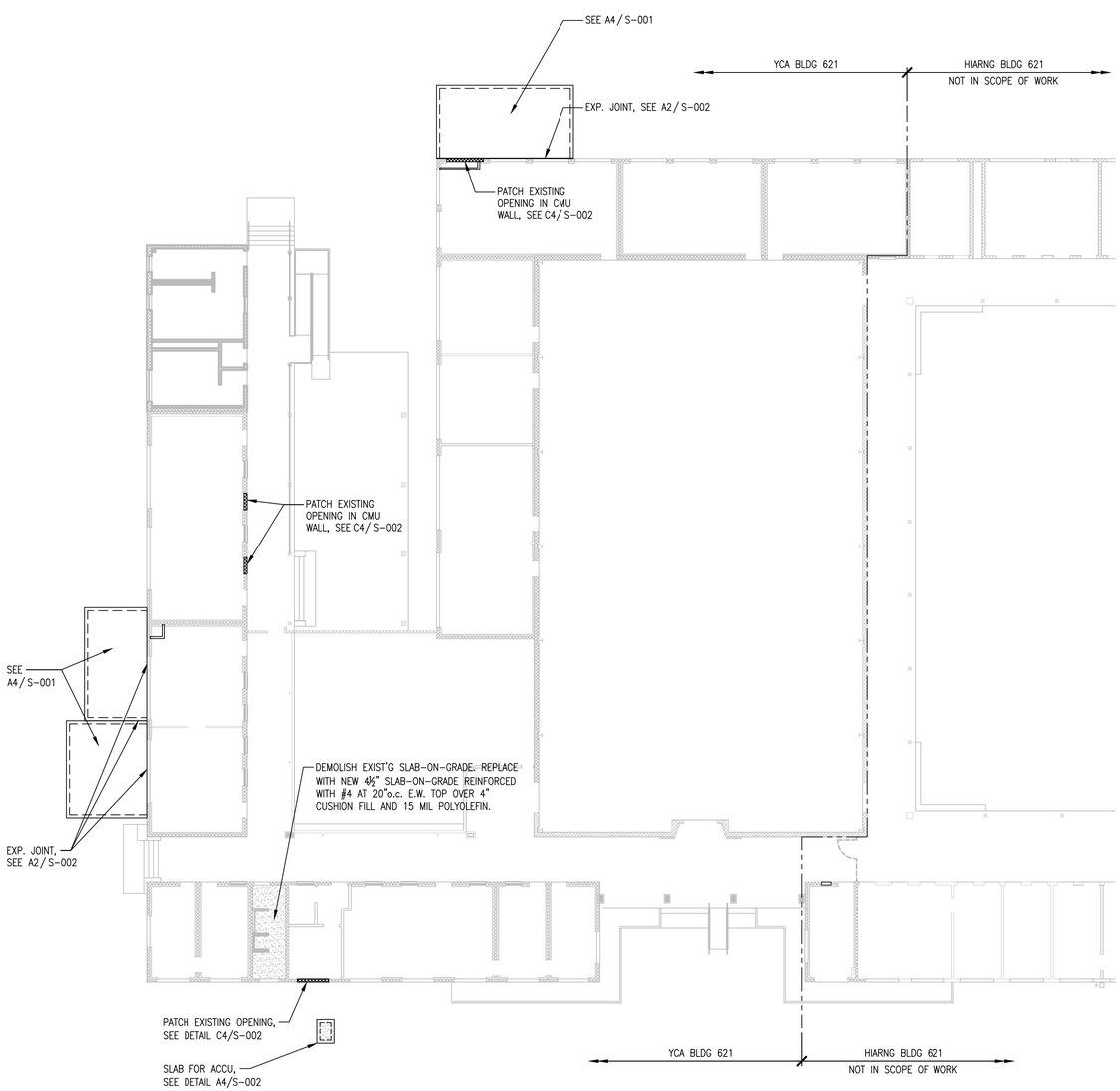

CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE — EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES C.S. | DRW D.H. | CHK C.S.

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TYPICAL DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 17 OF 131
S-002

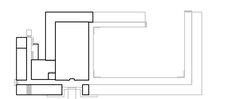



## YCA - PARTIAL FLOOR PLAN

SCALE: 1/16" = 1'-0"

S-101 A1

PLAN NORTH



8' 0 10' 20' 30' 40'

1/16" = 1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO


CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES C.S. | DRW D.H. | CHK C.S.

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL FLOOR PLAN

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

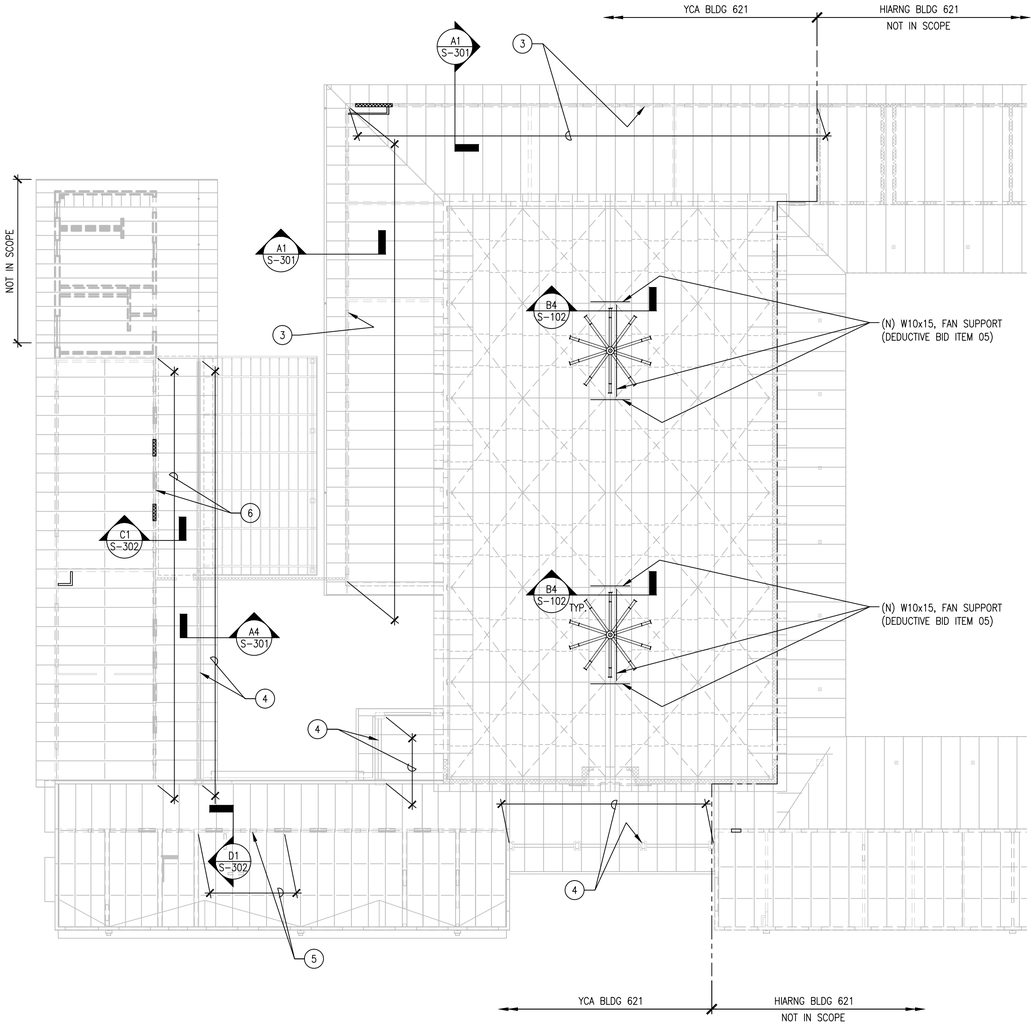
SHEET 18 OF 131

S-101

| SCHEDULE OF EXIST'G WALL TO ROOF RETROFIT CONN. | |
|---|---|
| MARK | DETAIL |
| ~~X~~ | ~~B1 / S-301~~ NOT USED |
| ~~X~~ | ~~A2 / S-301~~ NOT USED |
| 3 | A1 / S-301 |
| 4 | A4 / S-301 |
| 5 | D1 / S-302 |
| 6 | C1 / S-302 |

## LEGEND / NOTES

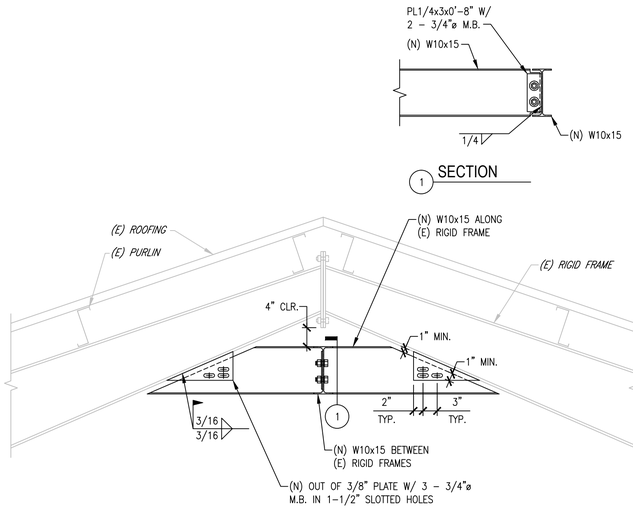
1. ALL PREFABRICATED ROOF CONNECTORS SHALL EITHER BE MADE OUT OF 316 STAINLESS STEEL OR WITH "Z-MAX" FINISH. STAINLESS STEEL CONNECTOR SHALL BE "SPECIALLY FABRICATED" IF NOT NORMALLY FABRICATED BY SIMPSON STRONG TIE. SPECIAL FABRICATION COST WILL BE AT NO ADDITIONAL COST TO THE CONTRACT. CONNECTORS THAT ARE THICK ENOUGH SHALL BE HOT-DIPPED GALVANIZED AND IF NOT, SHALL BE MADE OUT OF 316 STAINLESS STEEL. ALL PREFABRICATED CONNECTORS SHALL BE SIMPSON, STRONG TIE.
2. ALL NAILS FOR PREFABRICATED CONNECTORS SHALL BE OF THE PROPER SIZE AND NUMBER AS RECOMMENDED BY CONNECTOR MANUFACTURER. ALL NAILS SHALL EITHER BE HOT DIPPED GALVANIZED OR MADE OUT OF STAINLESS STEEL.
3. ALL BOLTS AND NUTS SHALL BE GALVANIZED.
4. STRUCTURAL ROOFING SHALL BE DEFINED FOR THIS PROJECT AS METAL ROOFING CAPABLE OF SUPPORTING THE REQUIRED ROOF LIVE LOAD AND WIND LOADS BETWEEN PURLINS, WITHOUT THE CONTINUOUS SUPPORT OF AN UNDERLYING DECKING.




## YCA - PARTIAL ROOF FRAMING PLAN

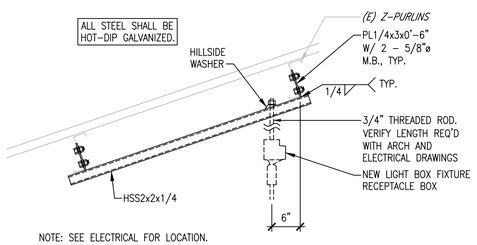
SCALE: 1/16" = 1'-0" S-102 A1

PLAN NORTH




## SECTION (DEDUCTIVE BID ITEM 05)

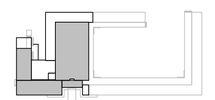
SCALE: 3/4" = 1'-0" S-102 B4




NOTE: SEE ELECTRICAL FOR LOCATION.

## NEW LIGHT SUPPORT IN MULTI-PURPOSE BLDG

SCALE: 3/4" = 1'-0" S-102 A4



1' 0 1' 2' 3'

3/4" = 1'-0"

8' 0 10' 20' 30' 40'

1/16" = 1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO

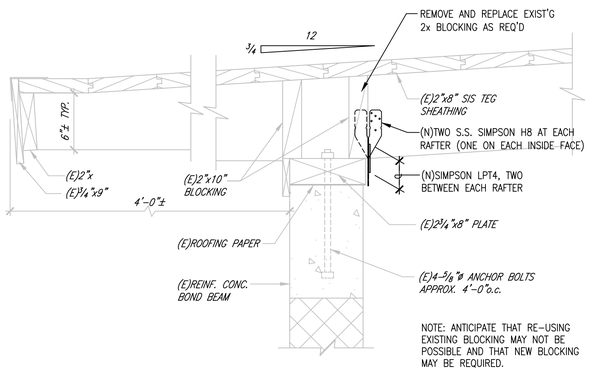

CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES C.S. DRW D.H. CHK C.S.

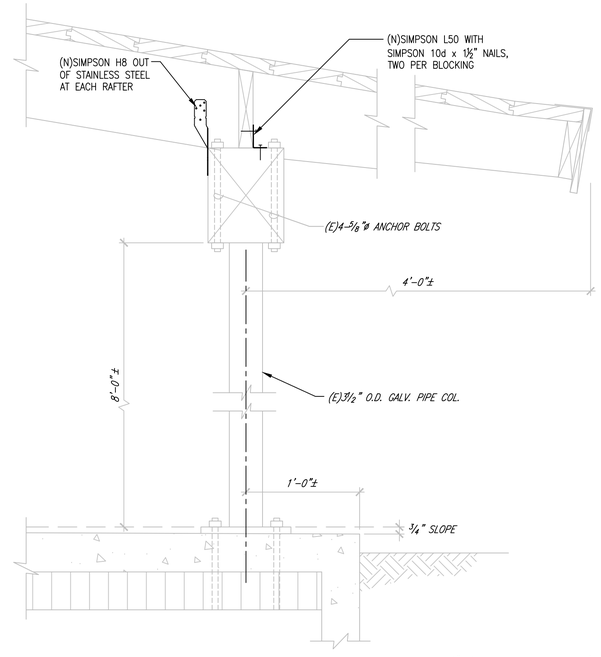
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL ROOF FRAMING PLAN AND SECTIONS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 19 OF 131
S-102




## ALONG EXTERIOR LONGITUDINAL WALL

SCALE: 1 1/2" = 1'-0" S-301 A1




## SECTION

SCALE: 1 1/2" = 1'-0" S-301 A4

2" 0 1' 2"

1 1/2" = 1'-0"

Youth Hawaii Challenge National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO

CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITAL DATE: 30 JUNE 2016

DES C.S. | DRW D.H. | CHK C.S.

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

ROOF FRAMING SECTIONS AND DETAILS

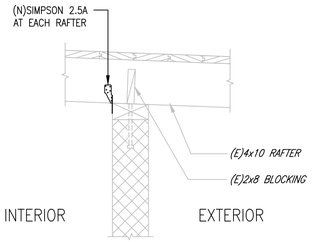
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

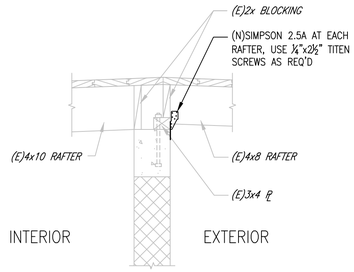
FEDERAL PROJECT NO.

SHEET 20 OF 131

S-301




DETAIL
SCALE: 3/4" = 1'-0" S-302 D1




DETAIL
SCALE: 3/4" = 1'-0" S-302 C1

1' 0 1' 2' 3'
3/4" = 1'-0"

Youth Hawaii Challenge Academy — National Guard

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com
A/E INFO

CRAIG H. SAKANASHI
LICENSED PROFESSIONAL ENGINEER
No. 5509-S
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

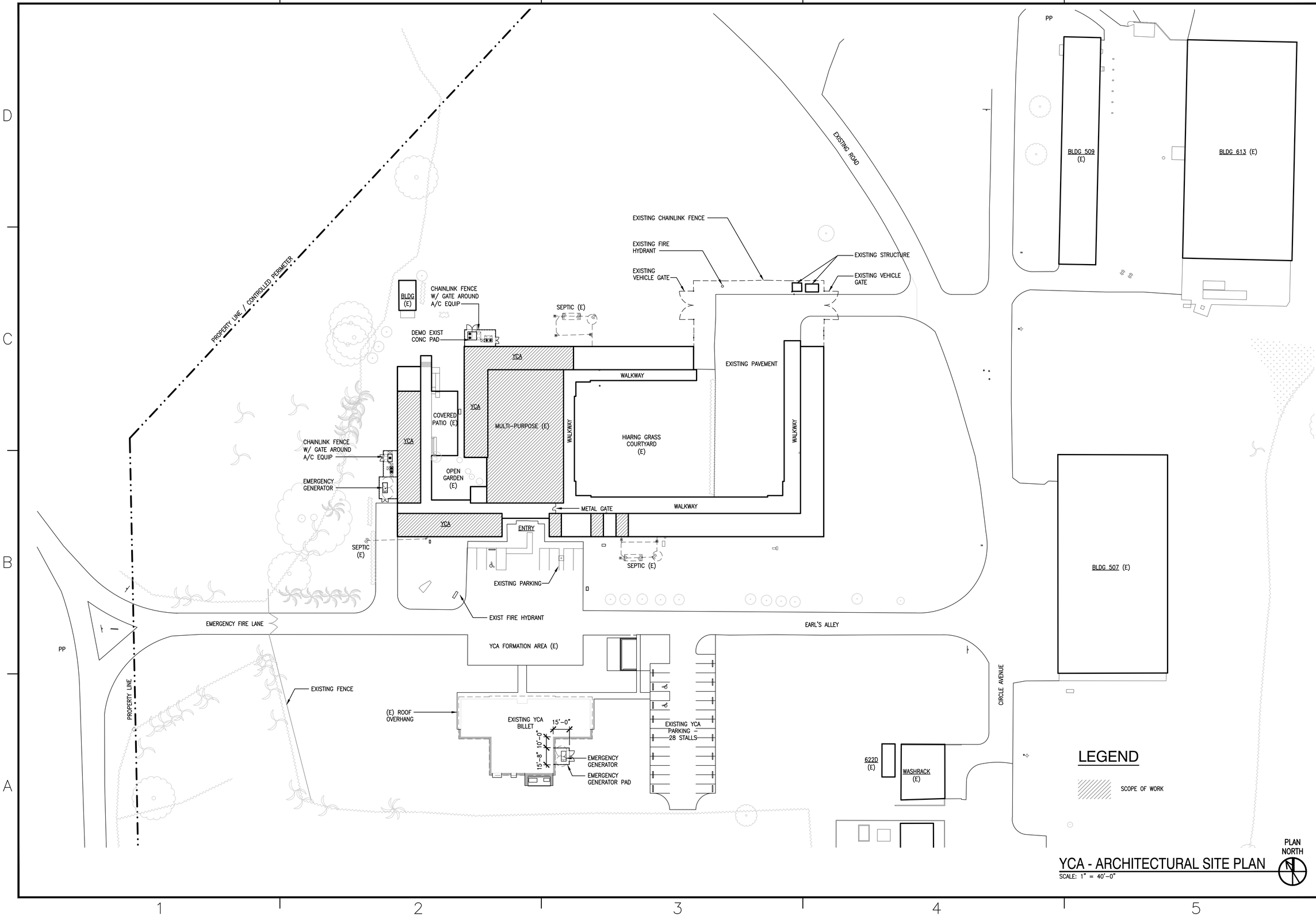
| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES C.S. | DRW D.H. | CHK C.S.

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
ROOF FRAMING DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 21 OF 131
S-302




## YCA - ARCHITECTURAL SITE PLAN

SCALE: 1" = 40'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

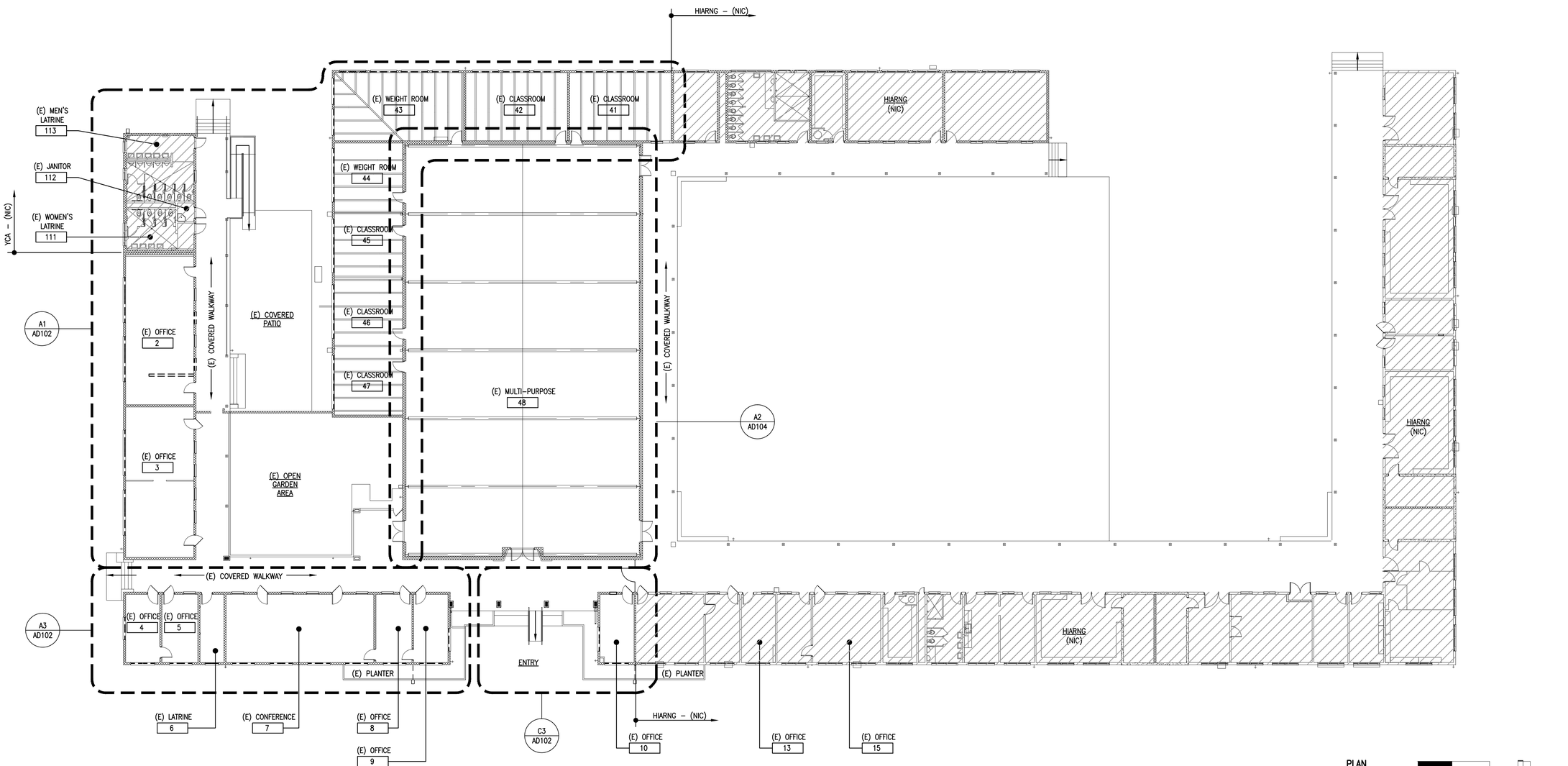
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ISS_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – ARCHITECTURAL SITE PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 22 OF 131
AS101




## LEGEND

EXISTING TO REMAIN

DEMOLISH EXISTING

AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

# YCA - OVERALL DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

PLAN NORTH

KEY PLAN

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_05_ | DATE | APPR |
|---|---|---|---|---|

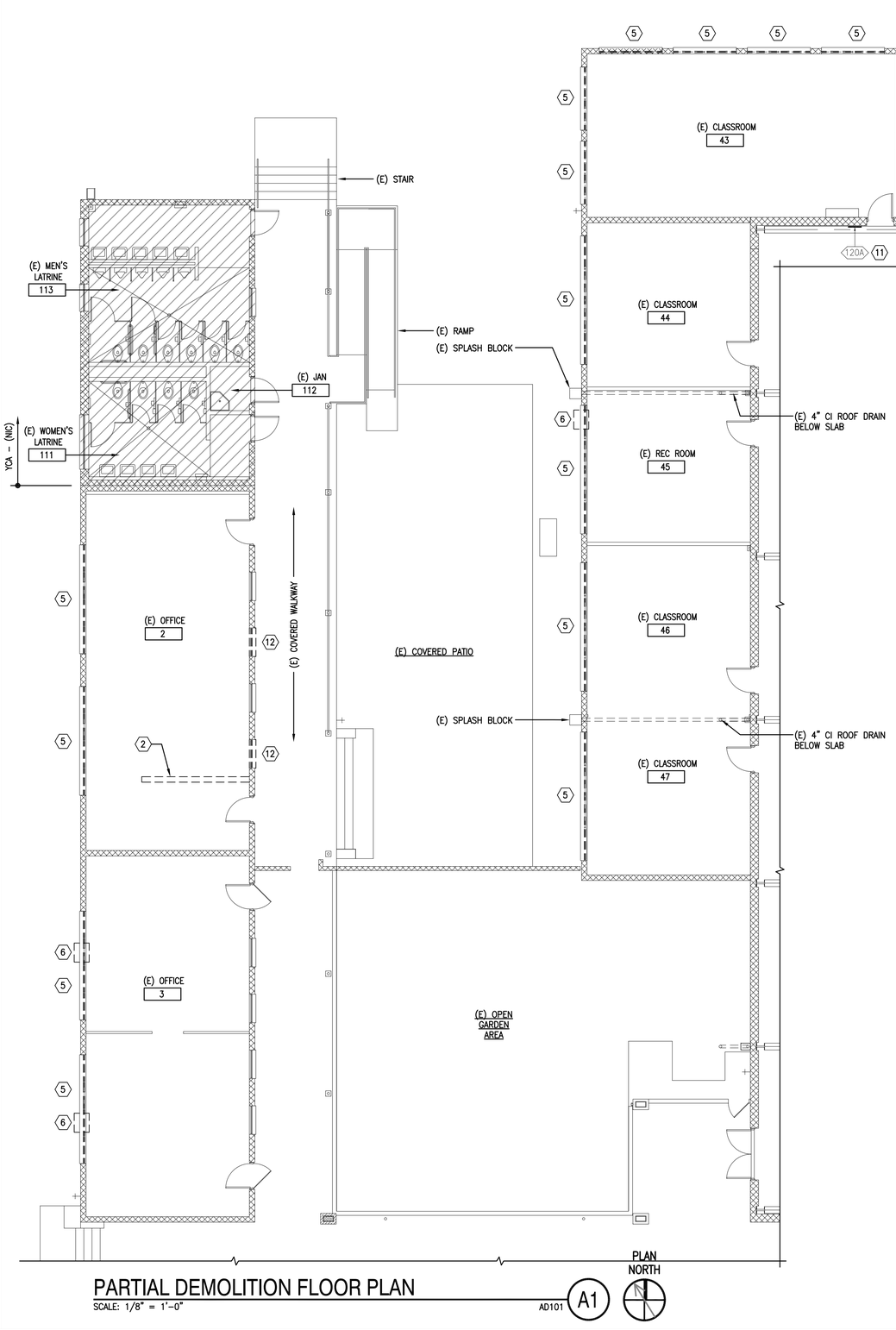
SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – OVERALL DEMOLITION PLAN

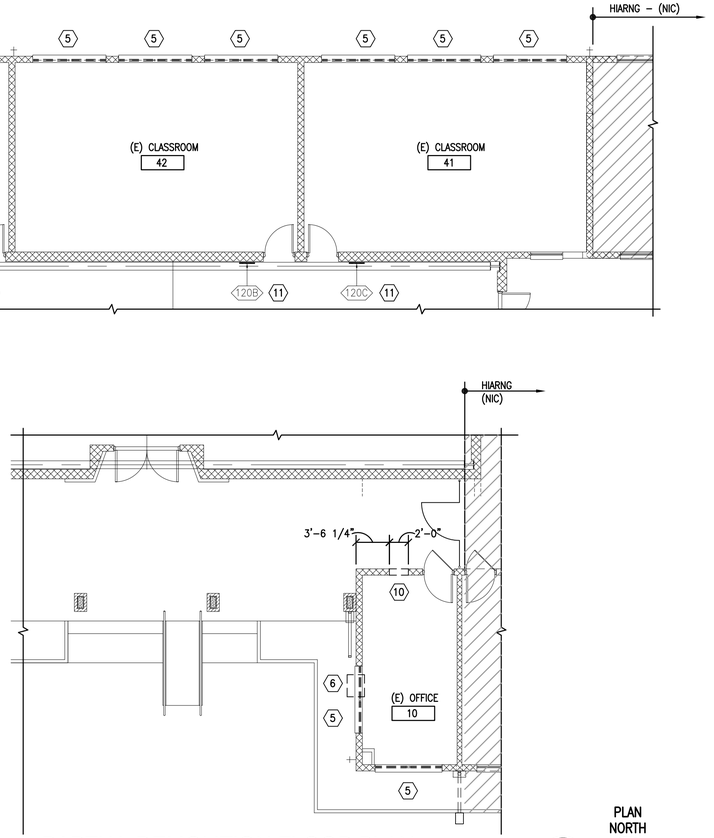
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 23 OF 131
AD101




## PARTIAL DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'-0" AD101 A1

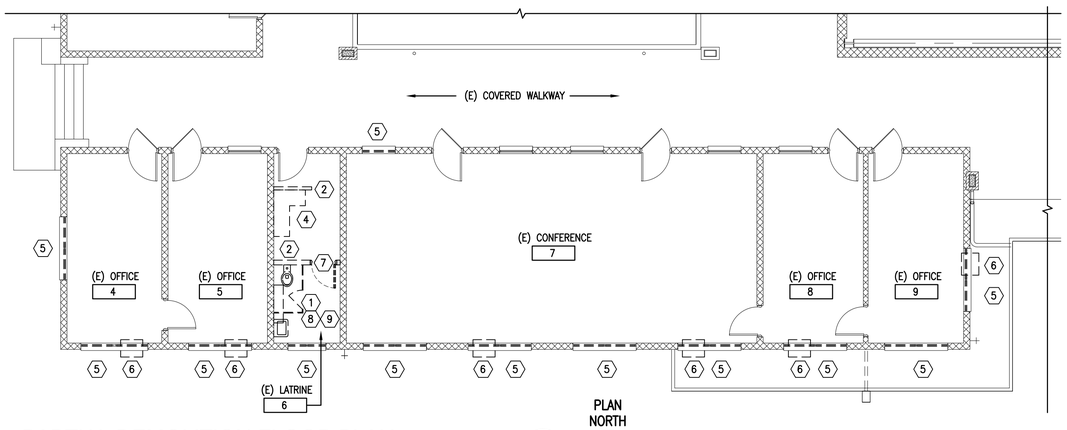
PLAN NORTH




## PARTIAL DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'-0" AD101 C3

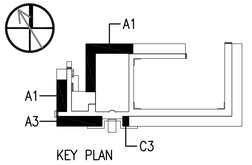
PLAN NORTH




## PARTIAL DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'-0" AD101 A3

PLAN NORTH




KEY PLAN

PLAN NORTH

GRAPHIC SCALE

0 2 4 8 16 24FT

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

## LEGEND

- EXISTING TO REMAIN
- DEMOLISH EXISTING
- AREA NOT IN CONTRACT
- CLASSROOM 6 / 119 — ROOM NAME / ROOM NUMBER
- XXX — SIGN ID TAG

GENERAL NOTES: 1. SEE CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, AND TELECOMMUNICATIONS DRAWINGS FOR DEMOLITION OF THOSE ITEMS.

| MARK | DESCRIPTION |
|---|---|
| 1 | REMOVE EXIST CERAMIC TILE FLOORING TO CONCRETE SUB-BASE IN ROOM/SPACE. |
| 2 | REMOVE EXIST MASONRY PARTITION WALL AS INDICATED. PATCH, REPAIR & SEAL CONCRETE FLOOR AS REQUIRED. |
| 3 | REMOVE EXIST METAL/WOOD STUD PARTITION AS INDICATED. PATCH, REPAIR & SEAL CONCRETE FLOOR. |
| 4 | REMOVE EXIST RESILIENT FLOORING ADHESIVE AND WALL BASE TO SUB-BASE IN ROOM/SPACE. PREP FLOOR TO RECEIVE NEW FLOOR FINISH W.O. |
| 5 | REMOVE EXIST WINDOW, FRAME, SECURITY GRILLE (WHERE OCCURS), WINDOW TREATMENT (WHERE OCCURS) AND CAULKING. (E) CONC SILL TO REMAIN. PATCH, REPAIR AND PREP ROUGH OPENING FOR NEW WINDOW ASSEMBLY. |
| 6 | REMOVE EXIST WINDOW AIR CONDITIONING UNITS AND ANCHOR SYSTEMS PRIOR TO WINDOW INSTALL – SEE MECHANICAL |
| 7 | REMOVE EXIST DOOR, FRAME, TRANSOM (WHERE OCCURS) AND HARDWARE. REMOVE THRESHOLD (WHERE OCCURS). |
| 8 | REMOVE EXIST TOILET PARTITIONS. |
| 9 | REMOVE ALL EXIST TOILET ACCESSORIES TO INCLUDE BUT NOT LIMITED TO MIRRORS, PAPER TOWEL DISPENSERS, SOAP DISPENSERS/HOLDERS, GRAB BARS, SHOWER RODS, ROBE HOOKS, AND TRASH RECEPTACLES, LAVATORIES, AND WATER CLOSET. |
| 10 | PROVIDE 24"W X 52H" ROUGH OPENING IN (E) CMU WALL FOR INSTALLATION OF NEW WINDOW. |
| 11 | RELOCATE ROOM SIGN TO NEW LOCATION, SEE SHEET A-401 & A-701 |
| 12 | REMOVE EXIST WINDOW, FRAME, SECURITY GRILLE (WHERE OCCURS), WINDOW TREATMENT (WHERE OCCURS) AND CAULKING. REMOVE EXISTING CONCRETE SILL. PATCH, REPAIR AND PREP ROUGH OPENING FOR NEW CMU INFILL. |


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND LICENSED PROFESSIONAL ARCHITECT No. 7418 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – DEMOLITION FLOOR PLANS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 24 OF 131

AD102

## LEGEND

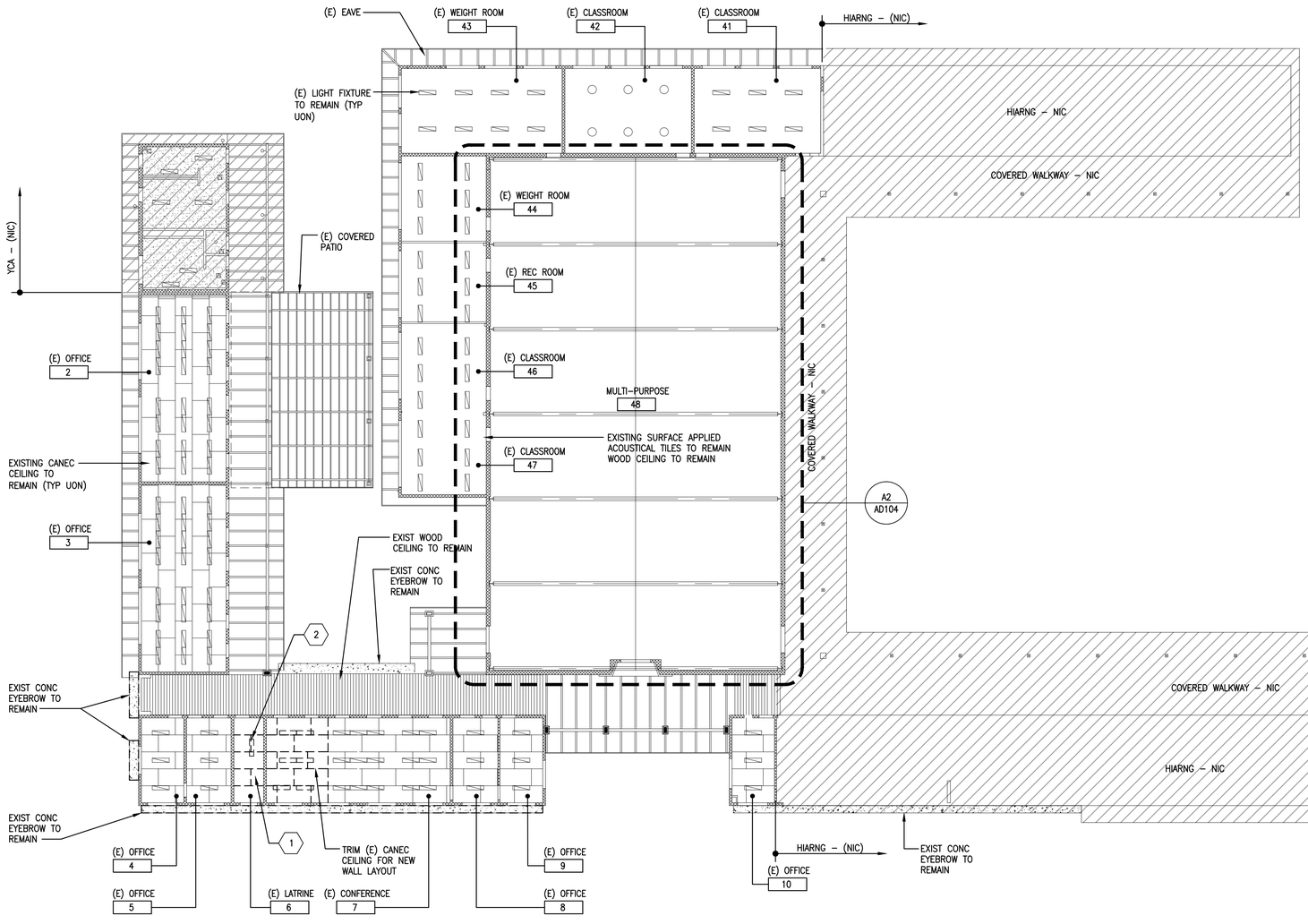
EXISTING TO REMAIN

DEMOLISH EXISTING

AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

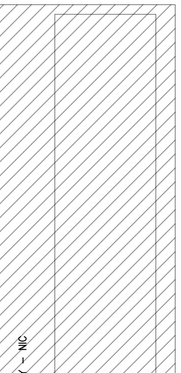
| MARK | DESCRIPTION |
|---|---|
| 1 | REMOVE EXIST CANEC CEILING SYSTEM COMPLETE TO STRUCTURE INCLUDING EXIST LIGHT FIXTURES |
| 2 | REMOVE EXIST LIGHT FIXTURES (SEE ELECTRICAL) |

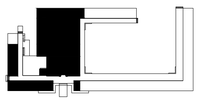



## YCA - OVERALL REFLECTED CEILING DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH



KEY PLAN

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

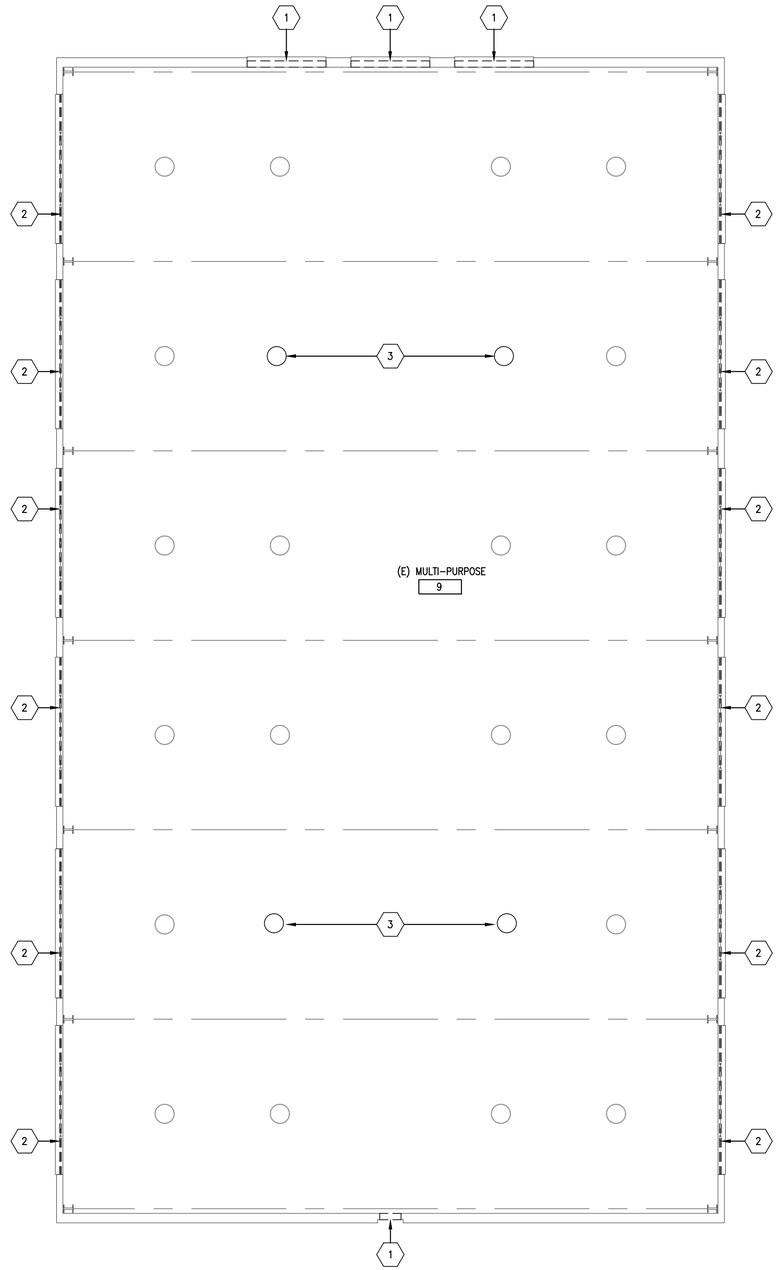
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ISS_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – OVERALL REFLECTED CEILING DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 25 OF 131
AD103




## YCA - CLERESTORY DEMOLITION PLAN

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

AD101 A2

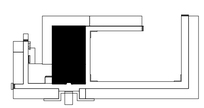
PLAN NORTH

## LEGEND

- EXISTING TO REMAIN
- = = = = = DEMOLISH EXISTING
- EXISTING LIGHT FIXTURE – SEE ELECTRICAL
- RELOCATE EXISTING LIGHT FIXTURE – SEE ELECTRICAL
- CLASSROOM 6 — ROOM NAME
- 119 — ROOM NUMBER

| MARK | DESCRIPTION |
|---|---|
| 1 | REMOVE EXIST LOUVERS, FRAME AND CAULKING. (E) CONC SILL TO REMAIN. PATCH, REPAIR AND PREP ROUGH OPENING FOR NEW LOUVER ASSEMBLY. |
| 2 | REMOVE EXIST WINDOWS, FRAME, CAULKING AND CONC SILL. PATCH, REPAIR AND PREP ROUGH OPENING FOR NEW CONC SILL AND WINDOW ASSEMBLY. |
| 3 | REMOVE AND RELOCATE EXISTING LIGHT FIXTURE – SEE ELECTRICAL |

PLAN NORTH



KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

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

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3900
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – CLERESTORY DEMOLITION PLAN

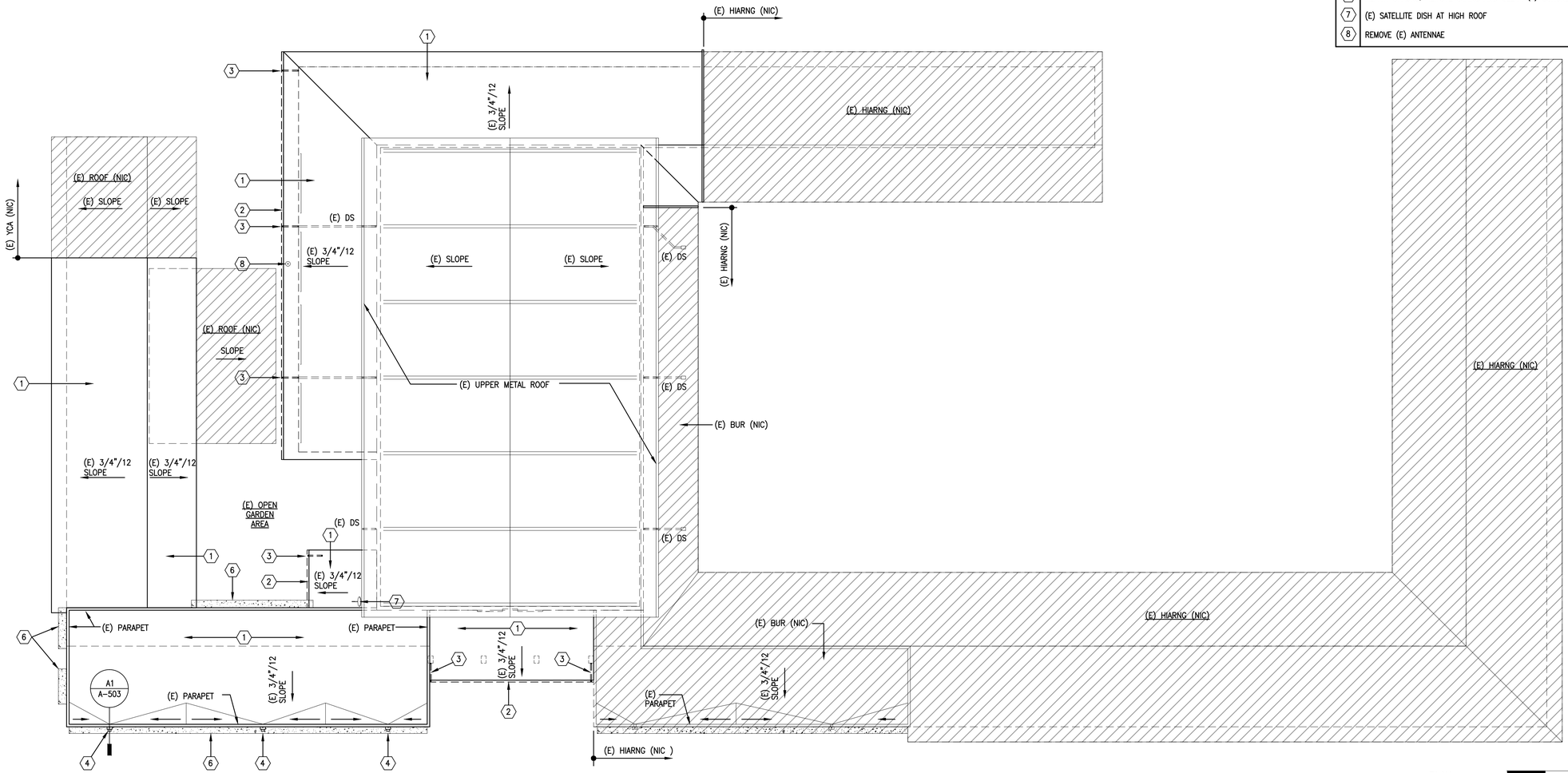
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. -

SHEET 26 OF 131

AD104




## LEGEND

EXISTING TO REMAIN

DEMOLISH EXISTING

AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

| MARK | DESCRIPTION |
|---|---|
| 1 | REMOVE (E) BUILT-UP ROOFING SYSTEM DOWN TO (E) SUBSTRATE |
| 2 | REMOVE (E) GUTTER, DOWNSPOUT AND SUPPORT STRAPS |
| 3 | REMOVE (E) DOWNSPOUT, SUPPORT BRACKETS AND (E) SPLASH BLOCK |
| 4 | REMOVE (E) SCUPPER, LEADER BOX, DOWNSPOUT AND SUPPORT BRACKETS |
| 5 | (E) METAL ROOF SYSTEM |
| 6 | REPAIR CRACKS, REMOVE STAINS AND CLEAN (E) CONCRETE EYEBROW |
| 7 | (E) SATELLITE DISH AT HIGH ROOF |
| 8 | REMOVE (E) ANTENNAE |

## YCA - OVERALL ROOF DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

PLAN NORTH

KEY PLAN

GRAPHIC SCALE

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ISS_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

YCA – OVERALL ROOF DEMOLITION PLAN

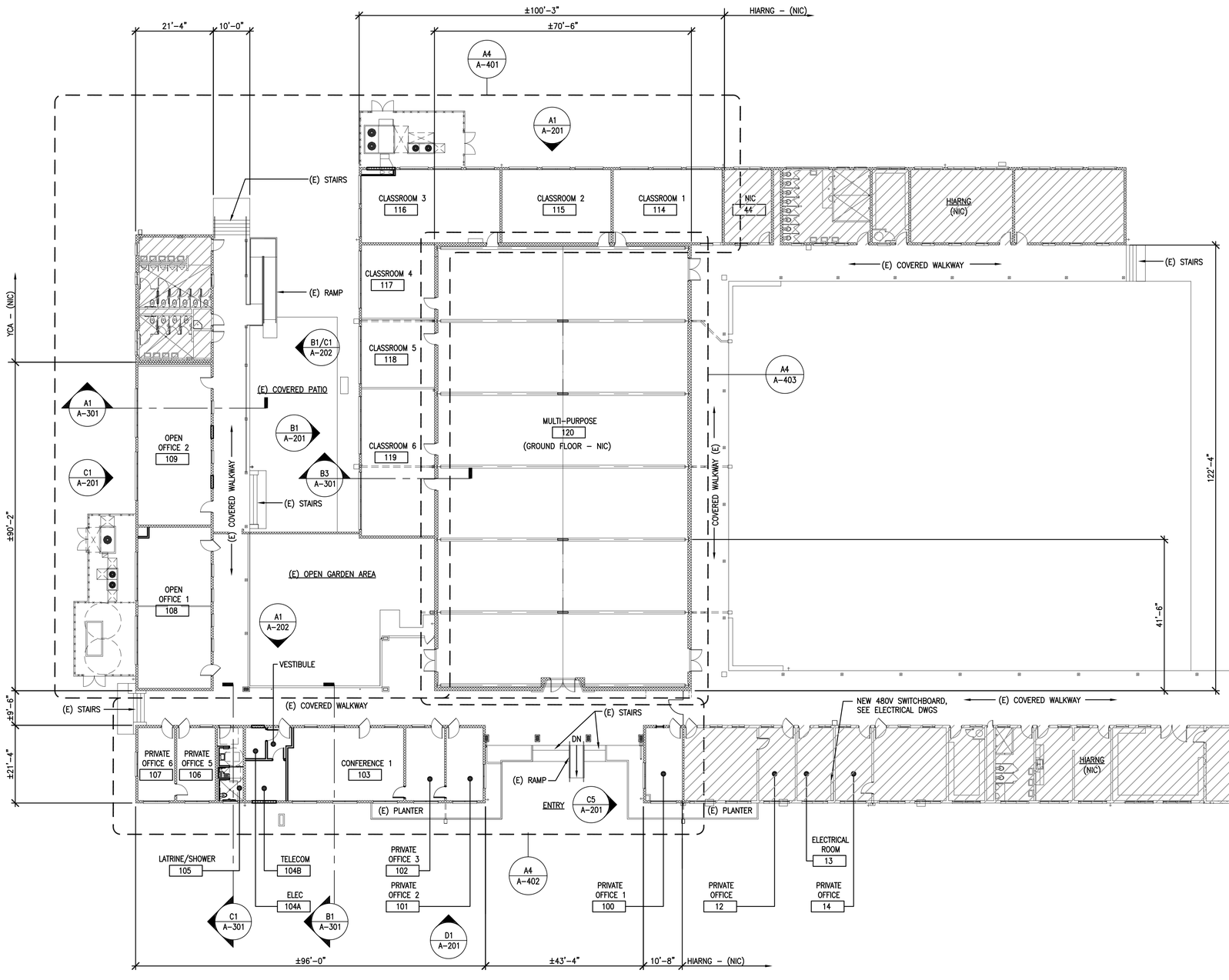
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 27 OF 131

AD105




## YCA - OVERALL FLOOR PLAN

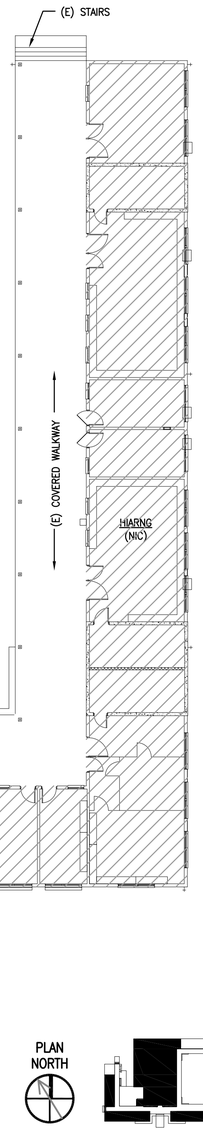
SCALE: 1/16" = 1'-0"

PLAN NORTH

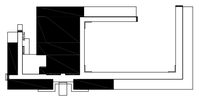
## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER




PLAN NORTH



KEY PLAN

GRAPHIC SCALE

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – OVERALL FLOOR PLAN

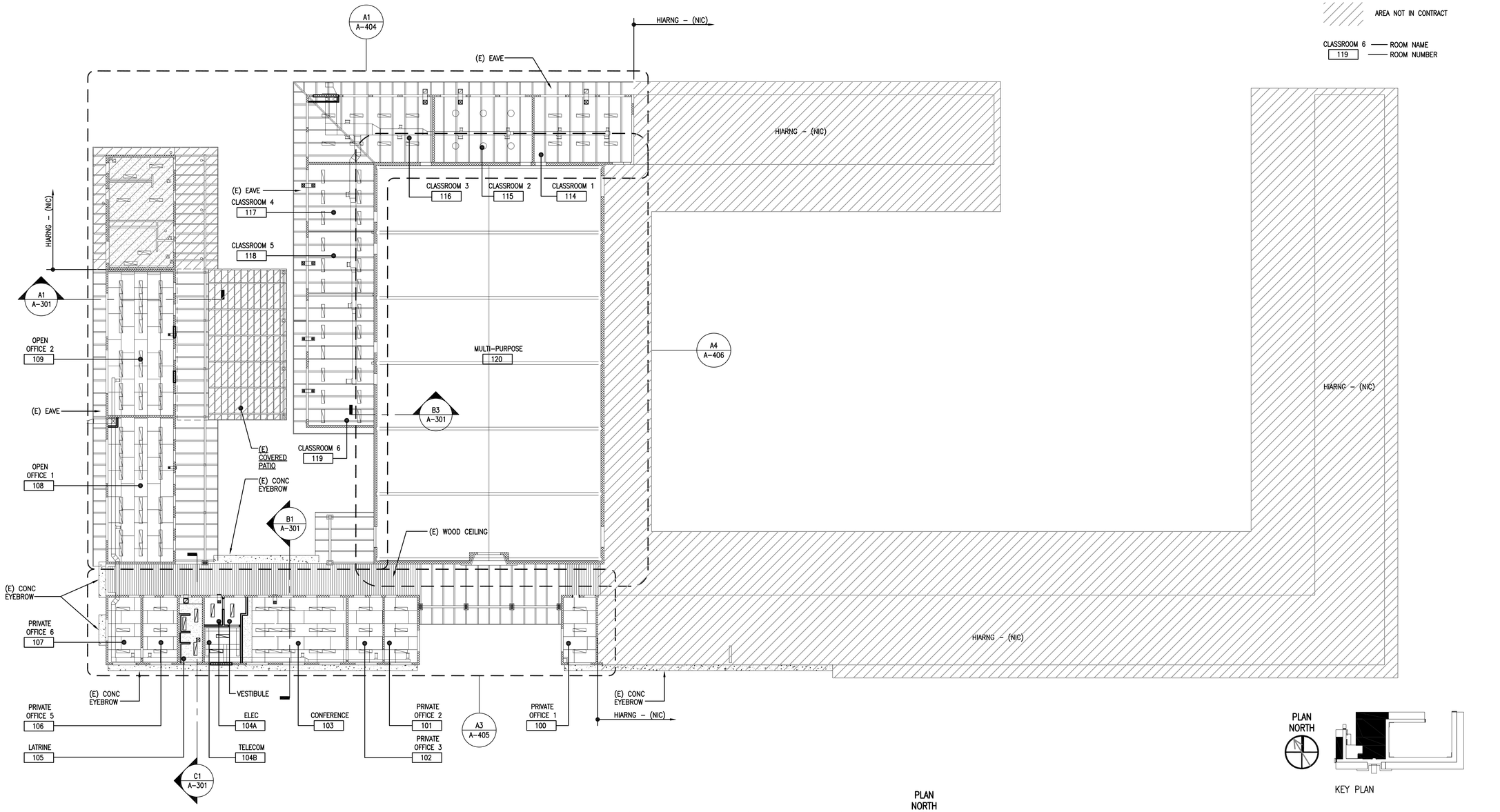
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 28 OF 131

A-101




## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- EXISTING LIGHT FIXTURE
- LIGHT FIXTURE – SEE ELECTRICAL
- GYP BOARD CEILING
- AREA NOT IN CONTRACT
- CLASSROOM 6 — ROOM NAME
- 119 — ROOM NUMBER

PLAN NORTH

KEY PLAN

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"

## YCA - OVERALL REFLECTED CEILING PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016
DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

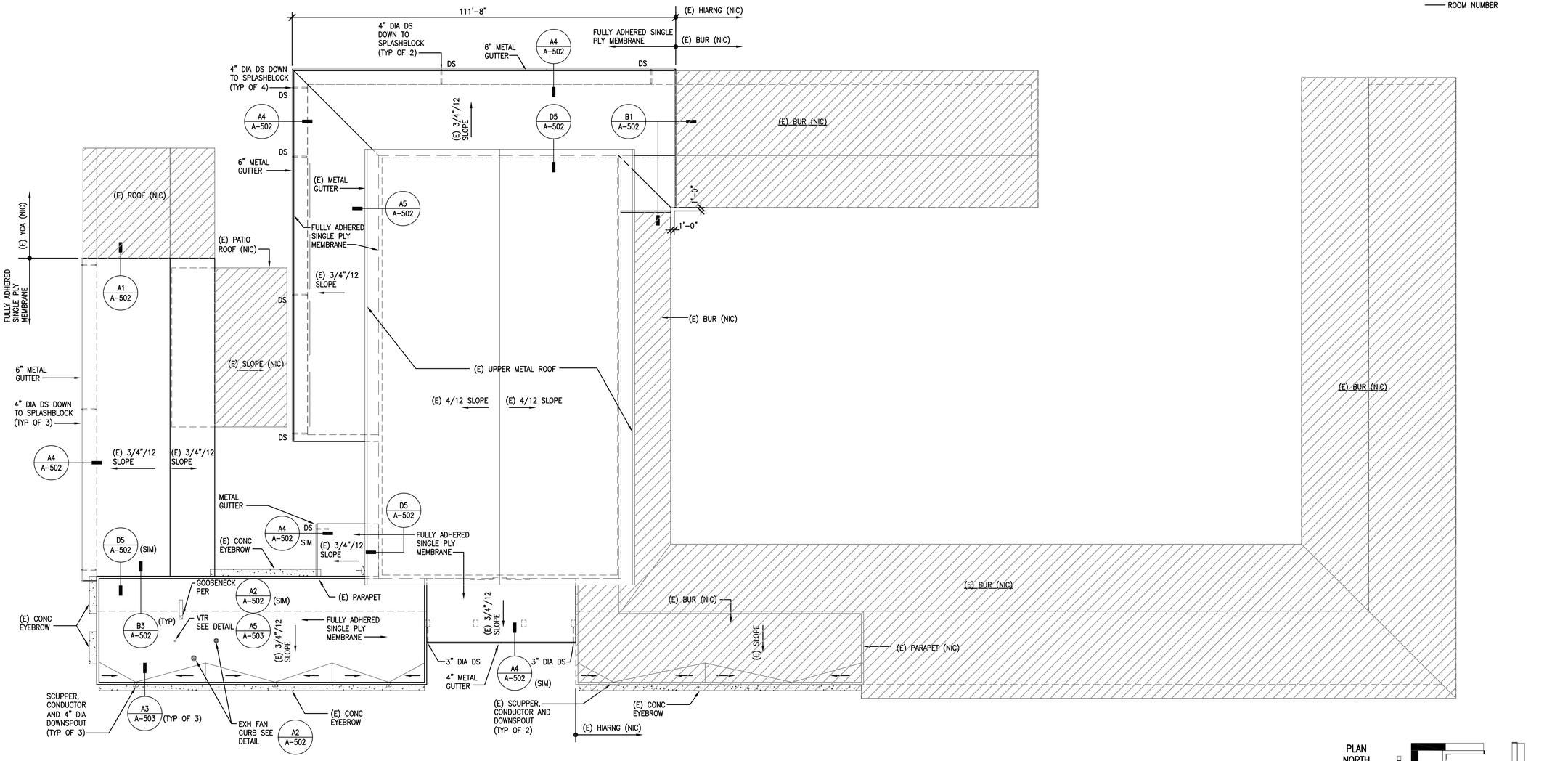
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – OVERALL REFLECTED CEILING PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 29 OF 131

A-102




## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- EXISTING LIGHT FIXTURE
- LIGHT FIXTURE – SEE ELECTRICAL
- AREA NOT IN CONTRACT
- ROOM NAME
- ROOM NUMBER

PLAN NORTH

KEY PLAN

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"

## YCA - OVERALL ROOF PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

YCA – OVERALL ROOF PLAN

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

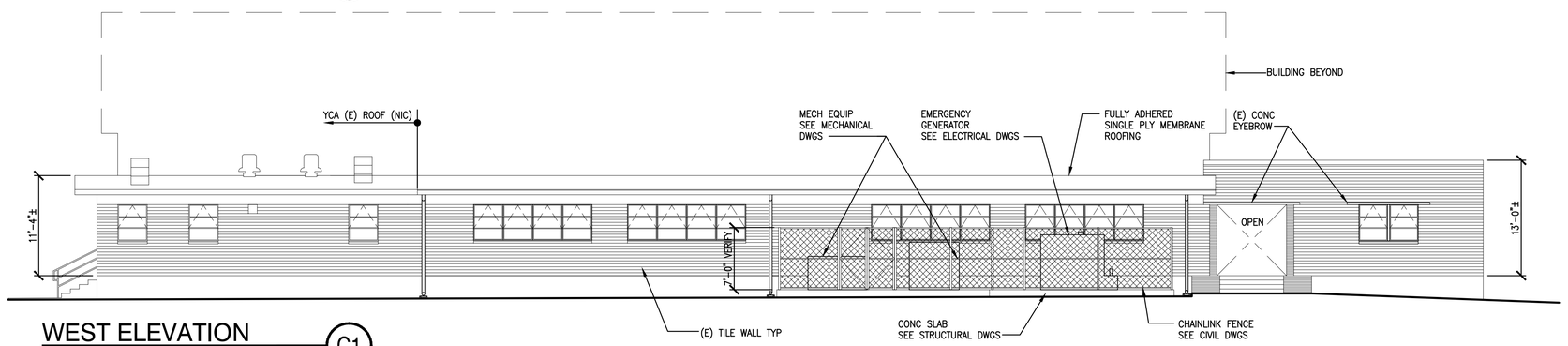
SHEET 30 OF 131

A-103



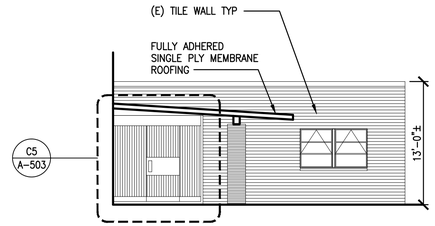

## SOUTH ELEVATION

SCALE: 1/8" = 1'-0" A-101 D1



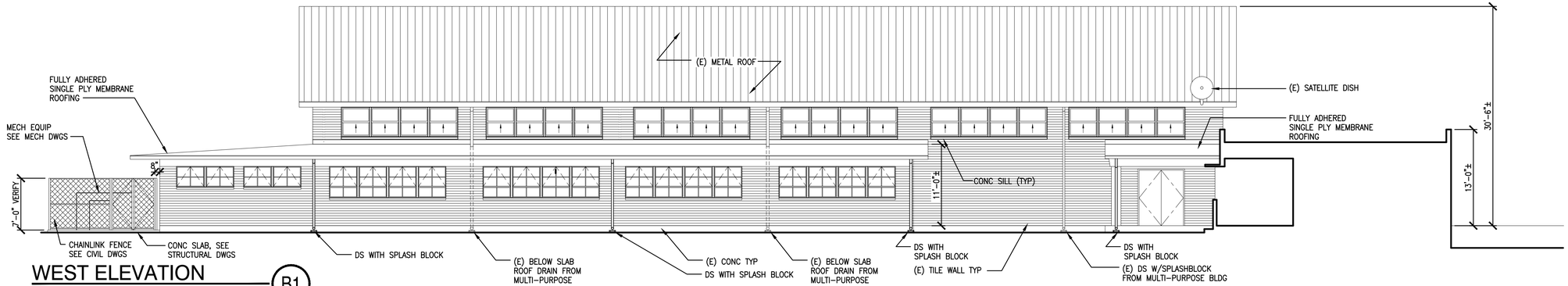

## WEST ELEVATION

SCALE: 1/8" = 1'-0" A-101 C1



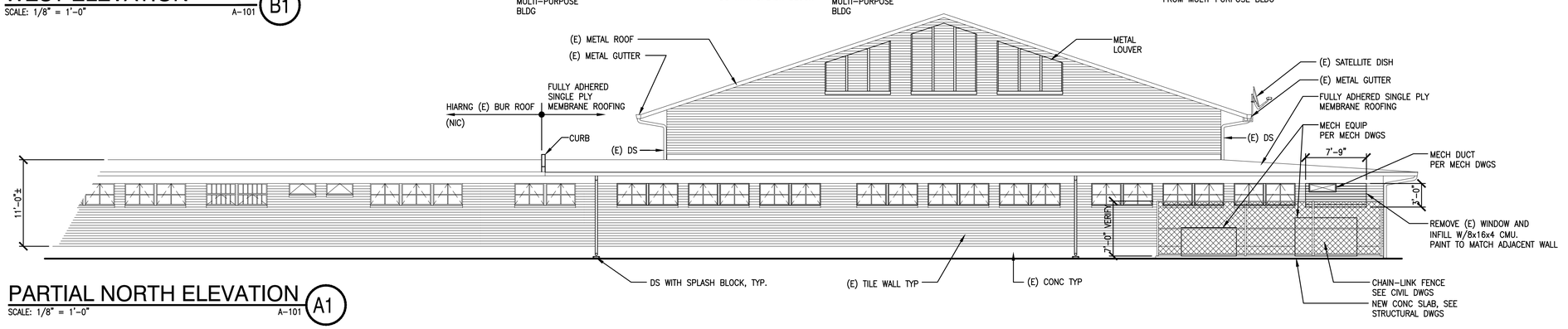

## WEST ELEVATION

SCALE: 1/8" = 1'-0" A-101 C5




## WEST ELEVATION

SCALE: 1/8" = 1'-0" A-101 B1




## PARTIAL NORTH ELEVATION

SCALE: 1/8" = 1'-0" A-101 A1

GRAPHIC SCALE

0 2 4 8 16 24FT

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

ARCHITECTS HAWAII LLLP
733 BISHOP STREET, SUITE 2300
HONOLULU, HAWAII 96813
TELEPHONE: (808) 521-8636
FAX: (808) 521-2380
www.ahldesign.com

TERRY MCFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET LIST | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| AHL | AHL | AHL |

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAII ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – EXTERIOR ELEVATIONS

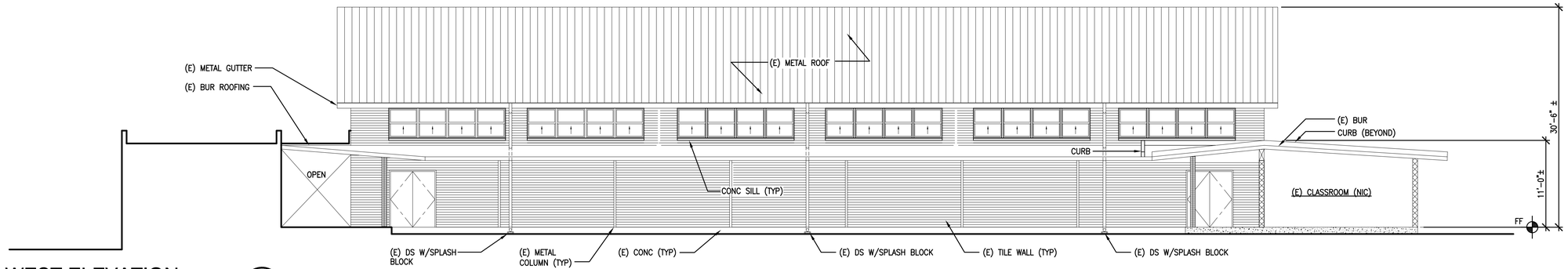
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

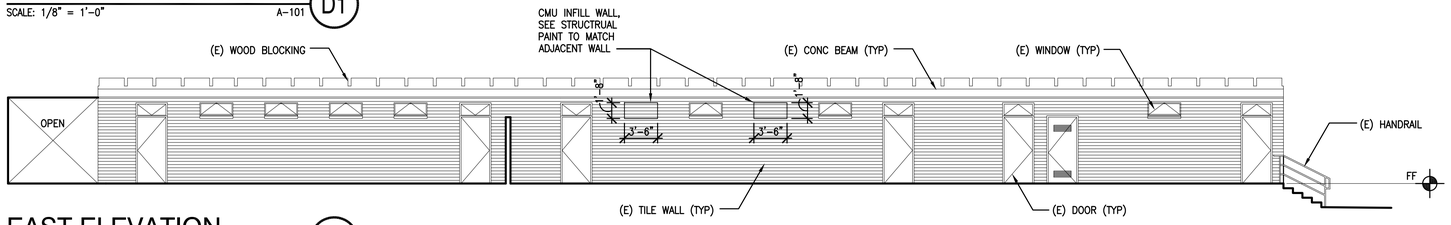
SHEET 31 OF 131

A-201



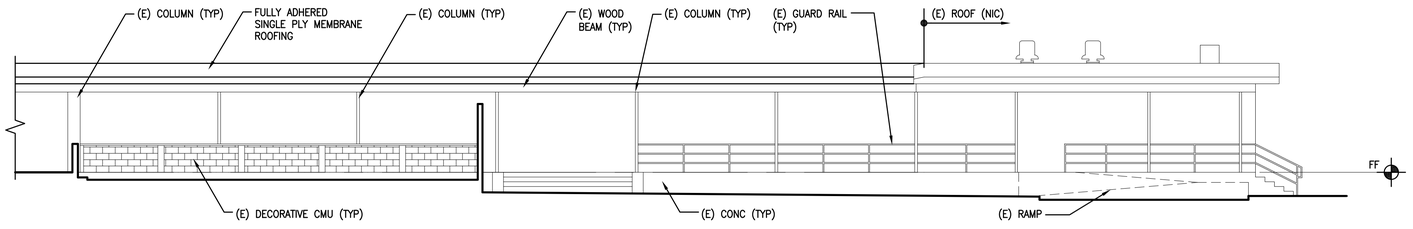

## WEST ELEVATION

SCALE: 1/8" = 1'-0" A-101 D1



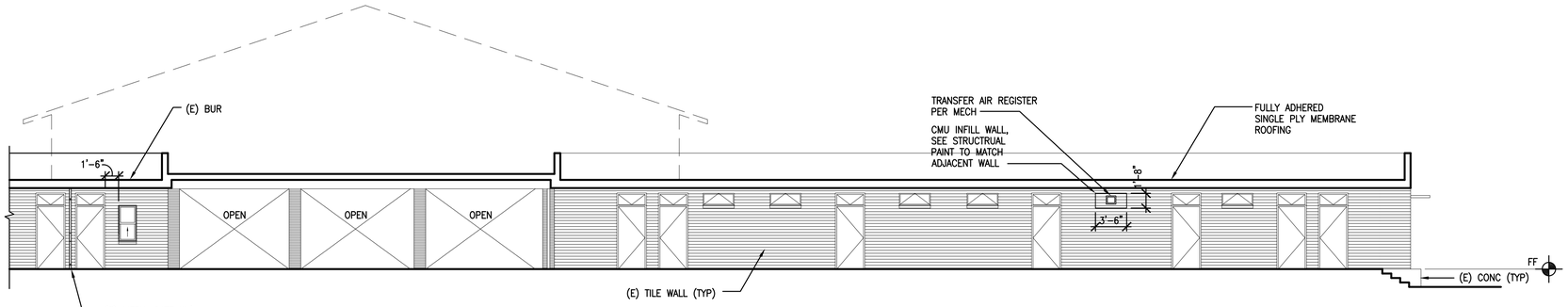

## EAST ELEVATION

SCALE: 1/8" = 1'-0" A-401 C1




## EAST ELEVATION

SCALE: 1/8" = 1'-0" A-401 B1




## NORTH ELEVATION

SCALE: 1/8" = 1'-0" A-101 A1

GRAPHIC SCALE

0 2 4 8 16 24FT

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


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND LICENSED PROFESSIONAL ARCHITECT No. 7418 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – EXTERIOR ELEVATIONS

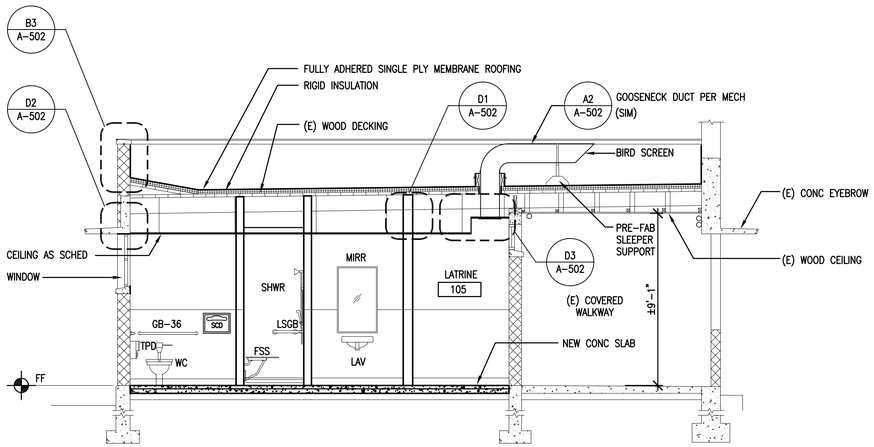
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 32 OF 131

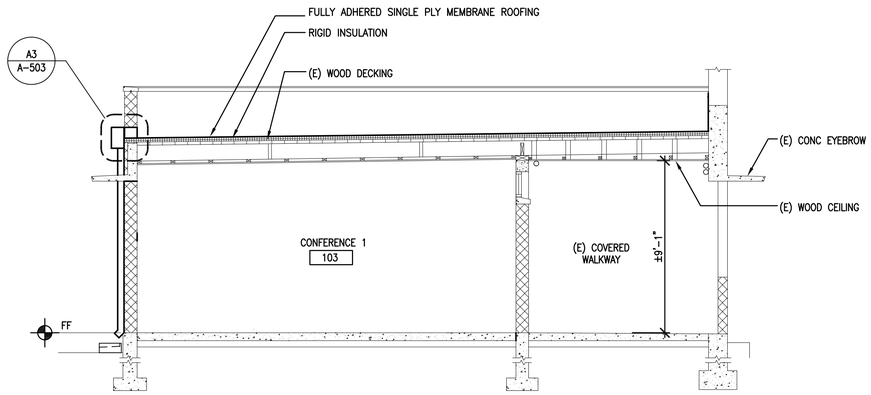
A-202




## BUILDING SECTION

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

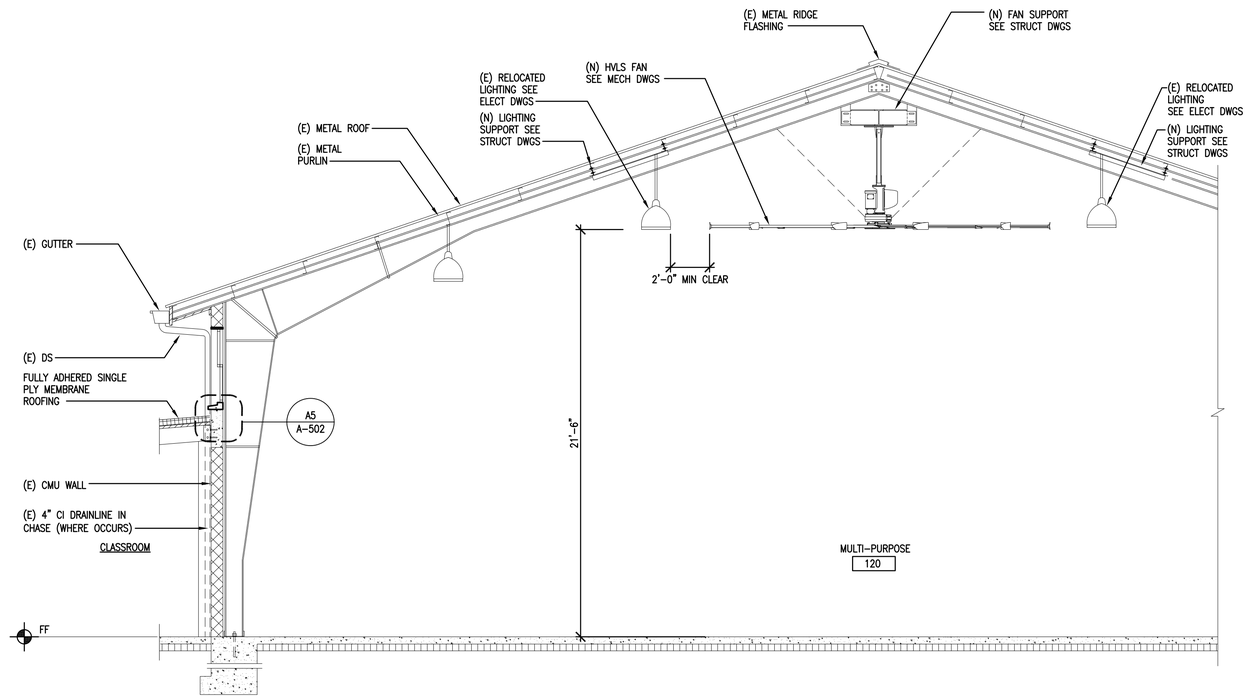
A-101 C1




## BUILDING SECTION

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

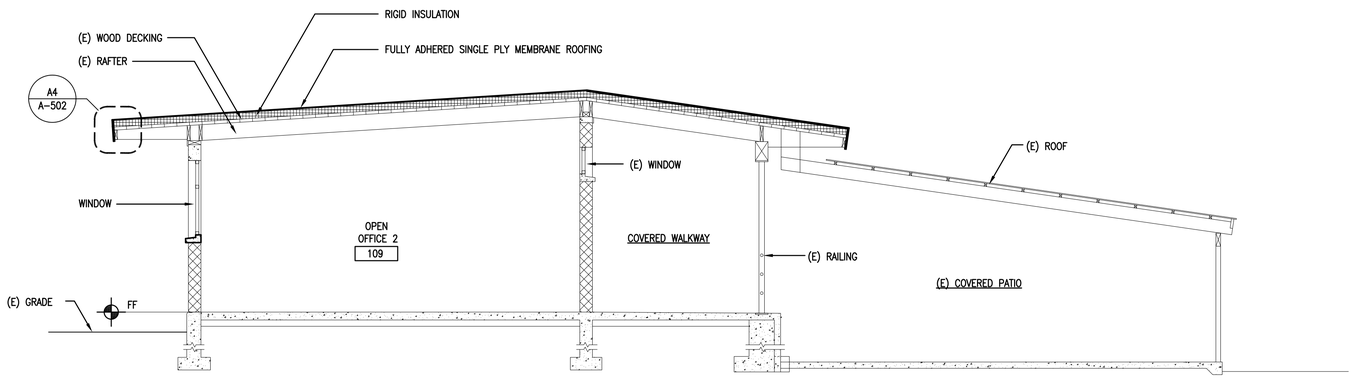
A-101 B1




## BUILDING SECTION

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

A-101 B3




## BUILDING SECTION

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

A-101 A1

GRAPHIC SCALE

0 1 2 4 8 12FT

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


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE

FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES: AHL DRW: AHL CHK: AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – BUILDING SECTIONS

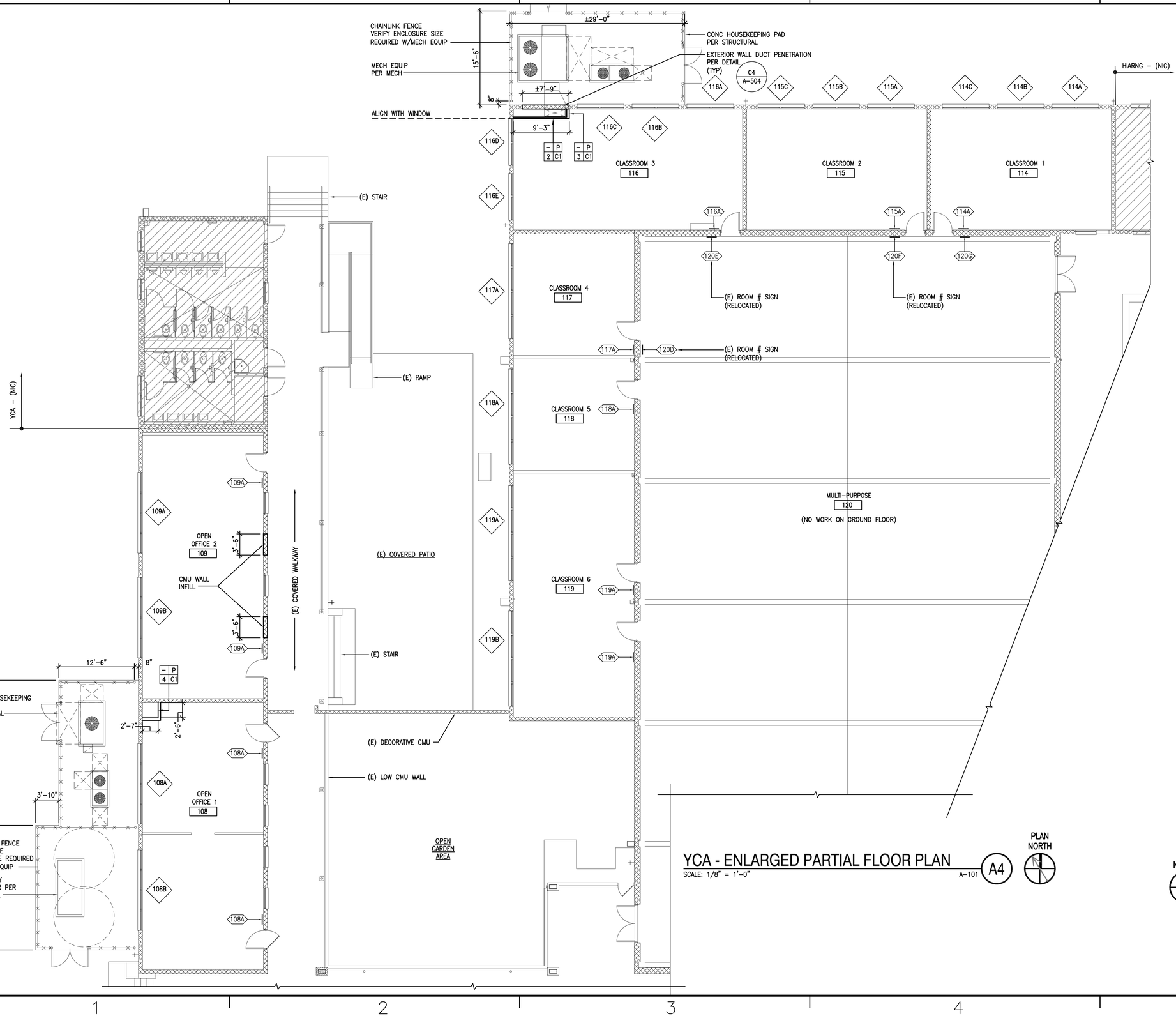
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 33 OF 131

A-301




YCA - ENLARGED PARTIAL FLOOR PLAN

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

A-101 A4

PLAN NORTH

# LEGEND

FIRE RATING → 1 P ← CONSTRUCTION TYPE
WALL OR STUD SIZE → 6 A ← MODIFICATIONS

## FIRE RATING

1 – 1 HOUR
2 – 2 HOUR
3 – 3 HOUR

NOTE: BLANK INDICATES NO FIRE RATING

## CONSTRUCTION TYPES

C – CHASE PARTITION
F – FURRING
M – MASONRY
P – BASIC PARTITION
S – SHAFT PARTITION
X – SPECIAL
D – CONC. WALL

## SIZE CODES

STUDS

H – 7/8" HAT CHANNEL
1 – 1 5/8" MTL STUDS
2 – 2 1/2" MTL STUDS
3 – 3 5/8" MTL STUDS
4 – 4" MTL STUDS
6 – 6" MTL STUDS

## MODIFICATIONS

A – ACOUS INSULATION
B – BULLET RESISTANT PANELS
C – GYP. BD. 4" PAST CLG
C1 – GYP. BD. ONE SIDE
F – EIFS
FR – FIRE RETARDANT TREATED PLYWOOD
L – LEAD LINED
P – PLUMBING WALL
V – VENEER PLASTER

EXISTING TO REMAIN
NEW CONSTRUCTION
AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

XXX — NEW SIGN TAG, UON
161A — WINDOW NUMBER
161A — DOOR NUMBER

DA A AB
D INTERIOR ELEVATION KEY B
CD C BC

PLAN NORTH

KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

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


Youth Hawaii ChalleNGE National Guard Academy

ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – ENLARGED PARTIAL FLOOR PLANS

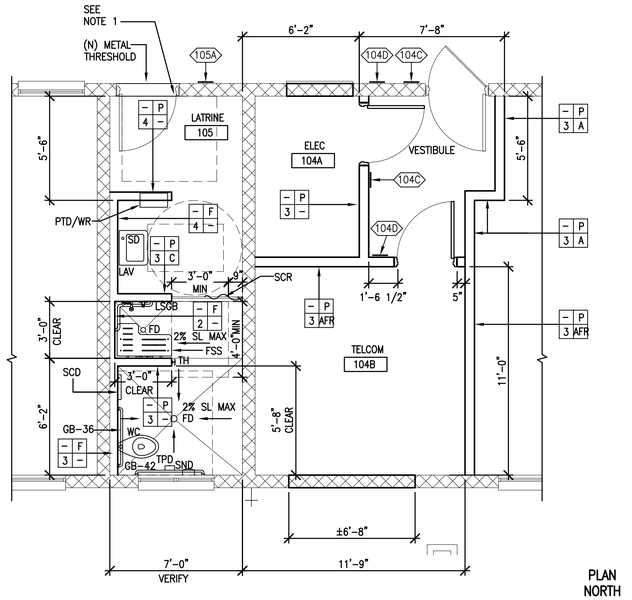
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 34 OF 131

A-401

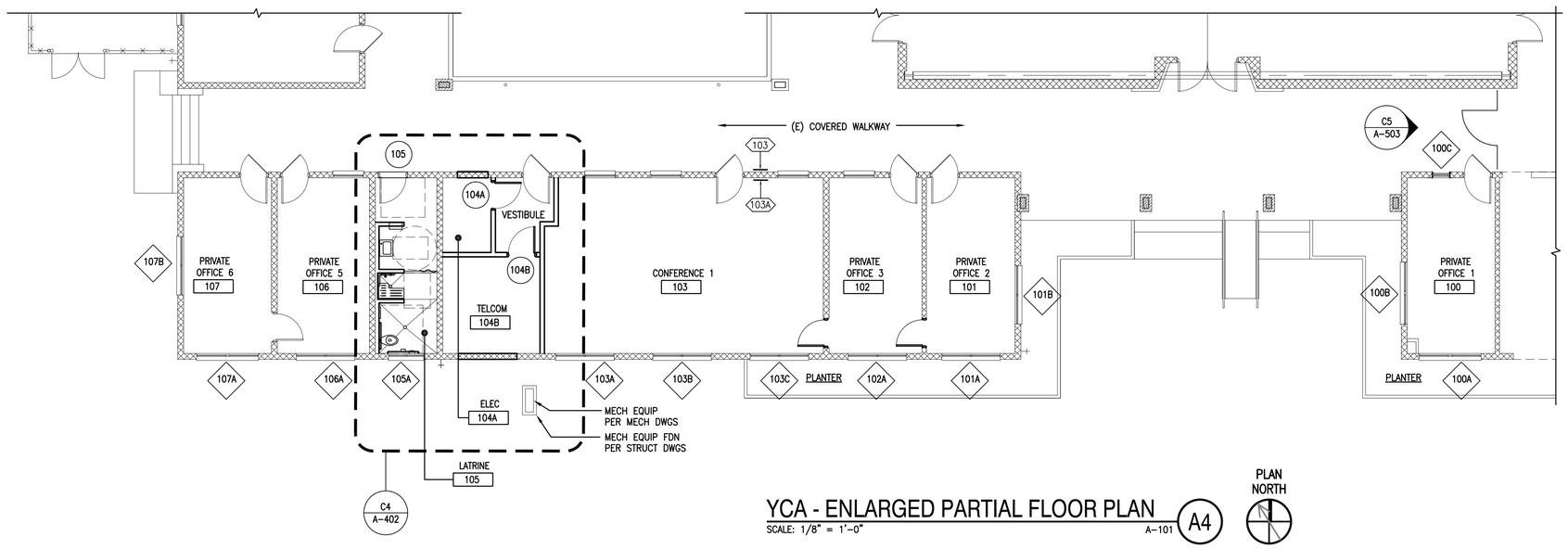



## YCA - ENLARGED PARTIAL FLOOR PLAN

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

A-402 C4

PLAN NORTH




## YCA - ENLARGED PARTIAL FLOOR PLAN

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

A-101 A4

PLAN NORTH

# LEGEND

FIRE RATING → 1 P ← CONSTRUCTION TYPE
WALL OR STUD SIZE → 6 A ← MODIFICATIONS

## FIRE RATING

1 – 1 HOUR
2 – 2 HOUR
3 – 3 HOUR

NOTE: BLANK INDICATES NO FIRE RATING

## CONSTRUCTION TYPES

C – CHASE PARTITION
F – FURRING
M – MASONRY
P – BASIC PARTITION
S – SHAFT PARTITION
X – SPECIAL
D – CONC. WALL

## SIZE CODES

STUDS

H – 7/8" HAT CHANNEL
1 – 1 5/8" MTL STUDS
2 – 2 1/2" MTL STUDS
3 – 3 5/8" MTL STUDS
4 – 4" MTL STUDS
6 – 6" MTL STUDS

## MODIFICATIONS

A – ACOUS INSULATION
B – BULLET RESISTANT PANELS
C – GYP. BD. 4" PAST CLG
C1 – GYP. BD. ONE SIDE
F – EIFS
FR – FIRE RETARDANT TREATED PLYWOOD
L – LEAD LINED
P – PLUMBING WALL
V – VENEER PLASTER

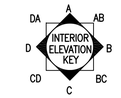
EXISTING TO REMAIN
NEW CONSTRUCTION

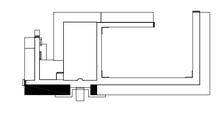
CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

XXX — NEW SIGN TAG, UON
61A — WINDOW NUMBER
161A — DOOR NUMBER

NOTES:

1. EXISTING DOOR HARDWARE TO BE RETROFITTED WITH PRIVACY LOCK HARDWARE.



KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"

0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

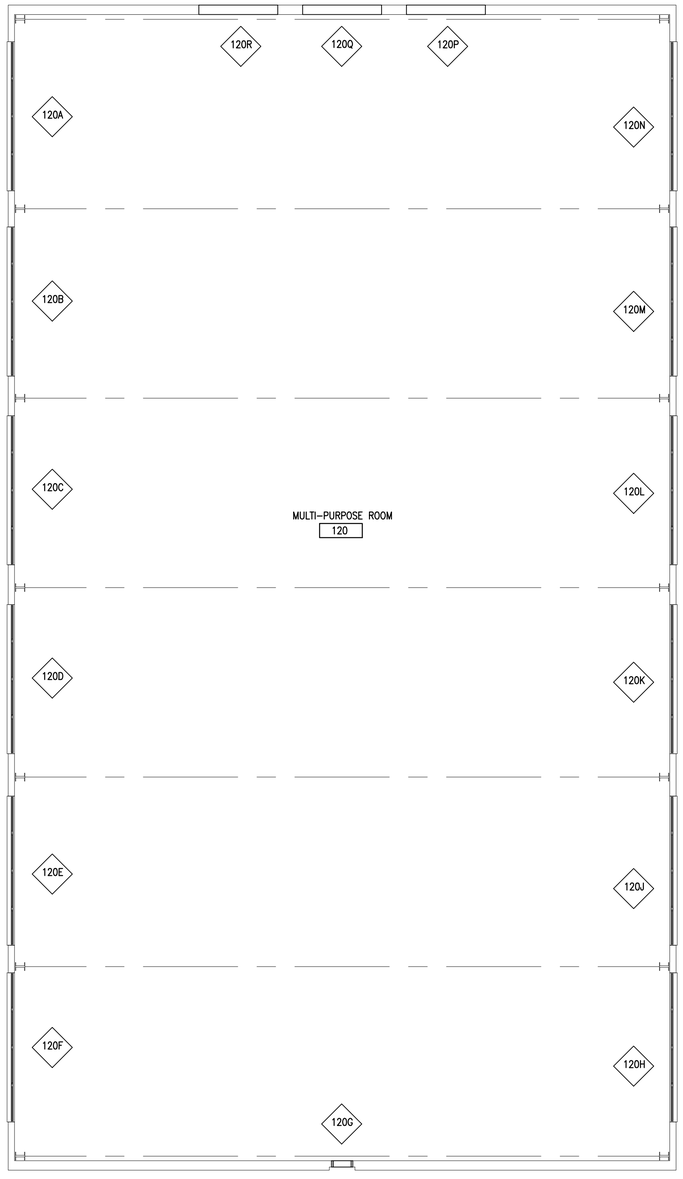
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – ENLARGED PARTIAL FLOOR PLANS

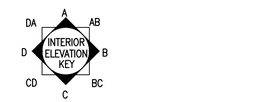
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 35 OF 131

A-402




## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- CLASSROOM 6 / 119 — ROOM NAME / ROOM NUMBER
- 161A — WINDOW NUMBER




PLAN NORTH

KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

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

YCA - ENLARGED MULTI-PURPOSE CLERESTORY PLAN

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

A-101 (A4)

PLAN NORTH

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I

KEAUKAHA MILITARY RESERVATION

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

YCA - ENLARGED MULTI-PURPOSE CLERESTORY PLAN

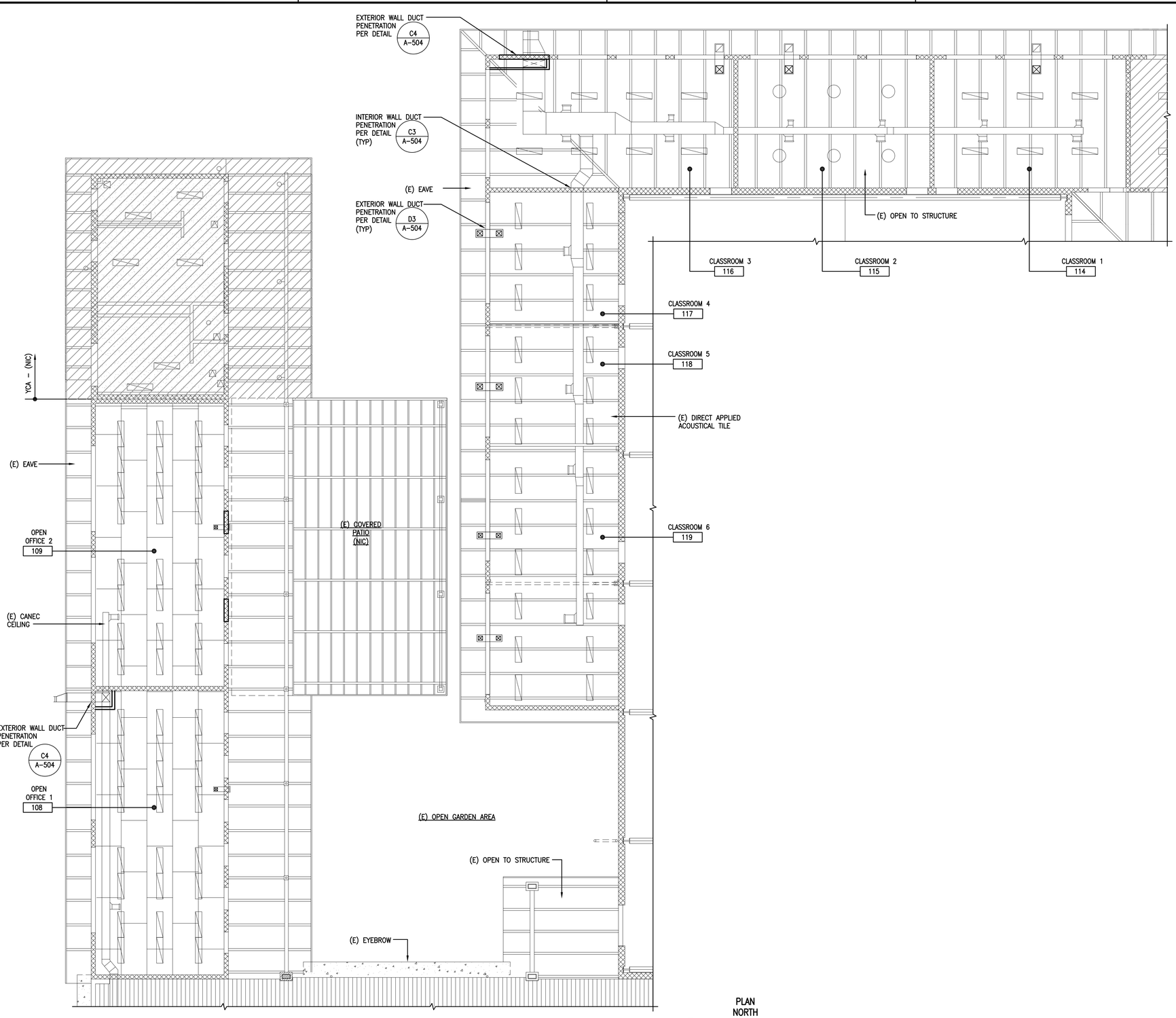
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. -

SHEET 36 OF 131

A-403




## YCA - ENLARGED PARTIAL REFLECTED CEILING PLAN

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

A-403 A1

PLAN NORTH

## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- EXISTING LIGHT FIXTURE – SEE ELECTRICAL
- LIGHT FIXTURE – SEE ELECTRICAL
- MECHANICAL DEVICE – SEE MECHANICAL
- AREA NOT IN CONTRACT

CLASSROOM 6 119 — ROOM NAME / ROOM NUMBER

INTERIOR ELEVATION KEY: A, AB, B, BC, C, CD, D, DA

PLAN NORTH

KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

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


ARCHITECTS HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND LICENSED PROFESSIONAL ARCHITECT No. 7418 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – ENLARGED PARTIAL REFLECTED CEILING PLAN

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

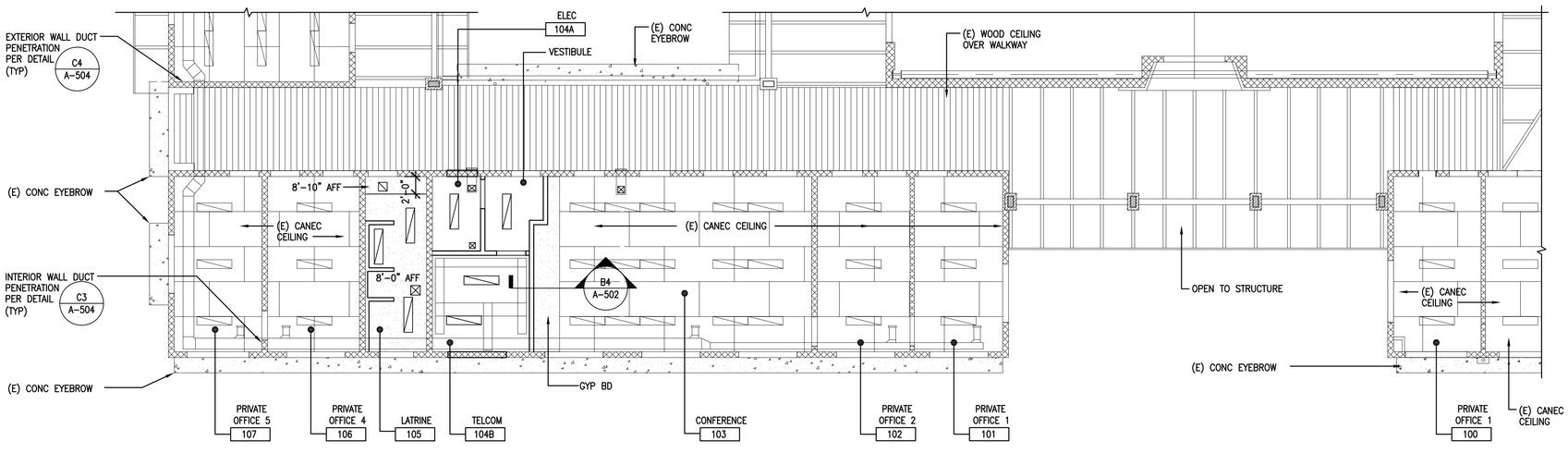
SHEET 37 OF 131

A-404

## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- EXISTING LIGHT FIXTURE
- LIGHT FIXTURE – SEE ELECTRICAL
- MECHANICAL DEVICE – SEE MECHANICAL
- GYP BOARD CEILING
- AREA NOT IN CONTRACT

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER

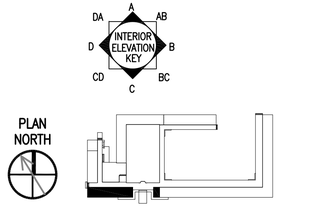



## YCA - ENLARGED PARTIAL REFLECTED CEILING PLAN

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

A-102 A3

PLAN NORTH




KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

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


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA – ENLARGED PARTIAL REFLECTED CEILING PLAN

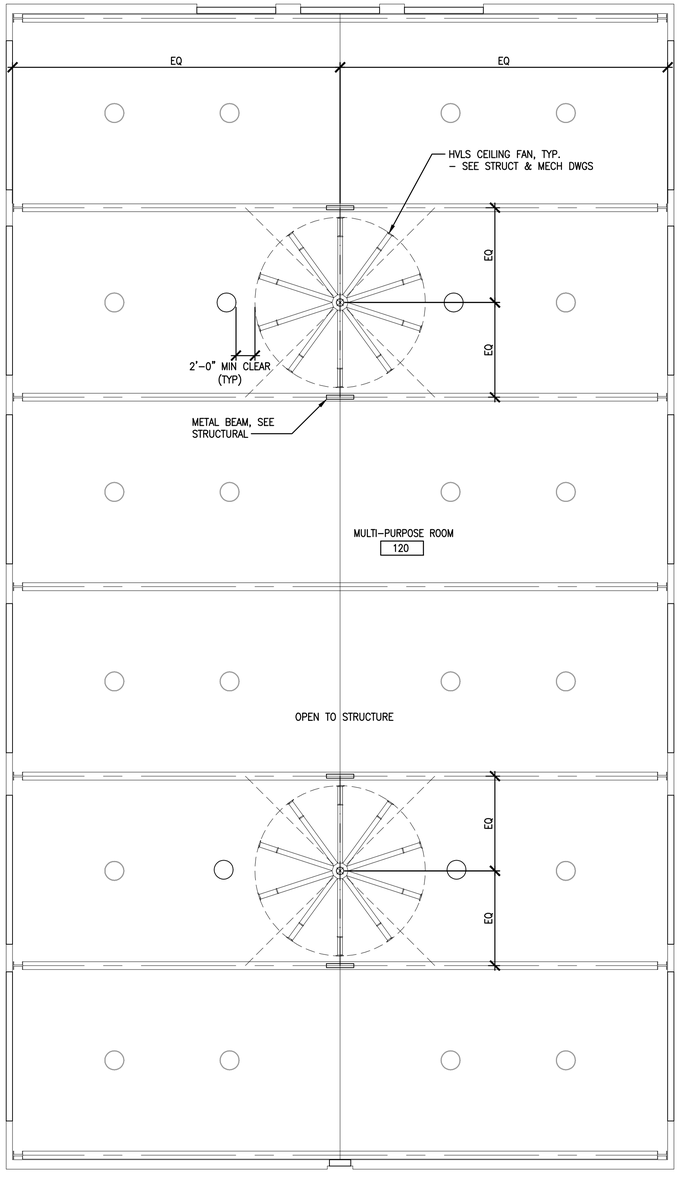
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 38 OF 131

A-405




YCA - ENLARGED MULTI-PURPOSE REFLECTED CEILING PLAN

SCALE: 1/8" = 1'–0"

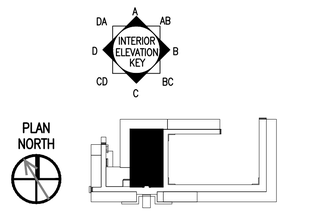
A–102 (A4)

PLAN NORTH

## LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION
- EXISTING LIGHT FIXTURE – SEE ELECTRICAL
- LIGHT FIXTURE – SEE ELECTRICAL

CLASSROOM 6 — ROOM NAME
119 — ROOM NUMBER




PLAN NORTH

KEY PLAN

GRAPHIC SCALE

0 2 4 8 16 24FT

SCALE: 1/8"=1'–0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – ENLARGED MULTI–PURPOSE REFLECTED CEILING PLAN

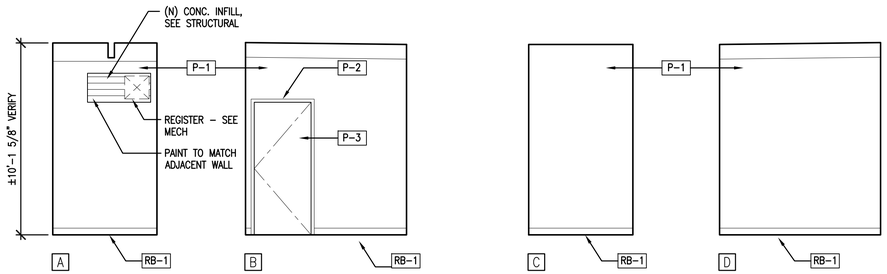
SCALE: AS NOTED

STATE JOB NO. CA–1212–C2

FEDERAL PROJECT NO. –

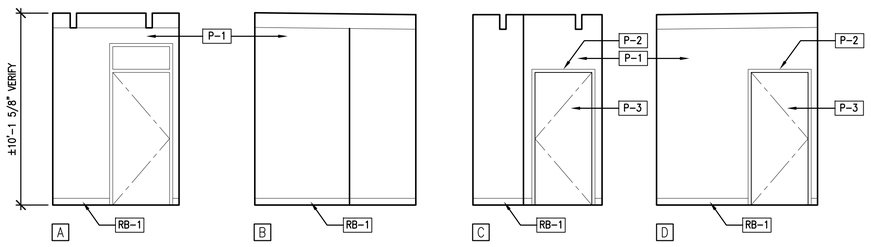
SHEET 39 OF 131

A-406



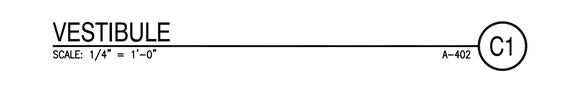

## ELEC 104A

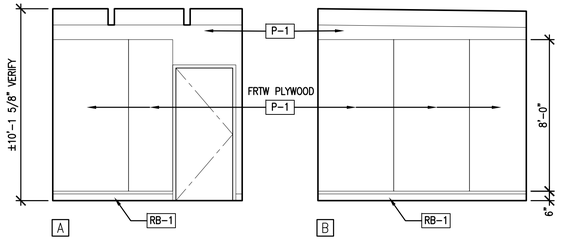
SCALE: 1/4" = 1'-0" — A-402 (D1)




## VESTIBULE

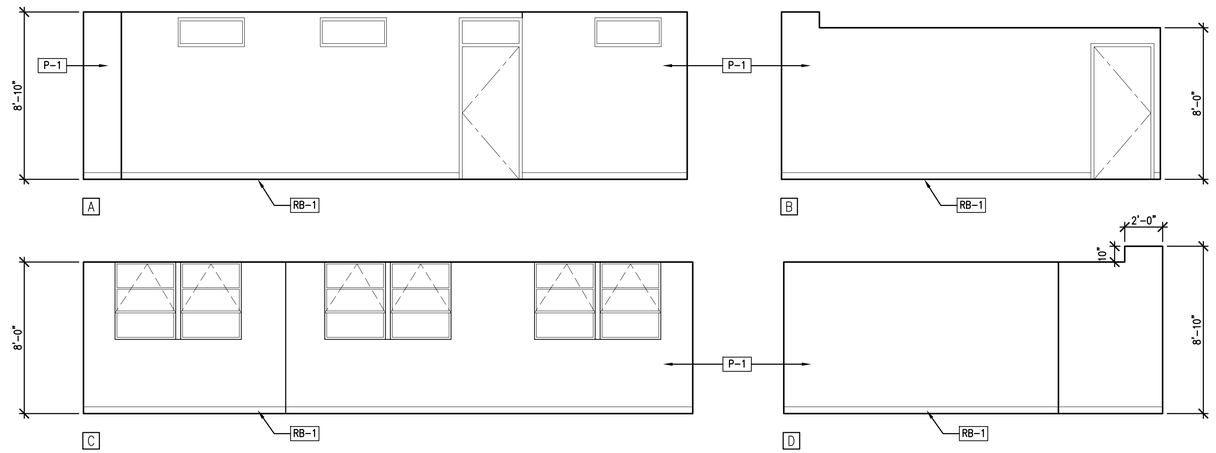
SCALE: 1/4" = 1'-0" — A-402 (C1)



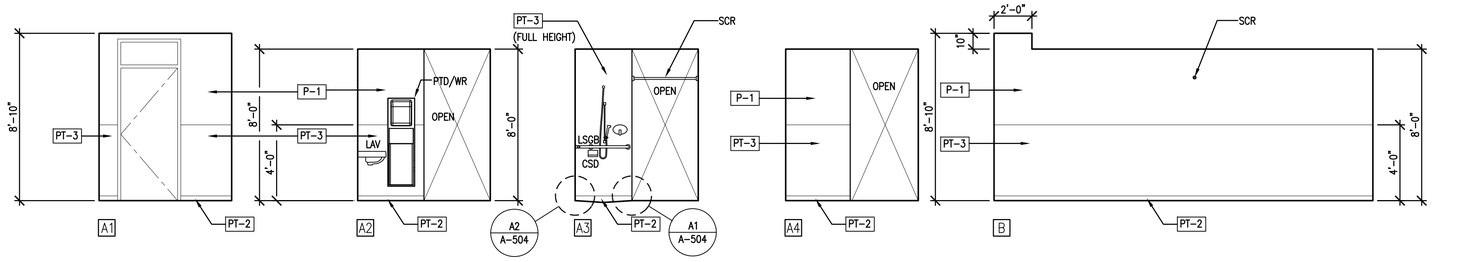

## TELCOM 104B

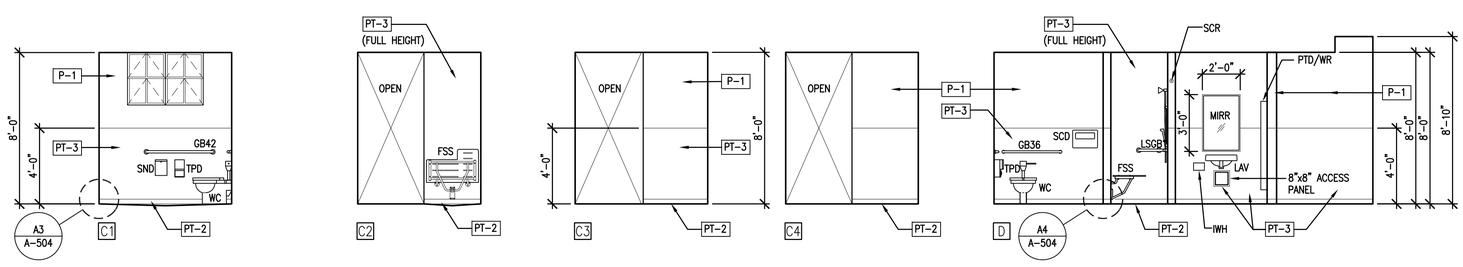
SCALE: 1/4" = 1'-0" — A-402 (A1)




## CONFERENCE ROOM 103

SCALE: 1/4" = 1'-0" — A-402 (C3)




## LATRINE 105

SCALE: 1/4" = 1'-0" — A-402 (A3)

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

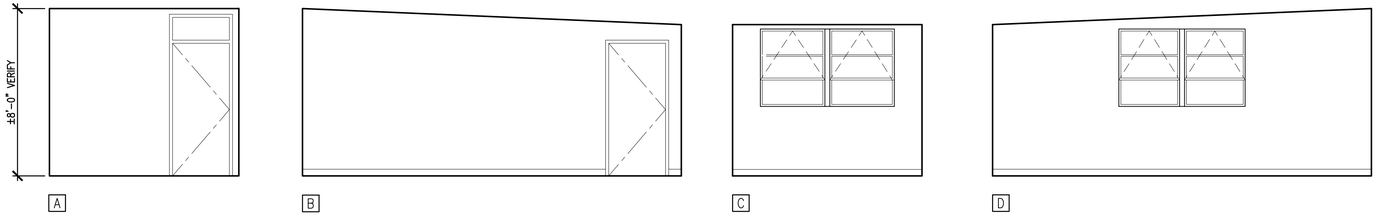
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES: AHL DRW: AHL CHK: AHL

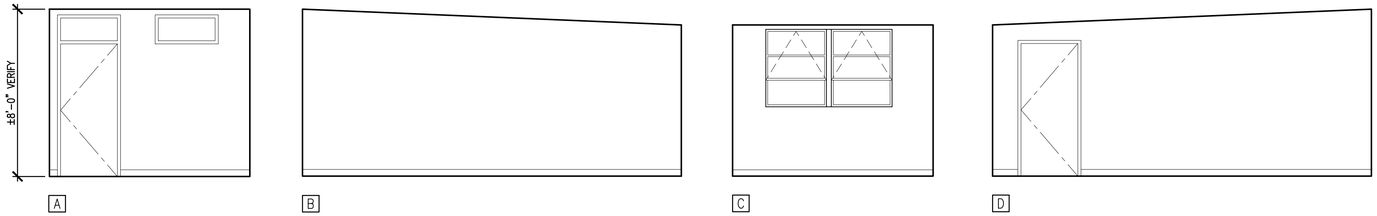
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – INTERIOR ELEVATIONS

SCALE: AS NOTED
STATE JOB NO.: CA-1212-C2
FEDERAL PROJECT NO.: -
SHEET 40 OF 131
A-407



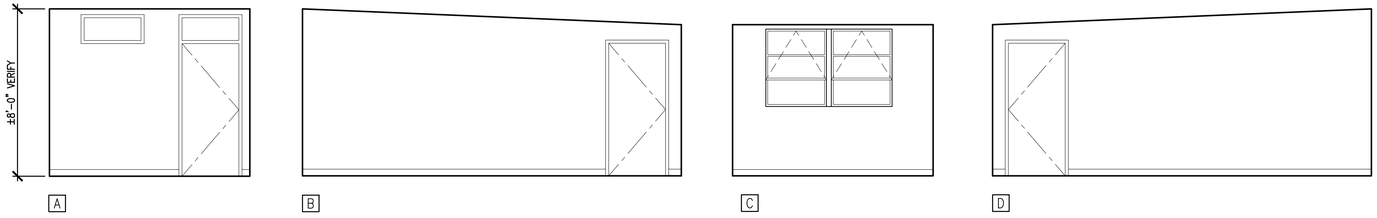

## PRIVATE OFFICE 6

SCALE: 1/4" = 1'-0" — A-402 — D1



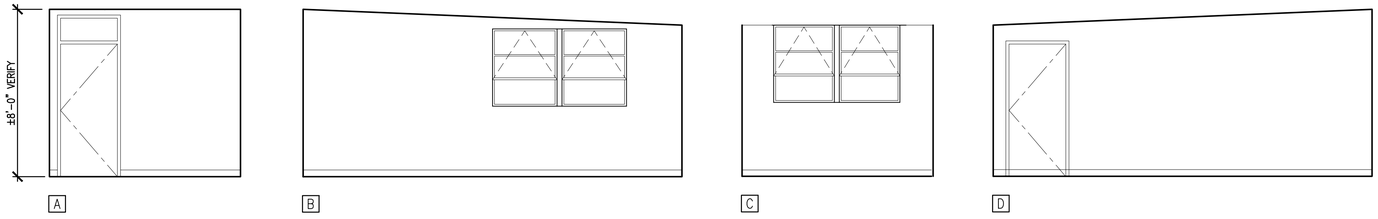

## PRIVATE OFFICE 5

SCALE: 1/4" = 1'-0" — A-402 — C1



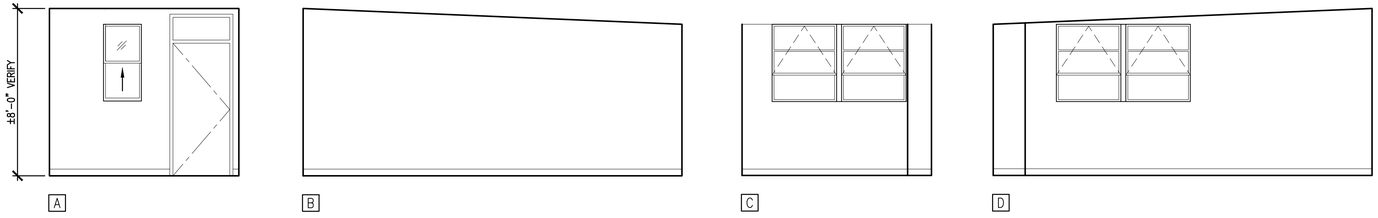

## PRIVATE OFFICE 3

SCALE: 1/4" = 1'-0" — A-402 — B1




## PRIVATE OFFICE 2

SCALE: 1/4" = 1'-0" — A-402 — B1




## PRIVATE OFFICE 1

SCALE: 1/4" = 1'-0" — A-402 — A1

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3900
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

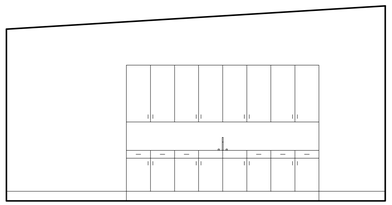
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE — 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_05_ | DATE | APPR |
|---|---|---|---|---|

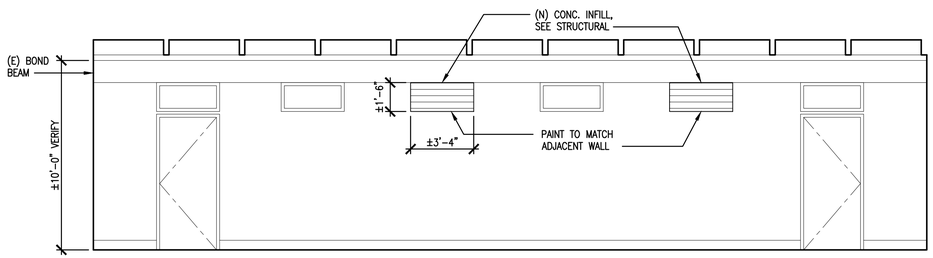
SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – INTERIOR ELEVATIONS

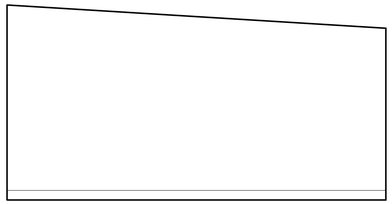
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 41 OF 131
A-408



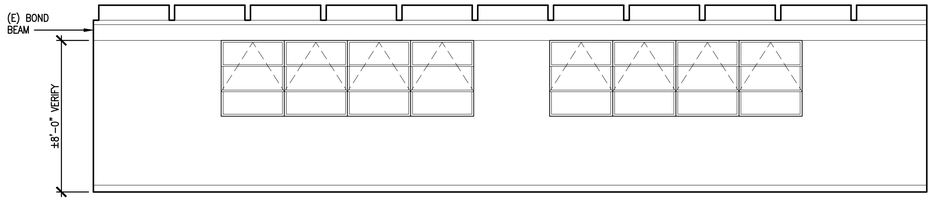
A




B



C

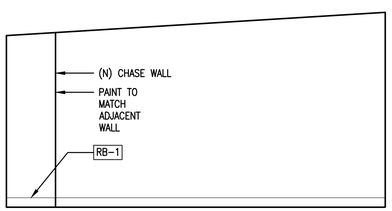



D

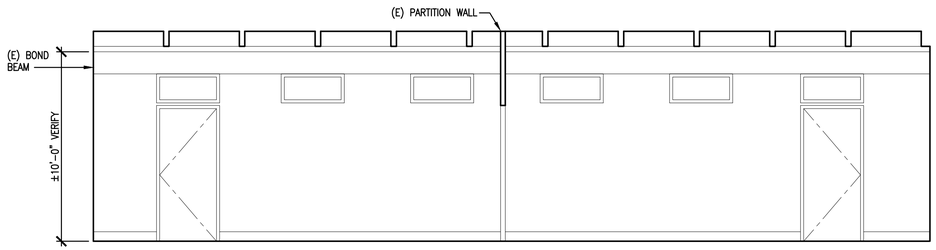
## OPEN OFFICE 1

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

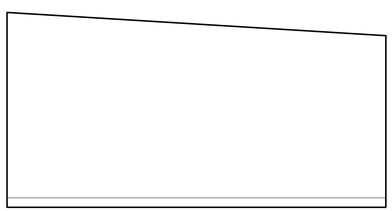
A-402 C1



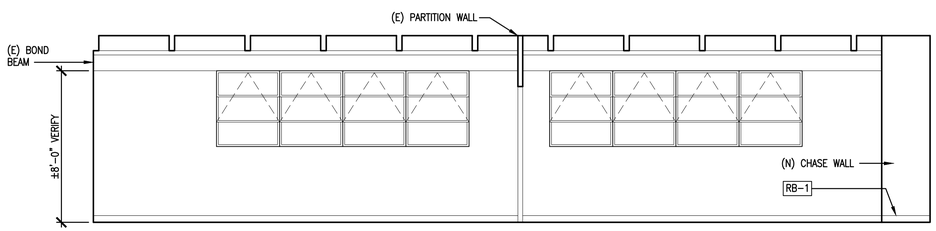

A




B



C




D

## OPEN OFFICE 1

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

A-402 A1

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| AHL | AHL | AHL |

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – INTERIOR ELEVATIONS

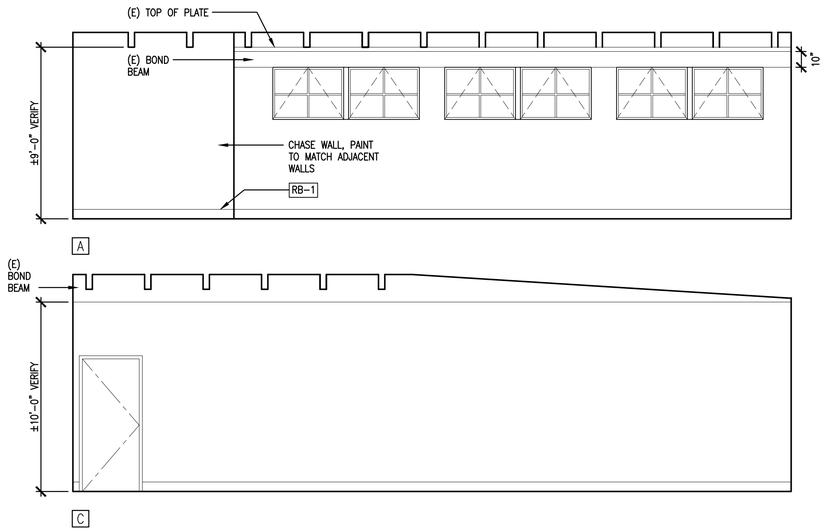
SCALE: AS NOTED

STATE JOB NO.
CA-1212-C2

FEDERAL PROJECT NO.
–

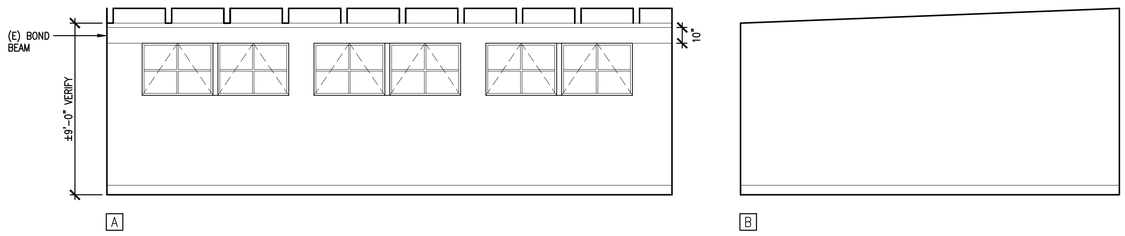
SHEET 42 OF 131

A-409




## CLASSROOM 116

SCALE: 1/4" = 1'-0" A-402 (C1)




## CLASSROOM 114 (115 SIM)

SCALE: 1/4" = 1'-0" A-402 (A1)

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3900
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

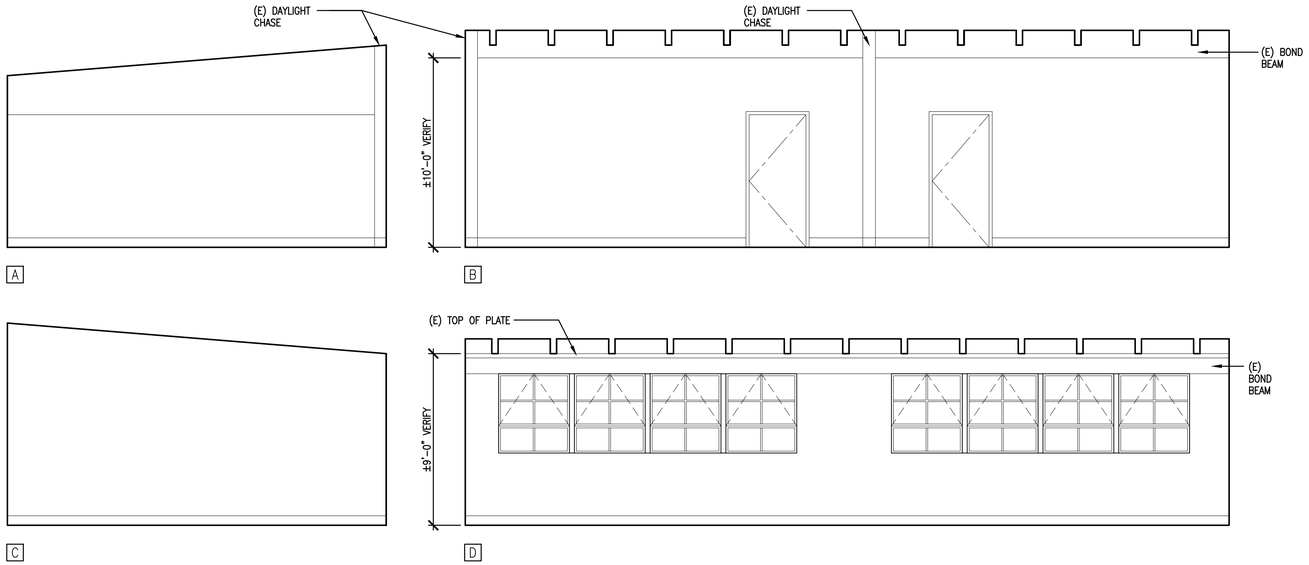
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – INTERIOR ELEVATIONS

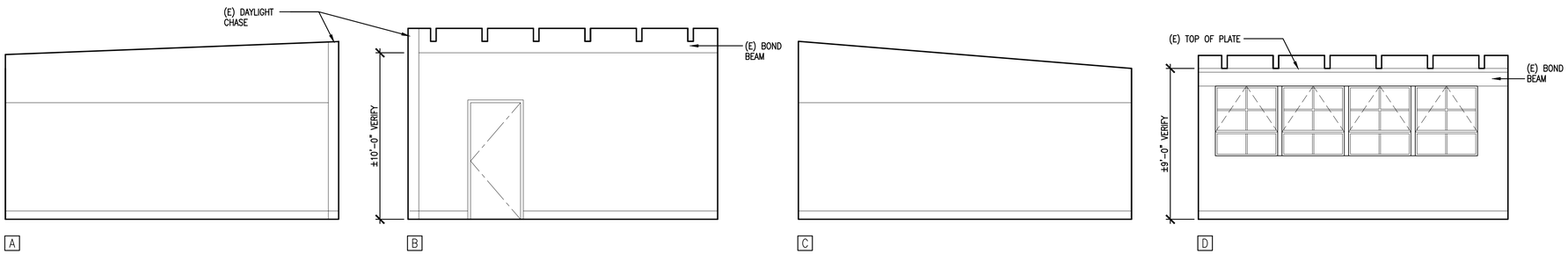
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 43 OF 131

A-410



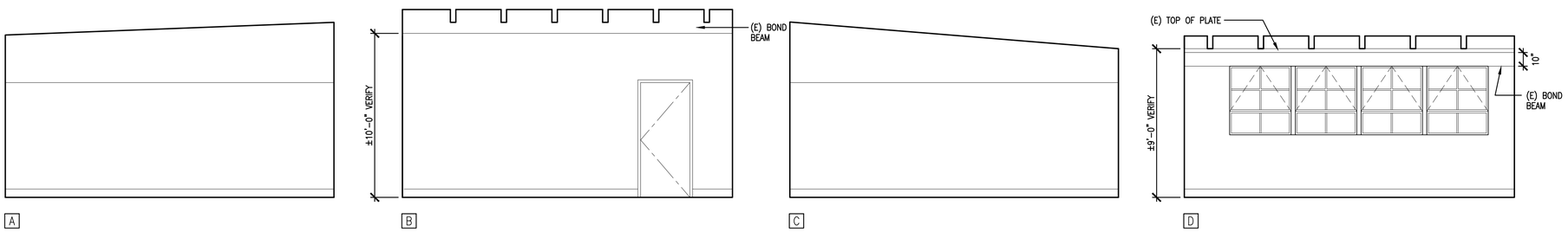

## CLASSROOM 6

SCALE: 1/4" = 1'-0" A-402 C1




## OFFICE 5

SCALE: 1/4" = 1'-0" A-402 B1




## OFFICE 4

SCALE: 1/4" = 1'-0" A-402 A1

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

Youth Hawaii Challenge National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 523-3280
www.ahldesign.com

TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

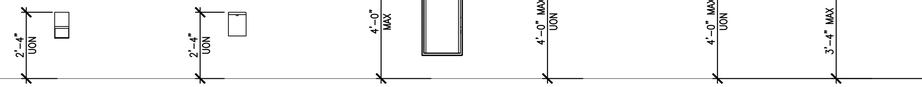
| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
YOUTH CHALLENGE ACADEMY
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2
YCA – INTERIOR ELEVATIONS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 44 OF 131
A-411




TPD — SURFACE MOUNTED MULTI-ROLL TOILET PAPER DISPENSER

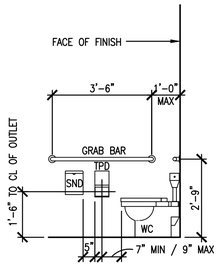
SND — SURFACE MOUNTED SANITARY NAPKIN DISPOSAL

PTD/R — SEMI-RECESSED PTD W/ WASTE RECEPTACLE

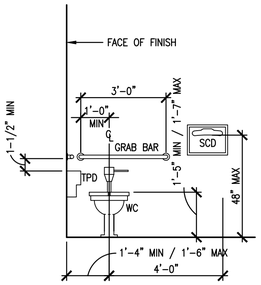
SCD — SURFACE MOUNTED SEAT COVER DISPENSER

RH or TH — ROBE or TOWEL HOOK

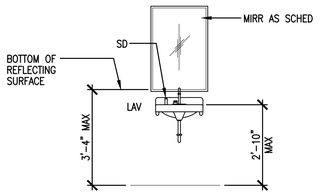
MIRR — MIRROR



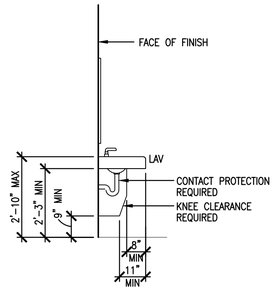

TYPICAL SIDE ELEVATION AT ACCESSIBLE TOILET COMPARTMENT



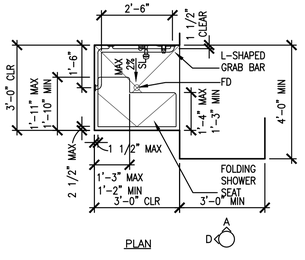

TYPICAL FRONT ELEVATION AT ACCESSIBLE TOILET COMPARTMENT

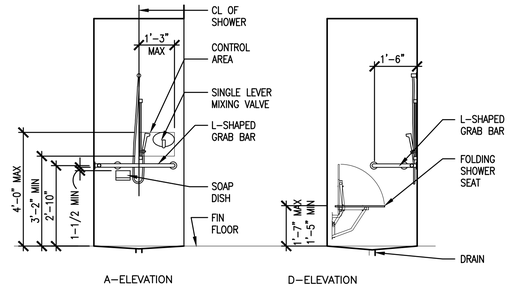



TYPICAL FRONT ELEVATION AT ACCESSIBLE LAVATORY




TYPICAL SIDE ELEVATION AT ACCESSIBLE LAVATORY




TRANSFER TYPE SHOWER

GRAPHIC SCALE
4' 2' 1' 0 2' 4'
3/8" = 1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET-05- | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL | DRW AHL | CHK AHL

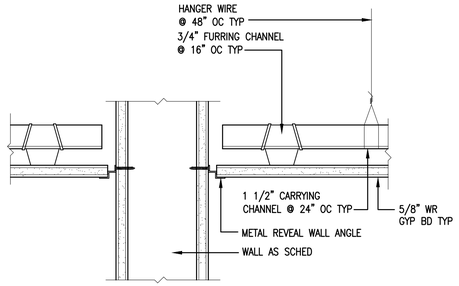
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – TYPICAL MOUNTING HEIGHTS

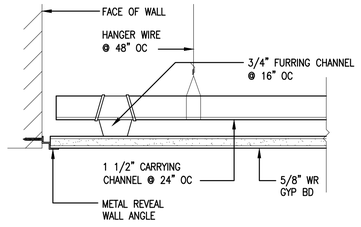
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 45 OF 131

A-501



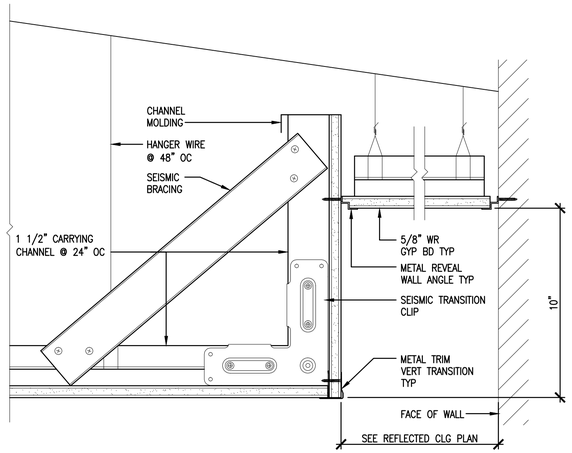

## GYP BD CEILING DETAIL D1

SCALE: 3" = 1'-0" A-301



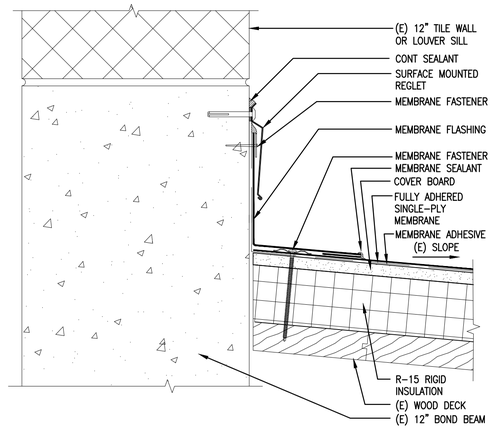

## GYP BD CEILING DETAIL D2

SCALE: 3" = 1'-0" A-301



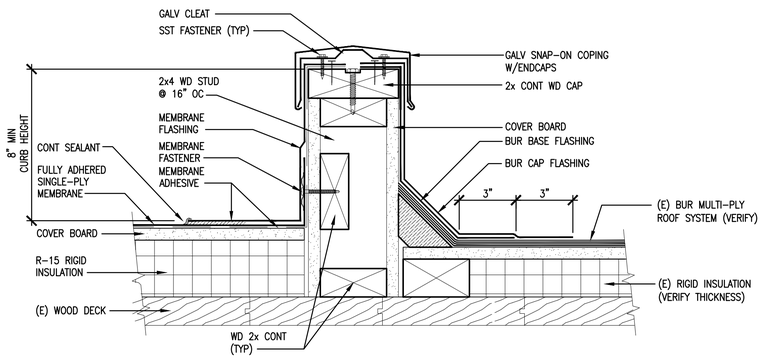

## SOFFIT DETAIL D3

SCALE: 3" = 1'-0" A-301



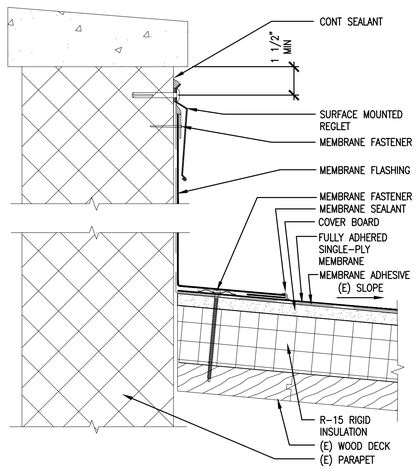

## FLASHING AT (E) MULTI-PURPOSE WALL D5

SCALE: 3" = 1'-0" A-103



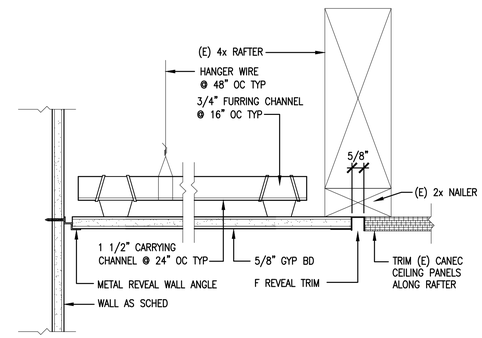

## ROOF CURB FLASHING B1

SCALE: 3" = 1'-0" A-103



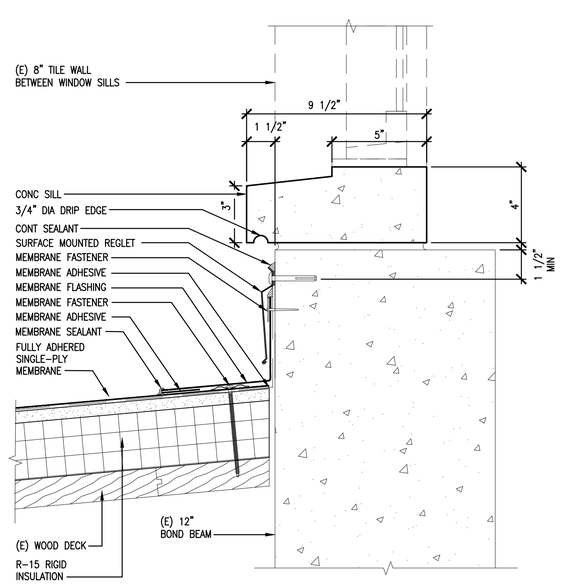

## (E) PARAPET FLASHING B3

SCALE: 3" = 1'-0" A-103



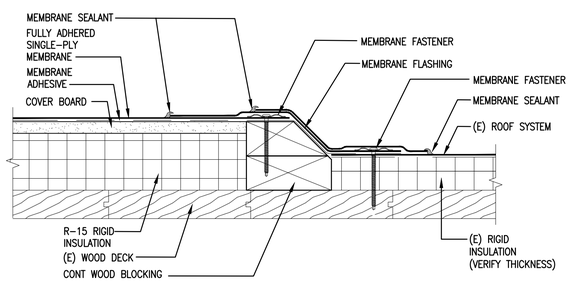

## GYP BD CEILING DETAIL B4

SCALE: 3" = 1'-0" A-405



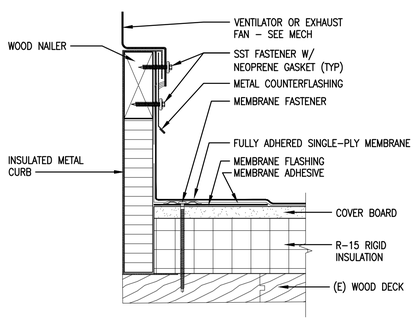

## FLASHING AT MULTI-PURPOSE WALL A5

SCALE: 3" = 1'-0" A-403



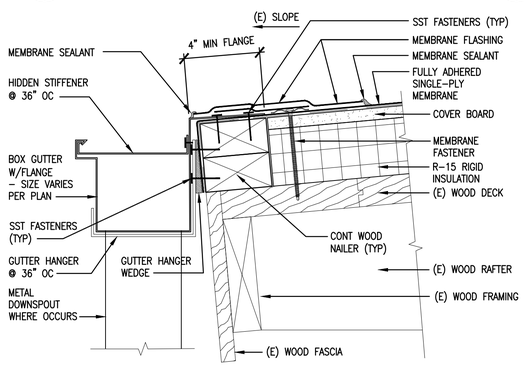

## TRANSITION TO EXISTING ROOF A1

SCALE: 3" = 1'-0" A-103




## FLASHING AT RECTANGULAR PENETRATION A2

SCALE: 3" = 1'-0" A-103




## GUTTER AND FLASHING AT EAVE A4

SCALE: 3" = 1'-0" A-103

GRAPHIC SCALE

0 1" 2" 3" 6" 9" 1FT

SCALE: 3"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_05_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
YOUTH CHALLENGE ACADEMY
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA - DETAILS

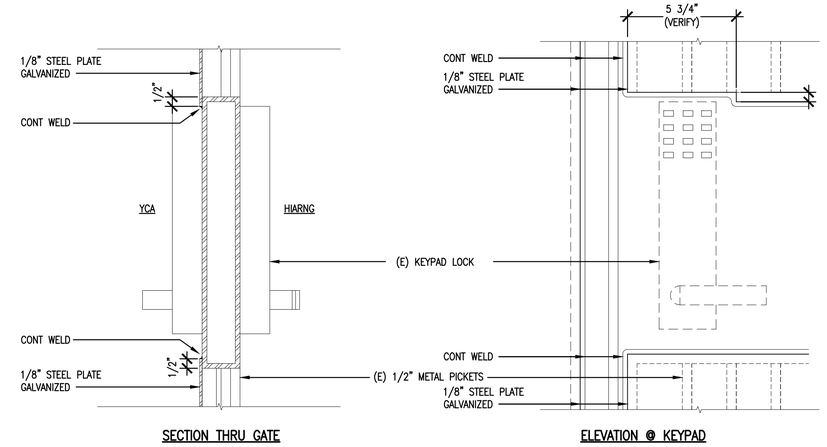
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. -

SHEET 46 OF 131

A-502



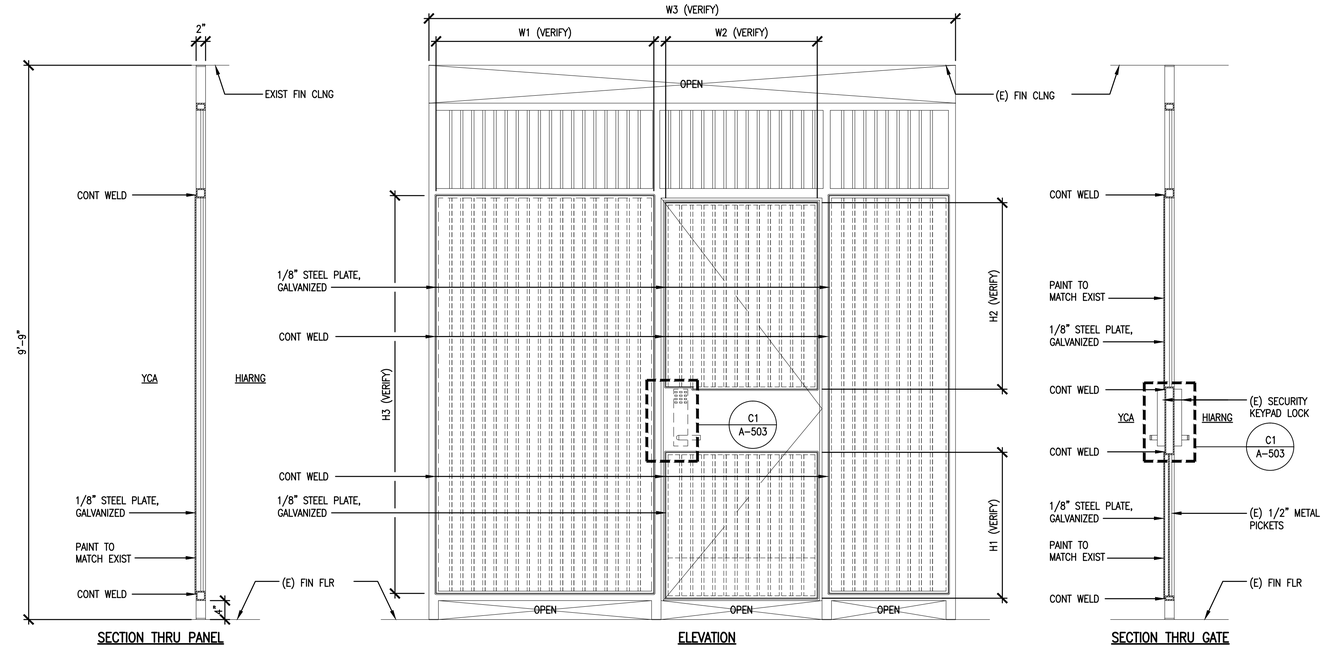

SECTION THRU GATE

ELEVATION @ KEYPAD

## (E) GATE PRIVACY PANEL DETAIL

SCALE: 3" = 1'-0"

A-503 C1




SECTION THRU PANEL

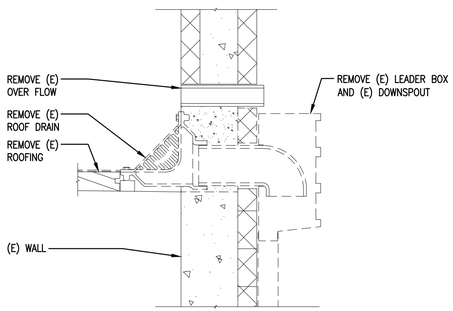
ELEVATION

SECTION THRU GATE

## (E) GATE - ADDITION OF PRIVACY PANELS

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

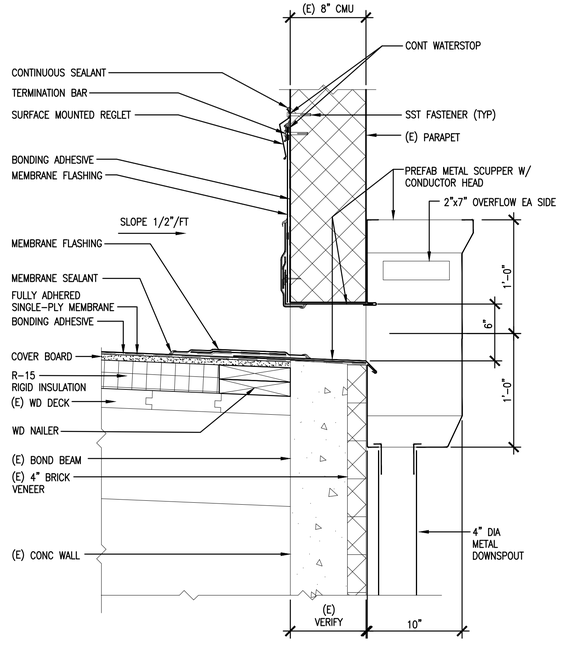
A-503 C5




## (E) SCUPPER DEMO DETAIL

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

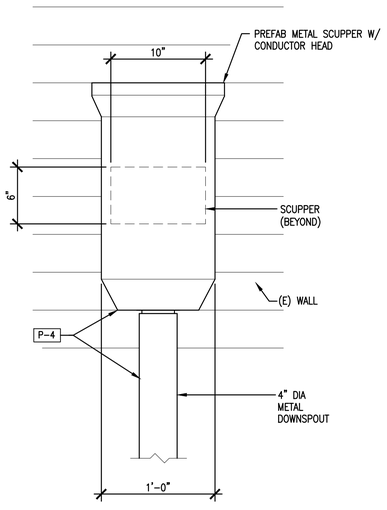
A-307 A1




## NEW SCUPPER & CONDUCTOR DETAIL

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

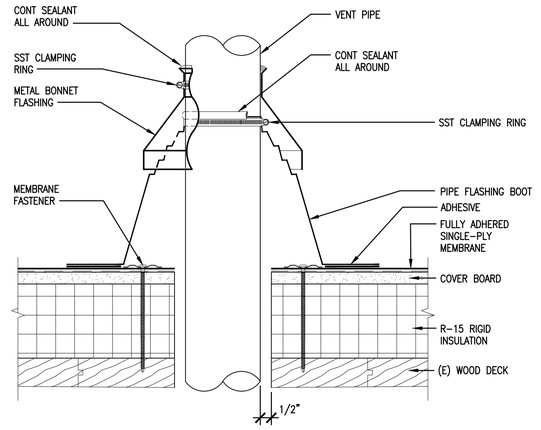
A-307 A3




## CONDUCTOR BOX ELEVATION

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

A-307 A4




## ROUND ROOF PENETRATION

SCALE: 3" = 1'-0"

A-103 A5

GRAPHIC SCALE

0 6" 1 2 3 4FT
SCALE: 3/4"=1'-0"

0 3" 6" 1 1'-6" 2FT
SCALE: 1-1/2"=1'-0"

0 1" 2" 3" 6" 9" 1FT
SCALE: 3"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ | DATE | APPR |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES: AHL DRW: AHL CHK: AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – DETAILS

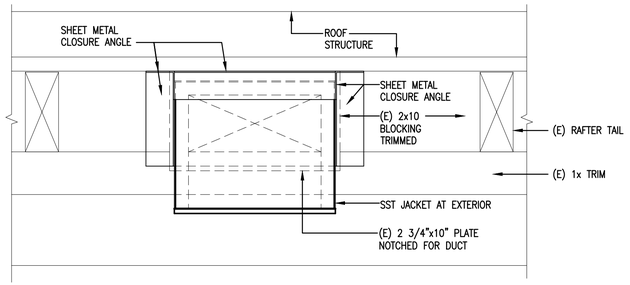
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

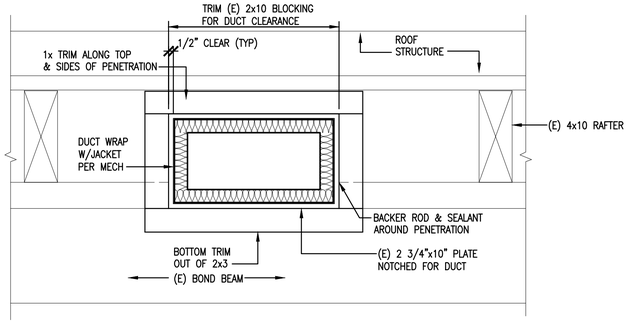
SHEET 47 OF 131

A-503



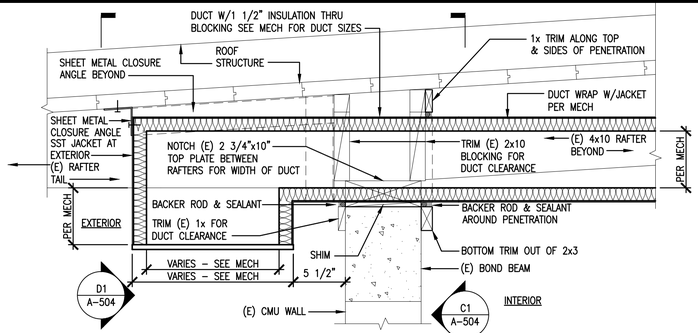

## DUCT THRU WALL D1

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



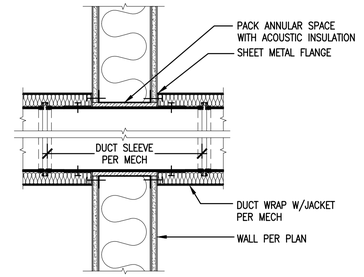

## DUCT THRU WALL C1

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



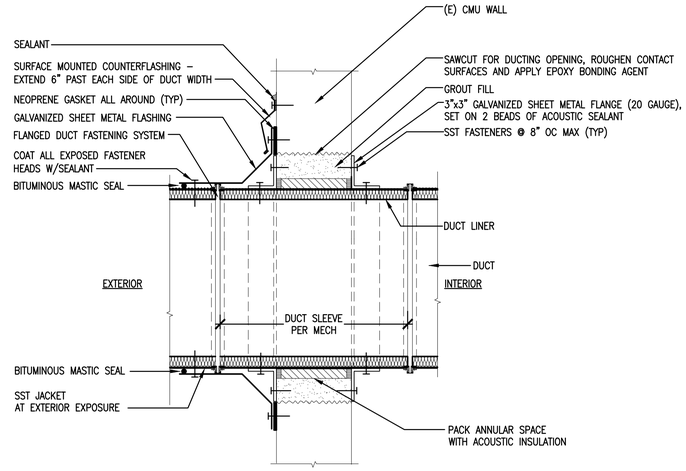

## DUCT THRU WALL D3

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



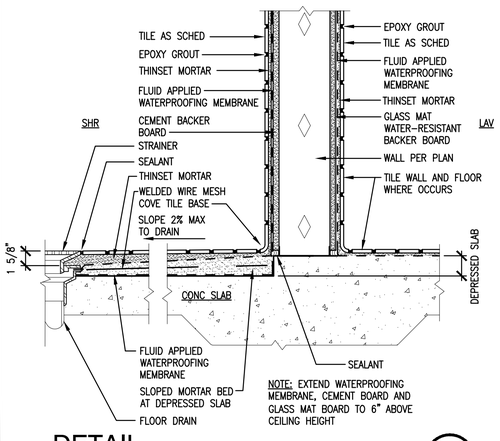

## DUCT THRU WALL C3

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




## DUCT THRU EXTERIOR WALL C4

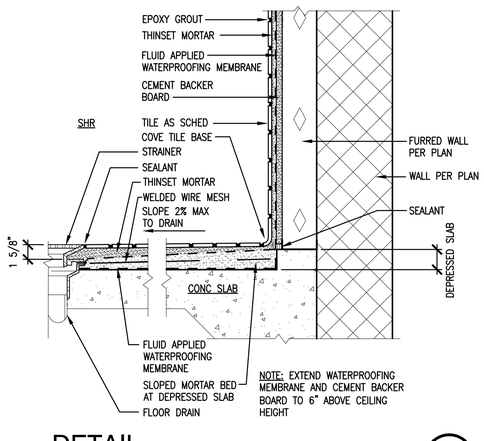
SCALE: 1 1/2" = 1'-0" A-401




## DETAIL

TCNA W244, W245, F112 & F122

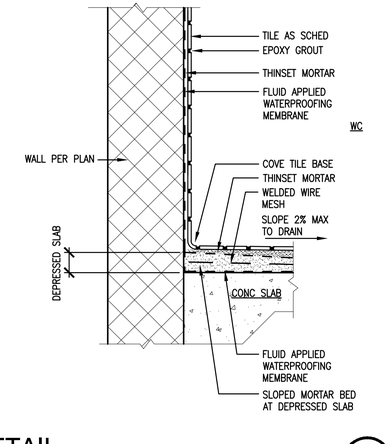
SCALE: 1 1/2" = 1'-0" A-407 A1




## DETAIL

TCNA W245 & F112

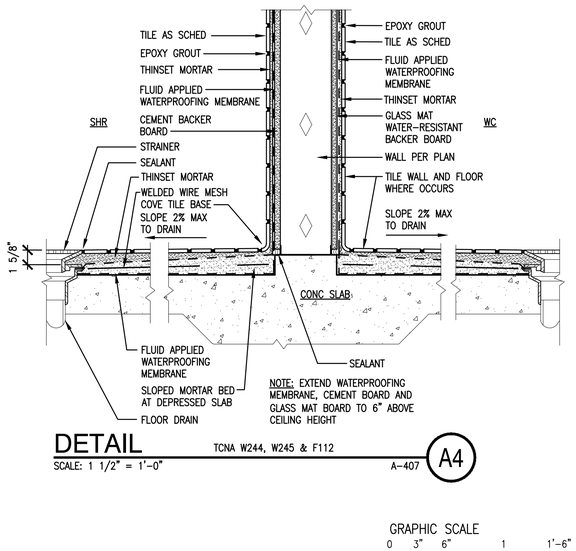
SCALE: 1 1/2" = 1'-0" A-407 A2




## DETAIL

TCNA W223 & F112

SCALE: 1 1/2" = 1'-0" A-407 A3




## DETAIL

TCNA W244, W245 & F112

SCALE: 1 1/2" = 1'-0" A-407 A4

GRAPHIC SCALE

0 3" 6" 1 1'-6" 2FT

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


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – DETAILS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 48 OF 131

A-504

# LEGEND

FIRE RATING / WALL OR STUD SIZE → [1 | P] ← CONSTRUCTION TYPE / MODIFICATIONS

## FIRE RATING

1 – 1 HOUR
2 – 2 HOUR
3 – 3 HOUR

NOTE: BLANK INDICATES NO FIRE RATING

## CONSTRUCTION TYPES

C – CHASE PARTITION
F – FURRING
M – MASONRY
P – BASIC PARTITION
S – SHAFT PARTITION
X – SPECIAL
D – CONC. WALL

## SIZE CODES

STUDS

H – 7/8" HAT CHANNEL
1 – 1 5/8" MTL STUDS
2 – 2 1/2" MTL STUDS
3 – 3 5/8" MTL STUDS
4 – 4" MTL STUDS
6 – 6" MTL STUDS

## MODIFICATIONS

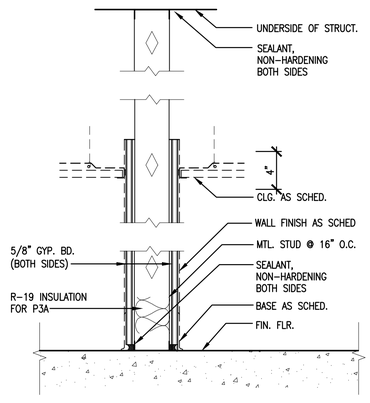
A – ACOUS INSULATION
B – BULLET RESISTANT PANELS
C – GYP. BD. 4" PAST CLG
C1 – GYP. BD. ONE SIDE
F – EIFS
FR – FIRE RETARDANT TREATED PLYWOOD
L – LEAD LINED
P – PLUMBING WALL
V – VENEER PLASTER
7 – 7'–0" H PARTITION CAP TOP W GYP. BD.

NOTE: BLANK INDICATES NO MODIFICATIONS

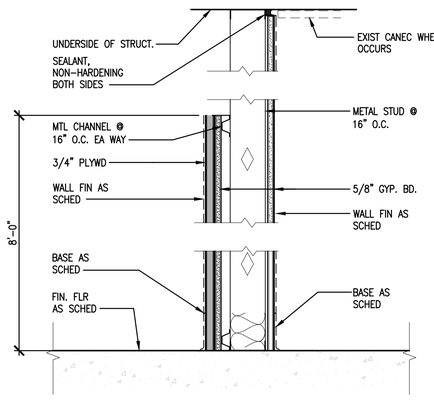
## GENERAL NOTES:

1. ALL GYP. BD. IS 5/8" THICK UNLESS NOTED OTHERWISE.
2. PARTITION TYPE ❹ HEADERS: AT DOORS, GLAZED PARTITIONS, CASED OPENINGS, CONTINUE ADJACENT PARTITION TYPE.
3. ALL PARTITIONS TO BE OF NON–COMBUSTIBLE CONSTRUCTION.
4. PROVIDE MOISTURE RESISTANT GYP. BD. FOR PARTITIONS RECEIVING CERAMIC TILE.
5. PROVIDE MOISTURE RESISTANT GYP. BD. FOR ALL LATRINE CEILINGS.
6. PROVIDE GLASS MAT WATER–RESISTANT GYP. BACKER BOARD AT ALL SHOWER CONDITIONS.

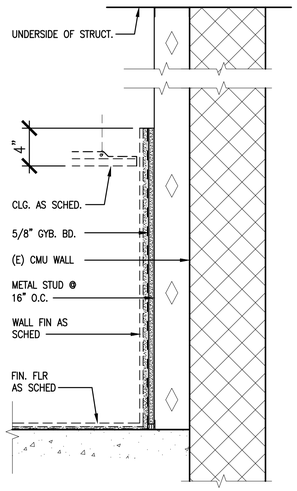
GRAPHIC SCALE
0 3" 6" 1 1'–6" 2FT
SCALE: 1–1/2"=1'–0"



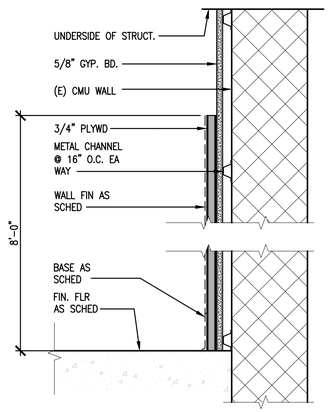

P3, P3A, P3C, P4



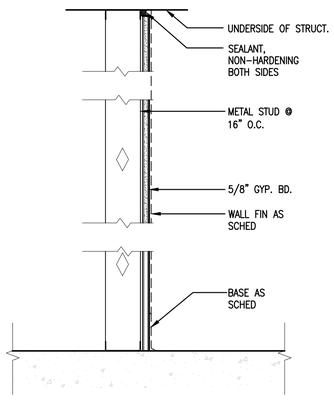

P3AFR




F2, F4




FHFR




P3C1

# WALL TYPES

SCALE: 1 1/2" = 1'–0"

A1


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

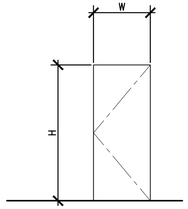
| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTITION TYPES AND WALL DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 49 OF 131
A-505

# DOOR TYPES




A

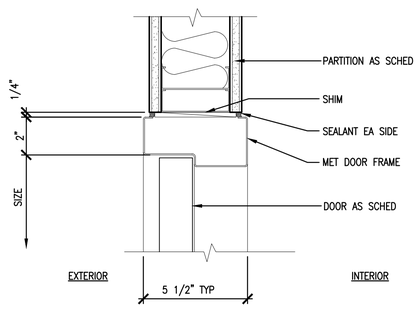
EXTERIOR FLUSH

## DOOR NOTES

1. (–) INDICATES FEATURE NOT REQUIRED
2. ALL DOORS ARE 1–3/4" THICK UNLESS NOTED OTHERWISE.
3. DOOR CONSTRUCTION:
   HM = HOLLOW METAL
4. DOOR FINISH:
   P = PAINT
5. DOOR FRAME (AND FINISH):
   HMP = HOLLOW METAL W/ PAINT FINISH

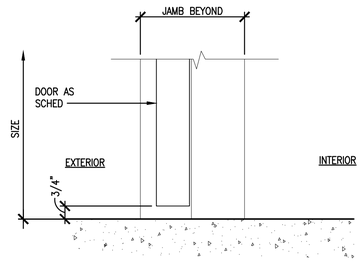
# DOOR SCHEDULE

| DOOR NUMBER | DOOR SIZE (W x H) | DOOR TYPE | CONSTRUCTION (NOTE 3) | DOOR FINISH (NOTE 4) | DOOR FRAME (NOTE 5) | GLAZING | FIRE RATING IN MINUTES | STC RATING | HARDWARE GROUP | FRAMING DETAILS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | HEAD | JAMB | THRESHOLD | |
| 104A | 3'–0" x 7'–0" | A | HM | P | HMP | – | – | – | HW–001 | B1/A–601 | B1/A–601 | A1/A–601 | |
| 104B | 3'–0" x 7'–0" | A | HM | P | HMP | – | – | – | HW–002 | B1/A–601 | B1/A–601 | A1/A–601 | |
| 105 | 3'–0" x 7'–0" | A | (E) | (E) | (E) | – | – | – | HW–003 | B1/A–601 | B1/A–601 | A2/A–601 | (E) DOOR TO BE RETROFITTED WITH PRIVACY LOCK HARDWARE |



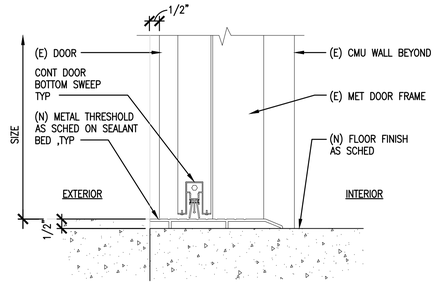

## HEAD (JAMB)

SCALE: 3" = 1'–0" A–601 B1




## THRESHOLD

SCALE: 3" = 1'–0" A–601 A1




## LATRINE THRESHOLD

SCALE: 3" = 1'–0" A–601 A2

GRAPHIC SCALE

4' 3' 2' 1' 0 4' 8'

1/4" = 1'–0"


Youth Hawaii ChALLENGE National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_OF_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

YCA – DOOR TYPES, SCHEDULE AND DETAILS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

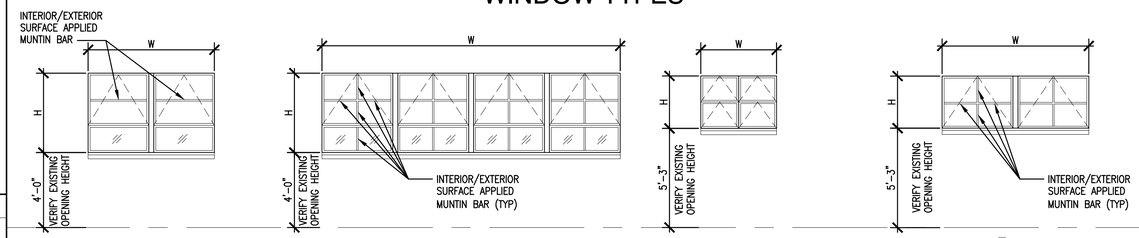
SHEET 50 OF 131

A-601

# WINDOW SCHEDULE

| WINDOW NUMBER | WINDOW SIZE (W x H) VERIFY ALL SIZES WITH EXISTING OPENINGS | WINDOW TYPE | FRAME CONSTRUCTION (NOTE 2) | FRANE FINISH (NOTE 3) | GLAZNG TYPE (NOTE 4) | BLAST ZONE RATING | STC RATING | FRAME DETAILS | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | HEAD | JAMB | SILL | MULLION | |
| 100A | 7'-1" x 4'-1" | A | AL | F | IGU1 | C | – | D2/A-603 | B1/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 100B | 7'-1" x 4'-1" | A | AL | F | IGU1 | D | – | D2/A-603 | B5/A-603 | A5/A-603 | C2/A-603 | NOTE 6 |
| 100C | 2'-0" x 4'-0" | H | AL | F | IGU1 | D | – | D2/A-603 | B5/A-603 | A5/A-603 | C2/A-603 | NOTE 6 |
| 101A | 6'-8" x 4'-0" | A | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 101B | 6'-8" x 4'-0" | A | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 102A | 6'-8" x 4'-0" | A | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 103A | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 103B | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 103C | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 105A | 4'-0" x 2'-9" | C | AL | F | IGU2 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | PRIVACY WINDOW: OBSCURE |
| 106A | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A2/A-603 | C2/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 107A | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | NOTE 6, B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 107B | 6'-8" x 4'-0" | A | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 108A | 13'-4" x 4'-0" | B | AL | F | IGU1 | A | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 108B | 13'-4" x 4'-0" | B | AL | F | IGU1 | A | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 109A | 13'-4" x 4'-0" | B | AL | F | IGU1 | A | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 109B | 13'-4" x 4'-0" | B | AL | F | IGU1 | A | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 114A | 7'-9" x 2'-9" | D | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 114B | 7'-9" x 2'-9" | D | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 114C | 7'-9" x 2'-9" | D | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 115A | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 115B | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 115C | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 116A | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 116B | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 116C | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 116D | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 116E | 7'-9" x 2'-9" | D | AL | F | IGU1 | B | – | D2/A-603 | B2/A-603 | A1/A-603 | C2/A-603 | |
| 117A | 15'-9" x 4'-1" | B | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 118A | 15'-9" x 4'-1" | B | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 119A | 15'-9" x 4'-1" | B | AL | F | IGU1 | D | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 119B | 15'-9" x 4'-1" | B | AL | F | IGU1 | D | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 120A | 15'-9" x 4'-5" | B | AL | F | IGU1 | C | – | D2/A-603 | B2/A-603 | A1/A-603 | C1/A-603 | SEE: B2/A-603 AWNING JAMB AND C2/A-603 AWNING MULLION |
| 120B | 15'-9" x 4'-5" | G | AL | F | IGU1 | C | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120C | 15'-9" x 4'-5" | G | AL | F | IGU1 | C | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120D | 15'-9" x 4'-5" | G | AL | F | IGU1 | C | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120E | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120F | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120G | 2'-2" x 14'-0" | I | AL | P | IGU1 | C | – | C4/A-603 | B4/A-603 | A4/A-603 | – | LOUVERED |
| 120H | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120J | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120K | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120L | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120M | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120N | 15'-9" x 4'-5" | G | AL | F | IGU1 | D | – | D3/A-603 | B3/A-603 | A3/A-603 | C3/A-603 | POLE OPERATED CAM LATCH W/RING PULL |
| 120P | 8'-4" x 4'-1" | J | AL | P | IGU1 | C | – | C4/A-603 | B4/A-603 | A4/A-603 | – | LOUVERED |
| 120Q | 8'-4" x 8'-0" | J | AL | P | IGU1 | C | – | C4/A-603 | B4/A-603 | A4/A-603 | – | LOUVERED |
| 120R | 8'-4" x 4'-1" | J | AL | P | IGU1 | C | – | C4/A-603 | B4/A-603 | A4/A-603 | – | LOUVERED |

## WINDOW TYPES

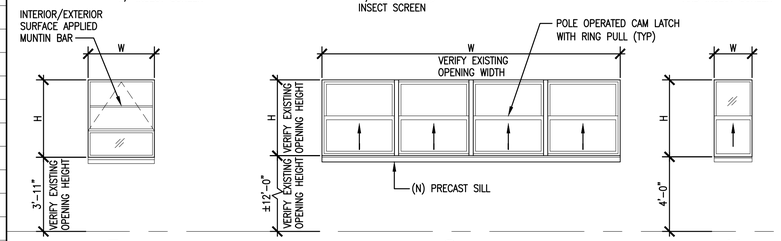



A — FIXED AND AWNING W/ INSECT SCREEN

B — FIXED AND AWNING W/ MULLION AND INSECT SCREEN

C — AWNING W/ MULLION AND INSECT SCREEN

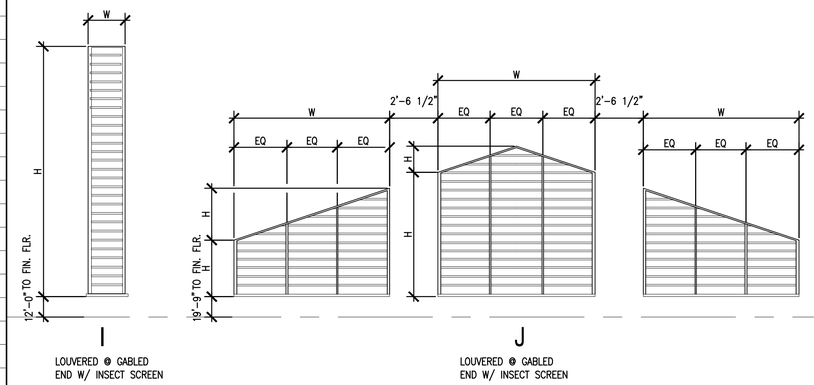
D — AWNING W/ MULLION AND INSECT SCREEN




F — FIXED AND AWNING W/ INSECT SCREEN

G — SINGLE HUNG W/ INSECT SCREEN

H — SINGLE HUNG W/ INSECT SCREEN




I — LOUVERED @ GABLED END W/ INSECT SCREEN

J — LOUVERED @ GABLED END W/ INSECT SCREEN

## WINDOW NOTES

1. (–) INDICATES FEATURE NOT REQUIRED.
2. WINDOW FRAME CONSTRUCTION
   AL – ALUMINUM FRAME
3. WINDOW FRAME FINISH
   F – FLUOROPOLYMER COATING FINISH
   P – PAINT
4. GLASS TYPE
   IGU 1 – INSULATED GLAZING UNIT
   IGU 2 – INSULATED GLAZING UNIT W/ OBSCURE GLASS
5. ALL OPENING TO REUSE EXISTING PRECAST SILL, TYPICAL UNLESS OTHERWISE NOTED.
6. PROVIDE MINI BLINDS AT WINDOW WHERE SCHEDULED


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

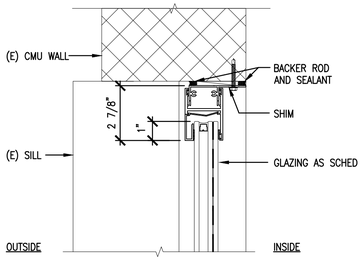
TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE


| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | SHEET_02_ | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES: AHL DRW: AHL CHK: AHL

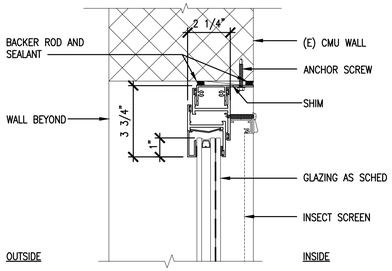
STATE OF HAWAI'I
DEPARTMENT OF DEFENSE
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – WINDOW TYPES AND SCHEDULE

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 51 OF 131
A-602



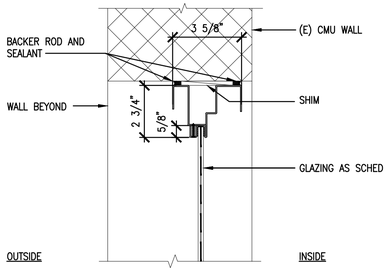

## HEAD DETAIL (FIXED) D1

SCALE: 3" = 1'-0"



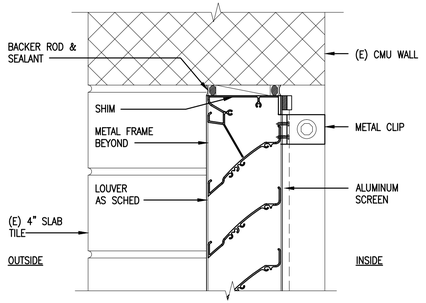

## HEAD DETAIL (AWNING) D2

SCALE: 3" = 1'-0" A-603



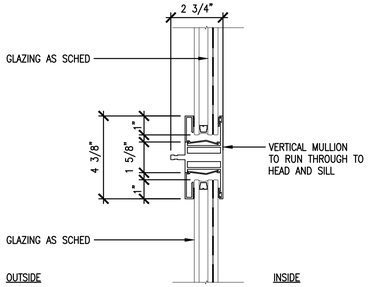

## HEAD DETAIL (SINGLE HUNG) D3

SCALE: 3" = 1'-0" A-603



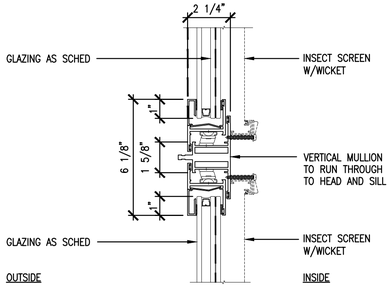

## HEAD DETAIL (LOUVERS) D4

SCALE: 3" = 1'-0" A-603



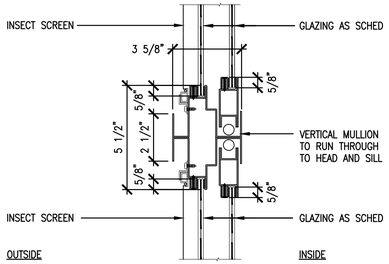

## MULLION DETAIL (FIXED) C1

SCALE: 3" = 1'-0" A-603



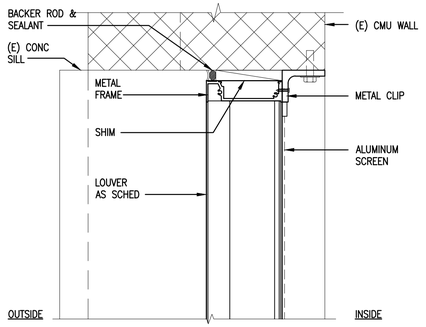

## MULLION DETAIL (AWNING) C2

SCALE: 3" = 1'-0" A-603



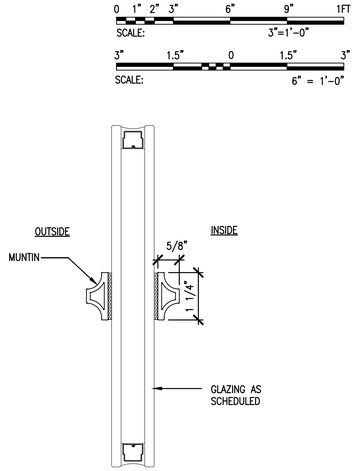

## MULLION DETAIL (SINGLE HUNG) C3

SCALE: 3" = 1'-0" A-603



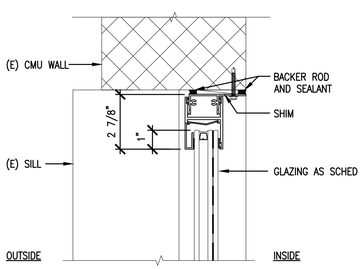

## JAMB DETAIL (LOUVERS) B4

SCALE: 3" = 1'-0" A-603



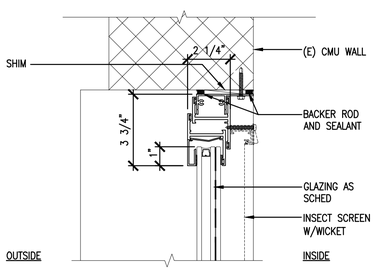

## MUNTIN PROFILE C5

SCALE: 6" = 1'-0" A-201, A-401



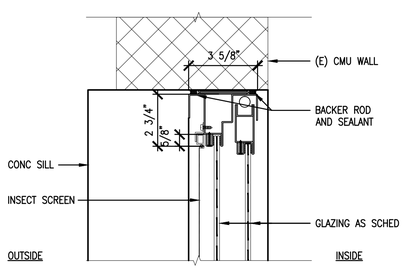

## JAMB DETAIL (FIXED) B1

SCALE: 3" = 1'-0" A-603



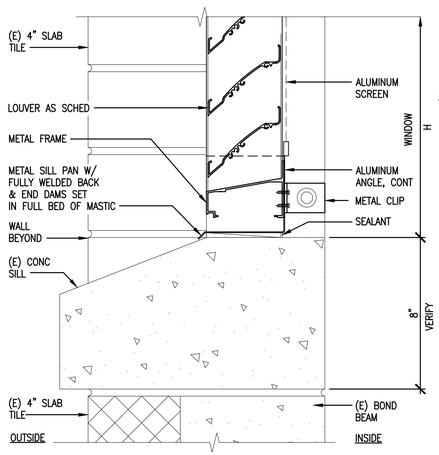

## JAMB DETAIL (AWNING) B2

SCALE: 3" = 1'-0" A-603



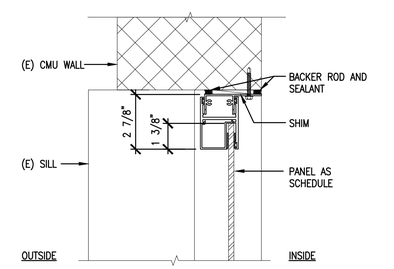

## JAMB DETAIL (SINGLE HUNG) B3

SCALE: 3" = 1'-0" A-603



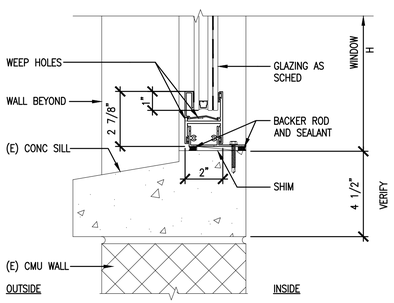

## JAMB DETAIL (LOUVERS) B4

SCALE: 3" = 1'-0" A-603



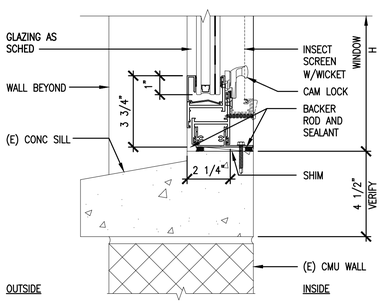

## JAMB DETAIL (FIXED PANEL) B5

SCALE: 3" = 1'-0" A-603



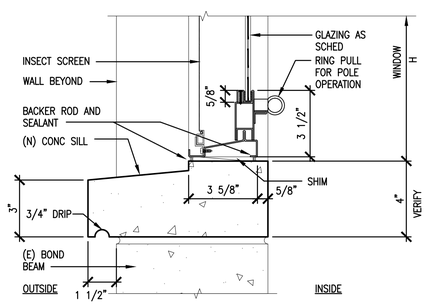

## SILL DETAIL (FIXED) A1

SCALE: 3" = 1'-0" A-603



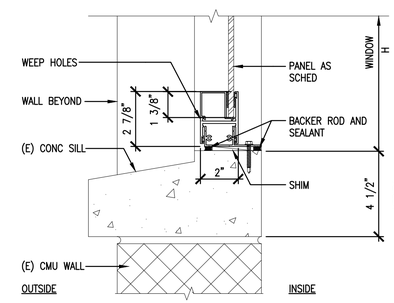

## SILL DETAIL (AWNING) A2

SCALE: 3" = 1'-0" A-603




## SILL DETAIL (SINGLE HUNG) A3

SCALE: 3" = 1'-0" A-603




## SILL DETAIL (FIXED PANEL) A5

SCALE: 3" = 1'-0" A-603

0 1" 2" 3" 6" 9" 1FT
SCALE: 3"=1'-0"

3" 1.5" 0 1.5" 3"
SCALE: 6" = 1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
YCA – WINDOW DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 52 OF 131
A-603

# ROOM FINISH SCHEDULE

| RM NUMBER | ROOM NAME | FLOOR | BASE | WALL A | WALL B | WALL C | WALL D | WAINSCOT MATERIAL | WAINSCOT HEIGHT | MILLWORK COUNTER TOP | MILLWORK CABINETS | TRIM CORNER GUARD | TRIM CRASH RAIL | CEILING | CEILING HEIGHT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103 | CONFERENCE | – | SEE REMARKS | – | – | – | P-1 | NONE | – | NONE | – | NONE | NONE | – | – | RB-1 AT WALL "D" BASE |
| -- | VESTIBULE | SC-1 | RB-1 | P-1 | P-1 | P-1 | P-1 | NONE | – | NONE | – | NONE | NONE | P-2 | – | |
| 104A | ELECTRICAL ROOM | SC-1 | RB-1 | P-1 | P-1 | P-1 | P-1 | NONE | – | NONE | – | NONE | NONE | P-2 | – | |
| 104B | TELCOM ROOM | SC-1 | RB-1 | P-1 | P-1 | P-1 | P-1 | NONE | – | NONE | – | NONE | NONE | P-2 | – | |
| 105 | LATRINE | PT-1 | PT-2 | PT-3 | PT-3 | PT-3 | PT-3 | PT-3 | 4'-0" | NONE | – | NONE | NONE | P-2 | 8'-0"/8'-10" | PT-3 FULL HEIGHT IN SHOWER STALL |
| 117 | CLASSROOM 4 | – | – | – | – | P-1 | – | NONE | – | NONE | – | NONE | NONE | – | – | |
| 118 | CLASSROOM 5 | – | – | P-1 | – | – | – | NONE | – | NONE | – | NONE | NONE | – | – | |
| 119 | MULTI-PURPOSE | – | – | – | – | – | – | NONE | – | NONE | – | NONE | NONE | P-2 | 17'-0" TO 30'-0" | |

# COLOR / MATERIAL SCHEDULE

| CODE | DESCRIPTION | MANUFACTURER | PATTERN / STYLE | COMMENTS |
|---|---|---|---|---|
| P-1 | PAINT | SHERWIN WILLIAMS | SHERWIN WILLIAMS PROGREEN, COLOR: #SW7042 SHOJI WHITE | EGG SHELL |
| P-2 | PAINT | SHERWIN WILLIAMS | SHERWIN WILLIAMS PROGREEN, COLOR: #SW7000 IBIS WHITE | SEMI-GLOSS |
| P-3 | PAINT | SHERWIN WILLIAMS | SHERWIN WILLIAMS PROGREEN, COLOR: #SW7554 STEAMED MILK | SATIN |
| P-4 | PAINT | SHERWIN WILLIAMS | SHERWIN WILLIAMS PROGREEN, COLOR: #SW6991 BLACK MAGIC | FLAT |
| GRT-1 | GROUT | LATICRETE | SPECTRALOCK PRO GROUT PREMIUM EPOXY GROUT, COLOR #40 LATTE | TO BE USED WITH PT-1, PT-2 |
| GRT-2 | GROUT | LATICRETE | SPECTRALOCK PRO GROUT PREMIUM EPOXY GROUT, COLOR #18 SAUTERNE | TO BE USED WITH PT-3 |
| PT-1 | PORCELAIN TILE | DALTILE | KEYSTONE MOSAIC COLOR BODY PORCELAIN TILE 1" X 1" X 1/4" THICK, COLOR: TERRAIN #DK10 (ELEMENTAL TAN D166, ARTISIAN BROWN D144, ARTISIAN BROWN SPECKLE D204) | USE GROUT GRT-1. GROUT WIDTH TO BE 1/16". |
| PT-2 | PORCELAIN TILE | DALTILE | KEYSTONE MOSAIC COLOR BODY PORCELAIN TILE 1" X 1" X 1/4" THICK, COLOR: TERRAIN #DK10 MB-5 COVE BASE (ELEMENTAL TAN D166, ARTISIAN BROWN D144, ARTISIAN BROWN SPECKLE D204) | USE GROUT GRT-1. GROUT WIDTH TO BE 1/16". |
| PT-3 | PORCELAIN TILE | DALTILE | RITTENHOUSE SQUARE SEMI-GLOSS GLAZED WALL TILE 2" X 4" X 5/16" THICK, COLOR: 3K175 BISCUIT W/ MOSAIC BULLNOSE | USE GROUT GRT-2. GROUT WIDTH TO BE 1/16". |
| RB-1 | RUBBER BASE | JOHNSONITE | STANDARD 4" COVE WALL BASE (1/8" THICK), COLOR: #63 BURNT UMBER | |
| SC-1 | SEALED CONCRETE | SINAK CORPORATION | SINAK SEALER S-102 @ FLOOR, COLOR: WATER CLEAR | |
| SS-1 | SOLID SURFACE | AMERICAN STANDARD | WHITE | |
| WWP-1 | WET WALL PANEL | AVONITE | WHITE | |

## COLOR & MATERIALS NOTES LIST

| CODE | SPECIFICATION SECTION |
|---|---|
| ACT | ACOUSTICAL CEILING PANEL/TILE |
| GRT | GROUT |
| P | PAINT |
| PL | PLASTIC LAMINATE |
| PT | PORCELAIN TILE |
| RB | RUBBER FLOOR BASE |
| RF | RESILIENT FLOORING |
| SC | SEALED CONCRETE |
| SS | SOLID SURFACE |
| TPT | TOILET PARTITION |

## NOTES:

1. SOLID PAINTS: THE COLOR SCHEDULE UTILIZES SHERWIN WILLIAMS COMPANY AS A BASE FOR COLOR SELECTION.
2. THE SHEEN LEVEL SHALL BE SEMI-GLOSS U.N.O.
3. PAINT EXPOSED CONDUITS AND PIPING TO MATCH COLOR OF ADJACENT WALL OR CEILING.
4. MANUFACTURER'S NAMES AND COLOR DESIGNATIONS ARE USED FOR COLOR IDENTIFICATION ONLY. NAMED PRODUCTS ARE ACCEPTABLE FOR USE ONLY IF THEY CONFORM TO SPECIFIED REQUIREMENTS. PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE IF THE COLORS APPROXIMATE COLORS INDICATED AND THE PRODUCT CONFORMS TO SPECIFIED REQUIREMENTS.


Youth Hawaii CHALLENGE National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ | DATE | APPR |
|---|---|---|---|---|

SUBMITAL PHASE
FINAL SUBMITTAL

SUBMITAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

YCA – ROOM FINISH AND COLOR/MATERIAL SCHEDULES

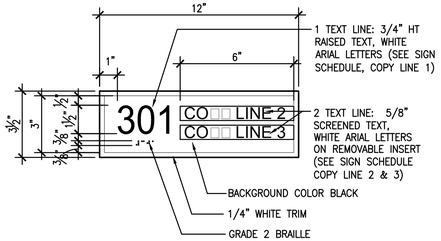
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

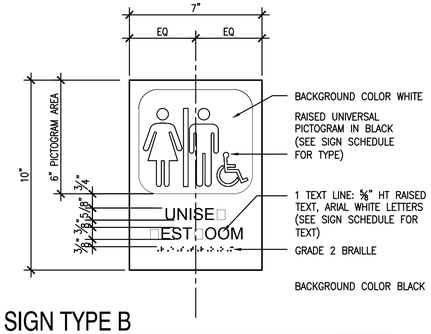
SHEET 53 OF 131

A-604



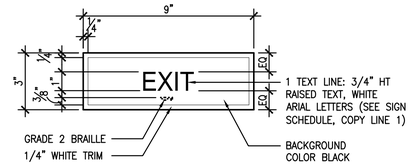

## SIGN TYPE A

SCALE: 3" = 1'-0"



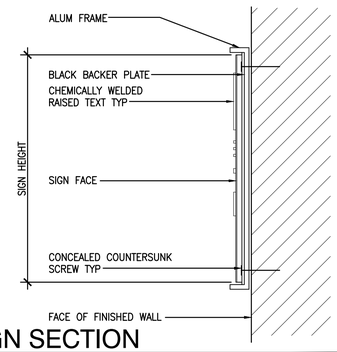

## SIGN TYPE B

SCALE: 3" = 1'-0"



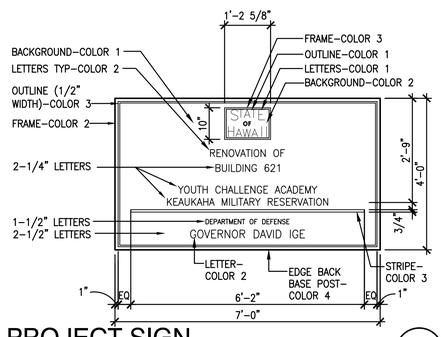

## SIGN C

SCALE: 3" = 1'-0"



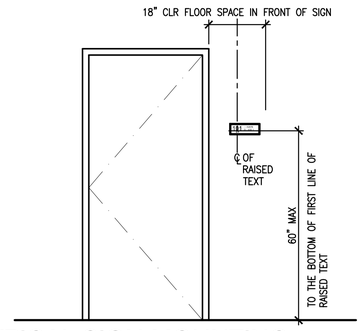

## SIGN SECTION

SCALE: 6" = 1'-0" A-701 (B1)




## PROJECT SIGN

SCALE: 1/2" = 1'-0" A-701 (B2)




## TYPICAL SIGN MOUNTING

SCALE: 1/2" = 1'-0" A-701 (A1)

PROJECT SIGN SPECIFICATIONS
LETTER STYLE: COPY IS CENTERED AND SET IN ADOBE TYPE FUTURA HEAVY. IF THIS TYPE IS NOT AVAILABLE, FUTURA BOLD MAY BE SUBSTITUTED. COPY SHOULD BE SET AND SPACED BY A PROFESSIONAL TYPESETTER AND ENLARGED PHOTOGRAPHICALLY FOR PHOTO STENCIL SCREEN PROCESS.

ART WORK: CONSTANT ELEMENTS OF SIGN LAYOUT – FRAME, OUTLINE, STRIPE AND OFFICIAL STATE INFORMATION – MAY BE DUPLICATED FOLLOWING WORKING DRAWING MEASUREMENTS OR BE REPRODUCED AND ENLARGED PHOTOGRAPHICALLY USING A LAYOUT TEMPLATE IF PROVIDED.

MATERIALS: PANEL IS 3/4" EXTERIOR GRADE HIGH DENSITY OVERLAID PLYWOOD, WITH RESIN BONDED SURFACES ON BOTH SIDES.

PAINTS AND INKS: SCREEN PAINTS ARE MATTE FINISH. PAINTS ARE SATIN FINISH, EXTERIOR GRADE. REFERENCES TO AMERITONE COLOR KEY ARE FOR COLOR MATCH ONLY.

COLOR 1: 1BL10A BOHEMIAN BLUE
COLOR 2: 2H16P SOFTLY (WHITE)
COLOR 3: 2VR2A HOT TANGO (RED)
COLOR 4: 1M52E TOKAY (GRAY)

## PROJECT SIGN

SCALE: 1/2" = 1'-0" A-701 (A2)

## SIGN SCHEDULE

| ROOM NO | SIGN TAG | SIGN TYPE | QTY | COPY LINE 1 | COPY LINE 2 | COPY LINE 3 | DETAIL | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 103 | 103 | A | 1 | 303 | CONFERENCE 1 | | B1/A-701 | |
| 103 | 103A | C | 1 | EXIT | | | B1/A-701 | |
| 104A | 104C | A | 1 | 304A | ELECTRICAL | | B1/A-701 | |
| 104B | 104D | A | 1 | 304B | TELECOMMUNICATION | | B1/A-701 | |
| 105 | 105A | B | 1 | UNISEX RESTROOM | | | B1/A-701 | |
| 108 | 108A | C | 2 | EXIT | | | B1/A-701 | |
| 109 | 109A | C | 2 | EXIT | | | B1/A-701 | |
| 114 | 114A | C | 1 | EXIT | | | B1/A-701 | |
| 115 | 115A | C | 1 | EXIT | | | B1/A-701 | |
| 116 | 116A | C | 1 | EXIT | | | B1/A-701 | |
| 117 | 117A | C | 1 | EXIT | | | B1/A-701 | |
| 118 | 118A | C | 1 | EXIT | | | B1/A-701 | |
| 119 | 119A | C | 2 | EXIT | | | B1/A-701 | |
| 120 | 120D | – | – | | | | | RELOCATE EXISTING 120A SIGNAGE TO THIS LOCATION |
| 120 | 120E | – | – | | | | | RELOCATE EXISTING 120B SIGNAGE TO THIS LOCATION |
| 120 | 120F | – | – | | | | | RELOCATE EXISTING 120C SIGNAGE TO THIS LOCATION |
| 120 | 120G | A | 1 | 201F | CLASSROOM 1 | | B1/A-701 | |

NOTES:
1. SIGNAGE SHALL FOLLOW THE AMERICANS WITH DISABILITIES ACT AND ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES (ADA-ABA) 2004 AS REQUIRED.
2. FONT SHALL BE ARIAL UON.
3. VERIFY ROOM NUMBERS AND NAMES WITH USER GROUP PRIOR TO FABRICATION.
4. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.

GRAPHIC SCALE

16' 8' 4' 0 8' 16'
SCALE: 3/32" = 1'-0"

0 1 2 4 6FT
SCALE: 1/2"=1'-0"

0 1" 2" 3" 6" 9" 1FT
SCALE: 3"=1'-0"

3" 1.5" 0 1.5" 3"
SCALE: 6" = 1'-0"


Youth Hawaii ChalleNGE National Guard Academy

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


TERRY McFARLAND
LICENSED PROFESSIONAL ARCHITECT
No. 7418
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET_ | DATE | APPR |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES AHL DRW AHL CHK AHL

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY

HILO, HAWAI'I
KEAUKAHA MILITARY RESERVATION
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

YCA – SIGNAGE PLAN, SIGN TYPES AND SCHEDULE

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 54 OF 131

A-701

# GENERAL NOTES:

1. FIRE PROTECTION SYSTEM DESIGN, INSTALLATION, MATERIALS, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE, AS AMENDED AND THE 2012 NFPA 1 UNIFORM FIRE CODE, AS AMENDED PER HAWAII COUNTY.

2. PROVIDE LISTED THROUGH PENETRATION FIRESTOPPING SYSTEM FOR PIPE PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS, FLOOR–CEILING, AND ROOF/CEILING ASSEMBLIES. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED ASSEMBLIES.

# FIRE SPRINKLER NOTES:

1. SPRINKLER SYSTEM DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13 AND SPECIFICATION 15300. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SPRINKLER SYSTEM COMPONENTS AND COORDINATE WITH THE VARIOUS TRADES.

2. ALL DEVICES AND EQUIPMENT SHALL BE UL LISTED OR FM APPROVED. THE CONTRACTOR SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THE APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, AND EQUIPMENT LISTINGS.

3. WATER SUPPLY DATA:

   TEST HYDRANT: FH ALONG CIRCLE AVENUE
   FLOW HYDRANT: FH ALONG CIRCLE AVENUE

   STATIC PRESSURE: 83 PSI
   RESIDUAL PRESSURE: 20 PSI
   FLOW AT RESIDUAL PRESSURE: 2,100 GPM

4. WET PIPE SPRINKLER SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 13, SPECIFICATION 15300, AND AS INDICATED:

   YCA PORTION OF BUILDING 621:

   CONFERENCE, LATRINE, PRIVATE OFFICE, VESTIBULE:

   | | |
   |---|---|
   | OCCUPANCY CLASSIFICATION: | LIGHT HAZARD (HAZARD CATEGORY 1) |
   | DESIGN DENSITY: | 0.10 GPM/SF |
   | DESIGN AREA: | 1,500 SF |
   | HOSE STREAM: | 250 GPM |
   | DURATION: | 60 MINUTES |
   | SPRINKLER TYPE: | QUICK RESPONSE SSP OR SSU |
   | SPRINKLER TEMPERATURE RATING: | ORDINARY |
   | SPRINKLER K–FACTOR: | K=5.6 MINIMUM |

   PROVIDE CONCEALED PENDENTS FOR AREAS WITH SUSPENDED CEILINGS.
   PROVIDE UPRIGHTS OR PENDENTS FOR AREAS WITHOUT SUSPENDED CEILINGS.

   DESIGN AREA SHALL BE INCREASED FOR SLOPED CEILINGS IN ACCORDANCE WITH NFPA 13.

   MULTIPURPOSE/DINING:

   | | |
   |---|---|
   | OCCUPANCY CLASSIFICATION: | LIGHT HAZARD (HAZARD CATEGORY 1) |
   | DESIGN DENSITY: | 0.10 GPM/SF |
   | DESIGN AREA: | 1,950 SF |
   | HOSE STREAM: | 250 GPM |
   | DURATION: | 60 MINUTES |
   | SPRINKLER TYPE: | QUICK RESPONSE SSU |
   | SPRINKLER TEMPERATURE RATING: | ORDINARY |
   | SPRINKLER K–FACTOR: | K=5.6 MINIMUM |

   DESIGN AREA SHALL BE INCREASED FOR SLOPED CEILINGS IN ACCORDANCE WITH NFPA 13.

   ELEC, TELECOM:

   | | |
   |---|---|
   | OCCUPANCY CLASSIFICATION: | ORDINARY HAZARD GROUP 1 (HAZARD CATEGORY 2) |
   | DESIGN DENSITY: | 0.20 GPM/SM |
   | DESIGN AREA: | 2,500 SF OR ENTIRE AREA |
   | HOSE STREAM: | 250 GPM |
   | DURATION: | 60 MINUTES |
   | SPRINKLER TYPE: | QUICK RESPONSE SSP OR SSU |
   | SPRINKLER TEMPERATURE RATING: | ORDINARY |
   | SPRINKLER K–FACTOR: | K=5.6 MINIMUM |

5. SPRINKLER HYDRAULIC CALCULATIONS SHALL INCLUDE A 3 PSI SAFETY FACTOR TO THE WATER SUPPLY CURVE.

6. SPRINKLER AND PIPING LAYOUTS ARE CONCEPTUAL. THE CONTRACTOR SHALL VERIFY THE QUANTITY AND ARRANGEMENT OF SPRINKLERS. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE LOCATION OF ALL SPRINKLER COMPONENTS RELATIVE TO PARTITIONS, SOFFITS, LIGHT FIXTURES, MECHANICAL DUCTWORK, STRUCTURAL MEMBERS, ARCHITECTURAL FEATURES, ETC., AND COORDINATE WITH THE VARIOUS TRADES.

7. FIRE SPRINKLER PIPING SHALL NOT BE ROUTED BELOW AIR HANDLING UNITS OR OBSTRUCT MAINTENANCE ACCESS. FIRE SPRINKLER PIPING NEAR ELECTRICAL EQUIPMENT SHALL BE LOCATED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

8. SPRINKLER PIPE SHALL COMPLY WITH NFPA 13, EXCEPT THAT PLASTIC PIPE OR COPPER TUBING WILL NOT BE PERMITTED. ALL PIPING SHALL BE SCHEDULE 40 STEEL PIPE. EXTERIOR PIPING SHALL BE GALVANIZED AND PAINTED.

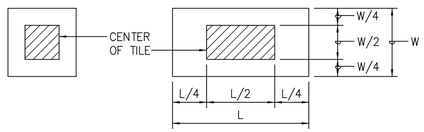
9. PIPING SHALL BE PROVIDED WITH SWAY BRACING AND BRANCH LINE RESTRAINT IN ACCORDANCE WITH NFPA 13.

10. ALL SPRINKLER PIPING IN FINISHED AREAS SHALL BE CONCEALED FROM VIEW UNLESS NOTED OTHERWISE ON DRAWINGS.

11. PRIME AND FINISH COAT ALL SPRINKLER PIPE IN ACCORDANCE WITH SPECIFICATION 09900. PAINT EXPOSED SPRINKLER PIPE TO MATCH THE COLOR OF CEILING/WALLS.

12. CONTRACTOR SHALL PATCH, REPAIR, AND PAINT WALLS AND CEILINGS DAMAGED DURING FIRE SPRINKLER SYSTEM INSTALLATION.

13. ALL FIRE SPRINKLERS SHALL BE PLACED APPROXIMATELY IN THE CENTER OF TILE UNLESS OTHERWISE INDICATED ON THE DRAWINGS. THE CENTER SHALL MEAN WITHIN THE CENTER 50% OF THE TILE AS SHOWN.




14. PROPER TYPES OF SPARE SPRINKLERS, STOPPERS, AND WRENCHES SHALL BE PROVIDED AND STORED IN A CABINET AS FOLLOWS:

   A. SPRINKLERS:

   | | |
   |---|---|
   | LESS THAN 300 SPRINKLERS | MINIMUM 6 SPARE SPRINKLERS |
   | 300 TO 1000 SPRINKLERS | MINIMUM 12 SPARE SPRINKLERS |
   | MORE THAN 1000 SPRINKLERS | MINIMUM 24 SPARE SPRINKLERS |

   B. THREE (3) SPRINKLER STOPPERS

   C. ONE (1) SPRINKLER WRENCH

   THE STOCK OF SPARE SPRINKLERS, STOPPERS AND WRENCHES SHALL INCLUDE ALL TYPES, RATINGS AND SIZES INSTALLED IN THE SYSTEM.

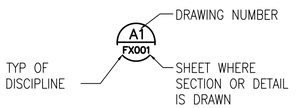
15. PROVIDE HYDROSTATIC TESTING IN ACCORDANCE WITH NFPA 13.

16. FIRE SAFETY DURING CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL BE IN ACCORDANCE WITH CHAPTER 16, 2012 NFPA 1 AS AMENDED PER HAWAII COUNTY.

# LEGEND & ABBREVIATIONS

| SYMBOLS | ABBREVIATIONS | DESCRIPTION |
|---|---|---|
| | AFF | ABOVE FINISHED FLOOR |
| | CONC | CONCRETE |
| | DEMO | DEMOLITION |
| | | FIRE SPRINKLER, CONCEALED PENDENT, EXST |
| | | FIRE SPRINKLER, PENDENT, EXST |
| | | FIRE SPRINKLER, UPRIGHT, EXST |
| | | FIRE SPRINKLER, UPRIGHT, NEW |
| | | FIRE SPRINKLER SYSTEM ALARM CHECK VALVE, EXST |
| | | FIRE SPRINKLER SYSTEM CHECK VALVE, EXST |
| FDC | FDC | FIRE SPRINKLER SYSTEM FIRE DEPARTMENT CONNECTION, EXST |
| | | FIRE SPRINKLER SYSTEM GATE VALVE, EXST |
| | OS & Y | FIRE SPRINKLER SYSTEM OUTSIDE SCREW & YOKE GATE VALVE, EXST |
| FS | FS | FIRE SPRINKLER SYSTEM PIPING, EXST |
| FS | | FIRE SPRINKLER SYSTEM PIPING, NEW |
| | | FIRE SPRINKLER SYSTEM PRESSURE GAUGE, EXST |
| PS | | FIRE SPRINKLER SYSTEM PRESSURE SWITCH, EXST |
| | | FIRE SPRINKLER SYSTEM RISER (WET PIPE), EXST |
| TS | | FIRE SPRINKLER SYSTEM TAMPER SWITCH, EXST |
| WF | | FIRE SPRINKLER SYSTEM WATER FLOW SWITCH, NEW |
| FW | | FIRE WATER LINE, EXST |
| $FW_{XX}$ | | FIRE WATER LINE SIZE DESIGNATION |
| | | PIPE/CONDUIT CAP |
| | CONT | PIPE/CONDUIT CONTINUATION |
| | | PIPE/CONDUIT ELBOW (TURNING DOWN) |
| | | PIPE/CONDUIT PLUG |
| | | PIPE/CONDUIT TEE (TURNING DOWN) |
| | UP/DN | PIPE/CONDUIT UP/DOWN |
| | POC | POINT OF CONNECTION |
| | NC | NORMALLY CLOSED (VALVE) |
| | NO | NORMALLY OPEN (VALVE) |
| FEC E | | PORTABLE FIRE EXTINGUISHER CABINET WITH 4A:60B:C RATED MULTIPURPOSE DRY CHEMICAL FIRE EXTINGUISHER, EXST |
| ABC | | PORTABLE FIRE EXTINGUISHER 4A:60B:C RATED MULTIPURPOSE DRY CHEMICAL, MOUNTED ON BRACKET, EXST |
| | TYP | TYPICAL |
| W | | WATER LINE |
| $W_{XX}$ | | WATER LINE SIZE DESIGNATION |

# SYMBOL LEGEND:




SECTION AND DETAIL SYMBOL


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

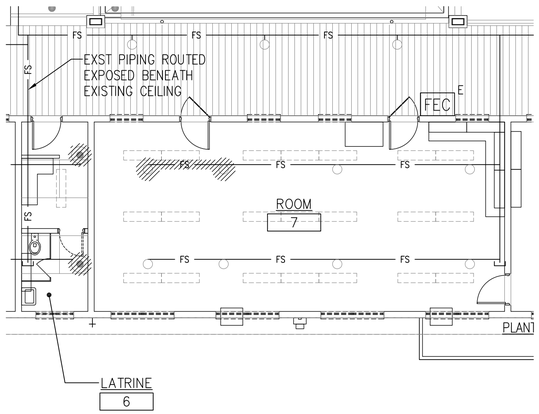
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES MKH DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
FIRE SUPPRESSION NOTES, LEGEND AND ABBREVIATIONS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 55 OF 131
FX001

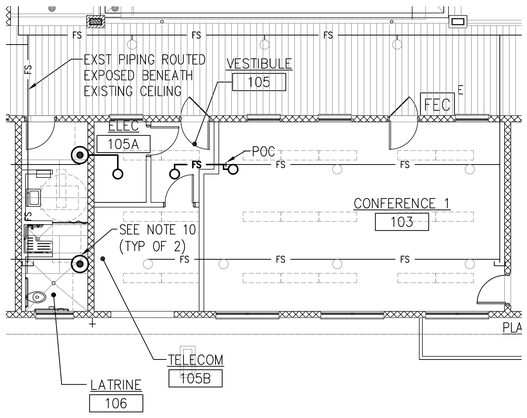
G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running ver\FX Files_FH\FX001_FIRE SUPPRESSION NOTES, LEGEND ABBREVIATIONS.dwg, 4/30/2018 4:04:04 PM, Adobe PDF




## PARTIAL YCA BUILDING 621
## FIRE SPRINKLER DEMOLITION PLAN

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

PLAN NORTH



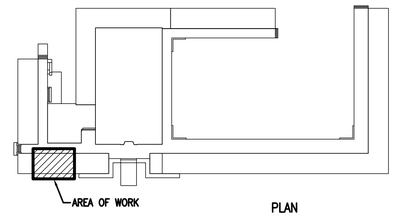

## PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN

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

PLAN NORTH

**NOTES:**

1. NEW AND EXISTING FIRE SPRINKLER LOCATIONS AND PIPE ROUTING ARE CONCEPTUAL. CONTRACTOR SHALL FIELD VERIFY AND FIELD COORDINATE EXISTING FIRE SPRINKLER LOCATIONS AND PIPE ROUTING.
2. AREA OF WORK IN THE BUILDING IS WOOD FRAMED.
3. EXISTING ROOF/CEILING CEILING ASSEMBLY CONSISTS OF WOOD JOISTS WITH BUILT UP ROOFING ABOVE AND CANEC CEILING PANELS BELOW. FIRE SPRINKLERS ARE NOT REQUIRED FOR CONCEALED SPACES WITHIN ROOF/CEILING ASSEMBLY PER NFPA 13 SINCE THIS IS A CONCEALED SPACE FORMED BY CEILINGS ATTACHED DIRECTLY TO OR WITHIN 6 INCHES OF WOOD JOISTS OR SIMILAR SOLID MEMBER CONSTRUCTION.
4. LOCATE FIRE SPRINKLERS TO AVOID OBSTRUCTIONS TO FIRE SPRINKLER DISCHARGE PATTERN FROM WOOD FRAMING, LIGHT FIXTURES, CONDUIT, ETC.
5. PROVIDE BRANCH LINE RESTRAINT IN ACCORDANCE WITH NFPA 13, SEE DETAILS
6. PROVIDE HANGERS IN ACCORDANCE WITH NFPA 13, SEE DETAILS C1 FX501, C2 FX501, C4 FX501, C5 FX501
7. PIPE PENETRATIONS THROUGH INTERIOR WALLS SHALL BE SEALED, SEE DETAIL A5 FX501 FOR PIPE PENETRATIONS THROUGH EXTERIOR WALL, SEE ARCHITECTURAL DRAWINGS.
8. PROVIDE SELF ADHESIVE LABELS ON SPRINKLER MAIN PIPING TO IDENTIFY "WET PIPE SPRINKLER" PIPING IN ACCORDANCE WITH SPECIFICATION 15300.
9. FIRE SPRINKLERS ONLY SHOWN IN AREA OF WORK.
10. PROVIDE FIRE SPRINKLER PROTECTION ABOVE AND BELOW SUSPENDED CEILINGS IN AREAS OF COMBUSTIBLE CONSTRUCTION AS REQUIRED PER NFPA 13.




KEY PLAN

SCALE: NONE

PLAN NORTH

GRAPHIC SCALE

1/8" = 1'-0"

4' 0' 8' 16' 24' 32'

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES MKH | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

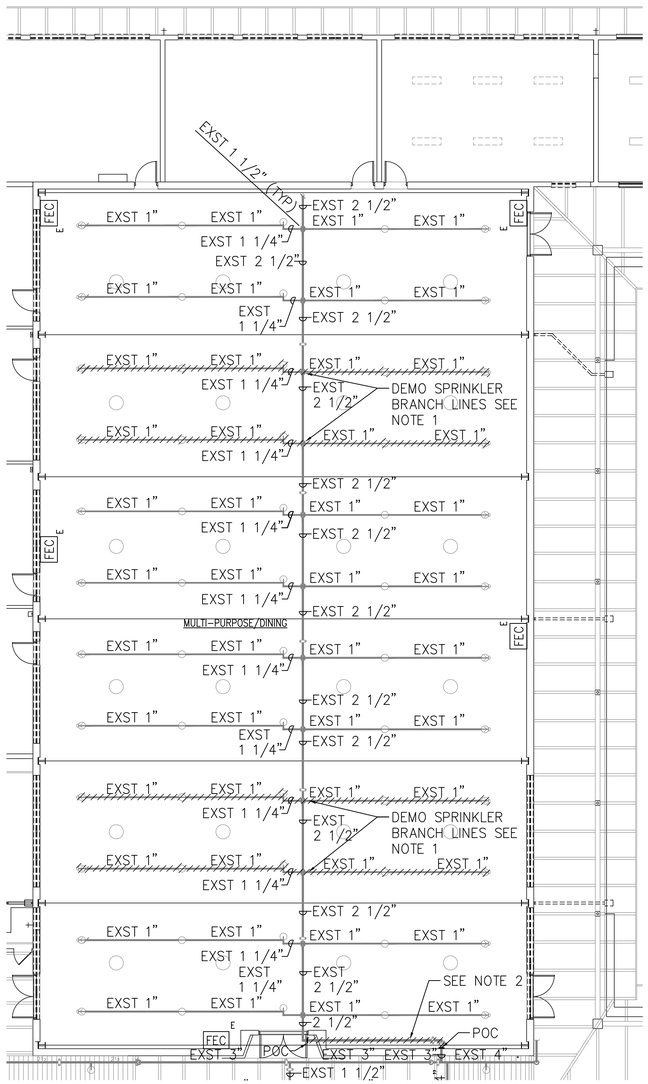
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 56 OF 131

FX401

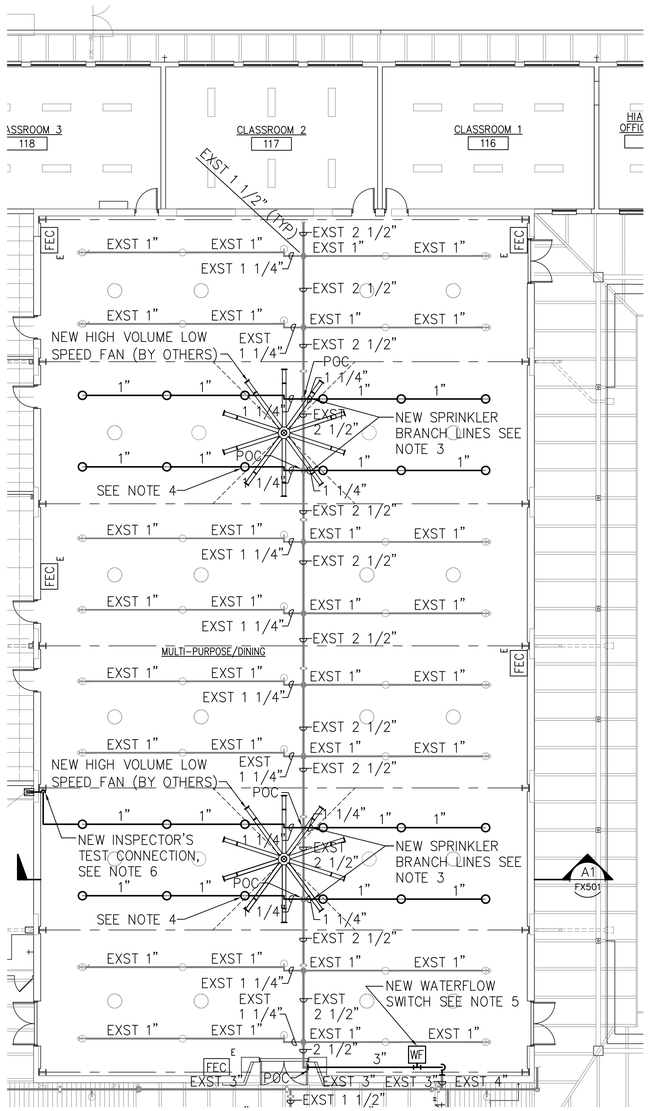
G:\2012\12001 Keaukaha Military Reserv Bldg 621\Drawings\Running set\YCA_B621_PH2\FX401_PARTIAL YCA B621 621 FIRE SPRINKLER PLAN.dwg, 6/28/2016 4:04:12 PM, Adobe PDF




## PARTIAL YCA BUILDING 621 FIRE SPRINKLER DEMOLITION PLAN

SCALE: 3/32" = 1'-0"

PLAN NORTH




## PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN

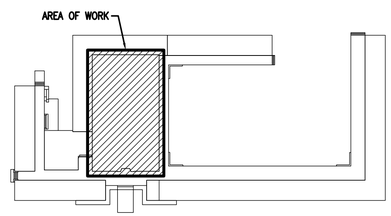
SCALE: 3/32" = 1'-0"

PLAN NORTH

**NOTES:**

1. REMOVE EXISTING BRANCH LINES INCLUDING 1-1/4 x 1 x 1-1/2 TEE AT THE TOP OF RISER PIPE CONNECTING THE BRANCH LINES.
2. REMOVE EXISTING 2-1/2 INCH FEED MAIN UP TO CROSS MAIN PIPE CONNECTION INCLUDING EXISTING SEISMIC BRACING INSTALLED ON PIPE.
3. NEW FIRE SPRINKLER LOCATIONS AND PIPE ROUTING ARE CONCEPTUAL. CONTRACTOR SHALL FIELD VERIFY AND FIELD COORDINATE EXISTING FIRE SPRINKLER LOCATIONS AND PIPE ROUTING.
4. HIGH VOLUME LOW SPEED CEILING FANS SHALL BE LOCATED IN THE APPROXIMATE CENTER OF FOUR SPRINKLER HEADS.
5. PROVIDE NEW VANE TYPE WATERFLOW SWITCH WITH 60 SECOND TIME DELAY.
6. PROVIDE NEW INSPECTOR'S TEST CONNECTION FOR TESTING OF NEW WATER FLOW SWITCH. PROTECT PIPING AND TEST VALVES FROM IMPACT BY INSTALLING PIPE IMMEDIATELY ADJACENT TO THE BUILDING COLUMN. DISCHARGE WATER TO THE BUILDING EXTERIOR ON TO A SPLASH BLOCK. PROVIDE LOCK ON INSPECTOR'S TEST VALVE TO PREVENT UNAUTHORIZED OPERATION OF THE TEST CONNECTION. COORDINATE WITH FIRE ALARM CONTRACTOR FOR CONNECTION OF WATERFLOW SWITCH TO THE BUILDING FIRE ALARM SYSTEM, SEE DETAIL A5 / FX502
7. PROVIDE BRANCH LINE RESTRAINT IN ACCORDANCE WITH NFPA 13. MULTI-PURPOSE/DINING IS STEEL FRAMED, SEE DETAILS C3 / FX502, C5 / FX502
8. PROVIDE HANGERS IN ACCORDANCE WITH NFPA 13. MULTI-PURPOSE/DINING IS STEEL FRAMED, SEE DETAILS A1 / FX502, A2 / FX502
9. PIPE PENETRATIONS THROUGH INTERIOR WALLS SHALL BE SEALED, SEE DETAIL A3 / FX502

   FOR PIPE PENETRATIONS THROUGH EXTERIOR WALL, SEE ARCHITECTURAL DRAWINGS.
10. PROVIDE LATERAL AND HORIZONTAL SWAY BRACING IN ACCORDANCE WITH NFPA 13. MULTI-PURPOSE/DINING IS STEEL FRAMED, SEE DETAILS A1 / FX502, A2 / FX502
11. FIRE SPRINKLERS ONLY SHOWN IN AREA OF WORK.




KEY PLAN
SCALE: NONE

PLAN NORTH

GRAPHIC SCALE

0 2 4 8 16 24 32FT

SCALE: 3/32"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SHEET OF

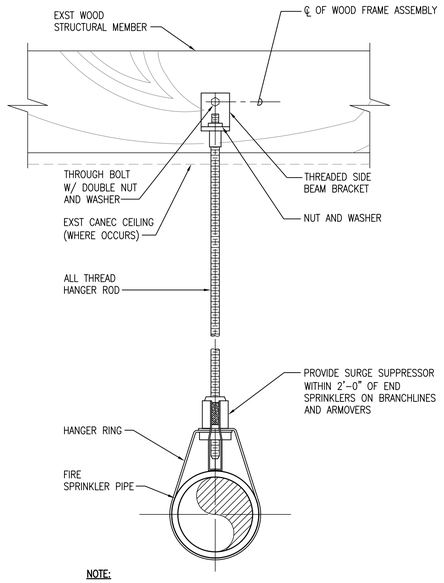
SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016
DES MKH | DRW TEC | CHK KMM

STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
DEPARTMENT OF DEFENSE
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BUILDING 621 FIRE SPRINKLER PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 57 OF 131
FX402

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA Bld.2_2NO\FX402_PARTIAL YCA BLDG 621 FIRE SPRINKLER PLAN.dwg, 6/28/2016 4:04:13 PM, Adobe PDF

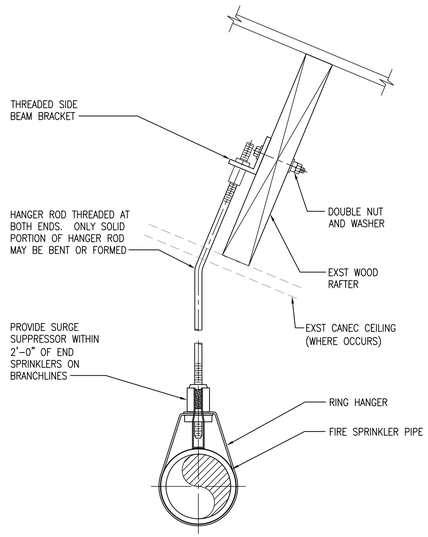



NOTE:

HOLES IN WOOD FRAME ASSEMBLY SHALL NOT EXCEED 1/16 INCH GREATER THAN THE BOLT DIAMETER.

## TYPICAL PIPE HANGER DETAIL — C1

SCALE: NONE — FX401

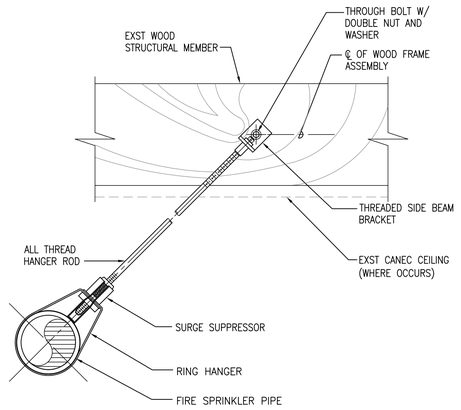



NOTE:

HOLES IN WOOD FRAME ASSEMBLY SHALL NOT EXCEED 1/16 INCH GREATER THAN THE BOLT DIAMETER.

## TYPICAL PIPE HANGER DETAIL — C2

SCALE: NONE — FX401

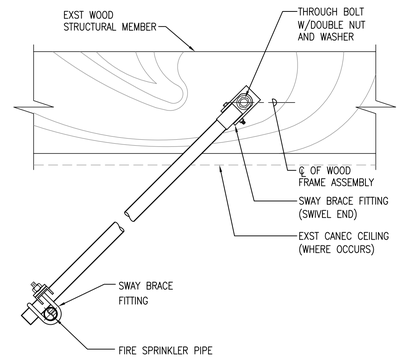



NOTE:

PROVIDE BRANCH LINE RESTRAINT WITHIN 2'-0" OF END OF BRANCH LINE.

## TYPICAL BRANCH LINE RESTRAINT DETAIL — C4

SCALE: NONE — FX401

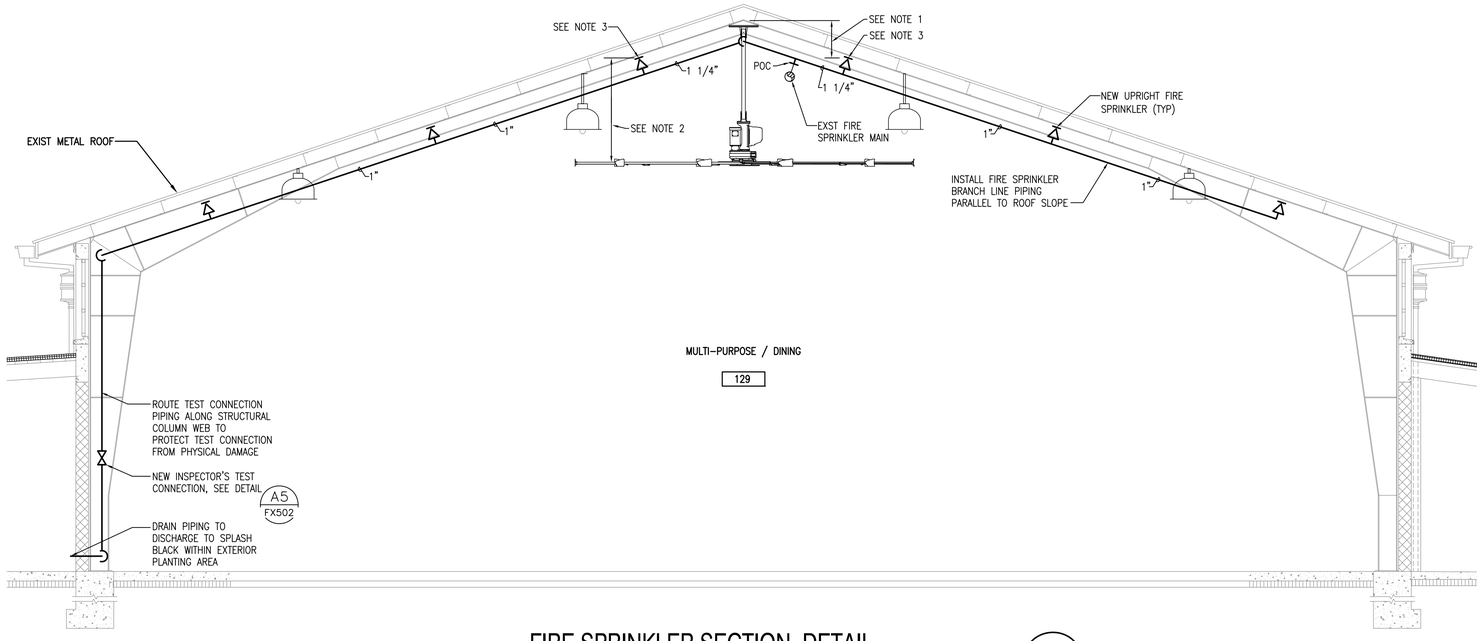



NOTES:

1. SWAY BRACING COMPONENTS, SIZING AND SPACING SHALL BE IN ACCORDANCE WITH NFPA 13.
2. HOLES IN WOOD FRAME ASSEMBLY SHALL NOT EXCEED 1/16 INCH GREATER THAN THE BOLT DIAMETER.

## TYPICAL BRANCH LINE RESTRAINT DETAIL — C5

SCALE: NONE — FX401




## FIRE SPRINKLER SECTION DETAIL — A1

SCALE: 1/4"=1'-0" — FX402

NOTES:

1. INSTALL UPRIGHT FIRE SPRINKLER WITHIN 3'-0' FROM THE TOP OF ROOF PEAK.
2. FIRE SPRINKLERS INSTALLED ABOVE THE HIGH VOLUME LOW SPEED FAN SHALL MAINTAIN A MINIMUM 3'-0" VERTICAL CLEARANCE.
3. RELOCATE FIRE SPRINKLERS SUCH THAT NEW HIGH VOLUME LOW SPEED FAN IS APPROXIMATELY CENTERED AROUND 4 FIRE SPRINKLERS.

GRAPHIC SCALE

1/4" = 1'-0"

4' 0' 4' 8' 12'


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA — LICENSED PROFESSIONAL ENGINEER — No. 8065-A — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018

SIGNATURE — EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES: MKH | DRW: TEC | CHK: KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

DETAILS

SCALE: AS NOTED

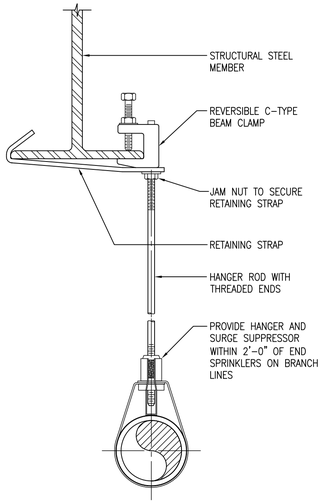
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 58 OF 131

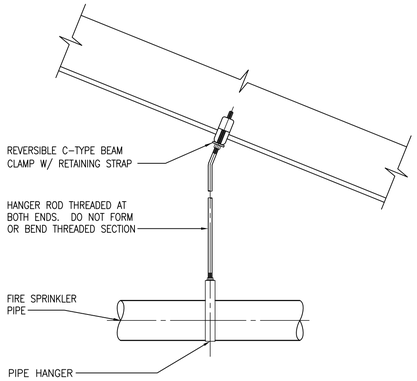
FX501

G:\2012\12003 Keaukaha Military Reserv Renov YMCA Bldg 621\Drawings\Survey\YCA BLDG PHOTOS_DETAILS.dwg, 6/28/2016 4:04:20 PM, Adobe PDF



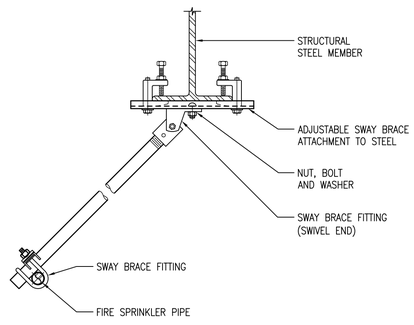

## TYPICAL PIPE HANGER DETAIL

SCALE: NONE FX402 C1




## TYPICAL PIPE HANGER DETAIL

SCALE: NONE FX402 C2

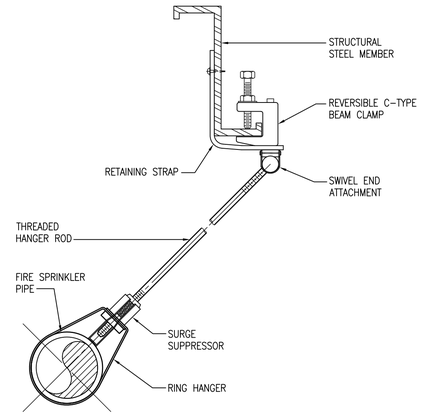



**NOTE:**

SWAY BRACING COMPONENTS, SIZING AND SPACING SHALL BE IN ACCORDANCE WITH NFPA 13.

## TYPICAL BRANCH LINE RESTRAINT DETAIL

SCALE: NONE FX402 C3

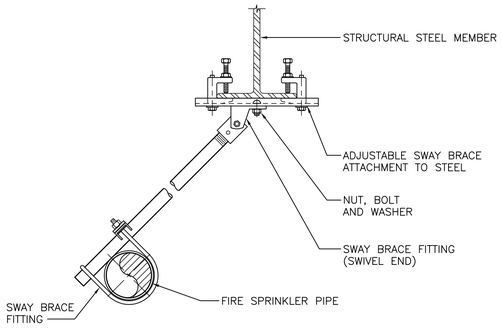



**NOTE:**

PROVIDE BRANCH LINE RESTRAINT WITHIN 2'–0" OF END OF BRANCH LINE.

## TYPICAL BRANCH LINE RESTRAINT DETAIL

SCALE: NONE FX402 C5

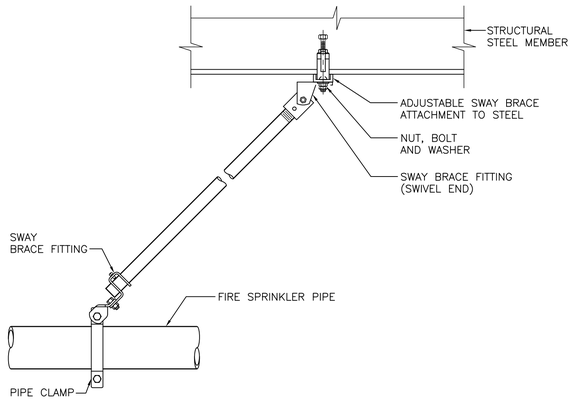



**NOTE:**

SWAY BRACING COMPONENTS, SIZING AND SPACING SHALL BE IN ACCORDANCE WITH NFPA 13.

## TYPICAL LATERAL SWAY BRACE DETAIL

SCALE: NONE FX402 A1

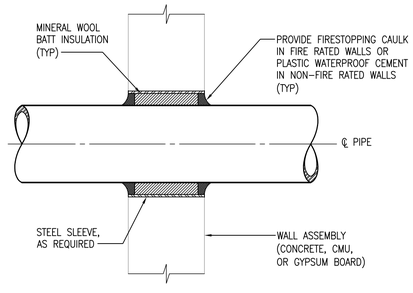



**NOTE:**

SWAY BRACING COMPONENTS, SIZING AND SPACING SHALL BE IN ACCORDANCE WITH NFPA 13.

## TYPICAL LONGITUDINAL SWAY BRACE DETAIL

SCALE: NONE FX402 A2

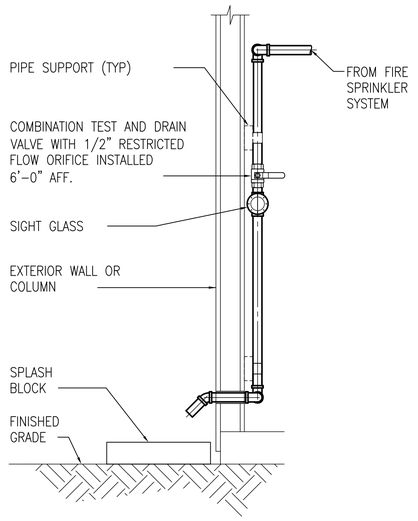



**NOTES:**

1. CONTRACTOR SHALL PROVIDE A UL LISTED THROUGH PENETRATION FIRE STOP SYSTEM FOR FIRE RATED WALLS.

## TYPICAL PIPE THRU INTERIOR WALL DETAIL

SCALE: NONE FX402 A3




## INSPECTOR'S TEST CONNECTION DETAIL

SCALE: NONE FX402 A5


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION 4/30/2018
SIGNATURE EXPIRATION DATE

| MK | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITAL DATE: 30 JUNE 2016
DES MKH | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
DETAILS

SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 59 OF 131
FX502

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\yca bldg 621 Survey 4-27-2018 4-04-24 PM Adobe PDF

## GENERAL NOTES:

1. FIRE PROTECTION SYSTEM DESIGN, INSTALLATION, MATERIALS, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE, AS AMENDED AND THE 2012 NFPA 1 UNIFORM FIRE CODE, AS AMENDED PER HAWAII COUNTY.

2. PROVIDE LISTED THROUGH PENETRATION FIRESTOPPING SYSTEM FOR PIPE PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS, FLOOR-CEILING, AND ROOF/CEILING ASSEMBLIES. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED ASSEMBLIES.

## FIRE ALARM NOTES:

1. PROVIDE MODIFICATIONS TO EXISTING ADDRESSABLE FIRE ALARM SYSTEM TO ACCOMMODATE REVISED FLOOR PLAN. FIRE ALARM SYSTEM DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 72 AND SPECIFICATION 13850.

2. DEVICES ARE SHOWN IN SUGGESTED LOCATIONS. FINAL QUANTITY AND LAYOUT SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, SPECIFICATION 13850, AND EQUIPMENT LISTINGS. CONTRACTOR IS RESPONSIBLE TO PROVIDE A FULLY FUNCTIONAL SYSTEM WITH ALL MATERIALS, EQUIPMENT, AND DEVICES WHETHER SHOWN ON DRAWINGS OR NOT. COORDINATE LOCATION OF DEVICES WITH STRUCTURAL MEMBERS, ARCHITECTURAL FEATURES, LIGHTING, ELECTRICAL CONDUIT AND CABLE TRAYS, MECHANICAL DUCTS AND PIPING, AND AIR HANDLING SYSTEMS.

3. FIRE ALARM CONDUIT SHALL BE 3/4 INCH MINIMUM, UNLESS OTHERWISE NOTED.

4. INITIATING DEVICE CIRCUITS SHALL BE CLASS B SUPERVISED. SIGNALING LINE CIRCUITS SHALL BE CLASS B SUPERVISED. SIGNALING LINE CIRCUITS FOR THE NETWORK SHALL BE CLASS A SUPERVISED. NOTIFICATION CIRCUITS SHALL BE CLASS A SUPERVISED.

5. WIRING FOR 24 VDC FIRE ALARM CIRCUITS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. VISUAL ALARM CIRCUITS SHALL BE SOLID COPPER NO. 14 AWG MINIMUM. INITIATING DEVICE CIRCUITS SHALL BE SOLID COPPER NO. 16 AWG MINIMUM. FOR SIGNALING LINE CIRCUITS, PROVIDE SINGLE STRAND TWISTED PAIR NO. 18 TO NO. 12 AWG DEPENDING ON DISTANCE AND PER MANUFACTURER'S RECOMMENDATIONS.

6. SEPARATE CONDUITS SHALL BE USED FOR 120 VAC AND 24 VDC CIRCUITS. CONDUIT SHALL BE CONCEALED IN FINISHED AREAS.

7. ALL FIRE ALARM DEVICES AND SIGNALS USED FOR THE GENERAL EVACUATION OF THE FACILITY SHALL BE ADA/ABA COMPLIANT. MOUNT AUDIOVISUAL AND VISUAL ALARMS 80 INCHES ABOVE FINISH FLOOR TO BOTTOM OF LENS. MOUNT AUDIBLE ALARMS 90 INCHES ABOVE FINISH FLOOR TO TOP OF DEVICE. MOUNT MANUAL PULL STATIONS 48 INCHES ABOVE FINISH FLOOR TO TOP OF MANUAL PULL STATION.

8. FIRE ALARM SYSTEM SHALL BE PROVIDED WITH TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS) PROTECTION DEVICES ON ALL CIRCUITS ENTERING AND LEAVING THE BUILDING. PROVIDE TVSS DEVICES AT POWER SUPPLY CONNECTION TO FIRE ALARM CONTROL PANEL, EXTENDER PANELS, ETC. A COMPREHENSIVE EVALUATION OF OTHER TRANSIENT VOLTAGE ENTRY POINTS SHALL BE CONDUCTED AND APPROPRIATE TVSS PROTECTION DEVICES SHALL BE INSTALLED WHERE NEEDED.

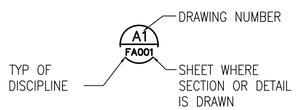
9. THE MANUFACTURER'S REPRESENTATIVE FOR THE BUILDING FIRE ALARM SYSTEM SHALL BE PRESENT AT THE PRELIMINARY AND FINAL ACCEPTANCE TESTING OF THE FIRE ALARM SYSTEM INSTALLATION.

10. CONTRACTOR SHALL PATCH, REPAIR, AND PAINT WALLS AND CEILINGS DAMAGED DURING FIRE ALARM SYSTEM INSTALLATION.

## LEGEND & ABBREVIATIONS

| SYMBOLS | ABBREVIATIONS | DESCRIPTION |
|---|---|---|
| | AFF | ABOVE FINISHED FLOOR |
| | CONC | CONCRETE |
| | DEMO | DEMOLITION |
| | CKT | FIRE ALARM SYSTEM CIRCUIT |
| CM | | FIRE ALARM SYSTEM CONTROL MODULE, EXST |
| CM | | FIRE ALARM SYSTEM CONTROL MODULE, NEW |
| FACP | FACP | FIRE ALARM SYSTEM CONTROL PANEL, EXST |
| DD | | FIRE ALARM SYSTEM DUCT SMOKE DETECTOR, NEW |
| | | FIRE ALARM SYSTEM END OF LINE RESISTOR, EXST |
| H | | FIRE ALARM SYSTEM HORN, WALL MOUNTED, EXST |
| H | | FIRE ALARM SYSTEM HORN, WALL MOUNTED, NEW |
| H | | FIRE ALARM SYSTEM HORN STROBE, WALL MOUNTED, EXST |
| H | | FIRE ALARM SYSTEM HORN STROBE, WALL MOUNTED, NEW |
| H WP | | FIRE ALARM SYSTEM HORN STROBE, WALL MOUNTED, WEATHERPROOF, EXST |
| JB | | FIRE ALARM SYSTEM JUNCTION BOX |
| M | | FIRE ALARM SYSTEM MANUAL PULL STATION, EXST |
| M WP | | FIRE ALARM SYSTEM MANUAL PULL STATION, WEATHERPROOF, EXST |
| MM | | FIRE ALARM SYSTEM MONITOR MODULE, EXST |
| | NAC | FIRE ALARM SYSTEM NOTIFICATION APPLIANCE CIRCUIT |
| FA | | FIRE ALARM SYSTEM RACEWAY, EXST |
| FA | | FIRE ALARM SYSTEM RACEWAY, NEW |
| | SLC | FIRE ALARM SYSTEM SIGNALING LINE CIRCUIT |
| | | FIRE ALARM SYSTEM SMOKE DETECTOR, PHOTOELECTRIC, EXST |
| | | FIRE ALARM SYSTEM STROBE, WALL MOUNTED, EXST |
| | | FIRE ALARM SYSTEM STROBE, WALL MOUNTED, NEW |
| TVSS | | FIRE ALARM SYSTEM TRANSIENT VOLTAGE SURGE SUPPRESSION PROTECTION DEVICE, EXST |
| PS | | FIRE SPRINKLER SYSTEM PRESSURE SWITCH, EXST |
| | | FIRE SPRINKLER SYSTEM RISER (WET PIPE), EXST |
| TS | | FIRE SPRINKLER SYSTEM TAMPER SWITCH, EXST |
| | | PIPE/CONDUIT CAP |
| | CONT | PIPE/CONDUIT CONTINUATION |
| | | PIPE/CONDUIT ELBOW (TURNING DOWN) |
| | | PIPE/CONDUIT PLUG |
| | | PIPE/CONDUIT TEE (TURNING DOWN) |
| | UP/DN | PIPE/CONDUIT UP/DOWN |
| | TYP | TYPICAL |

## SYMBOL LEGEND:




SECTION AND DETAIL SYMBOL


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

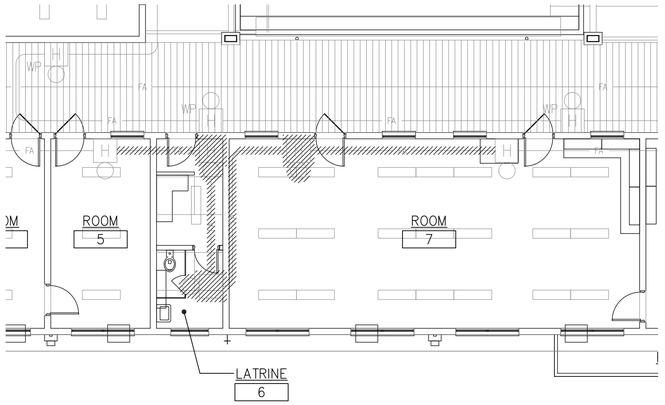
| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES MKH | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
FIRE ALARM NOTES, LEGEND AND ABBREVIATIONS

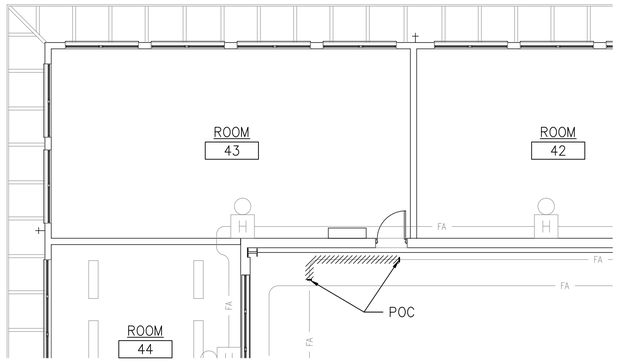
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 60 OF 131
FA001

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running ver\FA Bldg 621_PH2\FA001_FIRE ALARM NOTES LEGEND ABBREVIATIONS.dwg, 6/29/2016 4:03:49 PM, Adobe PDF



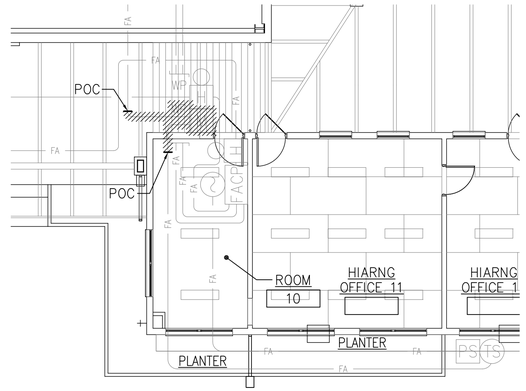

PARTIAL YCA BUILDING 621
FIRE ALARM DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



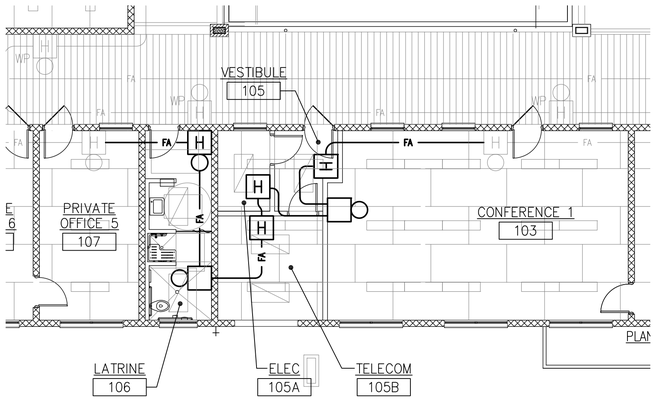

PARTIAL YCA BUILDING 621
FIRE ALARM DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



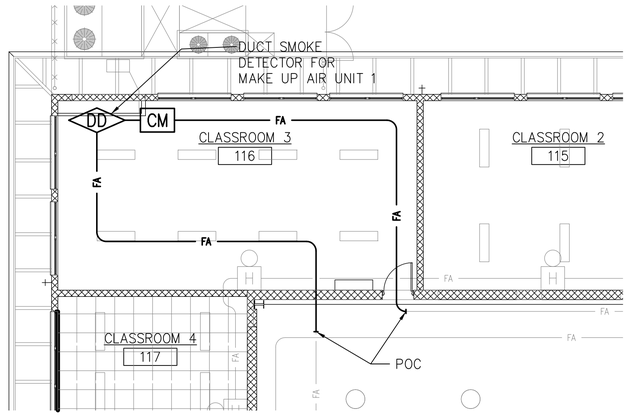

PARTIAL YCA BUILDING 621
FIRE ALARM DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



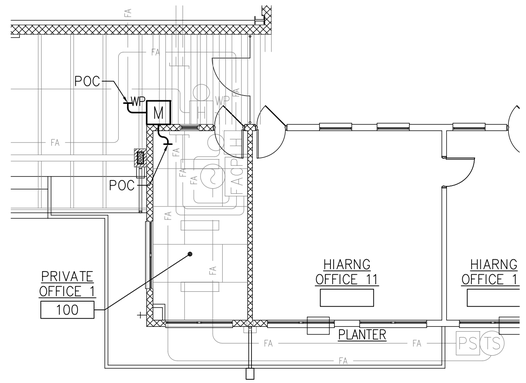

PARTIAL YCA BUILDING 621 FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH




PARTIAL YCA BUILDING 621 FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH




PARTIAL YCA BUILDING 621 FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH

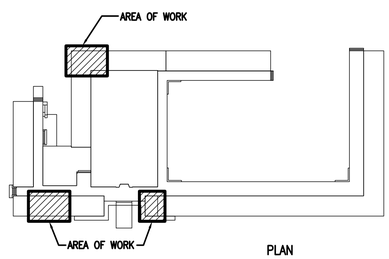
NOTES:

1. NEW AND EXISTING FIRE ALARM DEVICE LOCATIONS AND CONDUIT ROUTING ARE CONCEPTUAL. CONTRACTOR SHALL FIELD BERIFY AND FIELD COORDINATE EXISTING DEVICE LOCATIONS AND CONDUIT ROUTING.
2. FOR MOUNTING OF NOTIFICATION APPLIANCES, SEE DETAIL C1 / FA501
3. CONDUIT PENETRATIONS THROUGH INTERIOR WALLS SHALL BE SEALED, SEE DETAIL FOR PIPE PENETRATIONS THROUGH EXTERIOR WALLS, SEE ARCHITECTURAL DRAWINGS. C3 / FA501

GRAPHIC SCALE

1/8" = 1'-0"

4' 0' 8' 16' 24' 32'




KEY PLAN
SCALE: NONE

PLAN NORTH


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES MKH | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAII

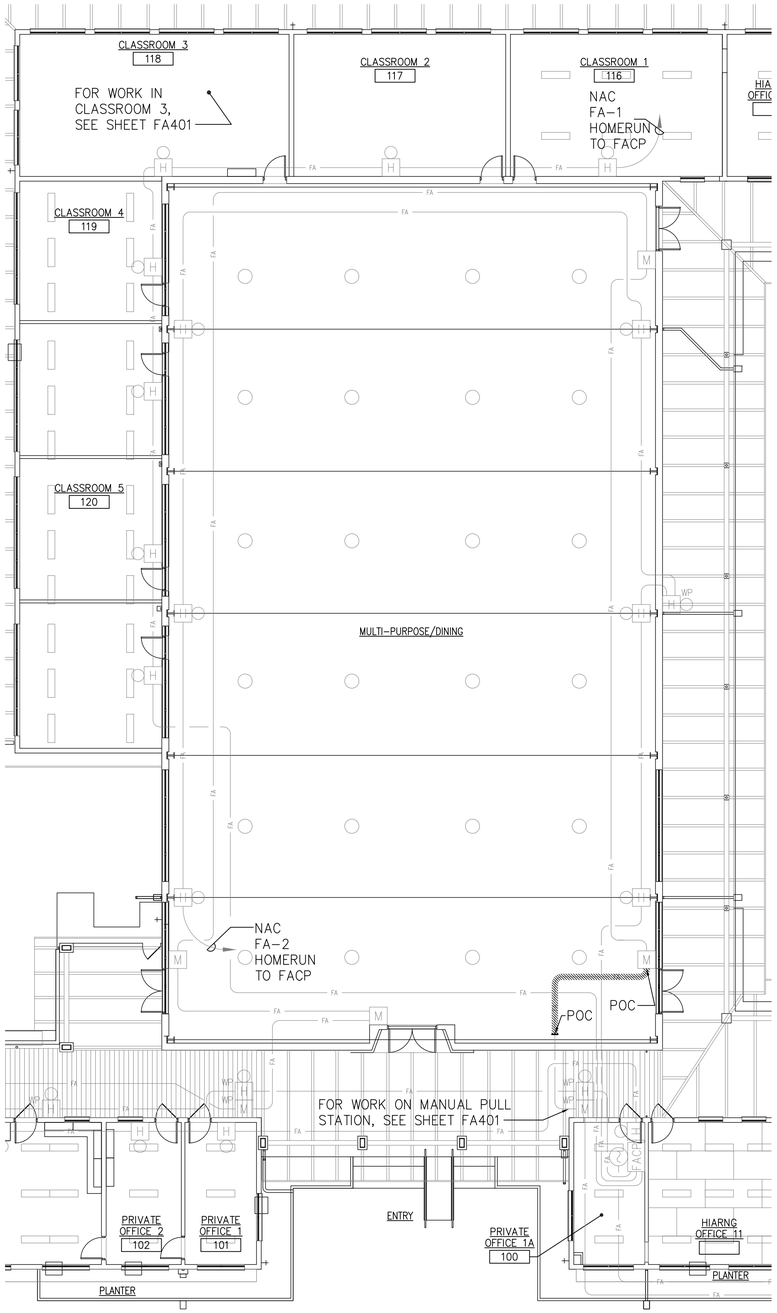
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

PARTIAL YCA BUILDING 621 FIRE ALARM PLANS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 61 OF 131

FA401

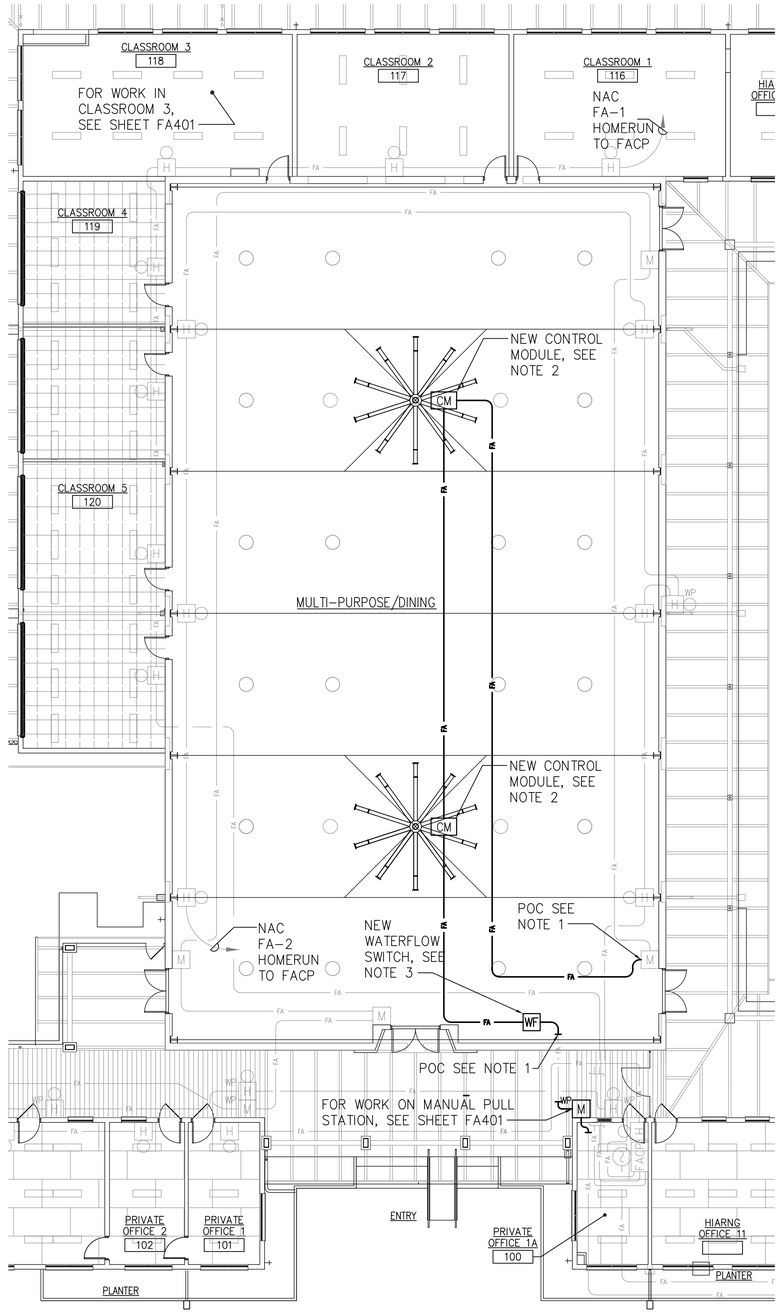
G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA BLDG 621 FIRE ALARM PLAN_PARTIAL YCA BLDG 621 FIRE ALARM PLAN.dwg, 6/28/2016 4:03:47 PM, Adobe PDF




## PARTIAL YCA BUILDING 621 FIRE ALARM DEMOLITION PLAN

SCALE: 3/32" = 1'-0"

PLAN NORTH



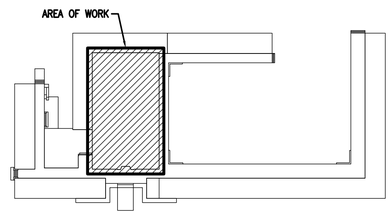

## PARTIAL YCA BUILDING 621 FIRE ALARM PLAN

SCALE: 3/32" = 1'-0"

PLAN NORTH

**NOTES:**

1. TIE IN TO EXISTING SIGNALING LINE CIRCUIT TO ADD NEW ADDRESSABLE MODULES FOR WATERFLOW SWITCH AND HIGH VOLUME LOW SPEED FAN SHUTDOWN RELAYS.
2. LOCATION OF CONDUIT AND CONTROL MODULES ARE CONCEPTUAL. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE FACTORY FURNISHED RELAYS PROVIDING FAN SHUTDOWN FUNCTIONS FOR THE HIGH VOLUME LOW SPEED FANS AND LOCATE CONTROL MODULES WITHIN 3 FEET OF THE RELAYS.
3. PROVIDE MONITOR MODULE FOR NEW WATERFLOW SWITCH.
4. CONDUIT PENETRATIONS THROUGH INTERIOR WALLS SHALL BE SEALED, SEE DETAIL FOR PIPE PENETRATIONS THROUGH EXTERIOR WALLS, SEE ARCHITECTURAL DRAWINGS. C3 / FA501
5. FOR MOUNTING OF FIRE ALARM CONTROL PANEL, SEE DETAIL C1 / FA501




## KEY PLAN

SCALE: NONE

PLAN NORTH

GRAPHIC SCALE

0 2 4 8 16 24 32FT

SCALE: 3/32"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES MKH DRW TEC CHK KMM

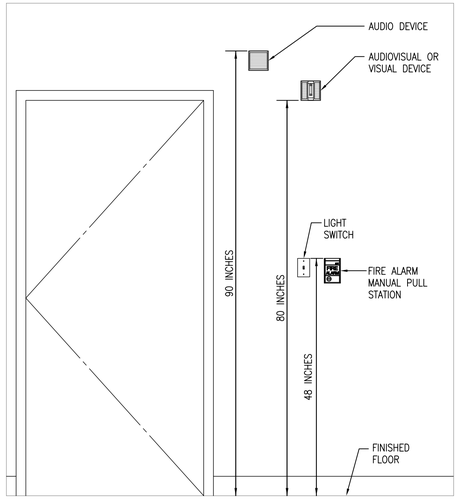
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BUILDING 621 FIRE ALARM PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 62 OF 131

FA402

G:\2012\12005 Kaukaha Military Reserv Renov Bldgs 621\Drawings\Running set\YCA BIDS_PHOTARIO_PARTIAL YCA BLDG 621 FIRE ALARM PLAN.dwg 6/28/2016 4:03:52 PM, Adobe PDF



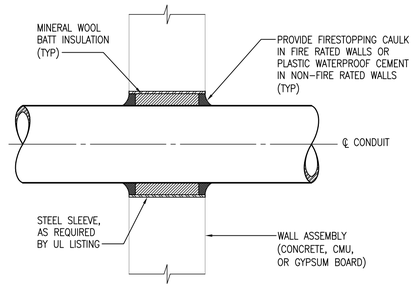

NOTE:

PROVIDE WEATHER AND TAMPER RESISTANT CLEAR PLASTIC COVERS WITH AUDIBLE ALARM FOR EXTERIOR MANUAL PULL STATIONS.

## TYPICAL FIRE ALARM DEVICE MOUNTING DETAIL

SCALE: NONE

FA401 C1




NOTES:

1. CONTRACTOR SHALL PROVIDE A UL LISTED THROUGH PENETRATION FIRE STOP SYSTEM FOR FIRE RATED WALLS.

## TYPICAL CONDUIT THRU INTERIOR WALL DETAIL

SCALE: NONE

FA401 C3

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| MK | STM | DESCRIPTION | DATE | APPR |
|---|---|---|---|---|

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES MKH | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2
DETAILS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 63 OF 131

FA501

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\YCA BLDG_PHOTASOL_DETAILS.dwg, 4/30/2018 4:57:56 PM, Adobe PDF

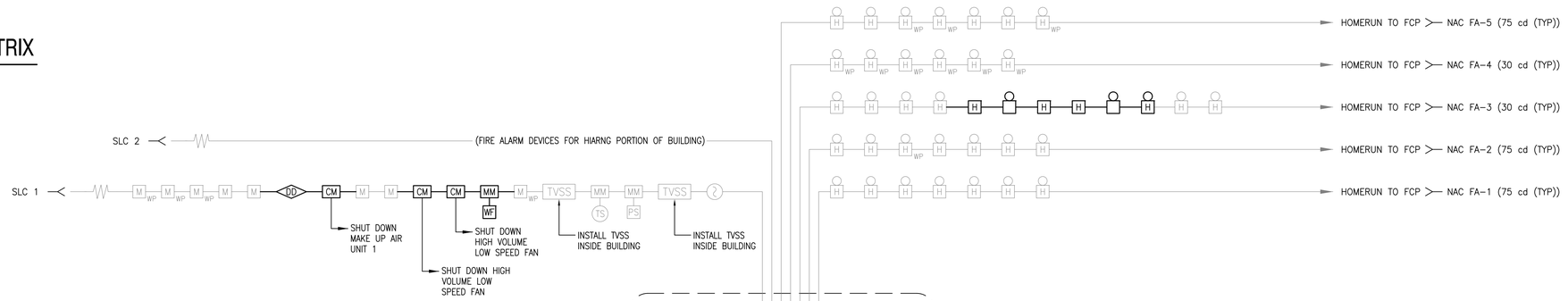
| SYSTEM INPUT | SYSTEM OUTPUT | ANNUNCIATE ALARM CONDITION ON FACP | ANNUNCIATE SUPERVISORY CONDITION ON FACP | ANNUNCIATE TROUBLE CONDITION ON FACP | SHUT DOWN MAKE-UP AIR UNIT 1 (SEE NOTE 1) | SHUT DOWN HIGH VOLUME LOW SPEED FANS IN MULTI-PURPOSE/DINING (SEE NOTE 1) | ACTIVATE BUILDING NOTIFICATION DEVICES WITH THREE TONE TEMPORAL SIGNAL OUTPUT | TRANSMIT SIGNAL TO REMOTE SUPERVISING STATION (SEE NOTE 2) |
|---|---|---|---|---|---|---|---|---|
| | | ANNUNCIATION | | | CONTROLS | | | NOTIFICATION |
| WET PIPE SPRINKLER SYSTEM PRESSURE OR WATERFLOW SWITCH (EXISTING) | ● | | | | | | ● | ● |
| WET PIPE SPRINKLER SYSTEM WATERFLOW SWITCH (NEW) IN MULTI-PURPOSE/DINING | ● | | | | | ● | ● | ● |
| MANUAL PULL STATION (EXISTING) | ● | | | | | | ● | ● |
| SMOKE DETECTOR (EXISTING) | ● | | | | | | ● | ● |
| DUCT SMOKE DETECTOR FOR MAKE UP AIR UNIT 1 | | ● | | | ● | | | ● |
| ANY SPRINKLER CONTROL VALVE TAMPER SWITCH (EXISTING) | | ● | | | | | | ● |
| ANY TROUBLE CONDITION ON SYSTEM | | | ● | | | | | ● |

NOTES:

1. SHUT DOWN VIA CONTROL WIRING.
2. SIGNAL TRANSMISSION VIA DACT.

## FIRE ALARM SYSTEM MATRIX

SCALE: NONE




| ZONE | SIGNAL |
|---|---|
| 1. | SPRINKLER WATERFLOW ALARM |
| 2. | FIRE ALARM |
| 3. | SUPERVISORY |
| 4. | TROUBLE |
| 5. | SPARE |
| 6. | SPARE |

NOTES:

1. SIGNALS MONITORED OFF SITE BY A COMMERCIAL REMOTE SUPERVISING STATION.
2. SIGNALS TRANSMITTED VIA DIGITAL ALARM COMMUNICATOR TRANSMITTER (DACT) VIA TELEPHONE CONNECTION.
3. CONTRACTOR SHALL COORDINATE AND VERIFY ZONE ASSIGNMENTS AT REMOTE SUPERVISING STATION.

## EXISTING FIRE ALARM SIGNALS MONITORED OFF SITE

SCALE: NONE

## FIRE ALARM SYSTEM RISER DIAGRAM

SCALE: NONE

NOTES:

1. CONTRACTOR SHALL PROVIDE ADDITIONAL MODULES AND DEVICES TO PROVIDE THE SPECIFIED FUNCTIONS.
2. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR CONTROL WIRING DIAGRAMS.
3. PROVIDE INTERMEDIATE RELAY IF CONTROL MODULE VOLTAGE AND/OR AMPERAGE RATING IS EXCEEDED.
4. ALL NEW VISUAL NOTIFICATION DEVICES SHALL BE MINIMUM 30 CD.


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-M
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| 3 | ASI | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES: MKH DRW: TEC CHK: KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
FIRE ALARM RISER DIAGRAM AND MATRIX

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 64 OF 131
FA601

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running sheet\FA SHEETS_PHOTASHOP_FILES\FA601_FIRE ALARM DIAGRAM AND MATRIX.dwg, 6/28/2016 4:54:00 PM, Adobe PDF

# PLUMBING LEGEND & ABBREVIATIONS

| SYMBOLS | ABBREVIATIONS | DESCRIPTIONS | SYMBOLS | ABBREVIATIONS | DESCRIPTIONS |
|---|---|---|---|---|---|
| | AFF | ABOVE FINISHED FLOOR | | kW | KILOWATT |
| | AP | ACCESS PANEL | | MAX | MAXIMUM |
| | APPROX | APPROXIMATELY | | MIN | MINIMUM |
| | ARCH | ARCHITECTURAL | | | NEW WORK |
| | | BALL VALVE | | NO | NUMBER |
| | | BUTTERFLY VALVE | | Pa | PASCAL |
| | CO | CLEANOUT | | PH | PHASE |
| | | CHECK VALVE | | PRV | PRESSURE REDUCING VALVE |
| | CLG | CEILING | | PV | PLUG VALVE |
| | CLR | CLEARANCE | | POC | POINT OF CONNECTION |
| | CONC | CONCRETE | | | PRESSURE GAUGE |
| | CONN | CONNECTION | | PRV | PRESSURE REDUCING VALVE |
| | CONT | CONTINUATION | | | |
| | COTG | CLEANOUT TO GRADE | | QTY | QUANTITY |
| CW | CW | COLD WATER | | RPBP | REDUCED PRESSURE BACKFLOW PREVENTER |
| ø | DIA | DIAMETER | | SHD | SHOWER DRAIN |
| | DN | DOWN | | SL | SLOPE IN DIRECTION OF THE ARROW |
| | DWGS | DRAWINGS | | SS | STAINLESS STEEL |
| | DWV | DRAIN WASTE VENT | | STRUCT | STRUCTURAL |
| | EXST | EXISTING | | S OR W | SOIL OR WASTE |
| | FCO | FLOOR CLEANOUT | | SQ | SQUARE |
| | FD | FLOOR DRAIN | | TEMP | TEMPERATURE |
| | FIN FLR | FINISHED FLOOR | | THK | THICK |
| | FS | FLOOR SINK | | | THERMOMETER |
| | FU | FIXTURE UNIT | | TMV | THERMOSTATIC MIXING VALVE |
| | GV | GATE VALVE | TW | TW | TEMPERED WATER |
| | GPD | GALLONS PER DAY | TWR | TWR | TEMPERED WATER RETURN |
| | GPM | GALLONS PER MINUTE | | TYP | TYPICAL |
| | HB W/VB | HOSE BIBB W/ VACUUM BREAKER | | | UNION |
| HW | HW | HOT WATER | | V | VOLTS |
| HWR | HWR | HOT WATER RETURN | | V | VENT |
| | HWRP | HOT WATER RETURN PUMP | | VTR | VENT THRU ROOF |
| IW | IW | INDUSTRIAL WATER | | WCO | WALL CLEANOUT |
| IA | IA | INSTRUMENT AIR | | WD | WASTE DISPOSER |
| | | | | WHA | WATER HAMMER ARRESTOR |

# PLUMBING NOTES

1. CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO FABRICATION, INSTALLATION AND COMMENCEMENT OF ALL WORK TO BE DONE. COORDINATE ALL WORK TO BE DONE WITH OTHER TRADES.
2. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES AND FIELD CONDITIONS AFFECTING OR AFFECTED BY THIS INSTALLATION. SHOULD CONFLICTS OCCUR, THE CONTRACTING OFFICER SHALL BE NOTIFIED IMMEDIATELY.
4. PROVIDE DIELECTRIC CONNECTIONS AT ALL FERROUS TO COPPER CONNECTIONS.
5. PROVIDE FIRE STOPPING AT ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED WALLS AND SMOKE WALLS AND FLOORS.
6. PROVIDE EPOXY COATING ON ALL EXTERIOR PIPING AND SUPPORTS.
7. AT EACH TEMPERATURE SENSOR, PROVIDE A THERMOMETER.
8. INDICATE ELECTRICAL CIRCUIT DESIGNATIONS, PANEL AND BREAKER LOCATIONS ON AS-BUILT DRAWINGS.
9. CONTRACTOR SHALL PROVIDE SUPPLEMENTAL STEEL FOR SUPPORT OF DUCTS, PIPING AND OTHER MECHANICAL EQUIPMENT AS INDICATED IN STRUCTURAL DRAWINGS. DO NOT DRILL STRUCTURAL STEEL OR JOISTS.
10. INSTALLATION OF ELECTRICAL ITEMS (E.G. CABLE TRAYS, CONDUITS, ETC.) IN THE CEILING CAVITY AND ACCESS FLOOR SPACE SHALL BE CLOSELY COORDINATED WITH ALL TRADES (I.E. HVAC, FIRE PROTECTION SYSTEMS, ACCESS FLOOR, ETC.) TO AVOID CONFLICTS AND TO INSURE PROPER CLEARANCES ARE MET.
11. ALL MOTOR CONTROLLERS AND CONTROL PANELS SHALL BE INSTALLED WITH CLEARANCE SPACES IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.
12. UNLESS OTHERWISE INDICATED, MOUNT ALL WALL MOUNTED MECHANICAL DEVICES, PANELS, SWITCHES, ETC AT 48" AFF.
13. ALL ROOF, WALL AND FLOOR PENETRATIONS SHALL BE VERIFIED AND COORDINATED WITH THE STRUCTURAL DRAWINGS.
14. COORDINATE ALL ACCESS PANEL LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND CENTER ON THE EQUIPMENT OR DEVICE IT SERVES (E.G. WHA, VALVES, ETC.). FOR 1 HOUR RATED WALLS AND ROOF/CEILING ASSEMBLIES, PROVIDE MINIMUM 1 HOUR RATED ACCESS PANELS.
15. CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT AND PIPING ARE INSTALLED WITH MANUFACTURER'S RECOMMENDED ACCESS SPACE FOR MAINTENANCE, OPERATION & CODES.
16. ALL SINKS, FLOOR DRAINS, FLOOR SINKS AND OTHER WASTE WATER CONNECTIONS WHICH ACCEPT PROCESS/WASHDOWN WATER, SHALL BE PROVIDED WITH 1/4" SCREENED OPENINGS MAXIMUM.
17. WATER CONSERVATION – PROVIDE FLOW RESTRICTORS OR OTHER APPROVED FLOW CONTROL DEVICES TO LIMIT FLOW ON ALL LAVATORY FAUCETS TO A MAXIMUM OF 1.5 GPM, FOR ALL SHOWER HEADS TO 2.0 GPM AND SINKS TO 2.5 GPM AND FOR ALL URINALS TO 1.0 GALLONS PER FLUSH AND FOR ALL WATER CLOSETS TO 1.6 GALLONS PER FLUSH.
18. PROVIDE SEISMIC BRACING AS SPECIFIED.
19. UNLESS OTHERWISE INDICATED, MOUNT ALL HOSE BIBBS AT 24" AFF.
20. NO PIPING OR DUCTS ALLOWED ABOVE THE ELECTRIC ROOMS OR TELECOMM ROOMS UNLESS THEY ARE SERVING THAT ROOM.
21. ALL GAPS AT THE PENETRATIONS THROUGH FIRE RATED CEILING AND WALL ASSEMBLIES FOR DUCTS, PIPES, PIPE AND DUCT SUPPORTS, RODS, STRAPS, CONTROL CONDUITS, ETC. SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN THE FIRE RATING OF THE ASSEMBLY. SEE ARCH DRAWINGS FOR LOCATION OF FIRE RATED WALLS & CEILINGS.
22. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241 AND CHAPTER 16 OF THE 2006 NFPA 1.
23. FOR VTR FLASHING DETAIL, SEE ARCH DRAWINGS.


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
LEGEND & ABBREVIATIONS AND PLUMBING NOTES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 65 OF 131
P-001

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running sym\YCA Bld'g_PHASE 2\01_LEGEND ABBREV_PLUMB NOTES.dwg, 6/28/2016 3:52:05 PM, Adobe PDF

## PLUMBING FIXTURES TO BE REMOVED

| FIXTURE TYPE | QUANTITY | WATER | |
|---|---|---|---|
| | | FU/FIX | TOTAL FU |
| WC | 1 | 3.4 | 3.4 |
| LAV | 1 | 0.6 | 0.6 |
| | | | |
| TOTAL FIXTURE UNITS: | | | 4.0 |
| TOTAL GPM: | | | 27 |

* FIXTURE UNITS FOR PRIVATE SYSTEM SHOWN.

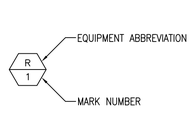
## NEW FIXTURE UNITS:

| FIXTURE TYPE | QUANTITY | WATER | |
|---|---|---|---|
| | | FU/FIX | TOTAL FU |
| A-LAV | 1 | 0.6 | 0.6 |
| A-WC | 1 | 3.4 | 3.4 |
| A-SHO | 1 | 1.6 | 1.6 |
| HOSE BIBB (FIRST) | 0 | 2.5 | 0 |
| HOSE BIBB | 1 | 1.0 | 1.0 |
| | | | |
| SUBTOTAL | | | 5.6 |
| TOTAL GPM | | | 27 |

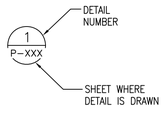
## PLUMBING FIXTURE SCHEDULE AND CONNECTION SIZE

| TAG | DESCRIPTION | CW | HW | DRAIN | VENT | MAX CONSUMPTION |
|---|---|---|---|---|---|---|
| A-WC | ACCESSIBLE WATER CLOSET, FLOOR MOUNTED, SENSOR FLUSH VALVE | 1 | N/A | 4 | 2 | 1.6/1.1 GAL/FLUSH |
| A-LAV | ACCESSIBLE LAVATORY, WALL MOUNT | 1/2 | 1/2 | 2 | 2 | 2.2 GPM |
| A-SHO | ACCESSIBLE SHOWER | 1/2 | 1/2 | 2 | 2 | 1.75 GPM |

## SYMBOL LEGEND




EQUIPMENT SYMBOL




DETAIL SYMBOL


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-M
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

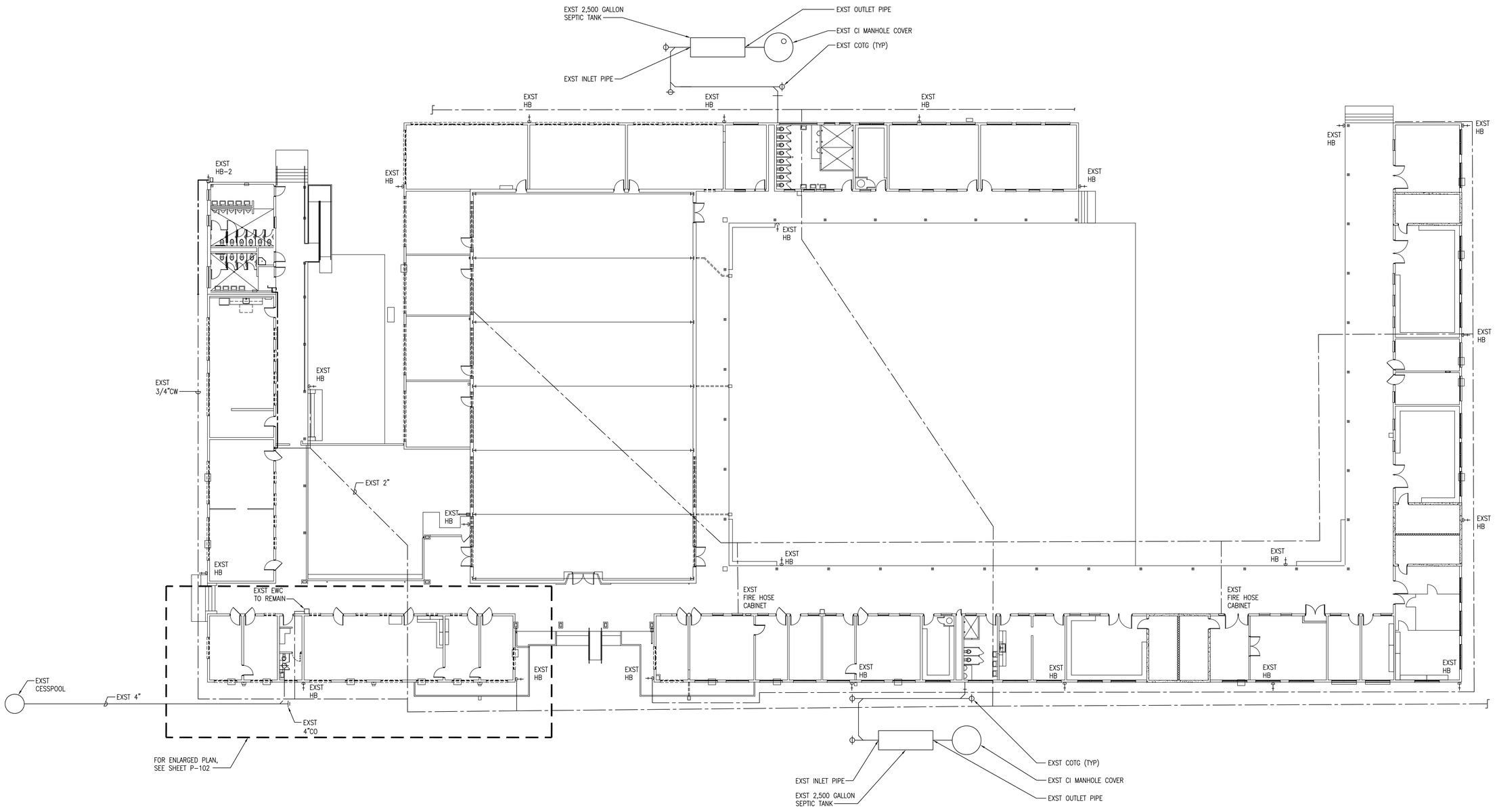
| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
BWS FLOW REQUIREMENTS AND NOTES, FIXTURE SCHEDULES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 66 OF 131
P-002

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\YCA B621_PH2F_002_BWS FLOW REQ_NOTES, FIXTURE SCHEDULES.dwg 6/28/2016 3:12:09 PM, Adobe PDF




## OVERALL PLUMBING DEMOLITION PLAN
SCALE: 1/16" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

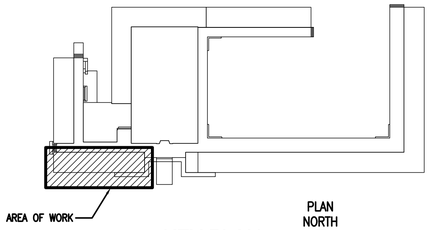
SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
OVERALL PLUMBING DEMOLITION PLAN

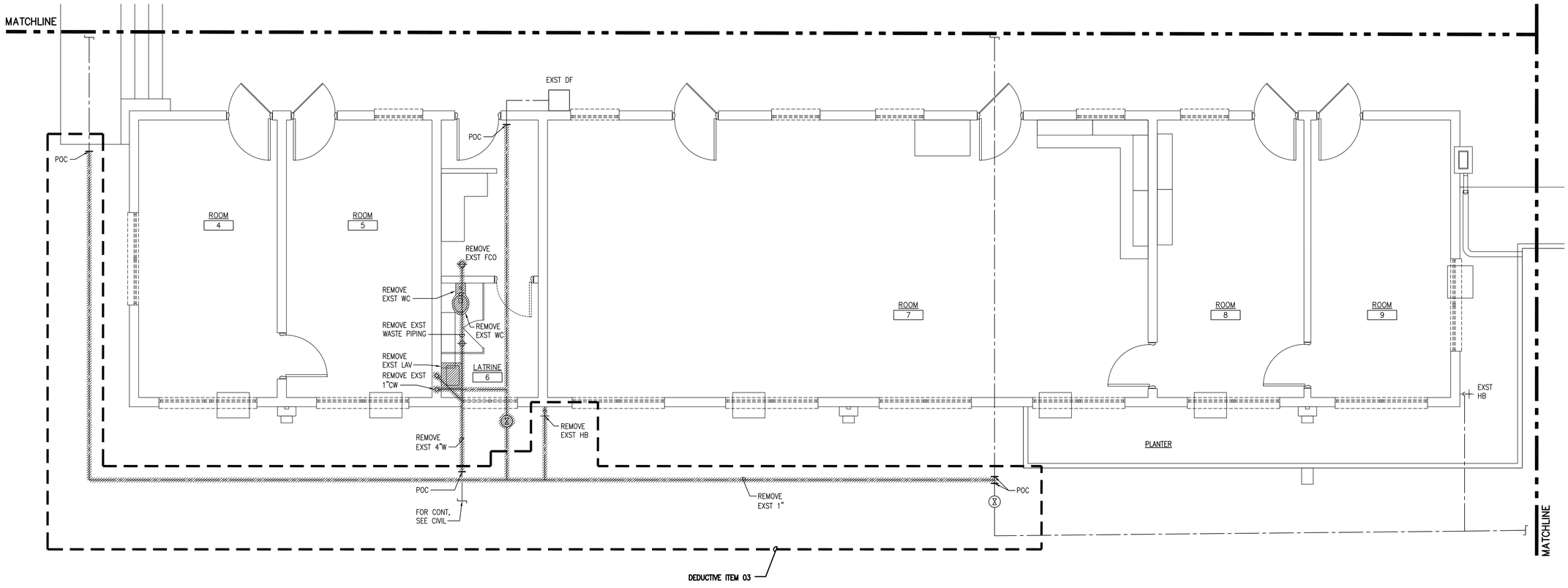
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 67 OF 131
PD101

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA BLDG_PHOTOS\01_OVERALL PLUMBING DEMO PLAN.dwg, 6/28/2018 3:12:44 PM, Adobe PDF




KEY PLAN
SCALE: NONE

PLAN NORTH




PARTIAL YCA BLDG 621 PLUMBING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

Youth Hawaii ChalleNGE National Guard Academy

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

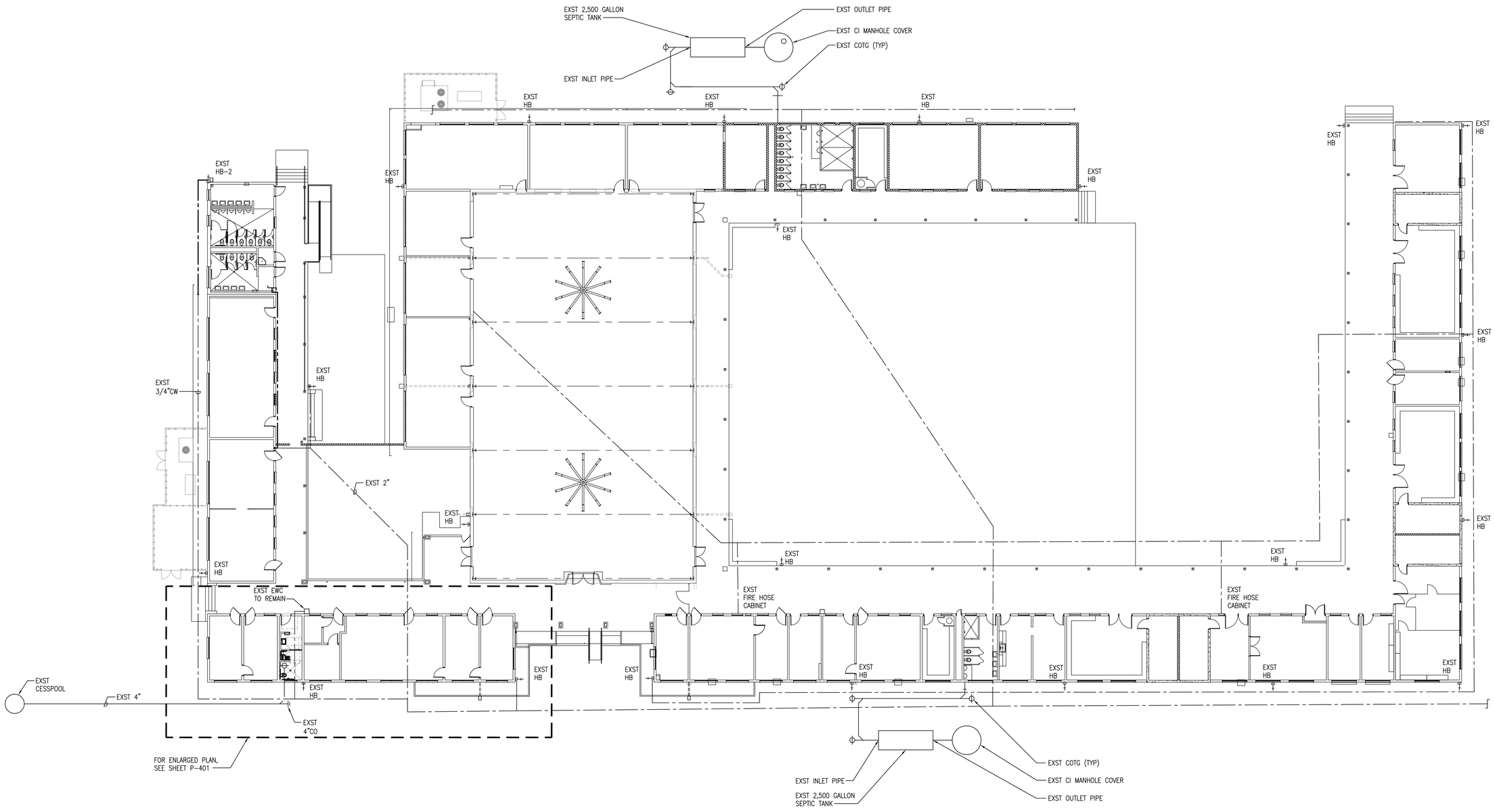
| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 PLUMBING DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 68 OF 131
PD401

G:\2012\12003 Keaukaha Military Reserve Renov Bldg 621\Drawings\Drawings set\YCA BLDG PHOTOS\01_PARTIAL YCA BLDG 621 PLUMB DEMO PLAN.dwg, 5/29/2018 3:52:49 PM, Adobe PDF




## OVERALL PLUMBING PLAN
SCALE: 1/16" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 4 8 16 32 48FT
SCALE: 1/16"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
EXPIRATION DATE 4/30/2018

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SHEET NO.

SUBMITTAL PHASE
FINAL SUBMITTAL

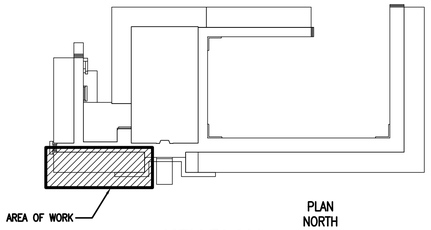
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
OVERALL PLUMBING PLAN

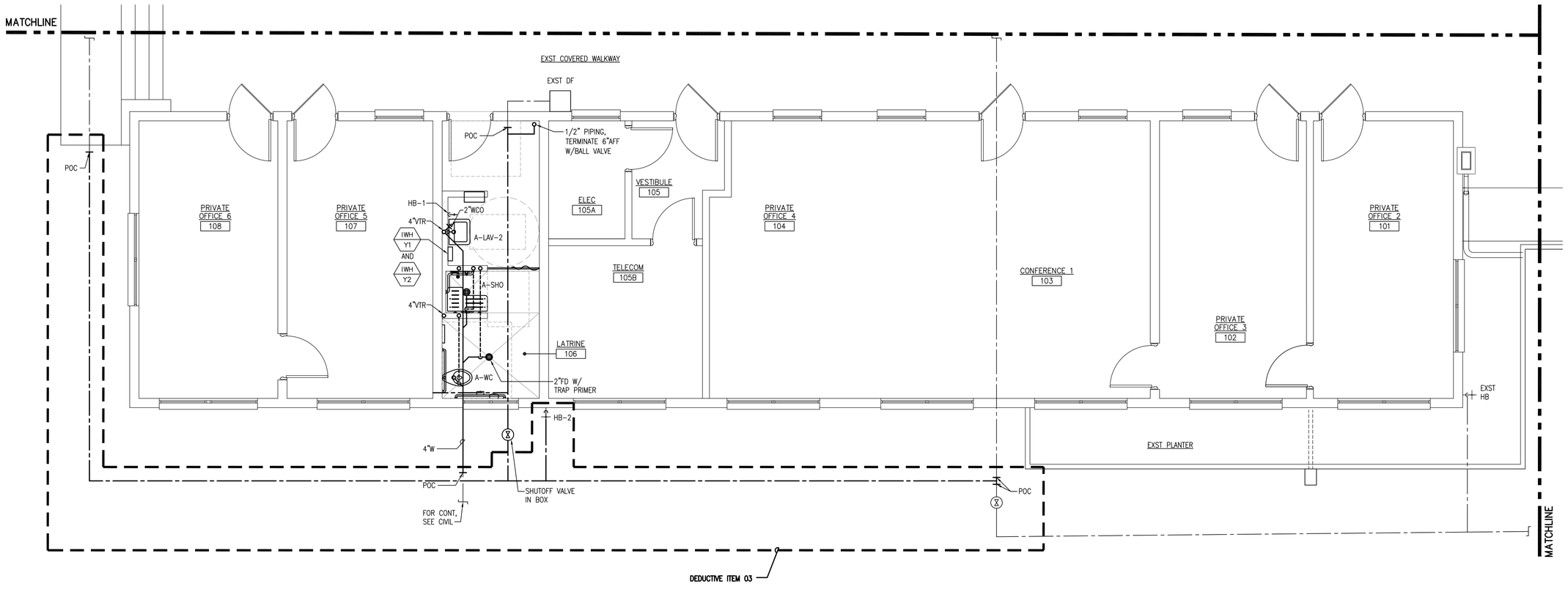
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 69 OF 131

P-101

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA BLDG_PHASE 2\01_OVERALL PLUMBING PLAN.dwg, 6/28/2016 3:52:13 PM, Adobe PDF




KEY PLAN
SCALE: NONE




PARTIAL YCA BLDG 621 PLUMBING PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

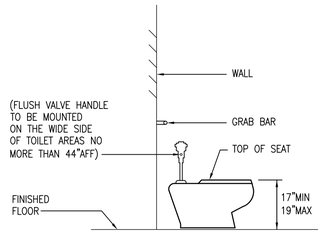
| SYM | DESCRIPTION | SHEET | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

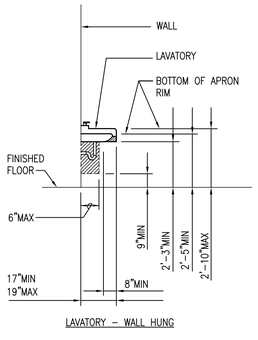
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 PLUMBING PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 70 OF 131
P-401

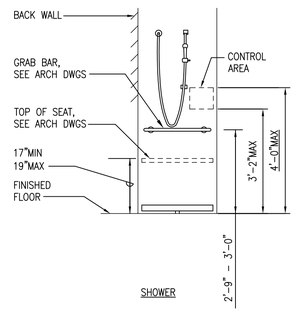
G:\2012\12001 Keaukaha Military Reserve Bldg 621\Drawings\Running set\YCA BLDG_PHOTF_401_PARTIAL YCA BLDG 621 PLUMBING PLAN.dwg, 6/28/2016 3:52:18 PM, Adobe PDF




WATER CLOSET



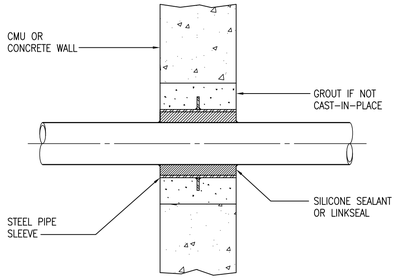

LAVATORY – WALL HUNG




SHOWER

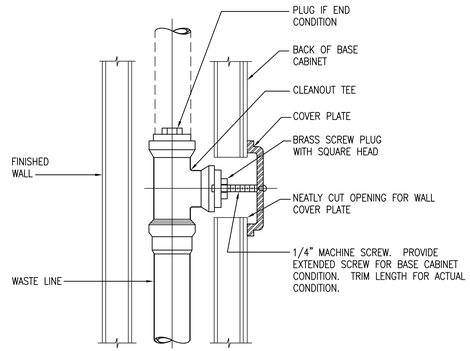
## ACCESSIBLE PLUMBING FIXTURE REQUIREMENT DETAILS — D1

SCALE: NONE P–501



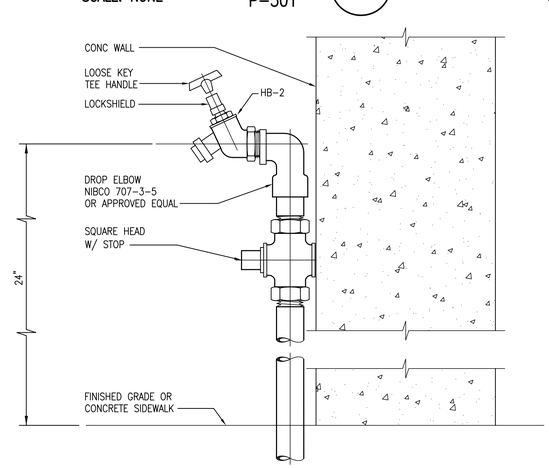

## TYPICAL WALL PENETRATION DETAIL — D3

SCALE: NONE P–501



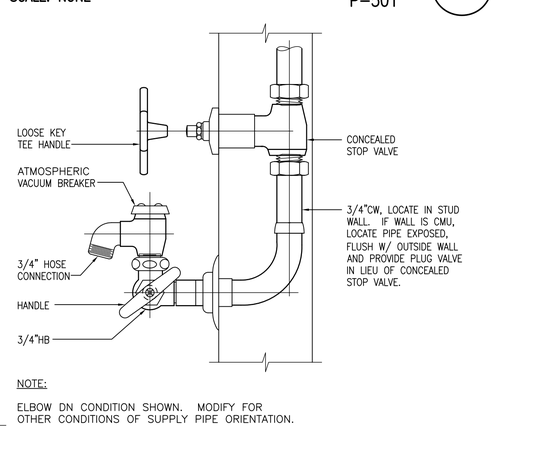

## WALL CLEANOUT DETAIL — D4

SCALE: NONE P–501




## FLOOR DRAIN DETAIL — B1

SCALE: NONE P–501




## FLOOR DRAIN W/ TRAP PRIMER DETAIL — B2

SCALE: NONE P–501




| P.D.I. SYMBOL | FIXTURE UNIT RATING | A SIZE | B SIZE | C SIZE | D SIZE |
|---|---|---|---|---|---|
| A | 1 – 11 | 3/4" | 2 5/8" | 3 1/4" | 1 7/16" |
| B | 12 – 32 | 1" | 3" | 3 1/4" | 1 3/4" |
| C | 33 – 60 | 1" | 3 5/8" | 3 1/4" | 2 1/4" |
| D | 61 – 113 | 1" | 5 1/8" | 3 1/4" | 3 1/4" |
| E | 114 – 154 | 1" | 5 1/2" | 3 1/4" | 4 1/8" |
| F | 155 – 330 | 1" | 6 5/8" | 3 1/4" | 5 1/4" |

## WATER HAMMER ARRESTER DETAIL — B3

SCALE: NONE P–501




BASE DETAIL

## LAVATORY - FLOOR SUPPORTED — B4

SCALE: NONE P–501




## EXTERIOR HOSE BIBB DETAIL — A1

SCALE: NONE P–501




NOTE:

ELBOW DN CONDITION SHOWN. MODIFY FOR OTHER CONDITIONS OF SUPPLY PIPE ORIENTATION.

## INTERIOR HOSE BIBB DETAIL — A2

SCALE: NONE P–501

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION 4/30/2018
SIGNATURE EXPIRATION DATE

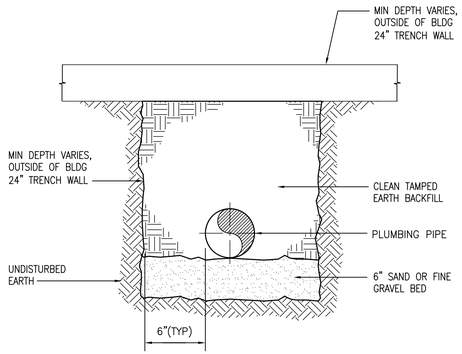
APPR | DATE | SHEET OF | DESCRIPTION | SYM

SUBMITAL PHASE: FINAL SUBMITTAL
SUBMITAL DATE: 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
DETAILS

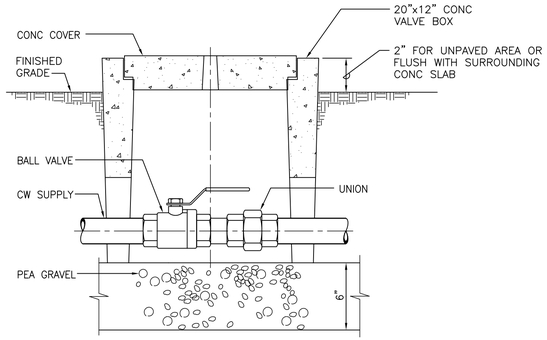
SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 71 OF 131
P-501

G:\2012\12003 Keaukaha Military Reserv Reno\Bldg 621\Drawings\Survey\YCA B621_PhD7_501_DETAILS.dwg, 6/28/2016 3:52:23 PM, Adobe PDF




## TYPICAL TRENCH DETAIL — D1

SCALE: NONE P-502




## VALVE BOX DETAIL — D2

SCALE: NONE P-502

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

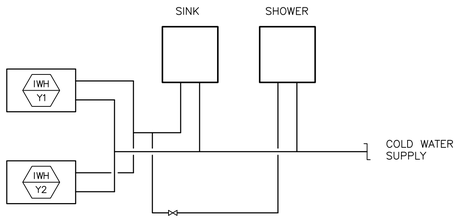
DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 72 OF 131
P-502

G:\2012\12003 Keaukaha Military Reserve Renov Bldg 621\Drawings\Survey\YCA Bld'g_PhII\P-502_DETAILS.dwg, 6/28/2016 3:52:29 PM, Adobe PDF

## INSTANTANEOUS WATER HEATER SCHEDULE

| NO | INPUT KILOWATTS | NUMBER OF ELEMENTS | WATER TEMPERATURE RISE (°F) | RECOVERY RATE (GPM) | DIMENSIONS (HxWxD) | WATER TEMPERATURE | | POWER V/PH/HZ | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | ENTERING (°F) | LEAVING (°F) | | |
| IWH Y1 | 8.3 | 1 | 38 | 1.5 | 6 1/4"x9 5/8"x2 3/4" | 70 | 108 | 208/1/60 | CHRONOMITE-S-40 OR APPROVED EQUAL |
| IWH Y2 | 8.3 | 1 | 38 | 1.5 | 6 1/4"x9 5/8"x2 3/4" | 70 | 108 | 208/1/60 | CHRONOMITE-S-40 OR APPROVED EQUAL |




## HOT WATER SCHEMATIC DIAGRAM

SCALE: NONE

## SEQUENCE OF OPERATION - HOT WATER SYSTEM

1. DOMESTIC HOT WATER IS TO THE SINK AND SHOWER.
2. WHEN THE SINK OR SHOWER IS NOT IN USE, THE HEATER IS DE-ENERGIZED. WHEN THE SINK OR SHOWER IS IN USE, THE HEATER IS ENERGIZED AND PROVIDES HOT WATER TO THE SINK OR SHOWER.


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-H
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| MJS | SHEET 0F | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

EQUIPMENT SCHEDULE, HOT WATER SCHEMATIC DIAGRAM AND SEQUENCE OF OPERATION

SCALE: AS NOTED

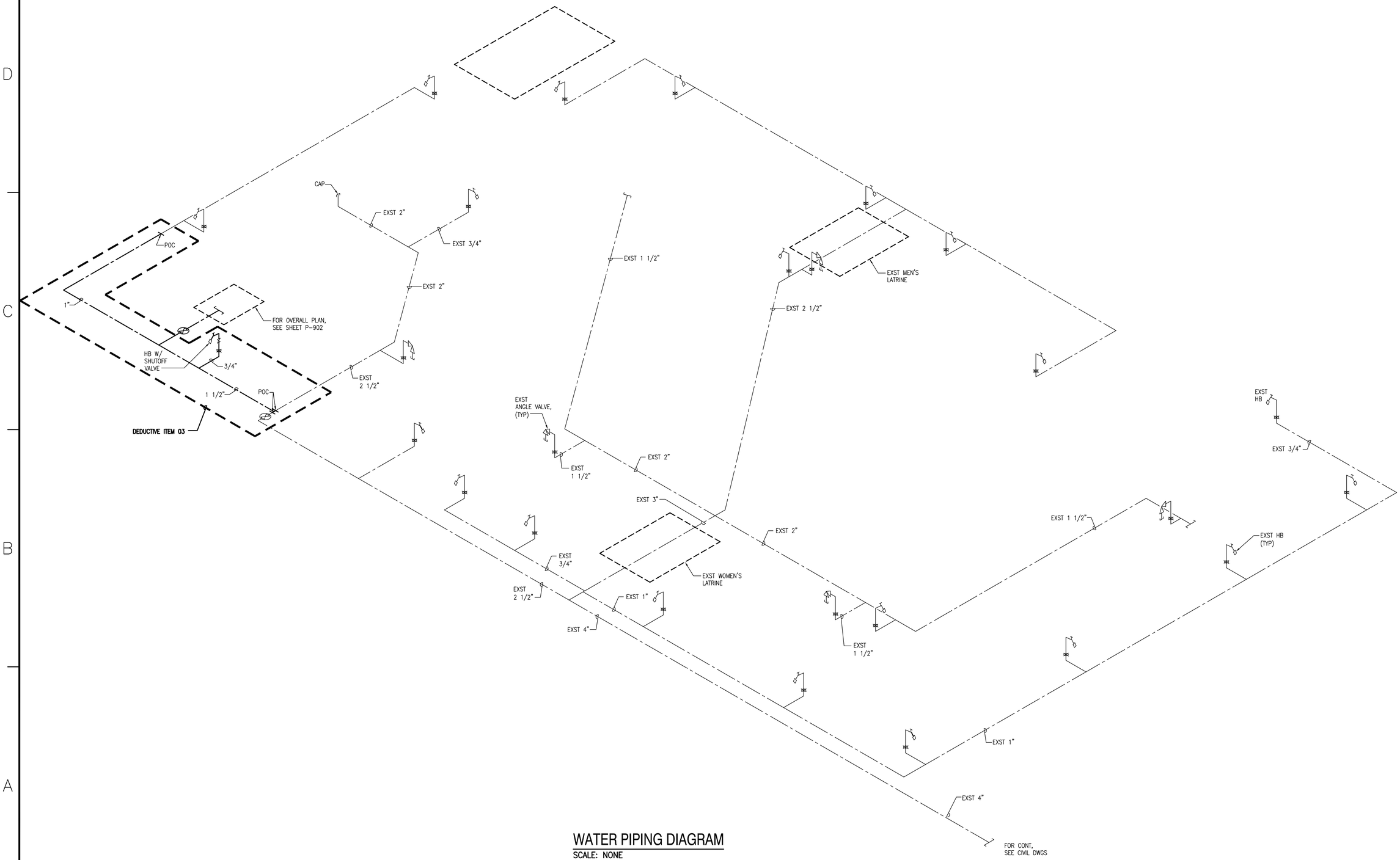
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 73 OF 131

P-601


G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Drawings set\YCA BLD1_PH2\P_DEL_EQUIPMENT SCHEDULE.dwg 6/28/2016 3:12:32 PM, Adobe PDF




## WATER PIPING DIAGRAM

SCALE: NONE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE — EXPIRATION DATE: 4/30/2018

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES: KMM | DRW: TEC | CHK: KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

WATER PIPING DIAGRAM

SCALE: AS NOTED

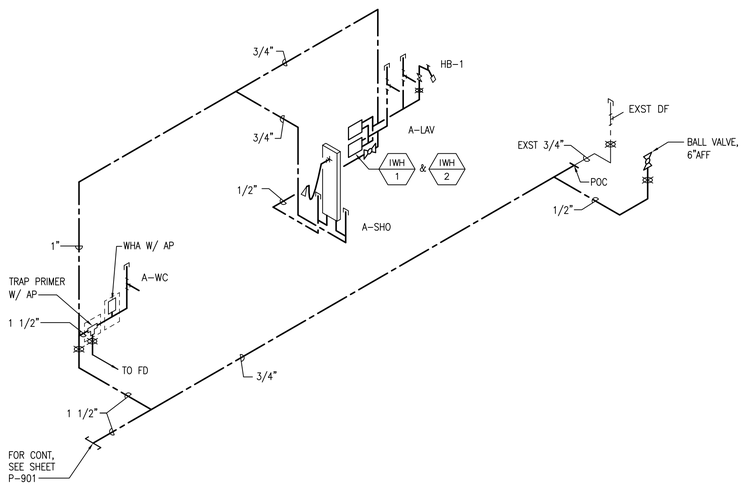
STATE JOB NO.: CA-1212-C2

FEDERAL PROJECT NO.: –

SHEET 74 OF 131

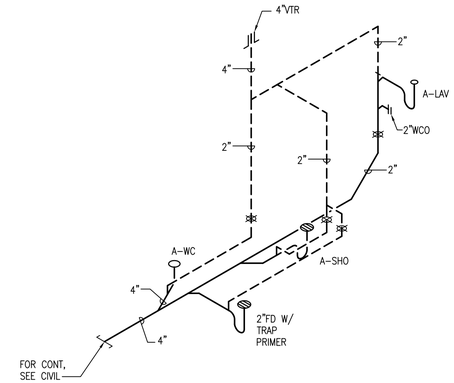
P-901

G:\2012\12-2003 Keaukaha Military Reserv Bldg 621\Drawings\Arch\A-621_FHCP_001 WATER PIPING DIAGRAM.dwg, 6/28/2016 1:53:26 PM, Adobe PDF




## WATER PIPING DIAGRAM

SCALE: NONE




## SANITARY PIPING DIAGRAM

SCALE: NONE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
EXPIRATION DATE 4/30/2018

| NUM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

WATER AND SANITARY PIPING DIAGRAMS

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 75 OF 131

P-902

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\YCA B621_PHOT_002 WATER_SANITARY PIPING DIAGRAMS.dwg, 6/28/2016 9:53:40 PM, Adobe PDF

# LEGEND & ABBREVIATIONS

| SYMBOLS | ABBREVIATIONS | DESCRIPTIONS |
|---|---|---|
| | ACCU | AIR COOLED CONDENSING UNIT |
| | AFF | ABOVE FINISHED FLOOR |
| | AP | ACCESS PANEL |
| | | BALL VALVE |
| BDD | | BACKDRAFT DAMPER |
| | BCP | BUILDING CONTROL PANEL |
| | BMS | BUILDING MANAGEMENT SYSTEM (SAME AS EMCS) |
| | BFV | BUTTERFLY VALVE |
| | CFM | CUBIC FEET PER MINUTE |
| | | CHECK VALVE |
| | | COMBINATION FIRE/SMOKE DAMPER (HORIZONTAL) |
| | | COMBINATION FIRE/SMOKE DAMPER (VERTICAL) |
| CD | | CONCEALED DAMPER |
| | CONC | CONCRETE |
| CD | CD | CONDENSATE DRAIN |
| | CONN | CONNECTION |
| | CONT | CONTINUATION |
| | CS | CURRENT SWITCH |
| ø | | DIAMETER |
| | DN | DOWN |
| | DWGS | DRAWINGS |
| | EMCS | ENERGY MANAGEMENT & CONTROL SYSTEM |
| | EA | EXHAUST AIR |
| | EAR | EXHAUST AIR REGISTER |
| | EF | EXHAUST FAN |
| | EXH | EXHAUST |
| | EXST | EXISTING |
| | FCU | FAN COIL UNIT |
| | FIN FLR | FINISHED FLOOR |
| | FLEX CONN | FLEXIBLE CONNECTION |
| | FMS | FLOW METERING STATION |
| | FA | FREE AREA |
| | GAL | GALLONS |
| | GPM | GALLONS PER MINUTE |
| | GV | GATE VALVE |
| | | GLOBE VALVE |
| HE | | HUMIDITY SENSOR |
| | IC | INDIVIDUAL CONTROLLER |
| | LS | LIMIT SWITCH |
| M | | MAGNAHELIC GAUGE |
| | MAU | MAKE-UP AIR UNIT |
| | MAX | MAXIMUM |
| | MCC | MOTOR CONTROL CENTER |
| | MD | MOTORIZED DAMPER |
| | MIN | MINIMUM |
| | | NEW EQUIPMENT |
| | NC | NORMALLY CLOSED |

| SYMBOLS | ABBREVIATIONS | DESCRIPTIONS |
|---|---|---|
| | NO | NORMALLY OPEN |
| | NIC | NOT IN CONTRACT |
| | OA | OUTSIDE AIR |
| | OFOI | OWNER FURNISHED OWNER INSTALLED |
| | | PIPE SLEEVE |
| | PFRR | PHASE FAILURE OR REVERSAL RELAY |
| | PRV | POWERED ROOF VENTILATOR |
| | | PRESSURE GAUGE W/ SHUTOFF VALVE |
| PS | | PRESSURE SWITCH |
| | | PLUG VALVE OR GAS COCK |
| | RA | RETURN AIR |
| | RAR | RETURN AIR REGISTER |
| RH | | RELATIVE HUMIDITY SENSOR |
| | RPBP | REDUCED PRESSURE BACKFLOW PREVENTER |
| | RV | RELIEF VALVE |
| | SCC | SENSIBLE COOLING CAPACITY |
| | | SMOKE DAMPER (HORIZONTAL) |
| | | SMOKE DAMPER (VERTICAL) |
| SD | | SMOKE DETECTOR (DUCT MOUNTED) |
| SP | | STATIC PRESSURE SENSOR & TRANSMITTER (DUCT MOUNTED) |
| | ST | STORAGE TANK |
| | SF | SUPPLY FAN OR SQUARE FEET |
| | SA | SUPPLY AIR |
| | SAD | SUPPLY AIR DIFFUSER |
| | SAR | SUPPLY AIR REGISTER |
| S | | SWITCH |
| TE | | TEMPERATURE ELEMENT W/ THERMOWELL |
| | | THERMOMETER W/ THERMOWELL |
| T | T-STAT | THERMOSTAT OR TEMPERATURE SENSOR |
| | TCC | TOTAL COOLING CAPACITY |
| | TA | TRANSFER AIR |
| | TAR | TRANSFER AIR REGISTER |
| | TYP | TYPICAL |
| | | UNION |
| | UV | ULTRAVIOLET |
| | UVC | ULTRAVIOLET 'C' |
| | VAV | VARIABLE AIR VOLUME |
| | VFD | VARIABLE FREQUENCY DRIVE |
| VD | VD | VOLUME DAMPER (OPPOSED BLADE IF DUCT DIMENSION OVER 10 INCHES) |
| | VTR | VENT THROUGH ROOF |
| | | |

# GENERAL NOTES:

1. MECHANICAL SUB-CONTRACTORS (A/C, PLUMBING, SPRINKLER, ETC) SHALL COORDINATE ALL WORK WITH OTHER TRADES.
2. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO THE START OF ANY WORK.
3. UNLESS OTHERWISE INDICATED, MOUNT ALL WALL MOUNTED MECHANICAL DEVICES, PANELS, SWITCHES, ETC AT 48" AFF.
4. ALL ROOF, WALL AND FLOOR PENETRATIONS SHALL BE VERIFIED AND COORDINATED WITH THE STRUCTURAL DRAWINGS.
5. PROVIDE DIELECTRIC CONNECTIONS AT ALL FERROUS TO COPPER CONNECTIONS.
6. ALL NUMERIC DUCT DIMENSIONS SHOWN ARE NET DIMENSIONS WITHOUT INSULATION THICKNESS, CONTRACTOR SHALL ADJUST DIMENSIONS FOR INSULATION THICKNESS REQUIRED. AIR CONDITIONING SUPPLY AND RETURN DUCTS SHALL BE INSULATED WITH 1 1/2" THICK DUCT WRAP, UNLESS OTHERWISE INDICATED.
7. CONDENSATE DRAINS SHALL BE CONTINUOUSLY SLOPED AT 1/4" PER FOOT MINIMUM. INSULATE ALL ABOVE GRADE INDOOR CONDENSATE DRAIN LINES WITH 1" THICK INSULATION MINIMUM OR AS INDICATED. PROVIDE PIPE FITTINGS & INSULATION FOR ALL FCU'S AND AHU'S, TO FLOOR SINK SPLASH BLOCK AT GRADE OR OTHER APPROVED RECEPTOR.
8. COORDINATE ALL ACCESS PANEL LOCATIONS WITH THE ARCHITECTURAL DRAWINGS AND CENTER ON THE EQUIPMENT OR DEVICE IT SERVES (eg WHA, VALVES, ETC). FOR 1 HOUR RATED WALLS AND ROOF/CEILING ASSEMBLIES, PROVIDE MINIMUM 1 HOUR RATED ACCESS PANELS.
9. ALL EQUIPMENT, ACCESSORIES AND STRUCTURES AND OTHER ITEMS ARE NEW UNLESS OTHERWISE INDICATED.
10. CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT AND PIPING ARE INSTALLED WITH MANUFACTURER'S RECOMMENDED ACCESS SPACE FOR MAINTENANCE, OPERATION & CODES.
11. FOR ALL WALL MOUNTED THERMOSTATS, SENSORS & SWITCHES, PROVIDE ALL CONDUIT & JUNCTION BOXES IN WALL (INCLUDING CMU WALLS) WHERE CONDITION OCCURS. EXPOSED CONDUIT & JUNCTION BOXES WILL NOT BE ALLOWED. MOUNT ALL SENSORS AND SWITCHES AT 48" AFF TO TOP OF SENSOR. PROVIDE CLEAR LOCKING COVERS FOR ALL THERMOSTATS, 4" MAXIMUM PROTRUSION FROM WALL.
12. PROVIDE SEISMIC BRACING AS SPECIFIED.
13. ALL GAPS AT THE PENETRATIONS THROUGH FIRE RATED CEILING AND WALL ASSEMBLIES FOR DUCTS, PIPES, PIPE AND DUCT SUPPORTS, RODS, STRAPS, CONTROL CONDUITS, ETC. SHALL BE SEALED WITH APPROVED FIRESTOPPING MATERIAL AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN THE UL FIRE RATING OF THE ASSEMBLY. SEE ARCH DRAWINGS FOR LOCATION OF FIRE RATED WALLS & CEILINGS.
14. STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241 AND CHAPTER 16 OF THE 2006 NFPA 1.
15. THE AIR CONDITIONING & VENTILATION SYSTEM SHALL COMPLY WITH TITLE II, ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, CHAPTER 39, AIR CONDITIONING & VENTILATING REQUIREMENTS.
16. COORDINATE LOCATION AND INSTALLATION OF EQUIPMENT, DUCTS, PIPE RACK SUPPORTS, AND PIPES WITH ELECTRICAL CONDUITS, PANELS, CABLE TRAYS, LIGHTS AND BUILDING STRUCTURE TO PROVIDE CLEARANCES AND MAINTENANCE ACCESS SPACE REQUIRED.
17. CONTRACTOR SHALL PROVIDE SUPPLEMENTAL STEEL FOR SUPPORT OF DUCTS, PIPING AND OTHER MECHANICAL EQUIPMENT. COORDINATE WITH STRUCTURAL DRAWINGS. DO NOT DRILL STRUCTURAL STEEL OR JOISTS.
18. ALL MOTOR CONTROLLERS AND CONTROL PANELS SHALL BE INSTALLED WITH CLEARANCE SPACES IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.
19. COORDINATE DUCT INSTALLATION WITH CEILING GRID TIE WIRES. CEILING GRID TIE WIRES SHALL NOT TOUCH DUCTWORK, PIPING, OR EQUIPMENT.
20. ALL OF THE EXTERIOR PIPING SUPPORTS AND EQUIPMENT SUPPORTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION. PAINT ALL EXTERIOR SUPPORTS WITH EPOXY TO MATCH ADJACENT AREAS.
21. COORDINATE HOUSEKEEPING PADS AND SLAB ON GRADE WITH STRUCTURAL AND CIVIL.
22. MOUNT ALL OVERHEAD UTILITIES AND OTHER FIXTURES WEIGHING 14 KILOGRAMS (31 POUNDS) OR MORE (EXCLUDING DISTRIBUTED SYSTEMS SUCH AS PIPING NETWORKS THAT COLLECTIVELY EXCEED THAT WEIGHT) TO MINIMIZE THE LIKELIHOOD THAT THEY WILL FALL AND INJURE BUILDING OCCUPANTS. DESIGN ALL EQUIPMENT MOUNTINGS TO RESIST FORCES OF 0.5 TIMES THE EQUIPMENT WEIGHT IN ANY HORIZONTAL DIRECTION AND 1.5 TIMES THE EQUIPMENT WEIGHT IN THE DOWNWARD DIRECTION. THIS STANDARD DOES NOT PRECLUDE THE NEED TO DESIGN EQUIPMENT MOUNTINGS FOR FORCES REQUIRED BY OTHER CRITERIA SUCH AS SEISMIC STANDARDS.
23. FOR ALL DEMOLISHED EQUIPMENT WITH A STATE OF HAWAII IDENTIFICATION STICKER, TURN OVER TO PROJECT MANAGER.
24. COORDINATE ALL NEW DUCTWORK WITH EXISTING FIRE SPRINKLER PIPING.
25. PAINT EXTERIOR AND INTERIOR CONDENSATE DRAINS TO MATCH ADJACENT WALLS.
26. PROVIDE ALUMINUM PIPE COVERING ON ALL INSULATED REFRIGERATED PIPING, INTERIOR AND EXTERIOR, PAINT TO MATCH ADJACENT WALL.
27. PAINT ALL INTERIOR AND EXTERIOR DUCTWORK, COORDINATE WITH ARCHITECT.
28. FOR ALL EXPOSED MAU SUPPLY DUCTS AND TRANSFER AIR DUCTS, PROVIDE INSULATED DOUBLE WALL DUCTS. PAINT ALL EXPOSED DUCTWORK, COORDINATE COLOR WITH ARCHITECT.
29. FOR MOUNTING FAN COIL UNITS, REMOVE EXISTING GYP BOARD AS REQUIRED TO INSTALL BLOCKING FOR FAN COIL UNITS. REPLACE GYP BOARD AND PAINT ENTIRE WALL, COORDINATE COLOR WITH ARCHITECT.

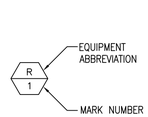
HAWAI'I COUNTY CODE – CHAPTER 5 – BUILDING
2006 IECC & ORDINANCES 09-48 & 10-68
BUILDING ENERGY EFFICIENCY STANDARDS

I CERTIFY THAT THE DESIGN IS IN CONFORMANCE WITH THE BUILDING ENERGY EFFICIENCY STANDARDS PERTAINING TO:

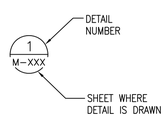
SECTION 503 BUILDING MECHANICAL SYSTEMS
SECTION 504 SERVICE WATER HEATING (MANDATORY)

Signature:_____ Date: _____
Name: KEVIN M. MACHIDA
Title: PRESIDENT
License No.: 8065-M

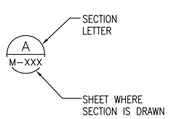
# SYMBOLS




EQUIPMENT SYMBOL




DETAIL SYMBOL




SECTION SYMBOL


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-M
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

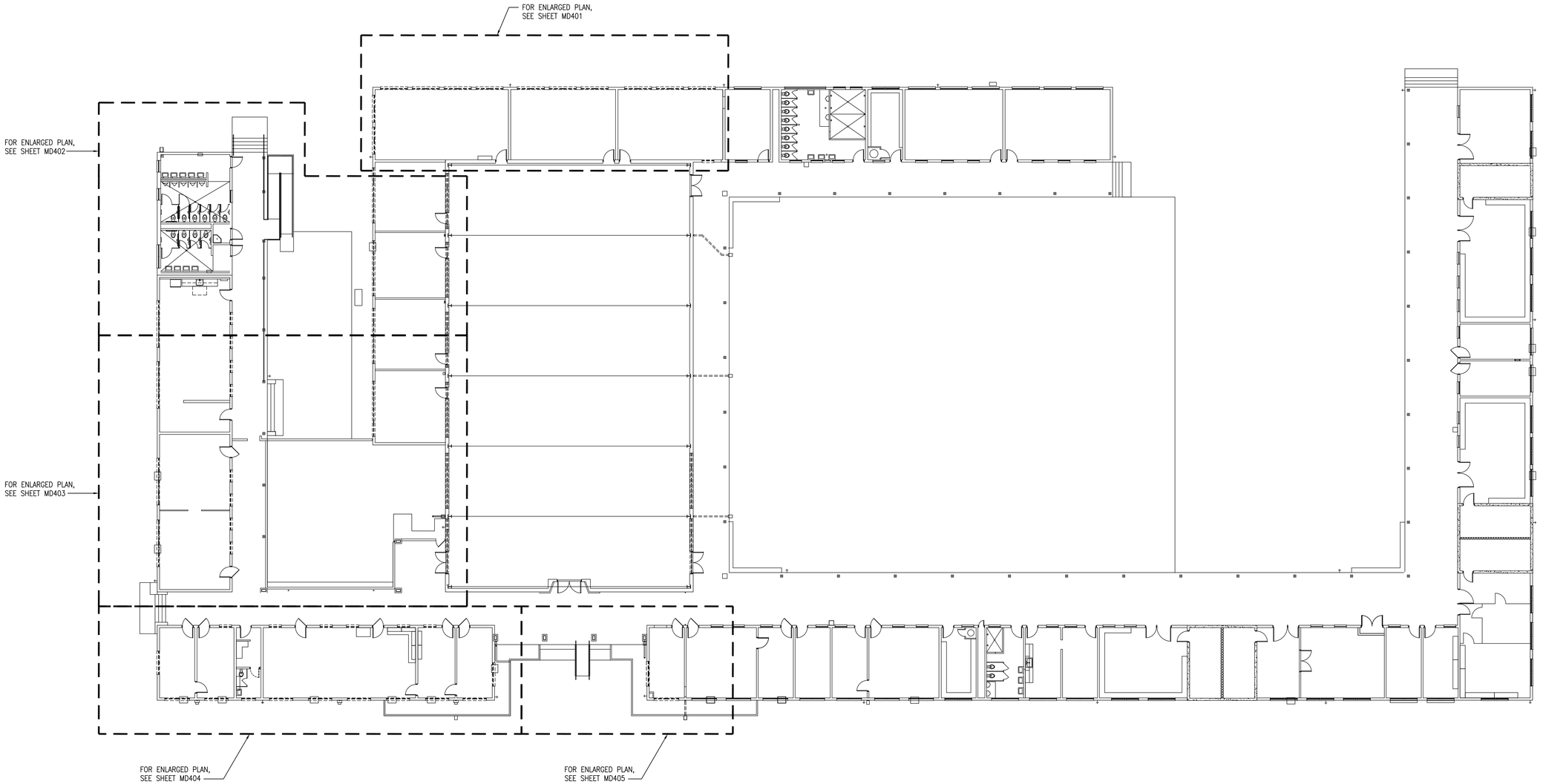
SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

STATE OF HAWAI'I
DEPARTMENT OF DEFENSE
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
LEGEND & ABBREVIATIONS AND GENERAL NOTES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 76 OF 131
M-001

G:\2012\12003 Keaukaha Military Reserv Reserv Bldg 621\Drawings\Survey set\YCA B621_PHOTOSET_LEGEND ABBREV NOTES.dwg, 6/28/2016 1:50:13 PM, Adobe PDF




## OVERALL MECHANICAL DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

GRAPHIC SCALE

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

OVERALL MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED

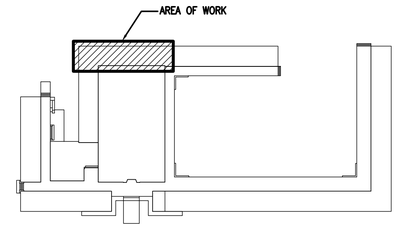
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 77 OF 131

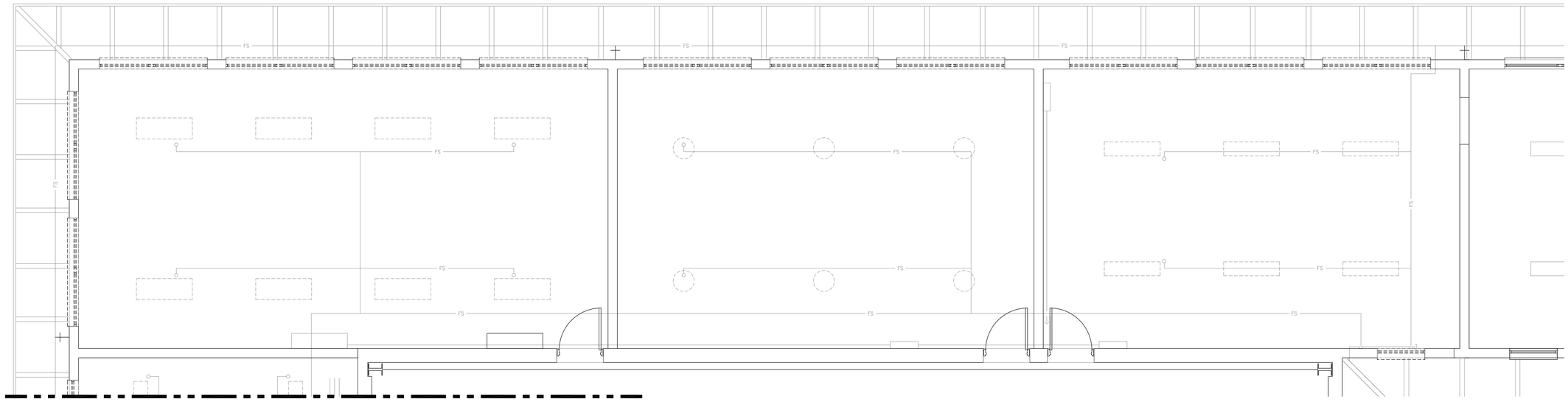
MD101

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\PLA REQ_PHO\MD\01_OVERALL MECHANICAL DEMO PLAN.dwg, 6/28/2016 3:51:38 PM, Adobe PDF




KEY PLAN
SCALE: NONE

PLAN NORTH




## PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

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

PLAN NORTH

GRAPHIC SCALE

0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| | APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

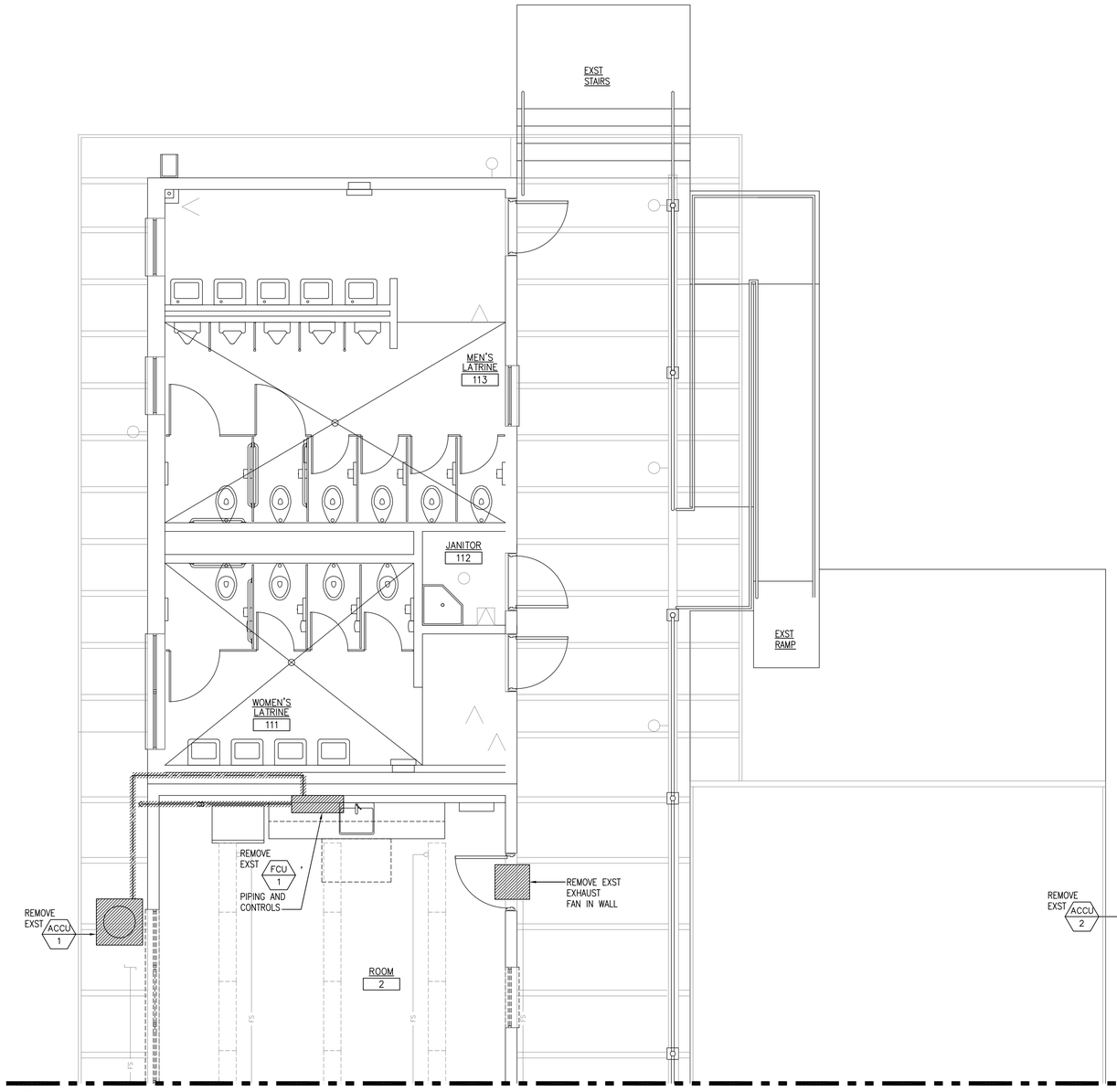
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

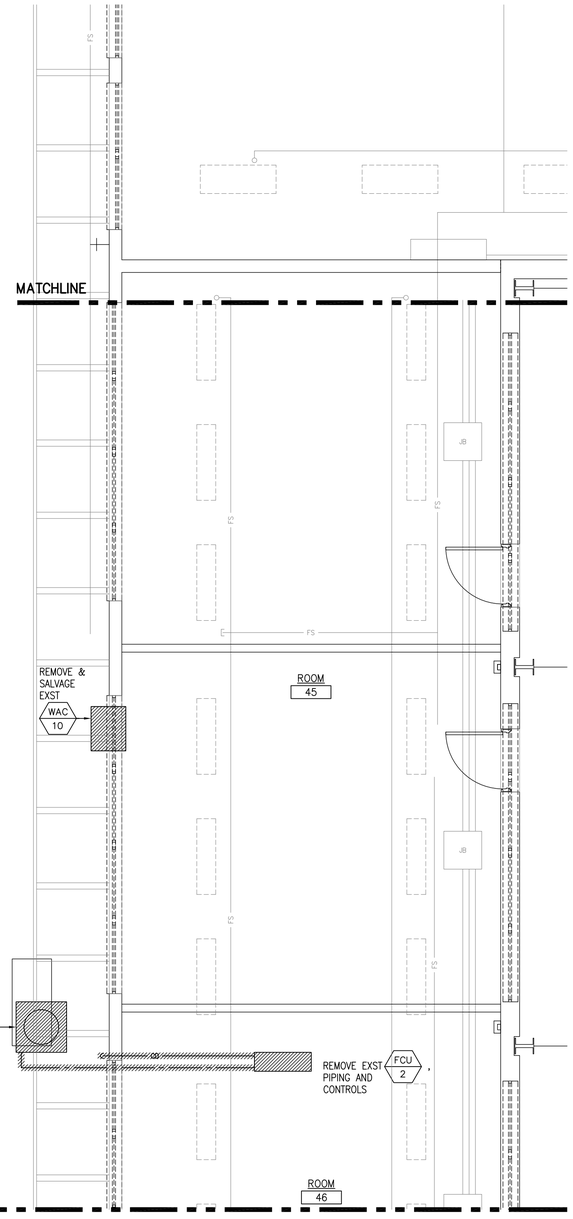
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

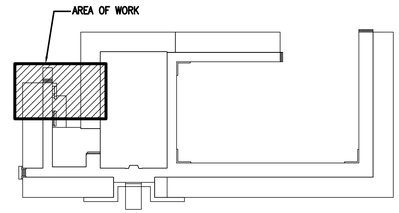
PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 78 OF 131
MD401

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA B621_PHOADEL_PARTIAL YCA B621 MECH DEMO PLAN.dwg 6/28/2016 3:15:43 PM, Adobe PDF




KEY PLAN
SCALE: NONE

PLAN NORTH

## PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

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

PLAN NORTH

GRAPHIC SCALE

0 1 2 4 8 12FT

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


Youth Challenge Academy — Hawaii National Guard

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. —
SHEET 79 OF 131
MD402

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA B621_PADMD402_PARTIAL YCA B621 MECH DEMO PLAN.dwg, 6/28/2016 1:51:47 PM, Adobe PDF

MATCHLINE

REMOVE EXST EXHAUST FAN IN WALL (TYP OF 2)

EXST COVERED PATIO

ROOM 46

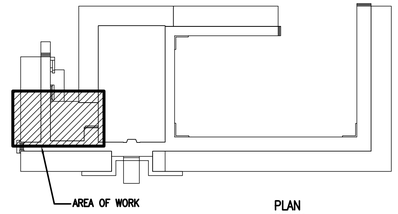
ROOM 47

ROOM 3

EXST OPEN GARDEN AREA

REMOVE & SALVAGE EXST WAC 1

REMOVE & SALVAGE EXST WAC 2




KEY PLAN
SCALE: NONE

PLAN NORTH

## PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

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

PLAN NORTH

GRAPHIC SCALE

0 1 2 4 8 12FT

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

MATCHLINE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES: KMM | DRW: TEC | CHK: KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED

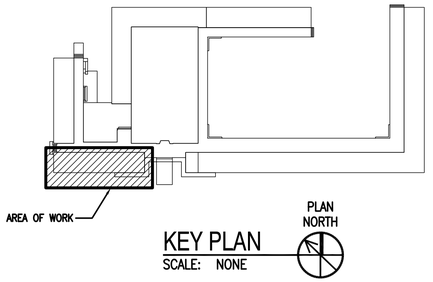
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 80 OF 131

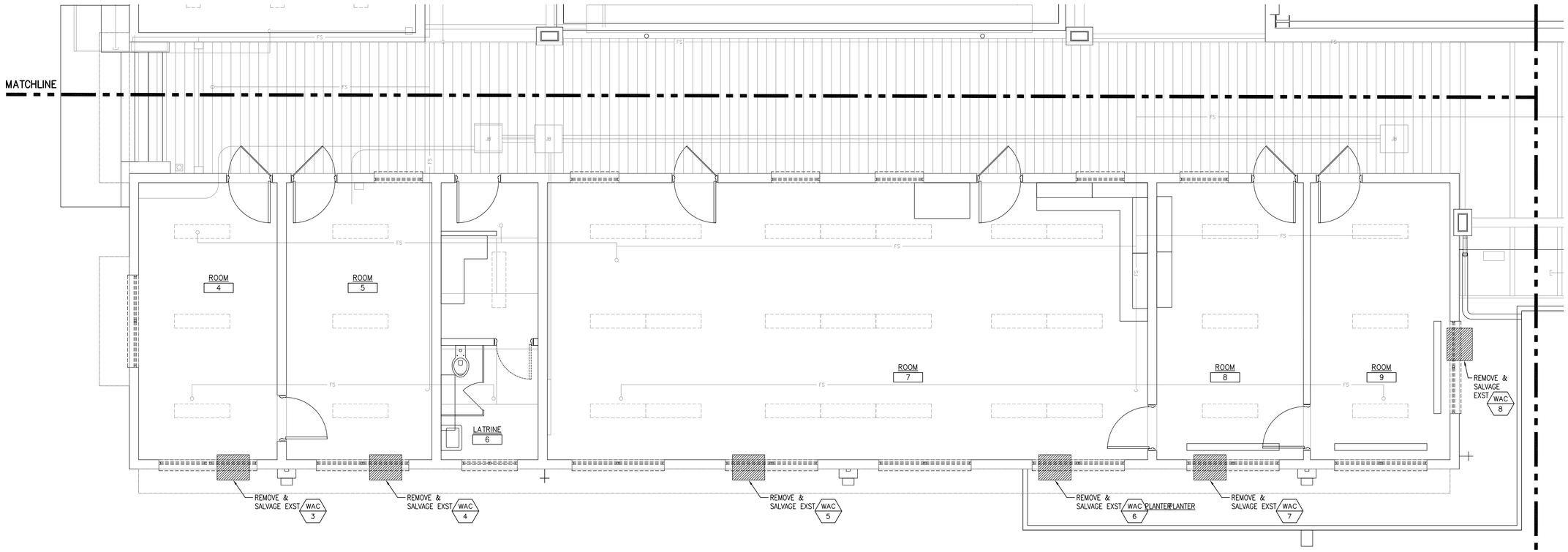
MD403

G:\2012\12003 Keaukaha Military Reserv Renov YBldg 621\Drawings\Running set\YCA BLD1_PH2\MD\MD403_PARTIAL YCA BLD1 MECH DEMO PLAN.dwg, 5/28/2018 5:51:52 PM, Adobe PDF




KEY PLAN
SCALE: NONE

PLAN NORTH




## PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

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

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

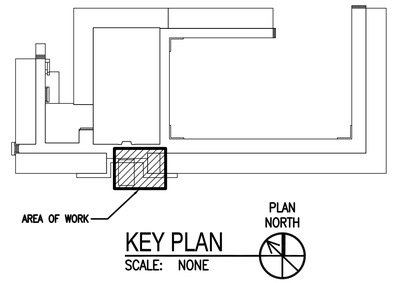
| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

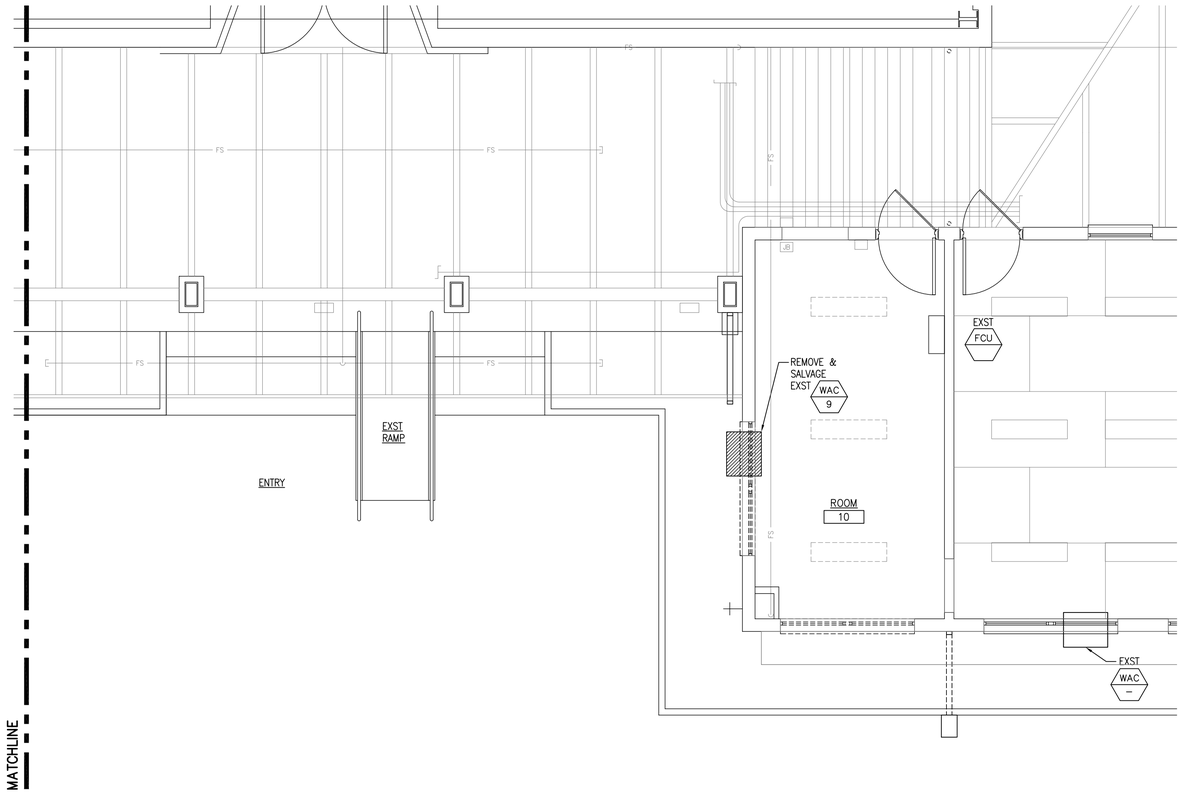
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 81 OF 131
MD404

G:\2012\12000 Kaeukaha Military Reserv Reno-Bldg 621\Drawings\Running cert\YCA BLDG_PHO\MD\MD_PARTIAL YCA BLDG MECH DEMO PLAN.dwg, 6/28/2016 3:15:16 PM, Adobe PDF




KEY PLAN
SCALE: NONE




PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

PLAN
NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

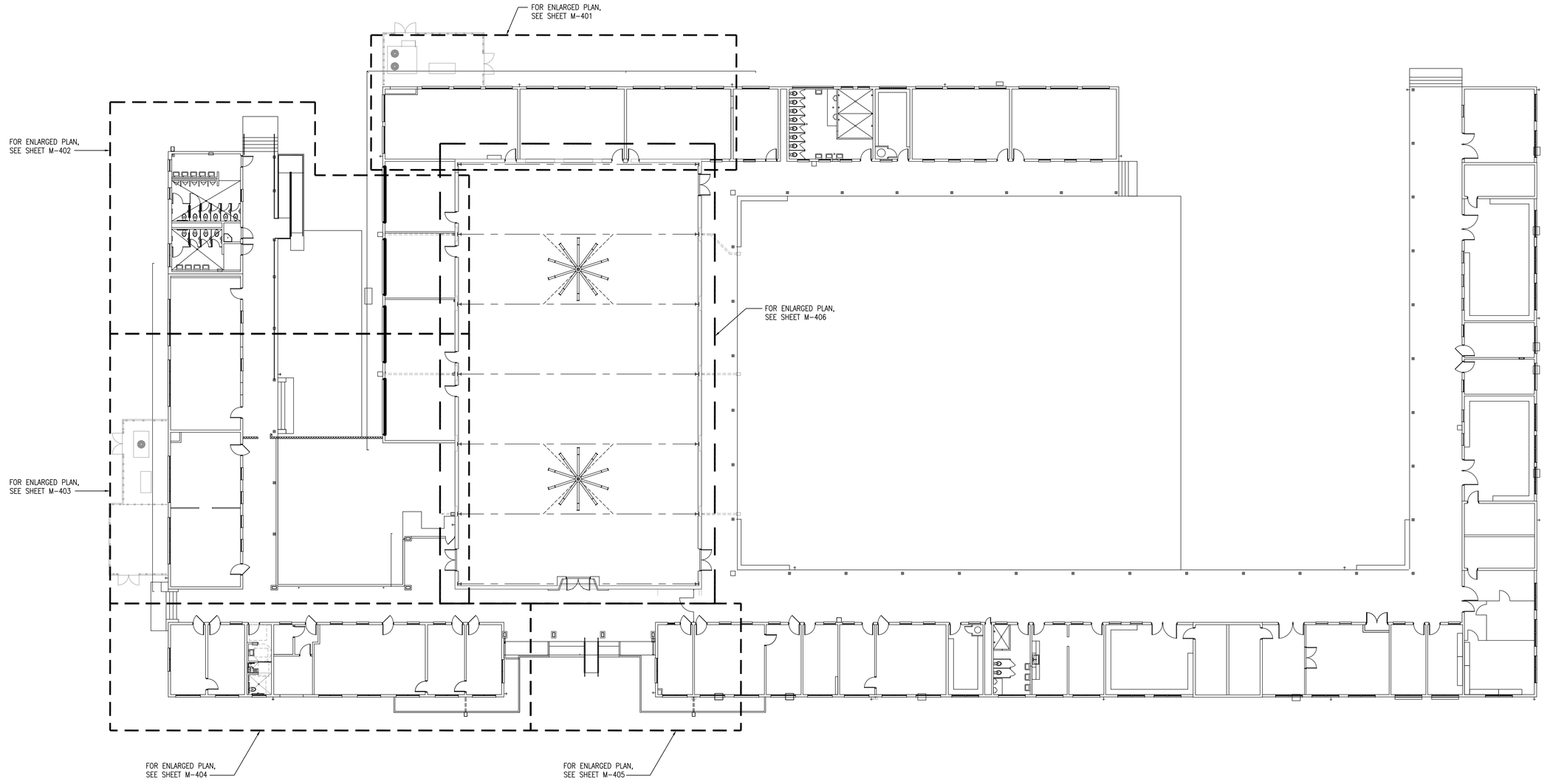
| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL DEMOLITION PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 82 OF 131
MD405

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Submtg set\YCA BLD_PHOMD405_PARTIAL YCA BLD MECH DEMO PLAN.dwg 6/28/2016 3:12:01 PM, Adobe PDF




## OVERALL MECHANICAL PLAN
SCALE: 1/16" = 1'-0"

PLAN NORTH

GRAPHIC SCALE

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

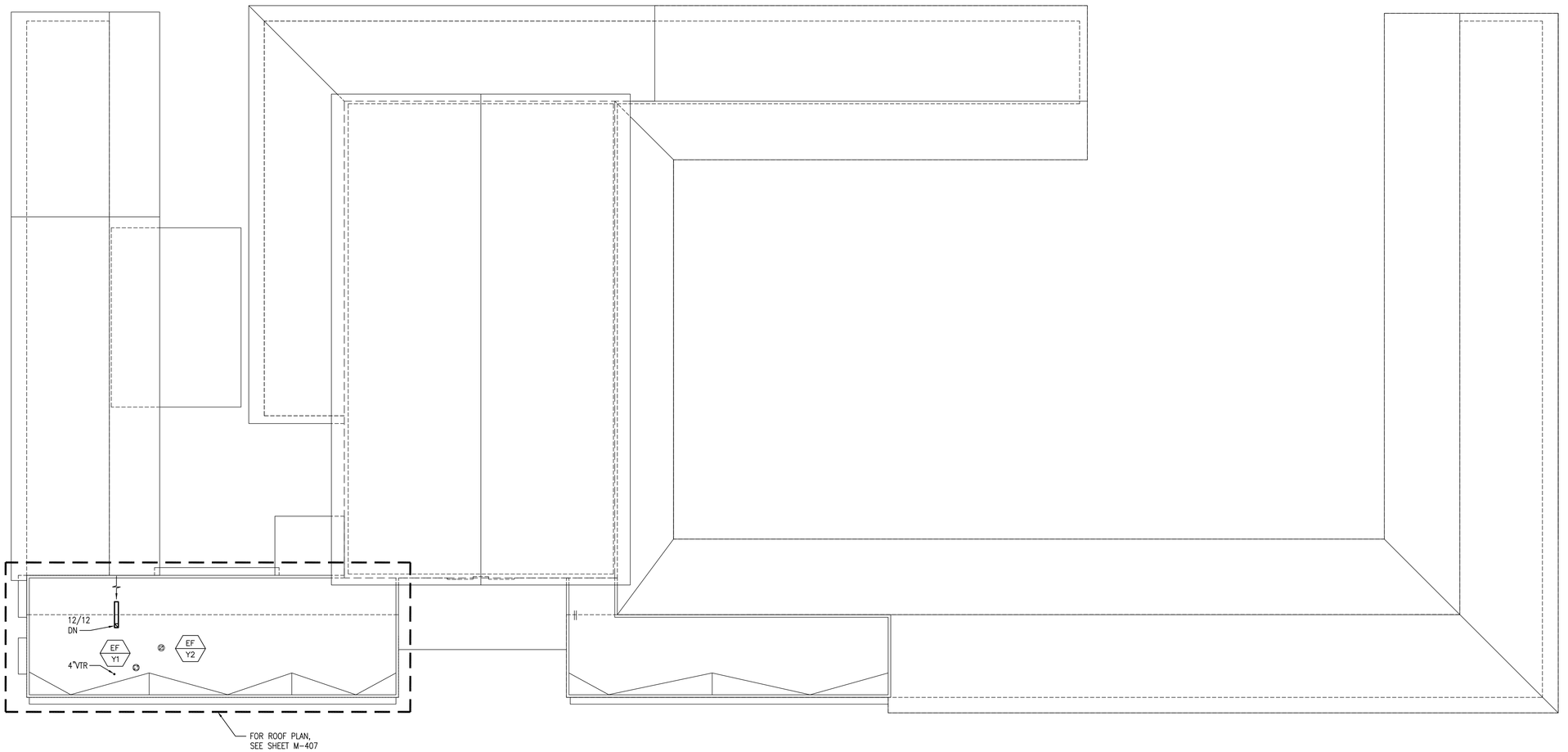
| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2
OVERALL MECHANICAL PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 83 OF 131
M-101

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\M\2 REG_PHOM\[01_OVERALL MECHANICAL PLAN.dwg, 5/28/2018 3:50:20 PM, Adobe PDF




## OVERALL MECHANICAL ROOF PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

GRAPHIC SCALE

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"


ARCHITECTS·HAWAII LIMITED

733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
OVERALL MECHANICAL ROOF PLAN

SCALE: AS NOTED

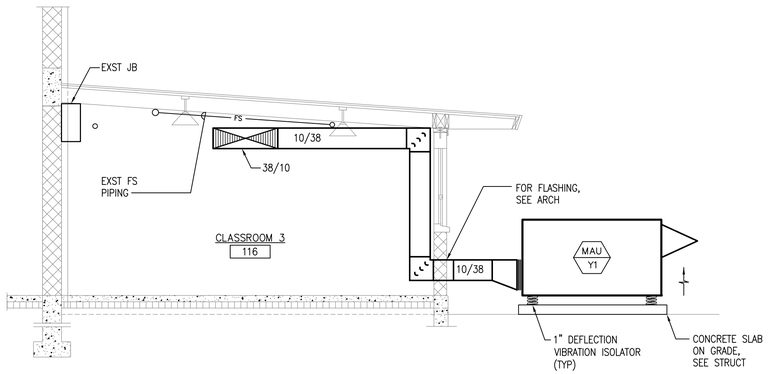
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

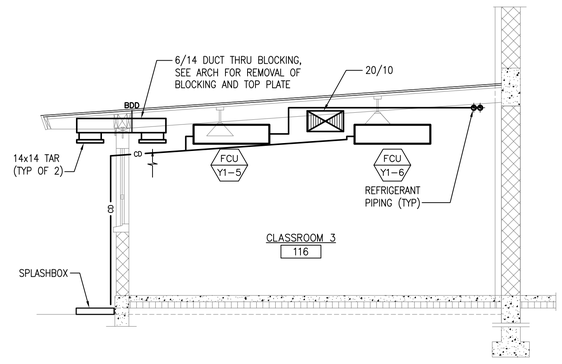
SHEET 84 OF 131

M-102

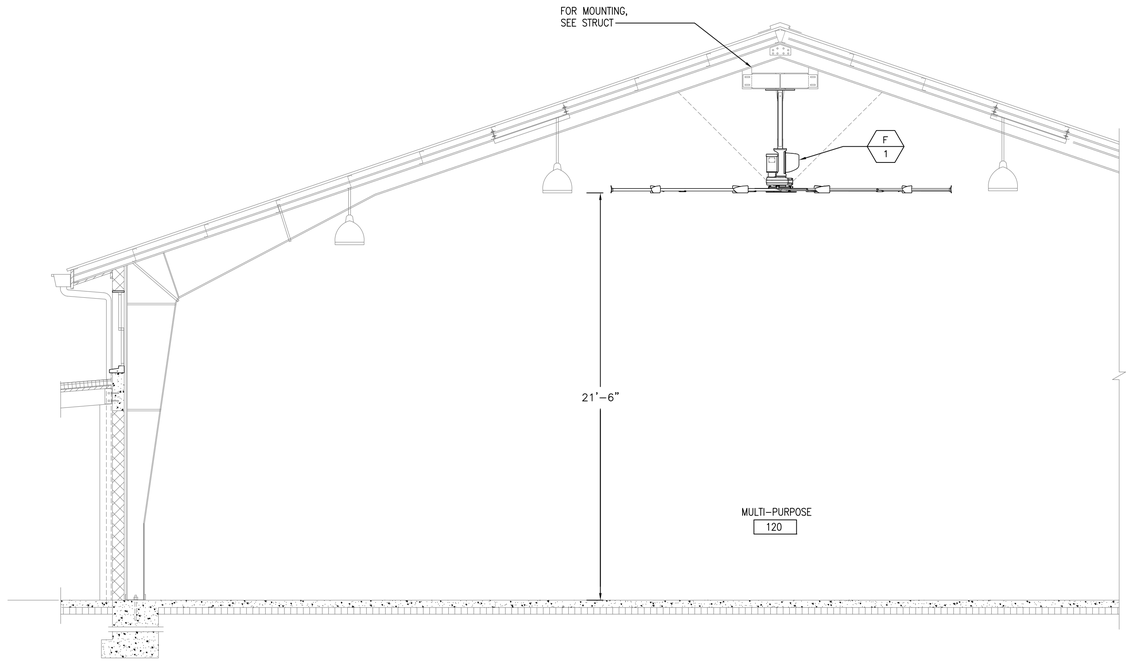
G:\2012\12000 Keaukaha Military Reserv Reno\Bldg 621\Drawings\Survey set\YCA B621_PHOVA102_OVERALL ROOF PLAN.dwg, 6/28/2016 3:02:24 PM, Adobe PDF



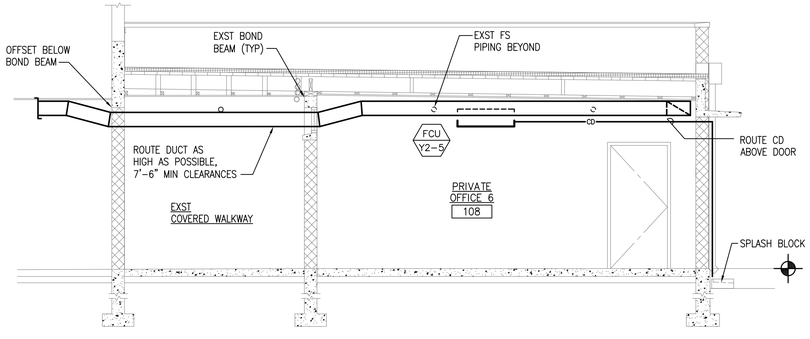

SECTION
SCALE: 1/4" = 1'-0" M-301 D1




SECTION
SCALE: 1/4" = 1'-0" M-301 D3




DEDUCTIVE BID ITEM 05
SECTION
SCALE: 1/4" = 1'-0" M-301 A1




SECTION
SCALE: 1/4" = 1'-0" M-301 A4

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

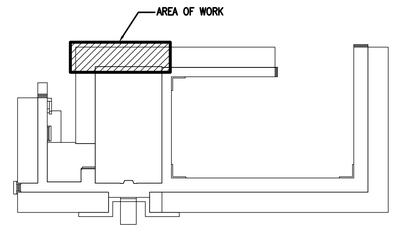
| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
SECTIONS

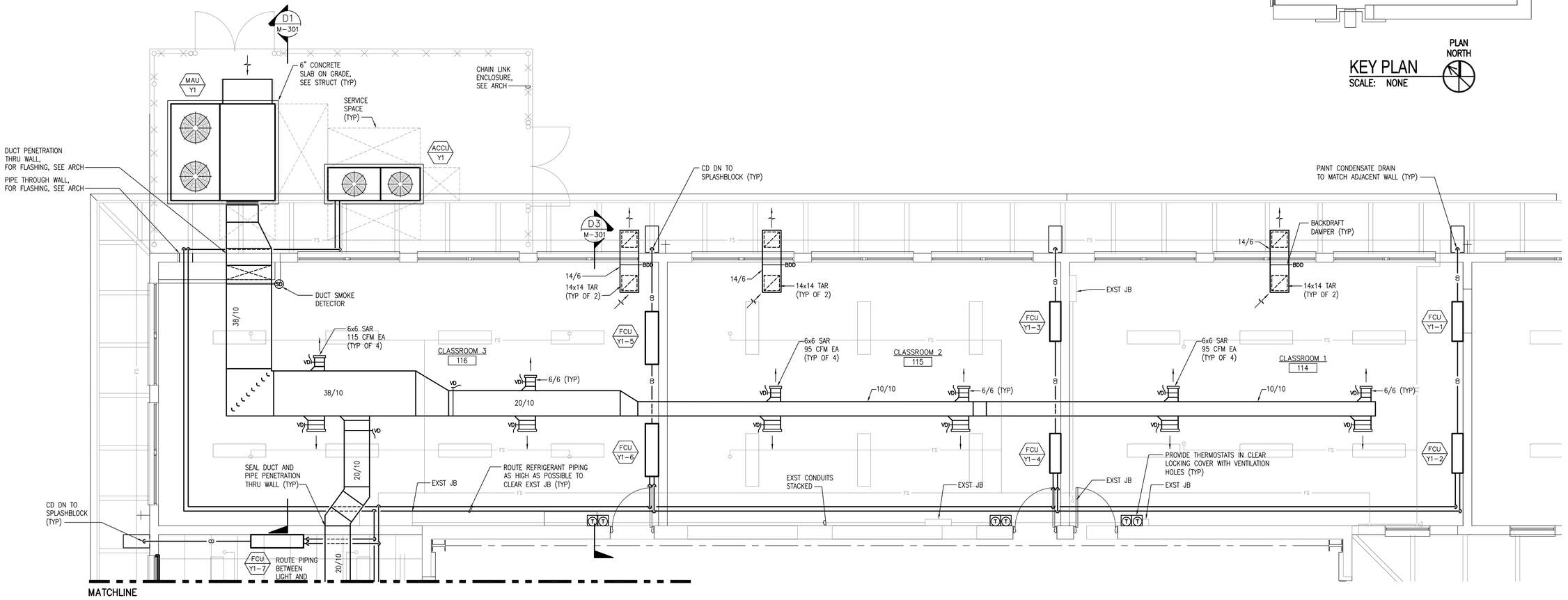
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 85 OF 131
M-301

G:\2012\12-2003 Keaukaha Military Reserv Renov YMCa 621\Drawings\Running set\YCA 621_PHOTARCH_SECTIONS.dwg, 6/28/2018 3:50:28 PM, Adobe PDF




KEY PLAN
SCALE: NONE

PLAN NORTH




PARTIAL YCA BLDG 621 MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

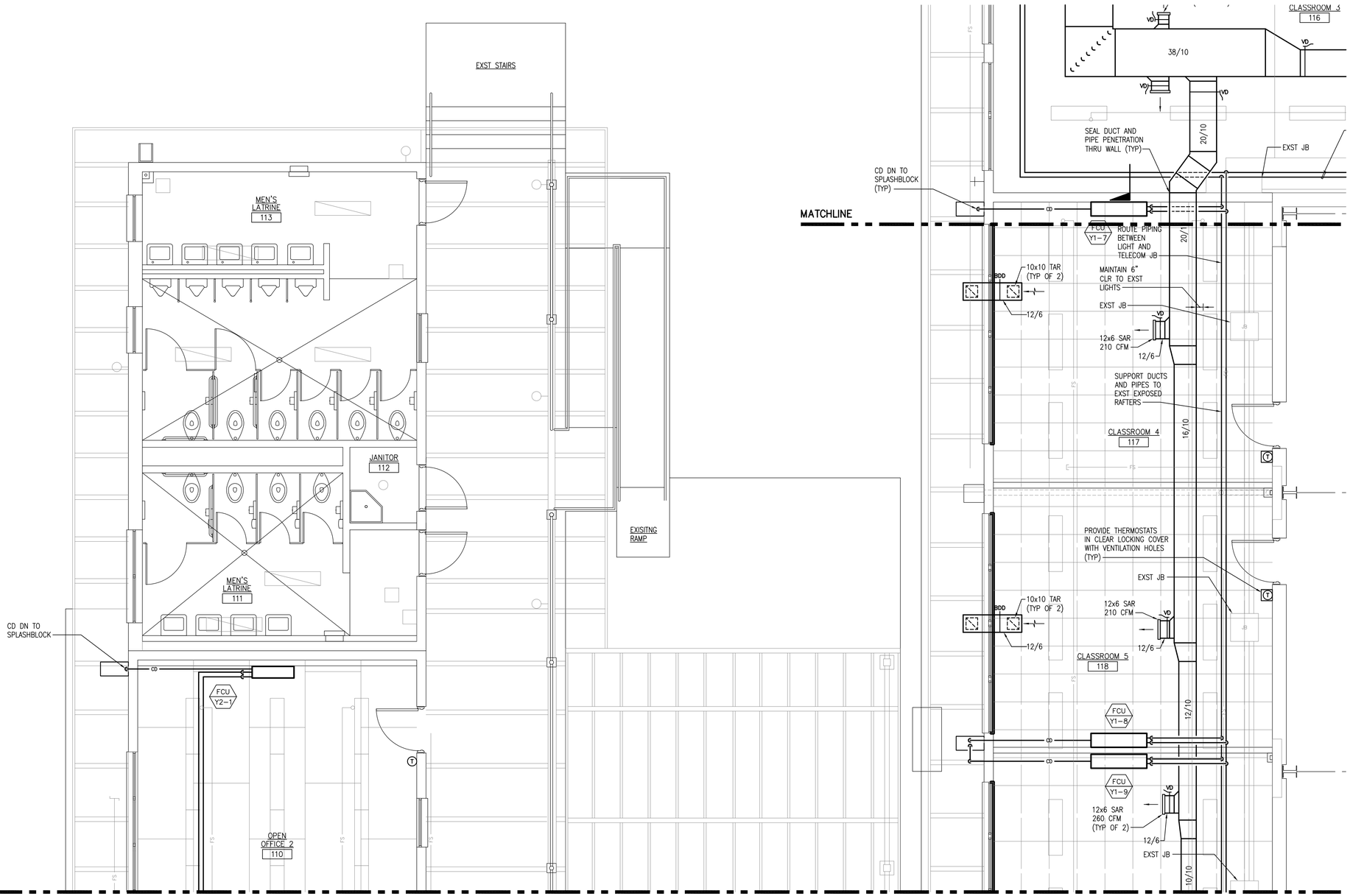
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 86 OF 131
M-401

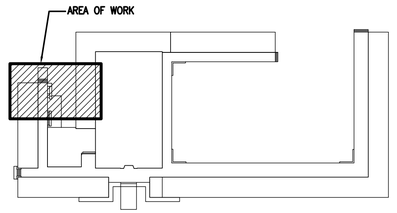
G:\2012\12003 Kaukaha Military Reserv Renov\Bldg 621\Drawings\Running set\YCA BLD1_PH2\MAN_PARTIAL YCA Bld21 MECHANICAL PLAN.dwg, 6/28/2018 3:50:33 PM, Adobe PDF




## PARTIAL YCA BLDG 621 MECHANICAL PLAN

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

PLAN NORTH




## KEY PLAN

SCALE: NONE

PLAN NORTH

GRAPHIC SCALE

0 1 2 4 8 12FT

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


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 87 OF 131

M-402

G:\2012\12000 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\sht\YCA 6621_PHOMA02_PARTIAL YCA 6621 MECHANICAL PLAN.dwg, 6/28/2016 3:03:38 PM, Adobe PDF

MATCHLINE

6x6 TAR (TYP OF 2)
BDD
6/6
EXST COVERED PATIO
8x8 TAR (TYP OF 2)
BDD
10/6
MAINTAIN 6" CLR TO EXST LIGHTS
10/10
CLASSROOM 6
119
PROVIDE THERMOSTATS IN CLEAR LOCKING COVER WITH VENTILATION HOLES (TYP)
VD
12/8
SUPPORT DUCTS AND PIPES TO EXST EXPOSED RAFTERS (TYP)
AREA OF WORK
PLAN NORTH
KEY PLAN
SCALE: NONE
6x6 OAR 90 CFM
SEAL ALL DUCT AND PIPE PENETRATION THRU WALL, (TYP)
SERVICE SPACE (TYP)
8/8
FCU Y2-2
MAU Y2
VD
CD
14/12
FCU Y2-3
DUCT PENETRATION THRU WALL, FOR FLASHING, SEE ARCH
DUCT CHASE, SEE ARCH
PIPE STACKED IN CHASE
EXST STAIRS
CD DN TO SPLASHBLOCK
FCU Y1-10
ROUTE PIPING BETWEEN LIGHT AND TELECOM JB
PIPE STACKED ALONG WALL
ROUTE DUCT 12" FROM WALL
CHAIN LINK ENCLOSURE, SEE ARCH
12/8
ACCU Y2
6" CONC PAD, SEE STRUCT DWGS (TYP)
SERVICE SPACE (TYP)
6x6 TAR (TYP OF 2)
BDD
6/6
OPEN OFFICE 1
109
EXST OPEN GARDEN AREA
12/6
ROUTE PIPING BETWEEN LIGHTS AND FIRE SPRINKLER LINES, AS HIGH AS POSSIBLE
DUCT AND PIPING BELOW EXST CEILING, SUPPORT TO EXST RAFTERS ABOVE CEILING (TYP)
VD
6x6 OAR 90 CFM
OFFSET DUCT TO CLEAR VENEER BRICK IN WALKWAY
DROP DUCT BELOW EXST BOND BEAM
FCU Y2-4
DUCT AND PIPING, EXPOSED IN WALKWAY ROUTE AS HIGH AS POSSIBLE BUT BELOW BOND BEAM
EXST JB
EXST COVERED WALKWAY
MATCHLINE

PARTIAL YCA BLDG 621
MECHANICAL PLAN
SCALE: 1/4" = 1'-0"
PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

1 2 3 4 5
A B C D


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE EXPIRATION DATE

| NO | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

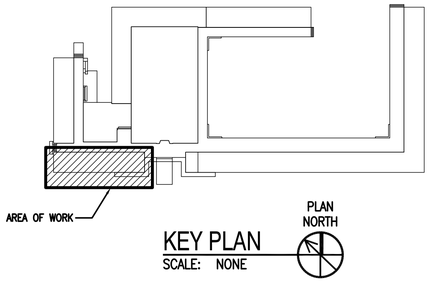
SHEET 0F

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

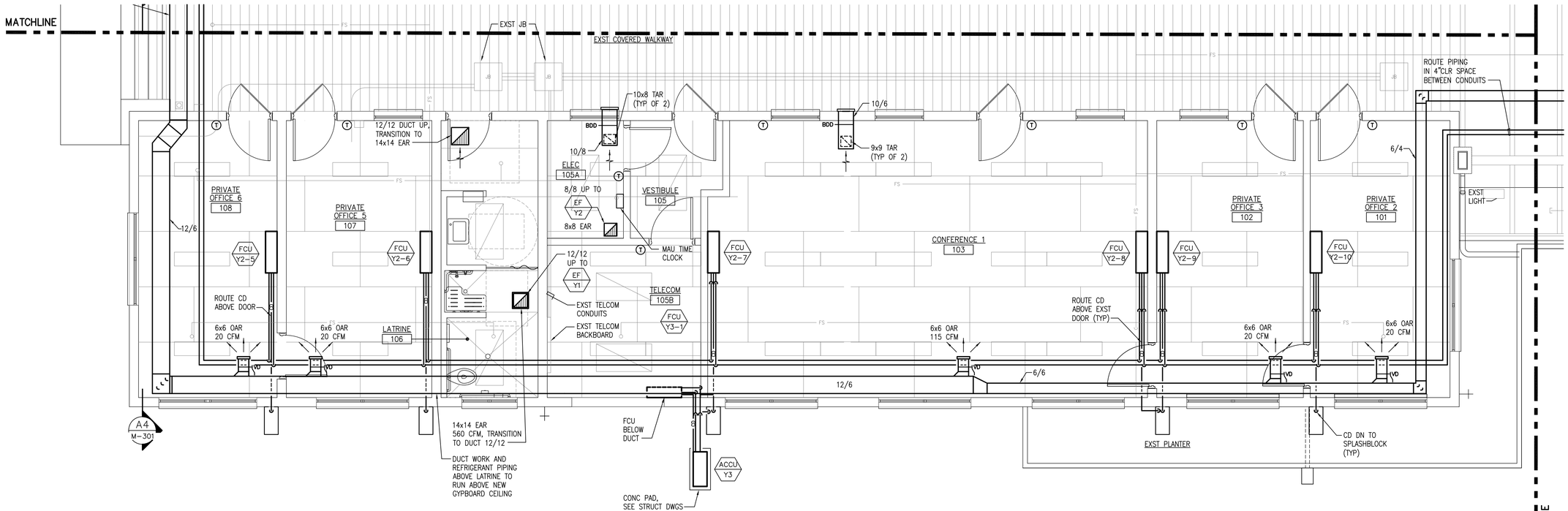
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 88 OF 131
M-403

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA BLDG 621_PHS\MAIN_PARTIAL YCA BLDG MECHANICAL PLAN.dwg, 6/28/2016 3:50:44 PM, Adobe PDF




KEY PLAN
SCALE: NONE




PARTIAL YCA BLDG 621 MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

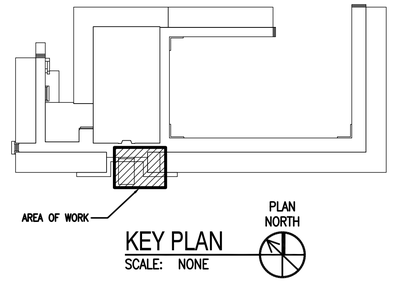
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

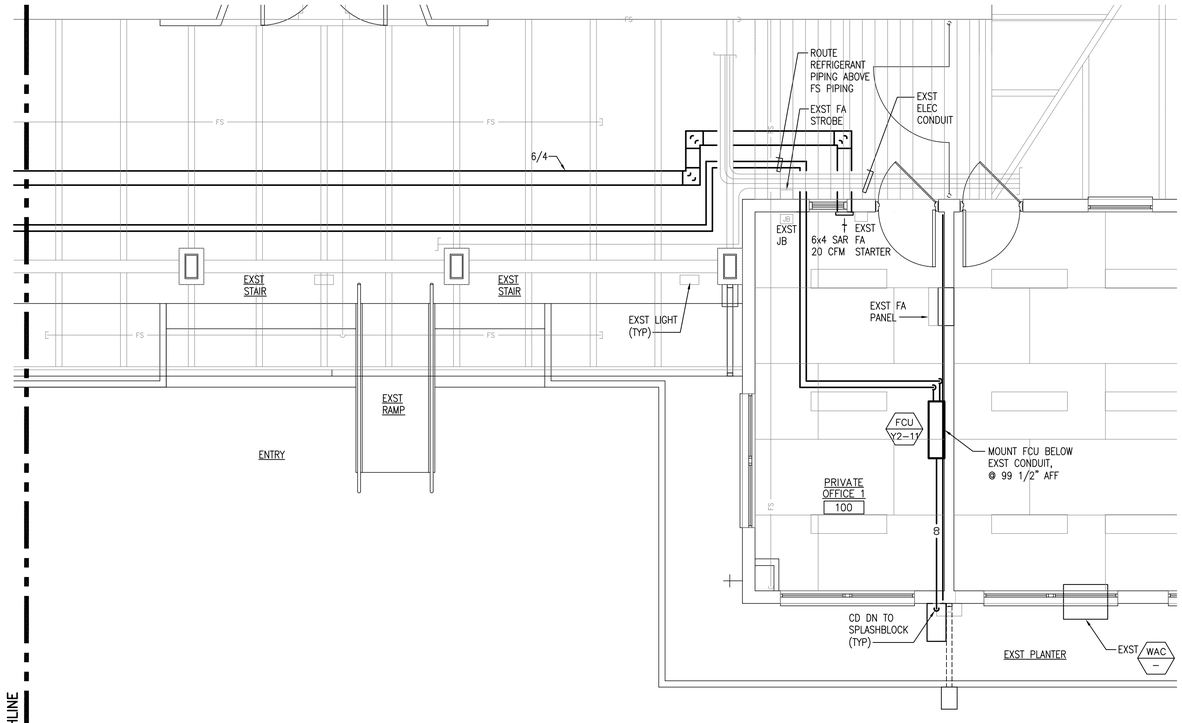
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 89 OF 131
M-404

G:\2012\12001 Keaukaha Military Reserv Reno Bldg 621\Drawings\Running set\YCA BLDG_PHOTARDC_PARTIAL YCA BLDG MECHANICAL PLAN.dwg 6/29/2016 8:59:23 AM, Adobe PDF




KEY PLAN
SCALE: NONE




PARTIAL YCA BLDG 621 MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

Youth Challenge Hawaii National Guard Academy

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

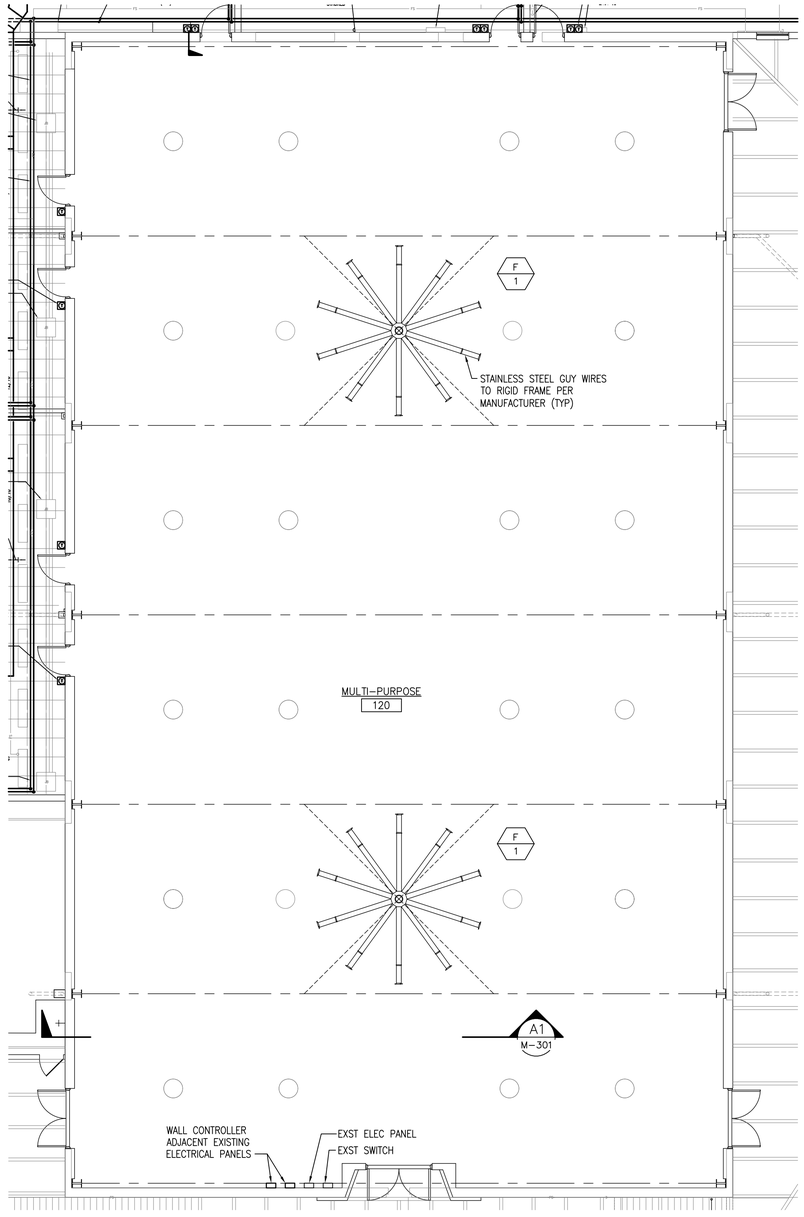
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2
PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 90 OF 131
M-405

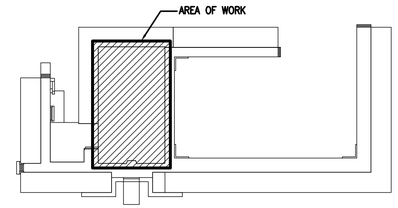
G:\2012\12003 Keaukaha Military Reserve Renov Bldg 621\Drawings\Running sets\YCA BLDG 621 MECHANICAL PLAN.dwg, 6/28/2016 3:50:13 PM, Adobe PDF




## DEDUCTIVE BID ITEM 05 - PARTIAL YCA BLDG 621 MECHANICAL PLAN

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

PLAN NORTH




KEY PLAN

SCALE: NONE

PLAN NORTH

GRAPHIC SCALE

0 2 4 8 16 32FT

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

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

DEDUCTIVE BID ITEM 05 – PARTIAL YCA BLDG 621 MECHANICAL PLAN

SCALE: AS NOTED

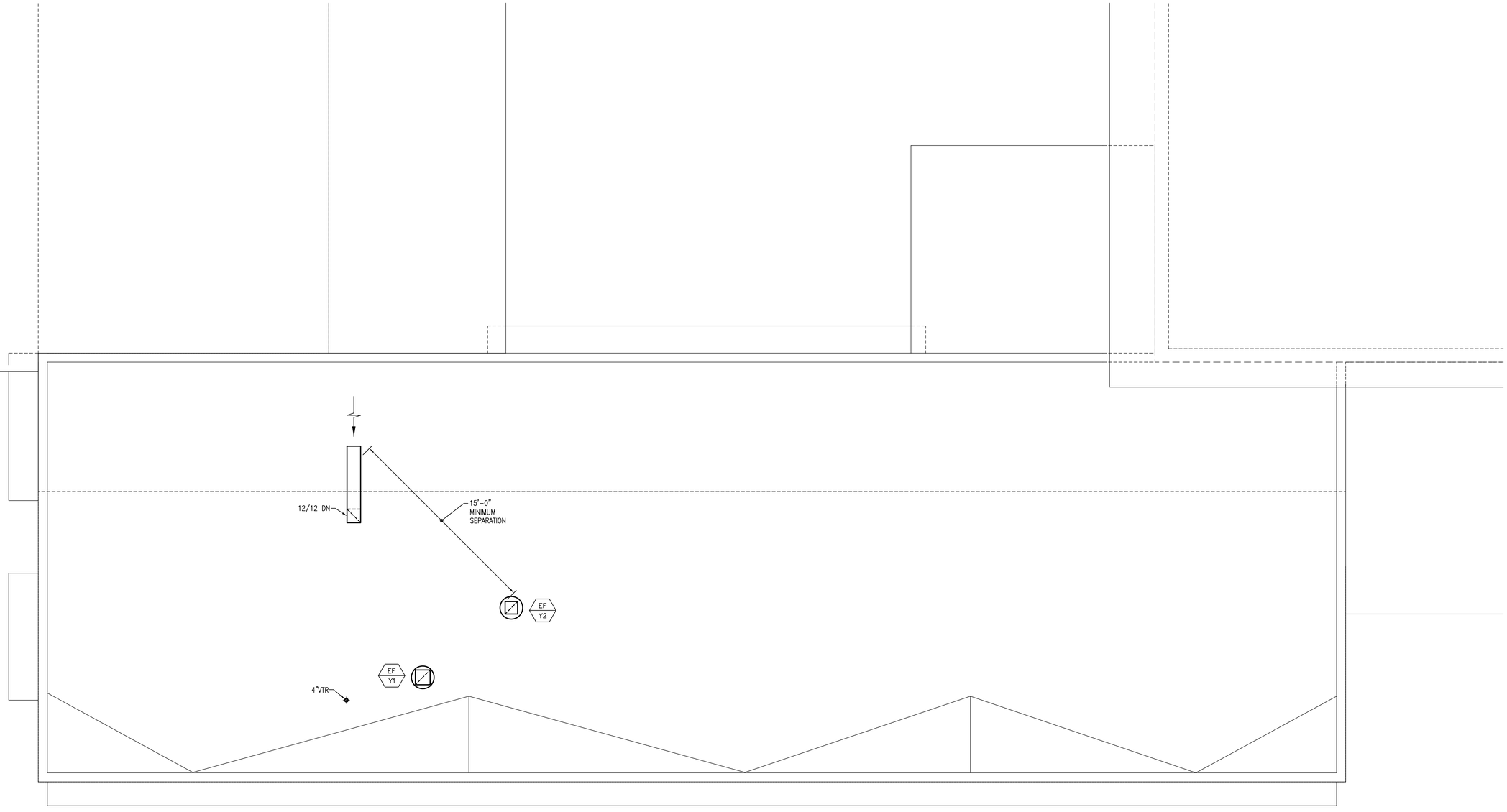
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 91 OF 131

M-406

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running sym\YCA B621_PHOAKRG_PARTIAL YCA B621 MECHANICAL PLAN.dwg 5/26/2016 3:03:58 PM, Adobe PDF




## MECHANICAL ROOF PLAN
SCALE: 1/4" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

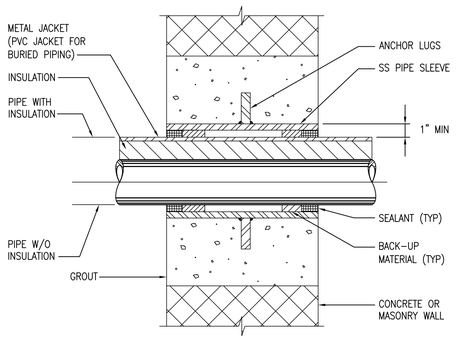
| APPR | DATE | SHEET NO. | DESCRIPTION | MAS |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2
MECHANICAL ROOF PLAN

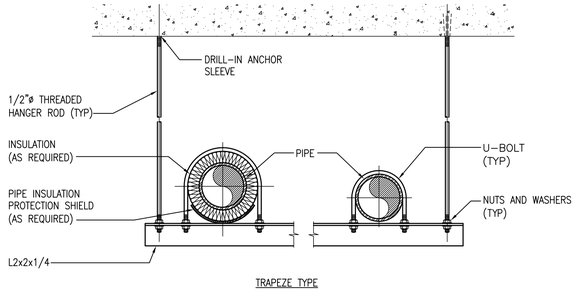
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 92 OF 131
M-407

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running sets\YCA REQ_PH2\M407_ROOF PLAN.dwg, 6/29/2016 9:55:28 AM, Adobe PDF



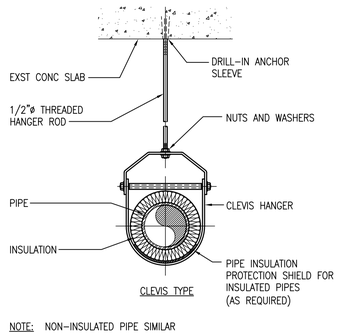

## WALL PIPE PENETRATION DETAIL — D1

SCALE: NONE — M-501




## PIPE HANGER DETAIL — D2

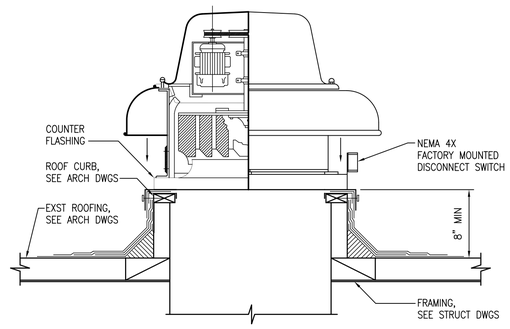
SCALE: NONE — M-501




NOTE: NON-INSULATED PIPE SIMILAR

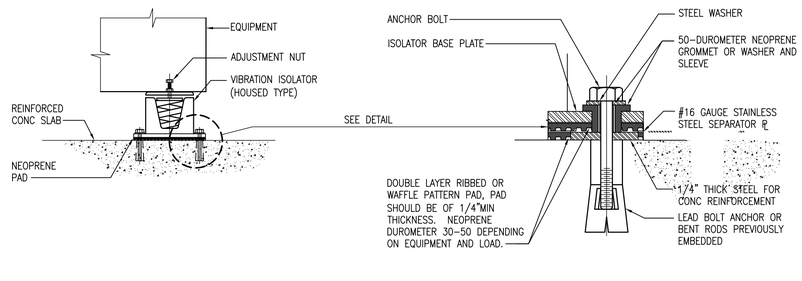
## PIPE HANGER DETAIL — D3

SCALE: NONE — M-501



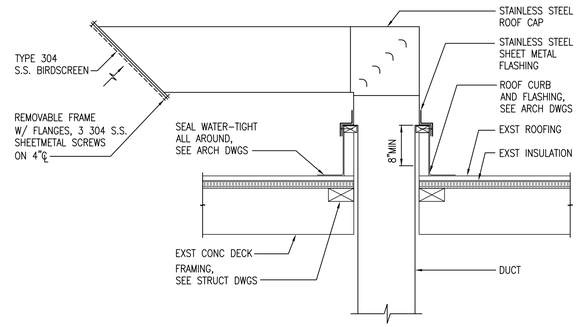

## ROOF CURB DETAIL — D5

SCALE: NONE — M-501



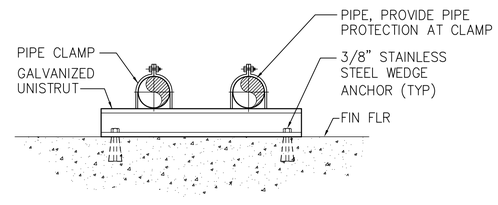

## MAKE-UP AIR & UNIT MOUNTING DETAIL — B1

SCALE: NONE — M-501



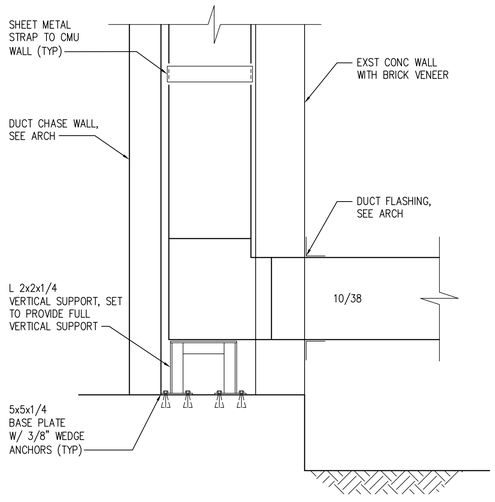

## TYPICAL PIPE SUPPORT DETAIL — B3

SCALE: NONE — M-501



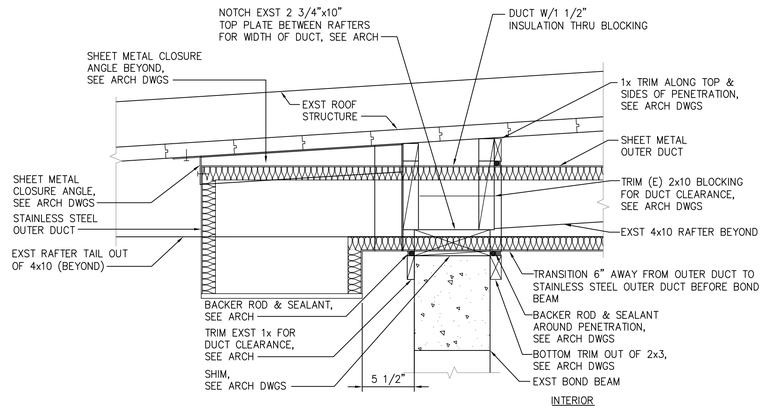

## TYPICAL PIPE SUPPORT DETAIL — B5

SCALE: NONE — M-501




## VERTICAL DUCT SUPPORT DETAIL — A1

SCALE: 1"=1'-0" — M-501




## DUCT THRU WALL DETAIL — A2

SCALE: NONE — M-501

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

KEVIN M. MACHIDA — LICENSED PROFESSIONAL ENGINEER — No. 8065 — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

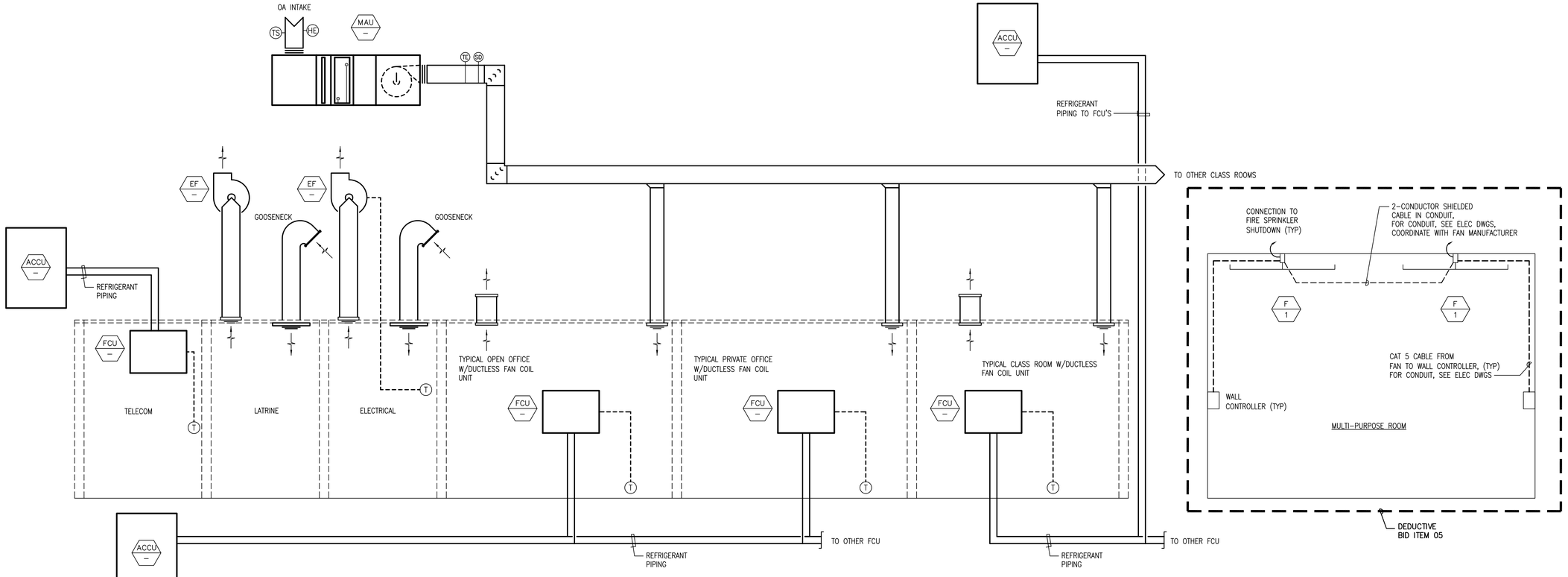
| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| SHEET 0F | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 93 OF 131
M-501

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA Bld.2_PHO\M501_DETAILS.dwg, 6/28/2016 3:51:08 PM, Adobe PDF




## AIRSIDE SCHEMATIC DIAGRAM

SCALE: NONE

## SEQUENCE OF OPERATION

1. BUILDING 621 HVAC SYSTEM INCLUDES FOUR (4) VARIABLE REFRIGERANT FLOW (VRF) SYSTEMS AND A DEDICATED OUTDOOR AIR PRECOOLER (MAU-1).

2. VARIABLE REFRIGERANT FLOW SYSTEM:

   A. THERE ARE TWO (2) TYPES VRF SYSTEMS, ONE OPERATING 24 HRS/DAY AND ONE OPERATING DURING BUSINESS HOURS.

      i. TELECOM ROOM SHALL BE CONDITIONED 24 HRS/DAY.

      ii. OFFICES, CONFERENCE ROOMS, AND CLASSROOMS SHALL BE CONDITIONED DURING BUSINESS HOURS AS REQUIRED BY OCCUPANCY.

   B. IN GENERAL, THE VRF SYSTEMS SHALL START AND STOP IN ACCORDANCE WITH THE PROGRAMMED SCHEDULE SET BY THE DDC SYSTEM.

   C. ON A CALL FOR COOLING, THE FAN COIL UNIT FAN STARTS AND RUNS CONTINUOUSLY. THE FAN SHALL ALWAYS START ON LOW SPEED OR ON THE PREDETERMINED SPEED SETTING. THE SYSTEM SHALL MODULATE REFRIGERANT FLOW TO THE INDIVIDUAL FAN COIL UNITS TO MAINTAIN THE ROOM TEMPERATURE SETPOINT.

      THE VRF FAN COIL UNITS ARE CONNECTED TO THE OCCUPANCY SENSOR PROVIDED BY THE ELECTRICAL. WHEN THE OCCUPANCY SENSOR DETECTS OCCUPANTS, THE FAN COIL UNIT SHALL OPERATE AS INDICATED ABOVE. WHEN THE OCCUPANCY SENSOR DETECTS NO OCCUPANTS, THE THERMOSTAT SETPOINT SHALL BE RESET TO 78 DEG F. OCCUPIED ROOM SETPOINT SHALL BE 75 DEG F.

   D. ON A CALL FOR COOLING, THE AIR COOLED CONDENSING UNIT SHALL INITIATE THE START-UP SEQUENCE. THE COMPRESSOR SHALL MODULATE REFRIGERANT FLOW TO MEET LOAD IN THE INDIVIDUAL FAN COIL UNIT ZONES.

   E. EACH VRF FAN COIL UNIT SHALL BE CONNECTED TO A LOCAL CONTROLLER. THE LOCAL CONTROLLER SHALL ALLOW LOCAL ON/OFF CONTROL AND TEMPERATURE SETPOINT ADJUSTMENT.

   F. BOTH VRF SYSTEMS SHALL BE CONNECTED TO SYSTEM CONTROLLER. THE SYSTEM CONTROLLER SHALL ALLOW STANDALONE CONTROL IF THE B BACNET INTERFACE IS LOST. THE SYSTEM CONTROLLER SHALL ALLOW ON/OFF CONTROL AND HOLD SCHEDULE PROGRAMMING.

   G. THE VRF SYSTEM SHALL BE CONNECTED TO A BACNET ADAPTER. THE BACNET ADAPTER SHALL ALLOW TWO WAY COMMUNICATION TO A FUTURE WEB-BASED BACNET NETWORK.

   H. EXCESS AIR IN CLASSROOMS SHALL BE REMOVED FROM CONDITIONED SPACES VIA TRANSFER AIR GRILLS AND DUCTWORK.

   I. FAN COIL UNITS IN PRIVATE OFFICES AND OPEN OFFICES ARE SUPPLEMENTAL COOLING FOR NATURALLY VENTILATED SPACES.

3. MAKE-UP AIR UNIT (MAU-1):

   A. DEDICATED MAKE-UP AIR UNIT SHALL PROVIDE PRECONDITIONED OUTDOOR AIR TO THE CLASS ROOMS.

   B. THE MAKE-UP AIR UNIT SHALL RUN THRU THE TIME CLOCK PROGRAM.

   C. ON A CALL FOR COOLING, THE MAKE-UP AIR UNIT SHALL MODULATE THE SCROLL COMPRESSOR TO MAINTAIN THE SUPPLY AIR TEMPERATURE SETPOINT. AS THE COOLING DEMAND INCREASES, THE SUPPLY AIR TEMPERATURE RISES ABOVE THE SETPOINT. THE COMPRESSOR CAPACITY IS MODULATED UP TO 100%. AS THE COOLING LOAD DECREASES, THE SUPPLY AIR TEMPERATURE DECREASES BELOW THE SETPOINT AND THE COMPRESSOR CAPACITY IS MODULATED DOWN TO 0%.

   D. THE MAKE-UP AIR UNIT DEHUMIDIFICATION MODE IS ALWAYS ENERGIZED. THE UNIT ACTIVATES DEHUMIDIFICATION MODE WHEN THE OUTDOOR AIR DEWPOINT RISES 2 DEG F ABOVE THE SETPOINT AND DE-ENERGIZES WHEN THE OUTDOOR AIR DEWPOINT DECREASES TO 2 DEG F BELOW THE SETPOINT.

   E. DURING OCCUPIED TIMES, THE MAKE-UP AIR UNIT SHALL CONTROL TO PROVIDE A LEAVING AIR TEMPERATURE OF 55 DEG F (ADJUSTABLE). DURING NIGHTTIME SETBACK MODE, THE LEAVING AIR TEMPERATURE SHALL BE RESET TO 75 DEG F (ADJUSTABLE). THE MAKEUP AIR UNIT SHALL USE MODULATING HOT GAS REHEAT TO WARM THE SUPPLY AIR LEAVING THE UNIT.

4. EXHAUST FANS:

   A. LATRINE, EXHAUST FAN OPERATES BASED ON OCCUPANCY SENSORS PROVIDED BY ELECTRICAL.

   B. ELECTRICAL ROOM EXHAUST FAN OPERATES BASED ON THERMOSTAT SETTING OF 90 DEGREES F.

5. TELECOM ROOM A/C SYSTEM SHALL BE ON EMERGENCY POWER.

6. MULTI-PURPOSE ROOM VENTILATION
   HIGH VOLUME LOW SPEED EXHAUST FAN:

   FANS SHALL BE CONTROLLED BY THE REMOTE WALL CONTROLLER AND SHALL BE ARRANGED IN A MASTER/SLAVE CONFIGURATION.

   UPON DETECTION OF WATER FLOW IN THE FIRE SPRINKLER SYSTEM, THE FANS SHALL BE SHUTDOWN BY HARDWIRED INTERLOCK WITH THE FIRE SPRINKLER SYSTEM.

   DEDUCTIVE BID ITEM 05


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

APPR | DATE | SHEET OF | DESCRIPTION | SYM

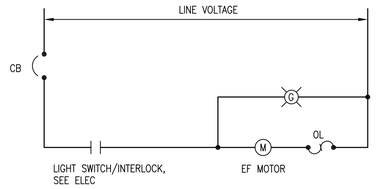
SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
AIRSIDE SCHEMATIC DIAGRAM AND SEQUENCE OF OPERATION

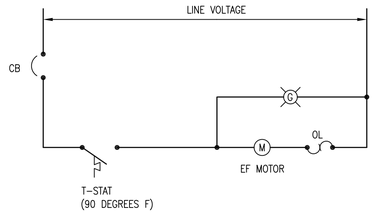
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 94 OF 131
M-601

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running sym\YCA Bld.2_PHOTARIS_AIRSIDE SCHEMATIC DIAG_SEQ OF OP.dwg 4/26/2018 3:51:14 PM Adobe PDF



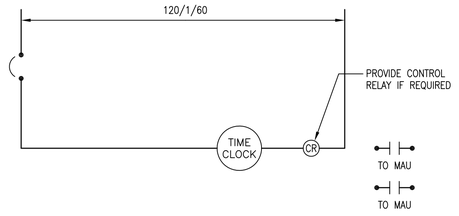

## SINGLE PHASE EXHAUST FAN CONTROL DIAGRAM

SCALE: NONE (FOR LATRINES EF)



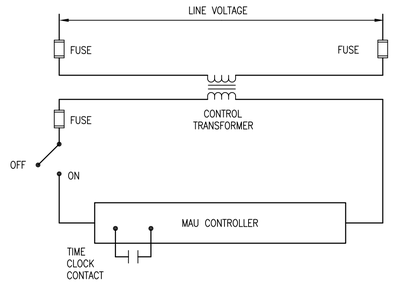

## SINGLE PHASE EXHAUST FAN CONTROL DIAGRAM (T-STAT)

SCALE: NONE (FOR ELECTRICAL RM EF)



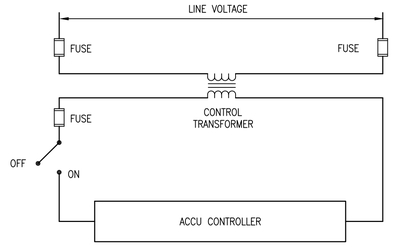

## TIME CLOCK CONTROL DIAGRAM

SCALE: NONE




## MAU CONTROL DIAGRAM

SCALE: NONE




## ACCU CONTROL DIAGRAM

SCALE: NONE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-H
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| SYM | | | |

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

CONTROL DIAGRAM

SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 95 OF 131

M-602

G:\2012\12003 Keaukaha Military Reserve Renov Bldg 621\Drawings\Running set\YCA BLD1_PHO\M602_CONTROL DIAGRAM.dwg, 6/28/2016 1:51:18 PM, Adobe PDF

## MAKE-UP AIR UNIT SCHEDULE

| NO | LOCATION | SA CFM | OA CFM | COIL LADB °F | UNIT LADB °F | FAN SELECTION | | | COOLING COIL SECTION | | COMPRESSOR | | AIR COOLED CONDENSER | | POWER | MCA (A) | MOCP | WEIGHT LBS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | E.S.P. "WG | MIN HP | DRIVE | TCC (BTUH) | SCC (BTUH) | QTY | RLA | AMBIENT AIR (°F) | FAN (HP) | | | | | |
| MAU Y1 | EXTERIOR | 2,160 | 2,160 | 55 | 75 | 1.25 | 2 | DIRECT | 180,750 | 90,000 | 1 | 12.6 | 87/75 | 0.75 | 460/3/60 | 35 | 45 | 1750 | AAON RN-015 OR APPROVED EQUAL |
| MAU Y2 | EXTERIOR | 395 | 395 | 55 | 75 | 1.50 | 0.5 | DIRECT | 24,900 | 12,900 | 1 | 3.5 | 87/75 | 0.33 | 460/3/60 | 8 | 15 | 760 | AAON RQ-002 OR APPROVED EQUAL |

## AIR COOLED CONDENSING UNIT SCHEDULE

| NO | LOCATION | MIN CAP BTUH | COMPRESSOR | CONDENSER SECTION | | WEIGHT LBS | UNIT | | MIN EER | MOCP | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | QTY | FAN EA (kW) | AMBIENT AIR (°F) | | POWER | MCA | | | |
| ACCU Y1 | EXTERIOR | 138,285 | 1 | 0.92x2 | 95 | 936 | 460/3/60 | 24 | 14.6 | 40 | MITSUBISHI PUHY-P144 OR APPROVED EQUAL |
| ACCU Y2 | EXTERIOR | 114,900 | 1 | 0.92x2 | 95 | 706 | 460/3/60 | 20 | 14.9 | 33 | MITSUBISHI PUHY-P120 OR APPROVED EQUAL |
| ACCU Y3 | EXTERIOR | 8,760 | 1 | 0.5A | 95 | 81 | 208-230/1/60 | 1 | 24.6 | – | MITSUBISHI PUY-A12 OR APPROVED EQUAL |

## FAN COIL UNIT SCHEDULE

| NO | TYPE | LOCATION | FAN SELECTION | | | COOLING COIL SECTION | | ELECTRICAL POWER | SOUND DBA | WEIGHT LBS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | SA CFM | POWER (W) | DRIVE | TCC (BTUH) | SCC (BTUH) | | | | |
| FCU Y1-1 | WALL MOUNTED DUCTLESS | CLASS ROOM 1 116 | 420 | 30 | DIRECT | 11,350 | 8,250 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y1-2 | WALL MOUNTED DUCTLESS | CLASS ROOM 1 116 | 420 | 30 | DIRECT | 11,350 | 8,250 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y1-3 | WALL MOUNTED DUCTLESS | CLASS ROOM 2 117 | 400 | 30 | DIRECT | 10,690 | 7,650 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y1-4 | WALL MOUNTED DUCTLESS | CLASS ROOM 2 117 | 400 | 30 | DIRECT | 10,690 | 7,650 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y1-5 | WALL MOUNTED DUCTLESS | CLASS ROOM 3 118 | 550 | 30 | DIRECT | 13,950 | 10,250 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y1-6 | WALL MOUNTED DUCTLESS | CLASS ROOM 3 118 | 550 | 30 | DIRECT | 13,950 | 10,250 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y1-7 | WALL MOUNTED DUCTLESS | CLASS ROOM 4 119 | 550 | 30 | DIRECT | 13,850 | 10,300 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y1-8 | WALL MOUNTED DUCTLESS | CLASS ROOM 5 118 | 485 | 30 | DIRECT | 12,880 | 9,600 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y1-9 | WALL MOUNTED DUCTLESS | CLASS ROOM 6 119 | 600 | 30 | DIRECT | 16,200 | 11,660 | 208-230/1/60 | 45 | 29 | MITSUBISHI PKFY-P 18 OR APPROVED EQUAL |
| FCU Y1-10 | WALL MOUNTED DUCTLESS | CLASS ROOM 6 119 | 600 | 30 | DIRECT | 16,200 | 11,660 | 208-230/1/60 | 45 | 29 | MITSUBISHI PKFY-P 18 OR APPROVED EQUAL |
| FCU Y2-1 | WALL MOUNTED DUCTLESS | OPEN OFFICE 2 110 | 525 | 30 | DIRECT | 11,170 | 10,200 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y2-2 | WALL MOUNTED DUCTLESS | OPEN OFFICE 2 110 | 525 | 30 | DIRECT | 11,170 | 10,200 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y2-3 | WALL MOUNTED DUCTLESS | OPEN OFFICE 1 109 | 570 | 30 | DIRECT | 12,050 | 10,220 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y2-4 | WALL MOUNTED DUCTLESS | OPEN OFFICE 1 109 | 570 | 30 | DIRECT | 12,050 | 10,220 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 15 OR APPROVED EQUAL |
| FCU Y2-5 | WALL MOUNTED DUCTLESS | PRIVATE OFFICE 6 108 | 370 | 30 | DIRECT | 7,600 | 7,400 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y2-6 | WALL MOUNTED DUCTLESS | PRIVATE OFFICE 5 107 | 275 | 30 | DIRECT | 5,670 | 5,460 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 08 OR APPROVED EQUAL |
| FCU Y2-7 | WALL MOUNTED DUCTLESS | CONFERENCE 1 103 | 360 | 30 | DIRECT | 8,750 | 7,210 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y2-8 | WALL MOUNTED DUCTLESS | CONFERENCE 1 103 | 360 | 30 | DIRECT | 8,750 | 7,210 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y2-9 | WALL MOUNTED DUCTLESS | PRIVATE OFFICE 3 102 | 250 | 30 | DIRECT | 5,170 | 4,125 | 208-230/1/60 | 36 | 22 | MITSUBISHI PKFY-P 06 OR APPROVED EQUAL |
| FCU Y2-10 | WALL MOUNTED DUCTLESS | PRIVATE OFFICE 2 101 | 320 | 30 | DIRECT | 6,620 | 6,410 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 08 OR APPROVED EQUAL |
| FCU Y2-11 | WALL MOUNTED DUCTLESS | PRIVATE OFFICE 1 100 | 380 | 30 | DIRECT | 7,825 | 7,620 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKFY-P 12 OR APPROVED EQUAL |
| FCU Y3-1 | WALL MOUNTED DUCTLESS | TELECOM 105B | 430 | 21 | DIRECT | 8,760 | 8,560 | 208-230/1/60 | 43 | 29 | MITSUBISHI PKA-A12 OR APPROVED EQUAL |


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

APPR | DATE | SHEET OF | DESCRIPTION | SYM

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM DRW TEC CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
EQUIPMENT SCHEDULES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 96 OF 131
M-603

G:\2012\12003 Keaukaha Military Reserv Reno Bldg 621\Drawings\Running sets\YCA Bld'g_PHOTARO_EQUIPMENT SCHEDULES.dwg, 6/28/2016 3:51:22 PM, Adobe PDF

## EXHAUST FAN SCHEDULE

| NO | LOCATION | SERVICE | TYPE | DRIVE | FAN | | | MOTOR | | DBA | WEIGHT LBS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | CAPACITY CFM | STATIC PRESSURE "WG | RPM | HP | V/PH/HZ | | | |
| EF Y1 | ROOF | LATRINE | CENTRIFUGAL | BELT | 560 | 0.55 | 1,252 | 1/4 | 115/1/60 | 54 | 45 | GREENHECK GB-091-4, COOK ACEB OR APPROVED EQUAL |
| EF Y2 | ROOF | ELECTRICAL ROOM | CENTRIFUGAL | BELT | 225 | 0.65 | 1,581 | 1/4 | 115/1/60 | 57 | 45 | GREENHECK GB-071-6 COOK ACEB OR APPROVED EQUAL |

## HVLS FAN SCHEDULE

| NO | LOCATION | NO. | TYPE | DRIVE | FAN | | MOTOR | | WEIGHT LBS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DIAMETER (FT) | RPM | HP | V/PH/HZ | | |
| F 1 | MULTIPURPOSE ROOM | 2 | PROPELLOR | DIRECT | 18 | 89 | 2 | 208/1/60 | 276 | BIG ASS FAN POWERFOIL PPX3-16, RITE-HITE REVOLUTION, MACROAIR AIRVOLUTION-D550 OR APPROVED EQUAL |


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-A
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

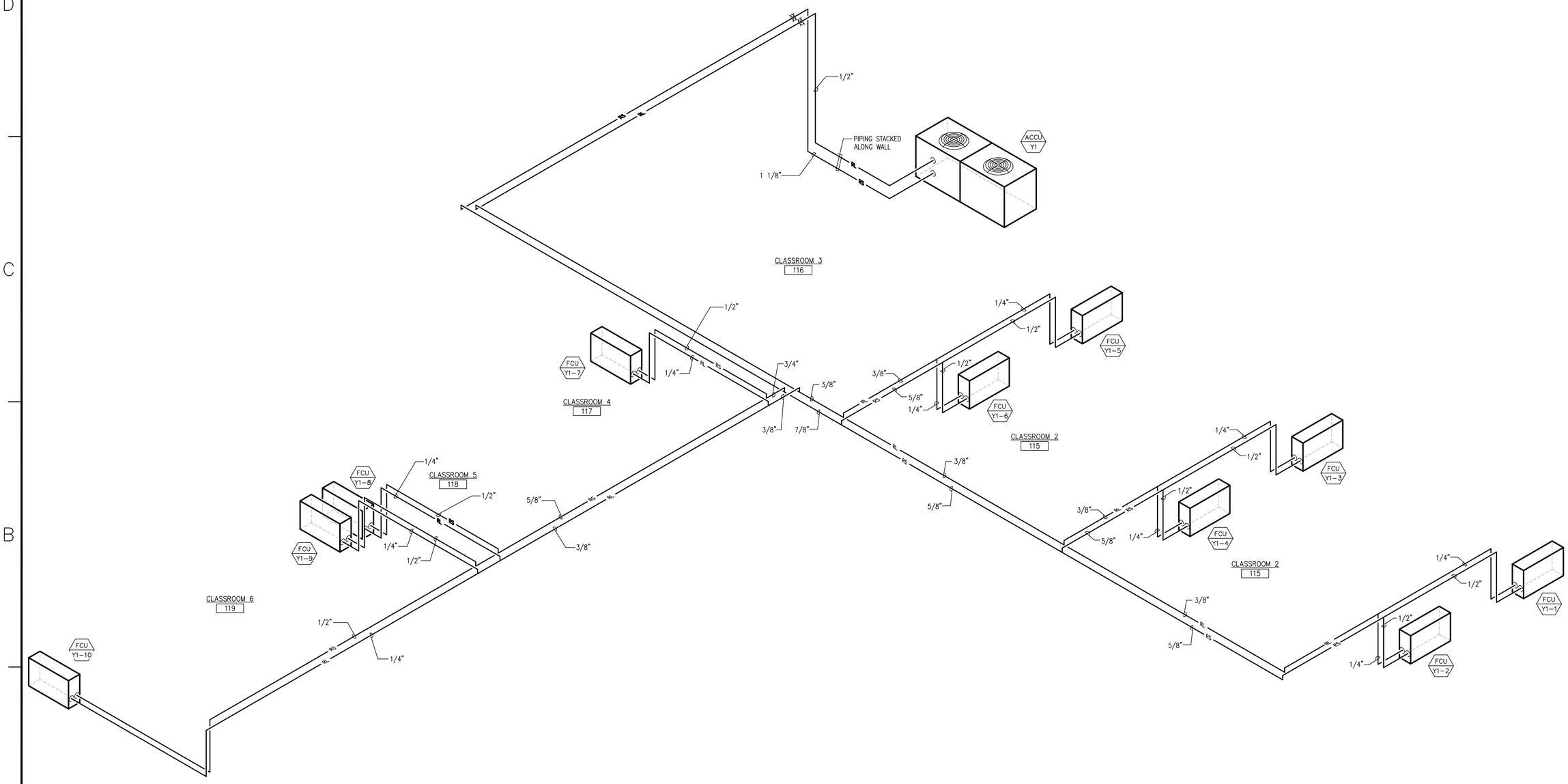
| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITAL DATE 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2
EQUIPMENT SCHEDULES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 97 OF 131
M-604

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Survey\YCA BLD2_PHOMASK_EQUIPMENT SCHEDULES.dwg, 6/28/2016 3:51:26 PM, Adobe PDF




# REFRIGERANT PIPING DIAGRAM

SCALE: NONE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

REFRIGERANT PIPING DIAGRAM

SCALE: AS NOTED

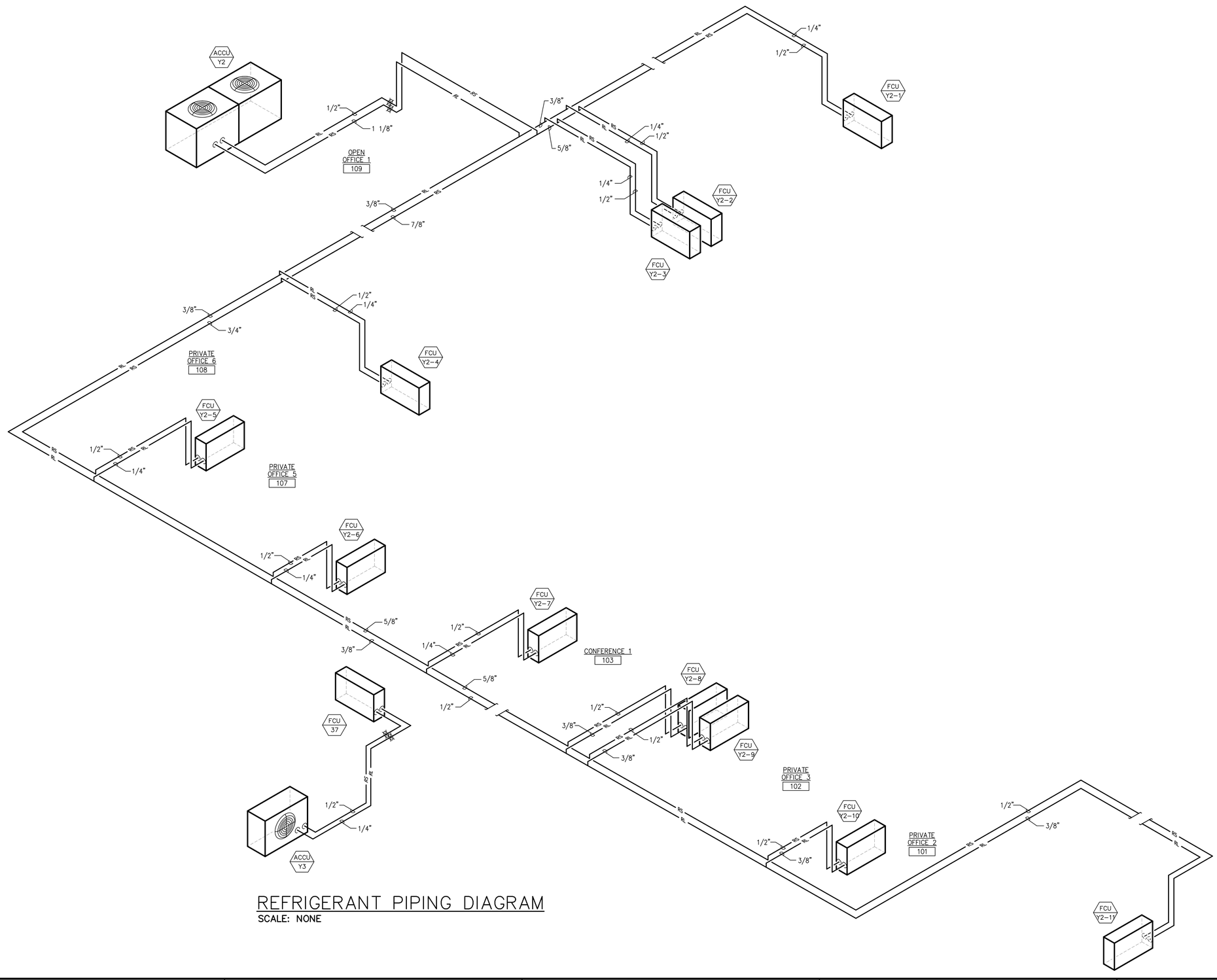
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. -

SHEET 98 OF 131

M-901

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\submit\YCA_BLDG_PHOTOVOL_REFRIGERANT PIPING DIAGRAM.dwg, 6/28/2016 1:51:39 PM, Adobe PDF




# REFRIGERANT PIPING DIAGRAM

SCALE: NONE


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


KEVIN M. MACHIDA
LICENSED PROFESSIONAL ENGINEER
No. 8065-M
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE — EXPIRATION DATE 4/30/2018

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES KMM | DRW TEC | CHK KMM

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
REFRIGERANT PIPING DIAGRAM

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. —
SHEET 99 OF 131
M-902

G:\2012\12003 Keaukaha Military Reserv Renov Bldg 621\Drawings\Running set\YCA Bld.2_PHO2#002_REFRIGERANT PIPING DIAGRAM.dwg 6/28/2016 3:15:14 PM, Adobe PDF

# ELECTRICAL SYMBOL LIST / MOUNTING HEIGHT SCHEDULE

| MOUNTING HEIGHT FROM FLOOR TO | | (SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN) | | |
|---|---|---|---|---|
| | | SYMBOL | | |
| TOP | ℄ | EXISTING | NEW | DESCRIPTION |
| | | (1) | 1 | FLUORESCENT LUMINAIRE, CEILING MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE) |
| | | 1 | 1 | LUMINAIRE, CEILING MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE) |
| | | 1 | 1H | LUMINAIRE, WALL MOUNTED (NUMERAL IN CIRCLE CORRESPONDS TO LUMINAIRE SCHEDULE) |
| | 7'–6" | | | EMERGENCY LUMINAIRE, WALL MOUNTED |
| | 7'–6" | | H | ILLUMINATED EXIT SIGN, WALL MOUNTED, DIRECTIONAL ARROWS AS INDICATED |
| | | | | ILLUMINATED EXIT SIGN, CEILING MOUNTED, DIRECTIONAL ARROWS AS INDICATED |
| | | | | |
| | 46" | $ | $a | LIGHT SWITCH, FLUSH WALL MOUNTED, 1P20A, 120/277V, 1HP MAX. (LETTER INDICATES LUMINAIRES CONTROLLED) |
| | 46" | | $2 | DOUBLE POLE SINGLE THROW SWITCH, 20A, 120/277V |
| | 46" | | $3 | THREE WAY SWITCH, 20A, 120/277V |
| | 46" | | $LV | FAN CONTROL STATION, BY FAN MANUFACTURER |
| | | | | |
| | 46" | | | SWITCHBANK |
| | 46" | | H | OCCUPANCY SENSOR LIGHT SWITCH |
| | | | | OCCUPANCY SENSOR HEAD, CEILING MOUNTED |
| | 7'–6" | | H | OCCUPANCY SENSOR HEAD, WALL MOUNTED |
| | | | P | OCCUPANCY SENSOR SWITCHPACK/RELAY |
| | 18" | | | RECEPTACLE, DUPLEX, GROUNDING TYPE, 125V, NEMA TYPE 5–20R |
| | 18" | | | RECEPTACLE, DUPLEX, GFCI TYPE, 125V, NEMA TYPE 5–20R |
| | | | | RECEPTACLE, SINGLE, GROUNDING TYPE, 125V, NEMA TYPE 5–20R |
| | 18" | | | RECEPTACLE, SINGLE, SPECIAL PURPOSE, 250V–1ø, NEMA CONFIGURATION AS NOTED |
| | | | J H | JUNCTION BOX, LARGE, WALL MOUNTED |
| | | | J | JUNCTION BOX, LARGE, HORIZONTALLY MOUNTED |
| | | (J) | J | JUNCTION BOX, HORIZONTALLY MOUNTED |
| | | (J) H | J H | JUNCTION BOX, WALL MOUNTED |
| 5'–0" | | | T H | TIME SWITCH |
| 5'–0" | | | C H | CONTACTOR |
| | | | T | TRANSFORMER, PAD OR FLOOR MOUNTED |
| | | | | |
| | | | | EQUIPMENT TERMINATION WITH FLEXIBLE CONDUIT WHIP |
| 5'–0" | | | | NON–FUSED DISCONNECT SWITCH, 3P30A UNLESS OTHERWISE NOTED, VOLTAGE TO MATCH CIRCUITING |
| 5'–0" | | | | ENCLOSED CIRCUIT BREAKER |
| 6'–0" | | | | PANELBOARD |
| | | | | ELECTRICAL EQUIPMENT |
| | | | | |
| | | | A–1,3 | HOMERUN ARROW TO PANELBOARD. LETTER INDICATES PANELBOARD, NUMBERS INDICATES CIRCUITS, HASHMARKS INDICATE QUANTITY OF CURRENT–CARRYING CONDUCTORS WITHIN |
| | | e | | CONCRETE ENCASED UNDERGROUND DUCT LINE, SEE DUCT DETAILS ON ES102 |
| | | | | |
| | | | | |
| | | | | |

| MOUNTING HEIGHT FROM FLOOR TO | | (SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN) | | |
|---|---|---|---|---|
| | | SYMBOL | | |
| TOP | ℄ | EXISTING | NEW | DESCRIPTION |
| | | e | | CONCEALED CONDUIT IN CEILING OR WALLS, HASHMARKS INDICATE QUANTITY OF CURRENT–CARRYING CONDUCTORS WITHIN |
| | | e | | EXPOSED RACEWAY, PROVIDE STRAP 10'–0" ON CENTER MAXIMUM, HASHARKS INDICATE QUANTITY OF CURRENT–CARRYING CONDUCTORS WITHIN |
| | | | E | CONDUIT STUB, 3/4" MINIMUM CONDUIT UNLESS OTHERWISE NOTED |
| | | | | SAWCUT ROADWAY/SIDEWALK. REPAIR TO MATCH EXISTING |
| | | | | |
| | | | W | SURFACE METAL RACEWAY |
| | | | +42" | DENOTES 42" ABOVE FINISHED FLOOR OR GRADE |
| | | | A.F.F. | ABOVE FINISHED FLOOR |
| | | | CL | CURFEW LIGHT |
| | | | EHH | ELECTRICAL HANDHOLE |
| | | | GFCI | GROUND FAULT CIRCUIT INTERRUPTER |
| | | | GND | GROUND |
| | | | HELCo | HAWAII ELECTRIC LIGHT COMPANY |
| | | | HP | HORSEPOWER |
| | | | HT | HAWAIIAN TELCOM |
| | | | KVA | KILOVOLT–AMPERE |
| | | | KW | KILOWATT |
| | | | NL | NIGHT LIGHT CIRCUIT |
| | | | WP | WEATHERPROOF |
| | | | | DENOTES DEMOLITION/REMOVAL |
| | | | 1 | NOTE INDICATOR |
| | | | 1 / E–2 | DETAIL INDICATOR: TOP HALF DENOTES DETAIL NUMBER, BOTTOM HALF DENOTES SHEET NUMBER |
| | | | | POWER TRANSFORMER |
| | | | | GROUND |
| | | | | CIRCUIT BREAKER |
| | | | | NON–FUSED DISCONNECT SWITCH |
| | | | | TRANSFER SWITCH |
| | | | | CURRENT TRANSFORMER |
| | | | M | METER SOCKET |
| | | | | POLE LIGHT ASSEMBLY |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Youth Hawaii ChalleNGe National Guard Academy


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017–E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — SIGNATURE — 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
ELECTRICAL SYMBOL LIST

SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO.
SHEET 100 OF 131
E-001


6/28/16–14:58 Y:\014\014.126\PHASE 2 – 2015\014.126 E–001.001_HARNG.dwg

## GENERAL ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE, AND ALL LOCAL RULES AND REGULATIONS.
2. THE CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION, RECONNECTION AND/OR NEW WORK PRIOR TO BIDDING. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND RESOLVED ALL DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO DO SO.
3. EXISTING DEVICE LOCATIONS, CIRCUIT ASSIGNMENTS, WIRING CONNECTIONS AND CONDUIT RUNS INDICATED WERE DERIVED FROM AVAILABLE REFERENCE DOCUMENTS AND LIMITED FIELD INVESTIGATION. FIELD VERIFY ALL EXISTING CONDITIONS AND MAKE ANY NECESSARY ADJUSTMENTS TO SATISFY THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
4. ALL CIRCUITS SHALL INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR, SIZED PER THE NATIONAL ELECTRICAL CODE. THIS CONDUCTOR SHALL BE CARRIED IN ALL RACEWAYS AND SHALL BE ATTACHED TO THE DEVICE OR EQUIPMENT HOUSING USING A SUITABLE GROUNDING LUG.
5. WORK INCIDENTAL TO THE CONTRACT AND NECESSARY TO COMPLETE THE PROJECT, ALTHOUGH NOT SPECIFICALLY REFERRED TO ON THE CONTRACT DOCUMENTS, SHALL BE FURNISHED AND PERFORMED BY THE CONTRACTOR.
6. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
7. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, THE CONTRACTOR SHALL MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL SUBMIT DRAWINGS TO REFLECT THE PROPOSED ALTERNATE METHODS TO THE PROJECT MANAGER. THE CONTRACTOR SHALL NOT PROCEED UNTIL APPROVAL IS OBTAINED. REARRANGEMENT OF WORK FOR THE PURPOSE OF COORDINATION SHALL NOT BE CONSIDERED AN ITEM FOR EXTRA COST.
8. MAINTAIN CONTINUITY OF ALL EXISTING CIRCUITS TO AREAS AND SYSTEMS OUTSIDE OF THE PROJECT LIMITS AND THAT PASS THROUGH THE PROJECT LIMITS. PROVIDE NEW JUNCTION BOXES, CONDUITS AND WIRING, AND THE LABOR REQUIRED TO FACILITATE SAID CONTINUITY. BOXES, CONDUITS AND WIRING SHALL BE IN ACCORDANCE WITH THE NEC.
9. EXISTING CONDITIONS: ALL EXISTING DUCTLINES INDICATED ON THE DRAWINGS ARE APPROXIMATE LOCATIONS BASED UPON AVAILABLE "AS-BUILT" DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR TONING THE ROUTES OF THE PROPOSED DUCTLINES TO IDENTIFY ANY POTENTIAL CONFLICTS PRIOR TO EXCAVATION. DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR AS A RESULT OF THE FAILURE TO TONE THE ROUTE PRIOR TO EXCAVATION WORK, WILL REQUIRE THE CONTRACTOR TO REPAIR THE DAMAGE AT NO COST TO THE STATE, TO THE SATISFACTION OF THE PROJECT MANAGER.
10. DO NOT USE A COMMON NEUTRAL FOR MULTIPLE BRANCH CIRCUITS INSTALLED IN A COMMON CONDUIT. PROVIDE A DEDICATED NEUTRAL FOR EACH INDIVIDUAL CIRCUIT. WHERE MULTIPLE DEDICATED NEUTRALS ARE INSTALLED IN A COMMON CONDUIT, PROVIDE COLOR CODING OF EACH NEUTRAL CONDUCTOR IN ACCORDANCE WITH NEC 2008.

## ATFP NOTE:

MOUNT ALL OVERHEAD UTILITIES AND OTHER FIXTURES WEIGHING 14 KILOGRAMS (31 POUNDS) OR MORE (EXCLUDING DISTRIBUTED SYSTEMS SUCH AS PIPING NETWORKS THAT COLLECTIVELY EXCEED THAT WEIGHT) TO MINIMIZE THE LIKELIHOOD THAT THEY WILL FALL AND INJURE BUILDING OCCUPANTS. DESIGN ALL EQUIPMENT MOUNTINGS TO RESIST FORCES OF 0.5 TIMES THE EQUIPMENT WEIGHT IN THE DOWNWARD DIRECTION. THIS STANDARD DOES NOT PRECLUDE THE NEED TO DESIGN EQUIPMENT MOUNTINGS FOR FORCES REQUIRED BY OTHER CRITERIA SUCH AS SEISMIC STANDARDS.

**HAWAII COUNTY CODE - CHAPTER 5 - BUILDING**

**2006 IECC & ORDINANCE 09-48 & 10-68**

**BUILDING ENERGY EFFICIENCY STANDARDS**

THE DESIGN IS IN CONFORMANCE WITH THE BUILDING ENERGY EFFICIENCY STANDARDS PERTAINING TO:

SECTION 506 ELECTRICAL POWER AND LIGHTING SYSTEMS

Signature: _____ Date: 06-30-16

Name: MICHELE N. ADOLPHO

Title: PROJECT ENGINEER

License No. 10017-E

## LUMINAIRE SCHEDULE

| TYPE | DESCRIPTION | LAMPS |
|---|---|---|
| 1 | NOT USED | |
| 2 | FLUORESCENT, SURFACE MOUNTED, 2 LAMP, 4' WRAPAROUND, POSITIVE LATCH DOOR, 120V, STEM MOUNTED AS NOTED<br>COLUMBIA # MWN4-232-EP, LITHONIA OR METALUX EQUAL | 2-F32T8<br>3500K |
| 3 | NOT USED | |
| 4 | LOW PRESSURE SODIUM, WALL MOUNTED AT +9'-0", SEMI-SHIELDED, WET LABEL, 120V HPF BALLAST, BRONZE FINISH, POLYCARBONATE LENS, SURFACE CONDUIT ENTRY BOX<br>ECLIPSE #748-LPS18, AMERICAN ELECTRIC OR EQUAL | 1-18W<br>LPS |
| 5 | FLUORESCENT, WALL MOUNTED AT +6'-9", POLYCARBONATE DIFFUSER, 1 LAMP, 120V BALLAST, WHITE FINISH<br>COLUMBIA # VRN4-132-E120, KENELL OR LITHONIA EQUAL | 1-F32T8<br>3500K |
| 6 | FLUORESCENT, HORIZONTALLY MOUNTED ON BEAM, POLYCARBONATE DIFFUSER, 120V BALLAST, SURFACE CONDUIT ENTRY HUBS, BRONZE FINISH, ALUMINUM HOUSING, DAMP LABEL<br>LUMINAIRE LIGHTING #DWL512-1PL26-CP-BRZ-DAMP, LITHONIA, KENALL, OR EQUAL | 1-PL26<br>3500K |
| 7 | NOT USED | |
| 8 | FLUORESCENT, SURFACE MOUNTED, 1 LAMP, 4' WRAPAROUND, POSITIVE LATCH DOOR, 120V, STEM MOUNTED AS NOTED, POLYCARBONATE LENS<br>COLUMBIA #VRN4-132-E120, KENELL OR LITHONIA EQUAL | 1-F32T8<br>3500K |
| 9 | FLUORESCENT, SURFACE MOUNTED, POLYCARBONATE DIFFUSER, DAMP LABEL, CONDUIT ENTRY HOUSING, 120V BALLAST, 12" SQUARE<br>LUMINAIRE LIGHTING #SWP1212-CAB, LITHONIA, KENELL, OR EQUAL | 1-PL26<br>3500K |
| 10 | | |
| 11 | FLUORESCENT, STEM MOUNTED AT +8'-0", 3 LAMP, WRAPAROUND ACRYLIC LENS, POSTIVE LATCH DOOR, 120V, PAINT AFTER FABRICATION<br>COLUMBIA #MWN4-332-EP, LITHONIA OR METALUX EQUAL | 3-F32T8<br>3500K |
| 12 | FLUORESCENT, SURFACE MOUNTED, 2 LAMP, 4' VAPORTIGHT FIBERGLASS HOUSING, ACRYLIC LENS, 120V, DAMP LABEL<br>COLUMBIA # LUN4-232-EP-120, LITHONIA OR METALUX EQUAL | 2-F32T8<br>3500K |
| 13 | NOT USED | |
| | EMERGENCY LIGHT, WALL MOUNTED AT +9'-0", 2 HEAD, 120/277V, SEALED MAINTENANCE-FREE BATTERIES, 90 MINUTE BATTERIES, BUILT-IN READY LIGHT AND TEST SWITCH, DAMP LABEL<br>LITHONIA, DUALITE, SURELITE OR EQUAL | 2-15W<br>MIN |
| | EXIT LIGHT, WALL MOUNTED AT 7'-6", 120/277V, SEALED MAINTENANCE-FREE BATTERIES, LOW VOLTAGE DISCONNECT, TEST BUTTON AND READY LIGHT, RED LETTERS ON BLACK STENCIL FACE, ALUMINUM FACEPLATE, DAMP LABEL<br>LITHONIA, DUALITE, SURELITE OR EQUAL | LED<br>5W |
| | EXIT LIGHT, SIMILAR TO ABOVE BUT WITH ADDITIONAL 2 EMERGENCY LIGHTING HEAD | LED<br>+2-25W |


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — SIGNATURE — 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
LUMINAIRE SCHEDULE

SCALE: AS NOTED

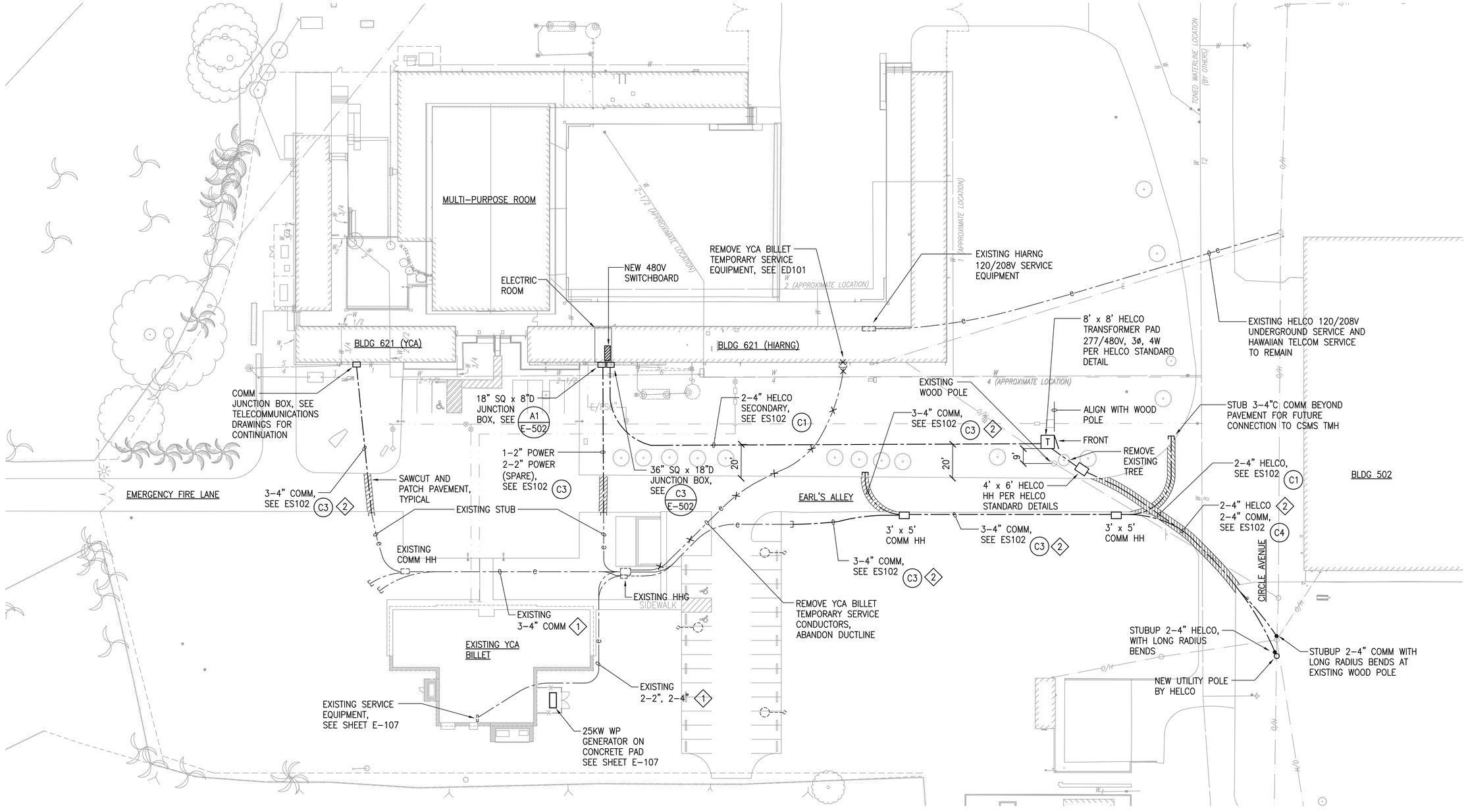
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 101 OF 131

E-002

6/28/16-15:00 Y:\014\014.126\PHASE 2 - 2015\014.126 E-002.SCH01.dwg




## ELECTRICAL SITE PLAN A1

SCALE: 1" = 30'

PLAN NORTH

**NOTES:**

1. ADD INNERDUCTS AND CABLING TO ONE (1) EXISTING 4" COMM CONDUIT. SEE TELECOMMUNICATIONS DRAWINGS FOR ADDITIONAL REQUIREMENTS.
2. ADD INNERDUCTS AND CABLING TO ONE (1) 4" COMM CONDUIT. SEE TELECOMMUNICATIONS DRAWINGS FOR ADDITIONAL REQUIREMENTS.

0 15 30 60 90FT
SCALE: 1" = 30'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

STATE OF HAWAI'I
DEPARTMENT OF DEFENSE
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

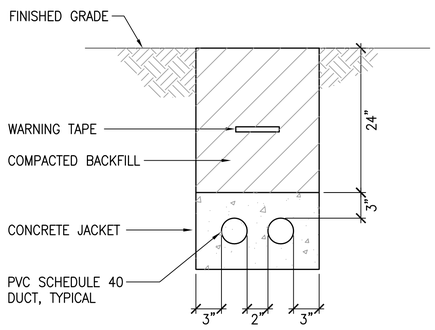
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

ELECTRICAL SITE PLAN

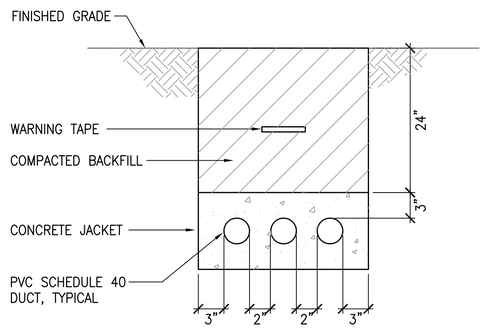
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 102 OF 131

ES101

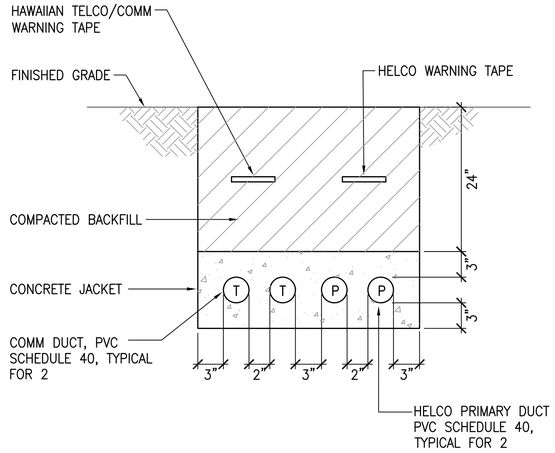
6/28/16-15:11 Y:\014\014.126\PHASE 2 - 2015\014.126 ES101.SD1.dwg




TYPICAL 2 WAY DUCT — C1
NOT TO SCALE — ES101




TYPICAL 3 WAY DUCT — C3
NOT TO SCALE — ES101




DUCT SECTION — C4
NOT TO SCALE — ES101


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE — 4/30/2018 EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
DUCT SECTION DETAILS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 103 OF 131
ES102

6/28/16-15:11 Y:\014\014.126\PHASE 2 - 2015\014.126 ES102.001.dwg

REMOVE ALL OUTLETS, CONDUITS, PANELS, SWITCHES, IN THIS AREA EXCEPT AS NOTED

HIARNG (NIC)

EXISTING PANEL "B"

OFFICE

COVERED PATIO

MULTI-PURPOSE

EXISTING PANEL "F"

OFFICE

EXISTING PANEL "A"

JUNCTION BOX TO REMAIN

REMOVE CONDUCTORS, ABANDON CONDUIT

EXISTING HELCO SECONDARY DUCTLINE TO REMAIN

EXISTING 120/208V SERVICE EQUIPMENT TO REMAIN

TO WOOD POLE

EXISTING PANEL "E"

CONFERENCE

OFFICE

EXISTING SURFACE MOUNTED CONDUITS

EXISTING PANEL "EE"

REMOVE HANDHOLE

REMOVE FEEDER CABLES FROM DUCTLINE

REMOVE YCA BILLET CHECK METER, BREAKER AND DRY TRANSFORMER

TO YCA BILLET

EXISTING HELCO METER #97841 TRANSFER SWITCH AND GENERATOR RECEPTACLE

REMOVE HANDHOLE

HIARNG (NIC)

## OVERALL ELECTRICAL DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

OVERALL ELECTRICAL DEMOLITION PLAN

SCALE: AS NOTED

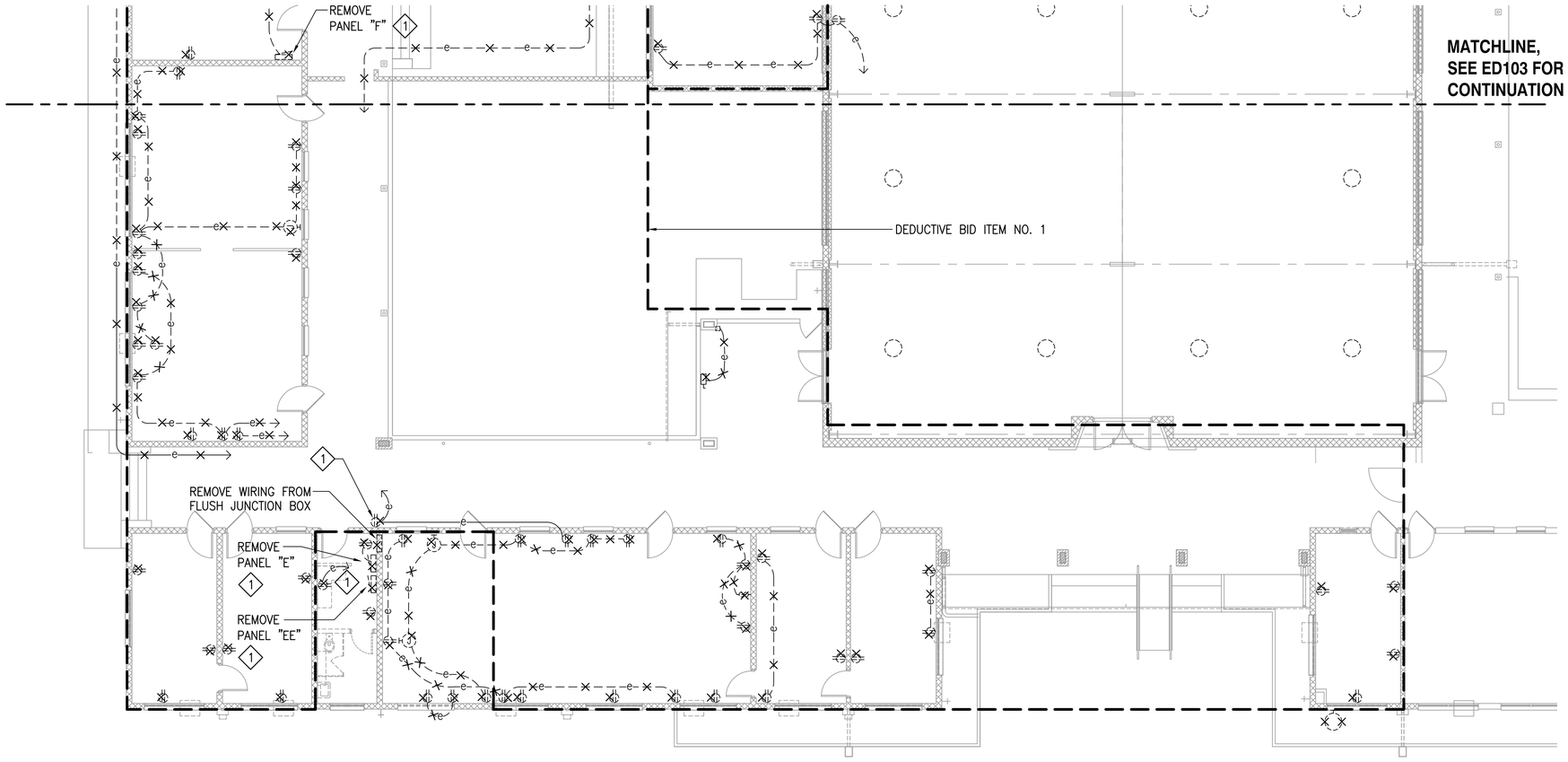
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 104 OF 131

ED101


6/28/16-15:01 Y:\0141\014.126\PHASE 2 - 2015\014.126 ED101.PDM01.dwg



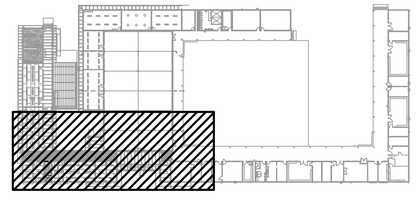

## POWER DEMOLITION PLAN - 1

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

PLAN NORTH

**NOTE:**

1. TO REMAIN IF DEDUCTIVE BID ITEM 1 IS IMPLEMENTED.
2. REMOVE EXISTING CONDUCTORS FROM CONCEALED CONDUIT AND ABANDON CONDUIT IN PLACE. REMOVE EXISTING RECEPTACLES DENOTED FOR REMOVAL AND ASSOCIATED BACKBOX. PROVIDE BLANK COVERPLATE OVER EXISTING FLUSHED OUTLET BOXES.



**KEY PLAN**

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT

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


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

POWER DEMOLITION PLAN - 1

SCALE: AS NOTED

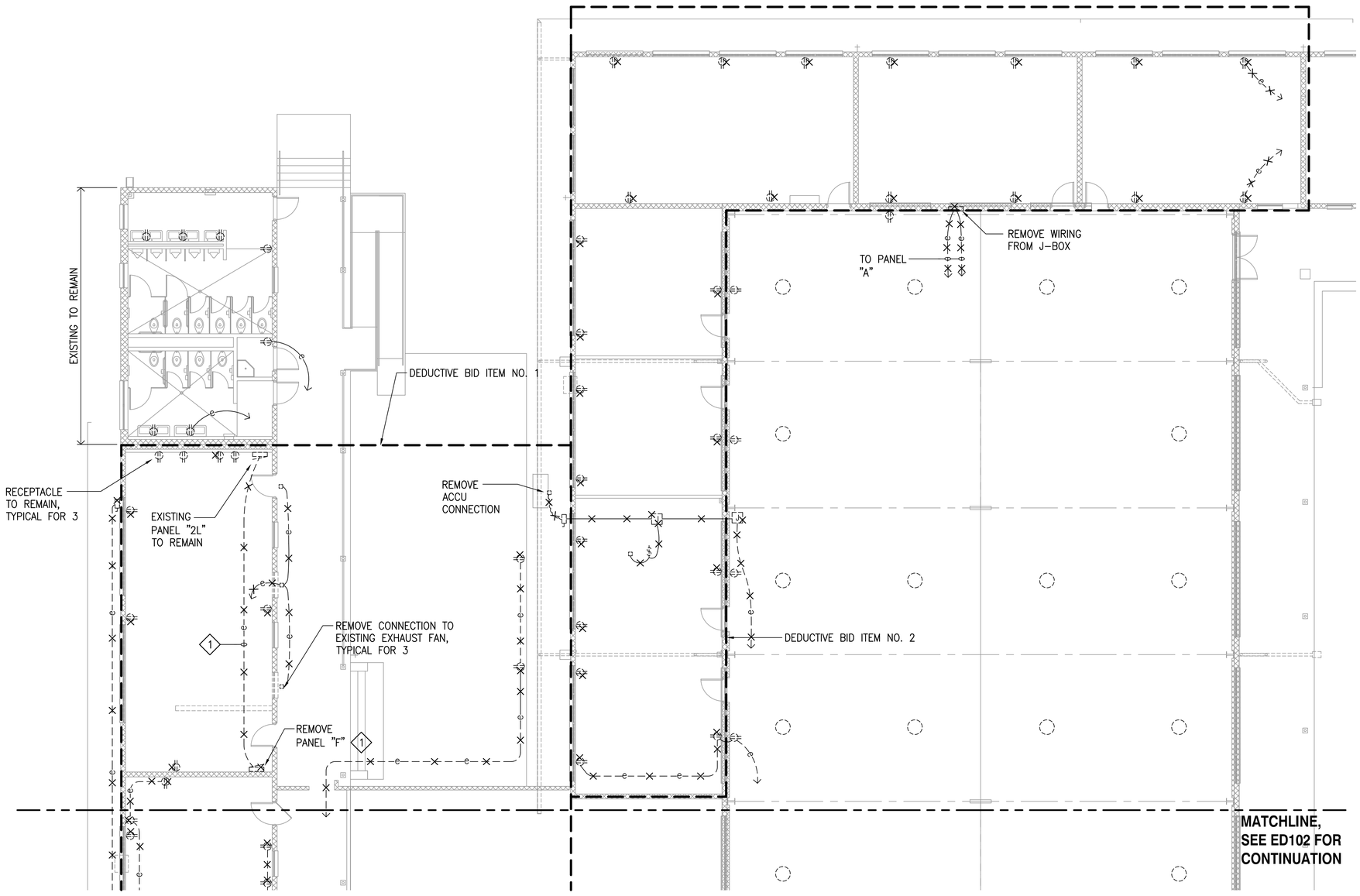
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 105 OF 131

ED102

6/28/16-15:02 Y:\0114\0114.126\PHASE 2 - 2015\0114.126 ED102-ED105.PDM02.dwg



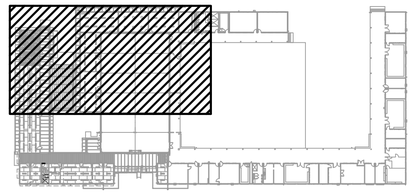

## POWER DEMOLITION PLAN - 2

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

PLAN NORTH

**NOTE:**

1. TO REMAIN IF DEDUCTIVE BID ITEM 1 IS IMPLEMENTED.
2. REMOVE EXISTING CONDUCTORS FROM CONCEALED CONDUIT AND ABANDON CONDUIT IN PLACE. REMOVE EXISTING RECEPTACLES DENOTED FOR REMOVAL AND ASSOCIATED BACKBOX. PROVIDE BLANK COVERPLATE OVER EXISTING FLUSHED OUTLET BOXES.



**KEY PLAN**

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT

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

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

POWER DEMOLITION PLAN – 2

SCALE: AS NOTED

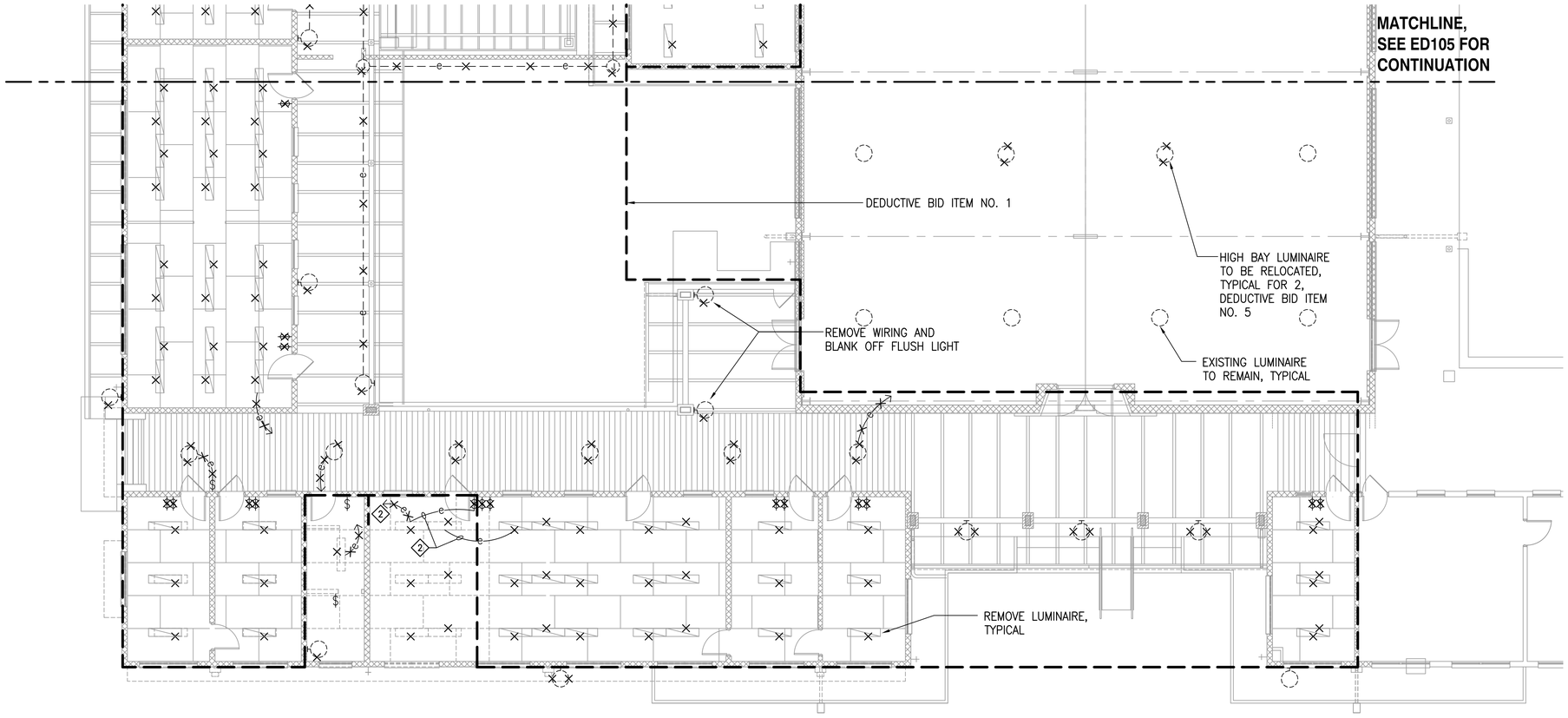
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 106 OF 131

ED103

6/28/16-15:02 Y:\014\014.126\PHASE 2 - 2015\014.126 ED102-ED105.PDM02.dwg




## LIGHTING DEMOLITION PLAN - 1

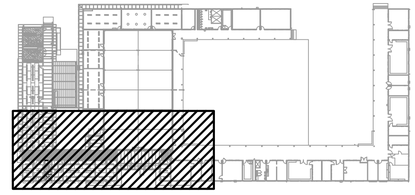
SCALE: 1/8" = 1'-0"

PLAN NORTH

**NOTE:**

1. REMOVE CONDUCTORS FROM EXISTING CONCEALED CONDUIT AND ABANDON CONDUIT IN PLACE.

(2) TO REMAIN IF DEDUCTIVE BID ITEM 1 IS IMPLEMENTED.



**KEY PLAN**
NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SHEET OF

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

DES GK | DRW MC | CHK GK

STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
DEPARTMENT OF DEFENSE

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

LIGHTING DEMOLITION PLAN - 1

SCALE: AS NOTED

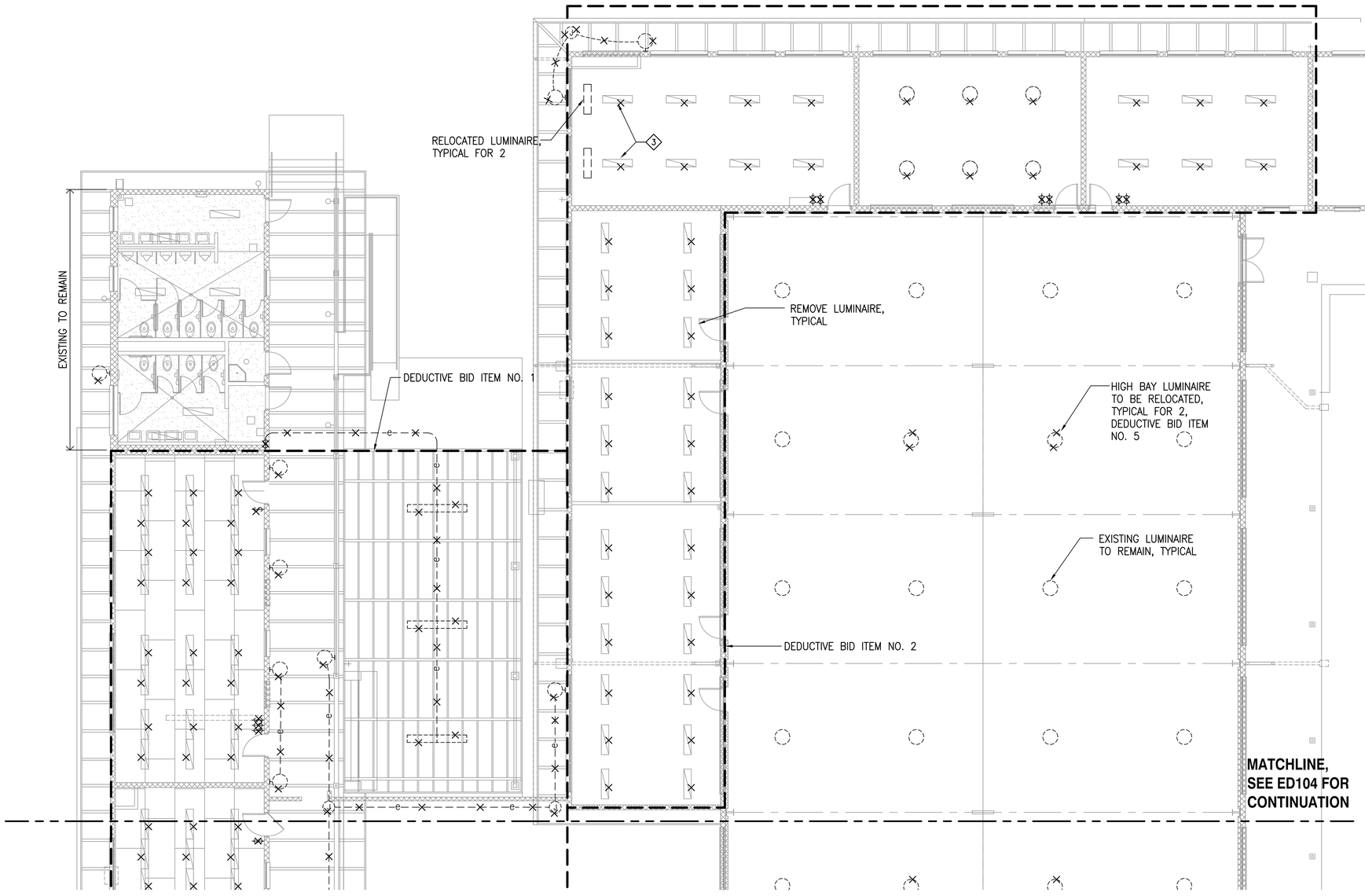
STATE JOB NO.
CA-1212-C2

FEDERAL PROJECT NO.

SHEET 107 OF 131

ED104

6/28/16-15:03 Y:\0114\0114.126\PHASE 2 - 2015\0114.126 ED102-ED105.PDM02.dwg




## LIGHTING DEMOLITION PLAN - 2

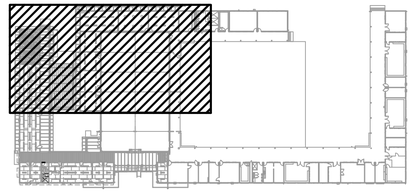
SCALE: 1/8" = 1'-0"

PLAN NORTH

**NOTE:**

1. REMOVE CONDUCTORS FROM EXISTING CONCEALED CONDUIT AND ABANDON CONDUIT IN PLACE.
2. REMOVE ALL EXPOSED CONDUIT AND CONDUCTORS UNLESS OTHERWISE NOTED.

◇3 RELOCATE LUMINAIRE TO CLEAR NEW AIR CONDITIONING DUCT IF DEDUCTIVE BID ITEM NO. 2 IS IMPLEMENTED. MAINTAIN EXISTING CIRCUITING AND SWITCHING CONFIGURATION.



**KEY PLAN**

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT

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


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO LICENSED PROFESSIONAL ENGINEER No. 10017-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
LIGHTING DEMOLITION PLAN – 2

SCALE: AS NOTED

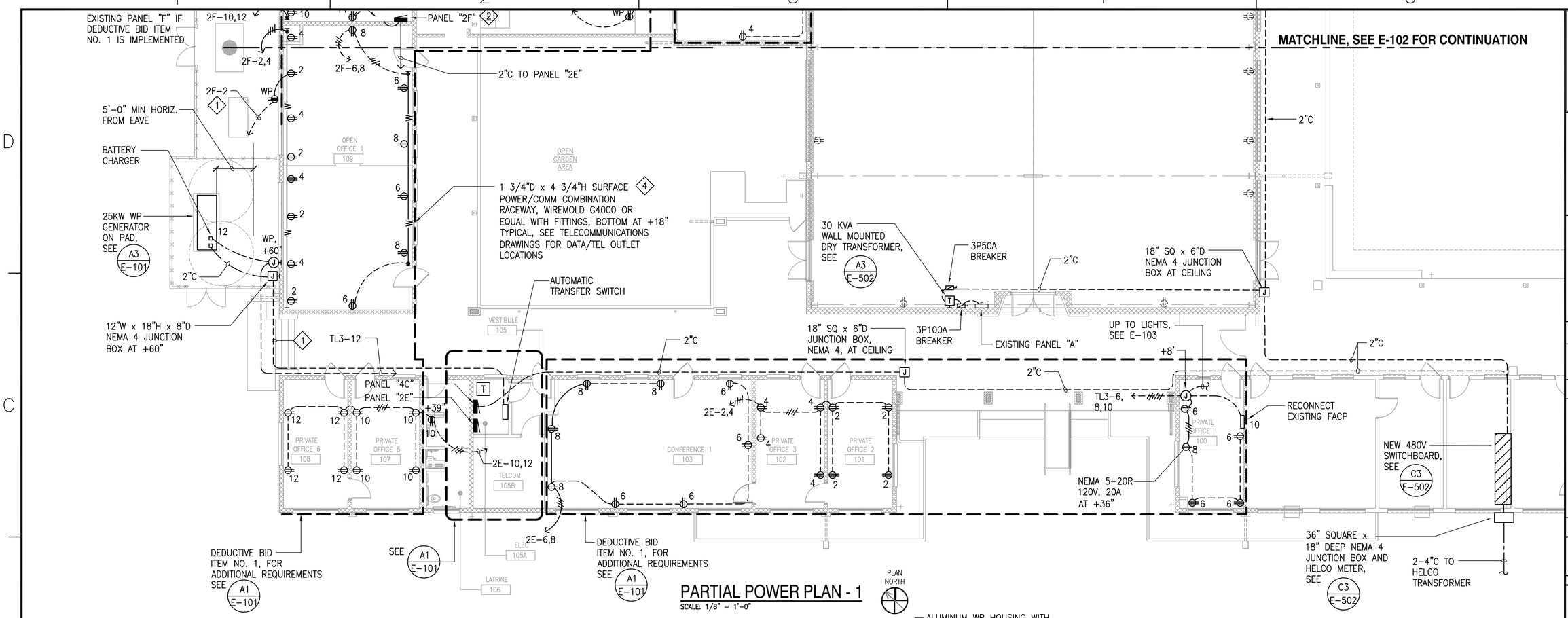
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 108 OF 131

ED105

6/28/16-15:03 Y:\014\014.126\PHASE 2 - 2015\014.126 ED102-ED105.PDM02.dwg

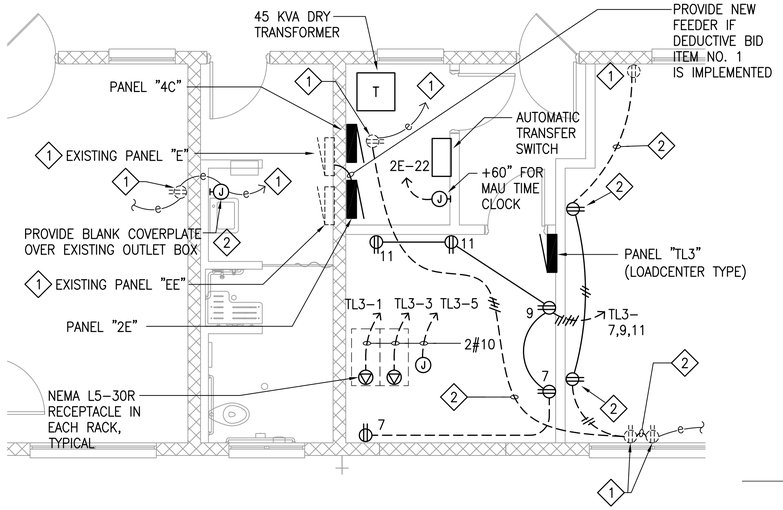



MATCHLINE, SEE E-102 FOR CONTINUATION

## PARTIAL POWER PLAN - 1

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

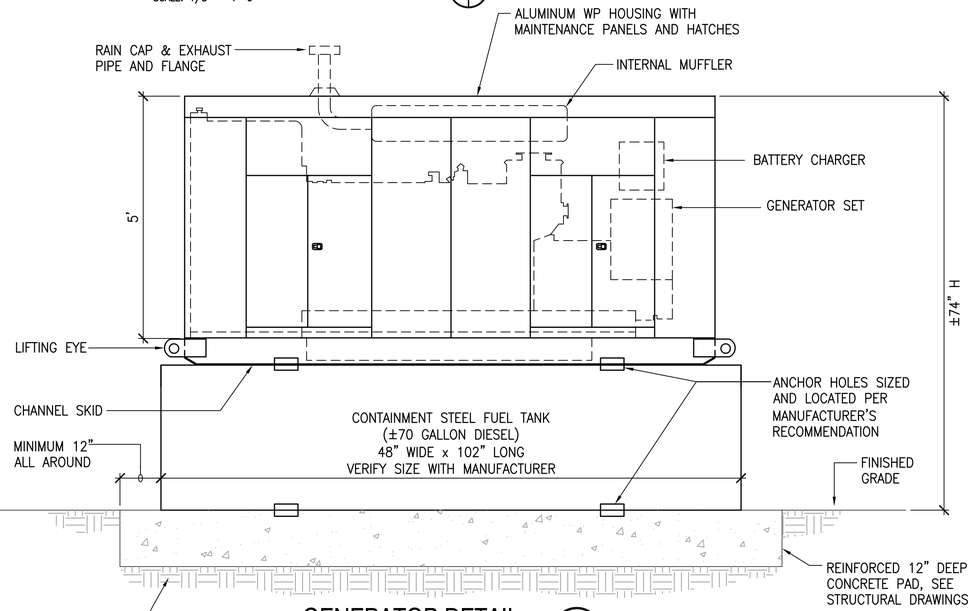
PLAN NORTH




## PARTIAL ELECTRICAL PLAN A1

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

PLAN NORTH

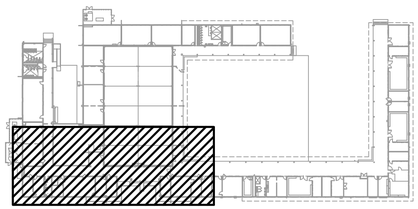



## GENERATOR DETAIL A3

NOT TO SCALE

### NOTES:

1. TO REMAIN IF DEDUCTIVE BID ITEM 1 IS IMPLEMENTED.
2. PROVIDE IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.
3. EXTEND BRANCH CIRCUIT CONDUIT AND CONDUCTORS TO NEW RECEPTACLES IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.
4. DELETE DUPLEX RECEPTACLES AND BRANCH CIRCUITING IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.



## KEY PLAN

NOT TO SCALE

PLAN NORTH

0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

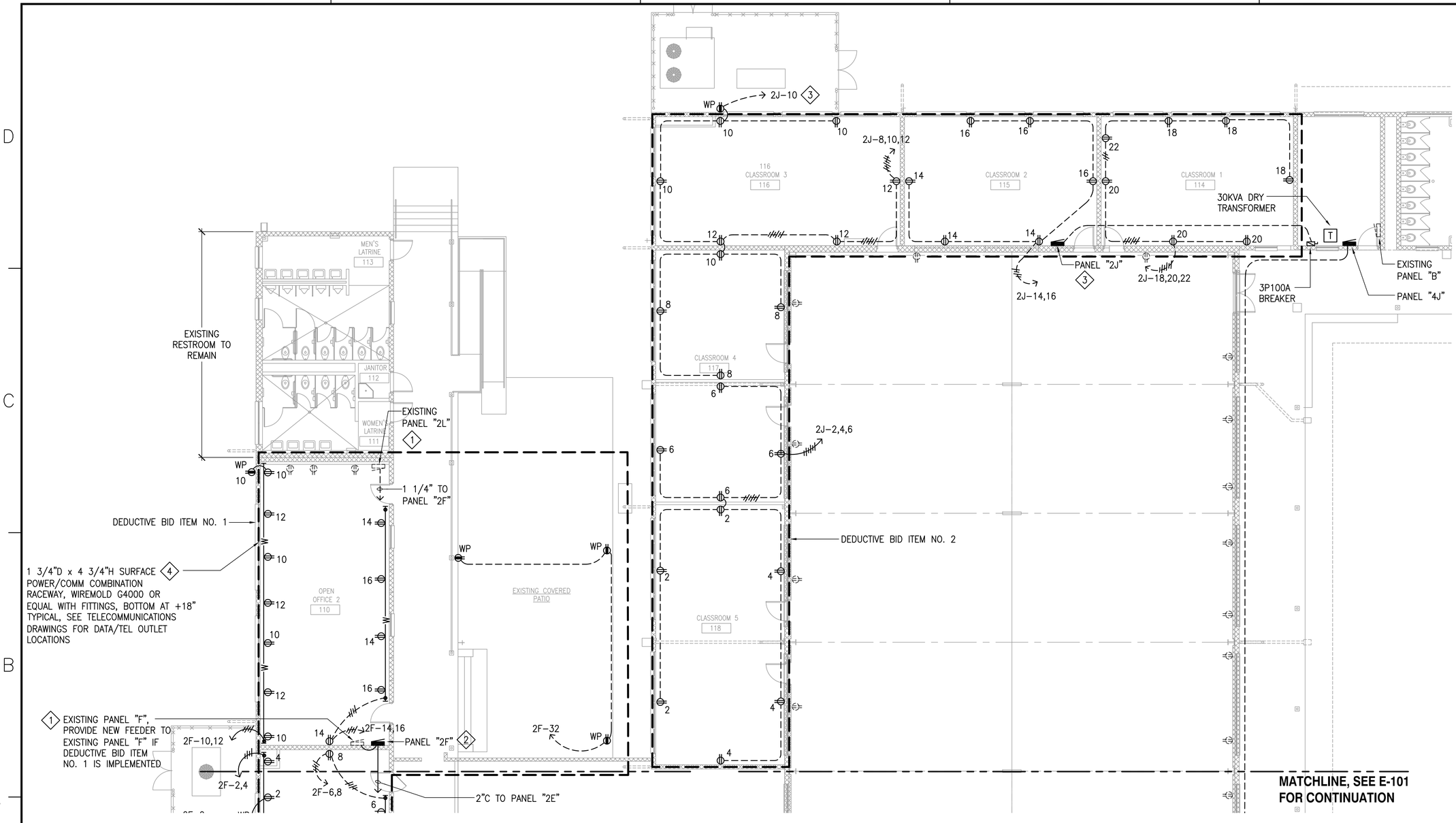
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL POWER PLAN - 1

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 109 OF 131
E-101

6/28/16-15:04 Y:\014\014.126\PHASE 2 - 2015\014.126 E-101_E-102.P01.dwg



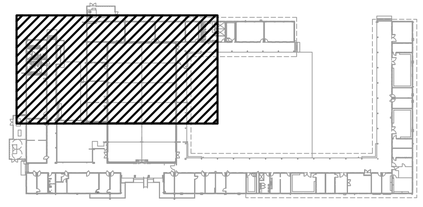

## PARTIAL POWER PLAN - 2

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

PLAN NORTH

**NOTES:**

1. TO REMAIN IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.
2. PROVIDE IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.
3. PROVIDE IF DEDUCTIVE BID ITEM NO. 2 IS IMPLEMENTED.
4. DELETE DUPLEX RECEPTACLES AND BRANCH CIRCUITING IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED.



## KEY PLAN

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO LICENSED PROFESSIONAL ENGINEER No. 10017-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

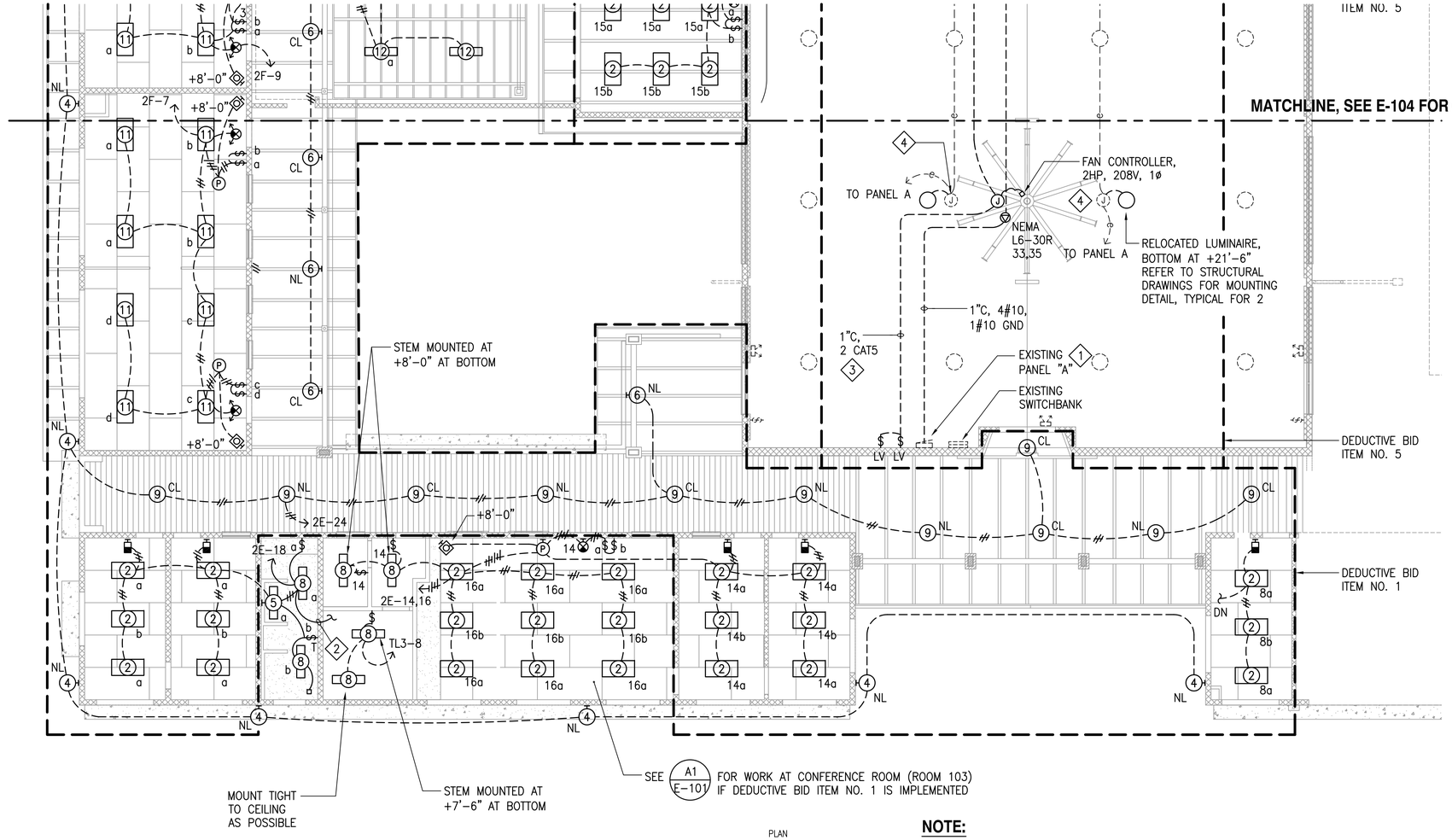
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL POWER PLAN - 2

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 110 OF 131
E-102

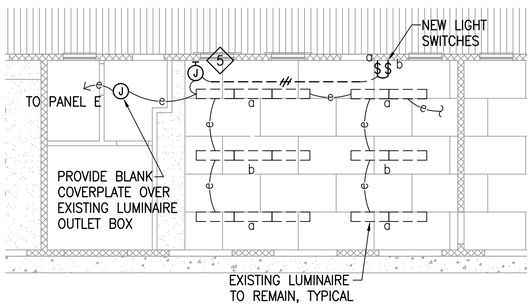
6/28/16-15:05 Y:\014\014.126\PHASE 2 - 2015\014.126 E-101_E-102.P01.dwg




## PARTIAL LIGHTING PLAN - 1

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

PLAN NORTH



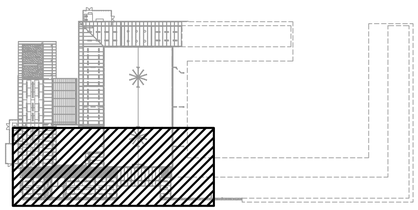

## CONFERENCE (ROOM 103) LIGHTING PLAN - DEDUCTIVE BID ITEM NO. 1

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

PLAN NORTH

**NOTE:**

1. REMOVE EXISTING 1P20A BREAKERS IN PANEL A CIRCUITS 33, 34, 35, 36 AND INSTALL (2) 2P30A BREAKERS FOR CEILING FANS. PROVIDE UPDATED, TYPEWRITTEN PANEL DIRECTORY. PANEL "A" IS A CUTLER HAMMER TYPE PRL1.
2. DOWN TO EXHAUST FAN RELAY, SEE E-101 FOR CONTINUATION.
3. CONFIRM CONTROL CABLING WITH FAN MANUFACTURER.
4. EXISTING OUTLET BOX, EXTEND CONDUIT AND WIRING TO RELOCATED LUMINAIRE.
5. PROVIDE OUTLET BOX OVER EXISTING LIGHT SWITCHES AND EXTEND CONDUIT AND WIRING TO NEW SWITCH LOCATION.



## KEY PLAN

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT

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

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
EXPIRATION DATE 4/30/2018

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

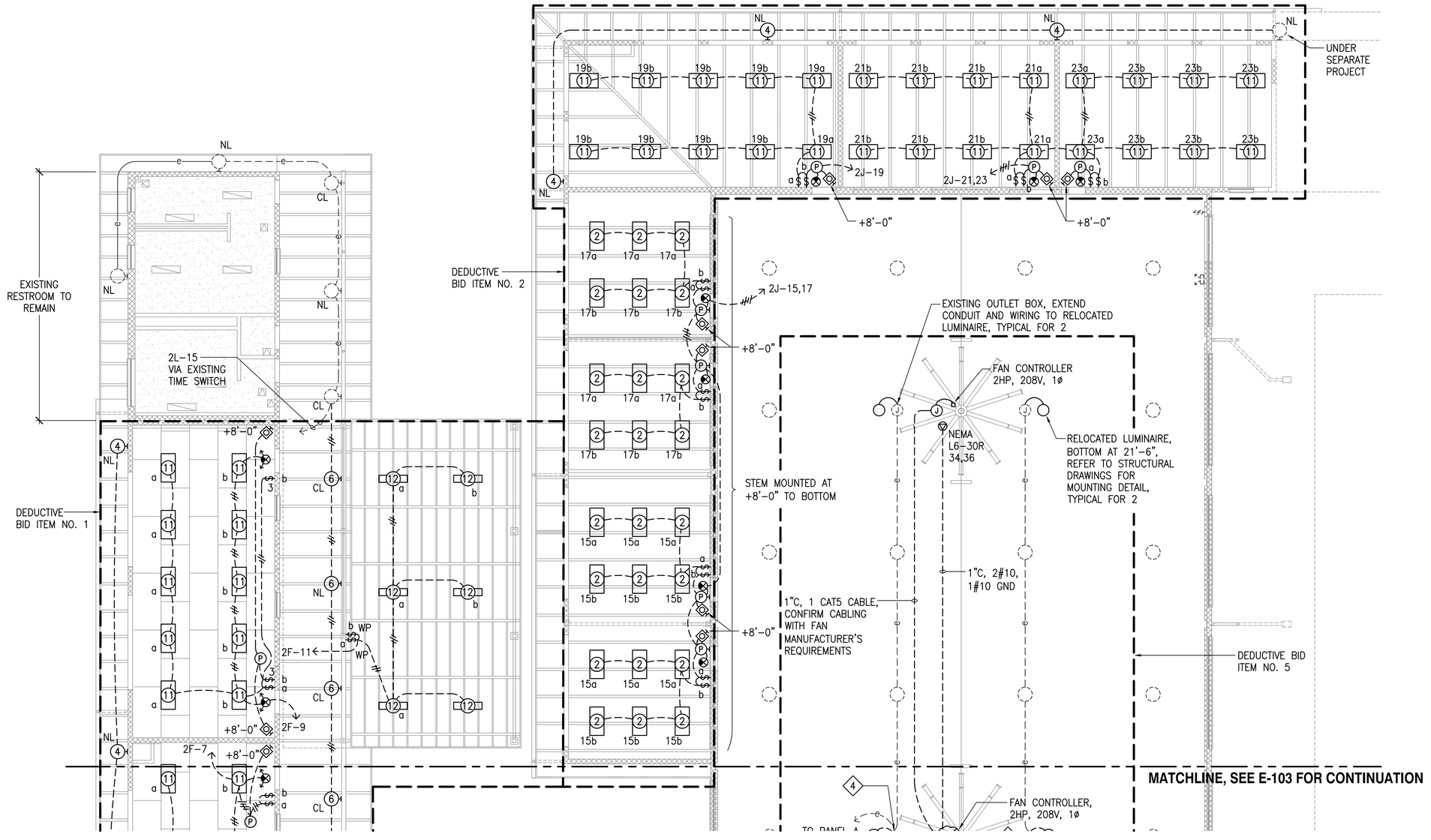
SUBMITAL PHASE: FINAL SUBMITTAL
SUBMITAL DATE: 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL LIGHTING PLAN - 1

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 111 OF 131
E-103

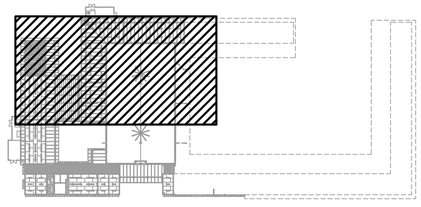
6/28/16-15:05 Y:\014\014.126\PHASE 2 - 2015\014.126 E-103_E-104_L01.dwg




## PARTIAL LIGHTING PLAN - 2

SCALE: 1/8" = 1'–0"

PLAN NORTH



**KEY PLAN**

NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT

SCALE: 1/8"=1'–0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017–E
HAWAII, U.S.A.


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE — EXPIRATION DATE: 4/30/2018

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PARTIAL LIGHTING PLAN – 2

SCALE: AS NOTED

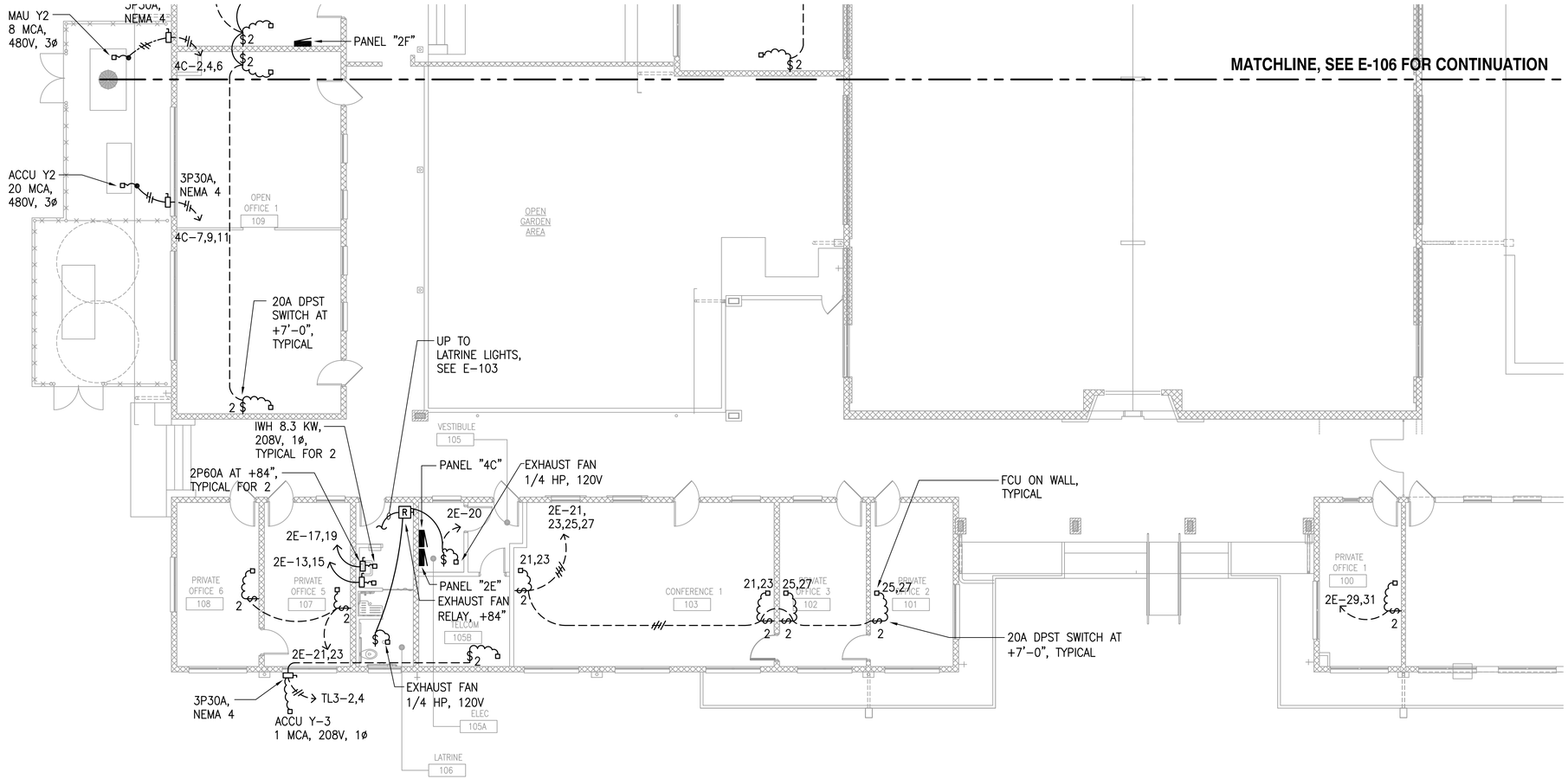
STATE JOB NO. CA–1212–C2

FEDERAL PROJECT NO.

SHEET 112 OF 131

E-104

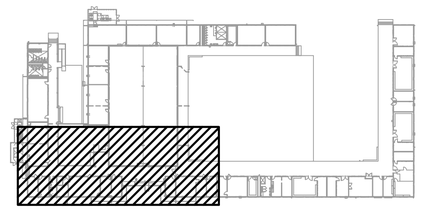
6/28/16–15:06 Y:\014\014.126\PHASE 2 – 2015\014.126 E–103_E–104.01.dwg




## HVAC POWER PLAN - 1

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

PLAN NORTH



**KEY PLAN**

NOT TO SCALE

PLAN NORTH

0 1 2 4 8 12FT
SCALE: 1/4"=1'-0"

0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
4/30/2018
SIGNATURE EXPIRATION DATE

| MK | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

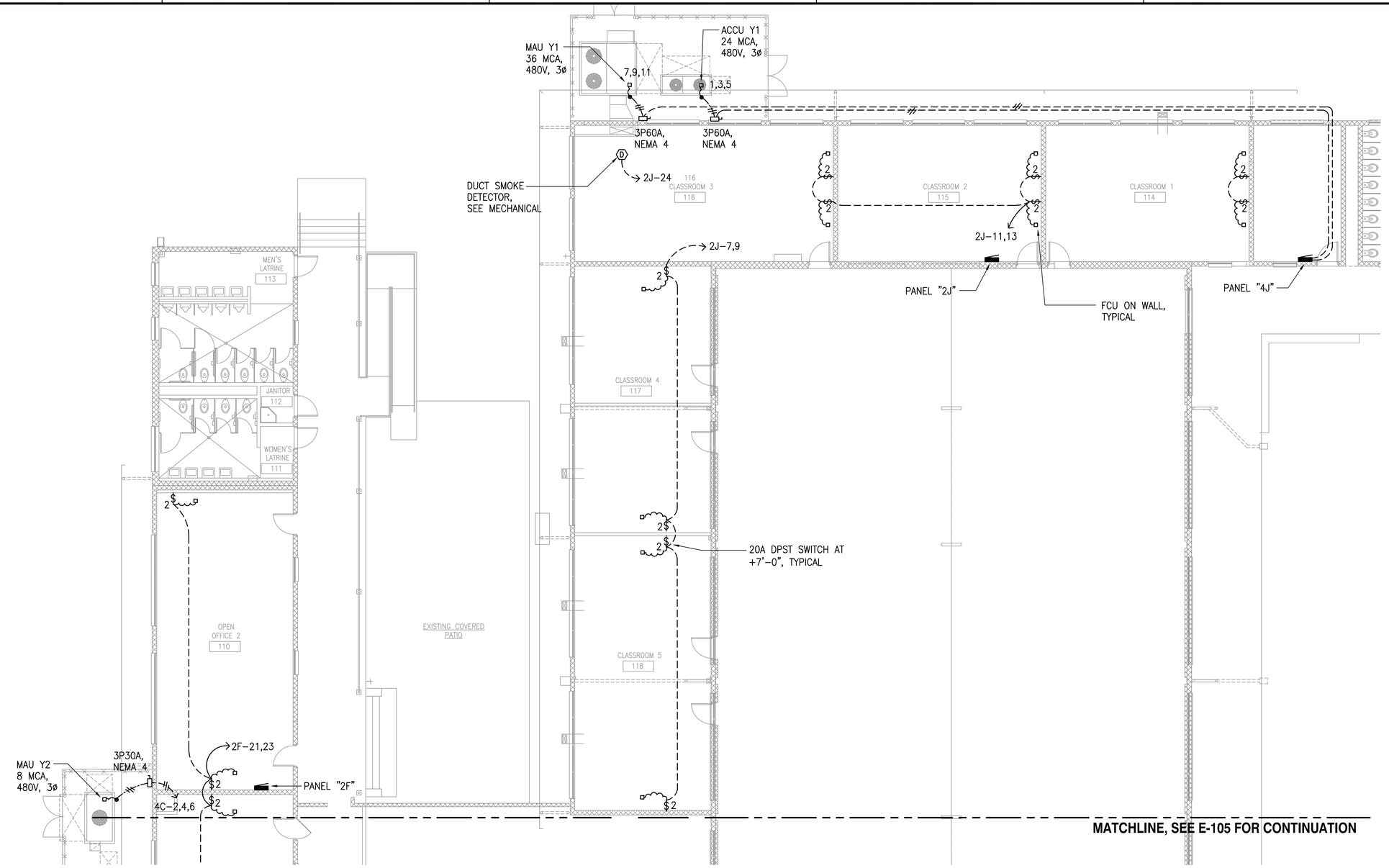
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

HVAC POWER PLAN - 1

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 113 OF 131

**E-105**

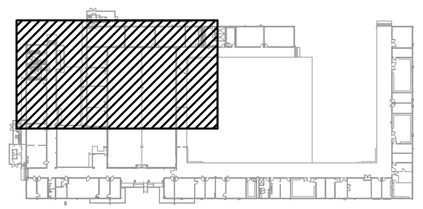
6/28/16-15:06 Y:\0114\0114.126\PHASE 2 - 2015\0114.126 E-105_E-106.P01.dwg




## HVAC POWER PLAN - 2

SCALE: 1/8" = 1'–0"

PLAN NORTH



**KEY PLAN**
NOT TO SCALE

PLAN NORTH

0 2 4 8 16 24FT
SCALE: 1/8"=1'–0"

ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017–E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITTAL DATE 30 JUNE 2016

| DES | GK | DRW | MC | CHK | GK |
|---|---|---|---|---|---|

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

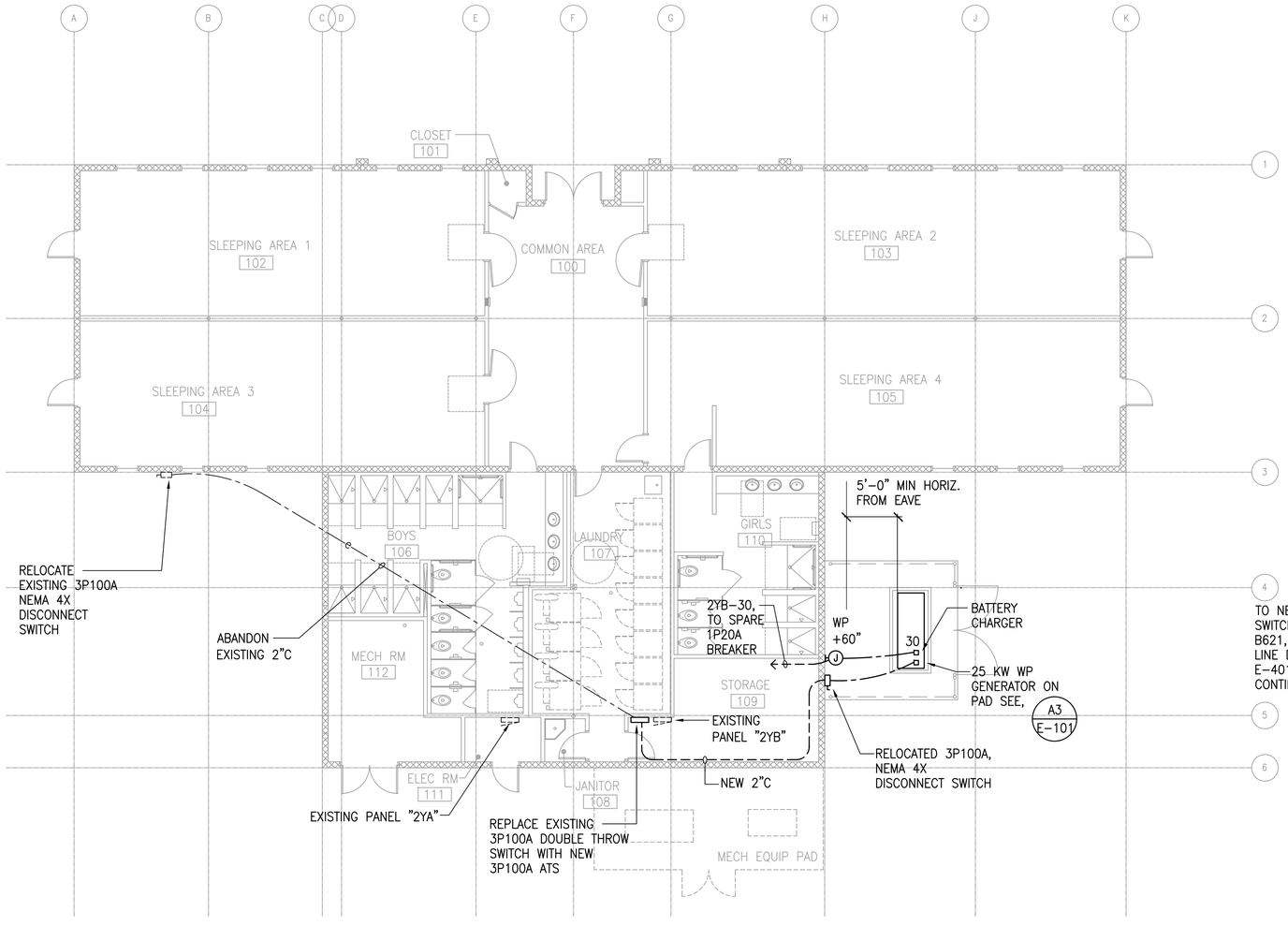
# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

HVAC POWER PLAN – 2

SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO.
SHEET 114 OF 131

**E-106**

6/28/16–15:07 I:\014\014.126\PHASE 2 – 2015\014.126 E-105_E-106.PI01.dwg

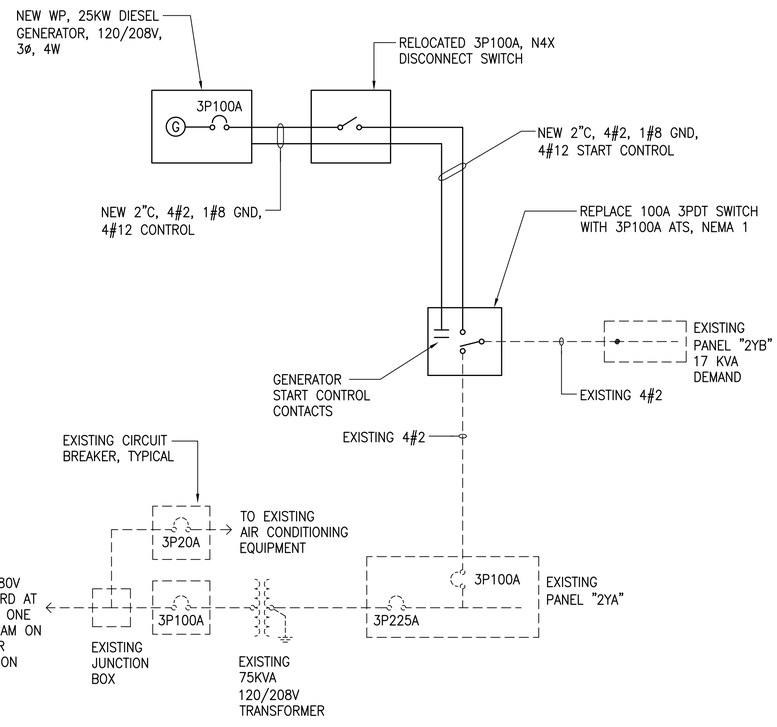



## EXISTING BILLET POWER PLAN

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

A1

PLAN NORTH




## BILLET ONE LINE DIAGRAM

NO SCALE

B4

0 2 4 8 16 24FT

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


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE — EXPIRATION DATE 4/30/2018

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITAL DATE: 30 JUNE 2016

| DES | GK | DRW | MC | CHK | GK |
|---|---|---|---|---|---|

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

EXISTING BILLET POWER PLAN

SCALE: AS NOTED

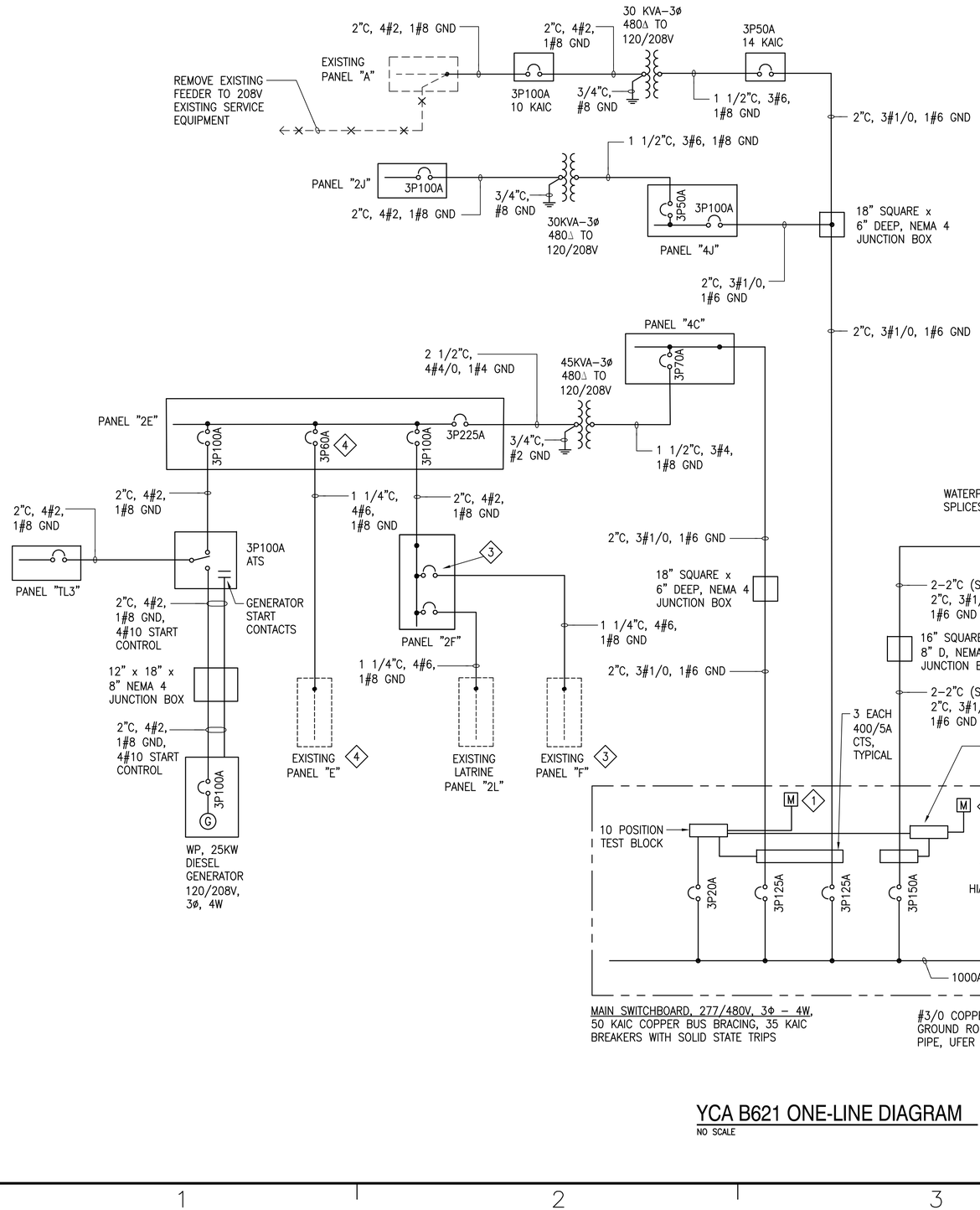
STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO.

SHEET 115 OF 131

E-107

6/28/16-15:07 Y:\014\014.126\PHASE 2 - 2015\014.126 E-107.P01.dwg




## YCA B621 ONE-LINE DIAGRAM

NO SCALE

### NOTES:

1. PROVIDE INTERIM ELECTRONIC, KWH, 400A, 480/277V ADVANCE SUBMETER, BACNET COMPATIBLE.
2. PROVIDE ENGRAVED LAMINATED PLAQUE ON 400A MAIN BREAKER, 1/4" HIGH LETTERS TO READ "SERVICE POINT #1. SECOND SERVICE TO BUILDING IS LOCATED IN ELECTRIC ROOM 13."
3. PROVIDE FEEDER FROM NEW PANEL "2F" TO EXISTING PANEL "F" UNDER DEDUCTIVE BID ITEM #1.
4. PROVIDE FEEDER FROM NEW PANEL "2E" TO EXISTING PANEL "E" UNDER DEDUCTIVE BID ITEM #1.
5. ATS SHALL NOT HAVE PARALLELING CAPABILITIES. TRANSFER SHALL BE DONE OPEN TRANSITION.
6. PROVIDE ENGRAVED LAMINATED PLAQUE ON 800A MAIN BREAKER, 1/4" HIGH LETTERS TO READ "HIARNG SERVICE POINT #2. SERVICE POINT #1 TO BUILDING IS LOCATED IN HIARNG ELECTRIC CLOSET."

### SERVICE DATA:

1. SERVICE VOLTAGE: 3ø – 4W 277/480V
2. LOAD DATA:

| METER | CONNECTED KVA | DEMAND KVA |
|---|---|---|
| 1 | 534 | 377 |

3. SERVICE ENTRANCE CONDUCTORS: 2–500Kcmil CU/PHASE
4. METERING: METER STANDARD B20; RATE J
5. TYPE: UNDER GROUND
6. BILLING ADDRESS: SH HAWAII NATIONAL GUARD ASO (FISCAL)


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO — LICENSED PROFESSIONAL ENGINEER — No. 10017–E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — SIGNATURE — 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

YCA ONE–LINE DIAGRAM

SCALE: AS NOTED

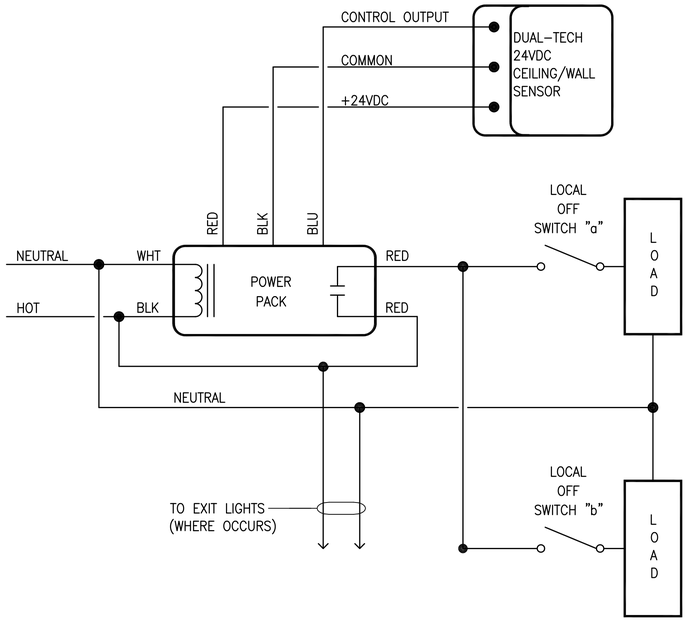
STATE JOB NO. CA–1212–C2

FEDERAL PROJECT NO.

SHEET 116 OF 131

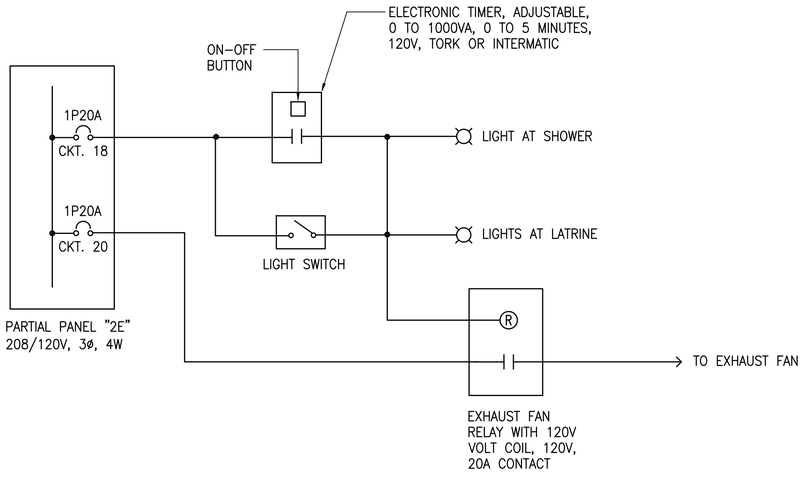
E-401

6/28/16–15:08 Y:\014\126\PHASE 2 – 2015\014.126 E–401. R01.dwg



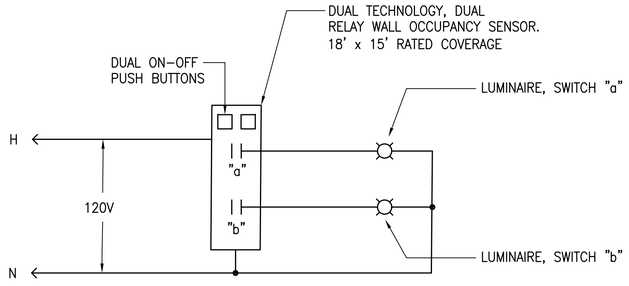

## TYPICAL POWER PACK LIGHTING CONNECTION C1

NO SCALE



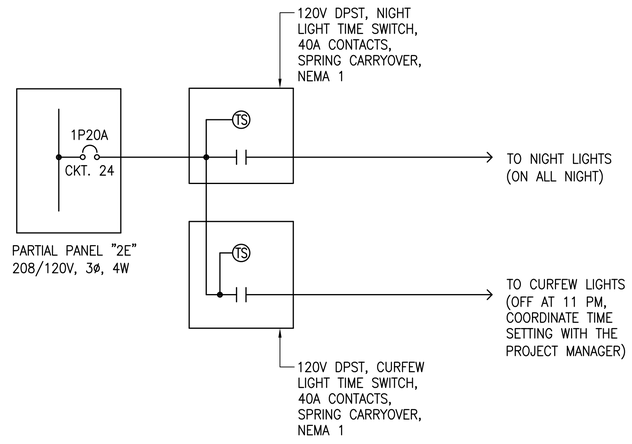

## LATRINE/SHOWER EXHAUST FAN CONTROL DIAGRAM C4

NO SCALE




## TYPICAL OCCUPANCY SENSOR LIGHT SWITCH WIRING DIAGRAM D4

NO SCALE




## EXTERIOR LIGHTING CONTROL DIAGRAM A4

NO SCALE

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHELE N. ADOLPHO
LICENSED
PROFESSIONAL
ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

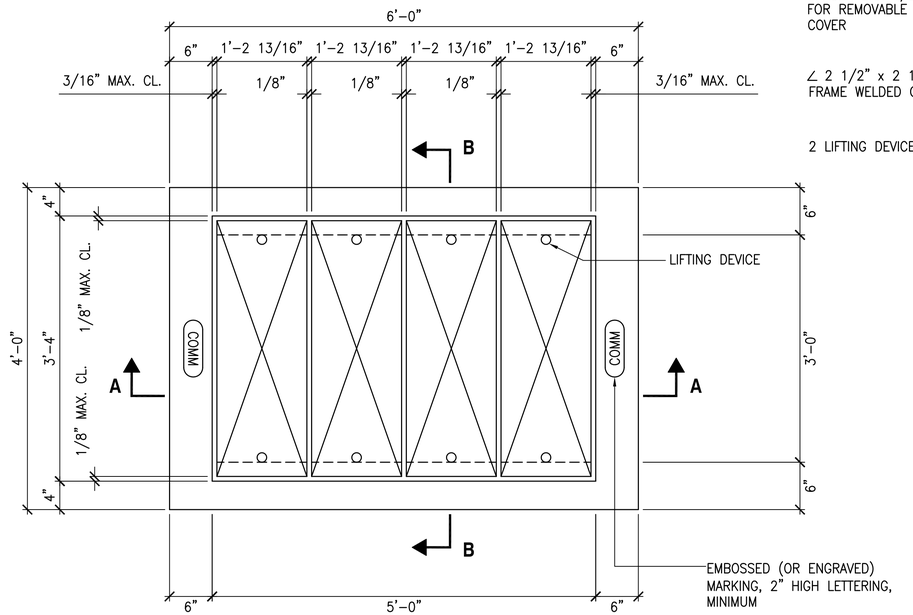
SUBMITTAL DATE 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

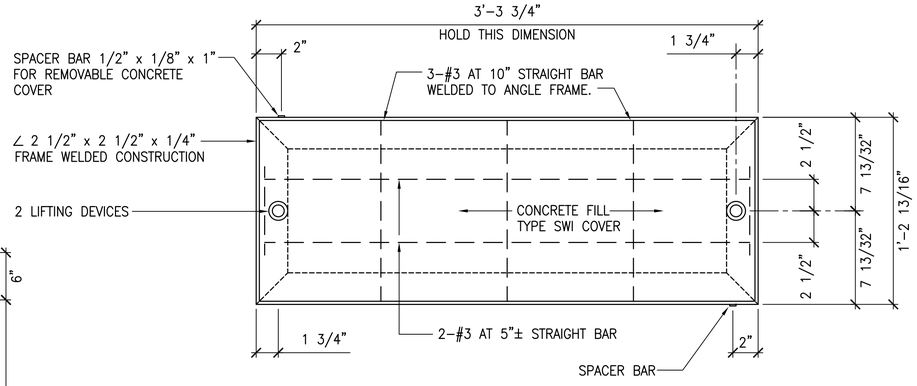
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
LIGHTING CONTROL DIAGRAMS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 117 OF 131
E-402

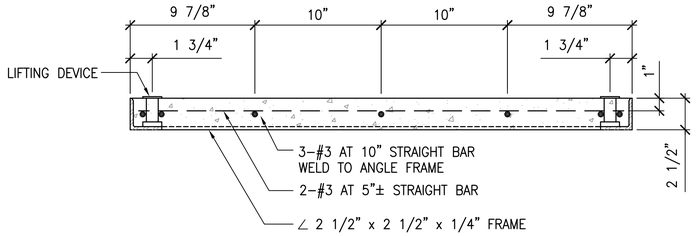
6/28/16-15:08 Y:\014\014.126\PHASE 2 - 2015\014.126 E-402.R02.dwg



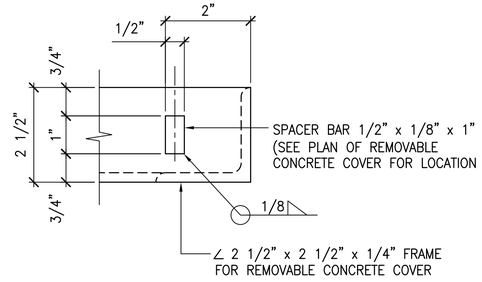

## PLAN




## COVER SLAB PLAN



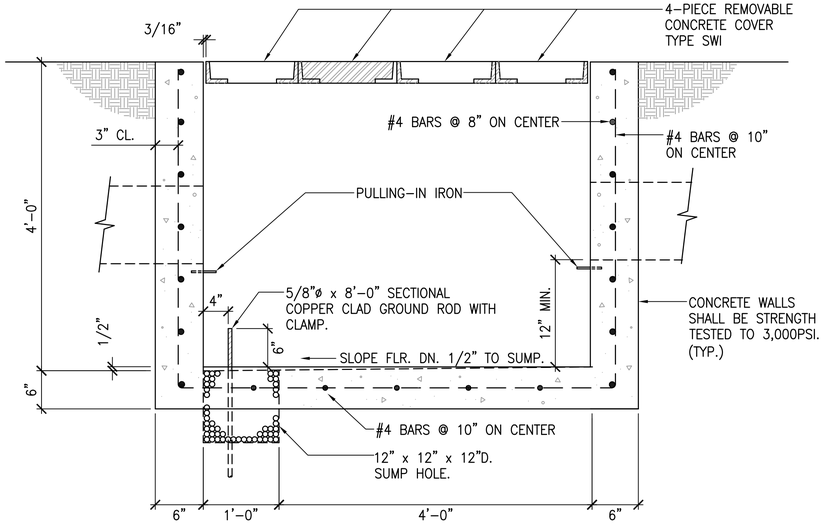

## COVER SLAB SECTION



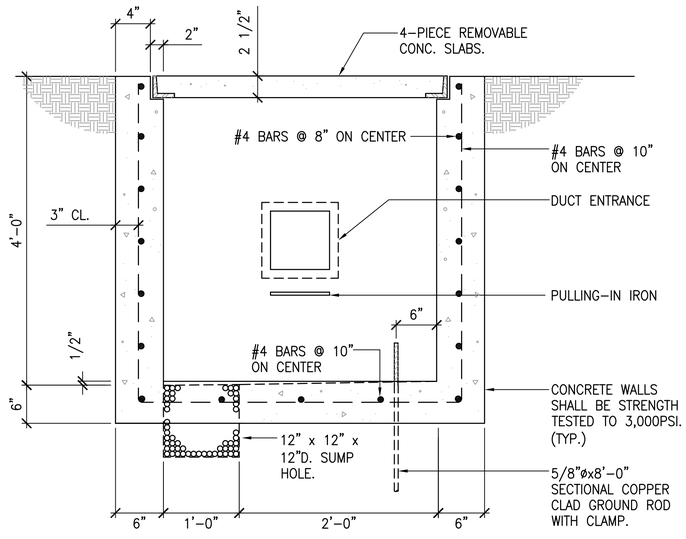

## SPACER BAR DETAIL

### NOTES:

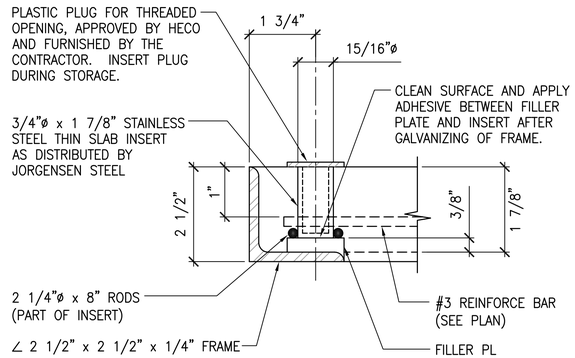
1. PROVIDE 2 EACH COVER LIFTING TOOL FOR HANDHOLE.
2. GALVANIZE L FRAME OR ⊏ FRAME, STEEL RODS, AND SPACER BARS AFTER FABRICATION.




## SECTION A-A




## SECTION B-B




## LIFTING DEVICE DETAIL

# TYPICAL 3' X 5' HANDHOLE DETAILS

NOT TO SCALE


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO
LICENSED PROFESSIONAL ENGINEER
No. 10017-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE 4/30/2018 EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

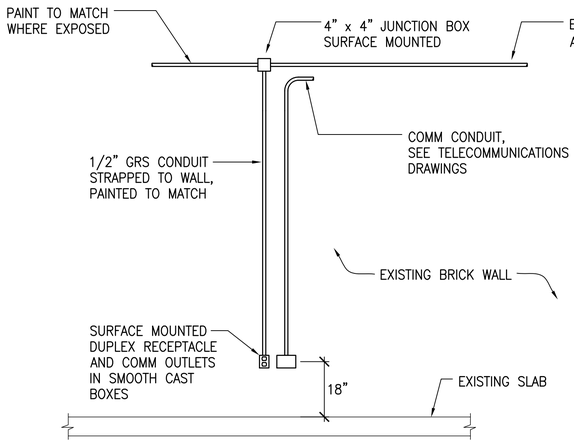
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

TYPICAL HANDHOLE DETAILS

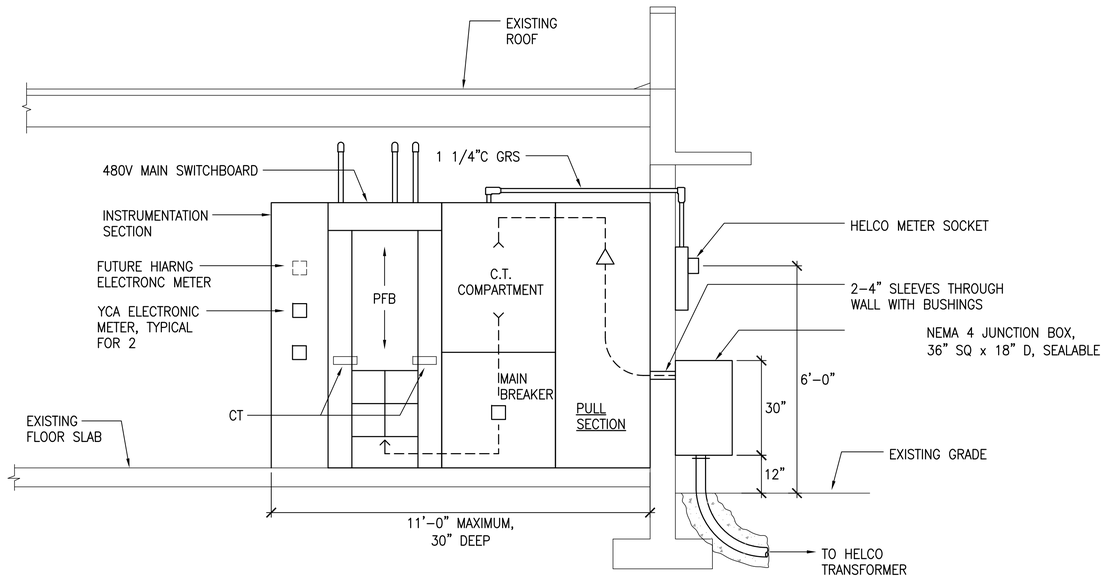
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 118 OF 131
E-501

6/28/16-15:09 Y:\014\014.126\PHASE 2 - 2015\014.126 E-501.002.dwg



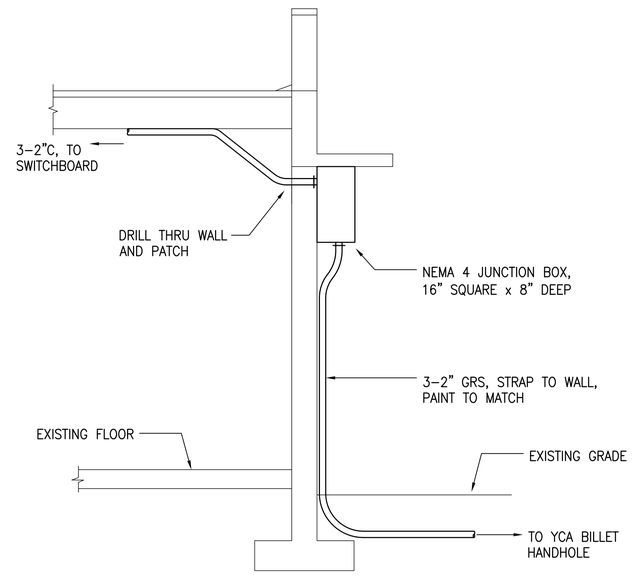

## TYPICAL WALL OUTLET ROUGH-IN — C1

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



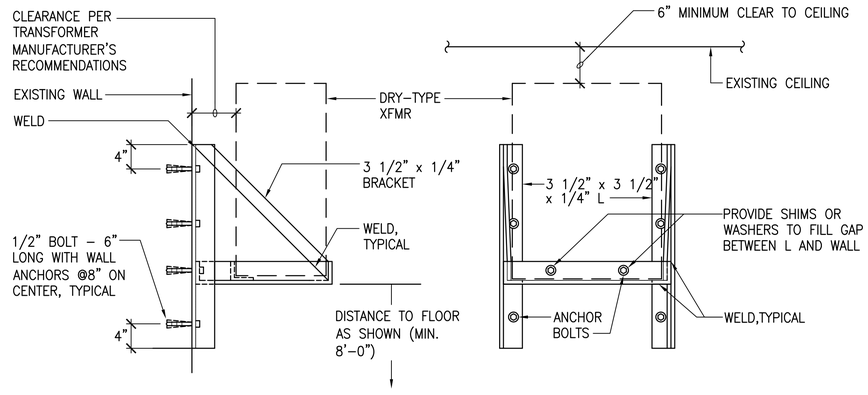

## MAIN SWITCHBOARD ELEVATION — C3

NOT TO SCALE




## JUNCTION BOX ELEVATION — A1

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



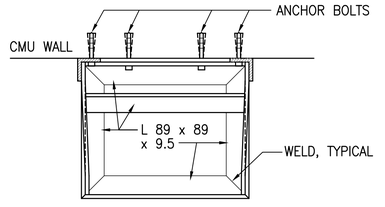

**END ELEVATION**

**FRONT ELEVATION**

### NOTES:

1. VERIFY DIMENSIONS WITH SUPPLIER OF TRANSFORMER PRIOR TO CONSTRUCTION OF SUPPORT.
2. APPROXIMATE TRANSFORMER DIMENSIONS:

   30KVA: 34"H x 24"W x 18"D, 450lbs
3. PROVIDE VIBRATION ISOLATORS UNDERNEATH TRANSFORMERS. 4 ISOLATORS PER TRANSFORMER.




**PLAN VIEW**

## WALL MOUNTED DRY-TYPE TRANSFORMER MOUNTING DETAIL — A3

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

0 1 2 4 6FT
SCALE: 1/2"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO — LICENSED PROFESSIONAL ENGINEER — No. 10017-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUNE 2016

| DES | DRW | CHK |
|---|---|---|
| GK | MC | GK |

DEPARTMENT OF DEFENSE
STATE OF HAWAII
HAWAII ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAII

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

ELECTRICAL ELEVATIONS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 119 OF 131

**E-502**

6/26/16-15:09 Y:\014\014.126\PHASE 2 - 2015\014.126 E-502.003.dwg

## PANEL "4C"

277/480 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 14,000
225 AMP MAIN LUGS — MOUNTING: SURFACE

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 1 | | 3 | | 5.5 – | | | – | 1 | PFB | 2 | – |
| 10 | 3 | ACCU Y2 | | | | 5.5 – | | – | 1 | PFB | 4 | – |
| 12 | 5 | | | 30 | | | 5.5 – | – | 1 | PFB | 6 | – |
| 12 | 7 | | 3 | | 2.2 – | | | – | 1 | PFB | 8 | – |
| 12 | 9 | MAU Y2 | | | | 2.2 – | | – | 1 | PFB | 10 | – |
| 12 | 11 | | | 15 | | | 2.2 – | – | 1 | PFB | 12 | – |
| 4 | 13 | | 3 | | 14.0 – | | | – | 1 | PFB | 14 | – |
| 4 | 15 | PANEL 2E | | | | 14.0 – | | – | 1 | PFB | 16 | – |
| 4 | 17 | | | 70 | | | 14.0 – | – | 1 | PFB | 18 | – |
| | | CONNECTED LOAD/PHASE | | | 21.7 | 21,7 | 21.7 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 65.1 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 0.8 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 52 KVA= 63 AMPS | | | | | | | |

## PANEL "4J"

277/480 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 14,000
3P100A MAIN BREAKER — MOUNTING: SURFACE

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 1 | | 3 | | 6.0 – | | | – | 1 | PFB | 2 | 12 |
| 8 | 3 | ACCU Y1 | | | | 6.0 – | | – | 1 | PFB | 4 | 12 |
| 8 | 5 | | | 40 | | | 6.0 – | – | 1 | PFB | 6 | 12 |
| 8 | 7 | | 3 | | 9.7 – | | | – | 1 | PFB | 8 | – |
| 8 | 9 | MAU Y1 | | | | 9.7 – | | – | 1 | PFB | 10 | – |
| 8 | 11 | | | 40 | | | 9.7 – | – | 1 | PFB | 12 | – |
| 8 | 13 | | 3 | | 7.0 – | | | – | 1 | PFB | 14 | – |
| 8 | 15 | PANEL 2J | | | | 7.0 – | | – | 1 | PFB | 16 | – |
| 8 | 17 | | | 50 | | | 7.0 – | – | 1 | PFB | 18 | – |
| | | CONNECTED LOAD/PHASE | | | 22.7 | 22.7 | 22.7 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 68.1 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 0.8 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 55 KVA= 66 AMPS | | | | | | | |

## PANEL "2E"

120/208 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 10,000
3P225A MAIN BREAKER — MOUNTING: SURFACE

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | | 3 | | 11.0 0.8 | | | 20 | 1 | OFFICE RECEPTACLE | 2 | 12 |
| 2 | 3 | PANEL 2F | | | | 11.0 0.8 | | 20 | 1 | OFFICE RECEPTACLE | 4 | 12 |
| 2 | 5 | | | 100 | | | 11.0 0.8 | 20 | 1 | OFFICE RECEPTACLE | 6 | 12 |
| 2 | 7 | | 3 | | 3.7 0.8 | | | 20 | 1 | OFFICE RECEPTACLE | 8 | 12 |
| 2 | 9 | PNL TL3 | | | | 3.7 0.8 | | 20 | 1 | OFFICE RECEPTACLE | 10 | 12 |
| 2 | 11 | | | 100 | | | 3.7 0.8 | 20 | 1 | OFFICE RECEPTACLE | 12 | 12 |
| 6 | 13 | WATER HEATER | 2 | | 4.5 0.8 | | | 20 | 1 | OFFICE LIGHTS | 14 | 12 |
| 6 | 15 | | | 50 | | 4.5 0.8 | | 20 | 1 | OFFICE LIGHTS | 16 | 12 |
| 6 | 17 | WATER HEATER | 2 | | | | 4.5 0.8 | 20 | 1 | OFFICE LIGHTS | 18 | 12 |
| 6 | 19 | | | 50 | 4.5 1.4 | | | 20 | 1 | EXHAUST FAN | 20 | 12 |
| 12 | 21 | FCU | 2 | | | 0.3 1.0 | | 20 | 1 | MAU TIME CLOCK | 22 | 12 |
| 12 | 23 | | | 15 | | | 0.3 1.0 | 20 | 1 | EXTERIOR LIGHTS | 24 | 12 |
| 12 | 25 | FCU | 2 | | 0.5 1.0 | | | 20 | 1 | SPARE | 26 | – |
| 12 | 27 | | | 15 | | 0.5 1.0 | | 20 | 1 | SPARE | 28 | – |
| 12 | 29 | FCU | 2 | | | | 0.3 1.0 | 20 | 1 | SPARE | 30 | – |
| 12 | 31 | | | 15 | 0.3 1.0 | | | 20 | 1 | SPARE | 32 | – |
| – | 33 | SPARE | 1 | 20 | | 1.0 1.0 | | 20 | 1 | SPARE | 34 | – |
| – | 35 | SPARE | 1 | 20 | | | 1.0 1.0 | 20 | 1 | SPARE | 36 | – |
| – | 37 | PFB | 1 | – | – – | | | | 3 | | 38 | 6 |
| – | 39 | PFB | 1 | – | | – – | | | | EXISTING PANEL E | 40 | 6 * |
| – | 41 | PFB | 1 | – | | | – – | 60 | | | 42 | 6 |
| | | CONNECTED LOAD/PHASE | | | 30.3 | 26.4 | 25.2 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 81.9 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 0.5 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 40.1 KVA= 111 AMPS | | | | | | | |

* PROVIDE 3P60A BREAKER IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED. PROVIDE PFBS IN BASE BID

## PANEL "TL3"

120/208 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 10,000
3P100A MAIN BREAKER — MOUNTING: SURFACE
REQ'D OPTIONS: FULL-SIZE LOAD CENTER

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 1 | RACK UPS | 1 | 30 | 1.5 1.0 | | | | 2 | ACCU Y3/FCU Y3 | 2 | 12 |
| 10 | 3 | RACK UPS | 1 | 30 | | 1.5 1.0 | | 15 | | | 4 | 12 |
| 10 | 5 | RACK UPS | 1 | 30 | | | 1.5 1.0 | 20 | 1 | OFFICE RCPT | 6 | 10 |
| 12 | 7 | TEL RECEPT | 1 | 20 | 0.4 1.0 | | | 20 | 1 | OFFICE LT, A/C | 8 | 10 |
| 12 | 9 | TV RECEPT | 1 | 20 | | 0.4 0.5 | | 20 | 1 | FACP | 10 | 12 |
| 12 | 11 | CARD ACCESS SYSTEM | 1 | 20 | | | 0.4 1.0 | 20 | 1 | BATTERY CHARGER | 12 | 12 |
| – | 13 | PFB | 1 | – | 0.4 1.2 | | | – | 1 | PFB | 14 | – |
| – | 15 | PFB | 1 | – | | 0.4 0.5 | | – | 1 | PFB | 16 | – |
| – | 17 | PFB | 1 | – | | | 0.4 0.5 | – | 1 | PFB | 18 | – |
| | | CONNECTED LOAD/PHASE | | | 5.1 | 4.3 | 4.8 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 14.2 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 1.0 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 14.2 KVA= 39 AMPS | | | | | | | |

## PANEL "2F"

120/208 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 10,000
225 AMP MAIN LUGS — MOUNTING: SURFACE

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1 | | 3 | | 5.0 0.9 | | | | 2 | OFFICE PLUGMOLD | 2 | 12 |
| 6 | 3 | PANEL "2L" | | | | 5.0 0.9 | | 20 | | OFFICE PLUGMOLD | 4 | 12 |
| 6 | 5 | | | 60 | | | 5.0 0.9 | | 2 | OFFICE PLUGMOLD | 6 | 12 |
| 12 | 7 | LIGHTS | 1 | 20 | 0.9 0.9 | | | 20 | | OFFICE PLUGMOLD | 8 | 12 |
| 12 | 9 | LIGHTS | 1 | 20 | | 0.9 0.9 | | | 2 | OFFICE PLUGMOLD | 10 | 12 |
| 12 | 11 | LIGHTS | 1 | 20 | | | 0.8 0.9 | 20 | | OFFICE PLUGMOLD | 12 | 12 |
| 12 | 13 | EXHAUST FAN | 1 | 20 | 1.0 0.9 | | | | 2 | OFFICE PLUGMOLD | 14 | 12 |
| 12 | 15 | EXHAUST FAN | 1 | 20 | | 1.2 0.9 | | 20 | | OFFICE PLUGMOLD | 16 | 12 |
| – | 17 | SPARE | 1 | 20 | | | 1.0 0.4 | 20 | 1 | SPARE | 18 | – |
| – | 19 | SPARE | 1 | 20 | 1.0 0.4 | | | 20 | 1 | SPARE | 20 | – |
| 12 | 21 | FCU | 2 | | | 0.3 0.4 | | 20 | 1 | SPARE | 22 | – |
| 12 | 23 | | | 15 | | | 0.3 0.8 | 20 | 1 | SPARE | 24 | – |
| – | 25 | PFB | 1 | – | – – | | | | 3 | | 26 | 6 |
| – | 27 | PFB | 1 | – | | – – | | | | EXISTING PANEL F | 28 | 6 * |
| – | 29 | PFB | 1 | – | | | – – | 60 | | | 30 | 6 |
| | | CONNECTED LOAD/PHASE | | | 11.8 | 11.1 | 10.7 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 33.6 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 0.7 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 23.5 KVA= 66 AMPS | | | | | | | |

* PROVIDE 3P60A BREAKER IF DEDUCTIVE BID ITEM NO. 1 IS IMPLEMENTED. PROVIDE PFBS IN BASE BID

## PANEL "2J"

120/208 VOLTS, 3 PHASE, 4 WIRE — MIN AIC: 10,000
3P100A MAIN BREAKER — MOUNTING: SURFACE

| WIRE SIZE (AWG) | CKT NO | USE | CKT BKR POLE | CKT BKR AMP | PHASE A | PHASE B | PHASE C | CKT BKR AMP | CKT BKR POLE | USE | CKT NO | WIRE SIZE (AWG) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| – | 1 | | 3 | | 1.0 0.8 | | | 20 | 1 | CLASSROOM RECEPT | 2 | 12 |
| – | 3 | SPARE | | | | 1.0 0.8 | | 20 | 1 | CLASSROOM RECEPT | 4 | 12 |
| – | 5 | | | 20 | | | 1.0 0.8 | 20 | 1 | CLASSROOM RECEPT | 6 | 12 |
| 12 | 7 | FCU | 2 | | 0.4 0.8 | | | 20 | 1 | CLASSROOM RECEPT | 8 | 12 |
| 12 | 9 | | | 15 | | 0.4 0.8 | | 20 | 1 | CLASSROOM RECEPT | 10 | 12 |
| 12 | 11 | FCU | 2 | | | | 0.3 0.8 | 20 | 1 | CLASSROOM RECEPT | 12 | 12 |
| 12 | 13 | | | 15 | 0.3 0.8 | | | 20 | 1 | CLASSROOM RECEPT | 14 | 12 |
| 12 | 15 | CLASSRM LIGHTS | 1 | 20 | | 0.7 0.8 | | 20 | 1 | CLASSROOM RECEPT | 16 | 12 |
| 12 | 17 | CLASSRM LIGHTS | 1 | 20 | | | 0.7 0.8 | 20 | 1 | CLASSROOM RECEPT | 18 | 12 |
| 12 | 19 | CLASSRM LIGHTS | 1 | 20 | 0.7 0.8 | | | 20 | 1 | CLASSROOM RECEPT | 20 | 12 |
| 12 | 21 | CLASSRM LIGHTS | 1 | 20 | | 0.7 1.0 | | 20 | 1 | COMM RACK | 22 | 12 |
| 12 | 23 | CLASSRM LIGHTS | 1 | 20 | | | 0.7 1.0 | 20 | 1 | DUCT DETECTOR | 24 | 12 |
| – | 25 | PFB | 1 | – | – 1.0 | | | 20 | 1 | SPARE | 26 | – |
| – | 27 | PFB | 1 | – | | – 1.0 | | 20 | 1 | SPARE | 28 | – |
| – | 29 | PFB | 1 | – | | | – 1.0 | 20 | 1 | SPARE | 30 | – |
| – | 31 | PFB | 1 | – | – – | | | – | 1 | PFB | 32 | – |
| – | 33 | PFB | 1 | – | | – – | | – | 1 | PFB | 34 | – |
| – | 35 | PFB | 1 | – | | | – – | – | 1 | PFB | 36 | – |
| – | 37 | PFB | 1 | – | – – | | | – | 1 | PFB | 38 | – |
| – | 39 | PFB | 1 | – | | – – | | – | 1 | PFB | 40 | – |
| – | 41 | PFB | 1 | – | | | – – | – | 1 | PFB | 42 | – |
| | | CONNECTED LOAD/PHASE | | | 6.6 | 7.2 | 7.1 | | | | | |
| | | TOTAL CONNECTED LOAD | | | 20.9 KVA | | | | | | | |
| | | DEMAND FACTOR | | | 0.7 | | | | | | | |
| | | TOTAL DEMAND LOAD | | | 14.6 KVA= 41 AMPS | | | | | | | |


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHELE N. ADOLPHO — LICENSED PROFESSIONAL ENGINEER — No. 10017-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

APPR | DATE | SHEET OF | DESCRIPTION | SYM

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUNE 2016
DES GK | DRW MC | CHK GK

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
KEAUKAHA MILITARY RESERVATION — HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
PANEL SCHEDULES

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO.
SHEET 120 OF 131
E-601

6/28/16-15:10 Y:\014\014.126\PHASE 2 - 2015\014.126 E-601.PNL01.dwg

## TELECOMMUNICATION SYMBOL LIST / MOUNTING HEIGHT SCHEDULE

| MOUNTING HEIGHT FROM FLOOR TO | | (SPECIAL MOUNTING HEIGHTS INDICATED ON PLAN) | |
|---|---|---|---|
| TOP | ℄ | SYMBOL | DESCRIPTION |
| | 46" | ▶ | TELEPHONE WALLPHONE OUTLET, WALL MOUNTED (1T) |
| | 18" | ▷ | TELECOMMUNICATIONS (TEL/DATA) INFORMATION OUTLET, WALL MOUNTED (1T/1D) |
| | | | EXISTING TELECOMMUNICATIONS OUTLET |
| | | (V)H | CATV OUTLET, WALL MOUNTED (1V) |
| | | (V)H | EXISTING CATV OUTLET |
| | | (J) | JUNCTION BOX, SMALL, HORIZONTALLY MOUNTED |
| | | (J)H | JUNCTION BOX, SMALL, WALL MOUNTED |
| | | [J] | JUNCTION BOX, LARGE, HORIZONTALLY MOUNTED, SIZED AS NOTED |
| | | [J]H | JUNCTION BOX, LARGE, WALL MOUNTED, SIZED AS NOTED |
| | | (C) | EXISTING IP CCTV CAMERA, TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION |
| | | | |
| | | | |
| | | —— - —— | CONCEALED CONDUIT IN FINISHED FLOOR OR BELOW GRADE |
| | | ——— | CONCEALED CONDUIT ABOVE GRADE IN CEILINGS OR WALLS. |
| | | ⌒ | EXPOSED RACEWAY, PROVIDE STRAP 8'–0" ON CENTER MINIMUM |
| | | TC1 | HOMERUN ARROW TO COMM CABINET. MIN. 1"C FOR HORIZONTAL DISTRIBUTION. IDENTIFIER INDICATES TELECOMMUNICATIONS ROOM. |
| | | E | CONDUIT STUB, 1" MINIMUM CONDUIT |
| | | | |
| | | X | DENOTES DEMOLITION/REMOVAL WORK |
| | | +42" | DENOTES 42" ABOVE FINISHED FLOOR OR GRADE |
| | | 1T | DENOTES ONE (1) CAT–6 TELEPHONE CABLE |
| | | 1D | DENOTES ONE (1) CAT–6 DATA CABLE |
| | | 1V | DENOTES ONE (1) CATV RG–6 COAXIAL CABLE |
| | | A.F.F. | ABOVE FINISHED FLOOR |
| | | BMS | BALANCED MAGNETIC SWITCH |
| | | CAT–6 | CATEGORY–6 UNSHIELDED TWISTED PAIR (UTP) CABLE |
| | | CCTV | CLOSED CIRCUIT TELEVISION SYSTEM |
| | | FO | FIBER OPTIC CABLE |
| | | GND | GROUND |
| | | MM | MULTI–MODE (50–MICRON OM3) FIBER OPTIC CABLE |
| | | PoE | POWER OVER ETHERNET |
| | | P/P | PATCH PANEL |
| | | PIR | PASSIVE INFRARED MOTION DETECTOR |
| | | SM | SINGLE MODE FIBER OPTIC CABLE |
| | | TGB | TELECOMMUNICATIONS GROUNDING BUSBAR |
| | | TMGB | TELECOMMUNICATIONS MAIN GROUNDING BUSBAR |
| | | 1 | NOTE INDICATOR |
| | | 1 / T101 | DETAIL INDICATOR: TOP HALF DENOTES DETAIL NUMBER, BOTTOM HALF DENOTES SHEET NUMBER |
| | | | |
| | | | |

## GENERAL TELECOMMUNICATIONS NOTES:

1. ALL TELECOMMUNICATIONS INFRASTRUCTURE SHALL BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS IDENTIFIED WITHIN ANSI/TIA/EIA WIRING STANDARDS.
2. ALL TELECOMMUNICATIONS PATHWAYS SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/TIA/EIA–569–B AND ADDENDA UNLESS OTHERWISE INDICATED.
3. ALL TELECOMMUNICATIONS CABLING SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH ANSI TIA/EIA–568–C.0, ANSI TIA/EIA–568–C.1, ANSI/TIA/EIA–568–C.2, ANSI/TIA/EIA–568–C.3 AND ADDENDA UNLESS OTHERWISE INDICATED.
4. ALL TELECOMMUNICATIONS INFRASTRUCTURE SHALL BE LABELED AND IDENTIFIED IN ACCORDANCE WITH ANSI TIA/EIA–606–A AND AS INDICATED ON THE CONSTRUCTION DOCUMENTS.
5. PROVIDE APPROPRIATE FIRE STOPPING MEASURES FOR ALL PENETRATIONS THRU FIRE–RATED PARTITITIONS/FLOORS. ALL PENETRATIONS THRU FIRE RATED PARTITIONS/FLOORS SHALL BE FIRE STOPPED SUCH AS TO PRESERVE THE INTEGRITY AND FIRE RATING OF THE PARTITION/FLOORS IN ACCORDANCE WITH THE LATEST EDITIONS OF IBC, NFPA 72 (NEC), ANSI/TIA/EIA WIRING STANDARDS, AND ANY LOCAL COUNTY ORDINANCES. REFER TO ARCHITECTURAL PLANS FOR FIRE PARTITION LOCATIONS. PENETRATIONS THRU NON–FIRE RATED PARTITIONS SHALL BE SEALED WITH PLIABLE DUCT SEAL OR OTHER MEANS TO MINIMIZE ACOUSTIC (NOISE) TRANSMISSIONS BETWEEN ADJACENT SPACES.
6. GROUNDING AND BONDING FOR ALL INTERIOR TELECOMMUNICATIONS INFRASTRUCTURE SHALL BE IN ACCORDANCE WITH ANSI J–STD–607–A AND NFPA 70 – NATIONAL ELECTRICAL CODE (NEC).
7. ALL WORK ASSOCIATED WITH PATHWAYS/SPACES SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND COUNTY BUILDING CODES. CONSTRUCTION PRACTICES SHALL CONFORM TO THE LATEST EDITION OF AMERICAN ELECTRICIANS' HANDBOOK BY CROFT, AND APPLICABLE INSTRUCTIONS OF MANUFACTURERS OF EQUIPMENT AND MATERIAL SUPPLIED FOR THIS PROJECT. ALL MATERIALS SHALL BE NEW AND BEAR THE UL LABEL WHERE APPLICABLE. INSTALLATION SHALL BE COMPLETED IN EVERY DETAIL AS SPECIFIED AND READY FOR USE.
8. ROUTING OF TELECOMMUNICATIONS PATHWAYS IS TYPICAL ONLY AND MAY BE VARIED IN ANY LOGICAL MANNER. CONTRACTOR SHALL PROVIDE ADDITIONAL JUNCTION BOXES WHERE TELECOMMUNICATIONS CONDUIT RUNS EXCEED 100–FT IN LENGTH OR WHERE THE SUM OF THE BENDS WITHIN A RUN EXCEEDS 180–DEGREES. ANY DEVICE MAY BE RELOCATED WITHIN 10' BEFORE INSTALLATION AT THE DIRECTION OF THE PROJECT MANAGER WITHOUT ADDITIONAL COST TO THE COUNTY.
9. ALL CONDUITS SHALL BE CONCEALED IN WALLS, CEILINGS, FLOORS, AND FURRED SPACES TO MAXIMUM EXTENT POSSIBLE OR UNLESS OTHERWISE NOTED.
10. THE TELECOMMUNICATIONS CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO AVOID CONFLICTS WITH ELECTRICAL, MECHANICAL, STRUCTURAL AND ARCHITECTURAL ELEMENTS OF THIS PROJECT.
11. IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY THE PROJECT MANAGER IN WRITING. DO NOT PROCEED WITH INSTALLATION IN AREAS OF DISCREPANCY UNTIL ALL SUCH DISCREPANCIES HAVE BEEN FULLY RESOLVED.
12. PAINT ALL EXPOSED RACEWAYS TO MATCH SURROUNDING FINISHES.
13. CONDUIT FITTINGS (LB, LR, ETC.) ARE NOT ACCEPTABLE AND SHALL NOT BE UTILIZED ON TELECOMMUNICATIONS CONDUITS.
14. ALL TELECOMMUNICATIONS WORK SHALL BE BE INCLUDED IN BASE BID UNLESS OTHERWISE INDICATED.


ARCHITECTS·HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL–SHAWN MATSUSUI — LICENSED PROFESSIONAL ENGINEER — No. 10603–E — HAWAII U.S.A.

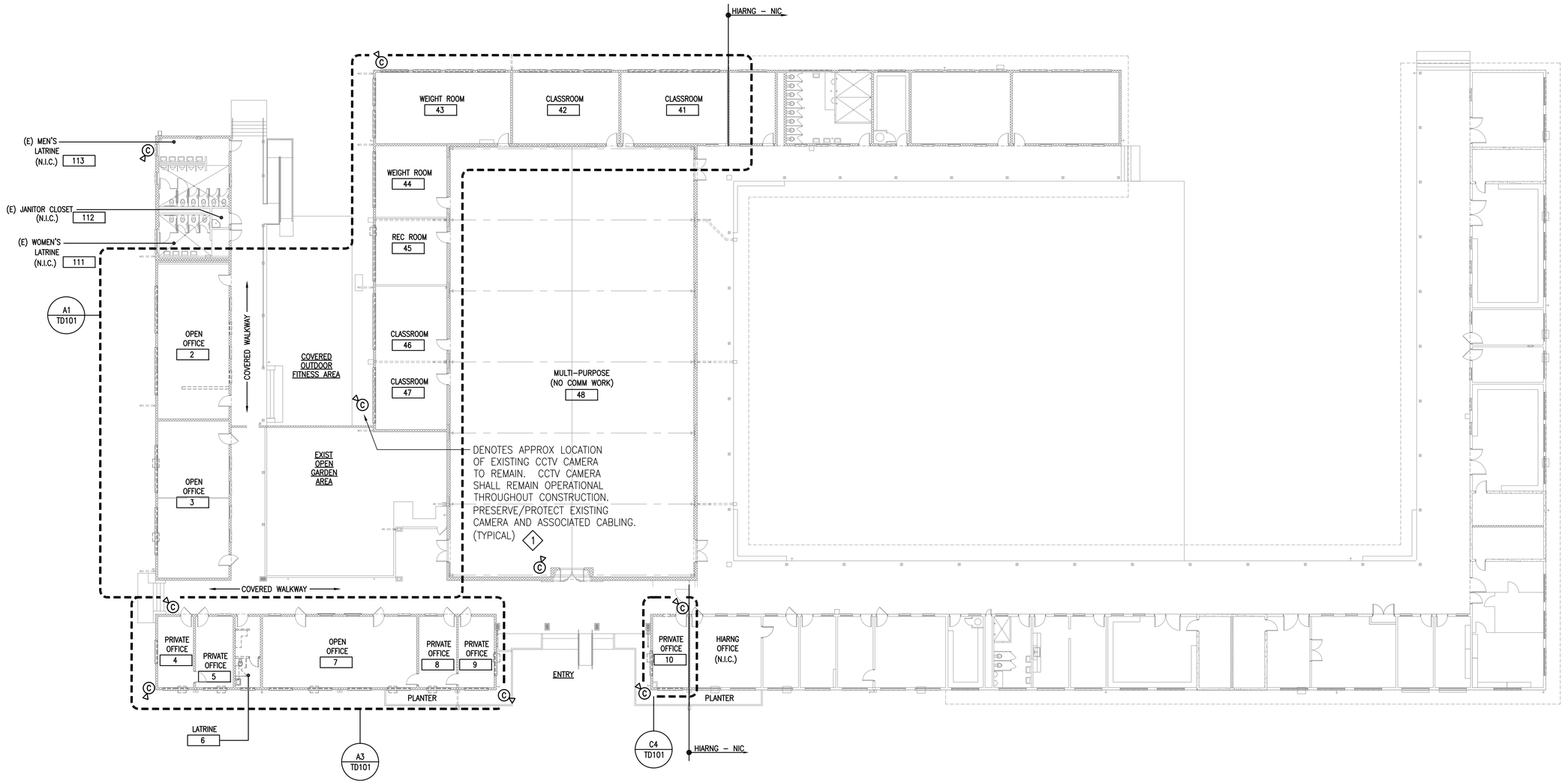
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES: MMI | DRW: FCC | CHK: MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS SYMBOL LIST AND GENERAL NOTES

SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 121 OF 131
T-001

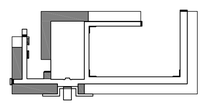



**NOTE:**

1. SHOULD EXISTING CCTV CAMERA VIEWS BE OBSTRUCTED WITH NEW CONSTRUCTION ELEMENTS. CONTRACTOR SHALL COORDINATE RELOCATION/REPOSITIONING OF CCTV CAMERAS WITH YCA. YCA DESIGNATED SECURITY CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING/REPOSITIONING OF ANY EXISTING CCTV CAMERA AND/OR CCTV CABLING INFRASTRUCTURE.

## BUILDING 621 OVERALL YCA TELECOMMUNICATIONS DEMOLITION PLAN

SCALE: 1/16" = 1'-0"



KEY PLAN

GRAPHIC SCALE:

0 4 8 16 32 48FT

SCALE: 1/16"=1'-0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL-SHAWN MATSUTSUI LICENSED PROFESSIONAL ENGINEER No. 10603-E HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018

SIGNATURE — EXPIRATION DATE

| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUN 2016

DES MMI | DRW FCC | CHK MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2

BLDG 621 OVERALL YCA TELECOM DEMOLITION PLAN

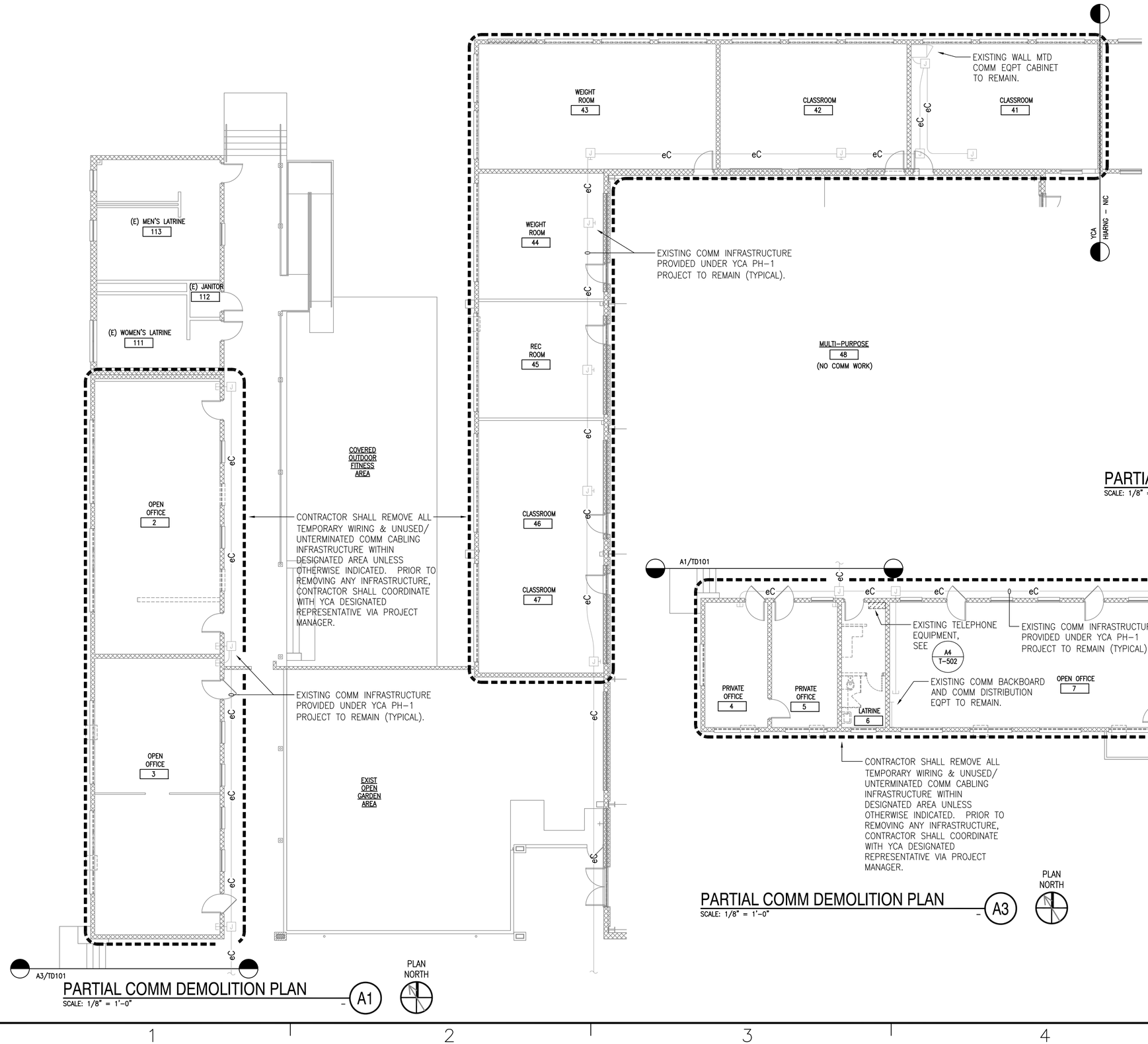
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

SHEET 122 OF 131

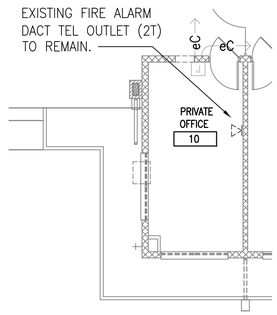
TD100




## PARTIAL COMM DEMOLITION PLAN

SCALE: 1/8" = 1'-0" – A1

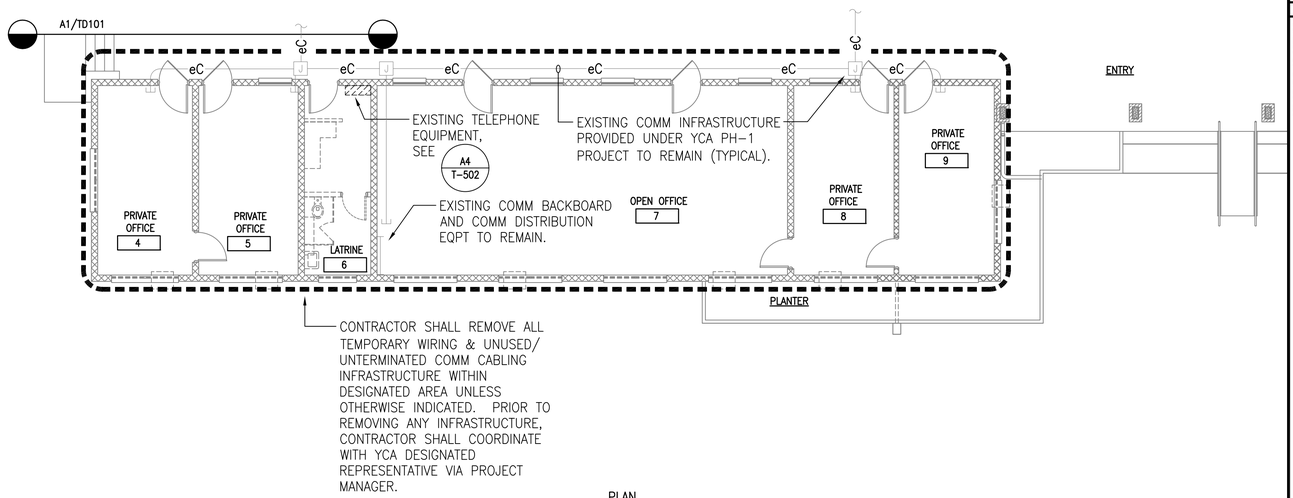
PLAN NORTH




## PARTIAL COMM DEMOLITION PLAN

SCALE: 1/8" = 1'-0" – C4

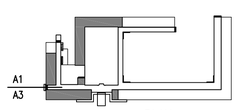
PLAN NORTH




## PARTIAL COMM DEMOLITION PLAN

SCALE: 1/8" = 1'-0" – A3

PLAN NORTH




KEY PLAN

PLAN NORTH

GRAPHIC SCALE: 0 2 4 8 16 24FT
SCALE: 1/8"=1'-0"

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHAEL-SHAWN MATSUTSUI — LICENSED PROFESSIONAL ENGINEER — No. 10603-E — HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| NO. | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| SYM | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES: MMI | DRW: FCC | CHK: MMI

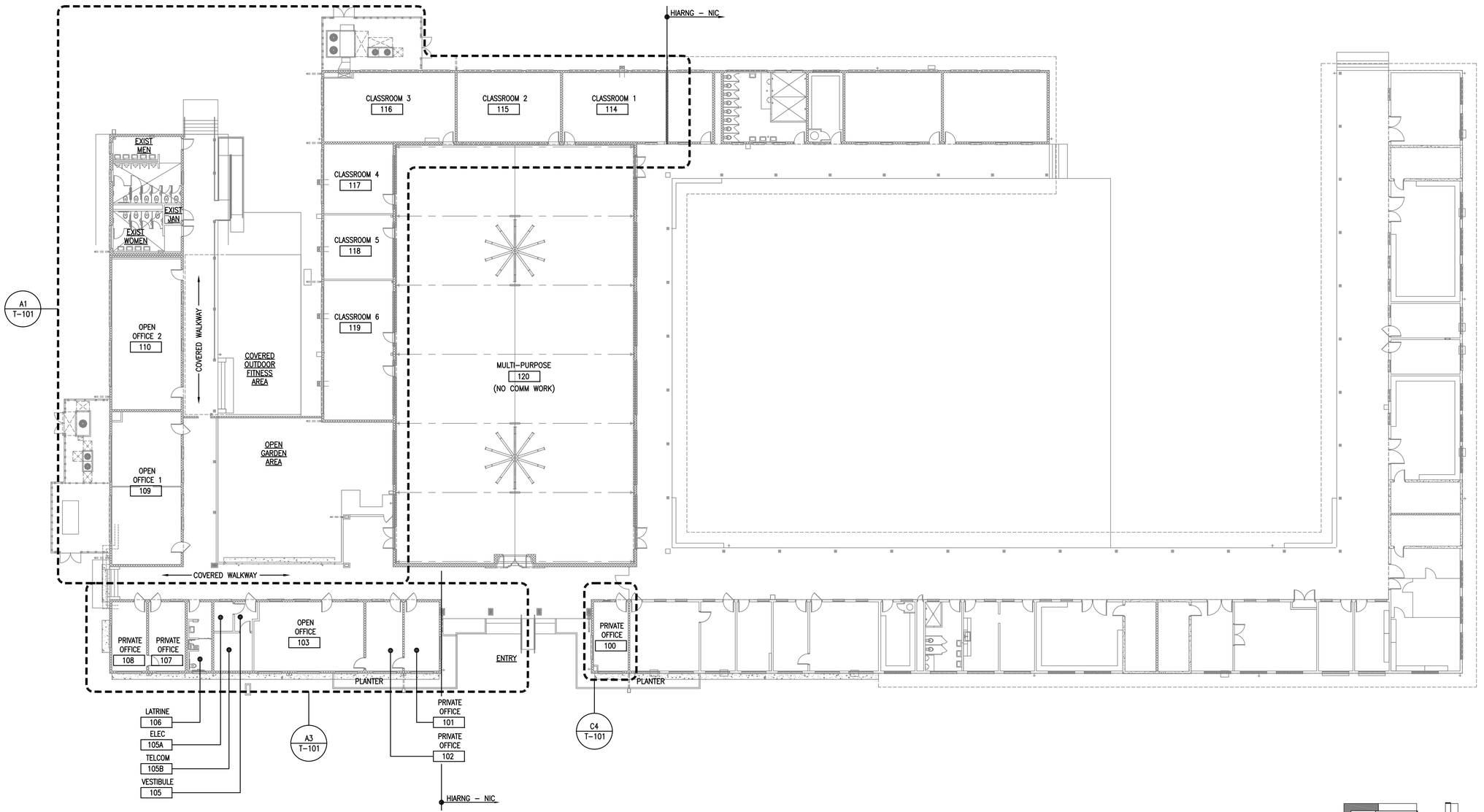
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

PARTIAL BLDG 621 YCA COMM DEMOLITION PLANS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 123 OF 131

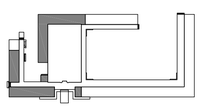
TD101




## BUILDING 621 OVERALL YCA TELECOMMUNICATIONS PLAN

SCALE: 1/16" = 1'–0"

PLAN NORTH



KEY PLAN

PLAN NORTH

GRAPHIC SCALE:

0 4 8 16 32 48FT

SCALE: 1/16"=1'–0"


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL-SHAWN M. MATSUSHIMA
LICENSED PROFESSIONAL ENGINEER
No. 10603-E
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
EXPIRATION DATE 4/30/2018

| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL

SUBMITAL DATE 30 JUN 2016

DES MMI | DRW FCC | CHK MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD

YOUTH CHALLENGE ACADEMY

KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA)
# BUILDING 621 RENOVATION - PHASE 2

BLDG 621 OVERALL YCA TELECOMMUNICATIONS PLAN

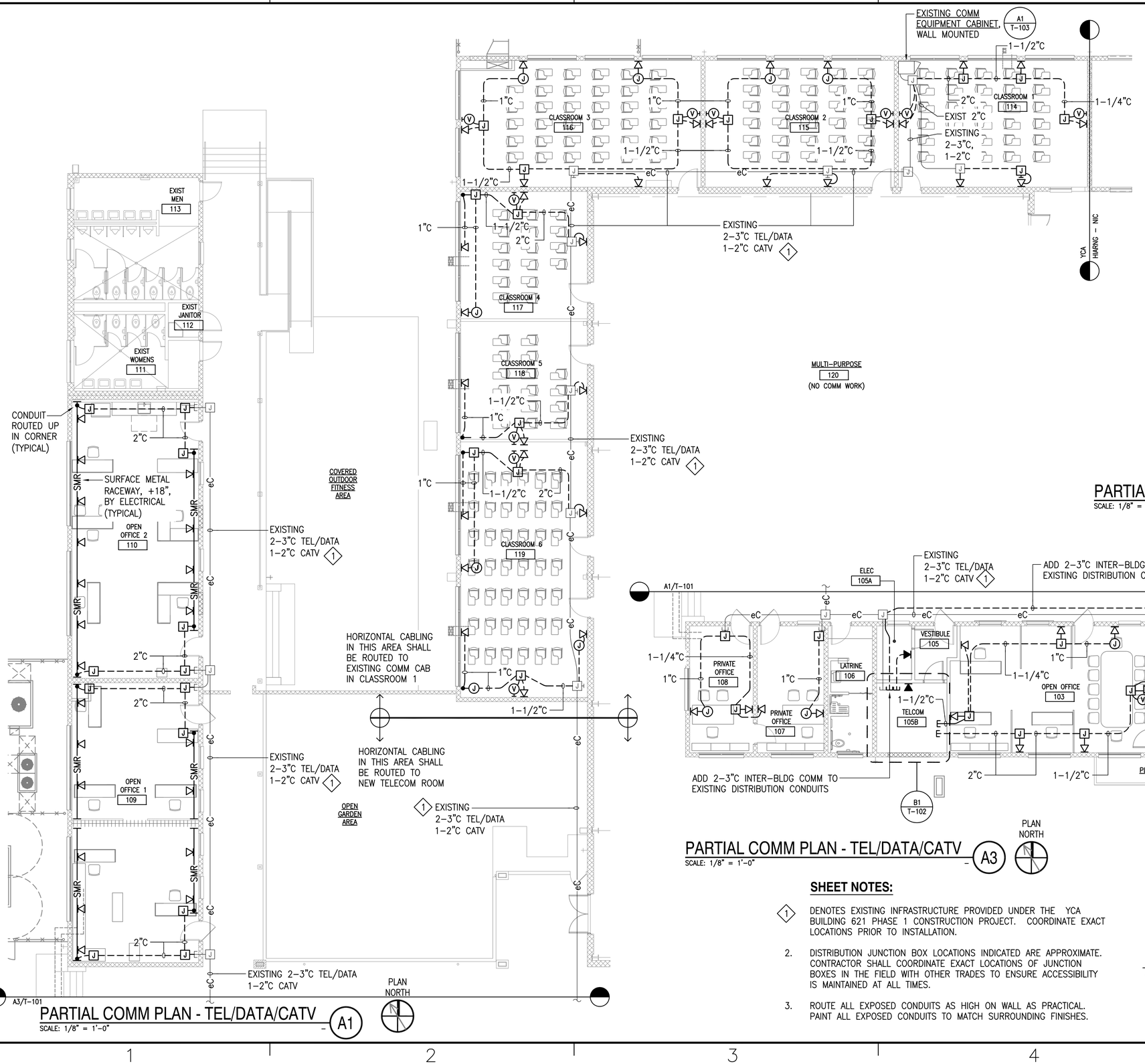
SCALE: AS NOTED

STATE JOB NO. CA–1212–C2

FEDERAL PROJECT NO. –

SHEET 124 OF 131

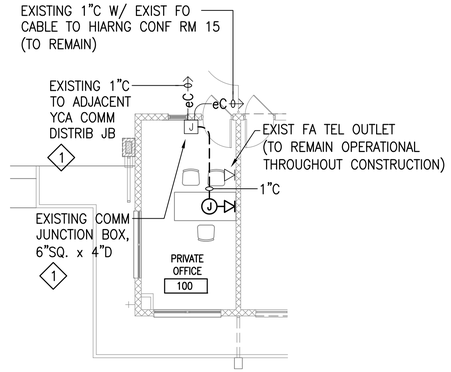
**T-100**




## PARTIAL COMM PLAN - TEL/DATA/CATV

SCALE: 1/8" = 1'-0" — A1

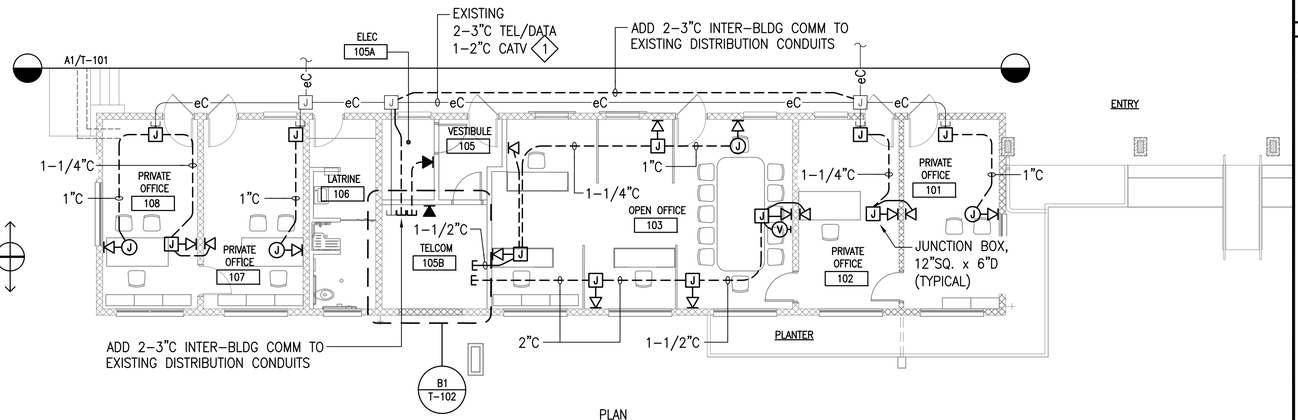
PLAN NORTH




## PARTIAL COMM PLAN - TEL/DATA/CATV

SCALE: 1/8" = 1'-0" — C4

PLAN NORTH



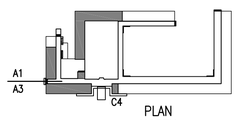

## PARTIAL COMM PLAN - TEL/DATA/CATV

SCALE: 1/8" = 1'-0" — A3

PLAN NORTH

### SHEET NOTES:

1. DENOTES EXISTING INFRASTRUCTURE PROVIDED UNDER THE YCA BUILDING 621 PHASE 1 CONSTRUCTION PROJECT. COORDINATE EXACT LOCATIONS PRIOR TO INSTALLATION.
2. DISTRIBUTION JUNCTION BOX LOCATIONS INDICATED ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF JUNCTION BOXES IN THE FIELD WITH OTHER TRADES TO ENSURE ACCESSIBILITY IS MAINTAINED AT ALL TIMES.
3. ROUTE ALL EXPOSED CONDUITS AS HIGH ON WALL AS PRACTICAL. PAINT ALL EXPOSED CONDUITS TO MATCH SURROUNDING FINISHES.




KEY PLAN

PLAN NORTH

GRAPHIC SCALE: 0 2 4 8 16 24FT

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

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHAEL-SHAWN MATSUTSUI — LICENSED PROFESSIONAL ENGINEER — No. 10603-E — HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018

SIGNATURE — EXPIRATION DATE

| APPR | DATE | SHEET NO. | DESCRIPTION | SYM |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUN 2016

DES MMI | DRW FCC | CHK MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I

# YOUTH CHALLENGE ACADEMY (YCA) BUILDING 621 RENOVATION - PHASE 2

PARTIAL BLDG 621 YCA COMM PLANS – TEL/DATA/CATV

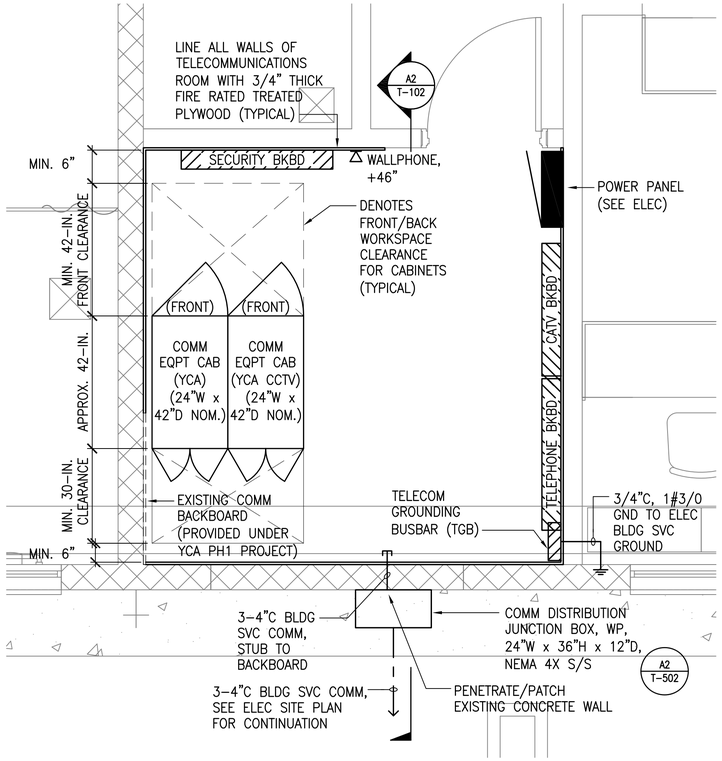
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

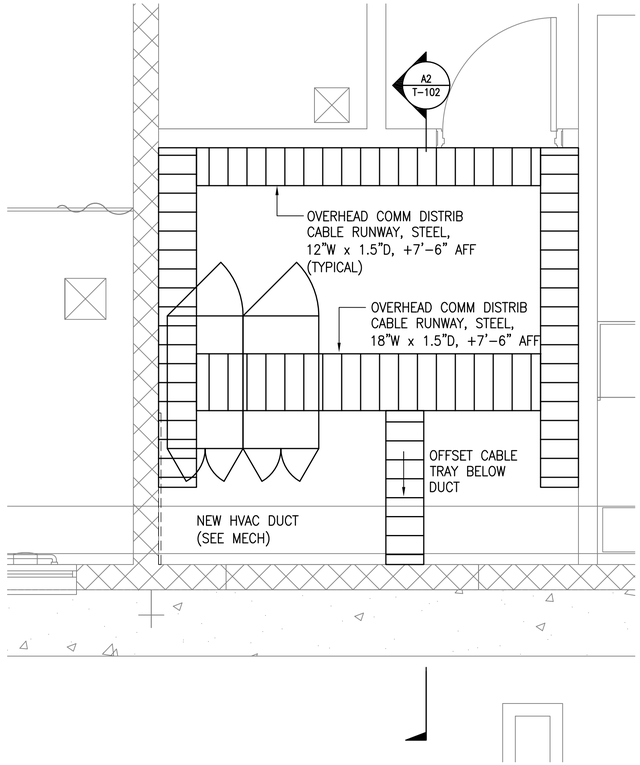
FEDERAL PROJECT NO. –

SHEET 125 OF 131

T-101




**FLOOR PLAN**

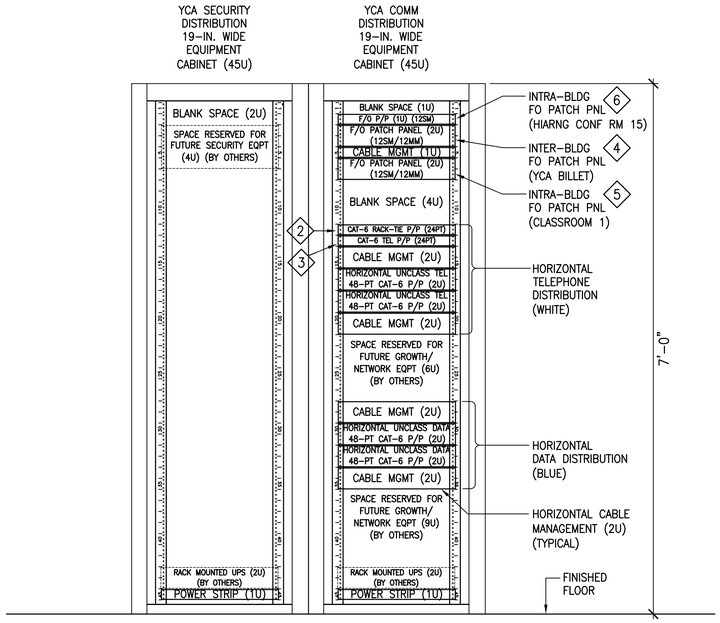



**OVERHEAD DISTRIBUTION PLAN**

## ENLARGED PLAN - YCA TELECOM ROOM (RM 105B) — B1

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

PLAN NORTH




### NOTES:

1. EQUIPMENT CABINET LAYOUTS ARE PROVIDED FOR INFORMATION ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EQUIPMENT REQUIREMENTS AND PROVIDING ALL NECESSARY EQUIPMENT TO ENSURE A COMPLETE AND OPERATIONAL SYSTEM.

◇2 24-PORT CAT-6 RACK-TIE PATCH PANEL (1U), SUPPORTS ANALOG TELEPHONE CONNECTIONS BETWEEN BACKBOARD AND EQUIPMENT RACK/CABINET.

◇3 24-PORT CAT-6 TELEPHONE (WALLPHONE) PATCH PANEL (1U)

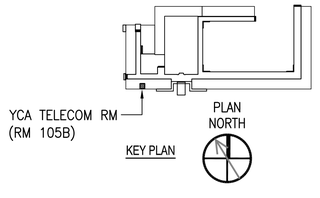
◇4 YCA INTER-BUILDING OSP FIBER OPTIC PATCH PANEL (YCA BILLET), HYBRID FO (12-STD SINGLE-MODE/ 12-STD OM-3 50-MICRON MULTI-MODE), DUPLEX SC CONNECTORS.

◇5 YCA INTRA-BUILDING FIBER OPTIC PATCH PANEL (YCA CLASSROOM 1), HYBRID FO (12-STD SINGLE-MODE/ 12-STD OM-3 50-MICRON MULTI-MODE), DUPLEX SC CONNECTORS.

◇6 YCA INTRA-BUILDING FIBER OPTIC PATCH PANEL (HIARNG CONF RM 15), HYBRID FO (12-STD SINGLE-MODE), DUPLEX SC CONNECTORS. TRANSFER EXIST FO CONNECTIONS FROM WALL MOUNTED COMM BACKBOARD.

## COMM CABINET ELEVATION - YCA COMM ROOM (RM 105B) — B4

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

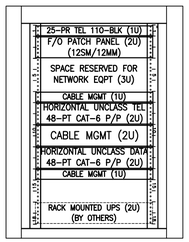


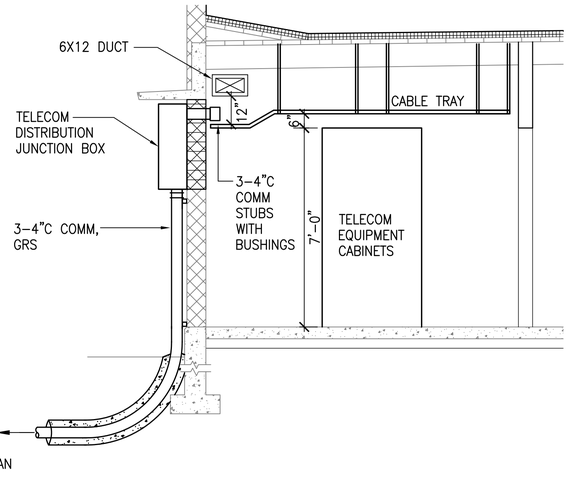

GRAPHIC SCALE:

0 1 2 4 6FT

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

WALL MTD COMM DISTRIBUTION 19-IN. WIDE EQUIPMENT CABINET (18U)




## COMM CABINET ELEVATION - CLASSROOM 1 — A1

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

## COMM ROOM - WALL SECTION — A2

NOT TO SCALE


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL-SHAWN MATSUI — LICENSED PROFESSIONAL ENGINEER — No. 10603-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018

SIGNATURE — EXPIRATION DATE

| SYM | DESCRIPTION | SHEET NO. | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL

SUBMITTAL DATE: 30 JUN 2016

DES: MMI DRW: FCC CHK: MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION — HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
BLDG 621 HIARNG ENLARGED COMM ROOM PLANS

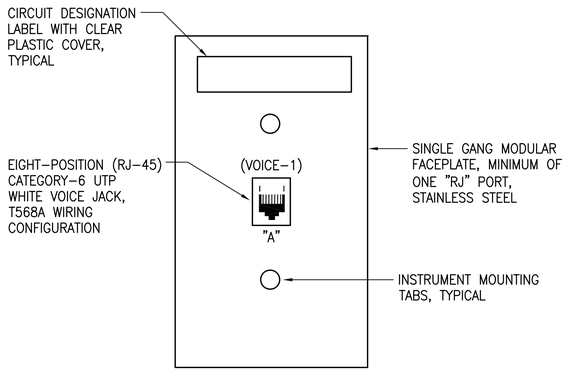
SCALE: AS NOTED

STATE JOB NO. CA-1212-C2

FEDERAL PROJECT NO. –

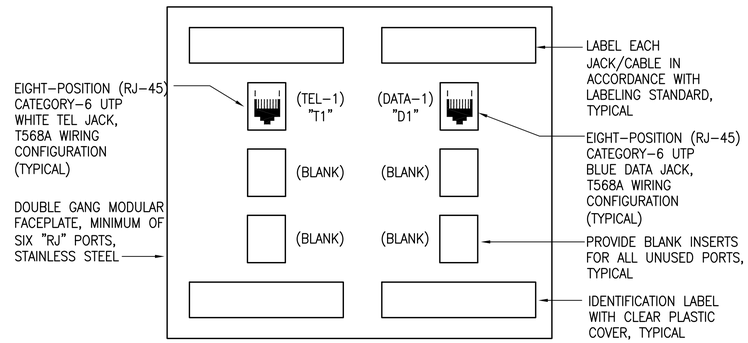
SHEET 126 OF 131

T-102



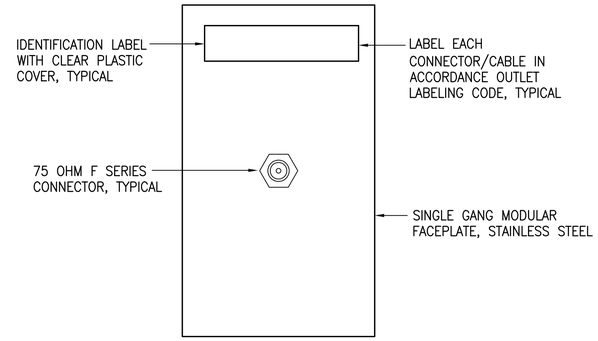

## TYPICAL TELEPHONE WALLPHONE OUTLET DETAIL C1

NOT TO SCALE




## TYPICAL COMBINATION TEL/DATA INFORMATION OUTLET DETAIL C2

NOT TO SCALE

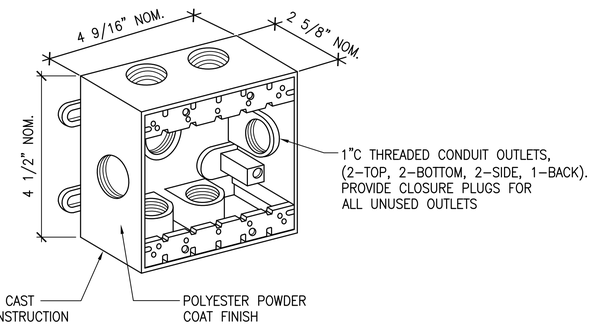



## TYPICAL CATV OUTLET DETAIL (1V) C4

NOT TO SCALE

## JACK/CABLE COLOR CODING SCHEME

| COLOR | SYSTEM DESCRIPTION |
|---|---|
| WHITE | TELEPHONE (VOICE) |
| BLUE | DATA/LAN |
| YELLOW | SECURITY (CCTV/ACS/IDS) |

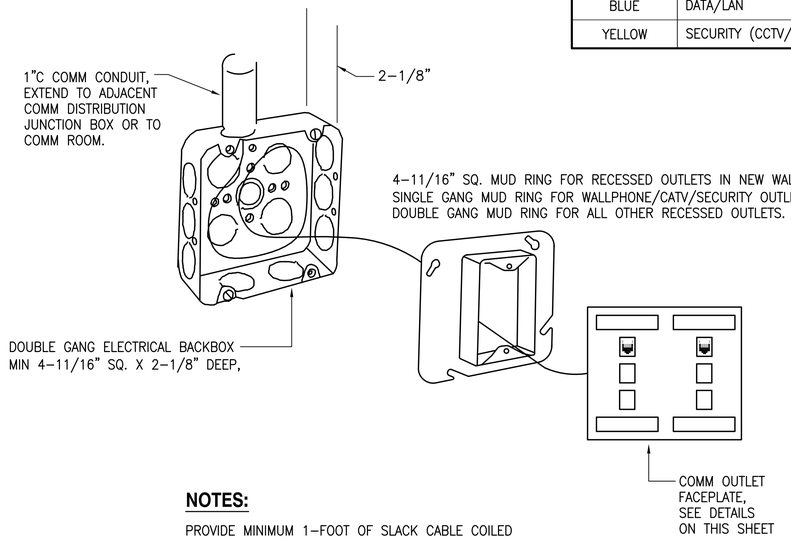



**NOTES:**

1. FACEPLATES NOT SHOWN FOR CLARITY. FOR FACEPLATE REQUIREMENTS, SEE DETAILS ABOVE.
2. O–Z GEDNEY #WDK210 OR APPROVED EQUIVALENT
3. PAINT OUTLETS AND CONDUITS TO MATCH EXISTING SURROUNDING SURFACE.
4. CUT CONDUIT OPENINGS AS REQUIRED TO CONNECT INDICATED CONDUIT SIZES AND COUNTS. REMOVE ALL SHARP EDGES.
5. MOUNT TO WALL WITH SCREWS OR ANCHOR BOLTS.
6. ORIENT BOXES TO ALLOW INSTALLATION OF OUTLET COVERS AS INDICATED IN DETAILS ABOVE.
7. DOUBLE–GANG OUTLET BOX SHOWN ABOVE. OUTLET BOX FOR SURFACE MOUNTED WALLPHONE, SECURITY, AND CATV OUTLETS ON EXISTING WALLS SIMILAR EXCEPT SINGLE–GANG DEEP OUTLET BOX.

## TYPICAL SURFACE MOUNTED TELECOM OUTLET BOX DETAIL - EXISTING WALL A1

NOT TO SCALE




**NOTES:**

PROVIDE MINIMUM 1–FOOT OF SLACK CABLE COILED AND STOWED AT EACH OUTLET LOCATION. DO NOT EXCEED CABLE MANUFACTURER'S RECOMMENDED MINIMUM BENDING RADIUS.

## TYPICAL RECESSED TELECOM OUTLET BOX DETAIL - NEW WALL A3

NOT TO SCALE

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHAEL SHAWN MATSUSUE — LICENSED PROFESSIONAL ENGINEER — No. 10603–E — HAWAII U.S.A.

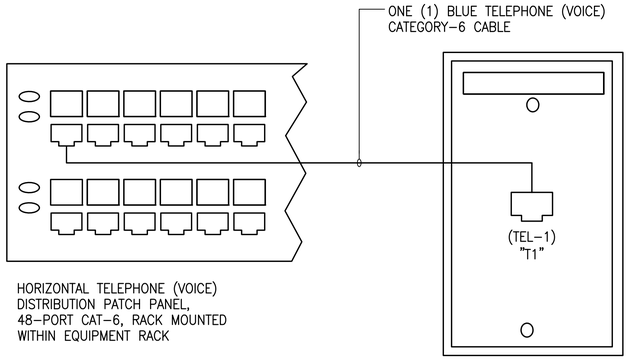
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION 4/30/2018
SIGNATURE EXPIRATION DATE

| NO | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SUBMITTAL PHASE
FINAL SUBMITTAL
SUBMITTAL DATE 30 JUN 2016
DES MMI DRW FCC CHK MMI

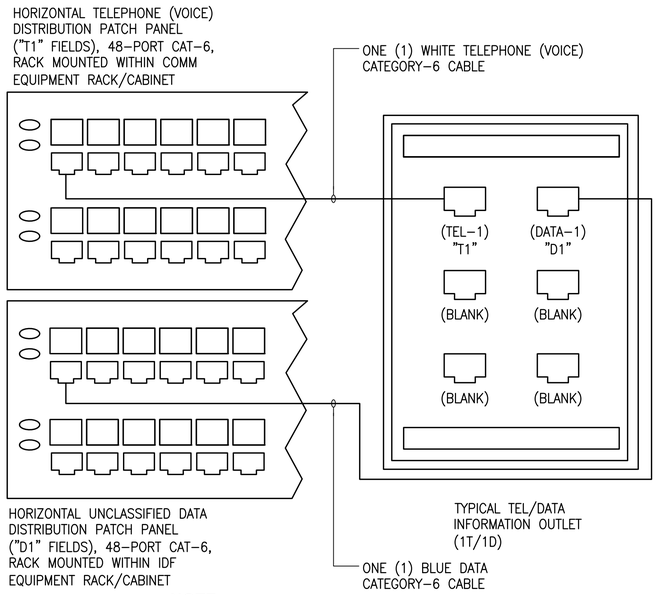
DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS DETAILS

SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 127 OF 131
T-501



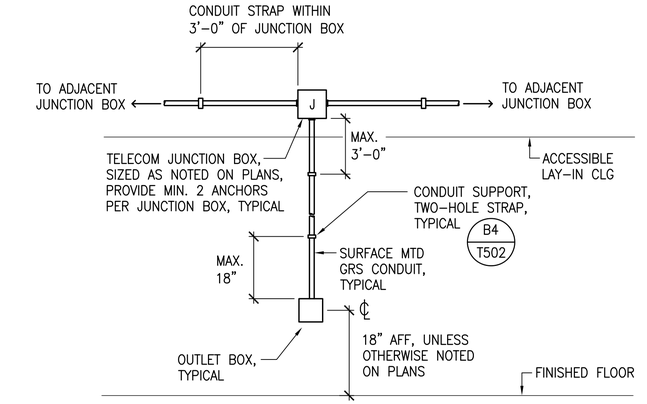

**NOTES:**

1. ALL TELEPHONE WALLPHONE OUTLETS SHALL BE GROUPED TOGETHER WITHIN THE SAME TELEPHONE (VOICE) PATCH PANEL.
2. ALL TELECOMMUNICATIONS INFRASTRUCTURE (OUTLETS, PATCH PANELS, EQUIPMENT/COMPONENT PANELS, RACKS, ETC.) SHALL BE LABELED IN ACCORDANCE WITH YCA BUILDING CABLING SYSTEM LABELING STANDARDS AND IN ACCORDANCE WITH ANSI/TIA/EIA–606–A.



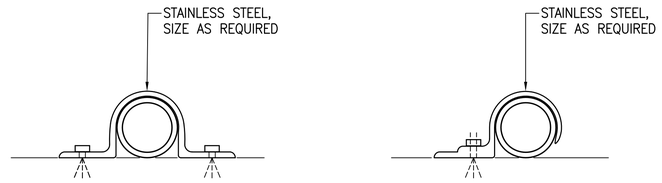

**NOTE:**

ALL TELECOMMUNICATIONS INFRASTRUCTURE (OUTLETS, PATCH PANELS, EQUIPMENT/COMPONENT PANELS, RACKS, ETC.) SHALL BE LABELED IN ACCORDANCE WITH YCA BUILDING CABLING SYSTEM LABELING STANDARDS AND IN ACCORDANCE WITH ANSI/TIA/EIA–606–A.



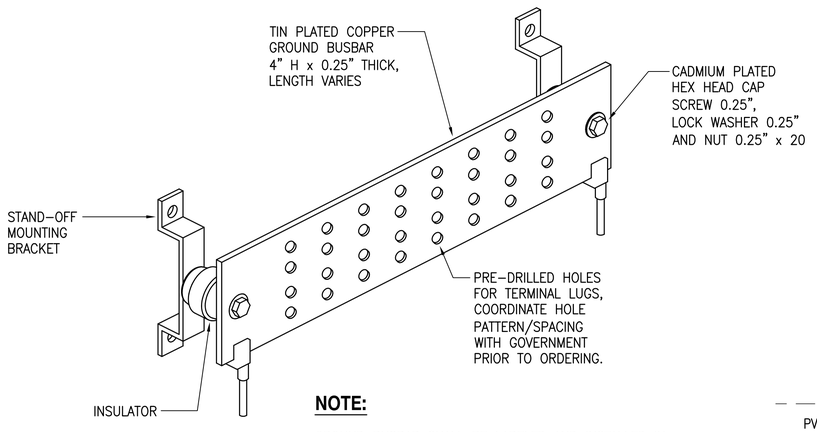

## TYPICAL SURFACE MOUNTED TELECOM OUTLET - ELEVATION C4

NOT TO SCALE




## TYPICAL TEL WALLPHONE OUTLET WIRING DIAGRAM B1

NOT TO SCALE




**NOTE:**

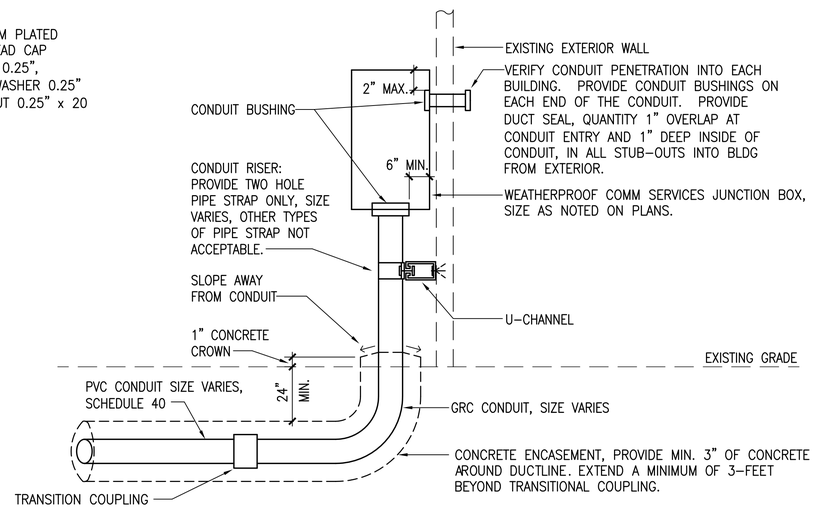
GROUND BUSBAR SHALL BE LABELED AND INSTALLED IN ACCORDANCE WITH ANSI J–STD–607–A. CONNECTIONS TO GROUND BUS SHALL BE VIA TWO–HOLE LUGS WITH NON–REVERSABLE COMPRESSION CRIMP. MECHANICAL LUG CONNECTIONS SHALL NOT BE USED.

## TELECOMMUNICATIONS GROUNDING BUSBAR DETAIL A1

NOT TO SCALE

## TYPICAL TEL/DATA INFORMATION OUTLET WIRING DIAGRAM B2

NOT TO SCALE

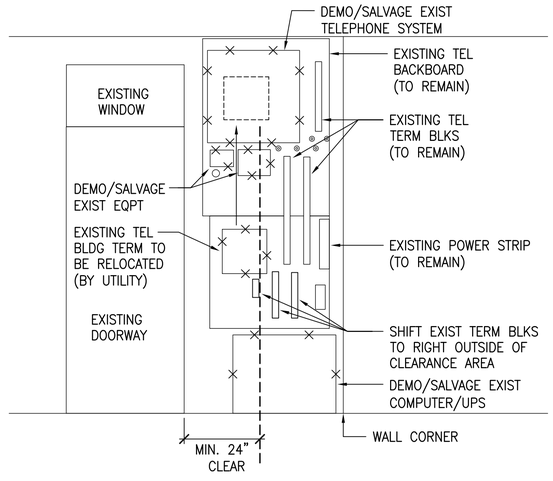



## TYPICAL EXTERIOR BUILDING SERVICE JUNCTION BOX DETAIL A2

NOT TO SCALE

## CONDUIT STRAP DETAIL B4

NOT TO SCALE




## EXISTING TELEPHONE EQUIPMENT - LATRINE A4

NOT TO SCALE


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL–SHAWN MATSUI LICENSED PROFESSIONAL ENGINEER No. 10603–E HAWAII U.S.A.

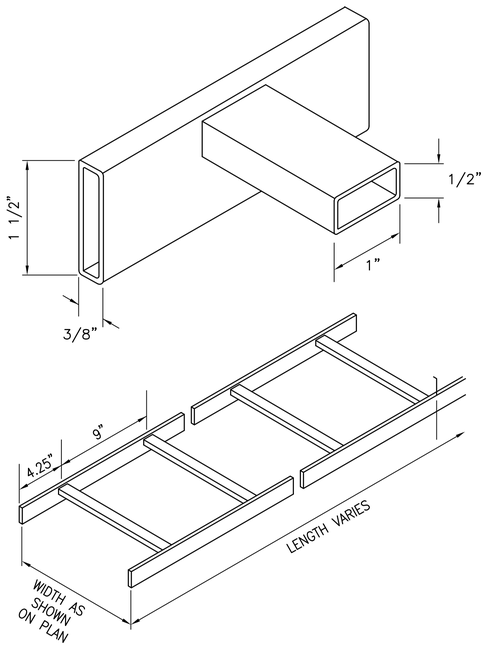
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|
| | | | |

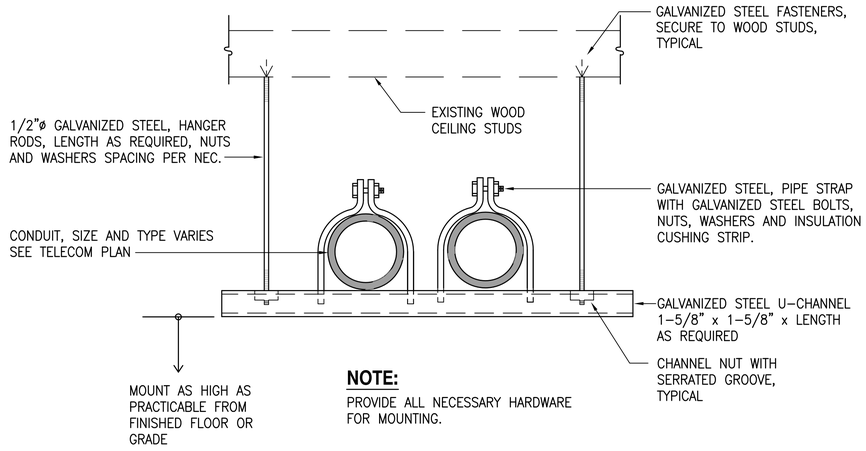
SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES: MMI | DRW: FCC | CHK: MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS DETAILS

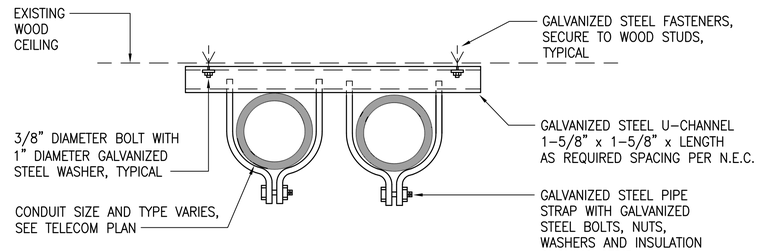
SCALE: AS NOTED
STATE JOB NO. CA–1212–C2
FEDERAL PROJECT NO. –
SHEET 128 OF 131
T-502



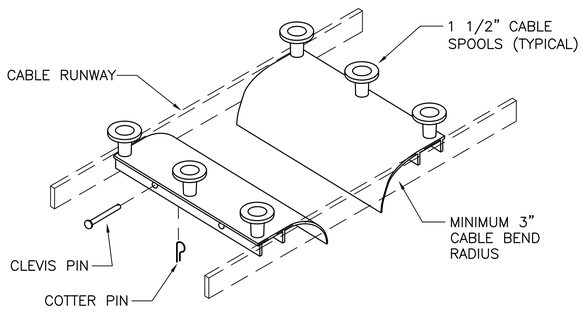

## CABLE RUNWAY DETAIL — C1
NOT TO SCALE




## TYPICAL CEILING CONDUIT HANGAR SUPPORT DETAIL — C2
NOT TO SCALE



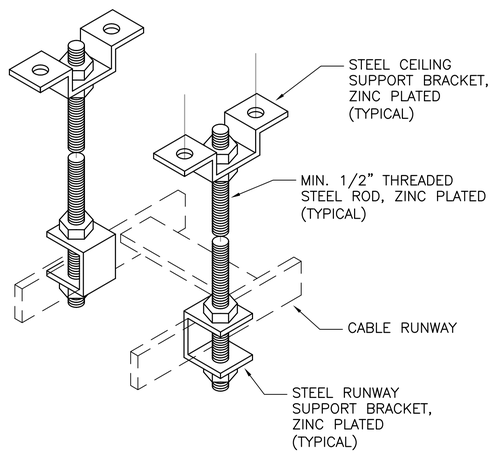

## TYPICAL CEILING MOUNTED CONDUIT SUPPORT DETAIL — C4
NOT TO SCALE



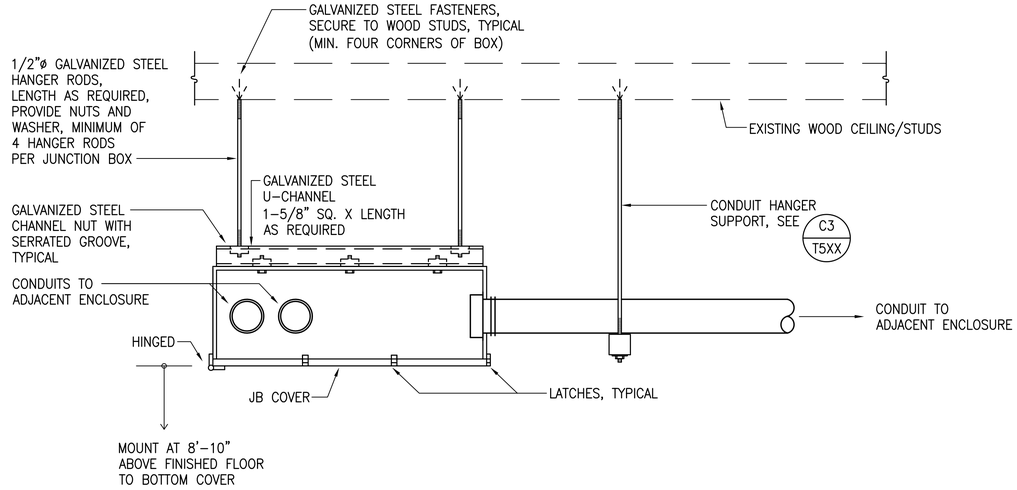

**NOTE:**

PROVIDE MINIMUM OF ONE (1) CABLE RUNWAY DROPOUT PER EQUIPMENT CABINET POSITION. REFER TO FLOORPLANS FOR EQUIPMENT CABINET POSITIIONS.

## CABLE RUNWAY DROPOUT DETAIL — A1
NOT TO SCALE




## CABLE RUNWAY SUPPORT DETAIL — A2
NOT TO SCALE




## CEILING SUSPENDED TELECOM JUNCTION BOX SUPPORT DETAIL — A3
NOT TO SCALE

ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com

MICHAEL-SHAWN MATSUSU — LICENSED PROFESSIONAL ENGINEER — No. 10603-E — HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

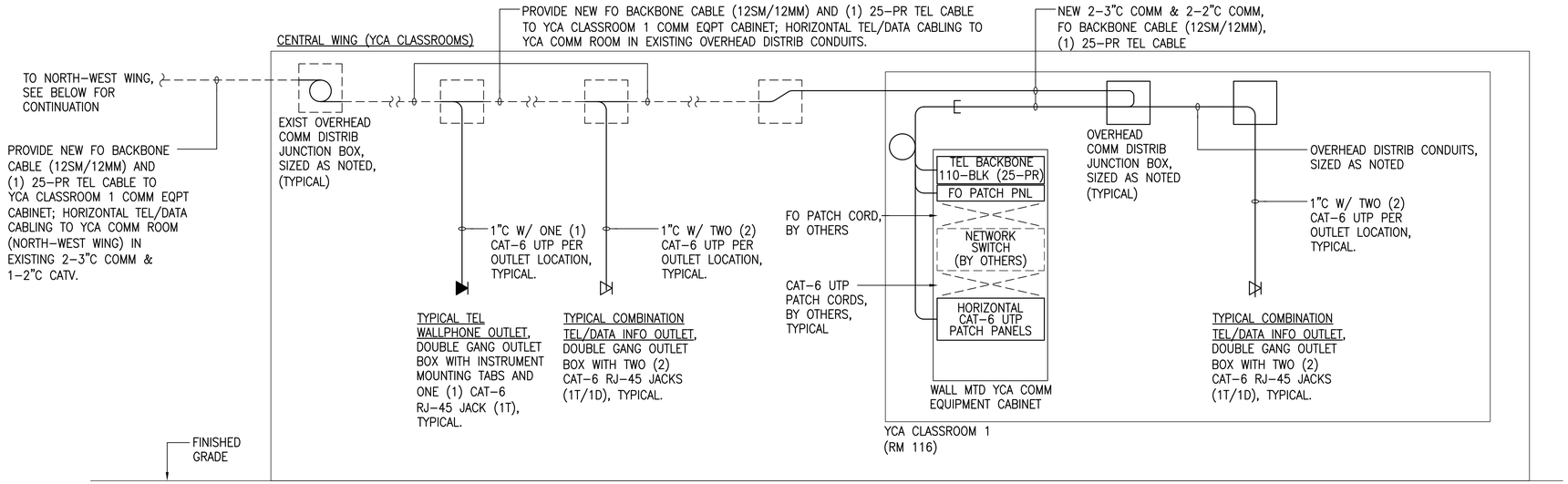
| SYM | DESCRIPTION | DATE | APPR |
|---|---|---|---|

SHEET OF

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES: MMI | DRW: FCC | CHK: MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS DETAILS

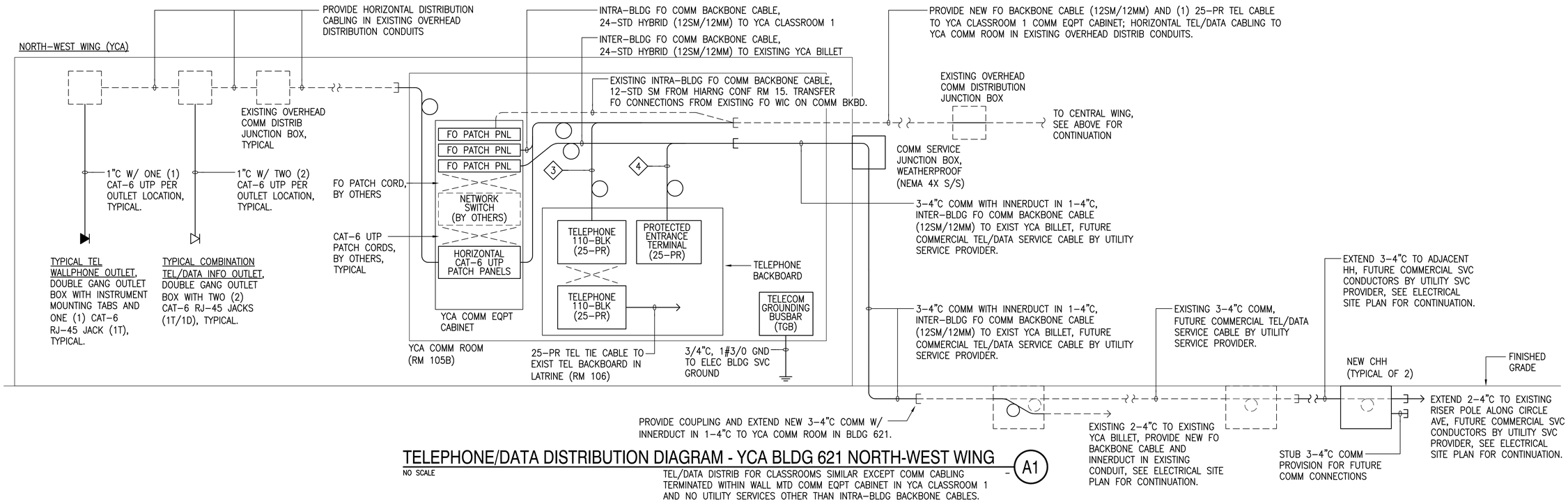
SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 129 OF 131
T-503




## TELEPHONE/DATA DISTRIBUTION DIAGRAM - YCA BLDG 621 CENTRAL WING

NO SCALE

C1




## TELEPHONE/DATA DISTRIBUTION DIAGRAM - YCA BLDG 621 NORTH-WEST WING

NO SCALE

A1

TEL/DATA DISTRIB FOR CLASSROOMS SIMILAR EXCEPT COMM CABLING TERMINATED WITHIN WALL MTD COMM EQPT CABINET IN YCA CLASSROOM 1 AND NO UTILITY SERVICES OTHER THAN INTRA-BLDG BACKBONE CABLES.

## SHEET **NOTES:**

1. ALL TELECOMMUNICATIONS HORIZONTAL DISTRIBUTION CABLING SHALL BE ROUTED TO THE YCA COMM ROOM (RM 105B) IN NORTH-WEST WING (YCA) WITH EXCEPTION OF TELECOMMUNICATIONS OUTLETS WITHIN YCA CLASSROOMS. ALL HORIZONTAL DISTRIBUTION CABLING FOR TELECOMMUNICATIONS OUTLETS WITHIN YCA CLASSROOMS SHALL BE ROUTED TO NEW WALL MOUNTED COMM EQUIPMENT CABINET WITHIN CLASSROOM 1 (RM 116).
2. ALL TELECOMMUNICATIONS HORIZONTAL DISTRIBUTION CABLING SHALL BE TERMINATED ON RACK/CABINET MOUNTED CAT-6 RJ-45 PATCH PANELS.

◇3 INTRA-BLDG TEL BACKBONE CABLE TO YCA CLASSROOM 1 (RM 116), 25-PAIR TEL CABLE.

◇4 INTER-BLDG TEL BACKBONE CABLE TO EXISTING YCA BILLET FACILITY, 25-PAIR OSP TEL CABLE.

5. DASHED LINES DENOTE EXISTING CONDITIONS OR WORK BY OTHERS, SOLID LINES DENOTE NEW WORK.


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL SHAWN MATSUSHIMA — LICENSED PROFESSIONAL ENGINEER — No. 10603-E — HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION — 4/30/2018
SIGNATURE — EXPIRATION DATE

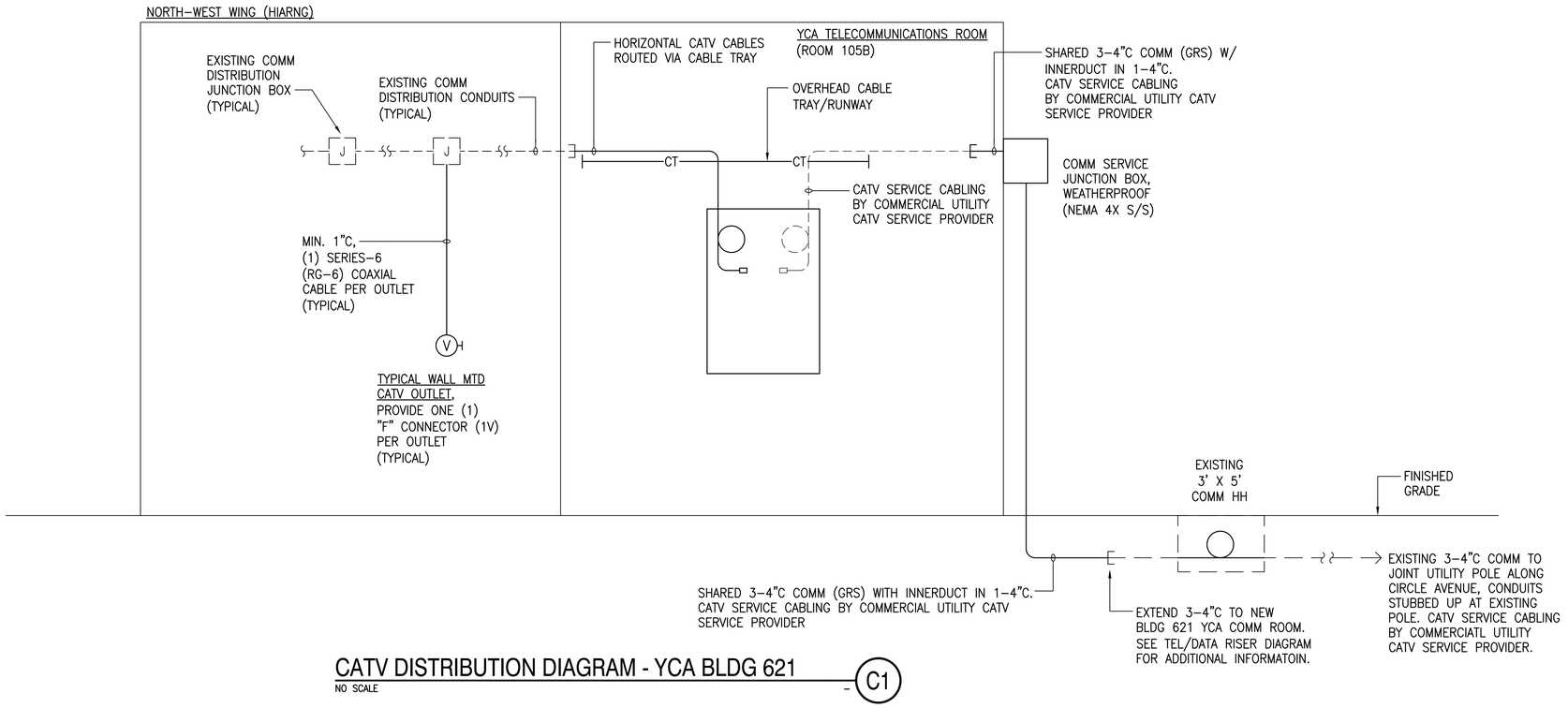
| APPR | DATE | SHEET OF | DESCRIPTION | SYM |
|---|---|---|---|---|
| | | | | |

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES MMI DRW FCC CHK MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS DISTRIBUTION DIAGRAMS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. –
SHEET 130 OF 131

T-601




## CATV DISTRIBUTION DIAGRAM - YCA BLDG 621

NO SCALE

C1

**NOTE:**

DASHED LINES DENOTE EXISTING CONDITIONS OR WORK BY OTHERS, SOLID LINES DENOTE NEW WORK.


ARCHITECTS-HAWAII LIMITED
733 BISHOP STREET, SUITE 3100
HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-9636
FAX: (808) 521-3280
www.ahldesign.com


MICHAEL-SHAWN MATSUSHIMA
LICENSED PROFESSIONAL ENGINEER
No. 10603-E
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SIGNATURE
4/30/2018
EXPIRATION DATE

| SYM | DESCRIPTION | SHEET OF | DATE | APPR |
|---|---|---|---|---|

SUBMITTAL PHASE: FINAL SUBMITTAL
SUBMITTAL DATE: 30 JUN 2016
DES MMI | DRW FCC | CHK MMI

DEPARTMENT OF DEFENSE
STATE OF HAWAI'I
HAWAI'I ARMY NATIONAL GUARD
YOUTH CHALLENGE ACADEMY
KEAUKAHA MILITARY RESERVATION
HILO, HAWAI'I
YOUTH CHALLENGE ACADEMY (YCA)
BUILDING 621 RENOVATION - PHASE 2
TELECOMMUNICATIONS DISTRIBUTION DIAGRAMS

SCALE: AS NOTED
STATE JOB NO. CA-1212-C2
FEDERAL PROJECT NO. -
SHEET 131 OF 131
T-602