

ROOF REPAIR / REPLACEMENT FOR BUILDING 1784

FEDERAL PROJECT NUMBER: PN15140055

FOR THE STATE OF HAWAII, DEPARTMENT OF DEFENSE, HAWAII ARMY NATIONAL GUARD

100% FINAL DESIGN

NOT FOR CONSTRUCTION



FERRARO CHOI
 FERRARO CHOI AND ASSOCIATES LTD
 1240 ALA MOANA BLVD, SUITE 510
 HONOLULU, HI 96826
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A/E INFO



EXP. 4/30/2020
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY SUPERVISION.

| BUILDING CODE SUMMARY | PROJECT INFORMATION | PROJECT TEAM | ZONING CODE SUMMARY | | | | | | | | |
|---|---|--|--|---|--------------------|--|----------------------|--|--------------------|--|----------------------------|
| <p>APPLICABLE CODES AND STANDARDS:</p> <p>2006 INTERNATIONAL BUILDING CODE (IBC) AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU</p> <p>2006 NFPA 1: UNIFORM FIRE CODE (UFC) AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU</p> <p>2006 UNIFORM PLUMBING CODE (UPC) WITH STATE AMENDMENTS</p> <p>2008 NATIONAL ELECTRICAL CODE (NEC) AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU</p> <p>2006 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU</p> <p>UNIFIED FACILITIES CRITERIA (UFC) UFC 1-200-01 GENERAL BUILDING REQUIREMENTS, 01 JULY 2013 UFC 1-200-02 HIGH PERFORMANCE AND SUSTAINABLE BUILDING REQUIREMENTS, 01 MARCH 2013 UFC 1-300-09N DESIGN PROCEDURES, 01 MAY 2014 UFC 3-101-01 ARCHITECTURE, 28 NOVEMBER 2011 UFC 3-101-04 ROOFING, 01 MAY 2012</p> <p>NATIONAL GUARD DESIGN GUIDES AND STANDARDS (DG) DG 415-1 READINESS CENTERS DESIGN GUIDE, 01 JUNE 2011 DG 415-5 GENERAL FACILITIES INFORMATION DESIGN GUIDE, 01 JUNE 2011, APPENDIX A NG PAM 415-12 FACILITIES ALLOWANCES, 01 JUNE 2011</p> <p>2010 ADA STANDARDS FOR ACCESSIBLE DESIGN</p> <p>TRADE STANDARDS: AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE) 90.1 SHEET METAL AND AIR CONDITIONING CONTRATORS NATIONAL ASSOCIATION (SMACNA) NRCA, ROOFING AND WATERPROOFING MANUAL AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)</p> <p>TYPE OF CONSTRUCTION: IIIB, NO CHANGE IN CONSTRUCTION</p> <p>FIRE SPRINKLER: NONE</p> <p>OCCUPANCY GROUP: B (EXISTING USE, TO REMAIN)</p> <p>NUMBER OF STORIES: 3 STORY (EXISTING, NO CHANGE)</p> <p>FLOOR AREA (EXISTING): 16,950 SF NOTE: NO CHANGE IN FLOOR AREA TO EXISTING BUILDING.</p> | <p>PROJECT NAME: ROOF REPAIR / REPLACEMENT FOR BUILDING 1784</p> <p>OWNER: DEPARTMENT OF DEFENSE</p> <p>TAX MAP KEY: 9-1-013-050</p> <p>PROJECT ADDRESS: 91-1152 ENTERPRISE AVE BARBERS POINT NAS 96862</p> <p>SUMMARY OF WORK: ROOF REPAIR/ REPLACEMENT</p> | <p>ARCHITECT: FERRARO CHOI AND ASSOCIATES, LTD. 1240 ALA MOANA BOULEVARD, SUITE 510 HONOLULU, HAWAII 96814 808.533.8880</p> <p>MECHANICAL, ELECTRICAL & PLUMBING ENGINEERS: WSP HAWAII INC. 1132 BISHOP ST, SUITE 1850 HONOLULU, HAWAII 96813 808.536.1737</p> <p>ENVIRONMENTAL: ENVIRONMETEO SERVICES, INC. 94-520 UKE'E ST WAIPAHU, HAWAII 96797 808.671.8383</p> | <p>TAX MAP KEY: 9-1-013-050</p> <p>ZONING DISTRICT (LUO): F-1</p> <p>FLOOD ZONE: D</p> <p>SPECIAL MANAGEMENT AREAS: NOT IN SMA</p> <p>SPECIAL DESIGN DISTRICT: NOT IN SPECIAL DESIGN DISTRICT</p> <p>HISTORIC REGISTER: NONE</p> <p>LOT RESTRICTIONS: NONE</p> <p>HEIGHT LIMIT: 15 FT OR 25 FT WITH 1:2 SETBACK, NO CHANGE IN HEIGHT</p> <p>STREET SETBACK: NONE</p> <p>LOT AREA: 5.93 ACRES</p> <p>FLOOR AREA (LUO): 16,950 SF EXISTING, NO CHANGE IN AREA</p> <p>EXISTING USES: OFFICE, NO CHANGE IN USE</p> <p>NOTE: NO CHANGE IN FLOOR AREA, NO CHANGE IN PARKING</p> | | | | | | | | |
| <p>ACCESSIBILITY STATEMENT:</p> <p>CONFORMANCE WITH THE DESIGN AND CONSTRUCTION REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES ADMINISTERED BY THE DEPARTMENT OF JUSTICE OR THE FAIR HOUSING ACT ACCESSIBILITY GUIDELINES ADMINISTERED BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT SHALL BE EQUIVALENT TO MEETING THE ACCESSIBILITY OF THIS CODE. CONSTRUCTION OF PUBLIC BUILDINGS OR FACILITIES IN COMPLIANCE WITH HRS 103-50 SHALL BE EQUIVALENT TO MEETING THE ACCESSIBILITY OF THIS CODE.</p> | <p>INDEX TO DRAWINGS</p> <table border="0"> <tr> <td>GENERAL:</td> <td>G0.01 - TITLESHEET G0.02 - ABBREVIATIONS AND SYMBOLS</td> <td>MECHANICAL:</td> <td>M0.01 - GENERAL NOTES AND LEGEND M1.01 - BLDGS 1785 & 1788 ROOF PLANS M2.01 - MECHANICAL SCHEDULES</td> </tr> <tr> <td>ARCHITECTURE:</td> <td>A1.01 - BLDG 1785 DEMO & NEW ROOF PLAN A1.02 - BLDG 1788 DEMO & NEW ROOF PLAN A9.01 - ROOF DETAILS A9.02 - ROOF DETAILS</td> <td>ELECTRICAL:</td> <td>E1.01 - BLDGS 1785 & 1788 ELECTRICAL NOTES, LEGEND & ROOF ELECTRICAL PLANS</td> </tr> </table> | | GENERAL: | G0.01 - TITLESHEET G0.02 - ABBREVIATIONS AND SYMBOLS | MECHANICAL: | M0.01 - GENERAL NOTES AND LEGEND M1.01 - BLDGS 1785 & 1788 ROOF PLANS M2.01 - MECHANICAL SCHEDULES | ARCHITECTURE: | A1.01 - BLDG 1785 DEMO & NEW ROOF PLAN A1.02 - BLDG 1788 DEMO & NEW ROOF PLAN A9.01 - ROOF DETAILS A9.02 - ROOF DETAILS | ELECTRICAL: | E1.01 - BLDGS 1785 & 1788 ELECTRICAL NOTES, LEGEND & ROOF ELECTRICAL PLANS | <p>PROJECT SITE</p> |
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| | <p>LOCATION MAP</p> | <p>VICINITY MAP</p> | | | | | | | | | |

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| APPR | DATE | | | | |
| SYN | DESCRIPTION | | | | |
| SUBMITAL PHASE | | | | | |
| 100% FINAL DESIGN | | | | | |
| SUBMITAL DATE 06-19-15 | | | | | |
| DES | JD | DRW | CP | CHK | TM |
| DEPARTMENT OF DEFENSE DESIGN AND PROJECT MANAGEMENT BRANCH | | | | | |
| HAWAII ARMY NATIONAL GUARD DESIGN AND PROJECT MANAGEMENT BRANCH | | | | | |
| ROOF REPAIR / REPLACEMENT OF BUILDING 1784 91-1152 ENTERPRISE AVE KALAELOA, KAPOLEI, OAHU 96062, HI | | | | | |
| STATE OF HAWAII FACILITY MANAGEMENT OFFICE | | | | | |
| SCALE: VARIES | | | | | |
| STATE JOB NO. CA-1419-D | | | | | |
| FEDERAL PROJECT NO. PN15140055 | | | | | |
| SHEET 1 OF 10 | | | | | |
| G0.01 | | | | | |

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KEY NOTES:

- ① REMOVE ROOFING SYSTEM TO CONCRETE ROOF DECK
- ② REMOVE EDGE FLASHING IN ITS ENTIRETY

DEMO NOTES:

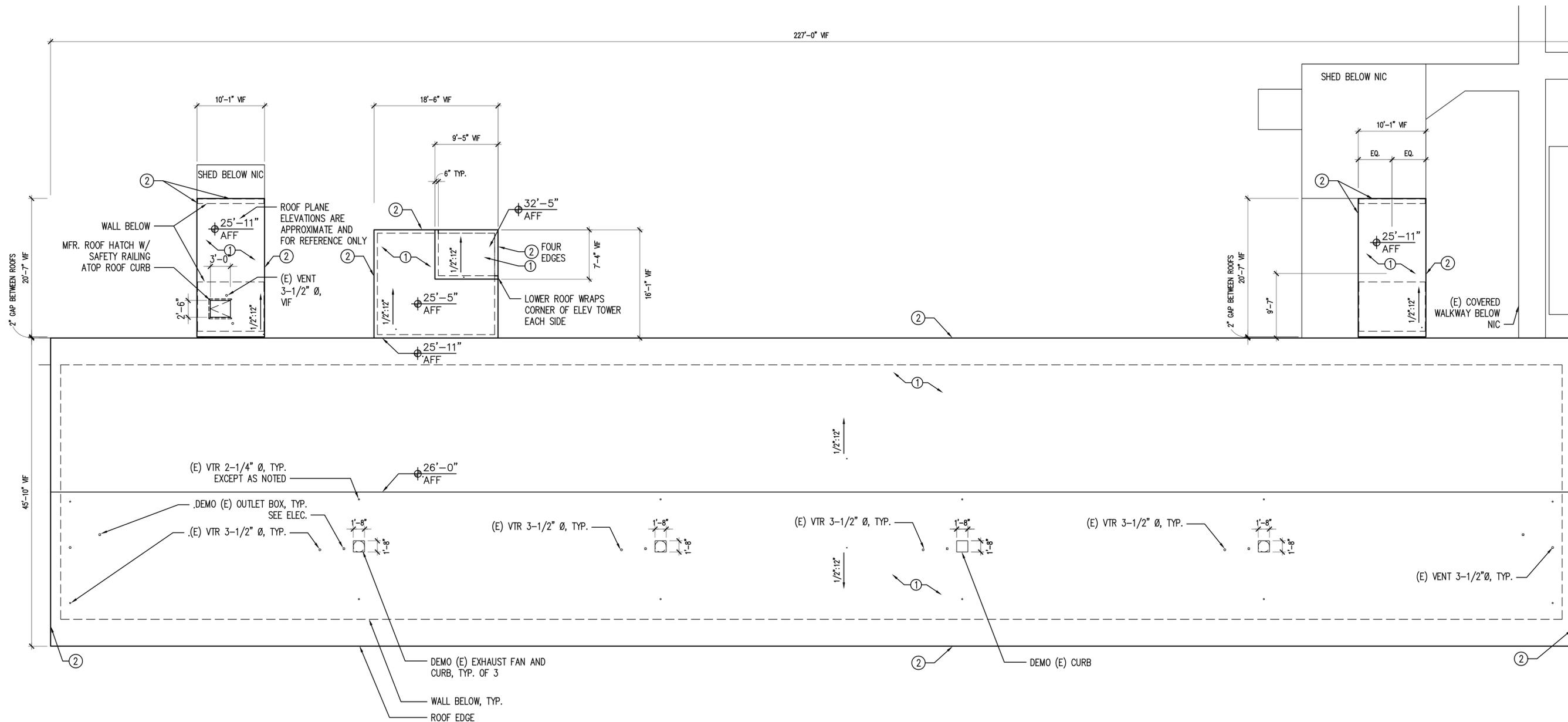
- 1. SCOPE OF WORK INCLUDES: MAIN ROOF, STAIR ROOFS AND ELEVATOR/ ENTRY VESTIBULE ROOF.
- 2. VERIFY ROOF PENETRATION SIZES IN FIELD.
- 3. FIELD VERIFY ROOF DECK SLOPES. NOTIFY ARCHITECT IF ROOF DECK SLOPES ARE LESS THAN THOSE INDICATED.

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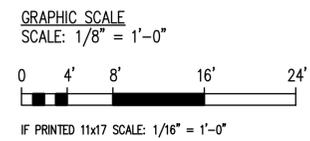
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1 BLDG 1784 - DEMO ROOF PLAN
 AD1.01 SCALE: 1/8" = 1' - 0"



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 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONTROL AND THE PROJECT WILL BE USED BY ME OR MY FIRM.

| SY# | DESCRIPTION | DATE | APPR. |
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| SUBMITTAL PHASE | | | |
| 100% FINAL DESIGN | | | |
| SUBMITTAL DATE 06-19-15 | | | |
| DES | JD | DRW | CP |
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| CHK | | | |
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|----------------------------|--|
| STATE OF HAWAII | DEPARTMENT OF DEFENSE |
| FACILITY MANAGEMENT OFFICE | DESIGN AND PROJECT MANAGEMENT BRANCH |
| HAWAII ARMY NATIONAL GUARD | ROOF REPAIR / REPLACEMENT OF BUILDING 1784 |
| | 91-1152 ENTERPRISE AVE |
| | KALAELOA, KAPOLEI, OAHU 96062, HI |
| | DEMO ROOF PLAN |
| SCALE: | 1/8" = 1' - 0" |
| STATE JOB NO. | CA-1419-D |
| FEDERAL PROJECT NO. | PN15140055 |
| SHEET | 3 OF 9 |
| AD1.01 | |

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 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONTROL AND I AM A LICENSED PROFESSIONAL ARCHITECT IN THE STATE OF HAWAII. MY LICENSE NO. IS 8018. I HEREBY CERTIFY THAT THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONTROL OF THE PROJECT WILL BE USED BY CONSTRUCTION. SEAL

| SYN | DESCRIPTION | DATE | APPR |
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| 100% FINAL DESIGN | | | |
| SUBMITTAL DATE 06-19-15 | | | |
| DES | JD | DRW | CP |
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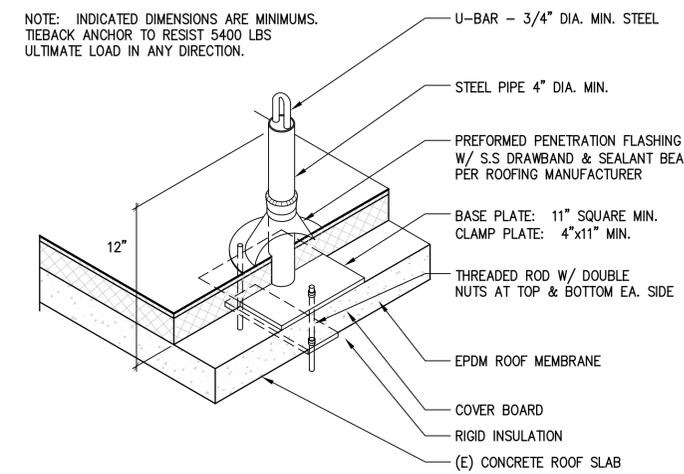
DEPARTMENT OF DEFENSE
 DESIGN AND PROJECT MANAGEMENT BRANCH

HAWAII ARMY NATIONAL GUARD
 FACILITY MANAGEMENT OFFICE

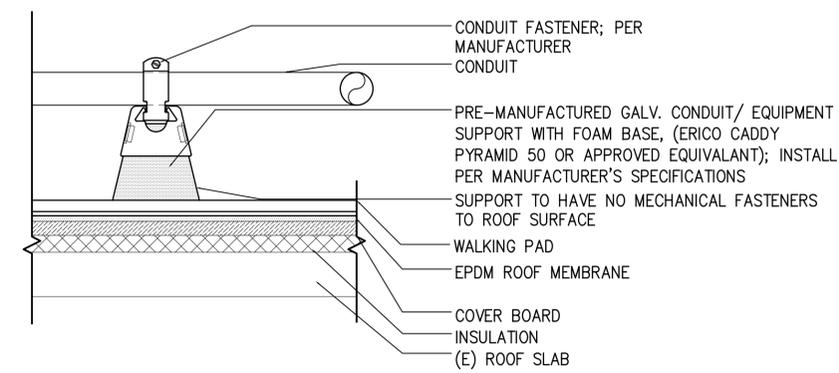
ROOF REPAIR / REPLACEMENT OF BUILDING 1784
 91-1152 ENTERPRISE AVE
 KALAELOA, KAPOLEI, OAHU 96062, HI

STATE OF HAWAII
 FACILITY MANAGEMENT OFFICE

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| SCALE: | VARIES |
| STATE JOB NO. | CA-1419-D |
| FEDERAL PROJECT NO. | PN15140055 |
| SHEET | 7 OF 10 |
| A9.02 | |



2 ROOF TIE OFF ANCHOR
 SCALE: 1" = 1'-0"



1 CONDUIT SLEEPER
 SCALE: 1" = 1'-0"

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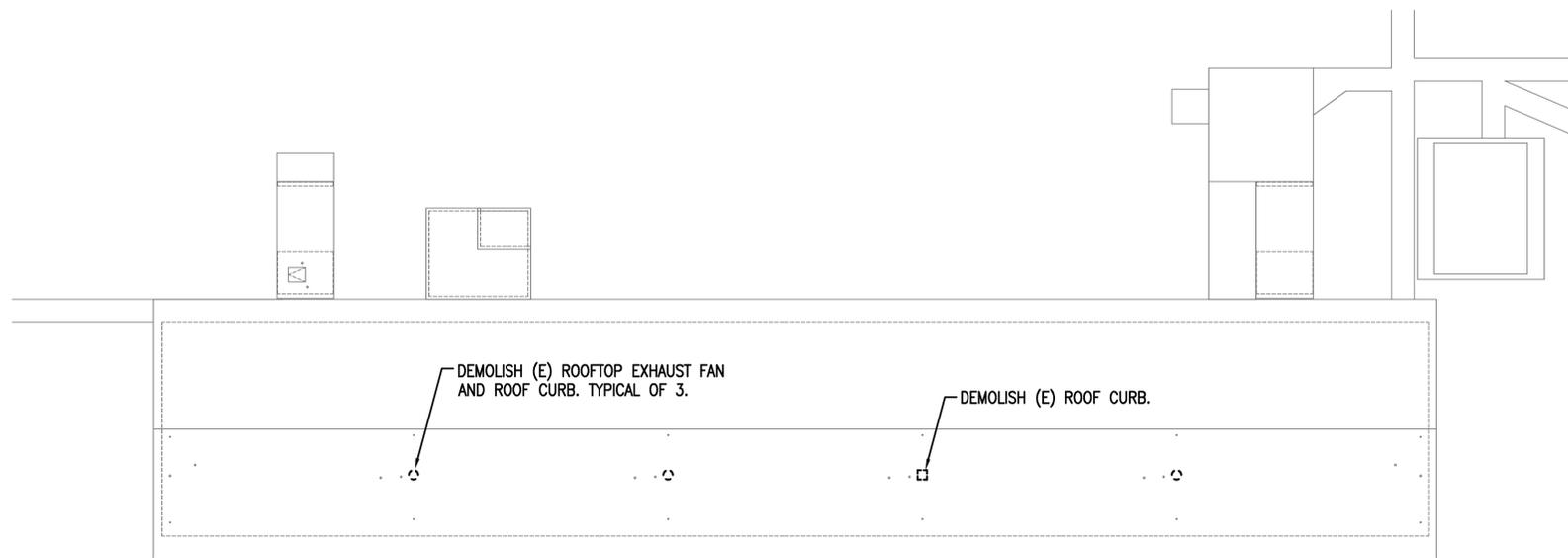
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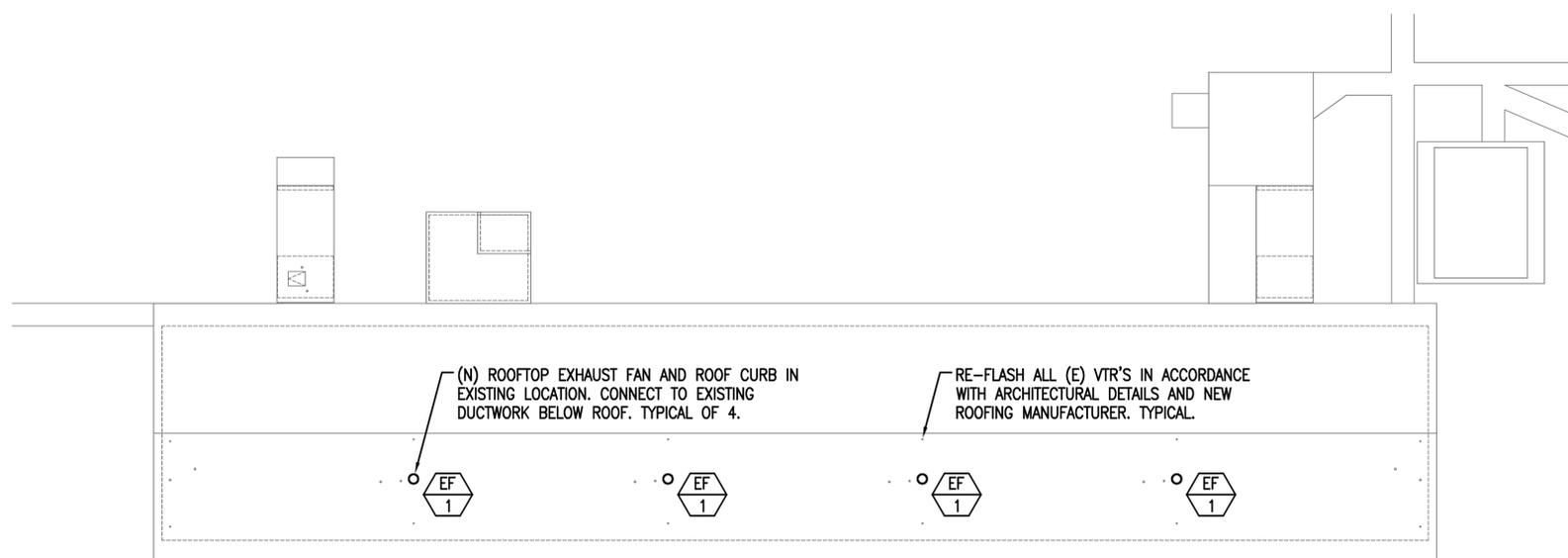
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1 BLDG 1784 ROOF PLAN - DEMOLITION
 1/16" = 1'-0"



2 BLDG 1784 ROOF PLAN - RENOVATION
 1/16" = 1'-0"



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| SYMBOL | DESCRIPTION | DATE | APPROVED |
|--------|-------------|------|----------|
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DEPARTMENT OF DEFENSE
 DESIGN AND PROJECT MANAGEMENT BRANCH
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 ROOF REPAIR / REPLACEMENT OF BUILDING 1784
 91-1152 ENTERPRISE AVE
 KALAELOA, KAPOLEI, OAHU 96062, HI
 BLDG 1784 ROOF PLANS

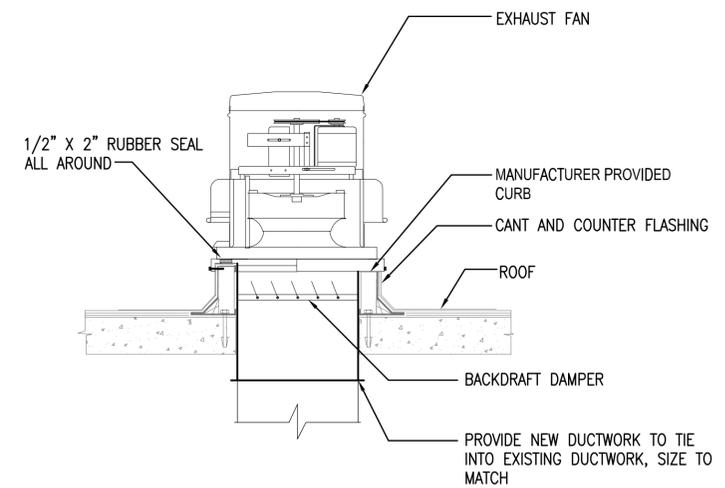
STATE OF HAWAII
 FACILITY MANAGEMENT OFFICE

SCALE:
 STATE JOB NO. CA-1419-D
 FEDERAL PROJECT NO. PN15140055
 SHEET OF M1.01

| EXHAUST / SUPPLY FAN SCHEDULE | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----------|----------|--------------------------|---------------------|--------------------|---|-----------------|-----------------------------|-----------------|-----------------|-------------------|--|---------|-------|---------------|-----------------------------------|---------------------|------------------------|-----------|----------|-------------|
| DESIGNATION | SERVICE | LOCATION | CONFIGURATION | | FAN DATA | | | MOTOR DATA | | | | ELECTRICAL | | | WEIGHT (LBS.) | DIMENSIONS (L" x W" x H" OR DIA.) | DESIGN BASIS MANUF. | DESIGN BASIS MODEL NO. | REMARKS | | |
| | | | FAN TYPE | DISCHARGE DIRECTION | AIR QUANTITY (CFM) | EXTERNAL FAN STATIC PRESSURE (IN. W.G.) | FAN SPEED (RPM) | MOTOR OPERATING POWER (BHP) | MOTOR SIZE (HP) | MOTOR WATTS (W) | MOTOR SPEED (RPM) | MOTOR CONTROLLER TYPE: A: VARIABLE FREQUENCY DRIVE B: FVAR MOTOR STARTER C: EC TYPE MOTOR | VOLTAGE | PHASE | | | | | | HERTZ | INLET SONES |
| EF-1 | RESTROOMS | ROOF | CENTRIFUGAL ROOF EXHAUST | DOWNBLAST | 660 | 0.5 | 1,211 | 0.1 | 1/4 | - | 1,725 | C | 120 | 1 | 60 | 5.4 | 45 | 24" DIA. | GREENHECK | G-103-VG | SEE NOTES |

NOTES:

- ALL FANS SHALL BE PROVIDED WITH VARI-GREEN EC MOTOR, FAN MOUNTED POTENTIOMETER DIAL, APPROPRIATE MOTOR CONTROLLER AND DISCONNECT SWITCH.
- ALL FANS SHALL BE PROVIDED WITH ROOF CURB, ALUMINUM BIRDSCREEN, INTEGRAL BACKDRAFT DAMPER, STAINLESS STEEL FASTENERS, AND 'PERMATECTOR' PROTECTIVE COATING.
- PROVIDE TIME CLOCK CONTROL WITH 7 DAY 24 HOUR SCHEDULING. COORDINATE LOCATION WITH OWNER BEFORE INSTALLING.



NOTES:

- PROVIDE CURB WITH UNIT.
- PROVIDE HINGED CURB CAP KIT WITH CABLES AND SUPPORT BRACKET.
- PROVIDE FACTORY WIRED NEMA 4X DISCONNECT
- REFER TO ARCH DRAWINGS FOR ADDITIONAL FLASHING DETAILS.
- FAN SHALL BE ALL ALUMINUM WITH CORROSION COATING.
- ALL BOLTS SHALL BE STAINLESS STEEL.
- INSTALLATION MUST INCLUDE A MEANS FOR INSPECTING CLEANING AND SERVICING THE EXHAUST FAN.
- ENSURE FAN HAS A MINIMUM OF 3 DUCT DIAMETERS OF STRAIGHT DUCTWORK AT INLET, PROVIDE CURB EXTENSION IF NECESSARY.
- FAN SHALL BE INTERNALLY ISOLATED.
- FAN SHALL BE RATED FOR 105 MPH WIND VELOCITY.

1 DOWNBLAST EXHAUST FAN DETAIL
NOT TO SCALE



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100% FINAL DESIGN

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MECHANICAL SCHEDULES

SCALE:

STATE JOB NO. CA-1419-D

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SHEET OF

M2.01

