ABBREVIATIONS

&	AND	EMER.	EMERGENCY	LKR.	LOCKER	S.DIS.	SOAP DISPENSER/SOAP DISH
∠	ANGLE	ENCL.	ENCLOSURE	LT.	LIGHT	S.D.	STORM DRAIN
∅	DIAMETER OR ROUND	ENTR.	ENTRANCE	MAT.	MATERIAL	SH.	SHELF
@	AT	EQ.	EQUAL	MAX.	MAXIMUM	SHR.	SHOWER
⊥	PERPENDICULAR	EQUIP.	EQUIPMENT	M.B.	MACHINE BOLT	SHT.	SHEET
#	POUND OR NUMBER	E.W.C.	ELECTRIC WATER COOLER	MBR.	MEMBER	SHTG.	SHEATHING
A.B.	ANCHOR BOLT	EXH.	EXHAUST	M.C.	MEDICINE CABINET	SIM.	SIMILAR
A/C	AIR CONDITIONING	EXIST.	EXISTING	MECH.	MECHANICAL	S.M.	SHEET METAL
ACOUS.	ACOUSTICAL	EXP.	EXPANSION	MEMB.	MEMBRANE	S.N.D.	SANITARY NAPKIN DISPENSER
A.C.T.	ACOUSTICAL CEILING TILE	EXT.	EXTERIOR	MET.	METAL	SNGL.	SINGLE
ADJ.	ADJUSTABLE	EXTD.	EXTRUDE	MEZZ.	MEZZANINE	S.N.R.	SANITARY NAPKIN RECEPTACLE
A.F.F.	ABOVE FINISH FLOOR	F.A.	FIRE ALARM	MFR.	MANUFACTURER	SPEC.	SPECIFICATION
AGGR.	AGGREGATE	FDN.	FOUNDATION	M.H.	MANHOLE	SPKR.	SPEAKER
AL.	ALUMINUM	F.E.	FIRE EXTINGUISHER	MLDG.	MOULDING	SQ.	SQUARE
ANOD.	ANODIZED	F.E.C.	FIRE EXTINGUISHER CABINET	MIN.	MINIMUM	SS.	SERVICE SINK
APPROX.	APPROXIMATE	F.F.EL.	FINISH FLOOR ELEVATION	MISC.	MISCELLANEOUS	S.STL.	STAINLESS STEEL
ARCH.	ARCHITECTURAL	FH	FIRE HYDRANT	MLWK.	MILLWORK	STA.	STATION
BD.	BOARD	FHC	FIRE HOSE CABINET	M.O.	MASONRY OPENING	STD.	STANDARD
BITUM.	BITUMINOUS	FIN.	FINISH	MON.	MONUMENT	STL.	STEEL
BLDG.	BUILDING	FIXT.	FIXTURE	M.S.	MACHINE SCREW	STOR.	STORAGE
BLK.	BLOCK	FLASH.	FLASHING	MTD.	MOUNTED	STRUC.	STRUCTURAL
BLKG.	BLOCKING	FLR.	FLOOR	MUL.	MULLION	SUSP.	SUSPENDED
BM.	BEAM	F.D.	FLOOR DRAIN	N.I.C.	NOT IN CONTRACT	SYM.	SYMMETRICAL
BOT.	BOTTOM	FLUOR.	FLUORESCENT	NO. OR #	NUMBER	T&G	TONGUE AND GROOVE
B.O.B.	BOTTOM OF BEAM	F.O.C.	FACE OF CONCRETE	NOM.	NOMINAL	T.B.	TOWEL BAR
BSMT.	BASEMENT	F.O.F.	FACE OF FINISH	N.T.S.	NOT TO SCALE	T.CONC.	TOP OF CONCRETE
BU.R.	BUILT-UP ROOFING	F.O.S.	FACE OF STUDS	O.C.	ON CENTER	T.D.	TOWEL DISPENSER
CAB.	CABINET	FPRF.	FIREPROOF	O.D.	OUTSIDE DIAMETER (DIM.)	T.D.W.	TOWEL DISPENSER & WASTE
C.B.	CATCH BASIN	FR.D.	FIRE DAMPER	OFF.	OFFICE	TEL.	TELEPHONE
C.D.	CEILING DIFFUSER	F.R.P.	FIBERGLASS REINF. PLASTIC	O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED	TEMP.	TEMPERED
CEM.	CEMENT	F.S.	FLOOR SINK	O.F.O.I.	OWNER FURNISHED, OWNER INSTALLED	TER.	TERRAZZO
℄	CENTERLINE	FT.	FOOT OR FEET	OH.	OVERHEAD	THK.	THICK
CER.	CERAMIC	FTG.	FOOTING	OPNG.	OPENING	THRES.	THRESHOLD
C.I.	CAST IRON	FURR.	FURRING	OPP.	OPPOSITE	T.O.C.	TOP OF CURB
C.JT.	CONSTRUCTION JOINT	F.W.C.	FABRIC WALL COVERING	PART.	PARTITION	T.O.S.	TOP OF STEEL
CLG.	CEILING	GA.	GAUGE	PERF.	PERFORATED	T.O.P.	TOP OF PLATE
CLKG.	CAULKING	GALV.	GALVANIZE	PROP.	PROPERTY	T.O.W.	TOP OF WALL
C.J.	CONTROL JOINT	G.B.	GRAB BAR	PT.	POINT	T.P.	TOP OF PAVEMENT
CLO.	CLOSET	G.C.	GENERAL CONTRACTOR	P.T.	PAVER TILE	T.P.D.	TOILET PAPER DISPENSER
CLR.	CLEAR	G.I.	GALVANIZED IRON	P.T.D.	PAPER TOWEL DISPENSER	TOIL.PART.	TOILET PARTITION
C.M.U.	CONCRETE MASONRY UNIT	G.L.	GLUE LAMINATED	P.LAM.	PLASTIC LAMINATE	TRD.	TREAD
CNTR.	COUNTER	GL.BK.	GLASS BLOCK	PLAS.	PLASTER	TV.	TELEVISION
C.O.	CLEAN OUT	GND.	GROUND	PLYWD.	PLYWOOD	TYP.	TYPICAL
COL.	COLUMN	GR.	GRADE	PNL.	PANEL	UNF.	UNFINISHED
CONC.	CONCRETE	G.T.	GLAZED TILE	POL.	POLISH	U.O.N.	UNLESS OTHERWISE NOTED
CONN.	CONNECTION	GYP.	GYPSUM	PR.	PAIR	U.O.S.	UNDERSIDE OF SLAB
CONST.	CONSTRUCTION	GYP.BD.	GYPSUM WALLBOARD	PREFAB.	PREFABRICATED	UR.	URINAL
CONT.	CONTINUOUS	H.B.	HOSE BIB	PROP.	PROPERTY	UTIL.	UTILITY
CORR.	CORRIDOR	HC	HANDICAPPED	P.T.	PAVER TILE	VYN.B	VINYL BASE
CPT.	CARPET	H.CAB.	HOSE CABINET	P.T.D.	PAPER TOWEL DISPENSER	V.C.T.	VINYL COMPOSITION TILE
C.T.	CERAMIC TILE	HCW	HOLLOW CORE WOOD	P.T.D./R.	COMBINATION PAPER TOWEL DISPENSER & RECEPTACLE	V.D.	VOLUME DAMPER
CTR.	CENTER	HCBD.	HARDBOARD	PVC	POLYVINYL CHLORIDE	VENT.	VENTILATION
CSK.	COUNTERSUNK	HDR.	HEADER	PVMT.	PAVEMENT	VERT.	VERTICAL
C.W.	COLD WATER	HDWD.	HARDWOOD	Q.T.	QUARRY TILE	VEST.	VESTIBULE
C.Y.	CUBIC YARD	HDWE.	HARDWARE	R.	RISER	VIF	VERIFY IN FIELD
DBL.	DOUBLE	HT.	HEIGHT	R.A.	RETURN AIR	V.G.	VERTICAL GRAIN
DEPT.	DEPARTMENT	HM	HOLLOW METAL	RAD.	RADIUS	V.P.	VENEER PLASTER
DET	DETAILS	HORIZ.	HORIZONTAL	R.D.	ROOF DRAIN	V.T.	VINYL TILE
D.F.	DRINKING FOUNTAIN	HR.	HOUR	REF.	REFERENCE	V.W.C.	VINYL WALL COVERING
DIA.	DIAMETER	HVAC	HEATING/VENTILATING AIR CONDITIONING	REFR.	REFRIGERATOR	W/	WITH
DIFF.	DIFFUSER	H.W.	HOT WATER	REG.	REGISTER	W.C.	WATER CLOSET
DIM.	DIMENSION	HYD.	HYDRANT	REINF.	REINFORCED	WD.	WOOD
DISP.	DISPENSER	I.D.	INSIDE DIAMETER (DIM.)	REQ.	REQUIRED	W.G.	WIRE GLASS
DN.	DOWN	INCL.	INCLUDE	RESIL.	RESILIENT	WDO.	WINDOW
D.O.	DOOR OPENING	INT.	INTERIOR	RET.	RETURN	WKPT	WORKPOINT
DR.	DOOR	JAN.	JANITOR	RM.	ROOM	W/O	WITHOUT
DS.	DOWNSPOUT	JT.	JOINT	R.O.	ROUGH OPENING	WP.	WATER PROOF
D.S.P.	DRY STANDPIPE	K.D.	KILN DRIED	R.O.W.	RIGHT OF WAY	WR.	WATER RESISTANT
DWG.	DRAWING	KIT.	KITCHEN	REDWD.	REDWOOD	W.REC.	WASTE RECEPTACLE
DWR.	DRAWER	K.P.	KICK PLATE	SAN.	SANITARY	WT.	WEIGHT
EA.	EACH	LAB.	LABORATORY	S.CD.	SEAT COVER DISPENSER	W.W.F.	WOVEN WIRE FABRIC
EXP.AN.	EXPANSION ANCHOR	LAM.	LAMINATE	SCHED.	SCHEDULE		
EXP.BT.	EXPANSION BOLT	LAV.	LAVATORY	S.C.W.	SOLID CORE WOOD		
E.J.	EXPANSION JOINT	L.B.	LAG BOLT	SECT.	SECTION		
EL.	ELEVATION	L.F.	LINEAL FOOT	S.DIS.	SOAP DISPENSER/SOAP DISH		
ELEC.	ELECTRICAL						
ELEV.	ELEVATOR						

SYMBOLS

- EARTH
- GRAVEL/ROCK FILL
- SAND/MORTAR/PLASTER
- CONCRETE
- CMU
- STONE/MARBLE/TERRAZZO
- STEEL
- LATH
- WOOD FINISH
- WOOD FRAMING
- WOOD BLOCKING
- PLYWOOD
- GYPSUM BOARD
- GLASS

- ACOUSTIC TILE OR BOARD
- BATT INSULATION
- RIGID INSULATION
- CERAMIC TILE
- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- EXTERIOR ELEVATION KEY REFERENCE GRID (1 / A)
- DOOR SYMBOL DOOR MARK (12)
- WINDOW AND LOUVER SYMBOL (24)
- REVISION (CLOUD REVISION) (5)

- ELEVATION IDENTIFIER
- INTERIOR ELEVATION KEY ELEVATION IDENTIFIER (#)
- ROOM NAME / ROOM NUMBER (NAME / 101)
- DETAIL SYMBOL DETAIL IDENTIFIER / SHEET LOCATION (4 / A2)
- WALL OR PARTITION TYPES (W-1)
- MATCH LINE
- WORK, CONTROL OR DATUM POINT
- SECTION IDENTIFIER / SHEET LOCATION (A / A5)

- SETBACK LINE
- PROPERTY LINE
- NEW OR FINISH CONTOUR (75)
- EXISTING CONTOUR (65)
- FINISH GRADE (75.5 / 68.6)
- TOP OF WALL (TOW 10.5)
- TOP CURB (TOC 6.5)
- TOP OF PAVEMENT (TP 7.5)
- FINISH FLOOR ELEVATION (FIN. FL. +1000.00)

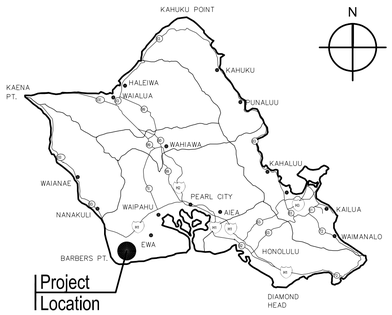
PROJECT SCOPE

INCLUDES DEMO WORK OF SITE, EXTERIOR & INTERIOR OF BUILDING #19 ONLY.

EXTERIOR SITE WORK: REMOVAL AND REPLACEMENT OF EXISTING LANDSCAPING, NEW ASPHALT PAVEMENT, REPAIR OF SIDEWALKS, NEW ADA RAMPS, AND NEW COVERED WALK WAY LIGHT FIXTURES. NEW EXTERIOR CANOPIES, NEW ACCESS DOORS AT EXIST,G ACCESS OPEN,GS

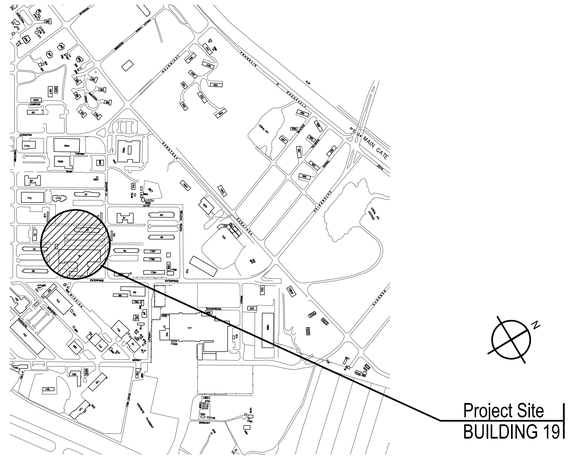
INTERIOR WORK: RENOVATION OF MULTI PURPOSE ROOM AND STORAGE ROOM, INCLUDING BASKETBALL COURT RE-STRIPING, NEW PAINTING, NEW EXTERIOR LIGHT FIXTURES, MECHANICAL AND ELECTRICAL WORK. NEW ALUMINUM FRAME WINDOWS

OAHU MAP N.T.S.



VICINITY MAP: N.T.S.

LOCATION MAP: N.T.S.



ZONING DATA

ADDRESS:	**KALAELOA BUILDING 19 91-1110 ENTERPRISE AVE. KAPOLEI, OAHU, HAWAII 96707**
TAX MAP KEY NO.:	**9-1-013:056**
LOT SIZE:	**162,479 SQUARE FEET**
LOT RESTRICTION:	**NONE**
LOT ZONING:	**F-1 (PRESERVATION - MILITARY AND FEDERAL)**
STATE LAND USE:	**URBAN DISTRICT**
FLOOD ZONE:	**D - UNDETERMINED**
SMA ZONE:	**NOT IN SMA**
HEIGHT LIMIT:	**NONE**
STREET SETBACK:	**NONE**

BUILDING DATA

EXIST'G BUILDING AREA: 63,545 SF

TYPE OF CONSTRUCTION: 1B (1-HR MIN RATING FOR BEARING WALLS, COLUMNS & ROOF FRAM'G)

EXIST'G USE	OCCUPANCY GROUP	ALLOWABLE FLOOR AREA (SF)	ALLOWABLE HEIGHT
LOCKER ROOM, SHOWERS (NO CHANGE)	A-3	UNLIMITED	UNLIMITED
KITCHEN, MULTI-PURPOSE ROOM (NO CHANGE)	A-2	UNLIMITED	UNLIMITED
CLASSROOM, OFFICES (NO CHANGE)	B	UNLIMITED	UNLIMITED
MAINTENANCE, STORAGE (NO CHANGE)	S-2	79,000 SF	11

EXISTING NUMBER OF STORIES: 1

EXISTING OCCUPANCY SEPERATION: 2 HOURS REQ'D BETWEEN A-2 & S-2 (90 MINUTE DOOR REQ'D @ 2-HOUR WALL)

PROPOSED USE: LOCKER ROOM, SHOWERS, KITCHEN, MULTI-PURPOSE ROOM & STORAGE (OFFICES, CLASSROOMS & STORAGE, NO CHANGE)

PARKING: EXISTING PARKING STALLS (NO CHANGE)

PN15130011

KALAELOA BUILDING 19
PHASE II - IMPROVEMENTS

KAPOLEI, OAHU, HAWAI'I
TAX MAP KEY:
9-1-013:056

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

PROJECT TEAM

CLIENT: **STATE OF HAWAII DEPARTMENT OF DEFENSE, ENGINEERING OFFICE
3949 DIAMOND HEAD ROAD
HONOLULU, HI 96816
CONTACT: VINCENT B. CABALLES, DESIGN AND PROJECT MANAGER
T: (808) 672-1531 F: (808) 590-0762
EMAIL: vincente.b.caballes.nfg@mail.mil**

ARCHITECT: **IN+FORM DESIGN, INC
1347 KAPIOLANI BLVD., SUITE 401
HONOLULU, HAWAII 96814
T: (808) 687- 6270 (REID) 687-6267 (CHAD) ; MAIN OFFICE: 946-3676
CONTACT: REID YAMAUCHI & CHAD OKINAKA
EMAIL: REID@IFDESIGNINC.COM, CHAD@IFDESIGNINC.COM**

STRUCTURAL: **KAI HAWAII INC.
50 SOUTH BERETANIA, SUITE #C-119C
HONOLULU, HAWAII 96813
T: (808) 791-3952
CONTACT: JONATHAN MURAI
EMAIL: JMURAI@KAIHAWAII.COM**

LANDSCAPE: **BROWNLIE & LEE
201 MERCHANT ST. SUITE 1930
HONOLULU, HI 96813
T: (808) 528-4363
CONTACT: BEN LEE
EMAIL: ben@bhawaii.com**

CIVIL: **HIDA OKAMOTO & ASSOCIATES, INC.
1440 KAPIOLANI BLVD. SUITE 1120
HONOLULU, HI 96814
T: (808) 942-0066
CONTACT: ALAN OKAMOTO
EMAIL: alan-hidaokamoto@hawaii.rr.com**

MECHANICAL & ELECTRICAL: **BURNS & McDONNELL
733 BISHOP ST. SUITE 2150
HONOLULU, HI 96813
T: (808) 954-6656
CONTACT: BRIAN SEABOUGH
EMAIL: bseabaugh@burnsmcd.com**

ENVIRONMENTAL ASSESSMENT: **ENVIROSERVICES & TRAINING CENTER, LLC
505 WARD AVE. SUITE 202
HONOLULU, HI 96814
T: (808) 839-7222
CONTACT: CELINA FREITAS
EMAIL: cfreitas@gotoetc.com**

COST ESTIMATOR: **J.UNO & ASSOCIATES, INC.
1210 WARD AVE. SUITE 204
HONOLULU, HI 96814
T: (808) 947-6855
CONTACT: JOE UNO & BRETT KATAYAMA
EMAIL: joe@j-uno-associates.com; brett@j-uno-associates.com**

THIRD PARTY REVIEWER: **BUREAU VERITAS, NORTH AMERICA INC.
841 BISHOP STREET, SUITE 1100
HONOLULU, HI 96813
T: (808) 531-6708
CONTACT: COREY SCHMIDT
EMAIL: corey.schmidt@us.bureauveritas.com**

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

APPR	DATE	DESCRIPTION	SYM

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
HAWAII ARMY NATIONAL GUARD
BUILDING 19 IMPROVEMENTS
COVER

SCALE:

STATE JOB NO.
CA-1514-C
FEDERAL PROJECT NO.
PN15130011
SHEET 1 OF 78

T0.0

FIRE SAFETY NOTES

16.1 GENERAL REQUIREMENTS.

16.1.1 STRUCTURES UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION OPERATIONS, INCLUDING THOSE IN UNDERGROUND LOCATIONS, SHALL COMPLY WITH NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION,
AND DEMOLITION OPERATIONS, AND THIS CHAPTER.

16.1.2 A FIRE PROTECTION PLAN SHALL BE ESTABLISHED WHERE REQUIRED BY THE AHJ.

16.1.3* IN BUILDINGS UNDER CONSTRUCTION, ADEQUATE ESCAPE FACILITIES SHALL BE MAINTAINED AT ALL TIMES FOR THE USE OF CONSTRUCTION WORKERS. ESCAPE FACILITIES SHALL CONSIST OF DOORS, WALKWAYS, STAIRS, RAMPS, FIRE ESCAPES, LADDERS, OR OTHER APPROVED MEANS OR DEVICES ARRANGED IN ACCORDANCE WITH THE GENERAL PRINCIPLES OF NFPA 101, INSOFAR AS THEY CAN REASONABLY BE APPLIED TO BUILDINGS UNDER CONSTRUCTION.[101: 4.6.101.2]

16.1.4 FIRE DEPARTMENT ACCESS ROADS PROVIDED IN ACCORDANCE WITH 18.2.3 SHALL BE PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

16.3.5 STANDPIPES. IN ALL NEW BUILDINGS IN WHICH STANDPIPES ARE REQUIRED OR WHERE STANDPIPES EXIST IN BUILDINGS BEING ALTERED OR DEMOLISHED, SUCH STANDPIPES SHALL BE MAINTAINED IN CONFORMITY WITH THE PROGRESS OF BUILDING CONSTRUCTION IN SUCH A MANNER THAT THEY ARE ALWAYS READY FOR USE. [241: 7.6]

16.4.3.3.2.10 TEMPORARY STANDPIPES SHALL REMAIN IN SERVICE UNTIL THE PERMANENT STANDPIPE INSTALLATION IS COMPLETE. [241: 8.7.4.2.10]

16.4.4 ALTERATION OF BUILDINGS.
16.4.4.1 WHERE THE BUILDING IS PROTECTED BY FIRE PROTECTION SYSTEMS, SUCH SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING ALTERATION.

16.4.4.2 WHERE ALTERATION REQUIRES MODIFICATION OF A PORTION OF THE FIRE PROTECTION SYSTEM, THE REMAINDER OF THE SYSTEM SHALL BE KEPT IN SERVICE AND THE FIRE DEPARTMENT SHALL BE NOTIFIED.

16.4.4.3 WHEN IT IS NECESSARY TO SHUT DOWN THE SYSTEM, THE AHJ SHALL HAVE THE AUTHORITY TO REQUIRE ALTERNATE MEASURES OF PROTECTION UNTIL THE SYSTEM IS RETURNED TO SERVICE.

16.4.4.4 THE FIRE DEPARTMENT SHALL BE NOTIFIED WHEN THE SYSTEM IS SHUT DOWN AND WHEN THE SYSTEM IS RETURNED TO SERVICE.

16.4.4.5 ALL REQUIRED EXIT COMPONENTS SHALL BE MAINTAINED IN ACCORDANCE WITH THIS CODE AS DEEMED NECESSARY BY THE AHJ.

16.4.4.6 FIRE-RESISTIVE ASSEMBLIES AND CONSTRUCTION SHALL BE MAINTAINED.

16.5 FIRE SAFETY DURING DEMOLITION.
16.5.1 IF A BUILDING INTENDED TO BE DEMOLISHED CONTAINS A SPRINKLER SYSTEM, SUCH SYSTEM SHALL NOT BE RENDERED INOPERATIVE WITHOUT APPROVAL OF THE AHJ.

16.5.2 DEMOLITION OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 41.

16.5.3 COMBUSTIBLE WASTE MATERIAL SHALL NOT BE BURNED AT THE DEMOLITION SITE UNLESS APPROVED BY THE AHJ. COMBUSTIBLE MATERIALS SHALL BE REMOVED FROM THE SITE AS OFTEN AS NECESSARY TO MINIMIZE THE
HAZARDS THEREFROM. (SEE SECTION 10.11.)

16.5.4 WHERE IN THE OPINION OF THE AHJ THE DEMOLITION SITE IS OF A HAZARDOUS NATURE, QUALIFIED PERSONNEL SHALL SERVE AS AN ON-SITE FIRE WATCH.

ENERGY CODE COMPLIANCE STAMP

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCE CHAPTER 32,
HONOLULU COUNTY CODE 1990, AS AMENDED

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

X Building Component System
_ Electrical Component System
_ Mechanical Component System

Signature: _____ Date: / /2016
Name: John Harada
Title: Vice President
License No.: 8369

APPLICABLE CODES AND STANDARDS

BUILDING:	INTERNATIONAL BUILDING CODE (IBC), -2006 EDITION WITH LOCAL AMENDMENTS, -REVISED ORDINANCES OF HONOLULU
MECHANICAL:	UNIFORM PLUMBING CODE (UPC), -2006 EDITION WITH LOCAL AMENDMENTS -HAWAII STATE MODEL ENERGY CODE -2006 INTERNATIONAL MECHANICAL CODE (IMC)
ELECTRICAL:	NATIONAL ELECTRICAL CODE (NEC), 2008 EDITION -HAWAII STATE MODEL ENERGY CODE
ZONING:	LAND USE ORDINANCE, DECEMBER 2008
ADA:	ADA STANDARDS FOR ACCESSIBILITY DESIGN, SEPTEMBER 2010
FIRE SAFETY:	NFPA 1 2012 WITH LOCAL AMENDMENTS

NOTES

1. THE CONTRACTOR SHALL EXECUTE THE WORK IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES AND ORDINANCES.

2. THE CONTRACTOR SHALL EXAMINE THE PROJECT SITE AND VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH THE WORK.

3. THE CONTRACTOR SHALL REVIEW AND EXAMINE THE CONTRACT DOCUMENTS. IF ANY CONFLICTS OR DISCREPANCIES ARE IDENTIFIED, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR CLARIFICATION TO THE ARCHITECT PRIOR TO COMMENCING WITH THE WORK.

4. THE CONTRACTOR SHALL NOT ALLOW DEBRIS AND RUBBISH TO ACCUMULATE ON THE JOB SITE. REMOVE, TRANSPORT AND DISPOSE OF DEBRIS AND RUBBISH DAILY IN A LAWFUL MANNER THAT PREVENTS SPILLAGE ON STREETS OR ADJACENT PROPERTY.

5. BURNING OF ANY DEBRIS IS NOT PERMITTED. EXPLOSIVES ARE NOT ALLOWED.

6. THE CONTRACTOR SHALL SERVE PROPER NOTICE AND CONSULT WITH THE OWNER/BUILDING MANAGER REGARDING ANY TEMPORARY DISCONNECTION OF COMPUTER CABLING, ELECTRICAL, TELEPHONE, PLUMBING, GAS, SEWAGE OR OTHER UTILITY LINES. WHERE TEMPORARY DISCONNECTION IS REQUIRED, ALL SUCH LINES SHALL BE PROPERLY DISCONNECTED, TERMINATED OR RELOCATED BEFORE COMMENCING WITH THE WORK.

7. THE CONTRACTOR SHALL PROPERLY PROTECT FROM WEAR & DAMAGE ALL EXISTING UTILITIES, PROPERTY AND EXISTING WORK THAT ARE SCHEDULED "TO REMAIN."

8. THE CONTRACTOR SHALL SAW-CUT ALL CONCRETE AND ASPHALT CONCRETE PRIOR TO REMOVAL. OVERCUTTING IS NOT PERMITTED. ALL CONCRETE AND ASPHALT CONCRETE SAW CUTTING SHALL BE WATER-APPLIED FOR DUST CONTROL.

9. THE CONTRACTOR SHALL UTILIZE LAWFUL AND PROPER METHODS FOR DUST CONTROL ASSOCIATED WITH THE WORK.

10. THE CONTRACTOR SHALL COORDINATE AND EXECUTE ALL WORK IN AN ORDERLY AND CAREFUL MANNER AND SHALL REPAIR ANY DAMAGE TO EXISTING ITEMS "TO REMAIN."

11. THE CONTRACTOR IS RESPONSIBLE TO THE OWNER FOR ACTS AND OMISSIONS OF THE CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES, AND OTHER PERSONS PERFORMING PORTIONS OF WORK UNDER CONTRACT WITH THE CONTRACTOR.

12. THE PROJECT LIMITS/LIMITS OF WORK SHALL BE GENERALLY INDICATED ON THE PLAN AS A REFERENCE ONLY. THE CONTRACTOR IS REQUIRED TO COMPLETE ANY WORK OUTSIDE THE "PROJECT LIMITS" REFERENCE, IF SUCH WORK IS MATERIAL TO, AND NECESSARY TO COMPLETE THE PROJECT, AND SUCH WORK IS DEFINED IN THE CONTRACT DOCUMENTS.

13. THE CONTRACTOR SHALL MAINTAIN SAFE WORKING CONDITIONS AT ALL TIMES. THE CONTRACTOR SHALL ERECT TEMPORARY BARRICADES AND PROVIDE TEMPORARY LIGHTING AS REQUIRED TO PREVENT THE PUBLIC FROM ENTERING INTO THE PROJECT AREA AT ALL TIMES. BARRICADES SHALL BE A MINIMUM OF 7'-0" IN HEIGHT. THIS WORK SHALL BE INCLUDED IN THE CONTRACT AND PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

14. THE CONTRACTOR SHALL PERFORM THE WORK WITH MINIMUM INTERFERENCE TO STREETS, DRIVEWAYS, SIDEWALKS, EXISTING SHOPPING AND PUBLIC AREAS, ETC.

15. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL CONSULT WITH THE OWNER REGARDING ANY ITEMS THAT SHOULD BE SALVAGED/RECOVERED. THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND "TURNOVER" OF THESE ITEMS WITH THE OWNER.

16. THE CONTRACTOR IS RESPONSIBLE TO ARREST ANY RUST OR OXIDATION AND TREAT ALL EXPOSED METAL PRIOR TO FINISHING OR COVERING.

17. ASBESTOS AND HAZARDOUS MATERIALS: IF ASBESTOS-CONTAINING OR ANY OTHER HAZARDOUS MATERIAL IS ENCOUNTERED OR SUSPECTED, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER AND TAKE PROPER PRECAUTIONS. HAZARDOUS MATERIAL ABATEMENT MEASURES SHALL BE THE RESPONSIBILITY OF THE OWNER AND NOT PART OF THIS CONTRACT, UNLESS SPECIFICALLY STATED.

18. CONTRACTOR WILL VERIFY EXISTING CONDITIONS PRIOR TO THE START OF WORK AND PROVIDE ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THE INTENT OF THE PROJECT. REMOVE ALL LIGHTING AND ELECTRICAL EQUIPMENT IN THE PROJECT AREA NOT REQUIRED FOR NEW WORK. DISPOSE OF REMOVED MATERIALS AS DIRECTED BY THE OWNER'S REPRESENTATIVE. SEE ARCHITECTURAL DRAWINGS FOR EXISTING CONDITIONS.

19. BEFORE ANY WIRING IS CUT, CONTRACTOR WILL VERIFY USAGE OF WIRING TO BE CUT TO ASSUME THAT REQUIRED SERVICES ARE NOT DISCONTINUED. ANY REQUIRED SERVICE IS CONNECTED BY THE CONTRACTOR WILL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE TENANT OR THE BUILDING MANAGEMENT.

20. PHASE ALL WORK TO ASSURE CONTINUITY OF ALL ELECTRICAL SERVICES, INCLUDING MECHANICAL CONTROL SYSTEMS, TO PARTS OF FACILITIES REMAINING IN SERVICE.

21. BRANCH CIRCUIT LIGHTING & POWER SHALL BE COMPLETELY DEMOLISHED AND DISPOSED. REMOVE ALL EXISTING WIRING NOT REMAINING IN SERVICE. REMOVE ABANDONED CONCEALED RACEWAYS NO LONGER REQUIRED.

22. REMOVE ALL DEVICES AND EQUIPMENT INDICATED TO BE REMOVED OR NO LONGER REQUIRED. PLUG ALL HOLES IN ENCLOSURES, BOXES AND CABINETS TO REMAIN.

23. ANY OUTAGE OF ELECTRICAL SERVICE TO ANY PART OF BUILDING WILL BE REQUESTED, IN WRITING, AT LEAST FIVE WORKING DAYS PRIOR TO THE DATE OF DESIRED OUTAGE. WRITTEN REQUEST TO THE BUILDING MANAGEMENT WILL INCLUDE THE FOLLOWING INFORMATION: SERVICE TO BE INTERRUPTED, DATE, TIME, DURATION OF OUTAGE AND REASON FOR DESIRED OUTAGE. OUTAGES WILL BE GRANTED AT THE SOLE CONVENIENCE TO THE BUILDING MANAGEMENT.

24. ALL FIRE SPRINKLERS, SMOKE DETECTORS AND FIRE ALARMS SHALL REMAIN OPERATIONAL. ANY WORK TO FIRE ALARM SYSTEM TO BE COORDINATED WITH OWNER AND MANAGEMENT. CONTRACTOR TO VERIFY MANAGEMENT REQUIREMENTS PRIOR TO ANY WORK.

25. PORTABLE FIRE EXTINGUISHERS SHALL BE IN ACCORDANCE WITH UFC STANDARD 10-1. 2012 NFPA 1.

26. CONTRACTOR RESPONSIBLE FOR PROTECTION OF ALL FIXTURES DURING CONSTRUCTION. CONTRACTOR WILL CONTROL DUST AND DEBRIS DURING ALL PHASES OF CONSTRUCTION

27. CONTRACTOR TO VERIFY CONDITION OF EXISTING CONCRETE FLOOR SLAB PRIOR TO INSTALLATION OF FLOOR. CONTRACTOR TO LEVEL FLOOR AS REQUIRED.

ADA

PER SECTION 1101.2 OF IBC 2006 AS AMENDED, THIS PROJECT IS SUBJECT TO THE 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.

BWS INFORMATION

1. A/C WORK WILL NOT AFFECT WATER DEMAND.

2. EXISTING WATER METER FOR PROJECT DOES NOT SERVE ANY EXISTING IRRIGATION AND AUTOMATIC FIRE SPRINKLER SYSTEM.

GENERAL NOTES

1. LAWS AND ORDINANCES: AS USED HEREIN SHALL MEAN ALL COUNTY, STATE AND NATIONAL CODES, ORDINANCES, STANDARDS, RULES AND REGULATIONS OF ANY NATURE WHICH ARE PERTINENT TO, OR REGULATORY OVER, THE WORK COVERED BY THE CONTRACT DOCUMENTS OF THIS PROJECT. ALL CONTRACTORS SHALL COMPLY FULLY WITH ALL APPLICABLE LAWS AND ORDINANCES. ALL CONSTRUCTION SHALL CONFORM TO THE 2006 INTERNATIONAL BUILDING CODE AND ALL AMENDMENTS AND THE LATEST CITY AND COUNTY OF HONOLULU/STATE OF HAWAII AMENDMENTS, OR THE RESPECTIVE AMENDMENTS BY EACH COUNTY HAVING JURISDICTION OF THE PROJECT. ALL DEMOLITION AND CONSTRUCTION WORK SHALL CONFORM WITH THE 2006 NFPA1.

FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL COMPLY WITH THE 2012 NFPA1.

CONSTRUCTION OF NEW FACILITIES TO COMPLY WITH THE 2006 IBC AND ALL AMENDMENTS.

UTILITY PENETRATIONS THROUGH EXISTING CORRIDOR AND FLOOR SLAB SHALL BE FIRE STOPPED WITH APPROPRIATE RATED ASSEMBLY AND/OR MATERIALS INDICATED IN 2006 IBC AND ALL AMENDMENTS, FIRE-RESISTANT MATERIALS AND CONSTRUCTION.

2. CONFLICT: IN THE CASE OF ANY CONFLICT WHEREIN THE METHODS, OR STANDARDS OF INSTALLATION, OR THE SPECIFIED MATERIALS ARE NOT EQUAL TO, OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES, THE LAWS OR ORDINANCES SHALL GOVERN. IN THE CASE OF A DISCREPANCY IN THE DRAWINGS OR SPECIFICATIONS, BUT NOT DIRECTLY RELATED TO THE PROVISIONS OF CODES, OR ORDINANCES, THE CONTRACTOR SHALL 1) PROVIDE THE BETTER QUALITY, OR GREATER QUANTITY OF WORK, OR 2) COMPLY WITH THE MORE STRINGENT REQUIREMENT IN ACCORDANCE WITH THE OWNER'S/ARCHITECT'S INTERPRETATION. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT OF ALL CONFLICTS.

3. CONDITIONS OF THE WORK: THE INFORMATION INDICATED ON THE DRAWINGS ARE BASED ON LIMITED FIELD INVESTIGATIONS AND ON THE AVAILABLE RESOURCES AT THE TIME OF DOCUMENT PREPARATION. AS A RESULT, THE ACCURACY AND COMPLETENESS OF THE INFORMATION IS NOT GUARANTEED. THE CONTRACTOR SHALL, THEREFORE, VERIFY THE DIMENSIONS SHOWN ON THE DRAWINGS WITH ACTUAL FIELD MEASUREMENTS, EXAMINE THE JOB SITE, VERIFY ALL FIELD CONDITIONS AND PROVIDE THE LABOR AND MATERIALS REQUIRED TO COMPLETE THE INTENDED WORK. ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL MANNER THAT IS OF ACCEPTABLE WORKMANSHIP OF THE RESPECTIVE TRADES. THE CONTRACTOR SHALL NOTIFY THE OWNER, OR ARCHITECT, PRIOR TO THE COMMENCEMENT OF WORK, IF THERE ARE ANY DIMENSIONAL DISCREPANCIES, OR IF THERE ARE ANY CONDITIONS THAT EXIST WHICH MAY PREVENT THE CONTRACTOR'S PERFORMANCE OF WORK, AND/OR OF ANY AND ALL ADDITIONAL WORK THAT MAY BE REQUIRED AS A RESULT OF THE OBSERVED CONDITIONS.

4. OMISSIONS: OMISSIONS OF THE DRAWINGS, OR SPECIFICATIONS, OR THE OMISSIONS OF DETAILS OF WORK WHICH ARE MANIFESTLY NECESSARY TO CARRY OUT THE INTENT OF THE DRAWINGS AND SPECIFICATIONS, OR WHICH ARE CUSTOMARILY PERFORMED, SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH OMITTED, OR INCORRECTLY DESCRIBED DETAILS OF THE WORK, BUT SHALL BE PERFORMED AS IF FULLY AND CORRECTLY SET FORTH AND DESCRIBED IN THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, OR OWNER, VERBALLY OF SUCH OMISSIONS AND PROVIDE A WRITTEN STATEMENT OF THE OMISSIONS WITHIN (5) WORKING DAYS OF VERBAL NOTIFICATION.

5. INTENT OF THE DRAWINGS: THE DRAWINGS ARE INTENDED TO DEFINE AND ESTABLISH THE PHYSICAL REQUIREMENTS OF THE PROJECT, I.E., THE DESIGN, LOCATION AND DIMENSIONS OF THE WORK, BASED ON RECOGNIZED STANDARDS, EVEN IF NOT ACTUALLY SHOWN, BUT REASONABLY INFERRED. ALL WORK SHOWN IS "NEW" UNLESS OTHERWISE NOTED AS "EXISTING." THE CONTRACTOR SHALL REVIEW AND VERIFY THE INFORMATION ON ALL DRAWINGS BEFORE PERFORMING THE WORK AND NOTIFY THE OWNER, OR ARCHITECT, OF ANY DISCREPANCIES. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL SUBCONTRACTORS/TRADES TO ACHIEVE THE DESIGN INTENT AND SPECIFIED REQUIREMENTS AND IS RESPONSIBLE TO COMPLETE ANY AND ALL WORK ASSOCIATED WITH SUCH COORDINATION.

6. COMPLETION OF THE WORK: THE CONTRACTOR SHALL IN THE WORK OF ALL TRADES, PERFORM ANY AND ALL CUTTING, PATCHING, REPAIRING, RESTORING AND THE LIKE NECESSARY TO COMPLETE THE WORK AND RESTORE ANY DAMAGED OR AFFECTED SURFACES RESULTING FROM THE WORK OF THIS CONTRACT TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ARCHITECT AND THE OWNER, OR HIS AGENT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO SAFETY PRECAUTION.

7. PERMITS AND FEES: THE CONTRACTOR IS RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, INSPECTIONS AND LICENSES FOR THE WORK AND OBTAIN ALL GOVERNMENTAL AGENCY CERTIFICATES AND FILE A NOTICE OF COMPLETION.

8. GUARANTEE: THE CONTRACTOR SHALL GUARANTEE THE INSTALLATION, MATERIALS AND WORKMANSHIP OF ALL WORK FOR (1) ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. HOWEVER, PRODUCT AND SYSTEM WARRANTIES SHALL BE EFFECTIVE FROM THE "DATE OF ACCEPTANCE" BY THE OWNER/ARCHITECT AND FOR THE PERIOD ESTABLISHED BY THE MANUFACTURER/INSTALLER, OR AS SPECIFICALLY DEFINED IN THE OWNER/CONTRACTOR AGREEMENT.

9. CLEAN UP: THE CONTRACTOR SHALL CLEAN AND REMOVE ANY TRASH, DIRT, DEBRIS AND SPILLAGE ARISING FROM THE WORK DAILY TO THE SATISFACTION OF THE OWNER AND THE ARCHITECT, INCLUDING: CLEANING OF DIRT, PUTTY, PAINT, DUST, ETC. FROM AREAS COUNTER TOPS, DOOR AND WINDOW FACES AND FRAMES.

10. RECORD DRAWINGS: THE CONTRACTOR SHALL PROVIDE THE OWNER AND LANDLORD WITH A SET OF REPRODUCIBLE "AS-BUILT" DRAWINGS OF THE WORK. (NOT REQUIRED FOR PROJECT SOLELY INVOLVING DEMOLITION).

10A. LIMITED NUMBER OF ELECTRONIC FILES MAYBE AVAILABLE FOR USE BY THE CONTRACTOR WITH THE AUTHORIZATION OF THE ARCHITECT OR OWNER (ARCHITECTURAL/CONSULTANT PLANS ONLY). RELEASE OF ELECTRONIC FILES REQUIRE SUBMISSION OF TRANSFER AGREEMENT AND PROCESSING FEE/DRAWING (PROCESSING FEE SCHEDULE AVAILABLE UPON REQUEST).

11. THIS PROJECT CONFORMS TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES TO THE BEST OF OUR KNOWLEDGE AND 2006 IBC SECTION 1101.2.

12. EGRESS ILLUMINATION TO COMPLY WITH ELECTRICAL CODE AND IBC SECTION 1006.1.

13. DIMENSIONS: UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS, ALL DIMENSIONS ARE TAKEN TO THE FACE OF FINISH.

14. ANY DAMAGE OCCURRING AS RESULT OF THIS PROJECT SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER. ALL REPAIRS SHALL BE AT THE SOLE EXPENSE OF THE GENERAL CONTRACTOR.

SHEET INDEX (CONTINUED)

ELECTRICAL	
E001	ELECTRICAL LEGEND & ABBREVIATIONS
E002	ELECTRICAL LEGEND
ED101	ELECTRICAL DEMOLITION PLAN
ED601	ELECTRICAL DEMO ONE LINE DIAGRAM
EL101	ELECTRICAL LIGHTING PLAN
EL401	ENLARGED LIGHTING PLAN
EL402	ENLARGED LIGHTING PLAN
EP101	ELECTRICAL POWER PLAN
EP401	ELECTRICAL POWER PLAN
ET101	ELECTRICAL TELECOM PLAN
ET401	ELECTRICAL TELECOM PLAN
E501	ELECTRICAL DETAILS
E502	ELECTRICAL DETAILS
E503	ELECTRICAL DETAILS
E504	ELECTRICAL DETAILS
E601	ELECTRICAL ONE LINE DIAGRAM

SHEET INDEX

GENERAL	
T0.0	COVER
T0.1	SHEET INDEX AND NOTES
T0.2	PLOT PLAN
T0.3	LIFE SAFETY AND OCCUPANCY PLAN
T0.4	SCHEDULES
CIVIL	
C1.0	NOTES
C2.0	DEMOLITION & EROSION CONTROL PLAN
C3.0	GRADING & DRAINAGE PLAN-A
C4.0	SITE & UTILITY PLAN
C5.0	GRADING & DRAINAGE PLAN-B
C6.0	DETAILS
LANDSCAPE	
L1.00	TREE AND SHRUB DISPOSITION PLAN
L1.01	LANDSCAPE PLANTING PLAN
L1.02	LANDSCAPE PLANTING PLAN
L2.01	PLANT LIST AND DETAILS
L3.01	IRRIGATION PLAN
L3.02	IRRIGATION PLAN
L4.01	IRRIGATION LEGEND
L4.02	IRRIGATION DETAILS
ARCHITECTURAL	
A0.0	DEMOLITION SITE PLAN
A0.1	DEMOLITION FLOOR PLAN
A0.2	DEMOLITION REFLECTED CEILING PLAN
A0.3	DEMO ENLARGED PLAN - MULTI PURPOSE ROOM
A0.4	DEMO ENLARGED PLAN - STORAGE
A0.5	DEMO ENLARGED RCP - MULTI PURPOSE ROOM
A0.6	DEMO ENLARGED REFLECTED CEILING PLAN - STORAGE
A0.7	DEMO BUILDING SECTION
A0.8	DEMO BUILDING SECTION
A0.9	DEMO ENLARGED PLAN - OFFICE
A1.1	FLOOR PLAN
A1.2	REFLECTED CEILING PLAN
A2.0	EXTERIOR ELEVATIONS
A2.1	EXTERIOR ELEVATIONS
A2.2	EXTERIOR ELEVATIONS
A2.3	INTERIOR ELEVATION
A2.4	INTERIOR ELEVATION
A2.5	INTERIOR ELEVATION
A3.0	BUILDING SECTION
A4.0	ENLARGED PLANS - MULTI PURPOSE ROOM
A4.1	ENLARGED PLANS - STORAGE
A4.2	ENLARGED RCP - MULTI PURPOSE ROOM
A4.3	ENLARGED REFLECTED CEILING PLAN - STORAGE
A4.4	GATE ELEVS, ENLARGED FLR PLN - OFFICES/CLASSRM
A4.5	ENLARGED STAIR PLANS
A4.6	DEDUCTIVE ALT 1: EXT CANOPY REFLECTED CEIL'G AND ROOF PLANS
A5.0	DETAILS
A5.1	DETAILS
A5.2	DETAILS
STRUCTURAL	
S1.1	GENERAL NOTES
S3.1	WALL STRENGTHENING PLAN
S3.2	DEDUCTIVE ALT 1: TYP. CANOPY FRAM'G PLANS & SECTION
MECHANICAL	
M-001	MECHANICAL LEGEND AND ABBREVIATIONS
M-101	MECHANICAL PLAN - MULTI PURPOSE ROOM
M-102	MECHANICAL PLAN - MECHANICAL ROOM
M-501	MECHANICAL DETAILS
M-601	HVAC CONTROLS - LEGEND
M-602	HVAC CONTROLS-SYSTEM ARCHITECTURE & EQPMT SCHEDULES
M-603	HVAC CONTROLS-SCHEMATIC & POINT LIST -1
M-604	HVAC CONTROLS-SCHEMATIC & POINT LIST -2
PLUMBING	
P-101	PLUMBING PLANS
LIFE SAFETY	
LS101	MULTI PURPOSE ROOM AND STORAGE LOCKER LIFE SAFETY PLAN
LS102	EGRESS ANAYLSIS

HAWAII ARMY NATIONAL GUARD

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

APPR	DATE	DESCRIPTION	SYM

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

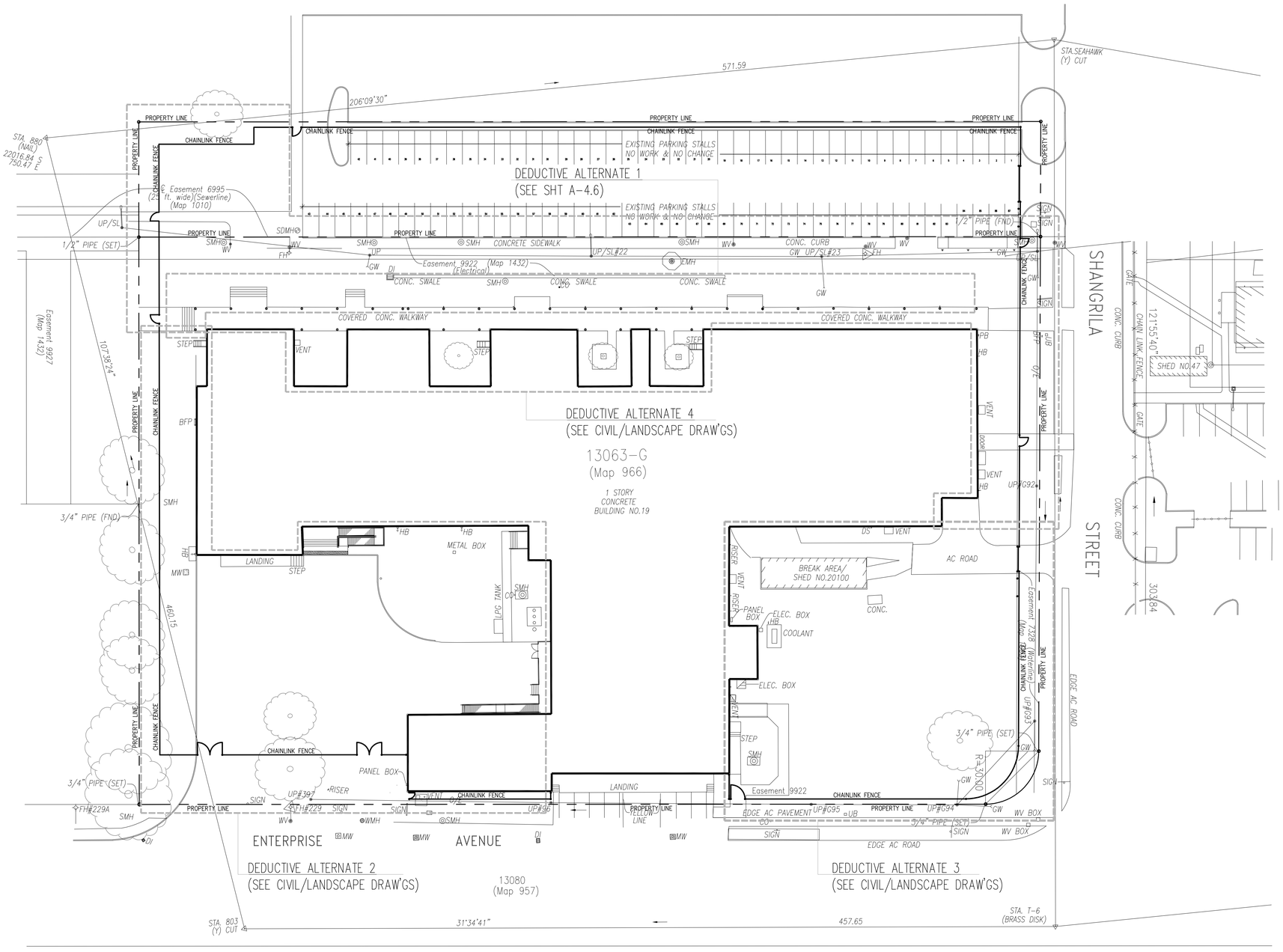
BUILDING 19
IMPROVEMENTS

SHEET INDEX AND NOTES

SCALE:

STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 2 OF 78

T0.1



1 PLOT PLAN
SCALE: 1/32"=1'-0"

GRAPHIC SCALE 1/32" = 1'-0"

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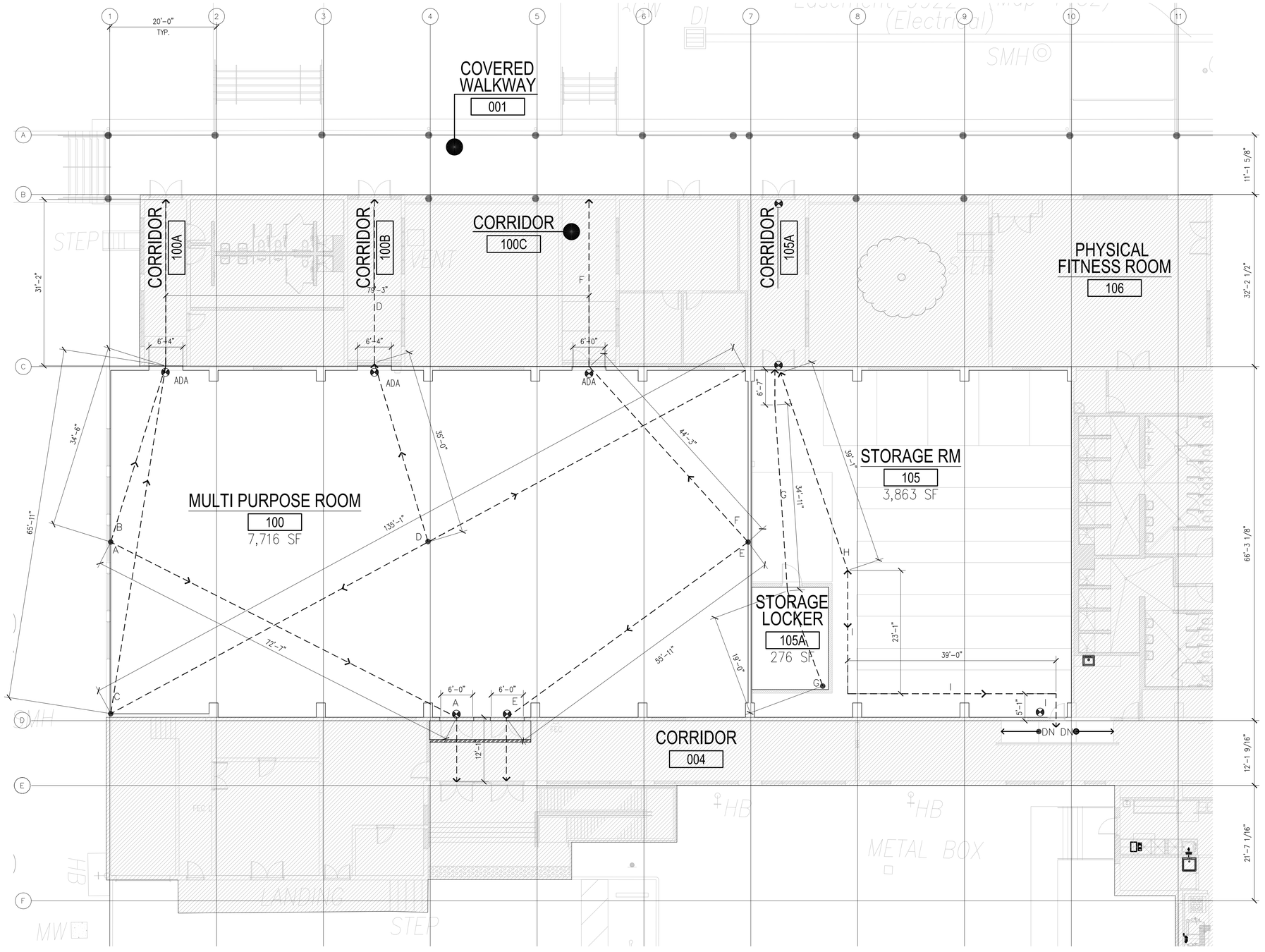
DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
BUILDING 19 IMPROVEMENTS
PLOT PLAN

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 3 OF 78
T0.2



COMMON PATH OF EGRESS

PATH NAME	DISTANCE
A	84' – 8"
B	65' – 8"
C	97' – 1"
D	66' – 2"
E	67' – 10"
F	75' – 5"
G	60' – 6"
H	39 – 1 "
I	67' – 2"

MULTI–PURPOSE RM & STORAGE RM

	OCCUPANT LOAD			EXIT	
NAME	SF (AREA)	OCCPNT/ SF	OCCPNT LOAD	EXIT REQ'D	EXIT PROVIDED
MULTI–PURPOSE RM.	7,716	5	1,543	5	5
STORAGE	3,863	300	13	2	2
STORAGE LOCKER	276	300	1	1	1

LEGEND CODE SYMBOLS

- 1–HOUR FIRE RATED SEPARATION
- PATH OF EGRESS
- EXIT SIGN, ABOVE
- LOAD # — OCCUPANT LOAD
- NOT IN SCOPE OF WORK

HAWAII ARMY NATIONAL GUARD

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No. 6239
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APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE
FINAL DESIGN

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DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91–1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

LIFE SAFETY AND OCCUPANCY PLAN

SCALE:

STATE JOB NO. CA–1514–C

FEDERAL PROJECT NO. PN15130011

SHEET 4 OF 78

T0.3

1 GYM & STORAGE LIFE SAFETY PLAN
SCALE: 1"=10'–0"

0 5' 10' 20' 40'

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	A	B	C	D	CEILING FINISH	HEIGHT	REMARKS	DELTA
100	MULTI PURPOSE ROOM	EXISTING CONCRETE	-	PT-4	PT- 4	PT- 4	PT- 4	PT- 4	VARIES		
105	STORAGE	EXISTING CONCRETE	-	PT- 4/ PT-5	PT- 4/ PT- 5	PT- 4/ PT-5	PT - 4/ PT - 5	PT- 4	VARIES		
VARIES	CLASSROOMS	EXIST'G VCT	RB-1 (MATCH EXIST'G)	-	PT-4	-	-	-	10'-0"		
VARIES	OFFICES	EXIST'G CARPET	RB-1 (MATCH EXIST'G)	PT-4	PT-4	-	-	-	8'-0"		

FINISH SCHEDULE

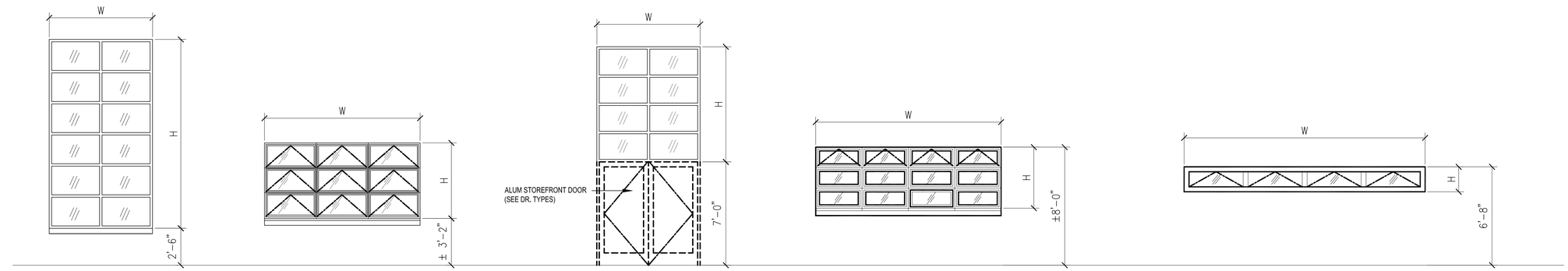
SYMBOL	DESCRIPTION	LOCATION	COLOR/PRODUCT	FINISH	SIZE	MANUFACTURER	RATING	REMARKS	DELTA
ACT-1	MV	CEILING	WHITE		SUPPLIED AND INSTALLED BY G.C.	ARMSTRONG			
CT-1	CERAMIC TILE	WALL	MUSTARD (MATCH EXISTING)		6" X 8" X 1/4" (MATCH EXISTING)	DALTILE			
PT-1	PAINT	EXTERIOR	DARK BEIGE	SEMI-GLOSS					
PT-2	PAINT	EXTERIOR	LIGHT BEIGE	SEMI-GLOSS					
PT-3	PAINT	EXTERIOR - GATE	MATCH EXISTING FENCE	SEMI-GLOSS					
PT-4	PAINT	INTERIOR	WHITE (MATCH EXIST'G)	EGGSHELL					
PT-5	PAINT	INTERIOR	BLACK (MATCH EXIST'G)	EGGSHELL					
PT-6	PAINT	INTERIOR (CORRIDOR HANDRAIL)	BEIGE (MATCH EXIST'G BASE)	SEMI-GLOSS					
PT-7	PAINT	MISC.							
RB-1	WALL BASE	CORRIDORS	TAN (MATCH EXISTING)		6" TALL	ARMSTRONG OR EQUIVALENT			
C-1	FLOOR COATING	CORRIDOR: RAMP AND STAIR & RAMP LAND'G	TERRACOTA (MATCH EXIST'G)	SEMI-GLOSS (NON-SLIP)					

DOOR SCHEDULE

IDENTIFICATION		OPENING			PANEL			FRAME			DETAILS (A SHEETS)			FIRE RATING	LBL.	PANIC HDW.	HDW. SET	NOTES
TYPE	ROOM NAME	WITDH	HEIGHT	THICK	MATERIAL	FINISH	UNDERCUT	TYPE	MATERIAL	FINISH	HEAD	JAMB	THRESHOLD					
D1	CORRIDOR/OFFICE	6' - 0"	7' - 0"	0' - 1 3/4"	ALUM	ANODIZED (MATCH EXIST'G)		ALUM	ALUM	KYNAR	13/A5.2	11/A5.2	14/A5.2				1	USE DET. 13/A5.2 AT CORRIDOR/WINDOW HEAD
D2	STORAGE	3' - 4"	7' - 2"	0' - 1 3/4"	METAL	PAINT		METAL	METAL	METAL - PAINT	15/A5.2	15/A5.2		20 MIN.			2	
D3	LOADING	9'-0"	8'-4"	2"	METAL	PAINT		METAL	METAL	PAINT	10/A5.1	15/A5.1	10/A5.1					

WINDOW SCHEDULE

WIN. TYPES	ROOM NAME	SIZE		HEAD HEIGHT	GLAZING TYPE	FRAME		DETAILS (A SHEETS)					MANUFACTURER	REMARKS
		WIDTH	HEIGHT			MATERIAL	FINISH	HEAD	JAMB	SILL	MULLION	MUNTIN		
W-1	CLASSROOM	± 7' - 0"	± 12' - 10"	15' - 4"	INSUL. GLASS	ALUM	ANODIZED (MATCH EXIST'G)	8/A5.2 (SIM)	9/A5.2	10/A5.2	3/A5.2	11/A5.2	ARCADIA	
W-2	OFFICE	± 10' - 6"	± 5' - 1"	8' - 3"	INSUL. GLASS	ALUM	ANODIZED (MATCH EXIST'G)	8/A5.2	9/A5.2	10/A5.2	3/A5.2	4/A5.2	ARCADIA	WINDOW PROJECTION SHALL BE 4" MAX.
W-3	CORRIDOR	± 7' - 0"	8' - 4"	15' - 4"	INSUL. GLASS	ALUM	ANODIZED (MATCH EXIST'G)	8/A5.2 (SIM)	9/A5.2	13/A5.2	3/A5.2	4/A5.2	ARCADIA	
W-4	OFFICE	± 12' - 6"	± 4' - 2"	8' - 0"	INSUL. GLASS	ALUM	ANODIZED (MATCH EXIST'G)	5/A5.2	6/A5.2	7/A5.2	2/A5.2	7/A5.2	ARCADIA	WINDOW PROJECTION SHALL BE 4" MAX.
W-5	OFFICE	± 16' - 5"	± 1' - 8"	6' - 8"	INSUL. GLASS	ALUM	ANODIZED (MATCH EXIST'G)	5/A5.2	6/A5.2	7/A5.2	2/A5.2	-	ARCADIA	WINDOW PROJECTION SHALL BE 4" MAX.



W-1
ALUM FRAME CURTAIN WALL
ANTI-TERRORIST FORCE
PROTECTION (ATFP) W/
INSULATED GLASS

W-2
ALUM FRAME CURTAIN WALL
ANTI-TERRORIST FORCE
PROTECTION (ATFP) W/
INSULATED GLASS

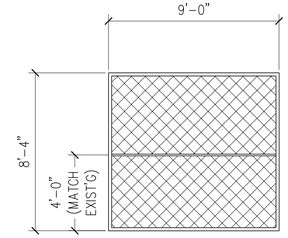
W-3
ALUM FRAME CURTAIN WALL
ANTI-TERRORIST FORCE
PROTECTION (ATFP) W/
INSULATED GLASS

W-4
ALUM FRAME WINDOW
W/ INSULATED GLASS

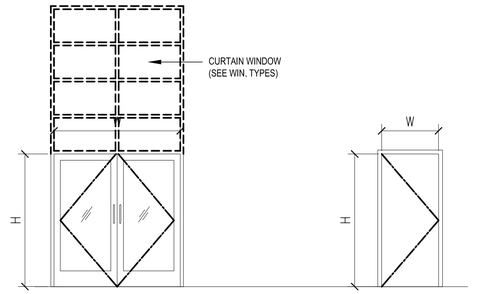
W-5
ALUM FRAME WINDOW
W/ INSULATED GLASS

WINDOW TYPES

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



D3: SLIDING METAL GATE
SLIDING GALV METAL TUBE FRAME GATE
W/GALV METAL SECURITY SCREEN (TO
MATCH EXISTING)



D1 (STOREFRONT - DBL.)
ALUM. FRAME WIDESTILE
DOOR W/ INSULATED GLASS.
(ANTI-TERRORIST FORCE
PROTECTION (ATFP) @
WINDOW TYPE W-3)

D2 (FLUSH - SINGLE)
GALVANIZED HOLLOW
METAL DOOR & FRAME

DOOR TYPES

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

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE

FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

SCHEDULES

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 5 OF 78

T0.4

CONSTRUCTION NOTES

1. ALL APPLICABLE 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, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII.

2. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATIONS FOR THE NEW LINES.

3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATIONS SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS" AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU 1990, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

5. FOR BENCH MARK, SEE SHEET C2.0

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.

2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE CITY
SHALL REQUIRE SUPPLEMENTARY MEASURES AS REQUIRED.

3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATIONS SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 44B PUBLIC HEALTH REGULATIONS DEPARTMENT OF HEALTH, STATE OF HAWAII "COMMUNITY NOISE CONTROL FOR OAHU" IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION ACTIVITIES FOR THIS PROJECT WILL EXCEED THE ALLOWABLE NOISE LEVELS, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF PUBLIC HEALTH. THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 44B AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.

WATER NOTES (PRIVATE)

1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S "WATER SYSTEM STANDARDS", DATED 2002. THE "THE WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.

2. NUTS AND BOLTS FOR FLANGE CONNECTION WITHIN METER BOXES SHALL BE BRONZE OR STAINLESS STEEL EXCEPT COUPLING ADAPTERS WHERE "COR-TEN" (U.S. STEEL) OR "MAYARI" (BETHLEHEM STEEL) MAY BE USED. FLANGE CONNECTIONS OUTSIDE OF METER BOX MAY USE "COR-TEN" OR "MAYARI" TYPE NUTS AND BOLTS.

3. TEST PRESSURE SHALL BE ONE OF THE FOLLOWING:
   A. PREVAILING LINE PRESSURE, JOINTS LEFT EXPOSED FOR 24 HOURS TO CHECK FOR LEAKS PRIOR TO BACKFILL.
   B. 150 PSI. DURING THE 30-MINUTE PRESSURE TEST, THE PRESSURE SHALL NOT DROP MORE THAN 10 PSI.

4. THE CONTRACTOR SHALL CHLORINATE THE ENTIRE INSIDE SURFACE OF EACH PIPE AND FITTING WITH DISINFECTION SOLUTION OF 5 OUNCES OF SODIUM HYPOCHLORITE MIXED WITH 10 GALLONS OF WATER. (FOR CONNECTION ONLY)

5. THE INSTALLATION, CHLORINATION AND TESTING OF THE WATER MAIN AND FACILITIES AFTER THE METER SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATERLINES, TEES AND BENDS WHENEVER THERE IS POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.

7. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOT ASSUME THAT WHERE NO UTILITIES ARE SHOWN, THAT NONE EXIST.

8. PIPE CUSHION SHALL BE OF HIGH RESISTIVITY MATERIAL. THE CONTRACTOR SHALL SUBMIT A SOIL CERTIFICATION THAT HIGH RESISTANT CUSHION MATERIAL HAS A RESISTIVITY GREATER THAN 5,000 OHM-CM. REMAINDER OF THE BACK--FILL MATERIAL SHALL BE AS SPECIFIED IN VOLUME 1 OF THE WATER SYSTEM STANDARDS. PIPE CUSHION AND BACKFILL MATERIAL SHALL CONTAIN NO HAZARDOUS SUBSTANCES ABOVE REGULATORY ACTION LEVELS INCLUDING BUT NOT LIMITED TO LEAD , ASBESTOS, MERCURY, CHROMIUM, CADMIUM, ZINC, STRONTIUM, AND POLYCHLORINATED BIPHENYL'S (PCB).

9. INSTALL 4 MIL THICK, NON-METALLIC, BLUE COLORED, 6 INCHES WIDE WARNING TAPE OVER CENTERLINE OF THE PIPE AND BELOW THE BASE COURSE ALONG THE ENTIRE LENGTH OF TRENCH. TAPE SHOULD BE MARKED WITH "CAUTION WATER LINE BURIED BELOW".

GRADING NOTES

1. ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15, AND 16, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL, OF THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED.

2. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

3. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL"

4. THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.

5. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.

6. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.

7. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.

8. THE CITY SHALL BE INFORMED OF THE LOCATION OF BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE. THE DEPARTMENT OF PLANNING AND PERMITTING, SITE DEVELOPMENT DIVISION, CIVIL ENGINEERING BRANCH, PERMITTING AND INSPECTION SECTION SHALL BE NOTIFIED OF ANY SUBSEQUENT CHANGES IN THE LOCATION OF BORROW/DISPOSAL SITES (PHONE NUMBERS: 768-8084).

9. NO GRADING WORK SHALL BE DONE ON SATURDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE DIRECTOR, DEPARTMENT OF PLANNING AND PERMITTING, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, "COMMUNITY NOISE CONTROL."

10. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.

11. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS" AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL" AND IF APPLICABLE, THE NPDES PERMIT FOR THE PROJECT.

12. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.

13. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.

14. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL AND/OR HAZARDOUS MATERIAL, THEN ALL GRADING SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS. CONTACT THE SOLID AND HAZARDOUS WASTE BRANCH OF THE STATE DEPARTMENT OF HEALTH FOR MORE INFORMATION (PHONE NUMBER: 586-4226).

15. PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATION, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768-8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.

16. FOR NON-CITY PROJECTS REQUIRING GRADING PERMIT. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P. AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK. FOR CITY PROJECTS, THE CONTRACTOR SHALL COORDINATE INSPECTIONAL SERVICES WITH THE RESPONSIBLE CITY AGENCY.

17. ALL GRADING AND CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.

18. FOR ALL PROJECTS, WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND, THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL A NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. ALSO, FOR NON-CITY AND OTHER NON-GOVERNMENTAL AGENCY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NGPC TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, DPP, AT LEAST SEVEN (7) CALENDAR DAYS BEFORE THE START OF THE CONSTRUCTION. FOR CITY OR OTHER GOVERNMENTAL PROJECTS, THE CONTRACTOR SHOULD PROVIDE A WRITTEN COPY OF THE NGCP TO THE APPROPRIATE CITY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.

19. NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE PERMITTEE. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

20. FOR BENCH MARK, SEE SHEET C-2

EROSION CONTROL/BEST MANAGEMENT PRACTICES NOTES

1. EROSION CONTROL MEASURES TO BE INSTALLED BEFORE DEMOLITION AND MAINTAINED UNTIL COMPLETION OF WORK.

2. THE STABILIZED CONSTRUCTION ACCESS PAD SHALL BE INSTALLED AT ENTRANCES TO THE CONSTRUCTION SITE TO PROTECT ROADS FROM MILD, DIRT, AND ROCKS.

3. CONTRACTOR TO PERIODICALLY INSPECT SILT FENCE AND FILTER SOCK ESPECIALLY DURING PERIODS OF HEAVY RAIN FALL.

4. THE SILT FENCE SHALL BE INSTALLED BEFORE ANY CONSTRUCTION OPERATIONS AND SHALL BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION ACTIVITIES.

5. THE FINAL LIFT OF EACH DAYS WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIALS.

6. THE CONTRACTOR SHALL DISPOSE OF VEGETATION AND EQUIPMENT AND HYDRAULIC OILS OFF-SITE.

7. NO OIL OR FUEL SHALL BE STORED ON SITE.

8. ALL EQUIPMENT SHALL BE SERVICED IN A CONFINED AREA AND ALL FLUIDS SHALL DRAIN INTO PANS FOR HANDLING.

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ALAN T. OKAMOTO
LICENSED PROFESSIONAL ENGINEER
No. 5483-C
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

APPR	DATE	DESCRIPTION	SYM

SUBMITAL PHASE

FINAL DESIGN

SUBMITAL DATE: JUNE 29 2018

DES: ATO DRW: KDP CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

NOTES

SCALE:

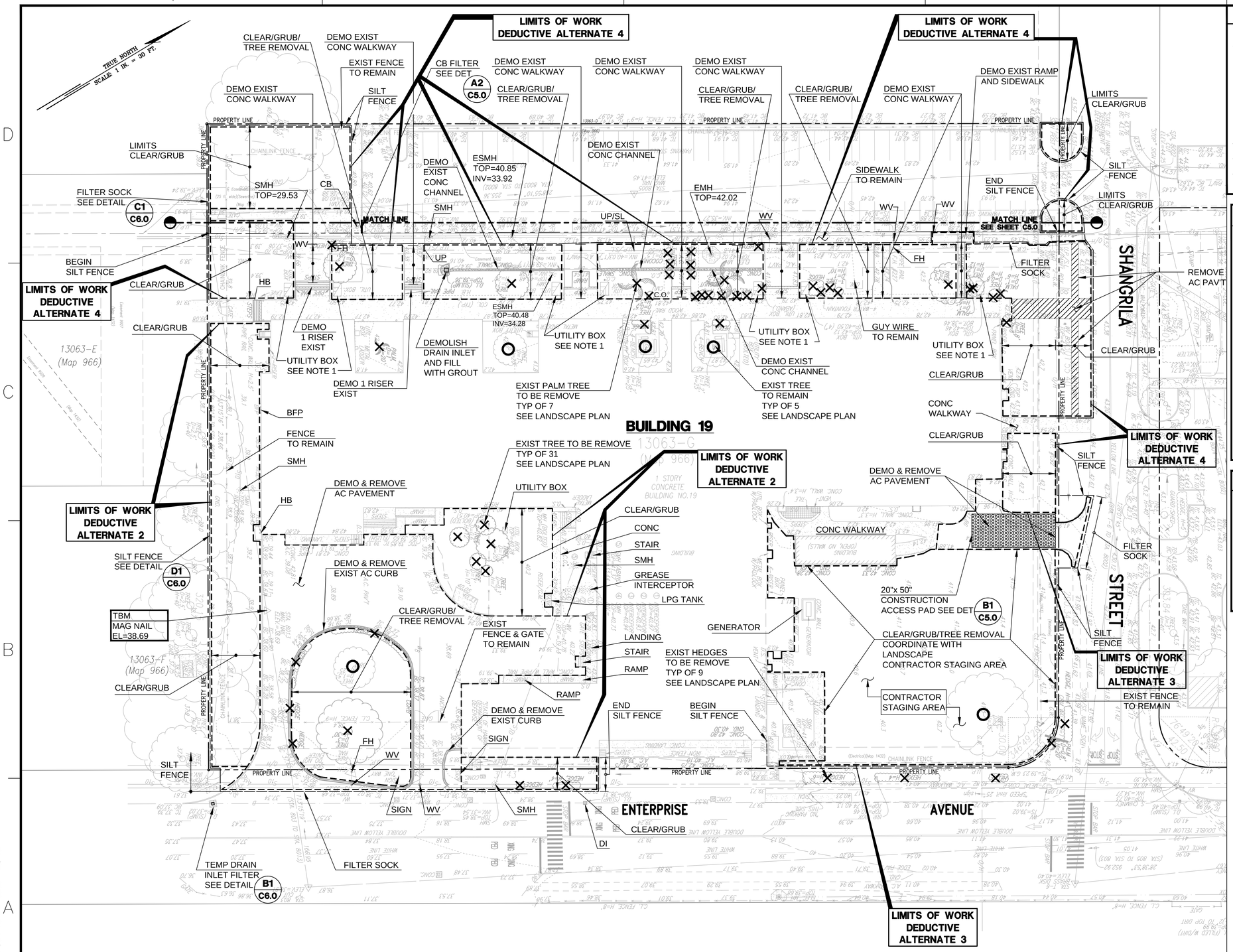
STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 6 OF 78

C1.0

2911 HIARNG Bldg 19-Note/HIDA, OKAMOTO & ASSOCIATES, INC.



LEGEND

EXISTING	DESCRIPTION	NEW
42	CONTOURS	40
42.3 / 43.53	SPOT GRADE	/ 40.03
	SILT FENCE	
	FILTER SOCK	
	LIMITS OF DEMOLITION, GRADING /WORK	
	DRAINAGE FLOW	
	WATERLINE	
	SEWER LINE	
	DRAIN LINE	

LEGEND

EXISTING	DESCRIPTION
	EXISTING TREE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
	EXISTING TREE TO BE REMOVED FROM SITE
	EXISTING PALM TO BE REMOVED FROM SITE
	EXISTING SHRUB TO BE REMOVED FROM SITE

NOTE:

1. REMOVE CHECKER PLATE COVER, CUT & PLUG EXIST UTILITY LINE, CORE 2-4"Ø HOLES IN BOTTOM SLAB, BACKFLOW WITH 3B FINE. SEE DETAIL B5 C6.0

2. TRENCHING FOR WATER CONNECTION AND IRRIGATION PIPE SLEEVE ARE SHOWN ON C4.0. ESTIMATED DEPTH=18"

3. TRENCHING FOR 18" IRRIGATION SYSTEM SHOWN ON L3-01 AND L3-02. ESTIMATED DEPTH=18".

A/E INFO

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ALAN T. OKAMOTO LICENSED PROFESSIONAL ENGINEER No. 5483-C HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

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DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
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FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19 IMPROVEMENTS

DEMOLITION & EROSION CONTROL PLAN

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 7 OF 78

C2.0

30 15 0 30 60
Graphic Scale in Feet (Scale: 1"=30')

DEMOLITION & EROSION CONTROL PLAN

SCALE: 1" = 30'

2911 HIARNG Bldg 19/HIDA, OKAMOTO & ASSOCIATES, INC.

BUILDING 19

13063-G
(Map 966)

1 STORY
CONCRETE
BUILDING NO.19

EXIST TREE
TO REMAIN
TYP OF 5
SEE LANDSCAPE PLAN

MATCH LINE

MATCH LINE
SEE SHEET C5.0

SHANGRILA

PROPERTY LINE

LIMITS OF GRADING/ WORK
DEDUCTIVE ALTERNATE 4

LIMITS OF GRADING/ WORK
DEDUCTIVE ALTERNATE 2

LIMITS OF GRADING/ WORK
DEDUCTIVE ALTERNATE 3

DELETE 1 RISER
MATCH TO
EXIST STAIR, TYP

DELETE 1 RISER
MATCH TO
EXIST STAIR, TYP

BACKFILL EXIST
SUMP PIT (5' x 8' x 4' DEPTH)

BACKFILL EXIST
SUMP PIT (5' x 8' x 4' DEPTH)

BACKFILL EXIST
SUMP PIT (5' x 8' x 4' DEPTH)

BACKFILL EXIST
SUMP PIT (5' x 8' x 4' DEPTH)

MATCH TO
EXIST CONC WALKWAY, TYP

MATCH TO
EXIST CONC WALKWAY

MATCH TO
EXIST
AC PAVEMENT

MATCH TO
EXIST AC
PAVEMENT

2" PVC PIPE SLEEVE
4" PVC PIPE SLEEVE
WV
INV=41.03
MH (BOLTED) TOP=40.82
MH (BOLTED) TOP=40.51
MH (BOLTED) TOP=40.68
MH (BOLTED) TOP=40.62
SMH TOP=40.37
SMH TOP=40.03
SMH TOP=40.00
SMH TOP=39.98
SMH TOP=39.96
SMH TOP=39.93
SMH TOP=39.91
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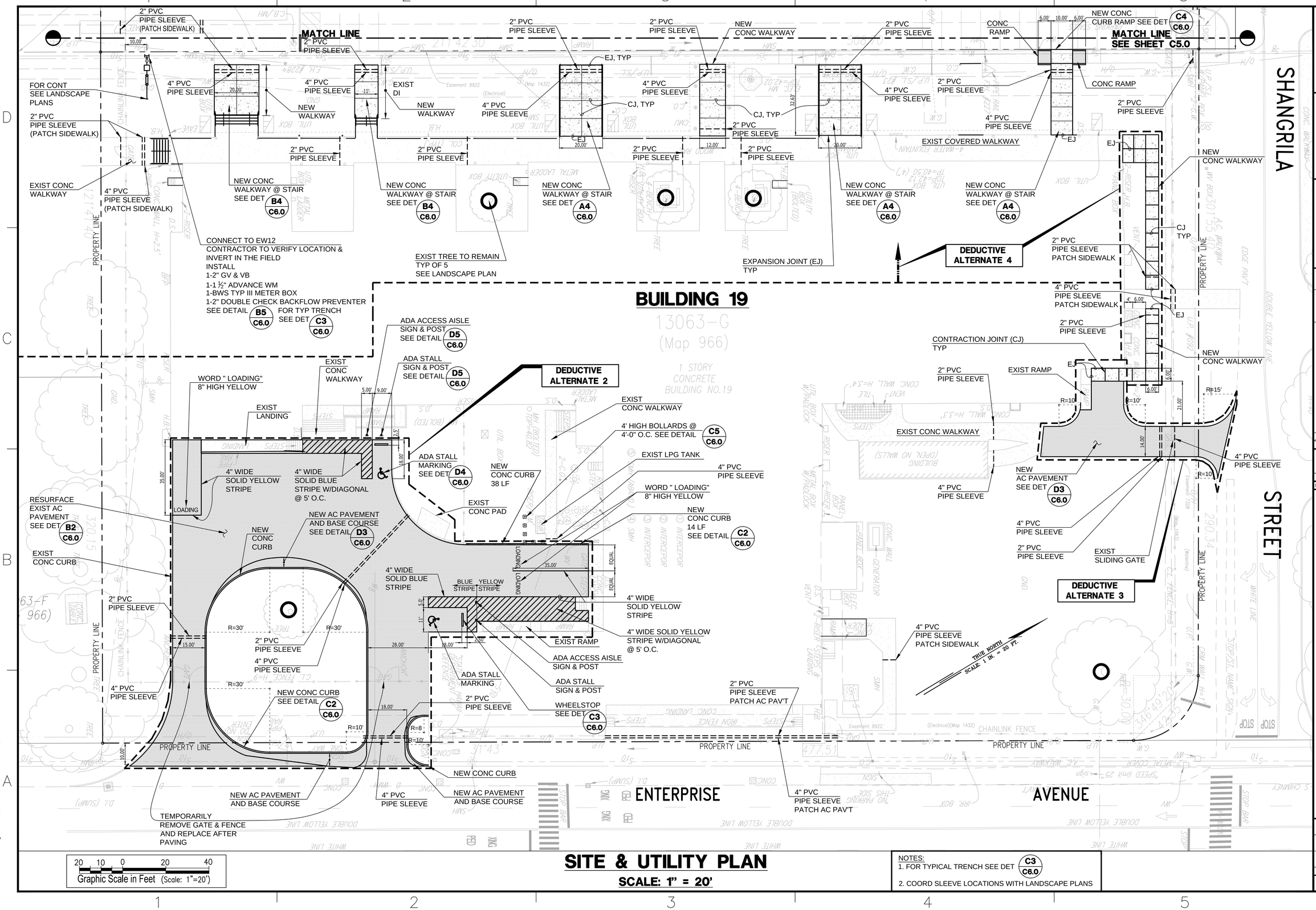

SITE & UTILITY PLAN

SCALE: 1" = 20'

NOTES:
1. FOR TYPICAL TRENCH SEE DET C3 C6.0
2. COORD SLEEVE LOCATIONS WITH LANDSCAPE PLANS

2911 HIARNG Bldg 19/HIDA, OKAMOTO & ASSOCIATES, INC.

A/E INFO

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ALAN T. OKAMOTO
LICENSED PROFESSIONAL ENGINEER
No. 5483-C
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

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KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

SITE & UTILITY PLAN

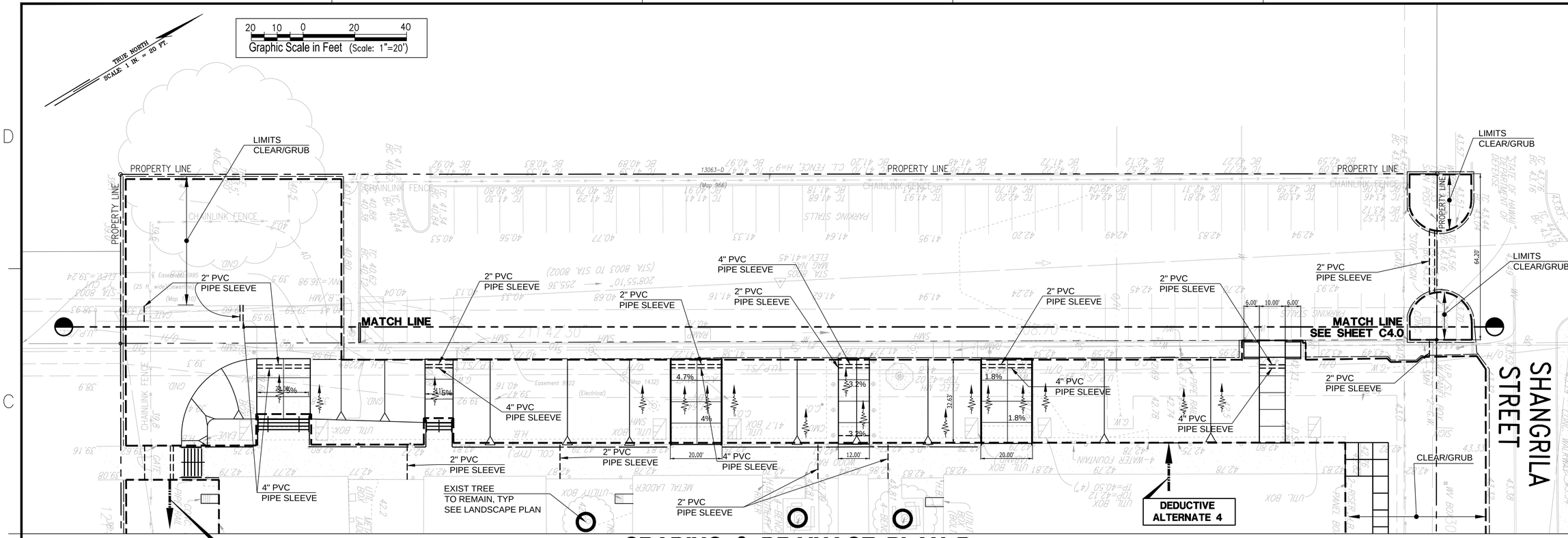
SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

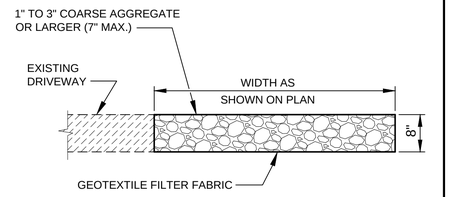
SHEET 9 OF 78

C4.0

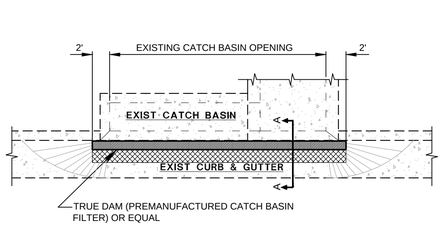


GRADING & DRAINAGE PLAN-B

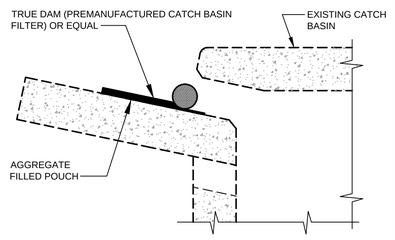
SCALE: 1" = 20'



CONSTRUCTION ACCESS PAD | SCALE NONE | B1



PLAN



SECTION A-A

NOTES:
1. TO BE INSTALLED AT ALL EXISTING CATCH BASINS ADJACENT TO AND IMMEDIATELY DOWN STREAM OF WORK AREAS.
2. INSTALL AS PER MANUFACTURERS RECOMMENDATIONS.

CATCH BASIN FILTER | SCALE NONE | A2

LEGEND

EXISTING	DESCRIPTION
○	EXISTING TREE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
×	EXISTING TREE TO BE REMOVED FROM SITE
×	EXISTING PALM TO BE REMOVED FROM SITE
×	EXISTING SHRUB TO BE REMOVED FROM SITE

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ALAN T. OKAMOTO LICENSED PROFESSIONAL ENGINEER No. 5483-C HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | MK

SUBMITTAL PHASE: FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: ATO DRW: KDP CHK: RY

DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
HAWAII ARMY NATIONAL GUARD
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
BUILDING 19 IMPROVEMENTS
GRADING & DRAINAGE PLAN-B

SCALE:

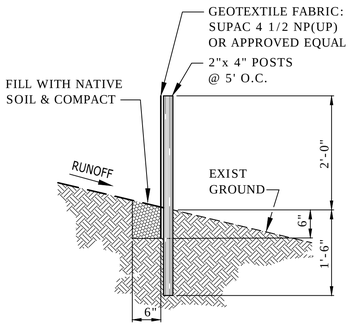
STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 10 OF 78

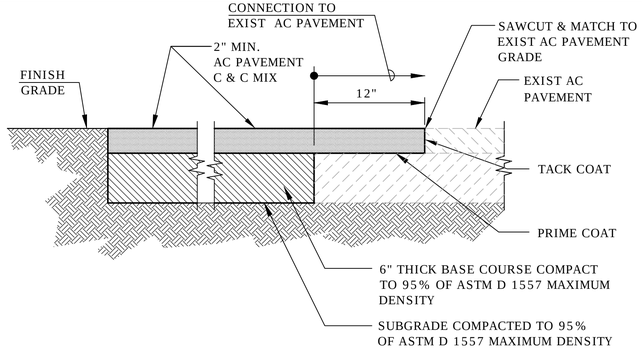
C5.0

2911 HIARNG Bldg 19/HDA, OKAMOTO & ASSOCIATES, INC.



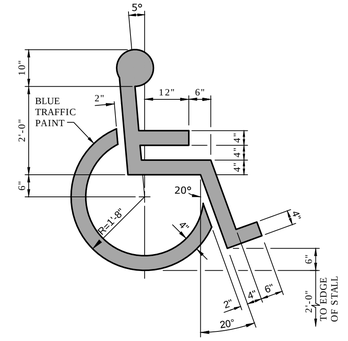
SILT FENCE

SCALE NONE — D1



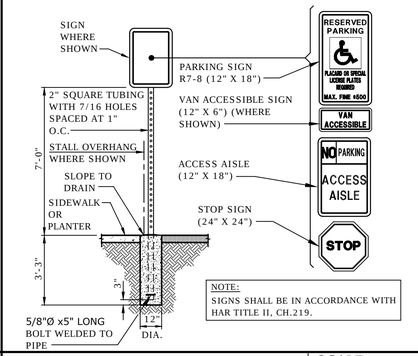
AC PAVEMENT

SCALE NONE — D3



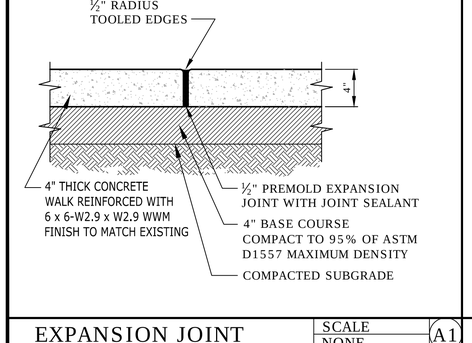
HANDICAP MARKING

SCALE NONE — D4



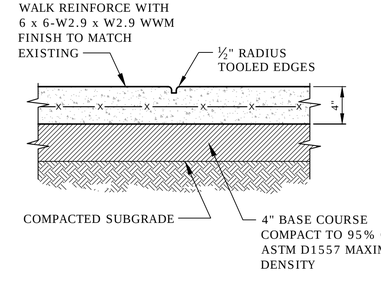
SIGN & POST

SCALE NONE — D5



FILTER SOCK

SCALE NONE — C1

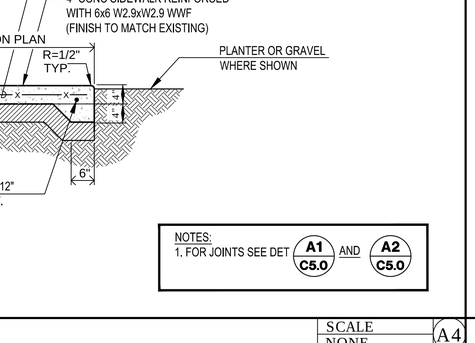


CONC CURB

SCALE NONE — C2

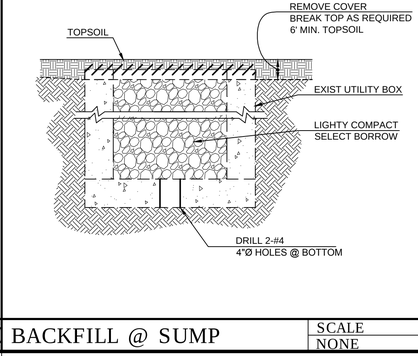
WHEELSTOP

SCALE NONE — C3



CURB RAMP

SCALE NONE — C4



BOLLARD

SCALE NONE — C5

DRAIN INLET FILTER

SCALE NONE — B1

PAVEMENT RESURFACING

SCALE NONE — B2

TYPICAL TRENCH

SCALE NONE — C3

WALKWAY @ STAIR

SCALE NONE — B4

RPP BACKFLOW PREVENTER (DOMESTIC)

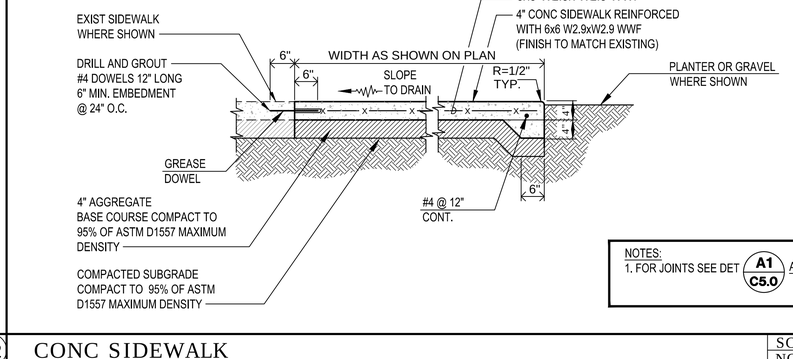
SCALE NONE — B5

EXPANSION JOINT

SCALE NONE — A1

CONTRACTION JOINTS

SCALE NONE — A2



CONC SIDEWALK

SCALE NONE — A4

BACKFILL @ SUMP

SCALE NONE — B5

A/E INFO

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ALAN T. OKAMOTO
LICENSED
PROFESSIONAL
ENGINEER
No. 5483-C
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | MK

SUBMITAL PHASE
FINAL DESIGN

SUBMITAL DATE: JUNE 29 2018

DES: ATO DRW: KBDP CHK: RY

DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH
HAWAII ARMY NATIONAL GUARD
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

DETAILS

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 11 OF 78

C6.0

2911 HARNG Bldg 19-Dets/HIDA, OKAMOTO & ASSOCIATES, INC.

TREE AND SHRUB DISPOSITION PLAN

SCALE: 1" = 20'-0"

0 5' 10' 20' 40'

LEGEND

- EXISTING TREE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
- EXISTING TREE TO BE REMOVED FROM SITE
- EXISTING PALM TO BE REMOVED FROM SITE
- EXISTING SHRUB TO BE REMOVED FROM SITE

DEDUCTIVE ALTERNATE #4

DEDUCTIVE ALTERNATE #2

DEDUCTIVE ALTERNATE #3

PROPERTY LINE

PROPERTY LINE

SHANGRILA STREET

ENTERPRISE AVENUE

STOP

STOP

(STA. 801+71 TO STA. 800+32.38)
238.66'
N 43°15'16" W

(STA. 800+32.38 TO STA. 800+23.72)
128.01'
N 43°15'16" W

(STA. 800+23.72 TO STA. 800+23)
77.63'
N 43°15'16" W

(STA. 800+23 TO STA. 800+21.72)
128.01'
N 43°15'16" W

(STA. 800+21.72 TO STA. 800+21)
77.63'
N 43°15'16" W

(STA. 800+21 TO STA. 800+12.34)
128.01'
N 43°15'16" W

(STA. 800+12.34 TO STA. 800+11.34)
77.63'
N 43°15'16" W

(STA. 800+11.34 TO STA. 800+03)
208'55'10" 255.36

H/O

S10

W12

S8

D1

01S

8W

9S

8S

D2

Jul 06, 2018–4:12pm
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PRELIMINARY NOT FOR CONSTRUCTION

A/E INFO

BENEDICT LEE
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 5818
HAWAII, U.S.A.

APPR | DATE | DESCRIPTION | MK

SUBMITAL PHASE
FINAL DESIGN

SUBMITAL DATE: JUNE 29 2018

DES: DRW: RRB CHK: BL

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

TREE AND SHRUB DISPOSITION PLAN

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 12 OF 78

L 1.00

SEE SHEET L 1.02
MATCHLINE

SEE SHEET L 1.02
MATCHLINE

PROPERTY LINE

SHANGRILA STREET

DEDUCTIVE
ALTERNATE #4

DEDUCTIVE
ALTERNATE #2

DEDUCTIVE
ALTERNATE #3

COMMON BERMUDA GRASS

RIVER ROCK BED IN EXISTING TREE WELL.
INSTALL FILTER FABRIC BELOW RIVER ROCK, TYP.

POLYDIVIDER

13063-G
(Map 966)

EXISTING TREE TO REMAIN AND BE PROTECTED
DURING CONSTRUCTION, TYP.

1 STORY
CONCRETE
BUILDING NO. 19

KUKUI NUT TREE, TYP.

BIOBARRIER, TYP.

ENTERPRISE AVENUE

PROPERTY LINE

LOADING

CHAINLINK FENCE

Easement 9922

(Electrical)(Map 1432)

LANDSCAPE PLANTING PLAN
SCALE: 1" = 20'-0"

0 5' 10' 20' 40'

PRELIMINARY
NOT FOR CONSTRUCTION

A/E INFO

BRENT D. LEE
LICENSED
PROFESSIONAL
LANDSCAPE
ARCHITECT
No. 5818
HAWAII, U.S.A.

APPR | DATE | DESCRIPTION | MARK

SUBMITAL PHASE
FINAL DESIGN

SUBMITAL DATE: JUNE 29 2018

DES: DRW: RRB CHK: BL

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

HAWAII ARMY NATIONAL GUARD

BUILDING 19
IMPROVEMENTS

LANDSCAPE PLANTING PLAN

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 13 OF 78

L 1.01

Jul 06, 2018-6:18pm
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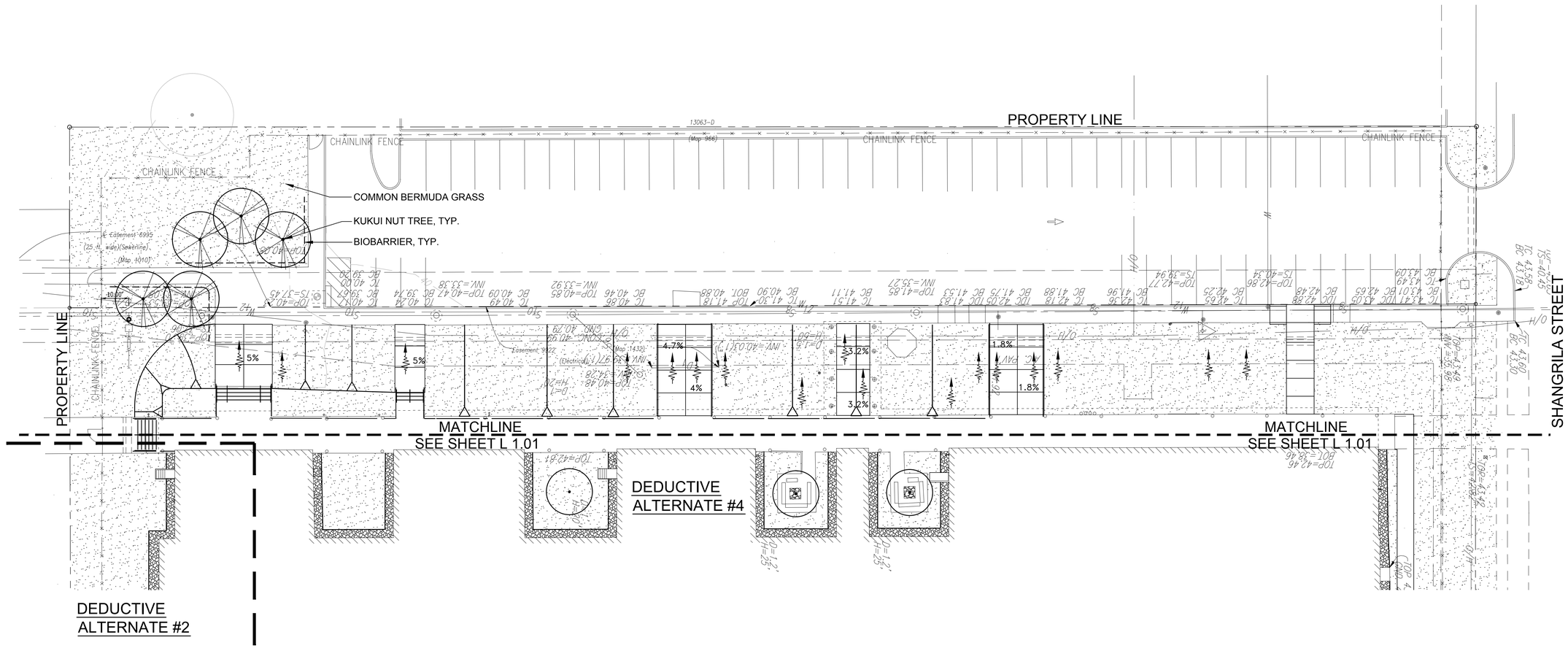

LANDSCAPE PLANTING PLAN

SCALE: 1" = 20'-0"

0 5' 10' 20' 40'

PRELIMINARY NOT FOR CONSTRUCTION

A/E INFO

BRENT DICE LEE
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 5818
HAWAII, U.S.A.

APPR | DATE | DESCRIPTION | MK

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: RRB CHK: BL

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19
IMPROVEMENTS
LANDSCAPE PLANTING PLAN

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 14 OF 78

L 1.02

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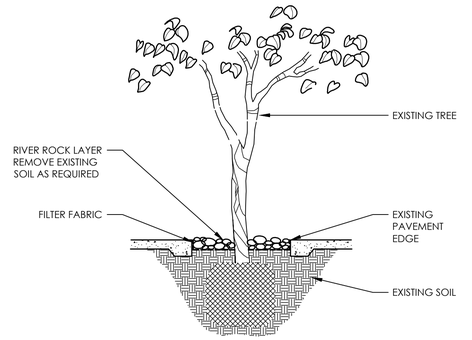
PLANT LIST					
BASE BID	DEDUCT ALT #2	DEDUCT ALT #3	DEDUCT ALT #4	COMMON NAME / BOTANICAL NAME	SIZE AND COMMENTS
TREES					
7 EA	4 EA	4 EA	0 EA.	KUKUI NUT / Aleurites moluccana	25 GAL, 8' HT., 5' SPREAD, 2 ½" CAL.
GROUND COVERS					
67,770 SF	47,870 SF	27,370 SF	0 SF	COMMON BERMUDA GRASS	HYDRO SEED, SEE SPECS
MISCELLANEOUS					
837 CY	595 CY	340 CY	0 CY	SCREENED TOP SOIL	UNIFORM 4" DEEP LAYER. SEE SPECS
970 LF	6100 LF	410 LF	0 LF	POLYDIVIDER	SEE DETAIL
3,360 SF	2,060 SF	1,310 SF	0 LF	GRAVEL MAINTENANCE STRIP	SEE DETAIL
35 SF	35 SF	35 SF	0 SF	RIVER ROCK	2" DIA, GRAY. DOUBLE LAYER
3,395 SF	2,095 SF	1,345 SF	0 SF	FILTER FABRIC	BELOW RIVER ROCK AND GRAVEL MAINTENANCE STRIP
220 LF	130 LF	130 LF	0 LF	BIOBARRIER	INSTALL PER DETAIL

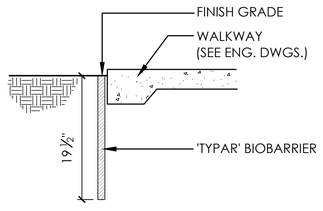


EXISTING TREE WELL DETAIL

NOT TO SCALE

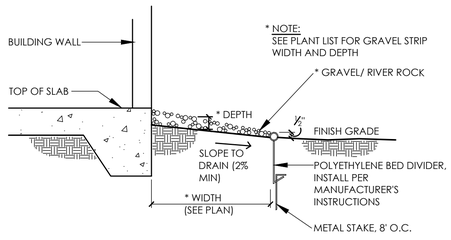
NOTE:
BIOBARRIER SHALL BE INSTALLED ALONG ALL PLANTING EDGES ADJACENT TO PAVEMENT. SEE LEVEL 1 PLANTING PLAN FOR LOCATIONS.

INSTALL BIOBARRIER PER MANUFACTURER'S INSTRUCTIONS.



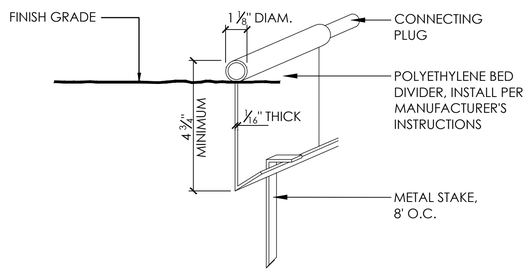
BIOBARRIER AT PAVEMENT

NOT TO SCALE



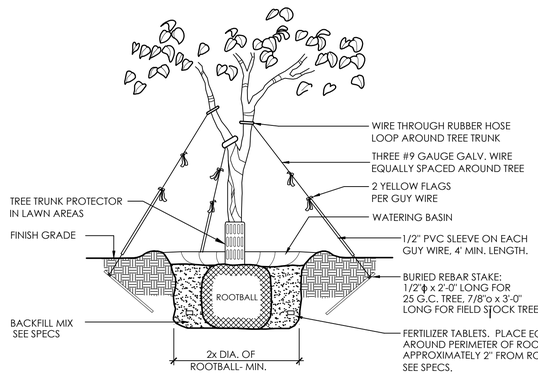
MAINTENANCE STRIP

NOT TO SCALE



POLY DIVIDER

NOT TO SCALE



25 GAL. KUKUI NUT TREE PLANTING

NOT TO SCALE

HAWAII ARMY NATIONAL GUARD

PRELIMINARY NOT FOR CONSTRUCTION

A/E INFO

BRENT D. ICE
LICENSED
PROFESSIONAL
LANDSCAPE
ARCHITECT
No. 5818
HAWAII, U.S.A.

APRIL 2022
expiration date
of this license

NOTE: Contractor shall visit and verify dimensions at job before proceeding with work.

SEAL

NUM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: RRB CHK: BL

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

PLANT LIST AND DETAILS

SCALE:

STATE JOB NO.
CA–1514–C

FEDERAL PROJECT NO.
PN15130011

SHEET 15 OF 78

L 2.01

Jul 06, 2018–6:27pm
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POINT OF CONNECTION, CONNECT TO 2" BACKFLOW PREVENTER PROVIDE BY CIVIL, SEE CIVIL PLANS

2 ½" IRRIGATION MAIN, TYPICAL

SEE SHEET L 3.02 MATCHLINE

SEE SHEET L 3.02 MATCHLINE

PROPERTY LINE

2 ½" IRRIGATION MAIN, TYPICAL

IRRIGATION CONTROLLER 120V CONNECTION PROVIDED BY ELECTRICAL, SEE ELEC PLANS

DEDUCTIVE ALTERNATE #4

13063-G
(Map 966)

1 STORY CONCRETE BUILDING NO.19

SHANGRILA STREET

DEDUCTIVE ALTERNATE #2

2 ½" IRRIGATION MAIN, TYPICAL

LOADING

LOADING

DEDUCTIVE ALTERNATE #3

2 ½" IRRIGATION MAIN, TYPICAL

Easement 9922 (Electrical) (Map 1432)

CHAIN LINK FENCE

CHAIN LINK FENCE

Easement 9922 (Electrical) (Map 1432)

PROPERTY LINE

ENTERPRISE AVENUE

STOP

STOP

IRRIGATION PLAN

SCALE: 1" = 20'-0"

0 5' 10' 20' 40'

Jul 06, 2018-6:41pm
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BENEDICT LEE
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 5818
HAWAII, U.S.A.
APRIL 2018
expiration date of the license
NOTE: Coordinate all plans and verify dimensions at job before proceeding with work.
SEAL

PRELIMINARY NOT FOR CONSTRUCTION

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FINAL DESIGN

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HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
BUILDING 19 IMPROVEMENTS
IRRIGATION PLAN

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 16 OF 78

L 3.01

PROPERTY LINE

CHAINLINK FENCE

13063-D (Map 966)

PROPERTY LINE

CHAINLINK FENCE

CHAINLINK FENCE

STA 8003 MAG NAIL ELEV=39.24

C Easement 6995 (25' wide)(Sewerline) (Map 1010)

POINT OF CONNECTION, CONNECT TO 2" BACKFLOW PREVENTER PROVIDE BY CIVIL, SEE CIVIL PLANS

2½" IRRIGATION MAIN TYPICAL

STA 8005 MAG NAIL ELEV=41.45

208°55'10" 255.36 (STA 8003 TO STA 8002)

211°42'30"

508.70

Easement 9922 (Electrical) (Map 1432)

4.7%

1.8%

SHANGRILA STREET

MATCHLINE SEE SHEET L 3.01

MATCHLINE SEE SHEET L 3.01

DEDUCTIVE ALTERNATE #4

2½" IRRIGATION MAIN, TYPICAL

121°41'40"

2½" IRRIGATION MAIN, TYPICAL

DEDUCTIVE ALTERNATE #2

IRRIGATION CONTROLLER 120V CONNECTION PROVIDED BY ELECTRICAL, SEE ELEC PLANS

IRRIGATION PLAN

SCALE: 1" = 20'-0"

0 5' 10' 20' 40'

HAWAII ARMY NATIONAL GUARD

BRENE DICK LEE
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 5818
HAWAII, U.S.A.
APRIL 2018
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SEAL

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STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH

HAWAII ARMY NATIONAL GUARD

91-1110 ENTERPRISE AVENUE

KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

IRRIGATION PLAN

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 17 OF 78

L 3.02

Jul 06, 2018-6:41pm
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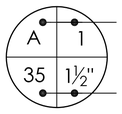
IRRIGATION LEGEND

SYMBOL	DESCRIPTION	P.S.I.	G.P.M.	RAD.	MANUFACTURER & MODEL No. (or approved equal)
	4" POP-UP SPRAY HEAD FULL,1/2,1/3,1/4 CIRCLE	20-30	4/2/1.5/1	4'-15'	RAINBIRD 1804-SAM-PRS-U15F, -U15H, -U15T, -U15Q (UNDER CUT NOZZLE) HUNTER PROS-04-PRS30-CV-U15F, -U15H, -U15T, -U15Q (RAINBIRD UNDER CUT NOZZLE)
	12" POP-UP SPRAY HEAD: FULL,1/2,1/3,1/4 CIRCLE	20-30	4/2/1.5/1	4'-15'	RAINBIRD 1812-SAM-PRS-U15F, -U15H, -U15T, -U15Q (UNDER CUT NOZZLE) HUNTER PROS-12-PRS30-CV-U15F, -U15H, -U15T, -U15Q (RAINBIRD UNDER CUT NOZZLE)
	4" POP-UP SPRAY HEAD: SIDE STRIP, END STRIP	20-30	1.5/0.75	4'x30'	RAINBIRD 1804-SAM-PRS-15SST, -15RCS, -15LCS; HUNTER PROS-4-PRS30-CV-SS-530, -LCS-515, -RCS-515
	12" POP-UP SPRAY HEAD: SIDE STRIP, END STRIP	20-30	1.5/0.75	4'x30'	RAINBIRD 1812-SAM-PRS-15SST, -15RCS, -15LCS; HUNTER PROS-12-PRS30-CV-SS-530, -LCS-515, -RCS-515
	4" POP-UP ROTOR HEAD, COLOR CODED NOZZLE FULL CIRCLE, PART CIRCLE	30-90	5	25'-47'	RAINBIRD 5505-6 (BLUE NOZZLE) HUNTER I-20-04-6.0 (YELLOW NOZZLE)
	IRRIGATION CONTROLLER "A", 40 STATIONS				RAINBIRD ESP-LXME, HUNTER IC-SS (STAINLESS STEEL CABINET)
1"	ANGLE VALVE / SIZE				BUCKNER VBM
	ELECTRIC VALVE				RAINBIRD PEB, HUNTER ICV
	IRRIGATION MAIN				PVC SCH. 40 (3" & SMALLER)
	IRRIGATION LATERAL				PVC CLASS 200
2"	IRRIGATION SLEEVE / SIZE				PVC SCH. 40



CONTROLLER / STATION NUMBER

FLOW (G.P.M.) / ELECTRIC VALVE SIZE

HAWAII ARMY NATIONAL GUARD

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

BENEDICT LEE
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 5818
HAWAII, U.S.A.

Signature

EXPIRES: APRIL 30, 2020 SEAL

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DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH

HAWAII ARMY NATIONAL GUARD

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

91-1110 ENTERPRISE AVENUE

KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

IRRIGATION LEGEND

SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 18 OF 78

L 4.01

Jul 17, 2018-10:45am
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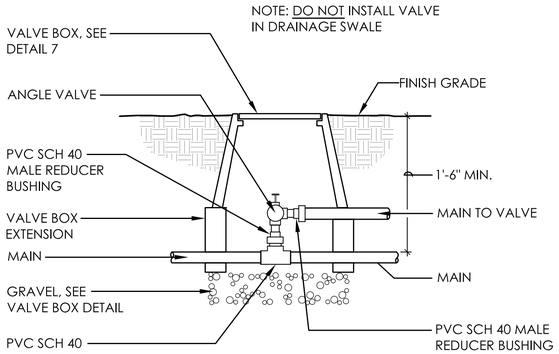
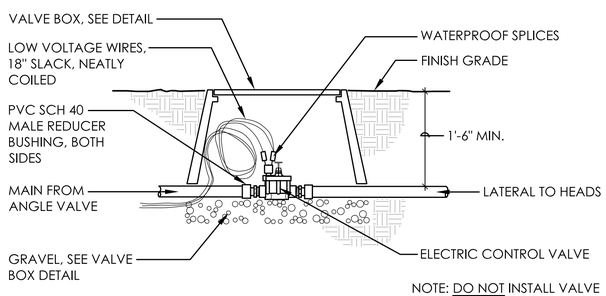


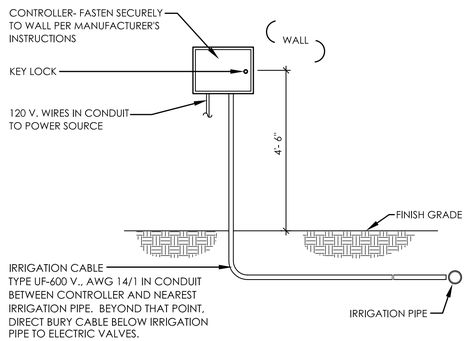
ANGLE VALVE

NOT TO SCALE



ELECTRIC VALVE

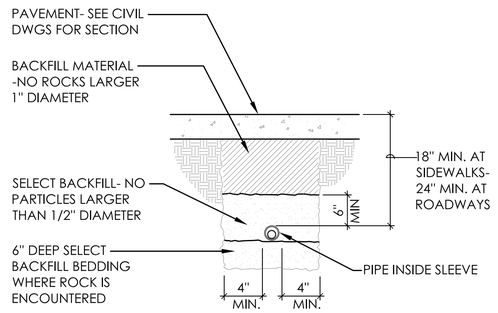
NOT TO SCALE



CONTROLLER (WALL MOUNTED)

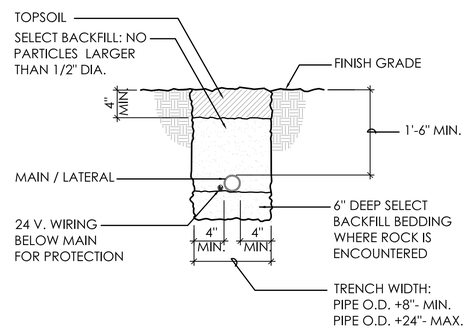
NOT TO SCALE

IC-002A
04/17/02



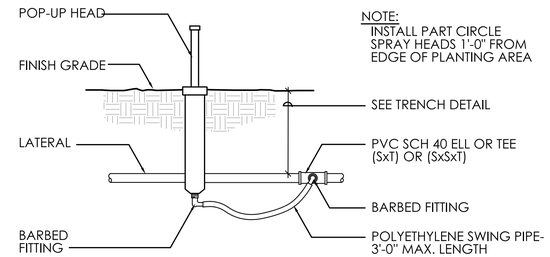
PIPE TRENCH GROUND LEVEL PAVED AREAS

NOT TO SCALE



PIPE TRENCH - GROUND LEVEL PLANTING

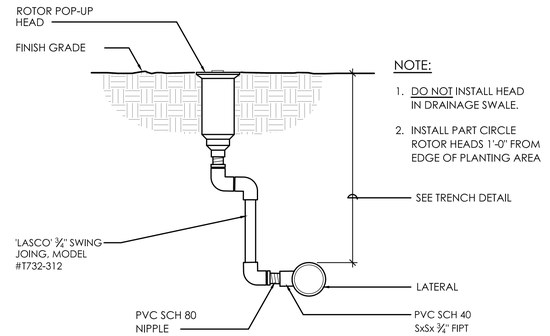
NOT TO SCALE



SPRAY HEAD - POP-UP WITH POLY SWING PIPE

NOT TO SCALE

LS-001
12/30/98



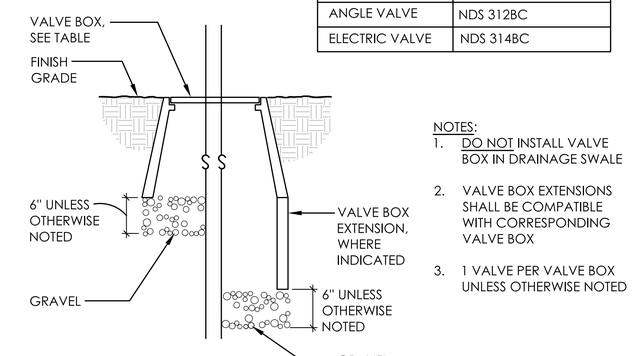
ROTOR HEAD - POP-UP

NOT TO SCALE

IH-006A
12/30/98

VALVE BOX TABLE

VALVE BOX CONTENTS	VALVE BOX MODEL NO. (OR APPROVED EQUAL)
GATE VALVE	NDS 312BC
ANGLE VALVE	NDS 312BC
ELECTRIC VALVE	NDS 314BC



VALVE BOX

NOT TO SCALE

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

BENEDICT LEE LICENSED PROFESSIONAL LANDSCAPE ARCHITECT No. 5818 HAWAII, U.S.A.

Signature EXPIRES: APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE

FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: RRB CHK: BL

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

IRRIGATION DETAILS

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 19 OF 78

L 4.02

Jul 17, 2018-10:45am
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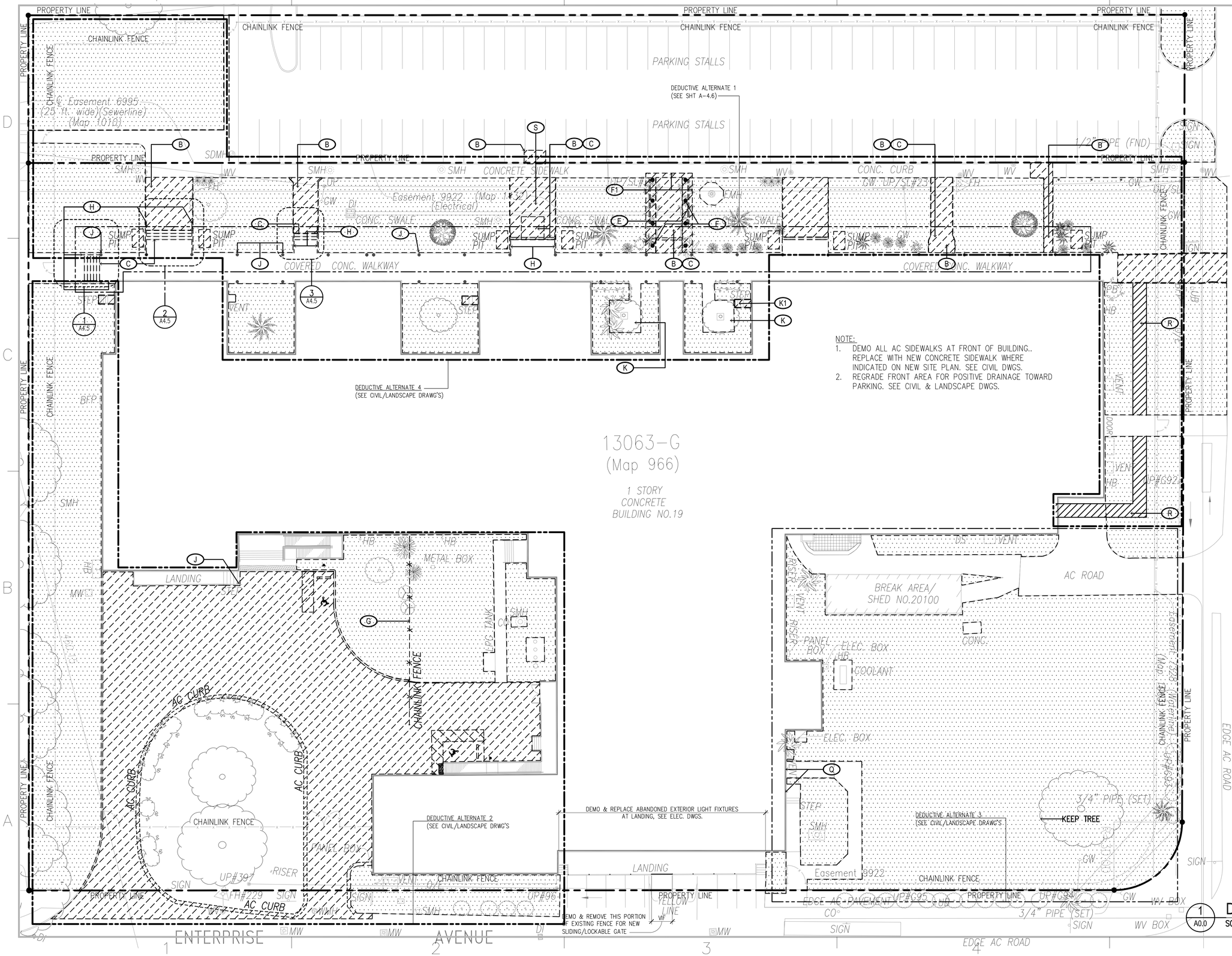

LEGEND:

-OR-	INDICATES EXISTING CONDITION REMAIN.
	INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
	INDICATES EXTENT OF EXST CONDITIONS &/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLR PLAN.
	INDICATES EXTENT OF EXISTING LANDSCAPE AREAS TO TO BE CLEARED ON THE DEMOLITION SITE PLAN.

EXTERIOR DEMOLITION KEYNOTES:

- (B) REMOVE CONCRETE WALKWAYS, RAMPS, STAIR & AS IT APPLIES. (SEE CIVIL DWGS.)
- (C) REMOVE CONCRETE STAIR METAL NOSING.
- (E) REMOVE 3-COURSE HIGH CMU WALL.
- (F) REMOVE CONCRETE POST BASE.
- (F1) REMOVE COVERED ENTRY (WHOLE STRUCTURE) & ASSOCIATED ELEMENTS ATTACHED TO STRUCTURE.
- (G) REMOVE CHAINLINK FENCE, POST & FOOTING. (SEE CIVIL DWGS.)
- (H) REMOVE METAL RAILINGS & HANDRAILS (IF ANY OCCUR).
- (J) REMOVE DAMAGED DOWNSPOUT (5-UNIT).
- (K) REMOVE BUILT-IN CMU & CONCRETE BENCH.
- (K1) REMOVE CRAWL SPACE COVER SCREWED TO CURB.
- (Q) DEMO & REPLACE EXISTING LIGHT FIXTURE.(SEE ELEC. DWGS.)
- (R) PREPARE SURFACE FOR NEW CONC WALKWAY

NOTES

1. SEE CONSULTANT DWGS. FOR ADDITIONAL SCOPE.
2. REMOVE HAZARDOUS MATERIAL AS INDICATED IN SURVEY REPORT PREPARED BY ENVIROSERVICES DATED APRIL 20, 2016 (SEE SPECS.)

HAWAII ARMY NATIONAL GUARD

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

DEMOLITION SITE PLAN

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 20 OF 78
A0.0

LEGEND:

- INDICATES EXISTING CONDITION TO REMAIN.
- INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
- INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

- (P) DEMO & REMOVE EXIST. CONCRETE RAMP. CLEAN & PREP FLOOR FOR NEW RAMP. DEMO & REMOVE EXISTING 9X9 CERAMIC FLOOR TILE PER NEW LOCATION OF RAMP.
- (P1) REMOVE WOODEN RAMP, DEMO & REMOVE EXISTING 9X9 CERAMIC FLOOR TILE PER NEW LOCATION OF RAMP. CLEAN & PREP FLOOR FOR NEW CONC. RAMP.
- (Q) EXIST. CONC. FLOOR TO REMAIN. DEMO & REMOVE MULTI PURPOSE ROOM STRIPING. PREP & CLEAN SURFACE FOR NEW STRIPING
- (R) CLEAN, PREPARE & PATCH (DAMAGES TO)WALLS, COLUMNS, BEAMS & CELINGS.
- (U) REMOVE BUILDING SIGNAGE AFFIXED TO WALLS.
- (V) REMOVE PILASTER PADDING & STORE FOR RE-INSTALLATION.
- (Z) DEMO FENCE AND PREP FOR NEW LOCKABLE SLIDING GATE
- (BB) DEMO & REMOVE CERAMIC TILE WAINSCOT & REFINISH EXISTING WALL SURFACE. CLEAN AND PREP WALL FOR NEW PAINT. SEE INT. ELEV. FOR EXTENTS
- (CC) DEMO & REMOVE INSECT SCREENS WHERE NEW SECURITY SCREEN TO BE INSTALLED. SEE A2.4 FOR LOCATIONS.
- (DD) DEMO & REMOVE EXISTING ALUM.FRAME WINDOW AND PREP OPENING FOR NEW ANTI TERRORIST FORCE PROTECTION (ATFP) (SEE A2.1 & A2.2 FOR LOCATIONS.)
- (EE) DEMO & REMOVE EXISTING ALUM.FRAME DOORS AND PREP OPENING FOR NEW ALUM. FRAME DOORS. (SEE A2.1 & A2.2 FOR LOCATIONS.)
- (FF) DEMO & REMOVE EXISTING ALUM.FRAME WINDOWS & WOOD PANELS AND PREP OPENING FOR NEW ANTI-TERRORIST FORCE PROTECTION (ATFP) WINDOW (SEE A2.1 & A2.2 FOR LOCATIONS.)

1 A0.1 DEMOLITION FLOOR PLAN
SCALE: 1"=20'-0"

GRAPHIC SCALE
15 10 5 0 10 20 30 40
SCALE IN FEET

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

DEMOLITION FLOOR PLAN

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 21 OF 78

A0.1

REMOVE & REPLACE ALL LIGHT FIXTURES AT COVERED WALKWAY CEILING
GC TO CONFIRM QTY: 22

SEE A2.3 & A2.4 FOR LOCATION OF CLERESTORY WINDOWS

COVERED WALKWAY 001

±8'-5" B.O.B.
±9'-8" V.I.F.

CORRIDOR 108A
CORRIDOR 108B
CORRIDOR 100C
CORRIDOR 105A

MULTI PURPOSE RM 100
STORAGE RM 105

COVERED WALKWAY 001
COVERED WALKWAY 001

OFFICE
OFFICE

CLASSROOM
CORRIDOR
CLASSROOM
CORRIDOR

CORRIDOR 004
CORRIDOR 004
CORRIDOR 004

LOADING 145

SEE A2.3 & A2.4 FOR LOCATION OF CLERESTORY WINDOWS

GRAPHIC SCALE
15 10 5 0 10 20 30 40
SCALE IN FEET

DEMOLITION REFLECTED CEILING PLAN

1 / A0.2 — SCALE: 1"=20'-0"

LEGEND:

-OR- INDICATES EXISTING CONDITION REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INDICATES EXTENT OF EXST CONDITIONS &/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(R) CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CELINGS.

(R1) REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE. CLEAN AND PREP FOR NEW PAINT.

(S) REMOVE LIGHT FIXTURES; ELECTRICAL CONDUITS, OUTLETS, SWITCHES, POWER LINES, PANELS & ASSOCIATED ELECTRICAL ELEMENTS. NOTE: ALL ASSOCIATED FIRE ALARM SYSTEMS ELEMENTS IS TO REMAIN & NOT INCLUDED INTO THIS WORK.

(T) REMOVE GLAZING AT WINDOWS WHERE NEW MECH. EXHAUST FANS ARE TO BE LOCATED. (SEE MEP DWGS. GC TO COORDINATE WITH ELEC. & MECH.).

(U) REMOVE & REINSTALL EXISTING ACOUSTICAL CEILING TILES & SUSPENDED CEILING GRID AS REQUIRED TO ACCOMMODATE EXISTING WINDOW.

INTERIOR DEMOLITION KEYNOTES:

1. SEE CONSULTANTS DWGS. FOR ADDITIONAL SCOPE.

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE
FINAL DESIGN

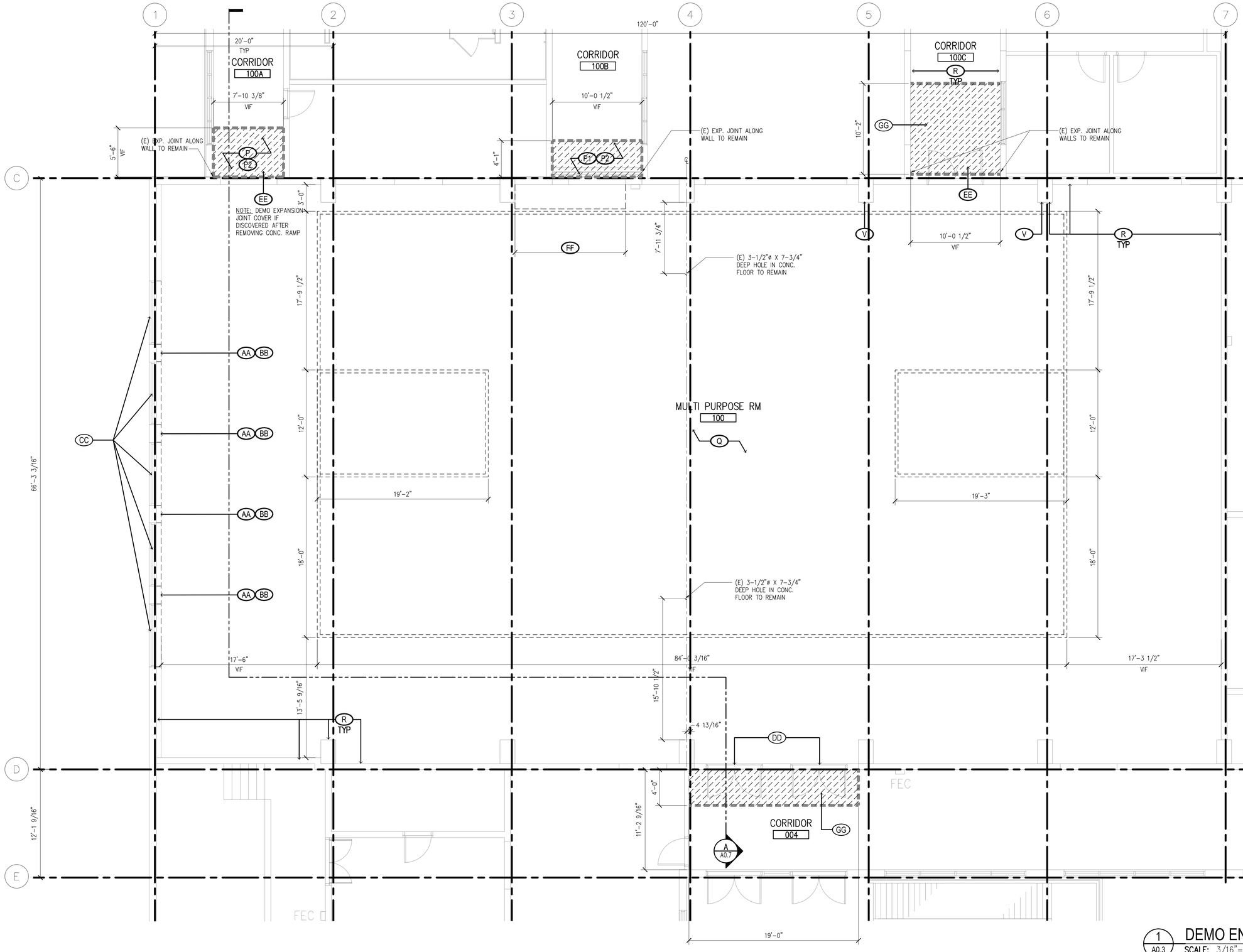
SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19 IMPROVEMENTS
91-1110 ENTERPRISE AVENUE

DEMOLITION REFLECTED CEILING PLAN

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 22 OF 78
A0.2



LEGEND:

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- INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

- (P) DEMO & REMOVE EXIST. CONCRETE RAMP. CLEAN & PREP FLOOR FOR NEW RAMP. DEMO & REMOVE EXISTING 9X9 CERAMIC FLOOR TILE PER NEW LOCATION OF RAMP.
- (P1) REMOVE WOODEN RAMP, DEMO & REMOVE EXISTING 9X9 CERAMIC FLOOR TILE PER NEW LOCATION OF RAMP. CLEAN & PREP FLOOR FOR NEW CONC. RAMP.
- (P2) DEMO & REMOVE WALL BASE FOR NEW RAMP LENGTH ONLY. SEE A4.0 FOR MORE INFO.
- (Q) EXIST. CONC. FLOOR TO REMAIN. DEMO & REMOVE ALL MULTI PURPOSE ROOM STRIPING. PREP & CLEAN SURFACE FOR NEW STRIPING.
- (R) CLEAN, PREPARE & PATCH (DAMAGES TO)WALLS, COLUMNS, BEAMS & CELINGS.
- (V) REMOVE PILASTER PADDING & STORE FOR RE-INSTALLATION.
- (AA) DEMO & REMOVE FURRED OUT WALL DOWN TO CONCRETE SURFACE.
- (BB) DEMO & REMOVE CERAMIC TILE WAINSCOT & REFINISH EXISTING WALL SURFACE. CLEAN AND PREP WALL FOR NEW PAINT. SEE INT. ELEV. FOR EXTENTS.
- (CC) DEMO & REMOVE INSECT SCREENS WHERE NEW SECURITY SCREEN TO BE INSTALLED. SEE A2.4 FOR LOCATIONS.
- (DD) DEMO DOOR THRESHOLD.
- (EE) DEMO EXPANSION JOINT COVER. REPLACE WITH NEW EXPANSION JOINT COVER.
- (FF) REMOVE AND RELOCATE EXISTING SCOREBOARD.
- (GG) PREP EXISTING CONC. FLOOR FOR NEW CONC. REPAIR MORTAR LANDING.

1 / A0.3 DEMO ENLARGED PLAN - GYM
SCALE: 3/16"=1'-0"

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE: FINAL DESIGN
SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

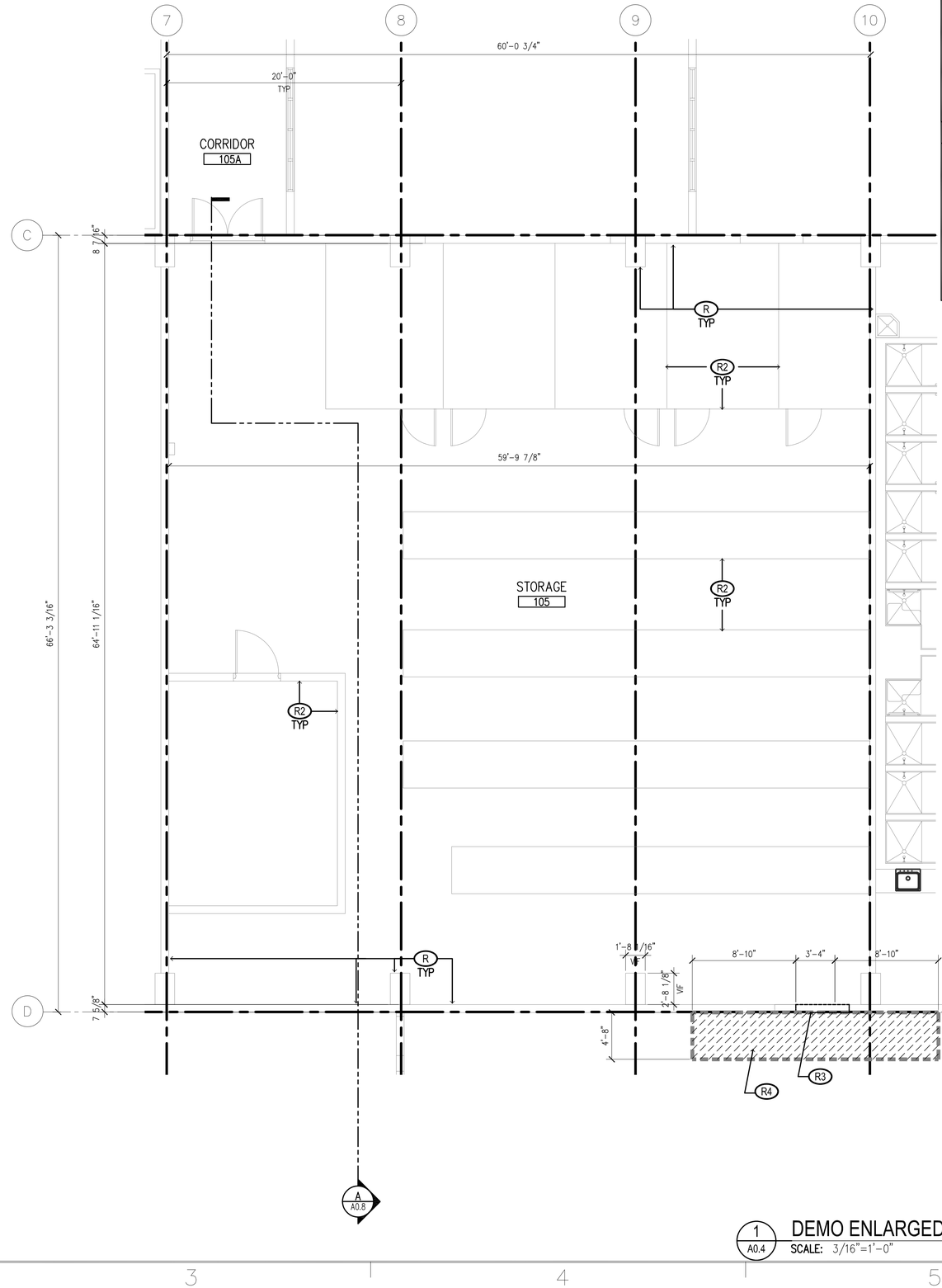
DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
FACILITY MANAGEMENT OFFICE
STATE OF HAWAII

KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

DEMO ENLARGED PLAN - MULTI PURPOSE ROOM

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 23 OF 78
A0.3



LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

- (R) CLEAN, PREPARE & PATCH (DAMAGES TO)WALLS, COLUMNS, BEAMS & CELINGS.
- (R2) EXISTING TO REMAIN
- (R3) CAREFULLY SAW CUT EXISTING CMU WALL FOR NEW DROPENING
- (R4) PREPARE EXISTING CONC FLOOR FOR NEW REPAIR MORTAR LANDING

1 / A0.4 DEMO ENLARGED PLAN - STORAGE

SCALE: 3/16"=1'-0"

2' 4' 8'

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE

FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

DEMO ENLARGED PLAN - STORAGE

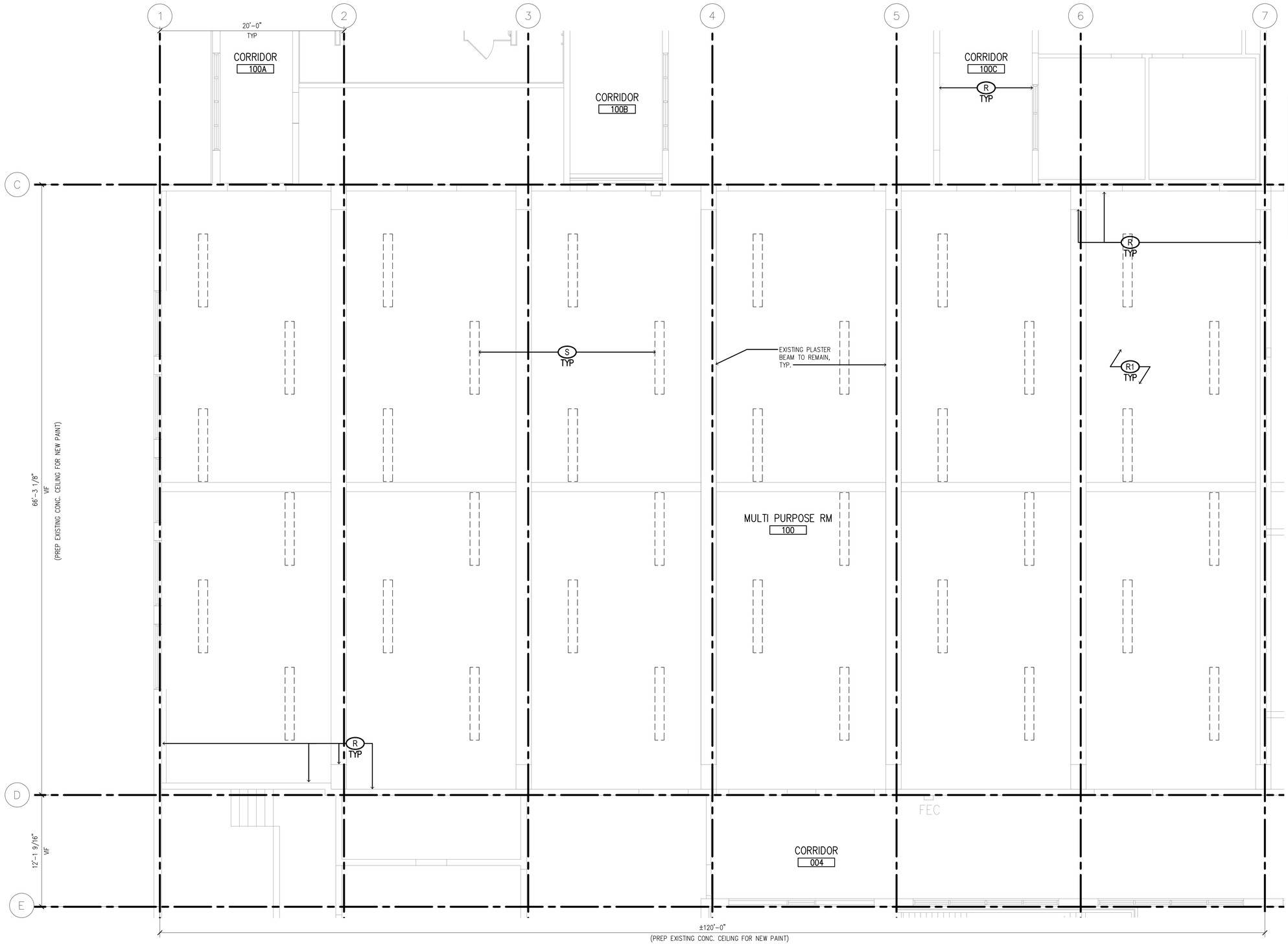
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 24 OF 78

A0.4



1 / A0.5 DEMO ENLARGED RCP - MULTI PURPOSE ROOM

SCALE: 3/16"=1'-0"

2' 4' 8'

LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(R) CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CELINGS.

(R1) REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE AT GYMNASIUM TO CONC. CEILING.

(S) REMOVE LIGHT FIXTURES; ELECTRICAL CONDUITS, OUTLETS, SWITCHES, POWER LINES, PANELS & ASSOCIATED ELECTRICAL ELEMENTS. NOTE: ALL ASSOCIATED FIRE ALARM SYSTEMS ELEMENTS IS TO REMAIN & NOT INCLUDED INTO THIS WORK.

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

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FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
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DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

DEMO ENLARGED RCP - MULTI PURPOSE ROOM

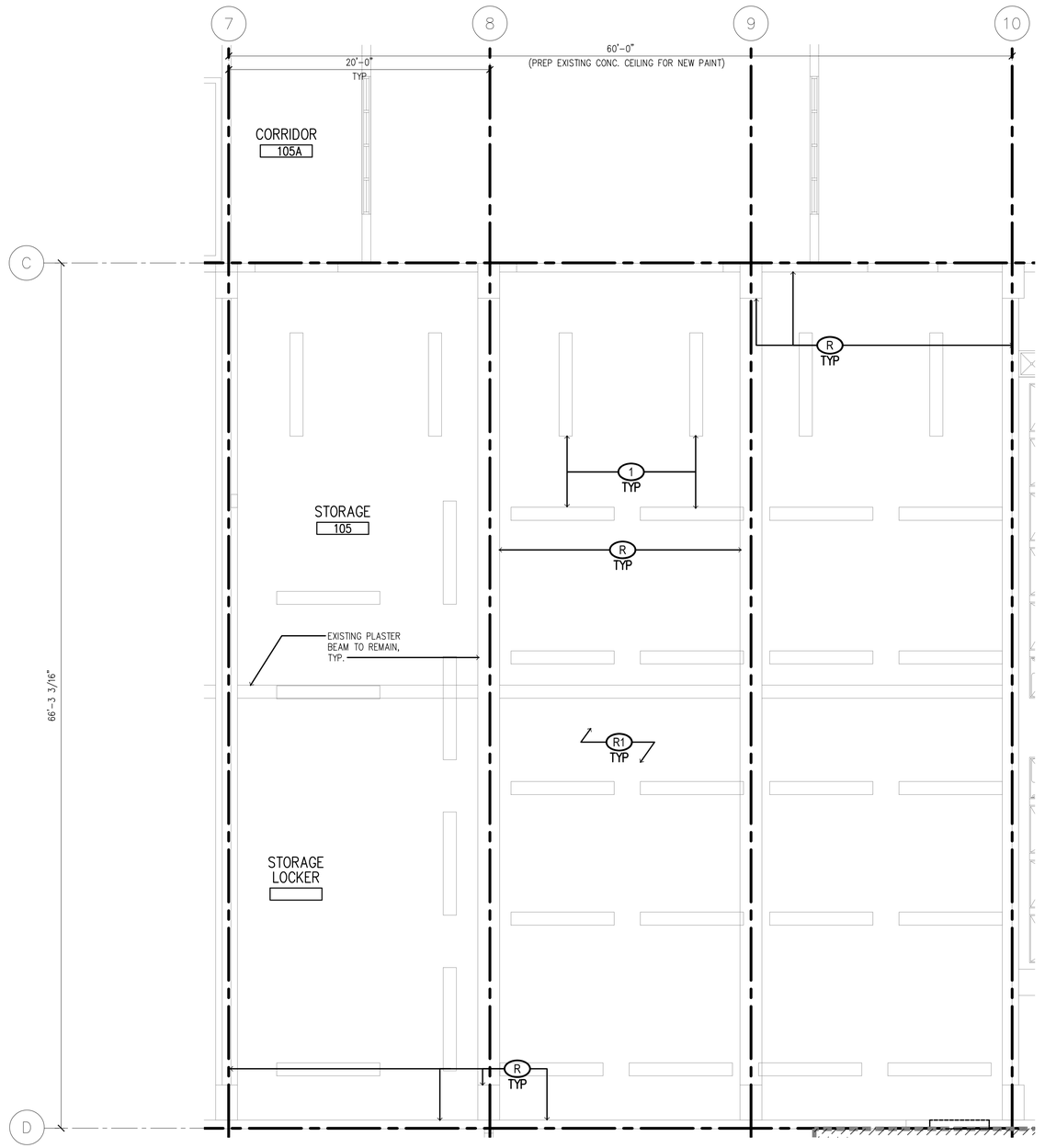
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 25 OF 78

A0.5



LEGEND:

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- INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

1. EXISTING LIGHT FIXTURES TO REMAIN. PROTECT DURING DEMO. REPLACE IF DAMAGED.
2. R CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CELINGS.
3. R1 REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE AT STORAGE TO CONC. CEILING.

2' 4' 8'

1 A0.6 DEMO ENLARGED REFLECTED CEILING PLAN - STORAGE
SCALE: 3/16"=1'-0"

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

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DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
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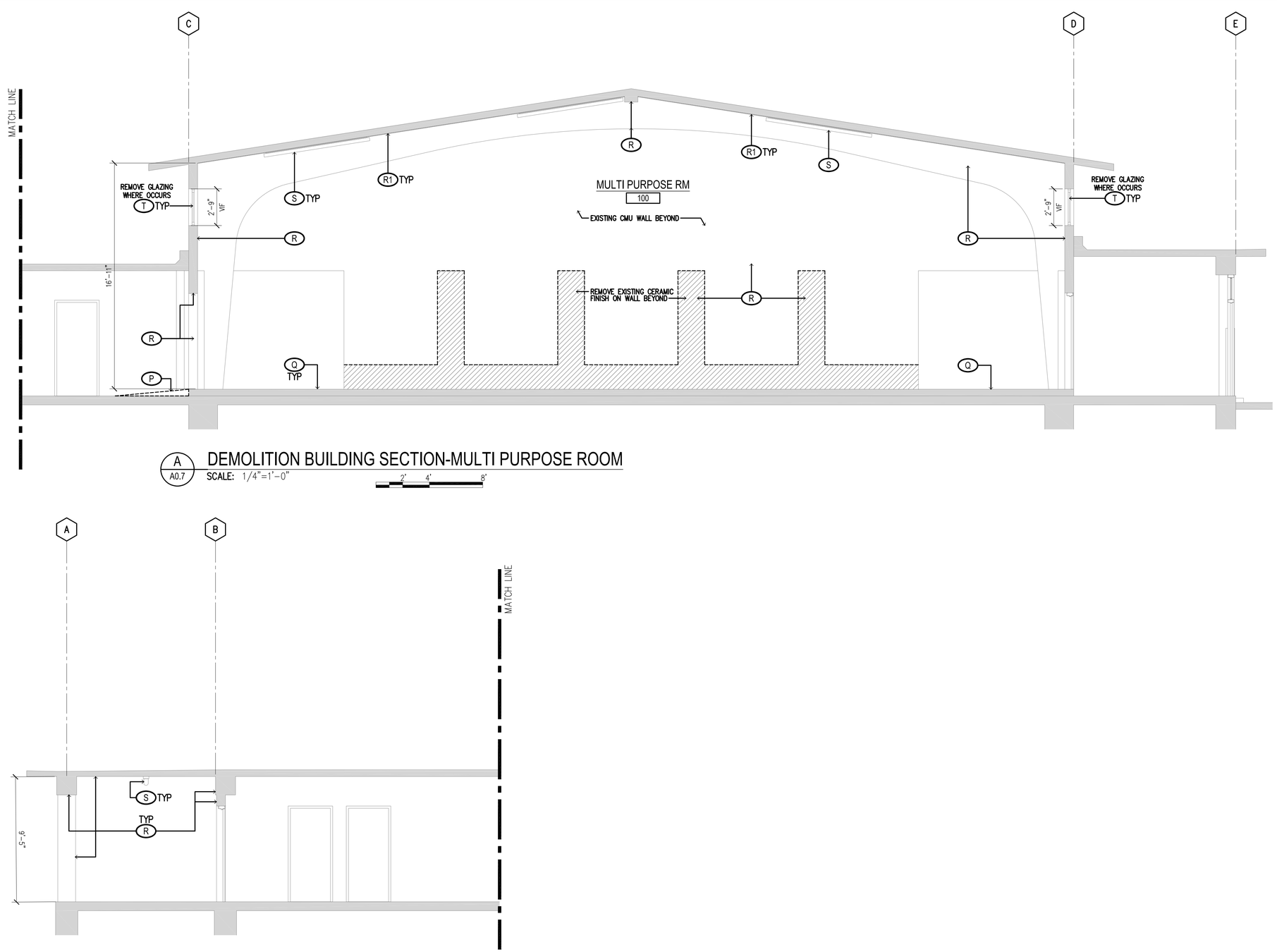
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

DEMO ENLARGED REFLECTED CEILING PLAN - STORAGE

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 26 OF 78
A0.6



A0.7 **DEMOLITION BUILDING SECTION-MULTI PURPOSE ROOM**

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

2' 4' 8'

A0.7 **DEMOLITION BUILDING SECTION-MULTI PURPOSE ROOM**

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

LEGEND:

- - - - - INDICATES EXISTING CONDITION REMAIN.

---------- INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(P) REMOVE CONCRETE RAMP

(Q) EXIST. CONC. FLOOR TO REMAIN. DEMO & REMOVE MULTI PURPOSE ROOM STRIPING. PREP & CLEAN SURFACE FOR NEW STRIPING

(R) CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CEILINGS.

(R1) REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE AT MULTI PURPOSE ROOM.

(S) REMOVE LIGHT FIXTURES; ELECTRICAL CONDUITS, OUTLETS, SWITCHES, POWER LINES, PANELS & ASSOCIATED ELECTRICAL ELEMENTS. NOTE: ALL ASSOCIATED FIRE ALARM SYSTEMS ELEMENTS IS TO REMAIN & NOT INCLUDED INTO THIS WORK. SEE ELEC. DWGS.

(T) REMOVE GLAZING AT WINDOWS WHERE NEW MECH. EXHAUST FANS ARE TO BE LOCATED. (SEE MECH. DWGS. GC TO COORDINATE WITH ELEC. & MECH.).REFER TO A2.3 & A2.4 FOR WINDOW LOCATIONS.

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
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HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

NO.	DESCRIPTION	DATE	APPR
MAS	SYM		

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: IFD CHK: RY

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

DEMO BUILDING SECTION

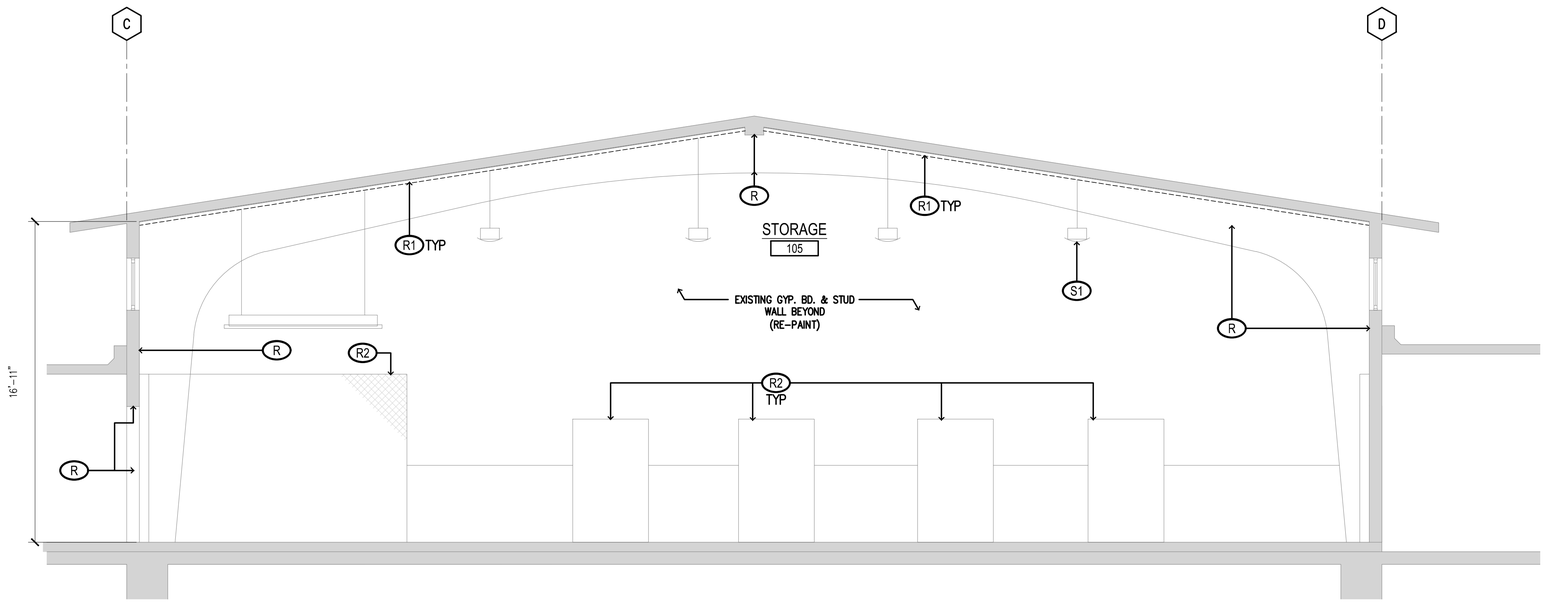
SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 27 OF 78

A0.7



A0.8 DEMOLITION BUILDING SECTION-STORAGE

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

2' 4' 8'

LEGEND:

INDICATES EXISTING CONDITION REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR DEMOLITION KEYNOTES:

- (R) CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CEILINGS.
- (R1) REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE
- (R2) EXISTING TO REMAIN
- (S1) EXISTING LIGHT FIXTURES TO REMAIN. PROTECT DURING DEMO. REPLACE IF DAMAGED.

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FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

DEMO BUILDING SECTION

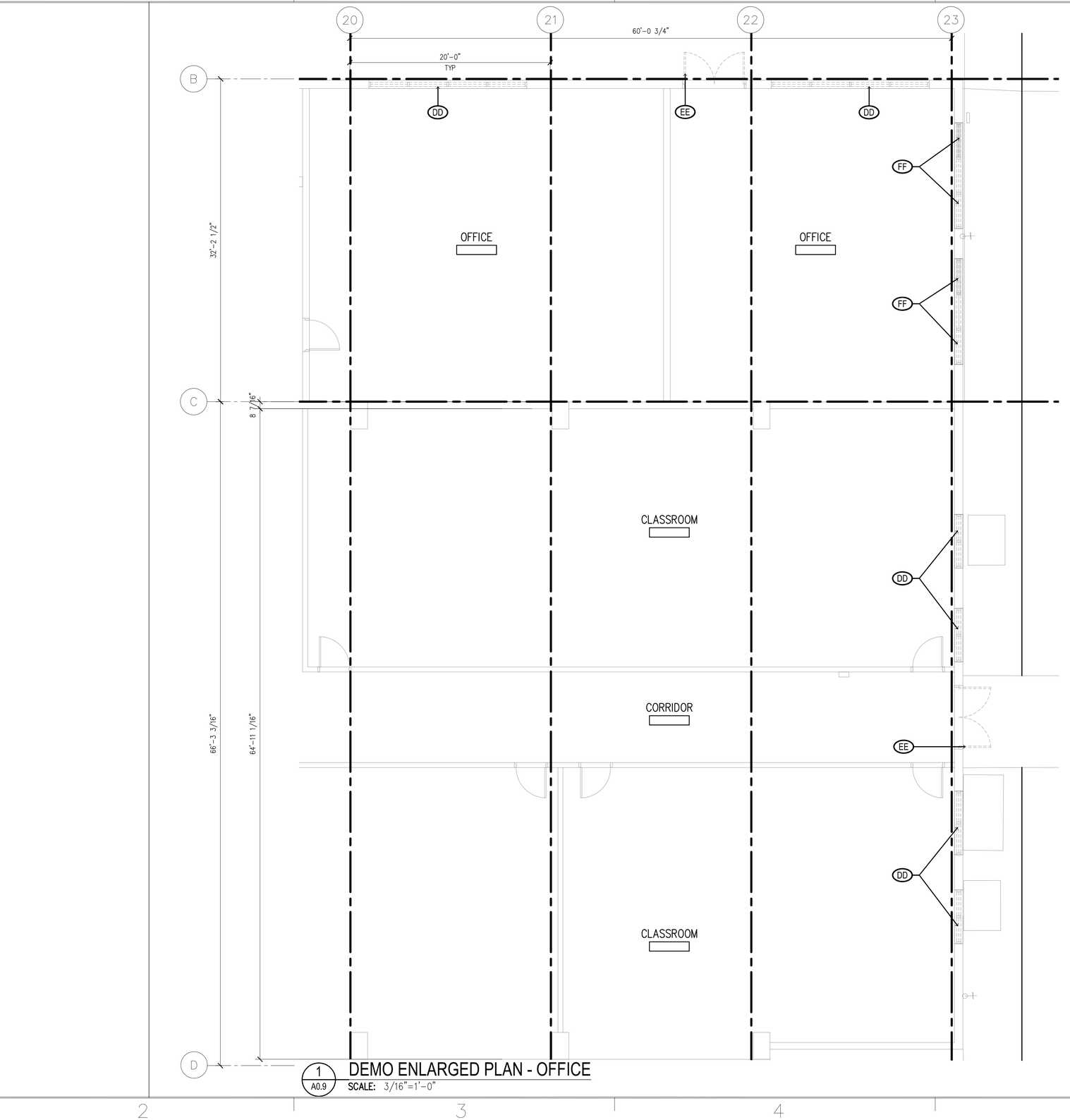
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 28 OF 78

A0.8



1 A0.9 DEMO ENLARGED PLAN - OFFICE

SCALE: 3/16"=1'-0"

2' 4' 8'

N

LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INDICATES EXTENT OF EXIST. CONDITIONS &/OR ELEMENTS TO BE REMOVED &/OR PREPARED ON THE DEMOLITION SITE & FLR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(R) CLEAN, PREPARE & PATCH (DAMAGES TO)WALLS, COLUMNS, BEAMS & CELINGS.

(R2) EXISTING TO REMAIN

(DD) DEMO & REMOVE EXISTING ALUM.FRAME WINDOW AND PREP OPENING FOR NEW ANTI TERRORIST FORCE PROTECTION (ATFP) (SEE A2.1 & A2.2 FOR LOCATIONS.)

(EE) DEMO & REMOVE EXISTING ALUM.FRAME DOORS AND PREP OPENING FOR NEW ALUM. FRAME DOORS. (SEE A2.1 & A2.2 FOR LOCATIONS.)

(FF) DEMO & REMOVE EXISTING ALUM.FRAME WINDOWS & WOOD PANELS AND PREP OPENING FOR NEW ANTI-TERRORIST FORCE PROTECTION (ATFP) WINDOW (SEE A2.1 & A2.2 FOR LOCATIONS.)

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KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

DEMO ENLARGED PLAN - OFFICE

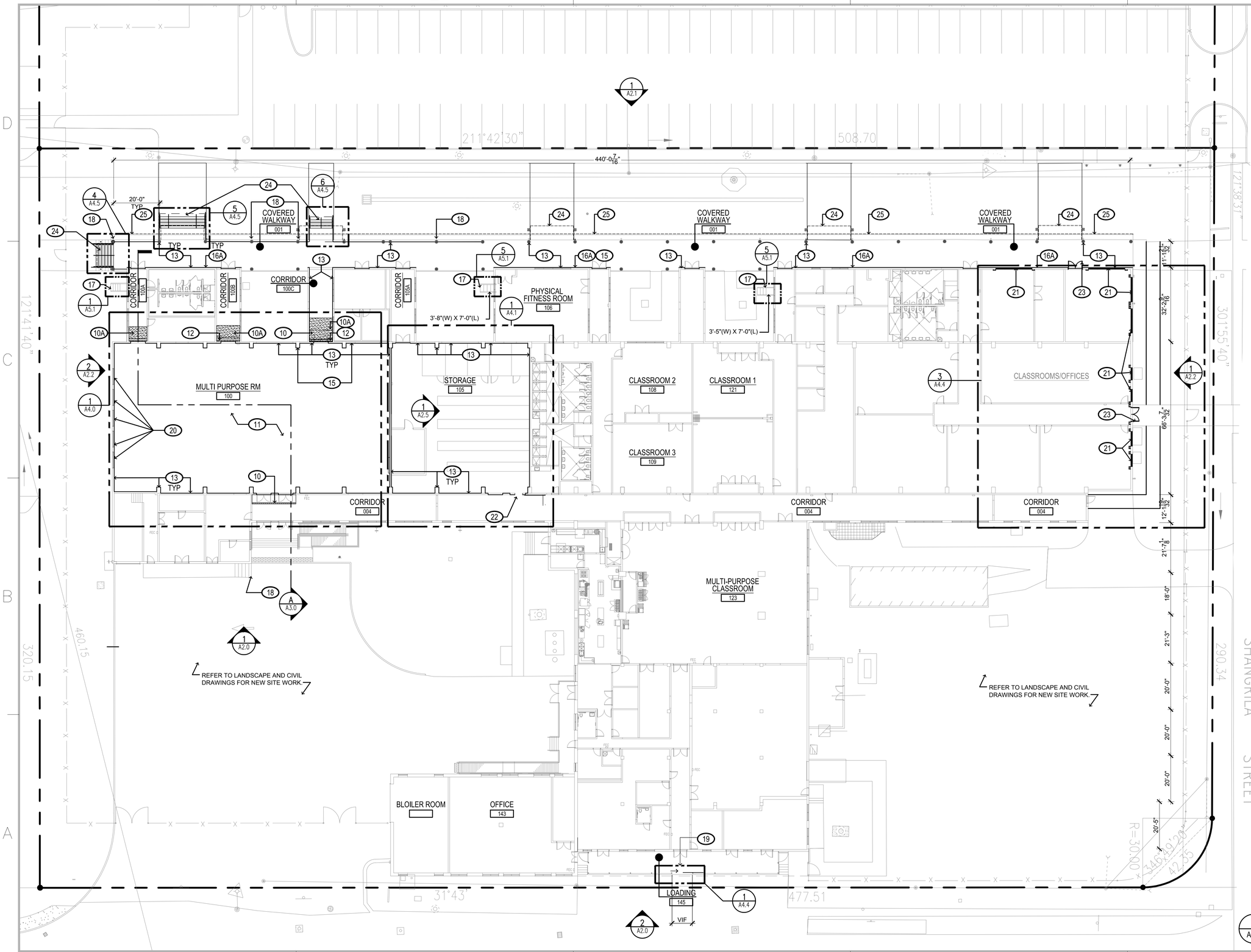
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 29 OF 78

A0.9



LEGEND:

—OR— INDICATES EXISTING CONDITION TO REMAIN.

— — — INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

▨ INDICATES EXTENT OF EXST CONDITIONS &/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLR PLAN.

NEW ELEMENTS KEYNOTES:

10 CONCRETE LANDING. SEE A5.0 FOR DETAILS.

10A ADAAG COMPLIANT CONCRETE RAMP. SEE A5.0 FOR DETAILS.

11 PAINTED BASKETBALL LINES, SEE A4.0 FOR FLOOR DESIGN

12 STAINLESS STEEL EXPANSION JOINT COVER, SEE SHEET A5.0 FOR DETAILS.

13 PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.

14 EXHAUST FANS ON DESIGNATED WINDOW OPENING.

15 FURRED OUT WALL, SEE A3.1 FOR WALL SECTION

16 FURRED CEILING SOFFIT (w/ELECT OUTLET) SEE ELEC. DWGS.

16A FURRED CEILING SOFFIT (w/RECESSED LIGHT) SEE ELEC. DWGS.

17 ROOF HATCH OVER CRAWL SPACE OPENINGS. SEE SHEET A5.1 FOR DETAILS. (QTY.3)

18 DOWNSPOUT TO MATCH EXISTING. SEE SHEET A5.1 FOR DETAILS.

19 SLIDING GATE AT LANDING. GC TO VERIFY OPENING FOR NEW GATE AFTER DEMOLISHING PORTION OF EXISTING FENCE.

20 ALUMINUM SECURITY SCREEN @ INTERIOR FACE OF WINDOWS (2 WINDOWS HIGH) SEE A3.1 FOR DETAILS

21 ALUMINUM FRAME ATFP WINDOWS

22 ADA COMPLIANT CONCRETE RAMP (SEE SHEET A4.1 FOR DETAIL)

23 ALUMINUM FRAME STOREFRONT DOORS

24 DEDUCTIVE ALTERNATE 1: MET FRAME CANOPY ABOVE (SEE SHT A-4.6)

25 COPPER GUTTER AND DOWNSPOUT ABOVE

NOTES

1. SEE T0.4 FOR FINISH SCHEDULE.
2. SEE CIVIL AND LANDSCAPE DRAWINGS FOR DEDUCTIVE ALTERNATES 2-4.

INTERIOR ELEVATIONS

GRAPHIC SCALE

15 10 5 0 10 20 30 40

SCALE IN FEET

1 A1.1 NEW FLOOR PLAN

SCALE: 1"=20'-0"

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91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

FLOOR PLAN

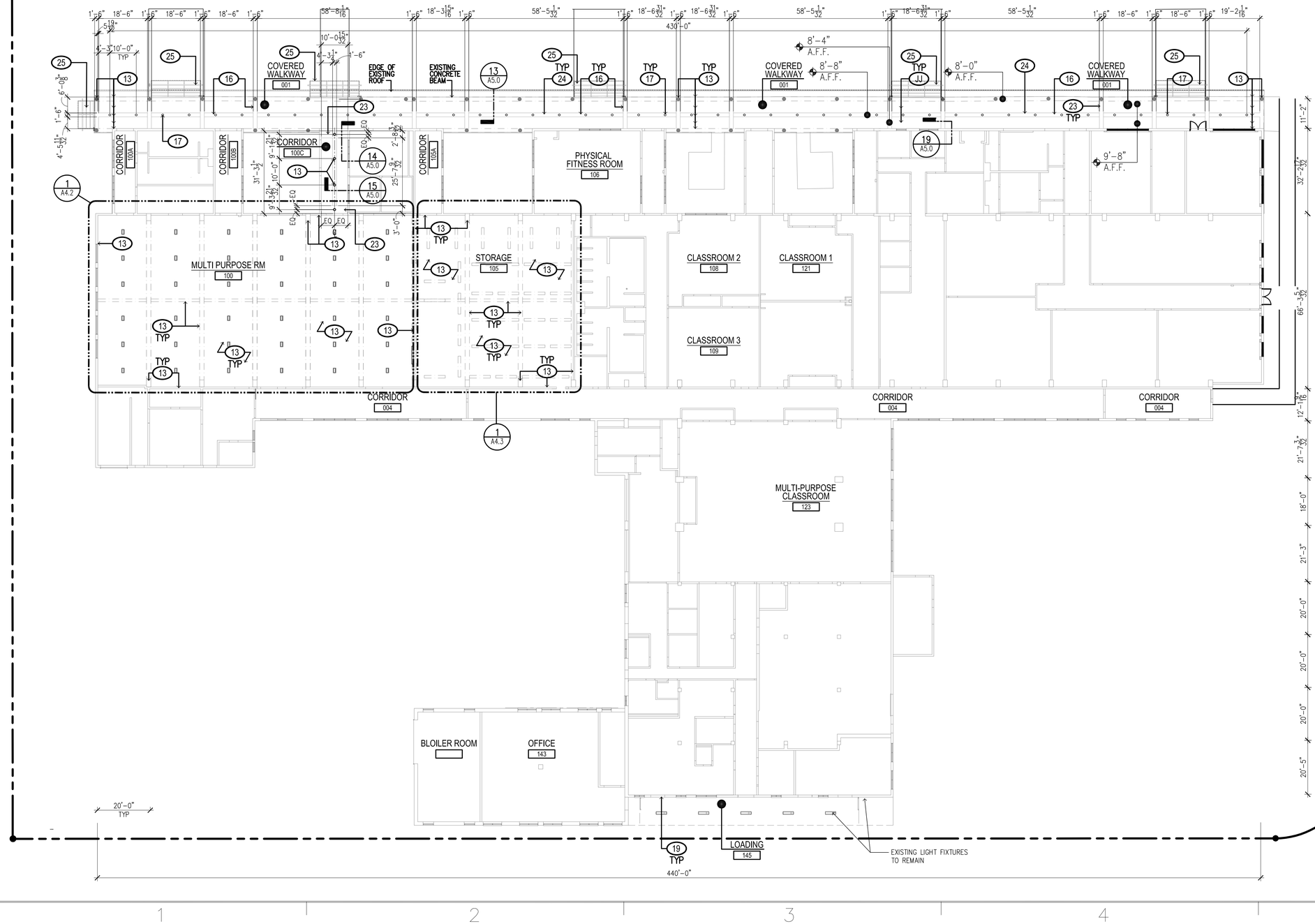
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 30 OF 78

A1.1



1 A1.2 NEW RCP
SCALE: 1"=20'-0"

LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR NEW ELEMENTS KEYNOTES:

- (HH) EXISTING CONC. BEAM @ 8'-0" A.F.F. TYP.
- (JJ) EXISTING CONC. BEAM @ 9'-8" A.F.F. TYP.
- (13) NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.
- (14) NEW EXHAUST FANS ON DESIGNATED WINDOW OPENING.
- (16) NEW FURRED CEILING SOFFIT.
- (17) NEW RECESSED LIGHT FIXTURE: SEE ELEC. DWGS.
- (17A) NEW SURFACE MOUNTED LIGHT FIXTURE ON ON SLOPED CEILING. SEE ELEC. DWGS.
- (19) NEW WALL MOUNTED EXTERIOR LIGHT FIXTURES, REFER TO ELECTRICAL DWGS.
- (23) EFS OVER GYP. BD. & MET. STUD SOFFIT @ 8'-4" A.F.F.
- (24) EFS OVER GYP. BD. & MET. STUD SOFFIT @ 8'-8" A.F.F.
- (25) DEDUCTIVE ALTERNATE 1: MET FRAME CANOPY (SEE SHT A-4.6)

NOTES

1. SEE ELEC. DWGS. FOR MORE INFORMATION.

RCP LEGEND

- RECESSED CANS
- GYM LIGHTS
- EXTERIOR WALL MOUNTED LIGHTS

HAWAII ARMY NATIONAL GUARD

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STATE OF HAWAII

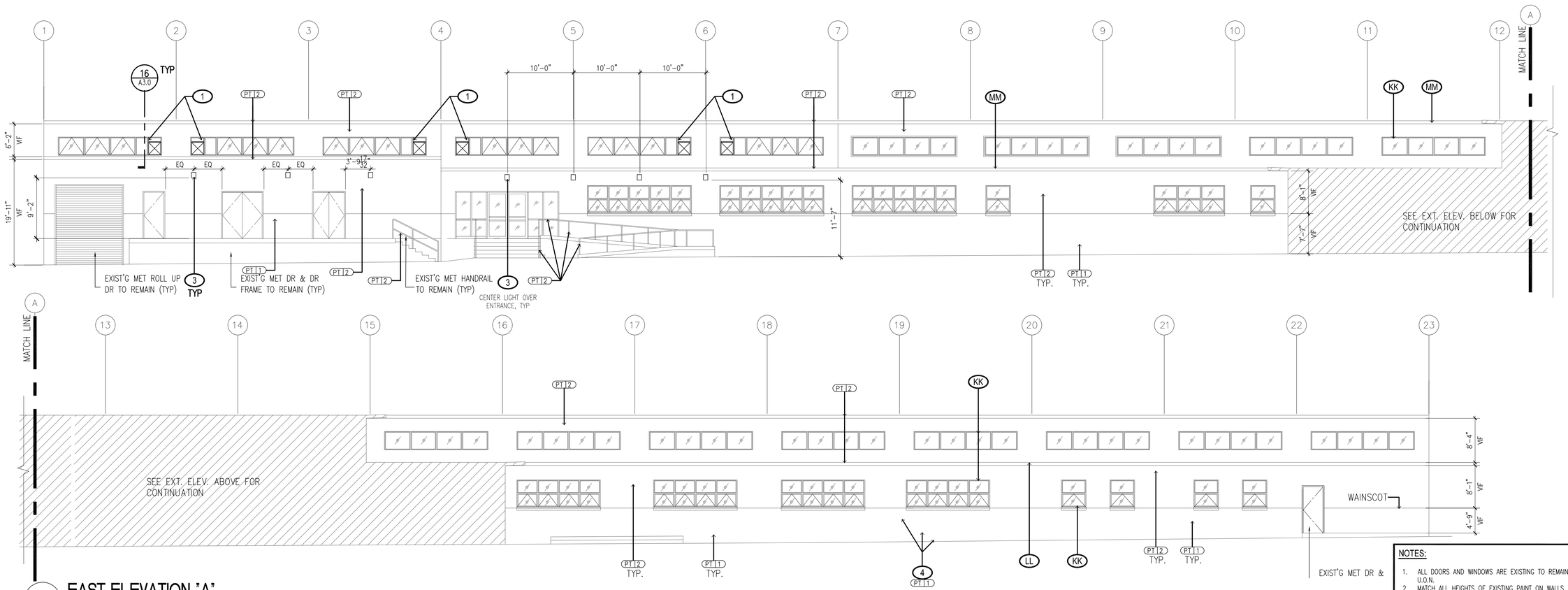
KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

REFLECTED CEILING PLAN

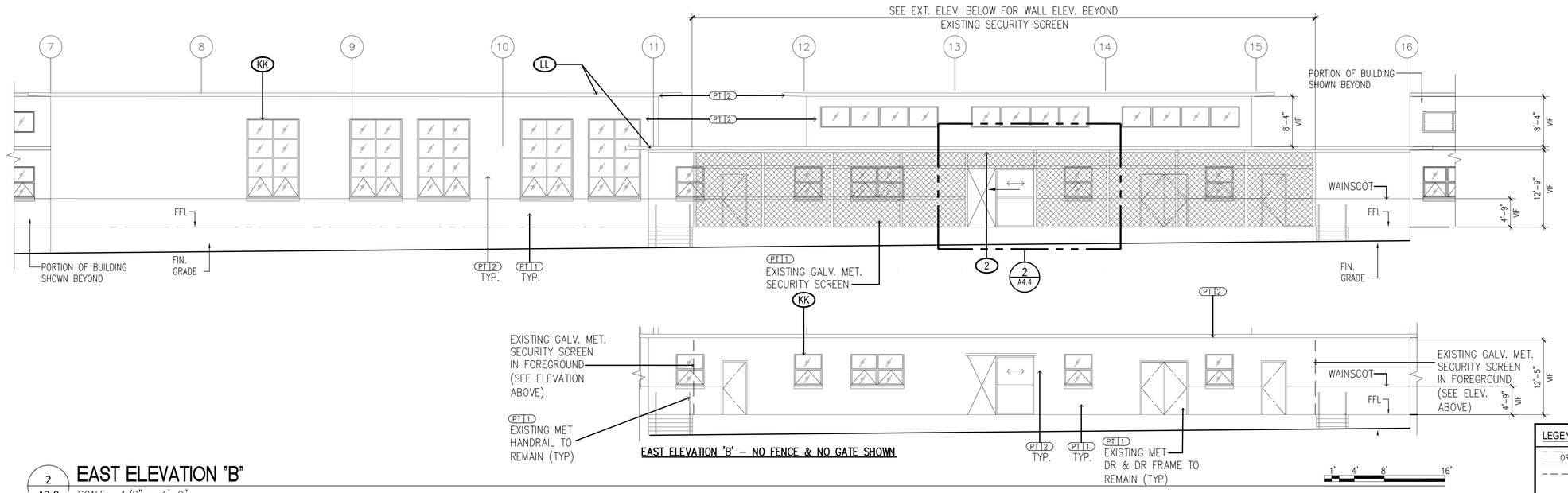
SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 31 OF 78

A1.2



1 EAST ELEVATION "A"

A2.0 — SCALE : 1/8" = 1'-0"



2 EAST ELEVATION "B"

A2.0 — SCALE : 1/8" = 1'-0"

NOTES:

1. ALL DOORS AND WINDOWS ARE EXISTING TO REMAIN U.O.N.
2. MATCH ALL HEIGHTS OF EXISTING PAINT ON WALLS

EXTERIOR NEW CONSTRUCTION KEYNOTES:

- (KK) EXISTING ALUM. FRAMED WINDOWS TO REMAIN,TYP
- (LL) EXISTING METAL FLASHING, TO REMAIN TYP.
- (MM) EXISTNG COPPER GUTER TO REMAIN, TYP.
- (1) REMOVE EXIST'G WINDOW (EXIST'G FRAME TO REMAIN) & INSTALL NEW ALUM MULLION & PANEL & INSTALL NEW MECH FAN/LOUVER (SEE DET 3 & 4/A5.2)
- (2) NEW SLIDING GATE. GC TO CONFIRM OPENING WIDTH PRIOR TO ORDERING.
- (3) NEW WALL MOUNTED EXTERIOR LIGHT FIXTURES, SEE ELEC. DWGS.
- (4) OPEN
- (4A) NEW GALVANIZED STEEL GUARDRAIL SYSTEM
- (4B) NEW GALVANIZED STEEL RAILING SYSTEM
- (4C) NEW GALVANIZED STEEL GUARDRAIL & HANDRAIL SYSTEM
- (4D) NEW GALVANIZED STEEL HANDRAIL SYSTEM
- (5) NEW CAST IRON DOWNSPOUT TO MATCH EXISTING DOWNSPOUT.
- (6) NEW HOSE BIB (HB), SEE MECH. DWGS.
- (7) IN-OPERABLE WINDOWS, SEE INTERIOR ELEVATIONS
- (8) REPAIR EXISTING WATER LINES, SEE CIVIL & MEP DWGS.
- (9) NEW 6"ø X 48" (MIN.) GALVANIZED STEEL BOLLARD SEE CIVIL DWGS.
- (10) NEW CRAWL SPACE HATCH, SEE DETAILS ON A5.1
- (11) NEW ALUM. FRAME ATFP WINDOWS

LEGEND:

- OR — INDICATES EXISTING CONDITION REMAIN.
- – – – – INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
- ——— INDICATES NEW CONDITION AND/OR NEW ELEMENTS, OR BOUNDRIES OF NEW CONSTRUCTION.

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KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

EXTERIOR ELEVATION

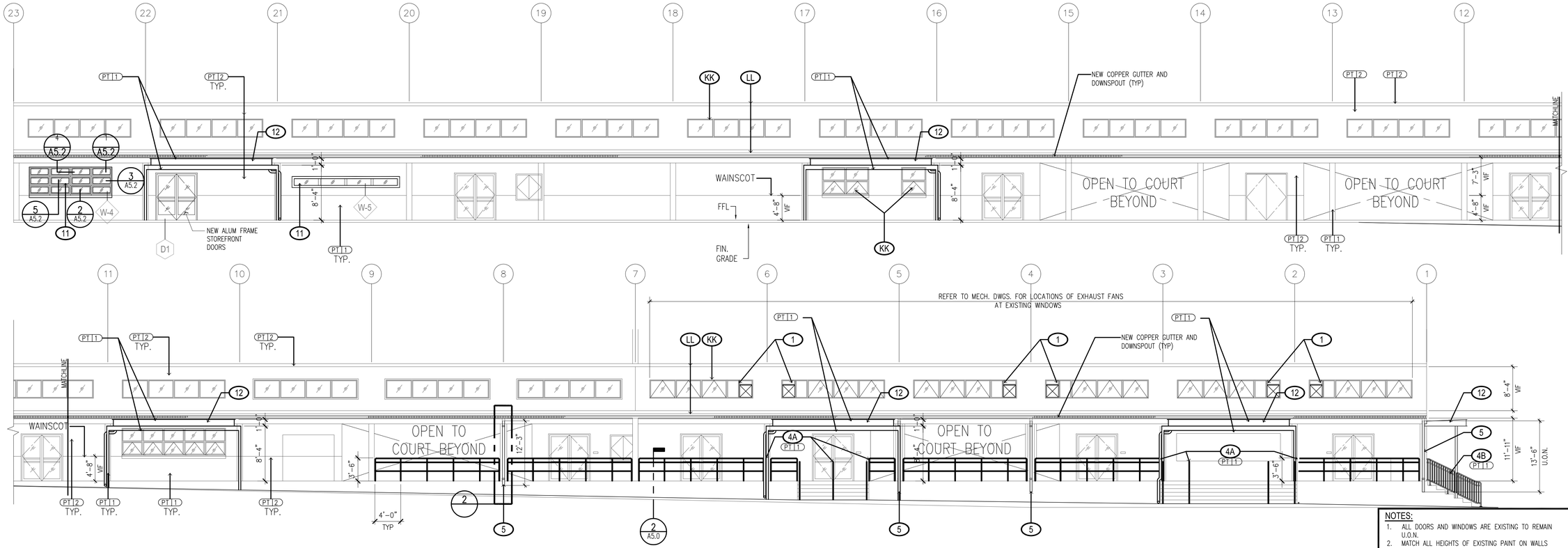
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 32 OF 78

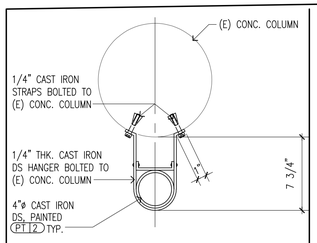
A2.0



1 A2.1 **WEST ELEVATION**

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

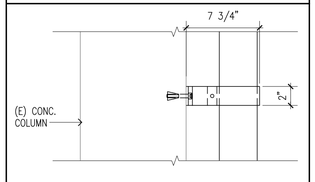
1' 4' 8' 16'



3 **D.S. PLAN DETAIL**

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

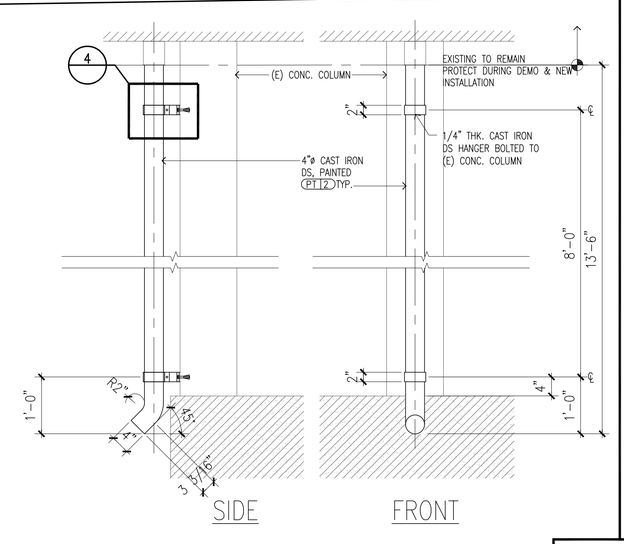
6" 1' 1'-6"



4 **D.S. DETAIL**

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

6" 1' 1'-6"



2 **D.S. ELEVATION**

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

3" 6" 1' 2' 4'

NOTES:

1. ALL DOORS AND WINDOWS ARE EXISTING TO REMAIN U.O.N.
2. MATCH ALL HEIGHTS OF EXISTING PAINT ON WALLS

EXTERIOR NEW CONSTRUCTION KEYNOTES:

- KK EXISTING ALUM. FRAMED WINDOWS TO REMAIN,TYP
- LL EXISTING METAL FLASHING, TO REMAIN TYP.
- MM EXISTNG COPPER GUTER TO REMAIN, TYP.
- 1 REMOVE EXIST'G WINDOW (EXIST'G FRAME OT REMAN) & INSTALL NEW ALUM MULLION & PANEL & INSTALL NEW MECH FAN/LOUVER (SEE MECH. DWGS.)
- 2 NEW SLIDING GATE. GC TO CONFIRM OPENING WIDTH PRIOR TO ORDERING.
- 3 NEW WALL MOUNTED EXTERIOR LIGHT FIXTURES, SEE ELEC. DWGS.
- 4 NEW STAIR
- 4A NEW GALVANIZED STEEL GUARDRAIL SYSTEM
- 4B NEW GALVANIZED STEEL RAILING SYSTEM
- 4C NEW GALVANIZED STEEL GUARDRAIL & HANDRAIL SYSTEM
- 4D NEW GALVANIZED STEEL HANDRAIL SYSTEM
- 5 NEW CAST IRON DOWNSPOUT TO MATCH EXISTING DOWNSPOUT.
- 6 NEW HOSE BIB (HB), SEE MECH. DWGS.
- 7 IN-OPERABLE WINDOWS, SEE INTERIOR ELEVATIONS
- 8 REPAIR EXISTING WATER LINES, SEE CIVIL & MEP DWGS.
- 9 NEW 6"ø X 48" (MIN.) GALVANIZED STEEL BOLLARD SEE CIVIL DWGS.
- 10 NEW CRAWL SPACE HATCH, SEE DETAILS ON A5.1
- 11 NEW ALUM. FRAME WINDOWS
- 12 DEDUCTIVE ALTERNATE 1: MET FRAME CANOPY (SEE SHT A-4.6)

LEGEND:

- OR — INDICATES EXISTING CONDITION REMAIN.
- — — — INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
- ——— INDICATES NEW CONDITION AND/OR NEW ELEMENTS, OR BOUNDRIES OF NEW CONSTRUCTION.

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KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

EXTERIOR ELEVATION

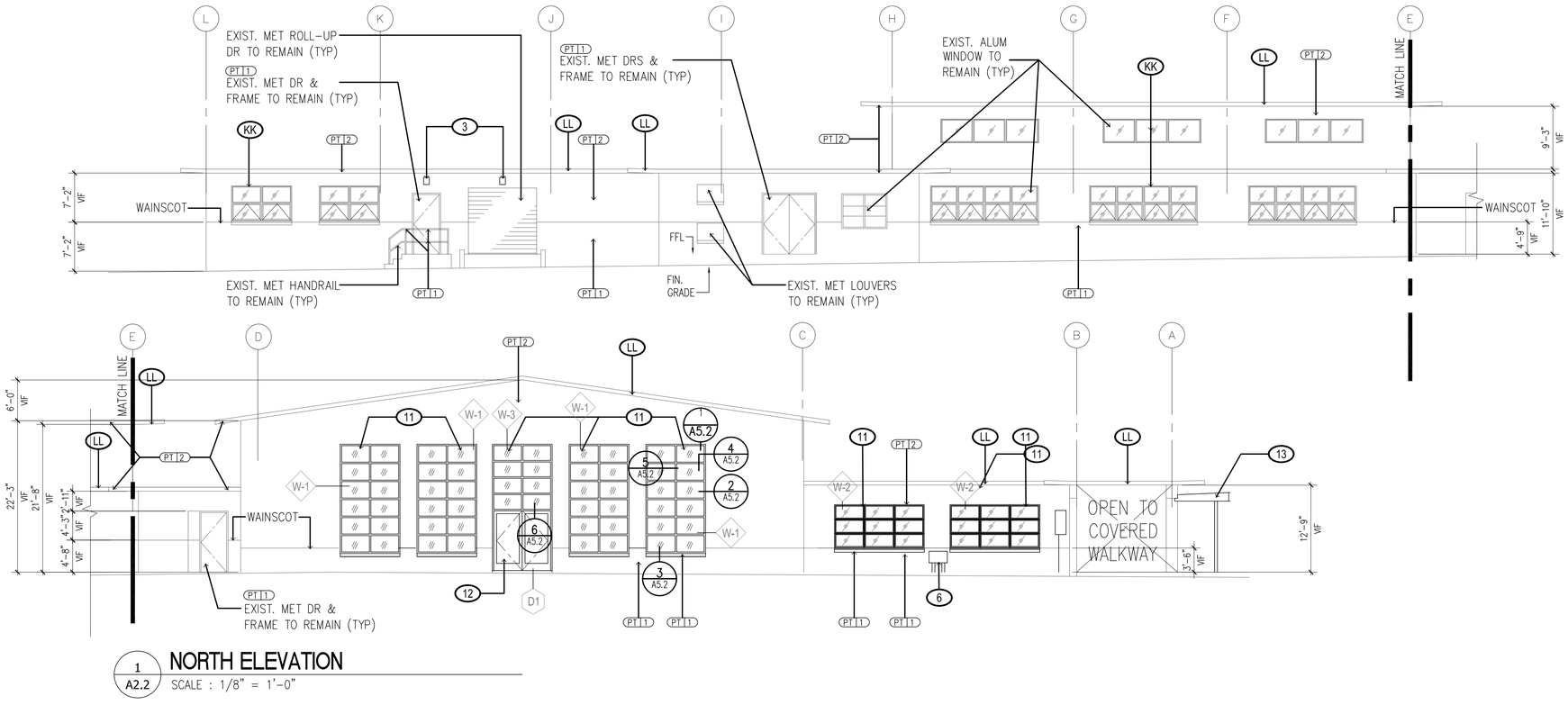
SCALE:

STATE JOB NO. CA-1514-C

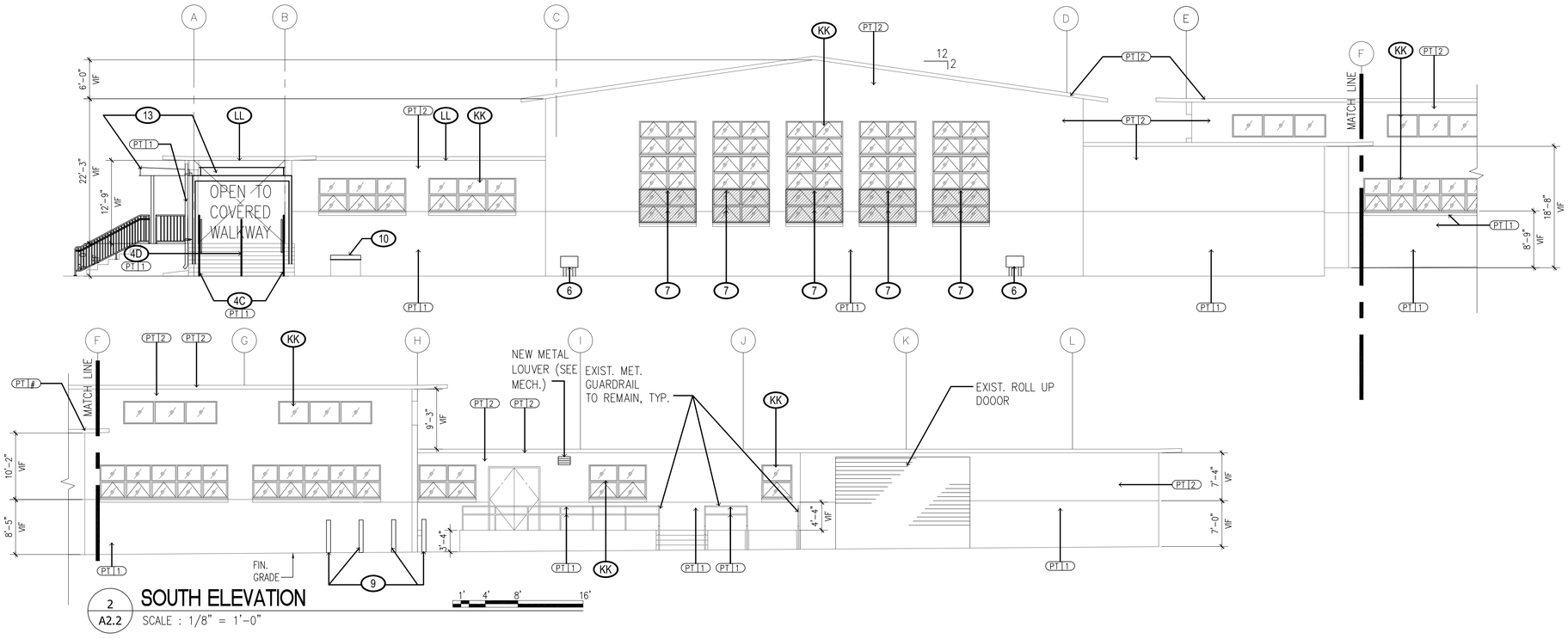
FEDERAL PROJECT NO. PN15130011

SHEET 33 OF 78

A2.1



1 NORTH ELEVATION
A2.2 SCALE : 1/8" = 1'-0"



2 SOUTH ELEVATION
A2.2 SCALE : 1/8" = 1'-0"

NOTES:
1. ALL DOORS AND WINDOWS ARE EXISTING TO REMAIN U.O.N.
2. MATCH ALL HEIGHTS OF EXISTING PAINT ON WALLS

EXTERIOR NEW CONSTRUCTION KEYNOTES:

- KK EXISTING ALUM. FRAMED WINDOWS TO REMAIN,TYP
- LL EXISTING METAL FLASHING, TO REMAIN TYP.
- MM EXISTNG COPPER GUTER TO REMAIN, TYP.
- 1 INSTALL EXHAUST FAN AT NOTED LOCATION TYP. SEE MECH. DWGS.
- 2 NEW SLIDING GATE. GC TO CONFIRM OPENING WIDTH PRIOR TO ORDERING.
- 3 NEW WALL MOUNTED EXTERIOR LIGHT FIXTURES, SEE ELEC. DWGS.
- 4 NEW RAMP AND STAIR
- 4A NEW GALVANIZED STEEL GUARDRAIL SYSTEM
- 4B NEW GALVANIZED STEEL RAILING SYSTEM
- 4C NEW GALVANIZED STEEL GUARDRAIL & HANDRAIL SYSTEM
- 4D NEW GALVANIZED STEEL HANDRAIL SYSTEM
- 5 NEW CAST IRON DOWNSPOUT TO MATCH EXISTING DOWNSPOUT.
- 6 NEW HOSE BIB (HB), SEE MECH. DWGS.
- 7 IN-OPERABLE WINDOWS, SEE INTERIOR ELEVATIONS
- 8 REPAIR EXISTING WATER LINES, SEE CIVIL & MEP DWGS.
- 9 NEW 6"ø X 48" (MIN.) GALVANIZED STEEL BOLLARD SEE CIVIL DWGS.
- 10 NEW CRAWL SPACE HATCH, SEE DETAILS ON A5.1
- 11 NEW ALUM FRAME ATFP WINDOW
- 12 NEW ALUM FRAME STORE FRONT DOORS
- 13 DEDUCTIVE ALTERNATE 1: MET FRAME CANOPY (SEE SHT A-4.6)

LEGEND:

- OR — INDICATES EXISTING CONDITION REMAIN.
- - - - - INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
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LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

APPR | DATE | DESCRIPTION | SYM

SUBMITTAL PHASE
FINAL DESIGN

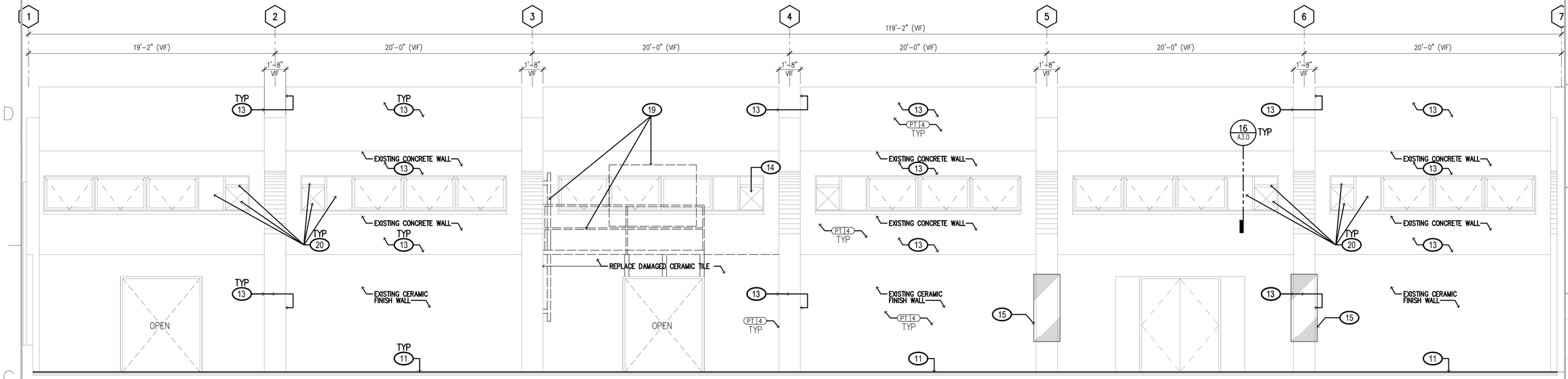
SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

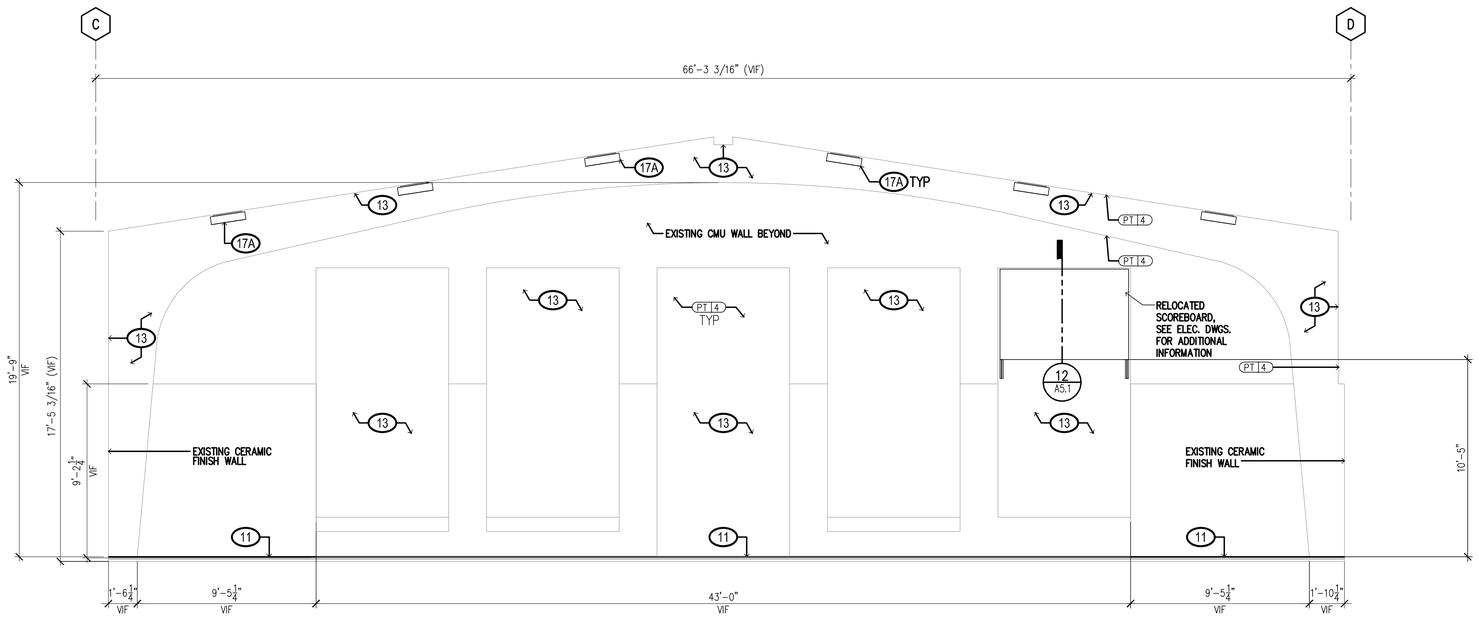
EXTERIOR ELEVATION

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 34 OF 78
A2.2



1 A2.3 NEW INTERIOR ELEVATION "1"

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



2 A2.3 NEW INTERIOR ELEVATION "2"

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

INTERIOR NEW ELEMENTS KEYNOTES:

- 4A NEW GALVANIZED STEEL GUARDRAIL SYSTEM
- 11 MULTI PURPOSE RM FLOORING W/ NEW STRIPING, SEE A4.0 FOR ENLARGED PLAN.
- 12 NEW STAINLESS STEEL EXPANSION JOINT COVER.
- 13 NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.
- 14 NEW EXHAUST FANS ON DESIGNATED WINDOW OPENING. SEE SHEET A5.1 FOR DETAILS. SEE MECH. DWGS. FOR MORE INFO.
- 15 RE-INSTALL SALVAGED PILASTER PADDING.
- 16 NEW FURRED CEILING SOFFIT (w/ELECT OUTLET)
- 16A NEW FURRED CEILING SOFFIT (w/RECESSED LIGHT)
- 17 NEW RECESSED LIGHT FIXTURE, SEE ELEC.
- 17A NEW SURFACE MOUNTED CEILING LIGHT FIXTURE ON ON SLOPED CEILING, SEE ELEC.
- 17B NEW SURFACE MOUNTED CEILING LIGHT FIXTURE, SEE ELEC.
- 19 REMOVE SCORE BOARD. CONFIRM NEW LOCATION WITH USER. DEMO CAGE,LADDER,AND GUARD RAILS. GC TO VERIFY MOUNTING SUPPORTS PRIOR TO REMOVING SCORE BOARD.
- 20 REMOVE EXIST'G WINDOW (EXIST'G FRAME TO REMAIN) AND INSTALL NEW ALUM MULLION AND PANEL (FINISH TO MATCH EXIST'G) AND NEW FAN (SEE MECH).

LEGEND:

- INDICATES EXISTING CONDITION REMAIN.
- INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.
- INDICATES NEW CONDITION AND/OR NEW ELEMENTS, OR BOUNDRIES OF NEW CONSTRUCTION.

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.

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BUILDING 19 IMPROVEMENTS

INTERIOR ELEVATIONS

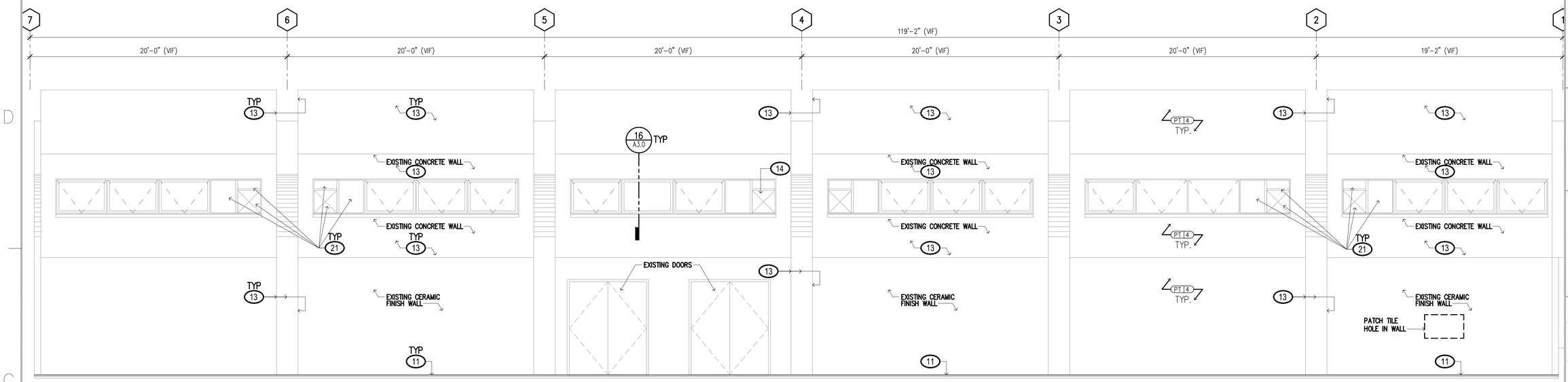
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

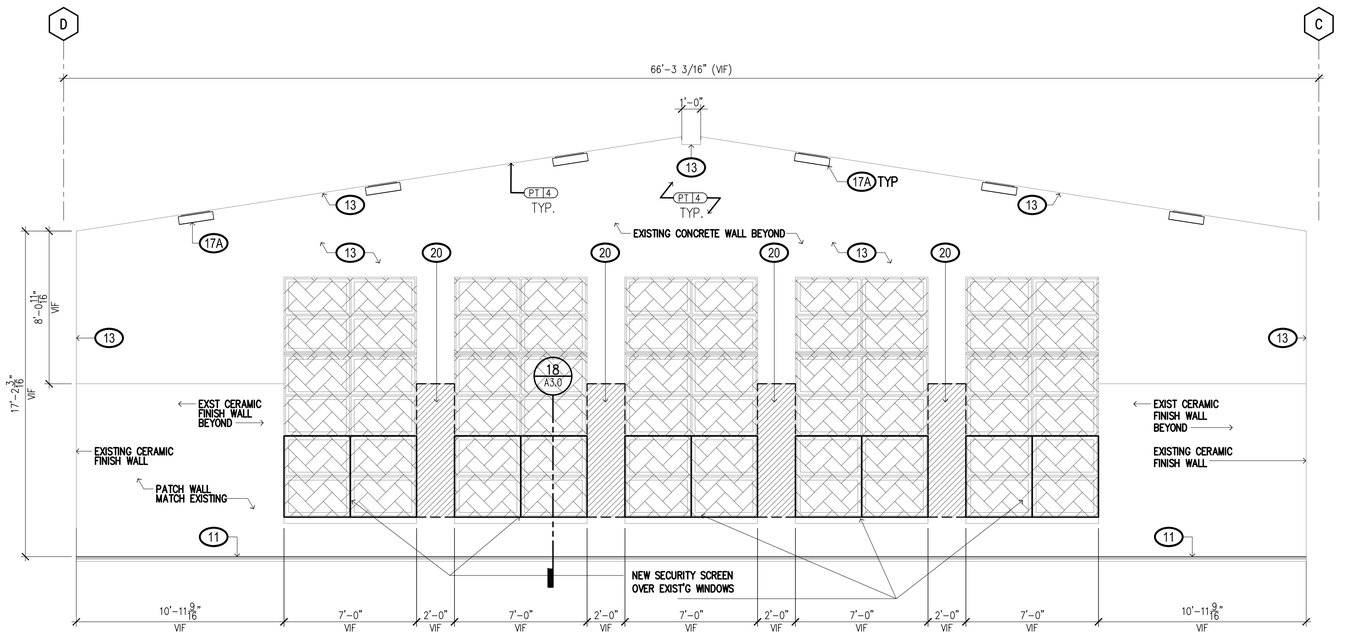
SHEET 35 OF 78

A2.3



1 A2.4 NEW INTERIOR ELEVATION "3"

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



2 A2.4 NEW INTERIOR ELEVATION "4"

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

INTERIOR NEW ELEMENTS KEYNOTES:

1. DEMO EXISTING CERAMIC FINISH WALL BEYOND
4A. NEW GALVANIZED STEEL GUARDRAIL SYSTEM
11. MULTI PURPOSE RM FLOORING W/ NEW STRIPING, SEE A4.0 FOR ENLARGED PLAN.
12. NEW STAINLESS STEEL EXPANSION JOINT COVER.
13. NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.
14. NEW EXHAUST FANS ON DESIGNATED WINDOW OPENING. SEE SHEET A5.1 FOR DETAILS.
15. RE-INSTALL SALVAGED PILASTER PADDING.
16. NEW FURRED CEILING SOFFIT (w/ELECT OUTLET)
16A. NEW FURRED CEILING SOFFIT (w/RECESSED LIGHT)
17. NEW RECESSED LIGHT FIXTURE, SEE ELEC.
17A. NEW SURFACE MOUNTED CEILING LIGHT FIXTURE ON ON SLOPED CEILING, SEE ELEC.
17B. NEW SURFACE MOUNTED CEILING LIGHT FIXTURE, SEE ELEC.
20. REMOVE EXISTING CERAMIC WALL TILE & REFINISH WALL. PATCH SILL CONDITION IF DAMAGED.
21. REMOVE EXIST'G WINDOW (EXIST'G FRAME TO REMAIN) AND INSTALL NEW ALUM MULLION AND PANEL (FINISH TO MATCH EXIST'G) AND NEW FAN (SEE MECH).

LEGEND:

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FACILITIES DESIGN & PROJECTS BRANCH

HAWAII ARMY NATIONAL GUARD

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

KALAELOA, KAPOLEI, OAHU, HAWAII

91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

INTERIOR ELEVATIONS

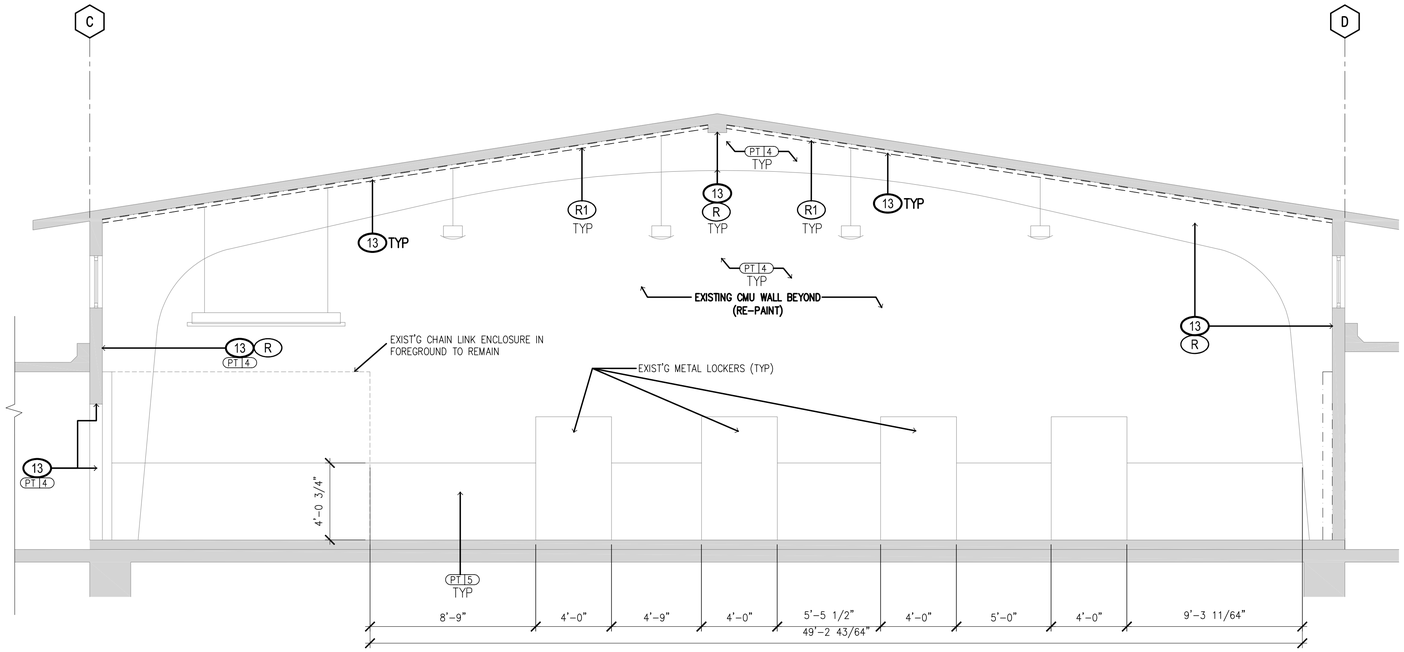
SCALE:

STATE JOB NO.
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

SHEET 36 OF 78

A2.4



1 **STORAGE ROOM - ELEVATION "2"**

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

INTERIOR NEW ELEMENTS KEYNOTES:

- (R) CLEAN, PREPARE & PATCH (DAMAGES TO) WALLS, COLUMNS, BEAMS & CELINGS.
- (R1) REMOVE ALL ACOUSTICAL CEILING TILES & ADHESIVE. CLEAN AND PREP FOR NEW PAINT.
- (13) NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.

LEGEND:

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KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

INTERIOR ELEVATIONS

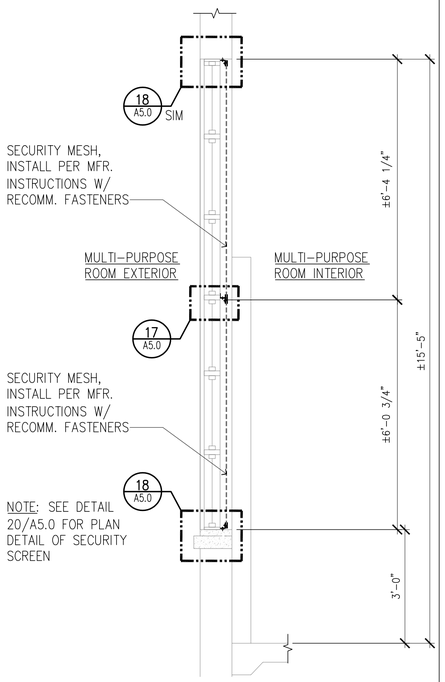
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

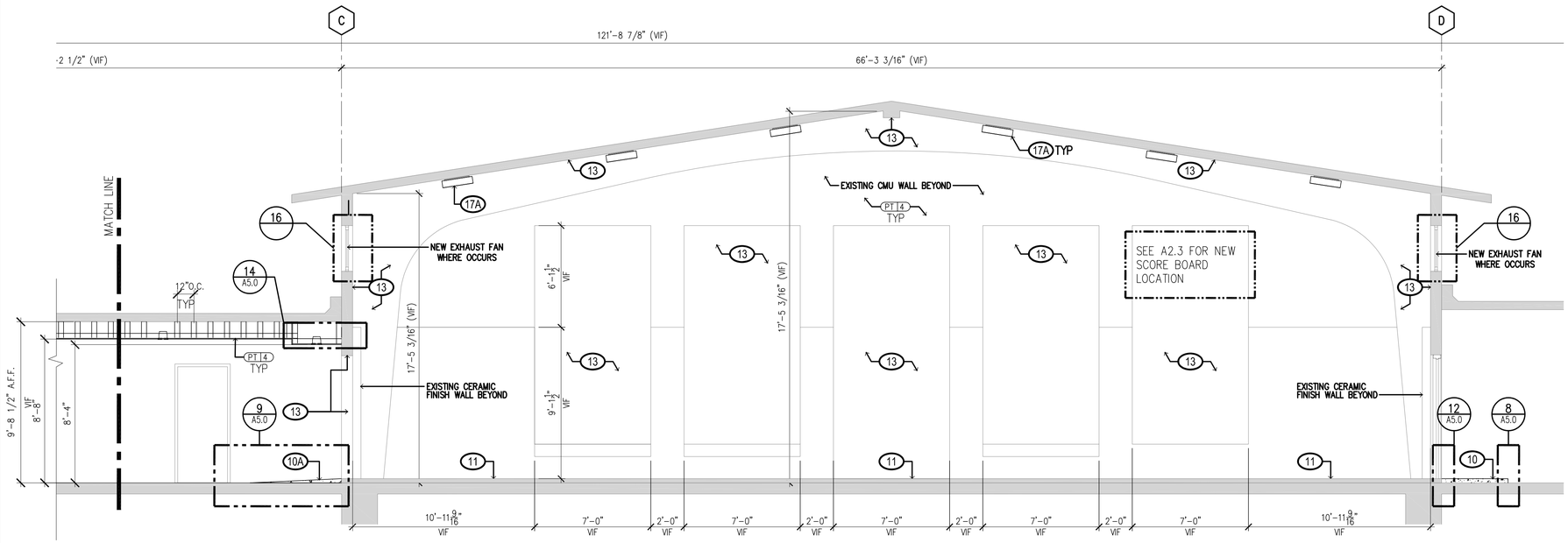
SHEET 37 OF 78

A2.5



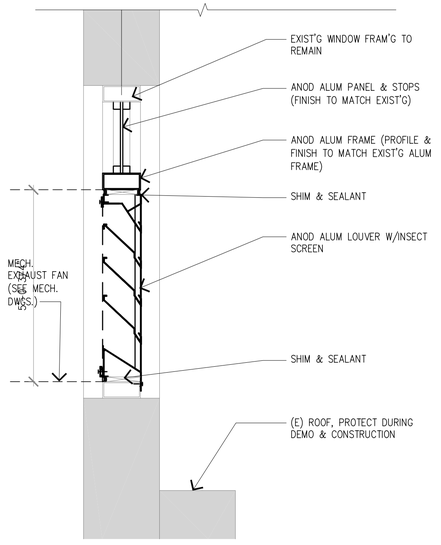
18 SECURITY SCREEN SECTION

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



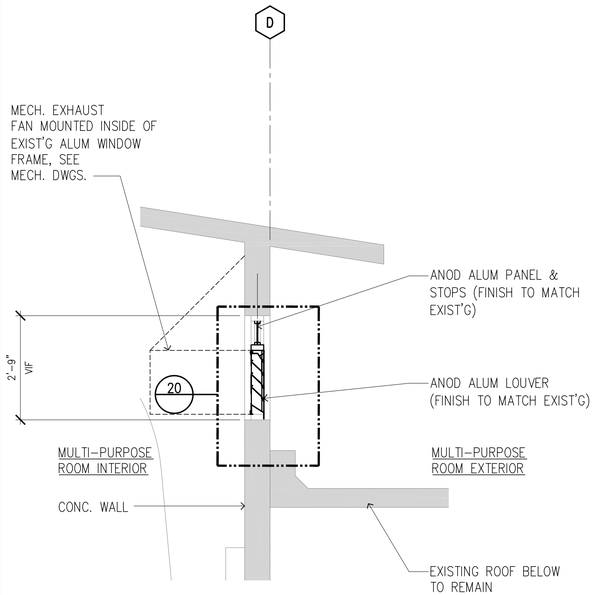
16 SECTION DETAIL

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



20 SECTION DETAIL

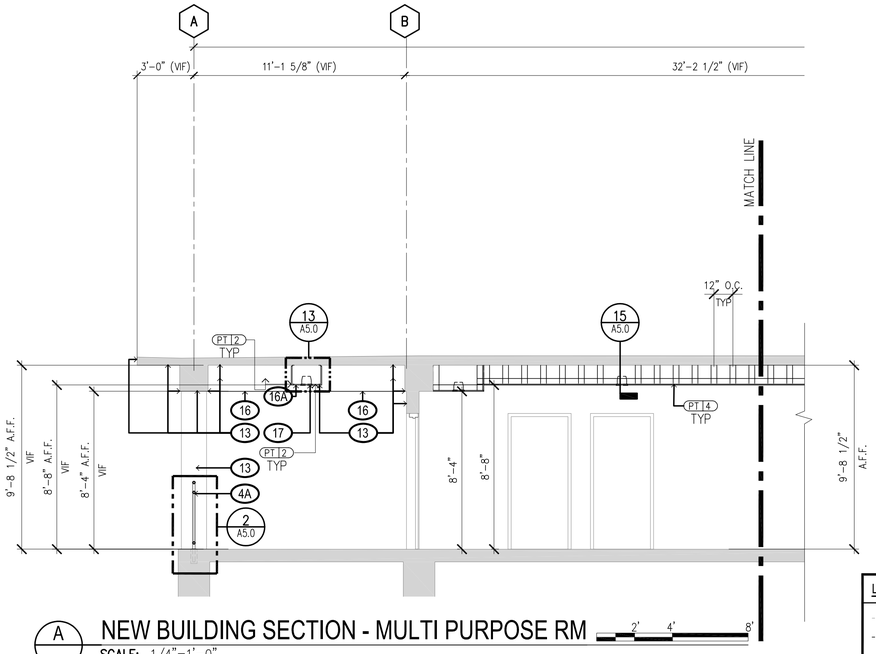
SCALE: 1 1/2"=1'-0"



16 SECTION DETAIL

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

1' 2' 4'



A NEW BUILDING SECTION - MULTI PURPOSE RM

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

2' 4' 8'

INTERIOR NEW ELEMENTS KEYNOTES:

- 4A NEW GALVANIZED STEEL GUARDRAIL SYSTEM
- 10A NEW ADAAG COMPLIANT CONCRETE RAMP
- 11 MULTI PURPOSE RM FLOORING W/ NEW STRIPING, SEE A4.0 FOR ENLARGED PLAN.
- 12 NEW STAINLESS STEEL EXPANSION JOINT COVER
- 13 NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.
- 14 NEW EXHAUST FANS ON DESIGNATED WINDOW OPENING.
- 15 RE-INSTALL SALVAGED PILASTER PADDING
- 16 NEW FURRED CEILING SOFFIT (w/ELECT OUTLET)
- 16A NEW FURRED CEILING SOFFIT (w/RECESSED LIGHT)
- 17 NEW RECESSED LIGHT FIXTURE, SEE ELEC.
- 17A NEW SURFACE MOUNTED CEILING LIGHT FIXTURE ON ON SLOPED CEILING, SEE ELEC.
- 17B NEW SURFACE MOUNTED CEILING LIGHT FIXTURE, SEE ELEC.

LEGEND:

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STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

BUILDING SECTION

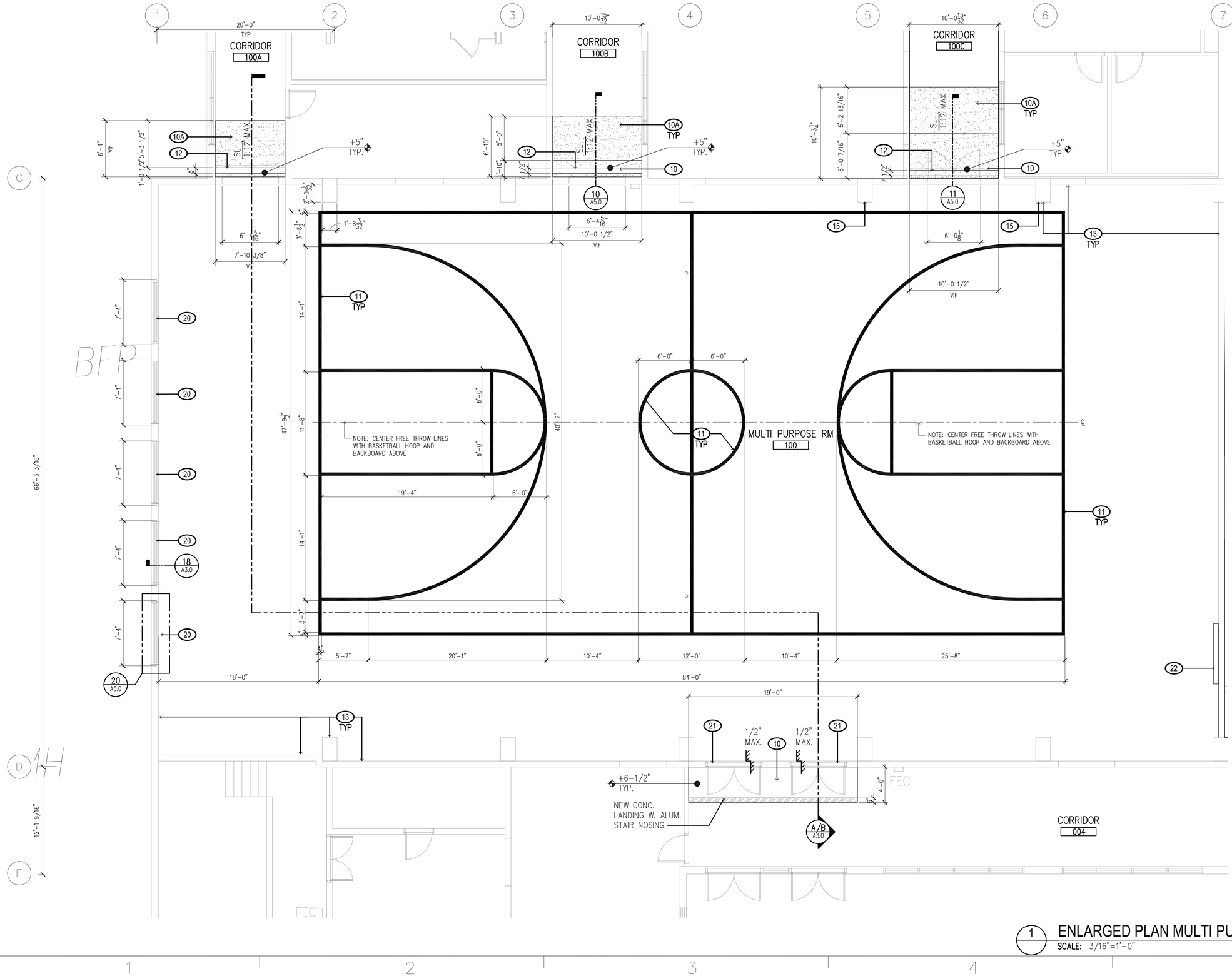
SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 38 OF 78

A3.0



LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR NEW ELEMENTS KEYNOTES:

10 CONCRETE LANDING

10A ADAAG COMPLIANT CONCRETE RAMP

11 4" WIDE STRIPING: COLOR WHITE

12 STAINLESS STEEL EXPANSION JOINT COVER

13 PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS. SEE FINISH SCHEDULE

15 RE-INSTALL SALVAGED PILASTER PADDING

20 ALUMINUM SECURITY SCREEN CENTERED ON INTERIOR FACE OF WINDOWS

21 ALUM. DOOR THRESHOLD

22 RELOCATED SCOREBOARD, SEE INT. ELEV. FOR LOCATION

1 ENLARGED PLAN MULTI PURPOSE RM
SCALE: 3/16"=1'-0"

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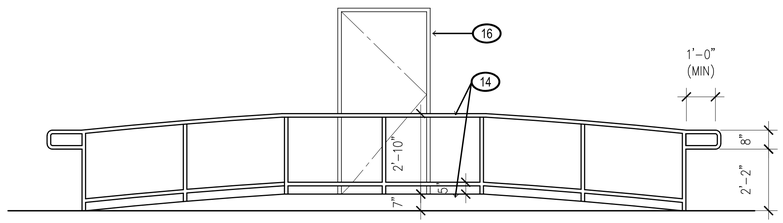
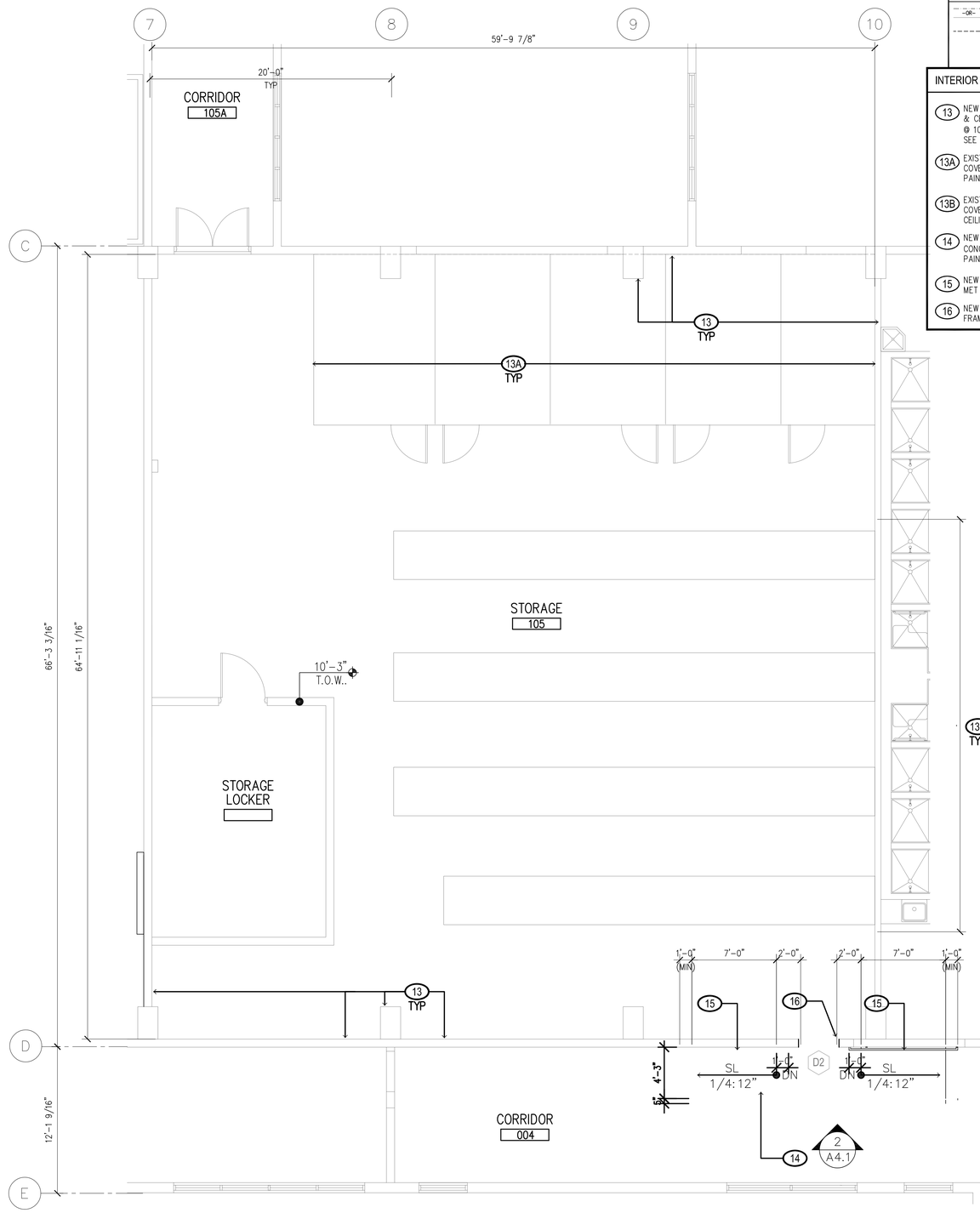
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19
IMPROVEMENTS
ENLARGED PLAN - MULTI PURPOSE ROOM

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 39 OF 78
A4.0



2 A4.1 **RAMP ELEVATION**
SCALE: 3/8"=1'-0"



1 A4.1 **ENLARGED PLAN - STORAGE**
SCALE: 3/16"=1'-0"

LEGEND:

— — —OR— — —	INDICATES EXISTING CONDITION TO REMAIN.
- - - - - -	INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR NEW ELEMENTS KEYNOTES:

13 NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS. START NEW PAINT ON WALLS @ 10'-3" A.F.E. (MATCH VAULT HEIGHT) SEE A2.5 FOR ELEVATION.

13A EXISTING CHAIN LINK FENCE TO REMAIN, COVER & PROTECT AREA WITHIN DURING PAINTING AND CEILING TILE REMOVAL

13B EXISTING LOCKERS TO REMAIN, COVER & PROTECT DURING PAINTING AND CEILING TILE REMOVAL

14 NEW ADA COMPLIANT CONCRETE RAMP W/GALV PAINTED MET HANDRAIL

15 NEW GALV PAINTED MET HANDRAIL

16 NEW DR W/METAL FRAME

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BUILDING 19
IMPROVEMENTS

ENLARGED PLAN - STORAGE

SCALE:

STATE JOB NO.
CA-1514-C

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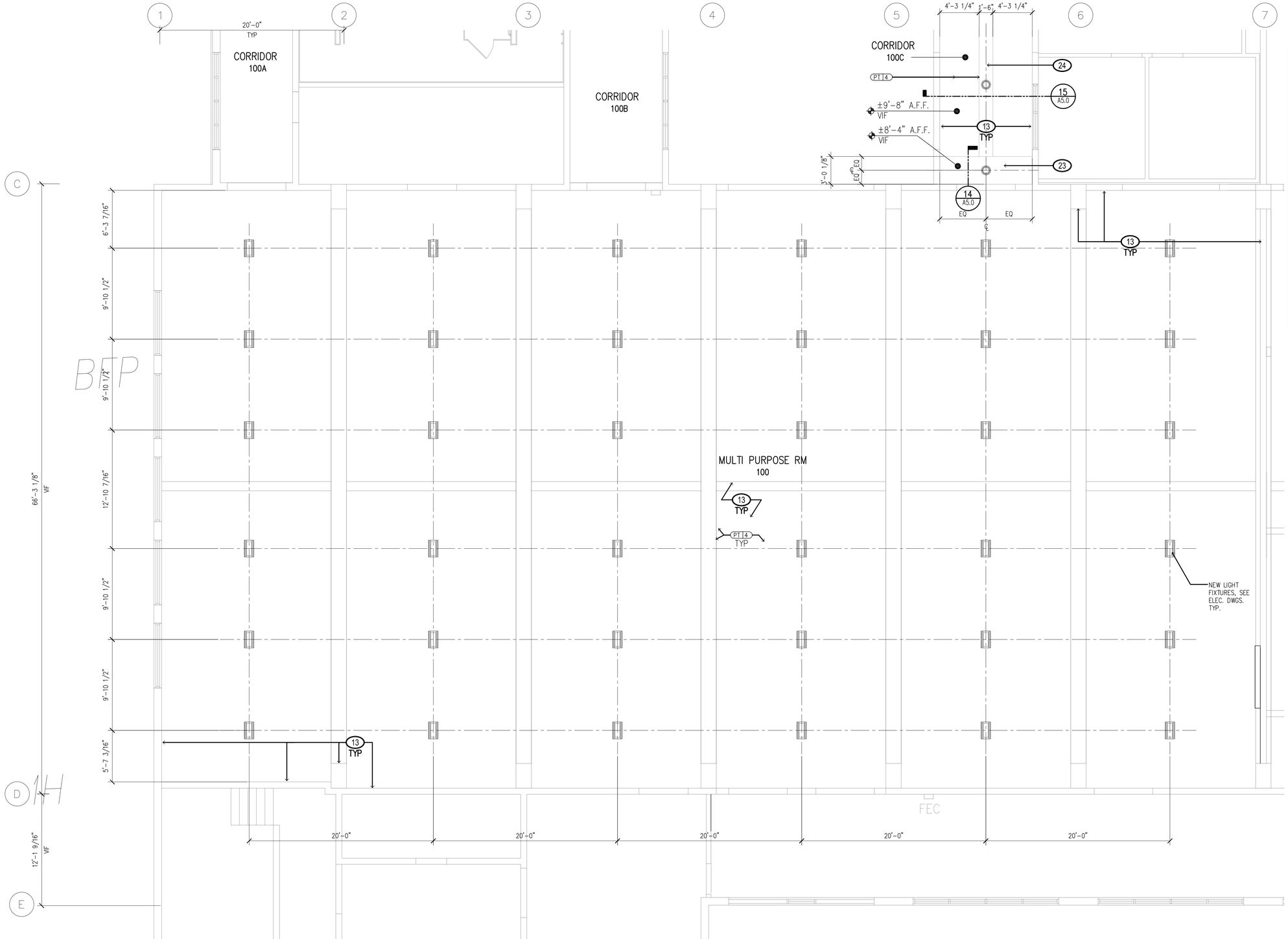
PN15130011

SHEET 40 OF 78

A4.1



LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(13) NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.

(23) EFS OVER GYP. BD. & MET. STUD SOFFIT @ 8'-4" A.F.F.

(24) EFS OVER GYP. BD. & MET. STUD SOFFIT @ 8'-8" A.F.F.

NOTES

1. SEE ELEC. DWGS. FOR FIXTURE SPECIFICATIONS AND ELEC. SCOPE.

RCP LEGEND

- RECESSED CANS
- GYM LIGHTS
- EXTERIOR WALL MOUNTED LIGHTS

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BUILDING 19
IMPROVEMENTS

ENLARGED RCP - MULTI PURPOSE ROOM

SCALE:

STATE JOB NO. CA-1514-C

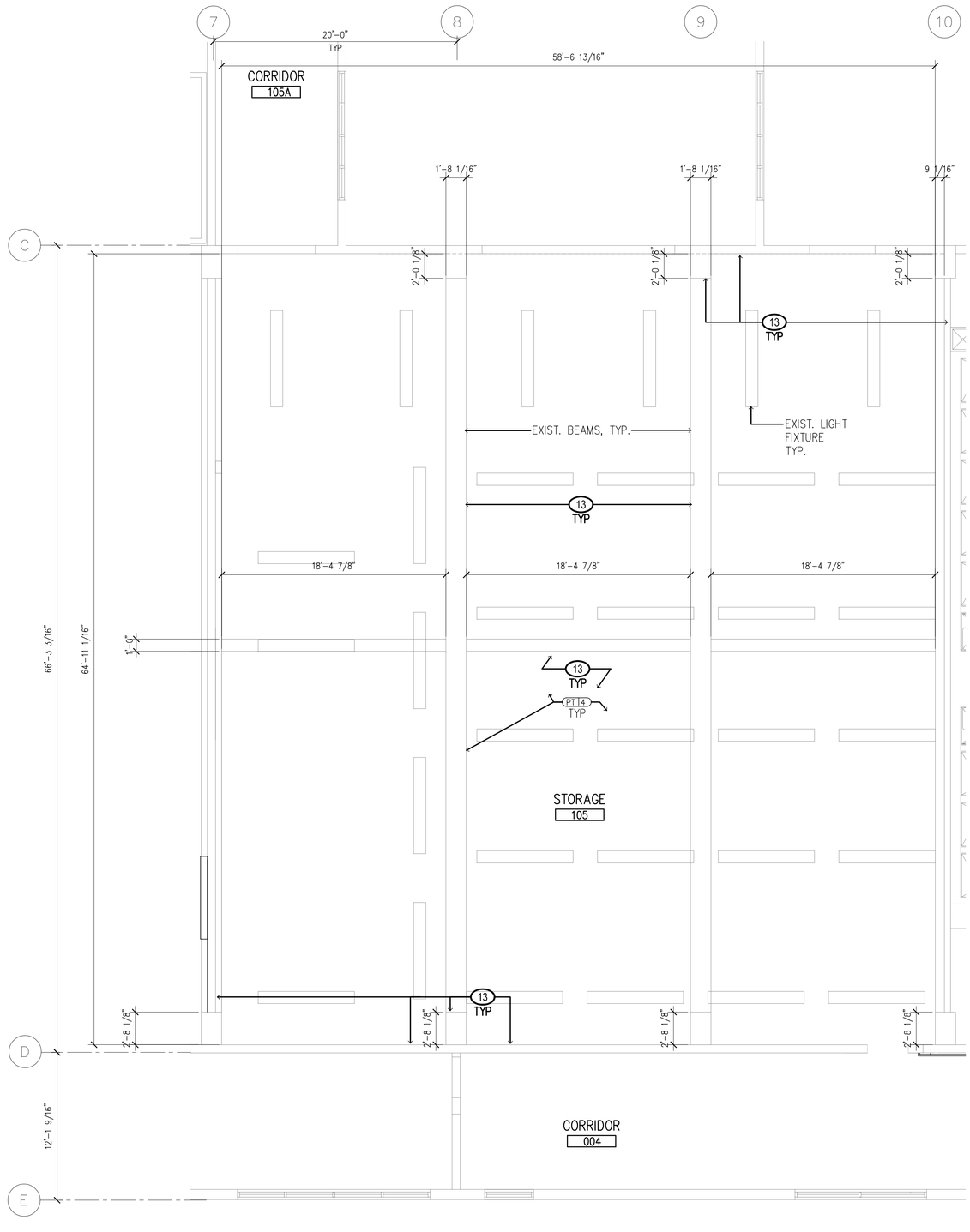
FEDERAL PROJECT NO. PN15130011

SHEET 41 OF 78

A4.2

1 A4.2 ENLARGED RCP - MULTI PURPOSE RM
SCALE: 3/16"=1'-0"

2' 4' 8'



LEGEND:

-or- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR DEMOLITION KEYNOTES:

(13) NEW PAINT ON COLUMNS, WALLS, BEAMS & CEILINGS.

NOTES

1. SEE T0.4 FOR FINISH SCHEDULES

HAWAII ARMY NATIONAL GUARD

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KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

ENLARGED REFLECTED CEILING PLAN - STORAGE

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

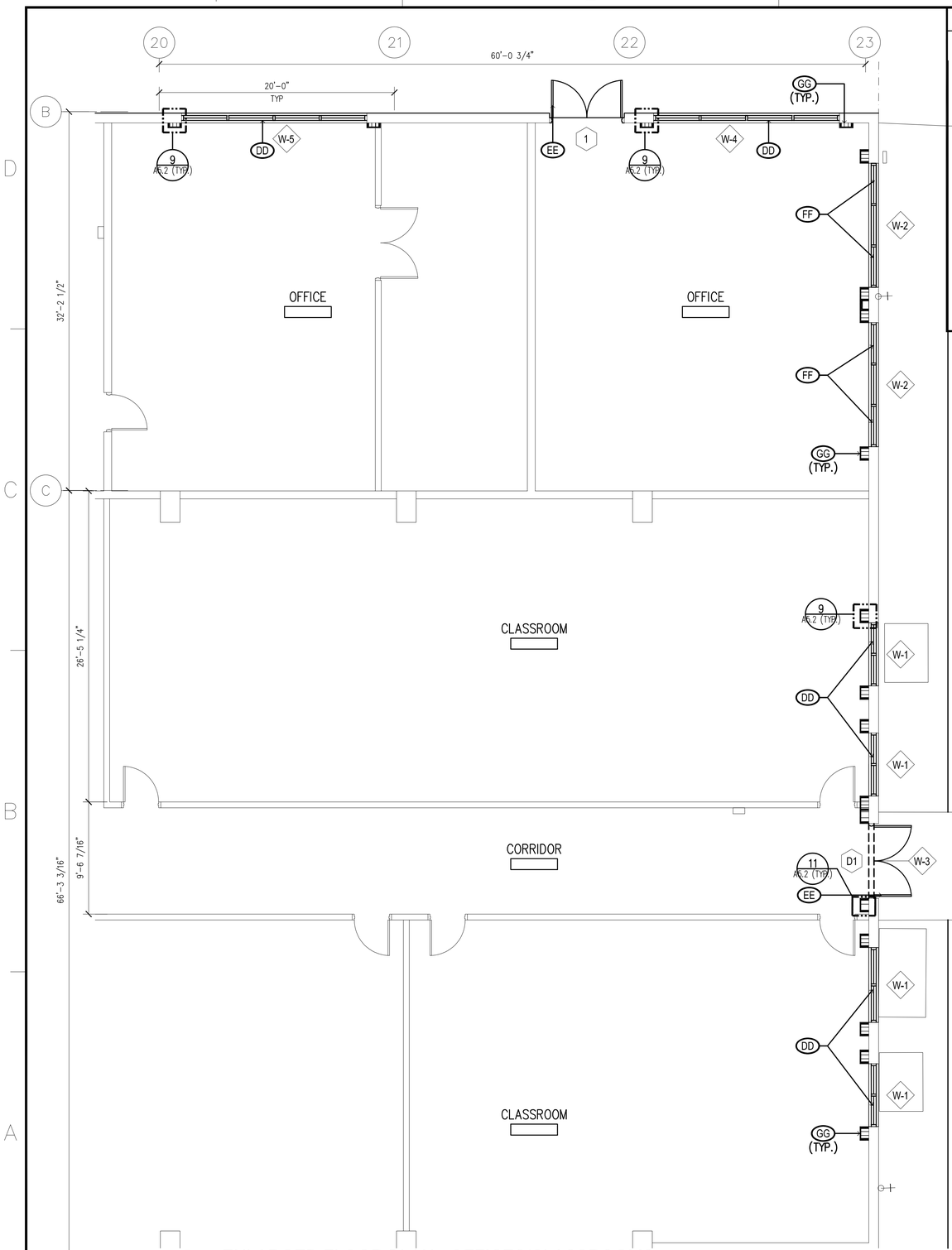
SHEET 42 OF 78

A4.3

1 / A4.3 ENLARGED REFLECTED CEILING PLAN - STORAGE

SCALE: 3/16"=1'-0"

0 2' 4' 8'



3 A4.4 **ENLARGED FLOOR PLAN - OFFICES/CLASSROOMS**
SCALE: 3/16"=1'-0"

2' 4' 8'

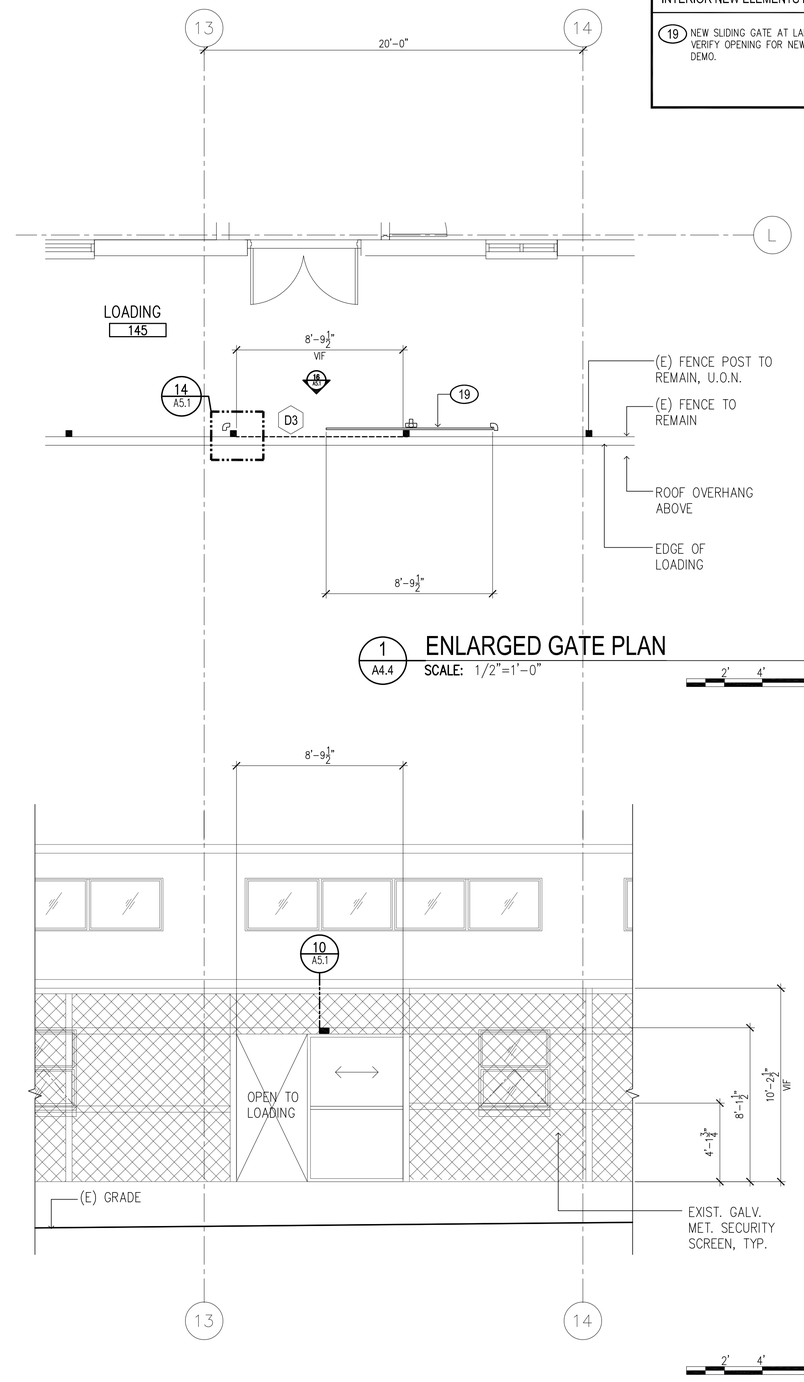
INTERIOR NEW ELEMENTS KEYNOTES:

(DD) DEMO & REMOVE EXISTING ALUM.FRAME WINDOW AND PREP OPENING FOR NEW ANTI TERRORIST FORCE PROTECTION (ATFP) (SEE A2.1 & A2.2 FOR LOCATIONS.)

(EE) DEMO & REMOVE EXISTING ALUM.FRAME DOORS AND PREP OPENING FOR NEW ALUM. FRAME DOORS. (SEE A2.1 & A2.2 FOR LOCATIONS.)

(FF) DEMO & REMOVE EXISTING ALUM.FRAME WINDOWS & WOOD PANELS AND PREP OPENING FOR NEW ANTI-TERRORIST FORCE PROTECTION (ATFP) WINDOW (SEE A2.1 & A2.2 FOR LOCATIONS.)

(GG) PROVIDE NEW MET. TUBE FRAM'G AT DR & WNDW OPEN'G (SEE STRUCT. DRAW'GS). PROVIDE MET. STUDS W/ 5/8" GYP. BD. AROUND MET. TUBE FRAM'G



1 A4.4 **ENLARGED GATE PLAN**
SCALE: 1/2"=1'-0"

2' 4' 8'

2 A4.4 **ENLARGED GATE ELEVATION**
SCALE: 1/4"=1'-0"

2' 4' 8'

LEGEND:

INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

INTERIOR NEW ELEMENTS KEYNOTES:

(19) NEW SLIDING GATE AT LANDING. GC TO VERIFY OPENING FOR NEW GATE AFTER DEMO.

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

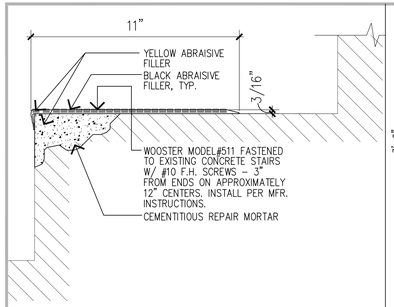
DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

GATE ELEV, ENLARGED FLR PLN - OFFICES/CLASSRMS

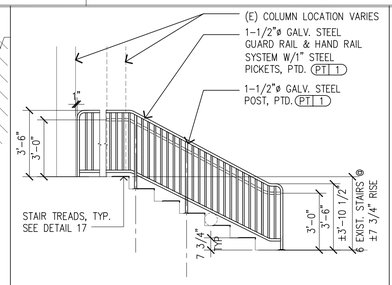
SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 43 OF 78

A4.4



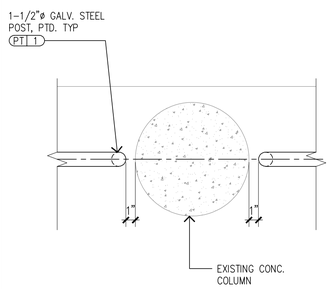
17 NOSING DETAIL TYP

SCALE: 3" = 1'-0"



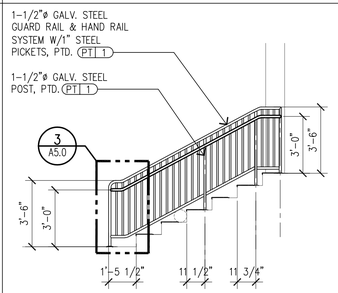
13 STAIR ELEVATION

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



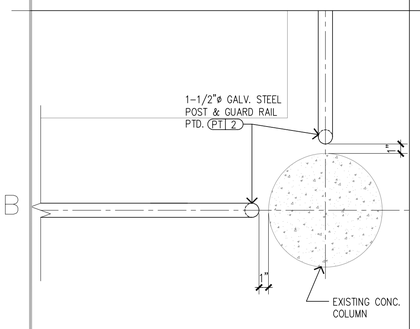
18 DETAIL

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



14 STAIR ELEVATION

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



19 DETAIL

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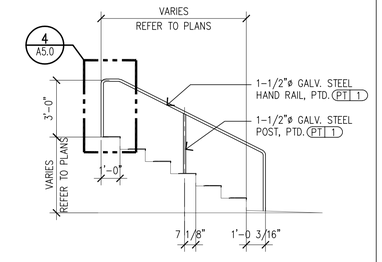
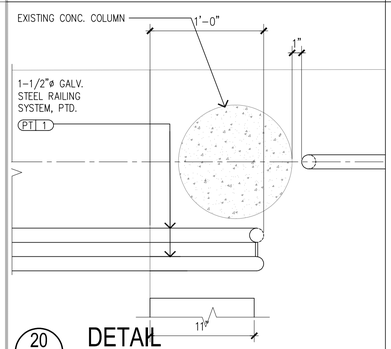


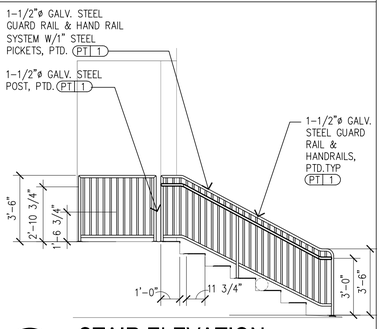
15 HAND RAIL ELEVATION

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



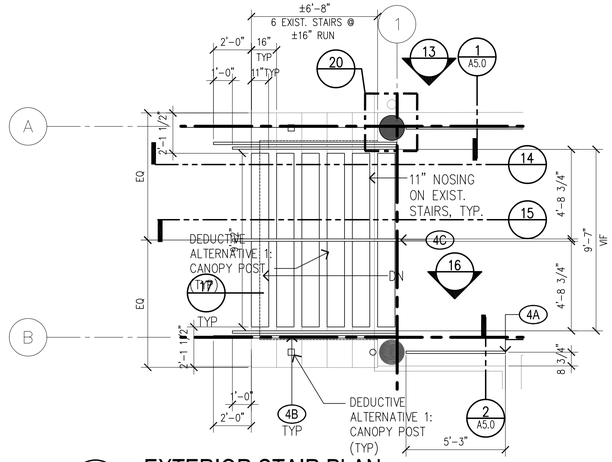
20 DETAIL

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



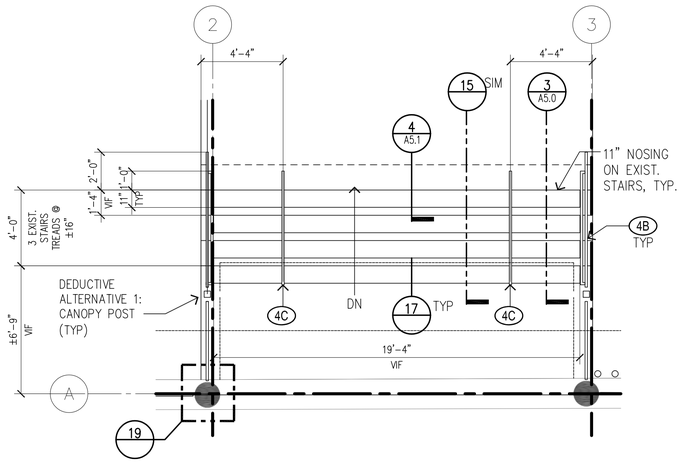
16 STAIR ELEVATION

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



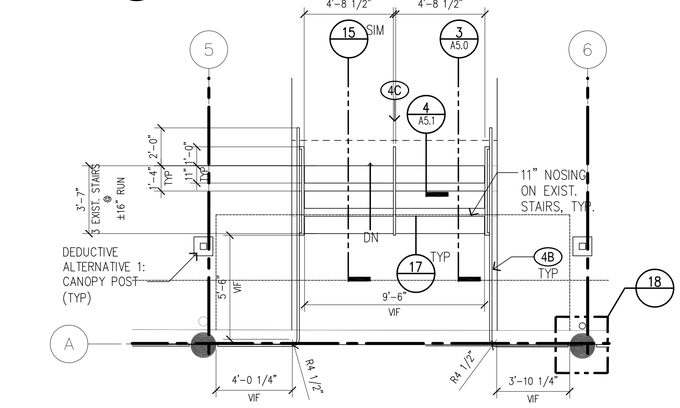
4 EXTERIOR STAIR PLAN

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



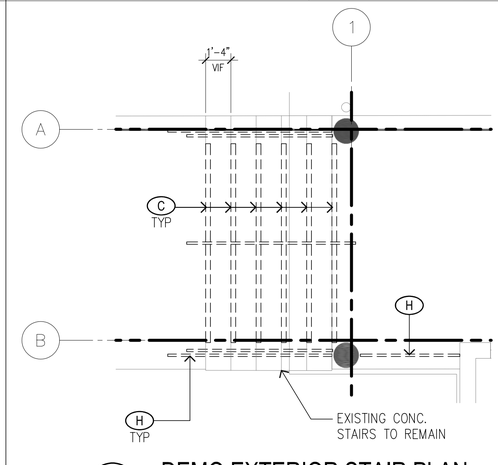
5 EXTERIOR STAIR PLAN

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



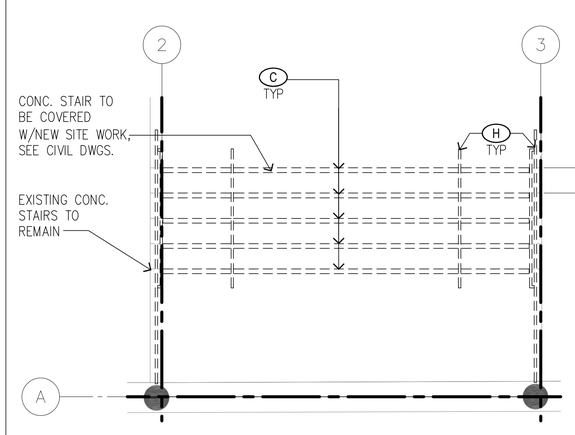
6 EXTERIOR STAIR PLAN

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



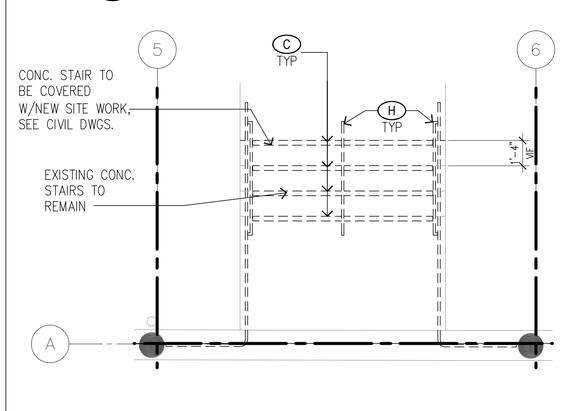
1 DEMO EXTERIOR STAIR PLAN

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



2 DEMO EXTERIOR STAIR PLAN

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



3 DEMO EXTERIOR STAIR PLAN

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

LEGEND:

-OR- INDICATES EXISTING CONDITION TO REMAIN.

INDICATES EXISTING CONDITIONS AND/OR ELEMENTS TO BE REMOVED ON THE DEMOLITION SITE & FLOOR PLAN.

KEYNOTES:

- C REMOVE CONCRETE STAIR METAL NOSING.
- H REMOVE METAL RAILINGS & HANDRAILS (IF ANY OCCUR).
- 4A GALVANIZED STEEL GUARDRAIL SYSTEM W/ 1-1/2"ø RAILS
- 4B GALVANIZED STEEL RAILING SYSTEM W/ 1-1/2"ø TOP & BOT. RAILS & POSTS, W/ 1"ø VERTICAL SUPPORT POSTS
- 4C GALVANIZED STEEL GUARDRAIL & HANDRAIL SYSTEM W/ 1-1/2"ø TOP & BOT. RAILS & MAJOR VERTICAL POSTS, W/ 1"ø VERTICAL SUPPORT POSTS

KEYNOTES:

1. GC TO REPAIR EXISTING CONCRETE STAIR NOSING PRIOR TO INSTALLING NEW TREAD COVERS.

HAWAII ARMY NATIONAL GUARD

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ENLARGED STAIR PLANS

SCALE:

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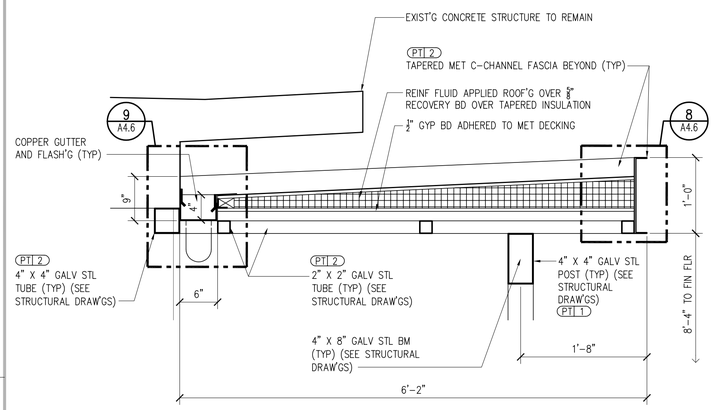
CA-1514-C

FEDERAL PROJECT NO.
PN15130011

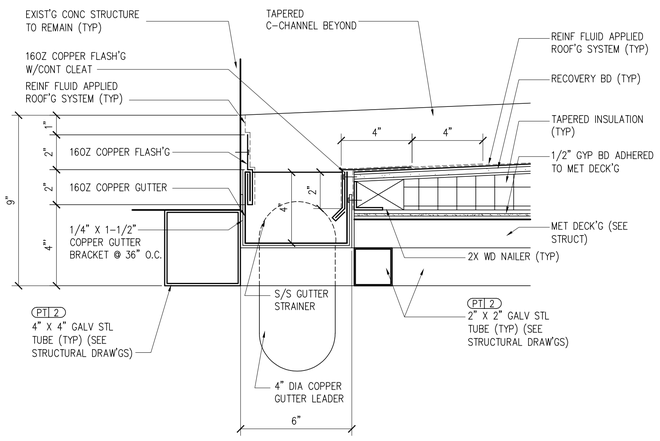
SHEET 44 OF 78

A4.5



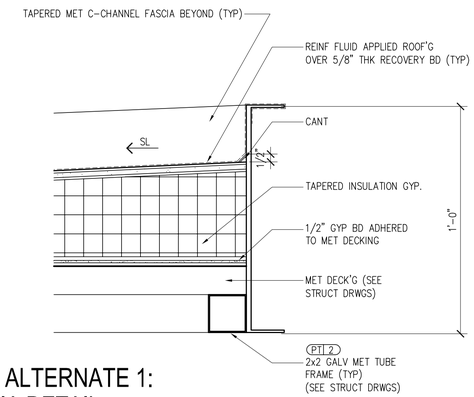
7 DEDUCTIVE ALTERNATE 1: SECTION THROUGH CANOPY

SCALE: 1" = 1'-0"



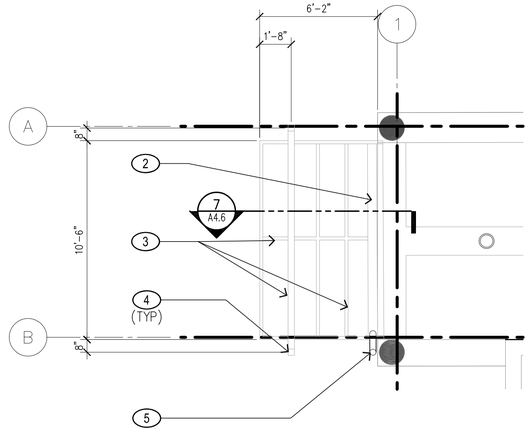
8 DEDUCTIVE ALTERNATE 1: ROOF GUTTER DETAIL

SCALE: 3" = 1'-0"



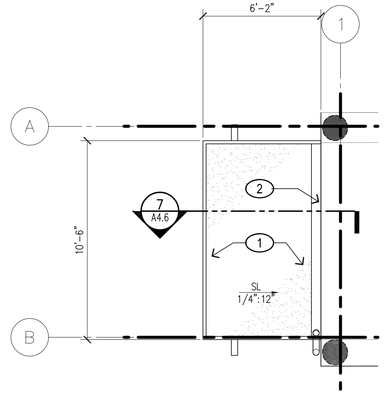
9 DEDUCTIVE ALTERNATE 1: ROOF FASCIA DETAIL

SCALE: 3" = 1'-0"



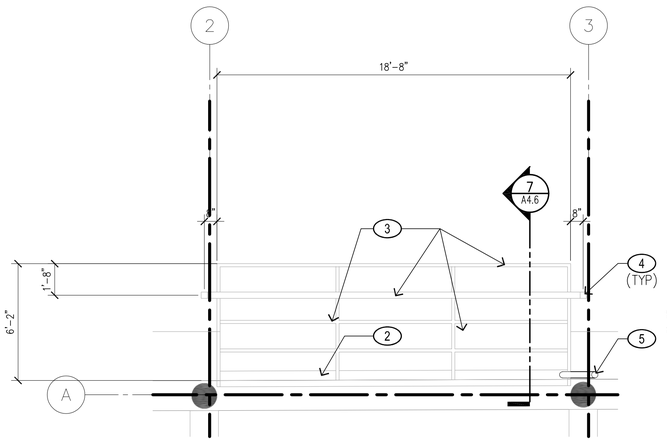
4 DEDUCTIVE ALTERNATE 1: EXT. STAIR REFLECTED CEILING PLAN

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



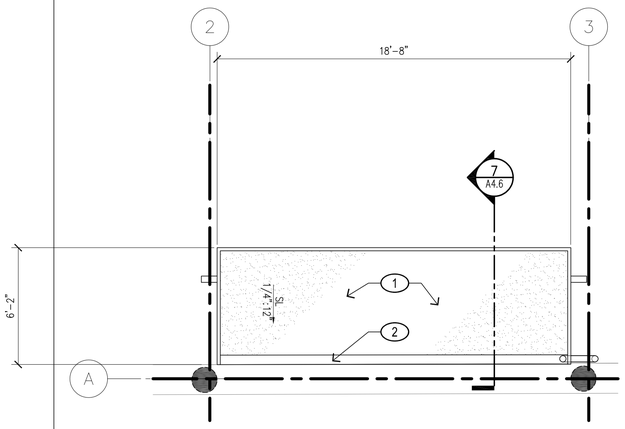
1 DEDUCTIVE ALTERNATE 1: NEW ROOF PLAN

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



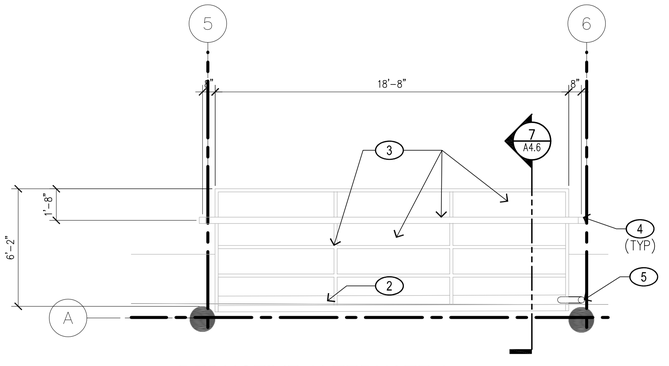
5 DEDUCTIVE ALTERNATE 1: EXT. STAIR REFLECTED CEILING PLAN

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



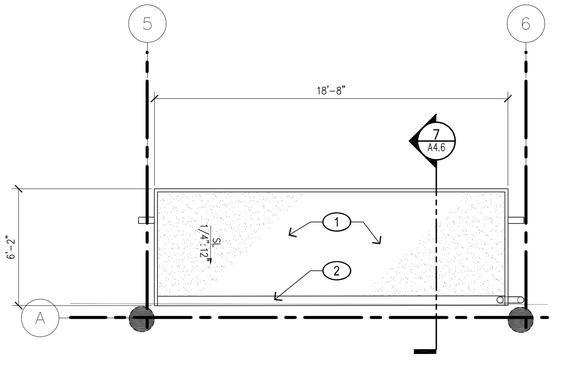
2 DEDUCTIVE ALTERNATE 1: NEW ROOF PLAN

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



6 DEDUCTIVE ALTERNATE 1: EXT. STAIR REFLECTED CEILING PLAN

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



3 DEDUCTIVE ALTERNATE 1: NEW ROOF PLAN

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

KEYNOTES:

1. REINFORCED FLUID APPLIED ROOFING SYSTEM OVER TAPERED INSULATION
2. COPPER GUTTER AND DOWNSPOUT
3. PAINTED GALVANIZED STEEL TUBE BEAM, JOIST, PURLINS AND C-CHANNEL FASCIA (SEE STRUCT)
4. 4" SQ GALVANIZED STEEL POST (SEE STRUCT)
5. 4"ø COPPER DOWNSPOUT

KEYNOTES:

HAWAII ARMY NATIONAL GUARD

A/E INFO

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ANN A. KUTAKA
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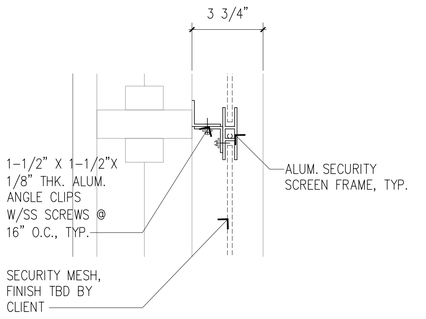
IMPROVEMENTS

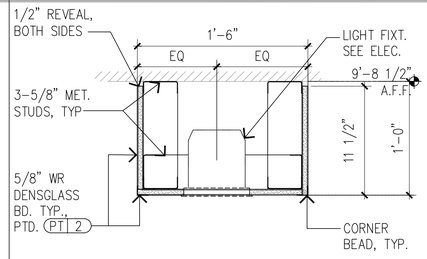
ENLARGED STAIR - REFLECTED CEIL'G & ROOF PLANS

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 45 OF 78

A4.6



17 SCREEN DETAIL
SCALE: 3"= 1'-0"



13 EXTERIOR LIGHT DETAIL
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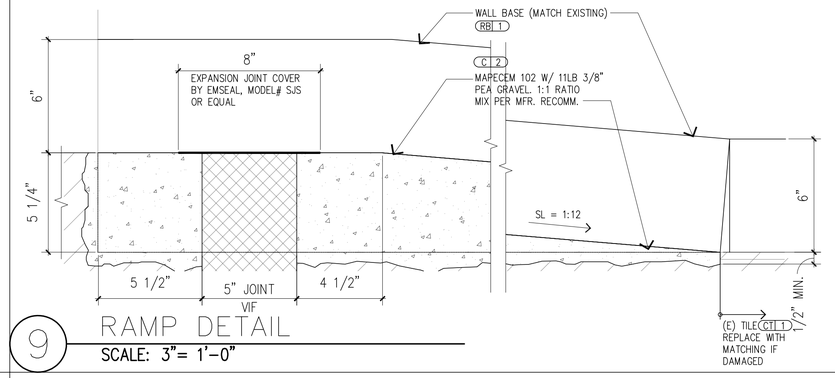

9 RAMP DETAIL
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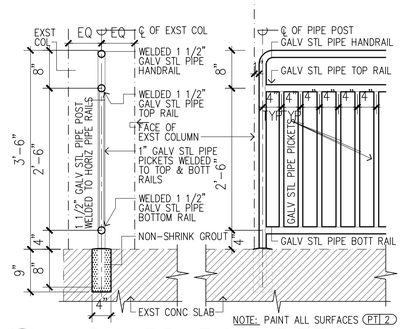
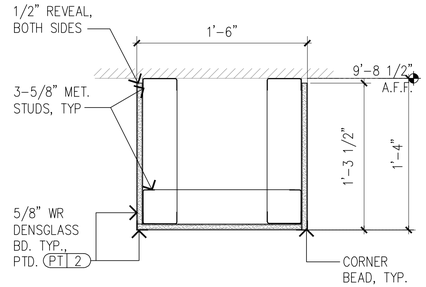


1 GUARD RAIL DETAIL
SCALE: 3/4"= 1'-0"



19 EXTERIOR SOFFIT DETAIL
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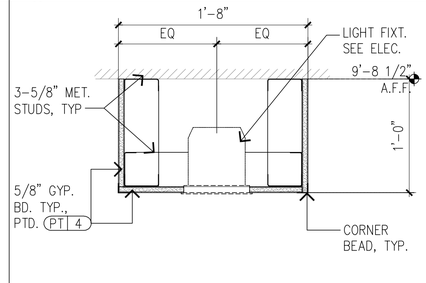

15 SOFFIT DETAIL
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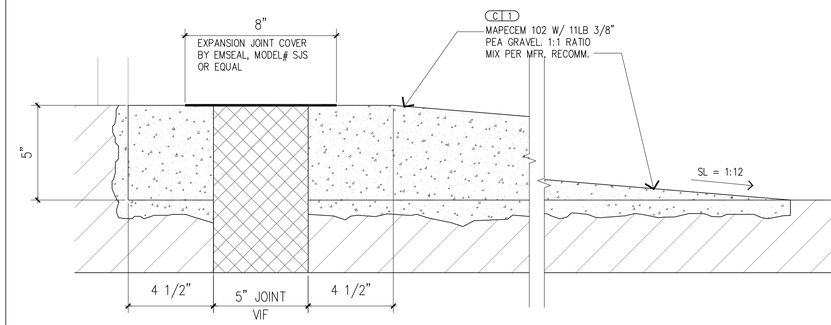

11 RAMP DETAIL
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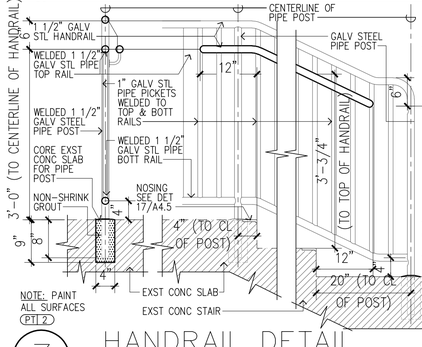
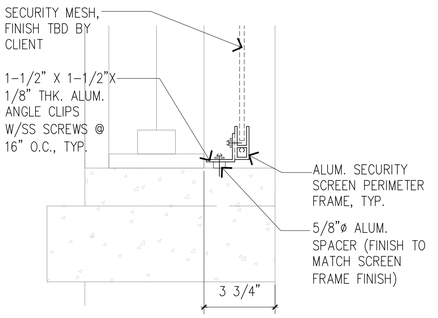


2 RAILING DETAL
SCALE: 3/4"= 1'-0"



18 SCREEN DETAIL
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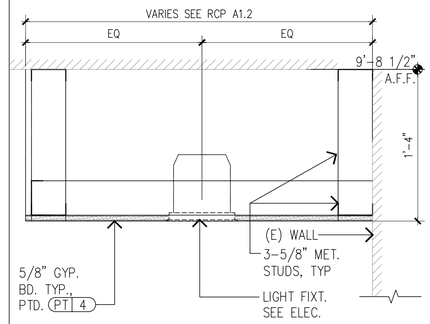

14 SOFFIT DETAIL
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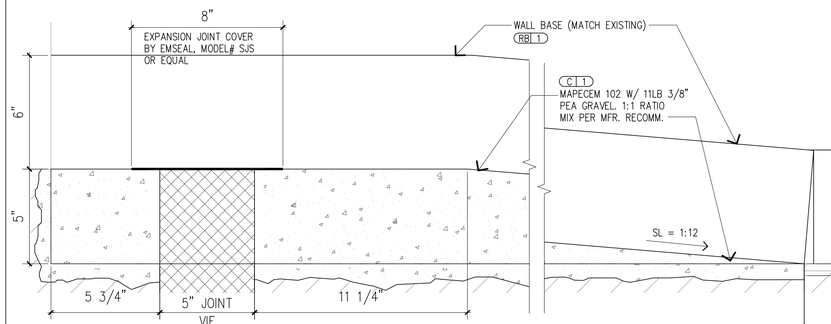

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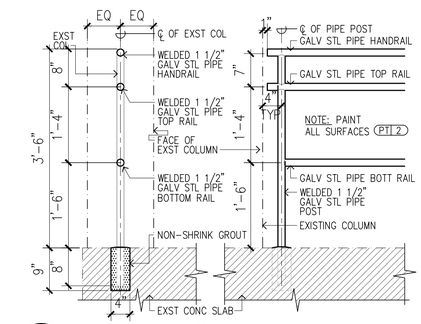
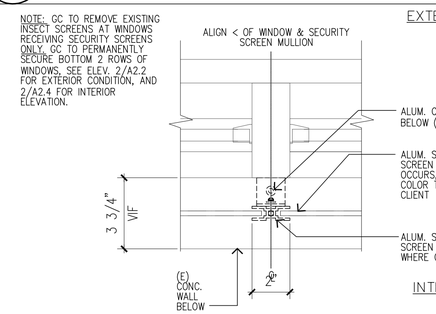


2 RAILING DETAL
SCALE: 3/4"= 1'-0"



20 SECURITY SCREEN DETAIL
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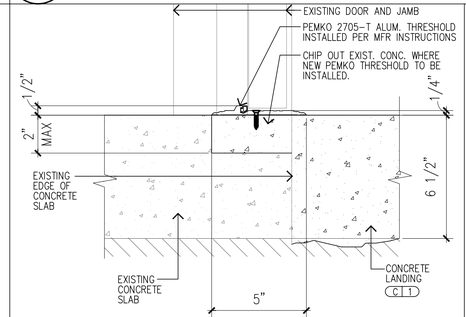
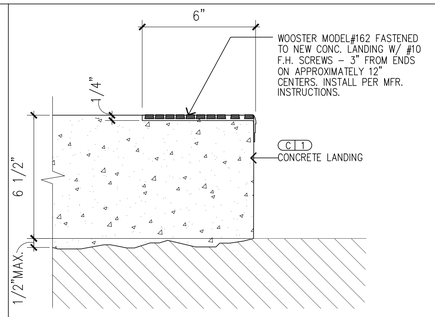
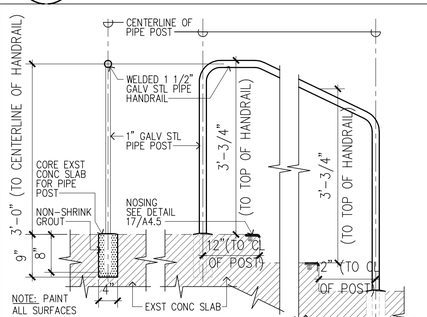


12 SADDLE DETAIL
SCALE: 3"= 1'-0"



8 LANDING EDGE DETAIL
SCALE: 3"= 1'-0"



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

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

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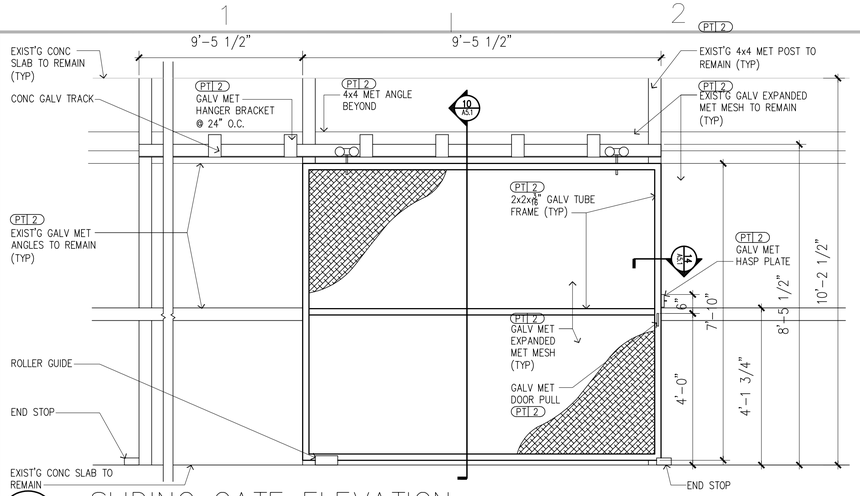
DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

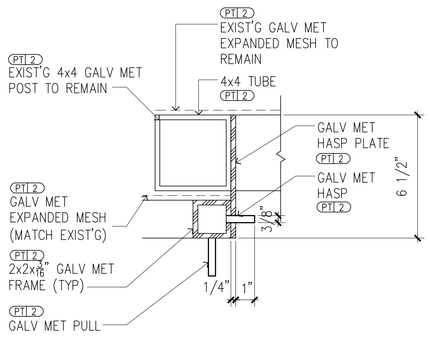
BUILDING 19 IMPROVEMENTS

DETAILS

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 46 OF 78
A5.0



16 SLIDING GATE ELEVATION
SCALE: 1/2"= 1'-0"



14 SECTION THRU SLIDING GATE
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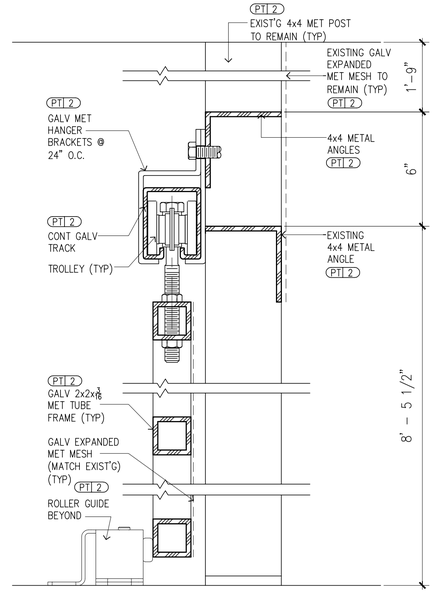

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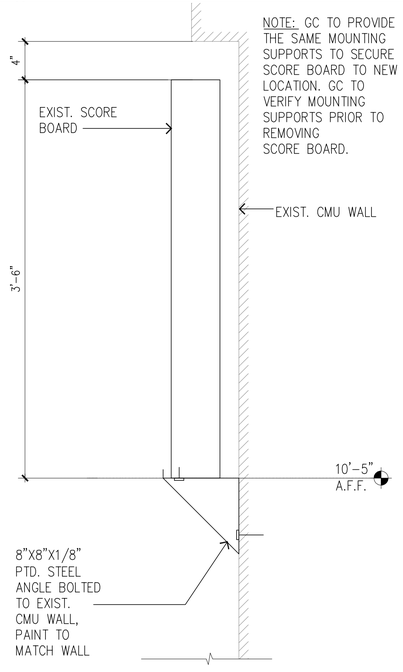

12 DETAIL
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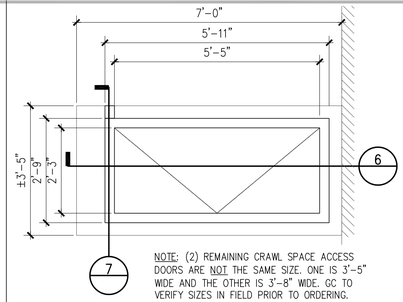
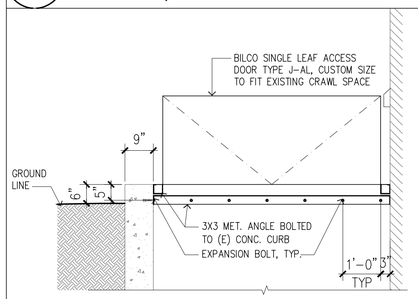


5 CRAWL SPACE PLAN DETAIL
SCALE: 1/2"= 1'-0"



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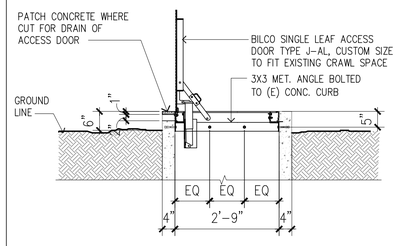

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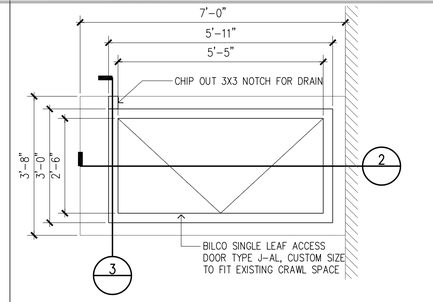

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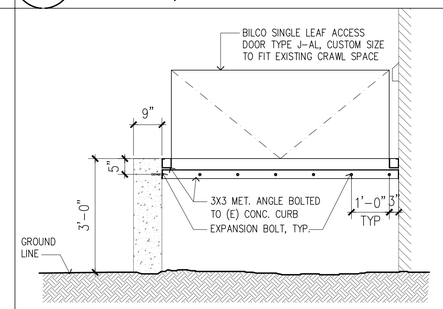

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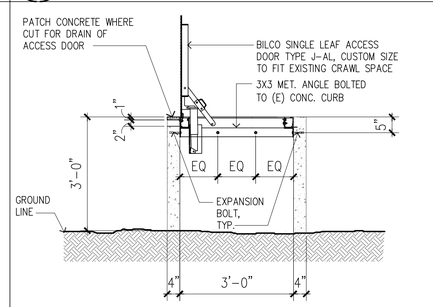

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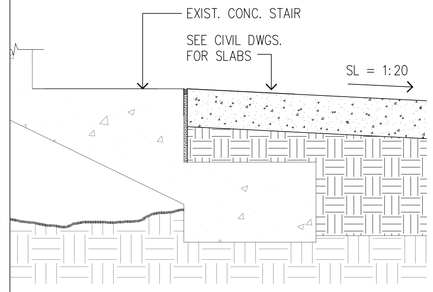

4 DETAIL – ALT. 1
SCALE: 1-1/2"= 1'-0"

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
No. 6239
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
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SCALE:

STATE JOB NO.
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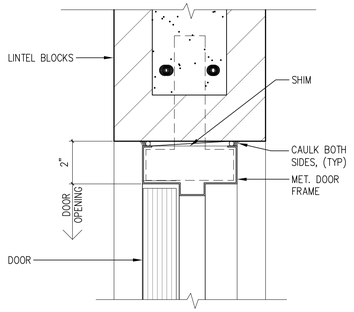
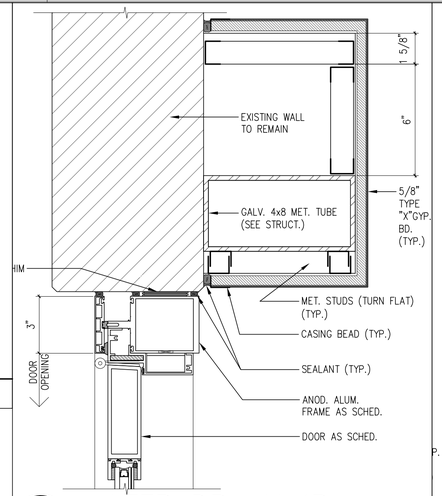
PN15130011
SHEET 47 OF 78

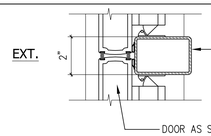
A5.1



15 HOLLOW METAL DOOR HEAD (JAMB SIM.)
SCALE: 3"= 1'-0"



11 ATFP DR. JAMB
SCALE: 3"= 1'-0"



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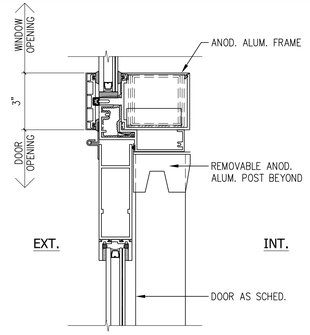

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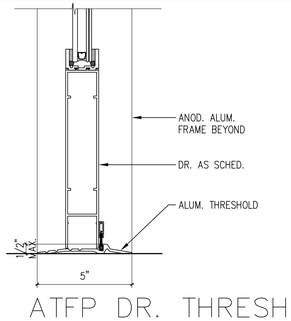
SCALE: 3"= 1'-0"



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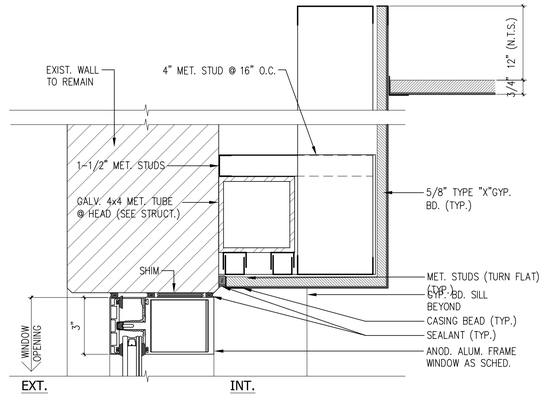

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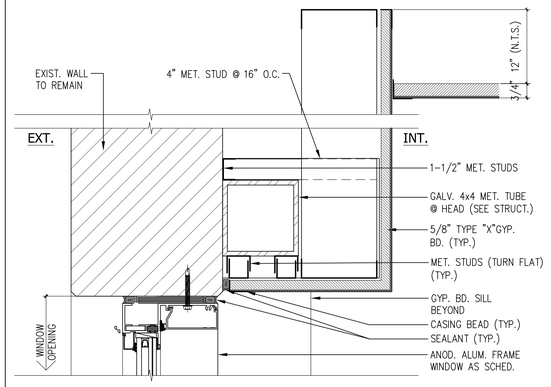

5 AWNING WNDW HD
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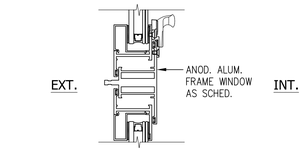

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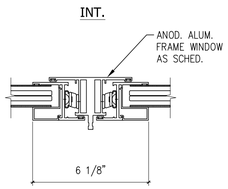
SCALE: 3"= 1'-0"



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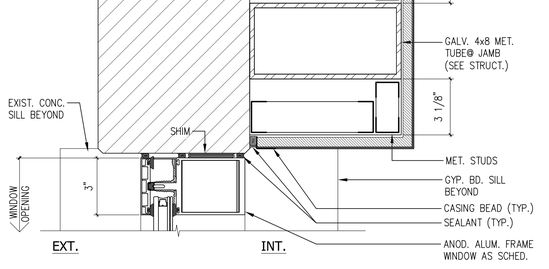

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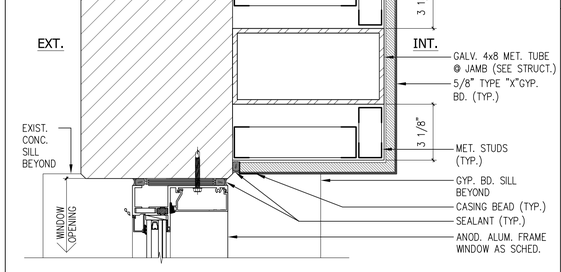

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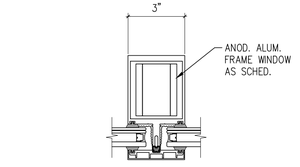

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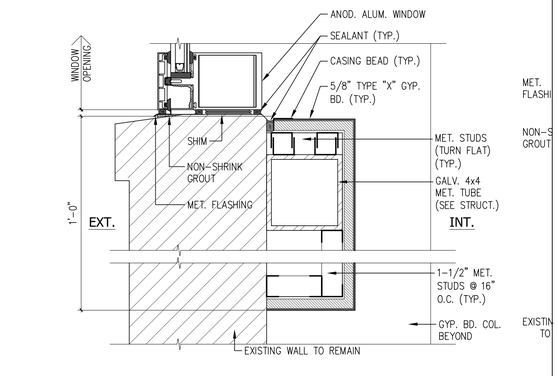

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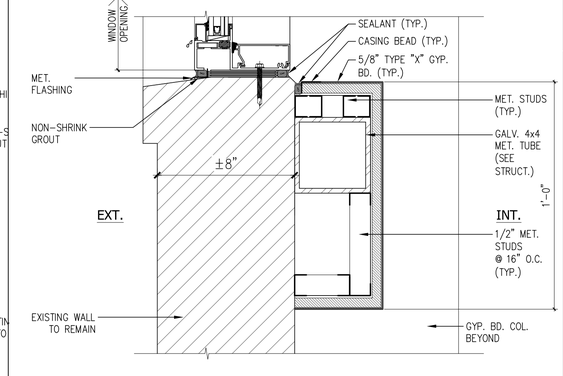

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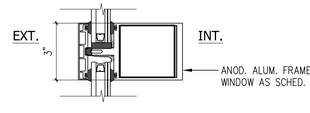

4 ATFP WNDW MUNTIN
SCALE: 3"= 1'-0"

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ANN A. KUTAKA
LICENSED PROFESSIONAL ARCHITECT
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APPR
DATE
DESCRIPTION
SYM

SUBMITTAL PHASE
FINAL DESIGN
SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
BUILDING 19 IMPROVEMENTS
WINDOW DETAILS

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 48 OF 78
A5.2

GENERAL:

A. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE BUILDING CODE AS STATED BELOW. HOWEVER, WHERE REFERENCE IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRINGENT SHALL APPLY.
   1. THE DEPARTMENT OF DEFENSE, UFC 1-200-01, 20 JUNE 2016, AMENDED IBC, 2015.
   2. THE DEPARTMENT OF DEFENSE, UFC 3-301-01, 1 JUNE 2013, INCLUDING CHANGE 3, 12 SEPTEMBER 2016.
B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO THE CONTRACTING OFFICER ALL INCONSISTENCIES AND OMISSIONS.
C. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE CONTRACTING OFFICER ALL INCONSISTENCIES AND OMISSIONS.
D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED FOR STABILITY OF STRUCTURAL MEMBERS AND SYSTEMS.
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES DURING THE CONSTRUCTION PERIOD.
G. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.

DESIGN CRITERIA:

A. ROOF LIVE LOAD: ----------20 PSF
B. WIND DESIGN DATA
   1. BASIC WIND SPEED (3-SECOND GUST, STRENGTH LEVEL): -------130 MPH
   2. RISK CATEGORY: ----------II
   3. EXPOSURE CATEGORY: ---------- C
C. EARTHQUAKE DESIGN DATA:
   1. RISK CATEGORY: ----------II
   2. MAPPED SPECTRAL RESPONSE ACCELERATIONS
      a. SHORT PERIOD: ---------- 0.59g
      b. 1-SEC PERIOD: ---------- 0.17g
   3. SITE CLASS: ---------- D
   4. SPECTRAL RESPONSE COEFFICIENTS
      a. SHORT PERIOD: ---------- 0.52g
      b. 1-SEC PERIOD: ---------- 0.24g
   5. DESIGN CATEGORY: ---------- D
D. BLAST LOADS
   1. CONTROLLED PERIMETER: EXPLOSIVE WEIGHT I
   2. PARKING WITHIN A CONTROLLED PERIMETER: EXPLOSIVE WEIGHT II
E. SOILS
   1. ALLOWABLE BEARING CAPACITY: ---------- 1,500 PSF

SPECIAL INSPECTIONS:

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT SPECIAL INSPECTION OF PORTIONS OF THE WORK AS REQUIRED BY THE BUILDING CODE IS MADE AT THE APPROPRIATE TIME. THE CONTRACTOR SHALL SUBMIT STATEMENT OF RESPONSIBILITY TO THE CONTRACTING OFFICER AND BUILDING DEPARTMENT PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL GIVE TIMELY NOTICE OF WHEN AND WHERE INSPECTIONS ARE TO BE MADE AND PROVIDE ACCESS FOR THE INSPECTOR. FREQUENCY OF INSPECTION IS DEFINED IN THE IBC, SECTION 1704 TABLES, AS AMENDED. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO THE GOVERNMENT AND PAY FOR RE-INSPECTION AS REQUIRED.
B. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. THE INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE CONTRACTING OFFICER AND LICENSED ARCHITECT OR ENGINEER WHO IN TURN SHALL SUBMIT A WRITTEN STATEMENT CERTIFYING RECEIPT OF THE FINAL INSPECTION LETTER AND DOCUMENTING THAT THERE ARE NO KNOWN UNRESOLVED CODE REQUIREMENTS.
C. THE FOLLOWING TYPE OF WORK LISTED IN THE IBC, SECTION 1704, REQUIRES SPECIAL INSPECTION:
   1. INSPECTION OF FABRICATOR/SHOP UNLESS WORK IS DONE BY A REGISTERED AND APPROVED FABRICATOR SHOP.
      a. STRUCTURAL STEEL
   2. STEEL CONSTRUCTION
      a. WELDING
   3. CONCRETE CONSTRUCTION
      a. EXCEPTIONS: INSPECTIONS NOT REQUIRED FOR CONCRETE POURS FOR
         i. CONCRETE FOOTINGS SUPPORTING BUILDINGS THREE STORIES OR LESS IN HEIGHT THAT ARE FULL SUPPORTED ON EARTH OR ROCK (DESIGNED f'c=2,500 PSI), INSPECTION OF REINFORCING IS REQUIRED
         ii. NON STRUCTURAL SLABS SUPPORT DIRECTLY ON GROUND.
      b. PLACEMENT OF REINFORCING STEEL
   4. SEE DRAWINGS FROM OTHER DISCIPLINES FOR NON-STRUCTURAL SPECIAL INSPECTION REQUIREMENTS

FOUNDATION:

A. CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATION FROM SURFACE WATER, GROUND WATER OR SEEPAGE.
B. EXCAVATIONS FOR ANY PURPOSE SHALL NOT REMOVE LATERAL SUPPORT FROM ANY FOOTING OR FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOOTING OR FOUNDATION AGAINST SETTLEMENT OR LATERAL TRANSLATION.
C. FOOTINGS SHALL BEAR ON UNDISTURBED IN-SITU FIRM SOILS. BOTTOM OF FOOTINGS SHALL BE COMPACTED TO PROVIDE A RELATIVELY FIRM AND SMOOTH BEARING SURFACE PRIOR TO PLACEMENT OF REINFORCING STEEL AND CONCRETE. IF SOFT AND/OR LOOSE MATERIALS ARE ENCOUNTERED AT THE BOTTOM OF FOOTING EXCAVATIONS, THEY SHALL BE OVER-EXCAVATED TO EXPOSE THE UNDERLYING FIRM MATERIALS. THE OVER-EXCAVATION SHALL BE BACKFILLED WITH SELECT GRANULAR MATERIAL COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION OR THE FOOTING BOTTOM MAY BE EXTENDED DOWN TO THE UNDERLYING COMPETENT MATERIAL.
D. UNLESS NOTED OTHERWISE, THE MINIMUM DEPTH OF FOOTINGS BELOW THE UNDISTURBED GROUND SURFACE SHALL BE 12 INCHES.

CONCRETE:

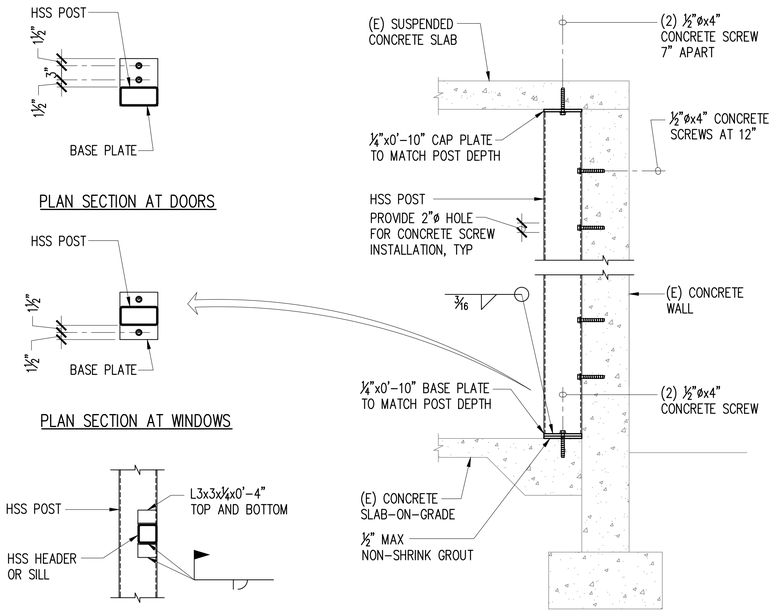
A. CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE ACI 318
B. CONCRETE SHALL BE REGULAR WEIGHT HARD ROCK CONCRETE AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI (DESIGNED FOR 3,000 PSI).
C. CONCRETE DELIVERY TICKETS SHALL RECORD ALL FREE WATER IN THE MIX: AT BATCHING BY PLANT, FOR CONSISTENCY BY DRIVER, AND ANY ADDITIONAL REQUEST BY CONTRACTOR IF PERMITTED BY THE MIX DESIGN.
D. WATER USED IN MIXING CONCRETE SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS OR OTHER SUBSTANCES THAT ARE DELETERIOUS TO CONCRETE OR STEEL REINFORCEMENT.
E. ALL INSERTS, ANCHOR BOLTS, PLATES, AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A153 UNLESS OTHERWISE NOTED.
F. REINFORCING BARS, ANCHOR BOLTS, INSERTS, AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE.
G. NON-SHRINK GROUT SHALL BE A PREMIXED NON-METALLIC FORMULA, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 1 DAY AND 5,000 PSI IN 28 DAYS.

REINFORCING STEEL:

A. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
B. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
   1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   2. CONCRETE FORMED AND EXPOSED TO EARTH OR WEATHER: 1.5"
C. CLEAR DISTANCE BETWEEN THE SURFACE OF A BAR AND ANY SURFACE OF A MASONRY UNIT SHALL BE NOT LESS THAN 1/2 INCH, UNLESS OTHERWISE NOTED.
D. STANDARD HOOKS ON REINFORCING BARS USED SHALL COMPLY WITH ACI 318, SECTION 7.1.
E. MINIMUM REINFORCEMENT BEND DIAMETERS SHALL COMPLY WITH ACI 318, SECTION 7.2.

STRUCTURAL STEEL:

A. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION, THIRTEENTH EDITION.
B. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE NOTED.
C. STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE B.
D. HIGH-STRENGTH BOLTS SHALL CONFORM TO ASTM A325, TYPE N. INSTALLATION SHALL BE ASSURED BY ANY OF THE FOLLOWING METHODS.
   1. TURN OF NUT METHOD
   2. DIRECT TENSION INDICATOR
   3. CALIBRATED WRENCH
E. WELDS AND WELDING PROCEDURES SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1 OF THE AMERICAN WELDING SOCIETY.
F. WELDING SHALL BE PERFORMED BY WELDERS PREQUALIFIED FOR WELDING PROCEDURES TO BE USED.
G. WELDING ELECTRODES SHALL BE E70XX.
H. ALL STEEL SHALL BE PRIME PAINTED IN THE SHOP.
I. EXTERIOR STEEL SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A123.
J. ALL ANCHOR BOLTS, PLATES, AND OTHER ITEMS TO BE CAST IN CONCRETE SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A153 UNLESS OTHERWISE NOTED.



1 / S1.1 TYPICAL WALL STRENGTENING DETAIL
SCALE: 3/4" = 1'-0"

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

HAWAII ARMY NATIONAL GUARD

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

JONATHAN D MURAI
LICENSED PROFESSIONAL ENGINEER
No. 15694
HAWAII, U.S.A.
EXPIRES APRIL 30, 2020 SEAL

	APPR	DATE	DESCRIPTION
SYM			

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
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FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

GENERAL NOTES

SCALE:

STATE JOB NO.
CA-1514-C
FEDERAL PROJECT NO.
PN15130011
SHEET 49 OF 78

S1.1

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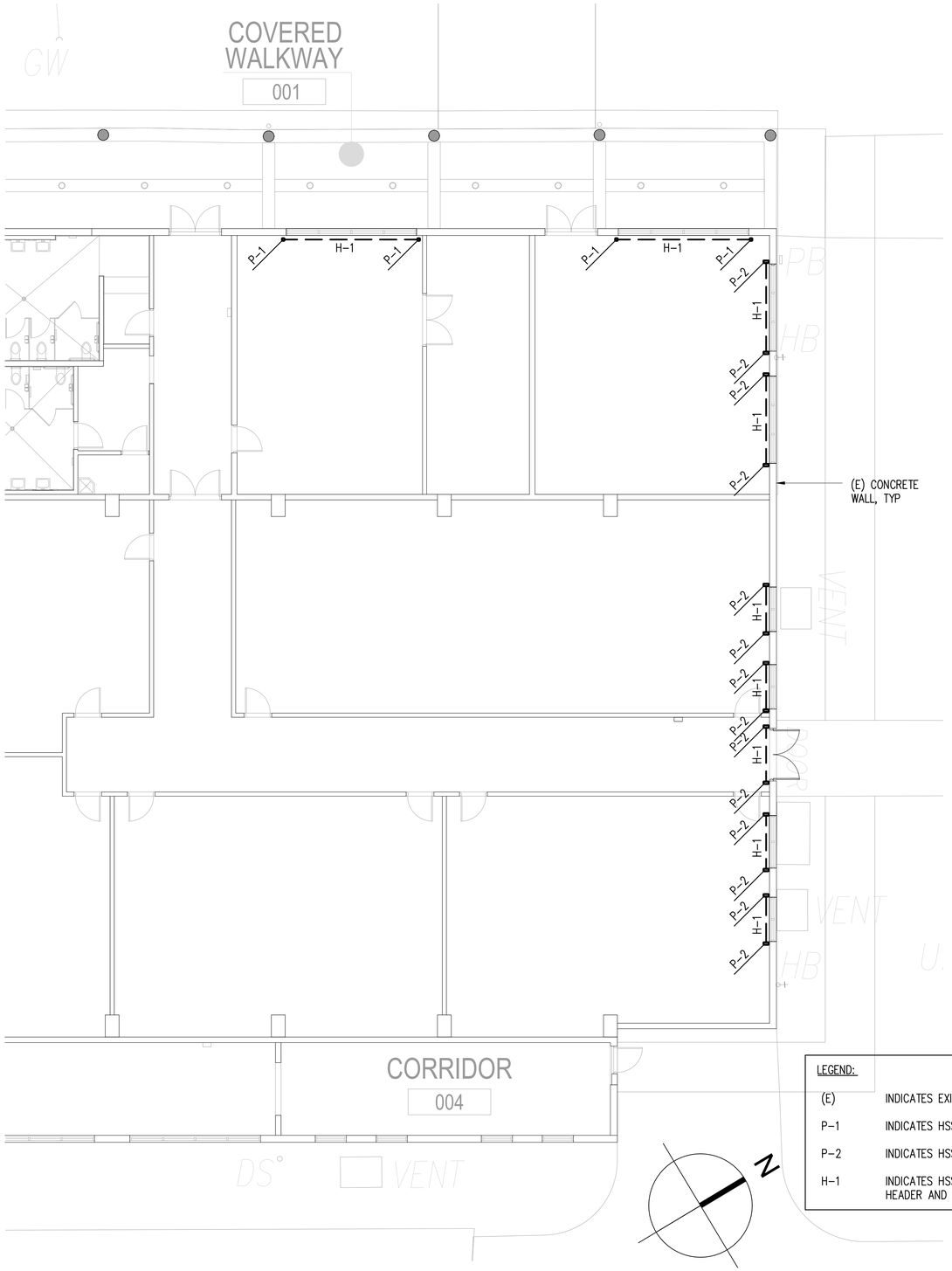

1 S3.1 WALL STRENGTHENING PLAN
SCALE: 1/8" = 1'-0"

A/E INFO

I CERTIFY THAT THIS DRAWING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

JONATHAN D MURAI
LICENSED PROFESSIONAL ENGINEER
HAWAII, U.S.A.

EXPIRES APRIL 30, 2020 SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

WALL STRENGTHENING PLAN

SCALE:
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 50 OF 78

S3.1

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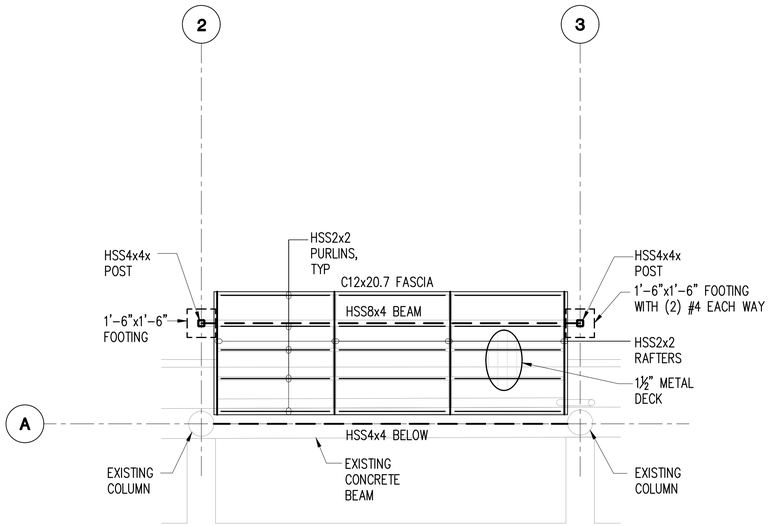
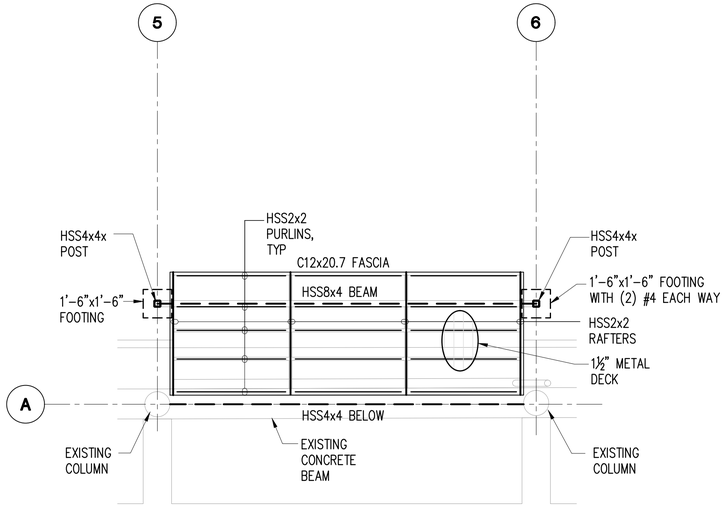


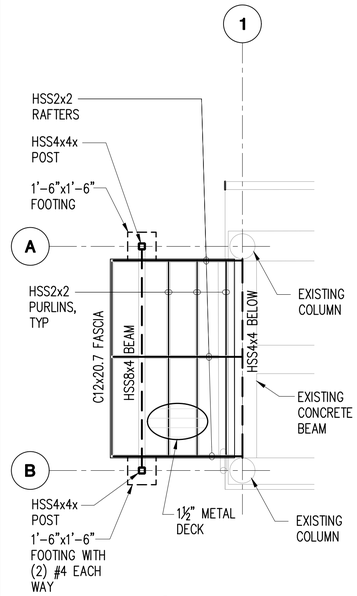
1 S3.2 DEDUCTIVE ALTERNATE 1: CANOPY FRAMING PLAN

SCALE: 1/4" = 1'–0"



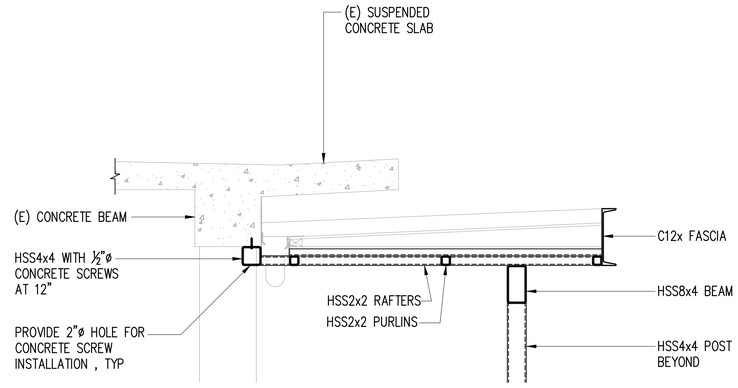
2 S3.2 DEDUCTIVE ALTERNATE 1: CANOPY FRAMING PLAN

SCALE: 1/4" = 1'–0"



3 S3.2 DEDUCTIVE ALTERNATE 1: CANOPY FRAMING PLAN

SCALE: 1/4" = 1'–0"



4 S3.2 DEDUCTIVE ALTERNATE 1: SECTION THRU CANOPY

SCALE: 3/4" = 1'–0"

0' 1' 2' 3' 4'
3/4" = 1'–0"

0' 2' 4' 8' 12'
1/4" = 1'–0"

A/E INFO

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JONATHAN D MURAI
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No. 10974
HAWAII, U.S.A.
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NO	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: DRW: IFD CHK: RY

DEPARTMENT OF DEFENSE
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KALAELOA, KAPOLEI, OAHU, HAWAII
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91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

DEDUCTIVE ALT. 1: TYP. CANOPY FRMG PLANS & SECTION

SCALE:

STATE JOB NO.
CA–1514–C

FEDERAL PROJECT NO.
PN15130011

SHEET 51 OF 78

S3.2

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HVAC LEGEND

- CONTROL DAMPER, MOTOR OPERATED
- MANUAL BALANCE DAMPER
- BACKDRAFT DAMPER
- ACCESS DOOR (AD) ACCESS PANEL (AP)
- FLEXIBLE DUCT CONNECTION
- RECTANGLUAR ELBOW WITH TURNING VANES
- RECTANGULAR TEE WITH TURNING VANES
- RECTANGULAR RADIUS ELBOW
- RISE IN RESPECT TO AIR-FLOW
- DROP IN RESPECT TO AIR-FLOW
- SQUARE OR RECTANGULAR TO ROUND TRANSITION
- SUPPLY AIR OR OUTSIDE AIR DUCT SECTION
- RETURN AIR DUCT SECTION
- EXHAUST AIR DUCT SECTION
- ROUND FLEXIBLE DUCT (5'-0" MAX LENGTH)
- SQUARE OR RECTANGULAR SUPPLY DIFFUSER
- RETURN AIR DIFFUSER
- EXHAUST AIR DIFFUSER
- THERMOSTAT
- EMERGENCY SHUT-OFF SWITCH
- MOTOR

MECHANICAL ABBREVIATIONS

AI/AO	ANALOG INPUT / ANALOG OUTPUT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ARF	ABOVE RAISED FLOOR
BI/BO	BINARY INPUT / BINARY OUTPUT
BOP	BOTTOM OF PIPE
CL	CENTER LINE OF PIPE ELEVATION
CONC	CONCENTRIC
CHWP	CHILLED WATER PUMP
DN	DOWN
EL	ELEVATION
ELL	ELBOW
ET	EXPANSION TANK
EXIST	EXISTING
FCU	FAN COIL UNIT
LDP	LOCAL DISPLAY PANEL
NC	NORMALLY CLOSED (FAIL POSITION)
NO	NORMALLY OPEN (FAIL POSITION)
PH	PHASE
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
RED	REDUCER-REDUCING
SCH	SCHEDULE
SP	STATIC PRESSURE SENSOR
SRC	SPRING RETURN CLOSED

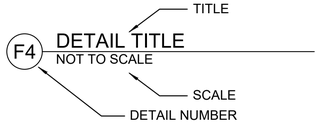
PIPE LINE ACCESSORIES

- BALL VALVE
- HOSE GATE DRAIN VALVE
- CHECK VALVE
- 3 - WAY VALVE
- BALANCING VALVE
- CONTROL VALVE
- SUCTION DIFFUSER
- BACKFLOW PREVENTION ASSEMBLY
- AUTOMATIC AIR VENT ASSEMBLY (AV)
- MANUAL AIR VENT - SEE SPECIFICATIONS FOR APPROPRIATE VALVE TYPE. (MV)
- PUMP
- THERMOMETER
- PRESSURE GAUGE
- Y-TYPE STRAINER
- WELD CAP
- REMOVABLE CAP
- REDUCER (CONCENTRIC)
- REDUCER (ECCENTRIC)
- UNION
- BLIND FLANGE
- TEST CONNECTION

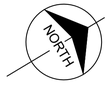
PIPE LINE ABBREVIATIONS

DCW	DOMESTIC COLD WATER
EXIST	EXISTING

DETAIL/SECTION TITLE



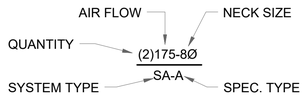
NORTH ARROW



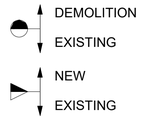
MECHANICAL GENERAL NOTES:

1. LEGEND IS GENERAL IN NATURE AND MAY INDICATE MORE INFORMATION THAN IS APPLICABLE TO PROJECT. SEE PLANS FOR SPECIFIC SYMBOLS AND ABBREVIATIONS.
2. PROVIDE ALL MATERIALS, VALVES, HANGERS, ETC. AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
3. INSTALL ALL MECHANICAL AND PLUMBING EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
4. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH CIVIL WORK, ELECTRICAL WORK, ETC..
5. MAINTAIN A MINIMUM OF 6'-8" MIN. CLEARANCE TO UNDERSIDE OF PIPES, CONDUITS, ETC., THROUGHOUT ACCESS ROUTES AND IN MECHANICAL ROOMS.
6. LOCATE ALL MECHANICAL EQUIPMENT FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS, CONTROLS, AND VALVING.
7. VERIFY DIMENSIONS AND CONNECTION SIZE WITH FURNISHED EQUIPMENT.
8. ALL ELEVATIONS ARE ABOVE FINISHED FLOOR TO BOTTOM OF DUCT, PIPE, OR PIPE INSULATION UNLESS NOTED OTHERWISE.
9. PIPES ARE OFFSET FOR CLARITY. CONTRACTOR SHALL ROUTE PIPES AS TIGHT TO STRUCTURE AS POSSIBLE. INSTALL VALVES IN ACCESSIBLE LOCATIONS FOR MAINTENANCE. CONTRACTOR SHALL COORDINATE PIPE ELEVATIONS WITH OTHER DISCIPLINES AS REQUIRED.
10. THE EXISTING CONDITIONS INDICATED ON THESE DRAWINGS ARE TAKEN FROM THE BEST INFORMATION AVAILABLE FROM VISUAL SITE OBSERVATIONS AND AVAILABLE DRAWINGS. THE INFORMATION IS SHOWN TO HELP ESTABLISH THE EXTENT OF THE WORK TO BE DONE. THE CONTRACTOR SHALL VERIFY ALL ACTUAL CONDITIONS AND THE INTENT OF THE WORK INDICATED ON THESE DRAWINGS.
11. COORDINATE ALL WALL PENETRATIONS WITH ARCHITECTURAL PLANS.
12. DUCT DIMENSIONS INDICATED REFER TO SHEET METAL DIMENSIONS. WHERE LINER IS NOT INSTALLED, AIR OPENING SIZE AND SHEET METAL SIZE SHALL BE THE SAME.
13. DUCT STATIC PRESSURE CLASSIFICATION: UNLESS OTHERWISE INDICATED, CONSTRUCT DUCTS ON THE DISCHARGE SIDE OF FANS TO HAVE 1.0 IN. W.C. POSITIVE PRESSURE AND DUCTS ON THE INLET SIDE OF EQUIPMENT TO HAVE 1.0 IN. W.C. NEGATIVE PRESSURE CLASSIFICATION.

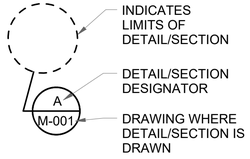
AIR DISTRIBUTION DEVICE IDENTIFICATION



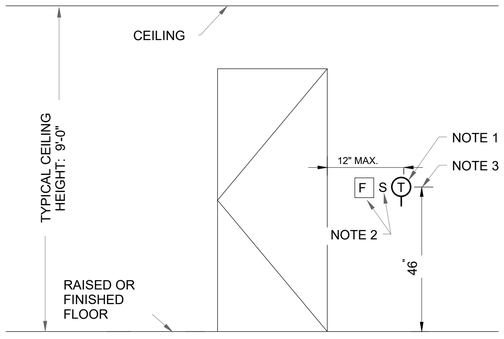
CONSTRUCTION INTERFACE



DETAIL/ENLARGED CALLOUT SYMBOL



TYPICAL DEVICE MOUNTING DETAIL



DEVICE MOUNTING NOTES:

1. THERMOSTATS AND OTHER WALL-MOUNTED DEVICES SHALL BE MOUNTED WITHIN 12" OF DOOR FRAME. COORDINATE WITH ARCHITECTURAL DRAWINGS. WHERE DEVICES ARE SHOWN ADJACENT TO THE DOOR ON THE HINGE-SIDE OF THE DOOR, AND THE DOOR SWINGS IN A MANNER THAT SHALL BLOCK THE DEVICE, MOUNT THE DEVICE 12" BEYOND THE DOOR SWING.
2. COORDINATE MOUNTING LOCATION WITH OTHER TRADES TO ENSURE A UNIFORM MOUNTING AND AESTHETICALLY-PLEASING APPEARANCE. DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SHALL GOVERN.
3. MOUNTING HEIGHT INDICATED IN LEGEND AND ON THE DRAWINGS SHALL BE THE DISTANCE MEASURED FROM THE CENTER OF THE DEVICE TO THE FINISHED FLOOR.

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

BRIAN A. SEABAUGH
LICENSED PROFESSIONAL ENGINEER
No. 16352-M
EXP 4/30/20
HAWAII, U.S.A.

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SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE: FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: J. KLEINOWSKI DRW: J. KLEINOWSKI CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

MECHANICAL LEGEND AND ABBREVIATIONS

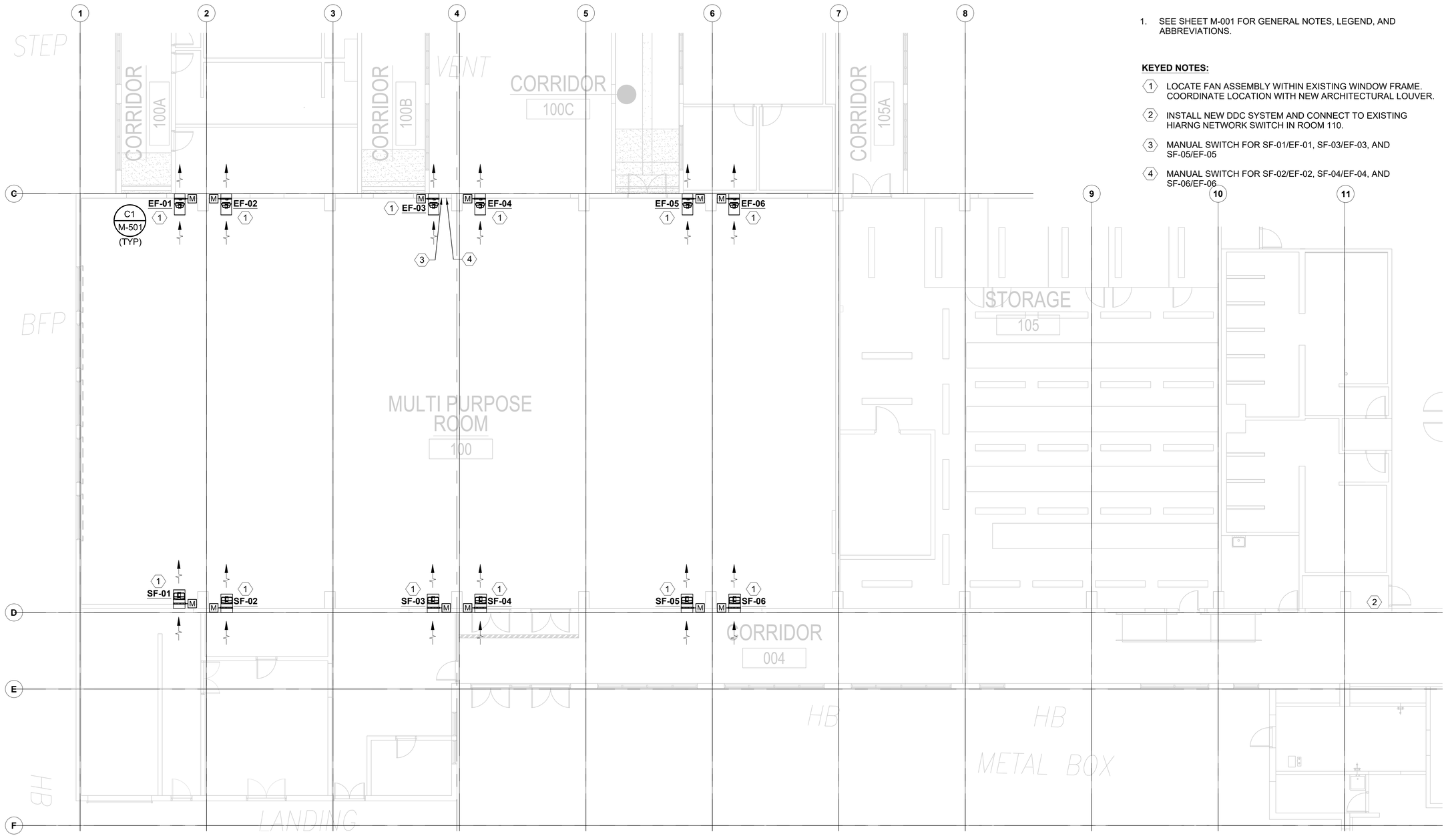
SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 52 OF 78

M-001



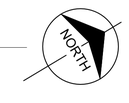
GENERAL NOTES:

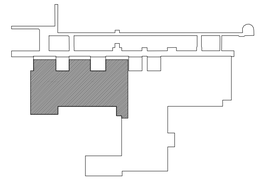
1. SEE SHEET M-001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

KEYED NOTES:

1. LOCATE FAN ASSEMBLY WITHIN EXISTING WINDOW FRAME. COORDINATE LOCATION WITH NEW ARCHITECTURAL LOUVER.
2. INSTALL NEW DDC SYSTEM AND CONNECT TO EXISTING HIARNG NETWORK SWITCH IN ROOM 110.
3. MANUAL SWITCH FOR SF-01/EF-01, SF-03/EF-03, AND SF-05/EF-05
4. MANUAL SWITCH FOR SF-02/EF-02, SF-04/EF-04, AND SF-06/EF-06

A1 MECHANICAL PLAN - GYMNASIUM
SCALE: 1/8" = 1'-0"





BURNS McDONNELL

A/E INFO

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LICENSED PROFESSIONAL ENGINEER
No. 16352-M
EXP 4/30/20
HAWAII, U.S.A.

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SEAL

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DES: J. KLEINOWSKI DRW: J. KLEINOWSKI CHK:

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BUILDING 19 IMPROVEMENTS
MECHANICAL PLAN - GYMNASIUM

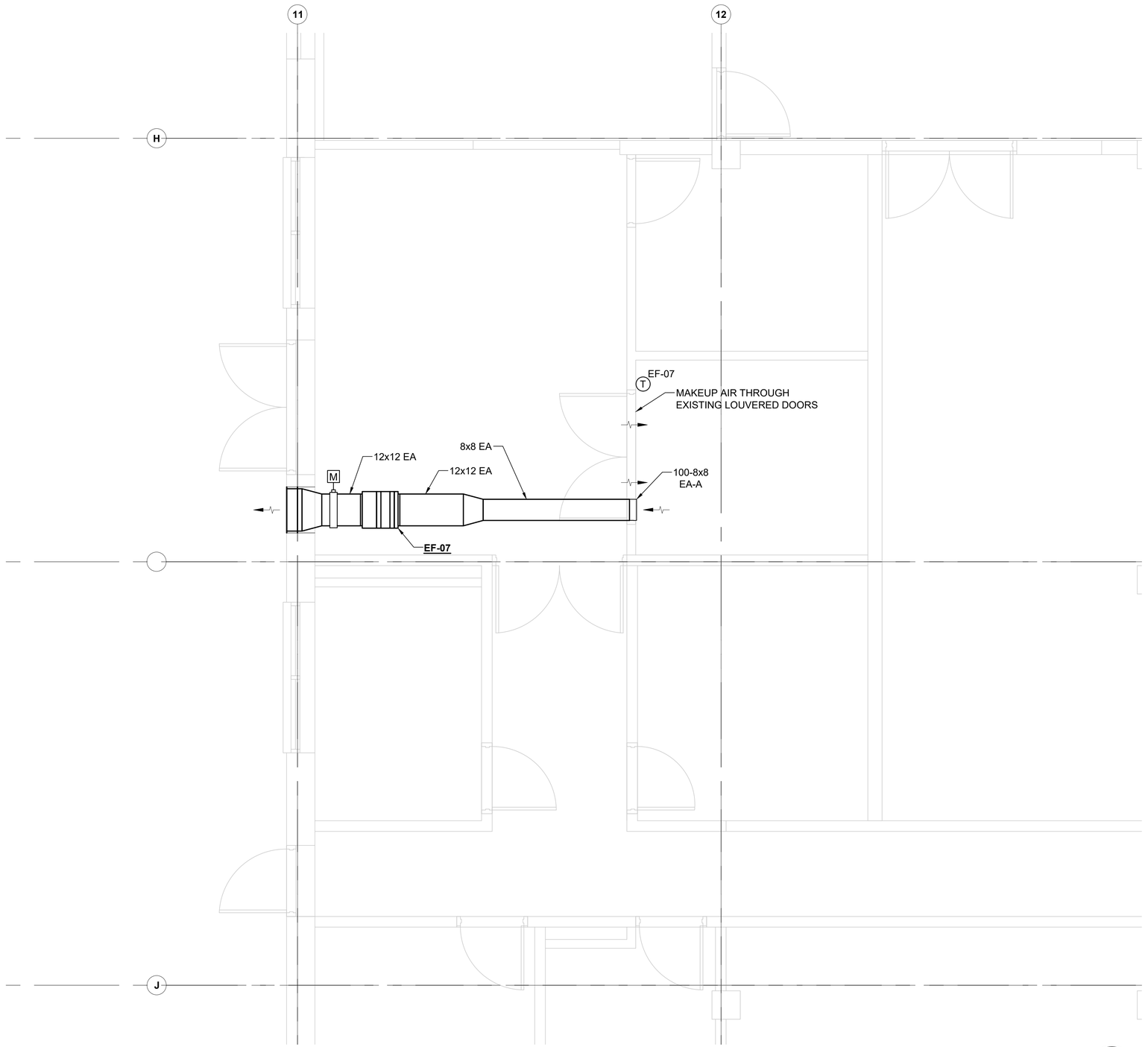
SCALE: 1/8" = 1'-0"

STATE JOB NO. CA-1514-C

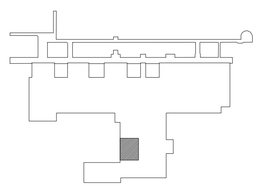
FEDERAL PROJECT NO. PN15130011

SHEET 53 OF 78

M-101



A1 MECHANICAL PLAN - MECHANICAL ROOM
SCALE: 3/8" = 1'-0"



GENERAL NOTES:

1. SEE SHEET M-001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

BRIAN A. SEABAUGH
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EXP 4/30/20
HAWAII, U.S.A.

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FINAL DESIGN

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DES: J. KLEINOW DRW: J. KLEINOW CHK:

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FACILITY MANAGEMENT OFFICE

KALAELOA, KAPOLEI, OAHU, HAWAII
91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

MECHANICAL PLAN - MECHANICAL ROOM

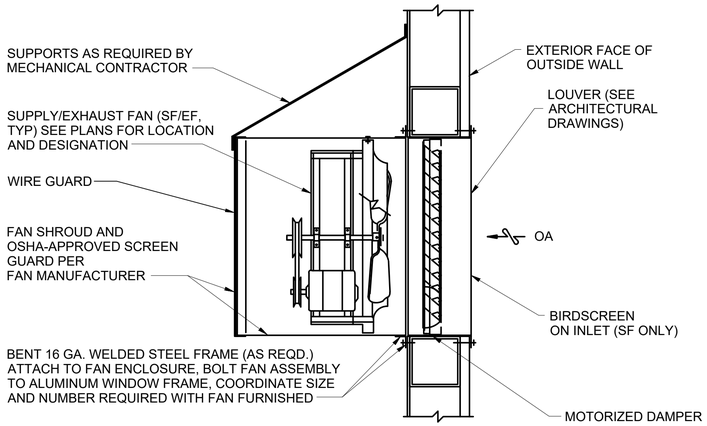
SCALE: 3/8" = 1'-0"

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 54 OF 78

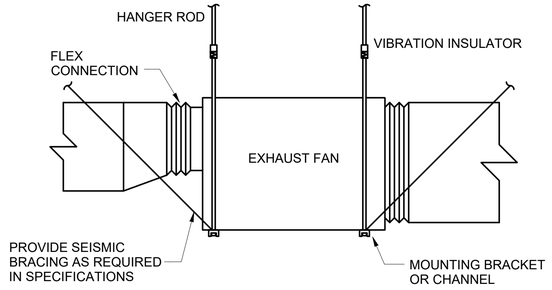
M-102



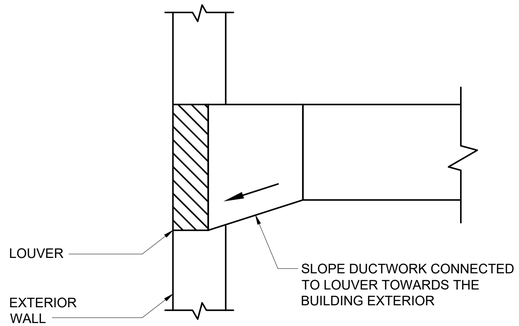
C1 WALL MOUNTED SUPPLY/EXHAUST FAN
SCALE: NONE

NOTES:

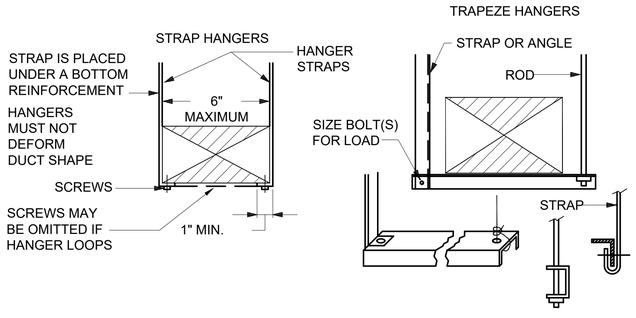
1. PROVIDE MOTOR OPERATED CONTROL DAMPER ON UPSTREAM SIDE OF SUPPLY FANS.



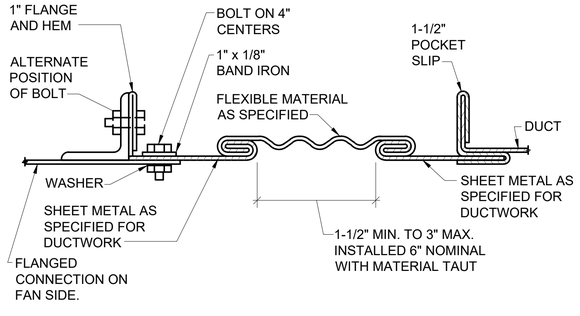
C3 INLINE EXHAUST FAN
SCALE: NONE



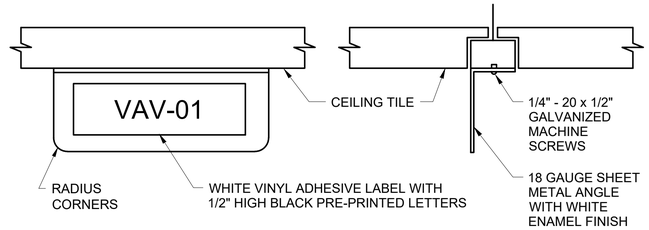
C5 DUCTWORK CONNECTED TO EXTERIOR LOUVER
SCALE: NONE



A1 LOWER DUCT HANGAR ATTACHMENT DETAIL
SCALE: NONE



A3 RECTANGULAR FLEXIBLE CONNECTION DETAIL
SCALE: NONE



NOTES:

1. PROVIDE FOR ALL MECHANICAL EQUIPMENT LOCATED ABOVE CEILING.
2. LOCATE EACH NAMEPLATE DIRECTLY UNDER THE DEVICE IT IDENTIFIES.
3. LETTERING ON BOTH SIDES OF NAMEPLATE.

A5 DEVICE NAMEPLATE DETAIL
SCALE: NONE

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

BRIAN A. SEABAUGH
LICENSED PROFESSIONAL ENGINEER
No. 16352-M
HAWAII, U.S.A.
6/30/20

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BUILDING 19 IMPROVEMENTS

MECHANICAL DETAILS

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 55 OF 78

M-501

LEGEND & SYMBOLS

W-X-Y-Z
##

DEVICE SYMBOL, GENERIC
USED TO REPRESENT SENSORS, INSTRUMENTS SAFETIES, AND OTHER CONTROL DEVICES
W-X-Y-Z : (SEE ABBREVIATIONS AND ACRONYMS)
GENERIC USAGE TO SHOW LOCATION OF DEVICE; PROCESS OR DEVICE BEING MEASURED OR CONTROLLED; SIGNAL TYPE; MODIFIERS AND OTHER APPLICATION INFORMATION

W-X-Y-Z
##

DEVICE SYMBOL, GENERIC
MULTIPLE OUTPUT DEVICE WHERE AT LEAST 1 OUTPUT IS ALWAYS SAFETY INTERLOCK

W-X-Y-Z
DDC
##
DIR
REV

DEVICE SYMBOL, CONTROLLER
DDC : DIRECT DIGITAL CONTROL
: DEVICE NUMBER
DIR : DIRECT CONTROL ACTION, OR
REV : REVERSE CONTROL ACTION
W-X-Y-Z : (SEE ABBREVIATIONS AND ACRONYMS)
GENERIC USAGE TO SHOW LOCATION OF DEVICE; PROCESS OR DEVICE BEING MEASURED OR CONTROLLED; SIGNAL TYPE; MODIFIERS AND OTHER APPLICATION INFORMATION

LDP
##

LOCAL DISPLAY PANEL
= SEQUENTIAL NUMBER
(WHEN MORE THAN 1 LDP)

H P L

PRESSURE SWITCH, DIFFERENTIAL, WITH GAGE
H = HIGH PRESSURE TAP
L = LOW PRESSURE TAP
SEE "DEVICE SYMBOL, GENERIC"

RST-BUT

RESET BUTTON FOR SAFETY RESET

SMOKE DETECTOR, DUCT-MOUNTED
SEE "DEVICE SYMBOL, GENERIC"

TEMPERATURE SENSOR, AVERAGING
or TEMPERATURE LOW LIMIT / FREEZESTAT
SEE "DEVICE SYMBOL, GENERIC"

TEMPERATURE SENSOR, POINT
SEE "DEVICE SYMBOL, GENERIC"

STAT

THERMOSTAT WITH SPECIFIED I/O FUNCTIONS

AFMA

AIR FLOW MEASUREMENT ARRAY,
WITH FLOW TRANSMITTER
SEE "DEVICE SYMBOL, GENERIC"

CONTROL SIGNAL LINE, LOW VOLTAGE

C — COIL, COOLING

DX — COIL, COOLING, DIRECT-EXPANSION

H — COIL, HEATING

PC — COIL, PRECOOL

PH — COIL, PREHEAT

FAN

FILTER

HUMIDIFIER

DAMPER, BALANCING

DAMPER, PARALLEL BLADE
NORMALLY OPEN OR CLOSED AS SHOWN

DAMPER, OPPOSED BLADE
NORMALLY OPEN OR CLOSED AS SHOWN

BOILER

CHILLER

SHELL AND TUBE
HEAT EXCHANGER

PLATE AND FRAME
HEAT EXCHANGER

PUMP

ACTUATOR, ELECTRIC

P — ACTUATOR, PNEUMATIC
WITH LOCALLY MOUNTED
PRESSURE GAGE

P PP M — ACTUATOR, PNEUMATIC
WITH POSITIVE POSITIONER
AND LOCALLY MOUNTED
PRESSURE GAGE

THERMOWELL IN PIPE

VALVE, BALANCING

V-## NC/NO — VALVE, WITH SPRING FAILSAFE
NO = NORMALLY OPEN
NC = NORMALLY CLOSED
= VALVE NUMBER AS SHOWN
IN VALVE SCHEDULE

V-## FL — VALVE
FL = FAIL IN LAST POSITION
= VALVE NUMBER AS SHOWN
IN VALVE SCHEDULE

V-## COM NO NC — VALVE, 3-WAY DIVERTING
WITH SPRING FAILSAFE
NO = NORMALLY OPEN
NC = NORMALLY CLOSED
COM = COMMON PORT
= VALVE NUMBER AS SHOWN
IN VALVE SCHEDULE

V-## NO COM NC — VALVE, 3-WAY DIVERTING
WITH SPRING RETURN FAILSAFE
NO = NORMALLY OPEN
NC = NORMALLY CLOSED
COM = COMMON PORT
= VALVE NUMBER AS SHOWN
IN VALVE SCHEDULE

PP — POSITIVE POSITIONER
SEE "ACTUATOR, PNEUMATIC"

P — PRESSURE GAGE

T — TEMPERATURE GAGE

MAIN AIR — MAIN AIR

M# — MOTOR

MS-# — MOTOR STARTER

CT — CURRENT TRANSFORMER/SWITCH

FM — FLOW METER

VFD XX-C XX-S XX-SS — VARIABLE FREQUENCY DRIVE
XX = PROCESS/DEVICE BEING CONTROLLED

SS = START/STOP COMMAND
S = STATUS FEEDBACK (ON/OFF)
C = 4-20 mA, VDC, or SNVT CONTROL SIGNAL

ABBREVIATIONS & ACRONYMS

2P	TWO-POSITION (CONTROL SIGNAL)
ADJ	ADJUSTABLE/ADJUSTMENT
AFMA	AIRFLOW MEASUREMENT ARRAY
AI	ANALOG INPUT
ALM	ALARM
AMP	AMPERAGE
AO	ANALOG OUTPUT
BI	BINARY INPUT
BLDG	BUILDING
BLR	BOILER
BO	BINARY OUTPUT
BUT	BUTTON
BYP	BYPASS
C	COMMAND (MODULATING CONTROL SIGNAL)
CF	CONDENSER FAN
CH	CHILLER
CHW	CHILLED WATER
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
CLD	CLOSED
CLG	COOLING
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COM	COMMON
COMP	COMPRESSOR
COV	CHANGE OF VALUE
CP	CONFIGURATION PROPERTY
CSR	CURRENT SENSING RELAY
CT	COOLING TOWER
CT	CURRENT TRANSFORMER/SWITCH
CTF	COOLING TOWER FAN
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CW	CONDENSER WATER
D	DAMPER
DA	DISCHARGE AIR
DB	DEADBAND
DDC	DIRECT DIGITAL CONTROL(LER)
DIFF	DIFFERENCE
DIR	DIRECT (CONTROL ACTION)
DIS	DISABLE
DISP	DISPLAY
DPT	DEW POINT TEMPERATURE
DX	DIRECT EXPANSION (UNIT)
EA	EXHAUST AIR
ECM	ELECTRICALLY COMMUTATED MOTOR
ECO	ECONOMIZER
EF	EXHAUST FAN
ENA	ENABLE
EP	ELECTRIC TO PNEUMATIC TRANSDUCER
EPS	ELECTRIC TO PNEUMATIC SWITCH
F	FLOW
FACP	FIRE ALARM CONTROL PANEL
FL	FAIL IN LAST POSITION
FLT	FILTER
H2	HYDROGEN
HL	HIGH LIMIT
HTG	HEATING
HUM	HUMIDIFIER
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
I/O	INPUT/OUTPUT
IR	INFRARED
L	LEVEL
LDP	LOCAL DISPLAY PANEL
LL	LOW LIMIT
LVG	LEAVING
M	MOTOR or MAIN
M&C	MONITORING & CONTROL (SOFTWARE)
MA	MIXED AIR
MINOA	MINIMUM OUTSIDE AIR
MS	MOTOR STARTER
MUW	MAKE-UP WATER
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
nci	NETWORK CONFIGURATION INPUT
NO	NORMALLY OPEN
NVI	NETWORK VARIABLE INPUT
NVO	NETWORK VARIABLE OUTPUT
OA	OUTSIDE AIR
OCC	OCCUPIED
ODT	ON DELAY TIMER
OL	OVERLOAD
OPN	OPEN
OVRD	OVERRIDE
OWS	OPERATOR WORKSTATION
P	PRESSURE
PID	PROPORTIONAL INTEGRAL DERIVATIVE (CONTROL)
PMP	PUMP
PP	POSITIVE POSITIONER
PWR	POWER
R	RELAY
RA	RETURN AIR
RE	RELIEF AIR
REV	REVERSE (CONTROL ACTION)
REF	RELIEF FAN
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RH	REHEAT
RM	ROOM
RQST	REQUEST
RST	RESET
RT	RATE
S	STATUS
SA	SUPPLY AIR
SEC	SECONDARY
SF	SUPPLY FAN
SHUTDN	SHUTDWON
SMK	SMOKE
SNVT	STANDARD NETWORK VARIABLE TYPE
SO	SHUT-OFF
SP	SETPOINT
SS	START/STOP COMMAND
STAT	THERMOSTAT
SYS	SYSTEM
SCHD	SCHEDULER
T	TEMPERATURE
TAP	TAP, PRESSURE
TRB	TROUBLE
TSTAT	THERMOSTAT
UNOCC	UNOCCUPIED
UV	ULTRA VIOLET LIGHT
V	VALVE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VIB	VIBRATION
WB	WET BULB (TEMPERATURE)
XFMR	TRANSFORMER
ZN	ZONE

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

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SYM	DESCRIPTION	DATE	APPR

SUBMITAL PHASE
FINAL DESIGN

SUBMITAL DATE: JUNE 29 2018

DES: KLEINOWSKI DRW: KLEINOWSKI CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
FACILITIES DESIGN & PROJECTS BRANCH
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

HVAC CONTROLS - LEGEND

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

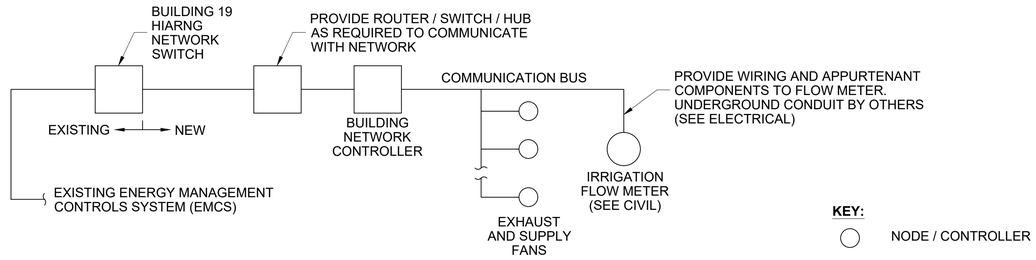
FEDERAL PROJECT NO. PN15130011

SHEET 56 OF 78

M-601

GENERAL NOTES:

1. SEE DRAWING M-001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. SEE DRAWING M-601 FOR CONTROLS SPECIFIC NOTES, LEGEND, AND ABBREVIATIONS.
3. THE CONTROL DIAGRAMS AND SCHEMATICS ILLUSTRATE THE FUNCTIONAL REQUIREMENTS AND CONTROL RELATIONSHIPS, ALL ACCESSORIES AND DEVICES MAY NOT BE SHOWN IN DETAIL.
4. THE SPECIFICATIONS SHOULD BE CONSULTED FOR DETAILED REQUIREMENTS.
5. SYSTEM ARCHITECTURE IS SCHEMATIC. CONTRACTOR SHALL PROVIDE ADDITIONAL DEVICES AS REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM IN COMPLIANCE WITH SPECIFICATION SECTION 15900.
6. CONTRACTOR IS RESPONSIBLE FOR SELECTING FINAL DETAILS OF THE ARCHITECTURE AND ENSURING THAT THE SYSTEM (DEVICES AND NETWORK) MEETS THE BANDWIDTH AND COMMUNICATIONS SPEEDS REQUIRED FOR A PROPERLY OPERATING SYSTEM.
7. 120 VOLT SINGLE PHASE POWER CONNECTION JUNCTION BOXES HAVE BE PROVIDED FOR USE TO POWER DDC SYSTEM COMPONENTS. THESE JUNCTION BOXES ARE SHOWN ON THE ELECTRICAL POWER PLAN DRAWINGS. THE DDC CONTROLS CONTRACTOR IS RESPONSIBLE FOR ALL POWER WIRING AND COMPONENTS DOWNSTREAM OF THESE JUNCTION BOXES AND VERIFYING THE QUANTITY AND LOCATION OF THE JUNCTION BOXES IS ADEQUATE. ADDITIONAL POWER CONNECTIONS ARE THE RESPONSIBILITY OF THE DDC CONTROLS CONTRACTOR.

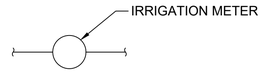


CONTROLS SYSTEM ARCHITECTURE

MISCELLANEOUS POINTS LIST SCHEDULE

FUNCTION	NAME	DESCRIPTION	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	LDP AND M&C DISPLAY			OVERRIDES		ALARMS	
						LDP VIEW REQ'D	M&C DISP REQ'D	M&C TREND REQ'D	LDP OVRD REQ'D	M&C OVRD REQ'D	ALARM CONDITION (SEE NOTES)	ALARM PRIORITY
METERING	IRIG-F	IRRIGATION FLOW	~	<___>	AI	~	~	X	~	~	~	~

Notes:
1) THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS SPECIFIED AND AS DESCRIBED IN THE GENERAL POINTS SCHEDULE NOTES ON THE CONTROLS LEGEND DRAWING.



CONTROL SYSTEM SCHEMATIC
IRRIGATION METER MONITORING
NOT TO SCALE

EXHAUST FAN (EF) AND SUPPLY FAN (SF) SCHEDULE

UNIT TAG NUMBER	SERVICE USED FOR	TYPE	ALTITUDE FEET	AIRFLOW CFM	FAN SPEED RPM	SPEED CONTROL	EXTERNAL STATIC PRESSURE IN W.G.	SOUND LEVEL DBA	ELECTRICAL DATA					INTERLOCK WITH	DRIVE TYPE	APPROXIMATE WEIGHT LBS.	REMARKS (SEE NOTE)
									MIN. MOTOR HP	OPERATING B.H.P.	MOTOR TYPE	STARTER / DISCONNECT PROVIDED BY	V/PH/HZ				
SF-01	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-01	DIRECT	75	2
SF-02	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-02	DIRECT	75	2
SF-03	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-03	DIRECT	75	2
SF-04	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-04	DIRECT	75	2
SF-05	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-05	DIRECT	75	2
SF-06	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/6	0.27	ODP	MFR.	115 / 1 / 60	EF-06	DIRECT	75	2
EF-01	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-01	DIRECT	73	2
EF-02	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-02	DIRECT	73	2
EF-03	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-03	DIRECT	73	2
EF-04	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-04	DIRECT	73	2
EF-05	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-05	DIRECT	73	2
EF-06	GYMNASIUM	SIDEWALL PROPELLER	16	1750	1750	CONSTANT	0.35	77	1/2	0.27	ODP	MFR.	115 / 1 / 60	SF-06	DIRECT	73	2
EF-07	MECH RM	CENTRIFUGAL INLINE	16	100	1550	2 SPEED	0.25	45	1/10	0.02	TEAO	MFR.	115 / 1 / 60	N/A	DIRECT	33	1

NOTES: 1. PROVIDE WITH TWO SPEED MOTOR WITH HALF RPM REDUCTION.
2. PROVIDE WITH METAL HOUSING AND WIRE GUARD ON GYMNASIUM OPENING OF HOUSING.

DIFFUSER, REGISTER & GRILLE SCHEDULE (DRG)

TAG	DESCRIPTION	MOUNTING	THROW PATTERN	BLADE DEFLECTION	BLADE SPACING - IN	NOTES
A	RECTANGULAR EXHAUST AIR GRILLE	DUCT	N/A	H-35	3/4	PROVIDE WITH INTEGRAL OPPOSED BLADE DAMPER, SEE PLANS FOR SIZE

MONITORING OF IRRIGATION METERS

GENERAL:
THE DDC SYSTEM SHALL MONITOR THE METER FOR CONSUMPTION ON A CONTINUAL BASIS. THESE VALUES SHALL BE MADE AVAILABLE TO THE SYSTEM AT ALL TIMES. THE OPERATOR INTERFACE SHALL DISPLAY THE CURRENT DEMAND AS WELL AS THE HISTORIES DESCRIBED BELOW.

PEAK DEMAND HISTORY:
THE DDC SYSTEM SHALL MONITOR AND RECORD THE PEAK (HIGH AND LOW) DEMAND READINGS FROM THE METER. THESE READINGS SHALL BE RECORDED ON A DAILY, MONTH-TO-DATE, AND YEAR-TO-DATE BASIS. WATER DEMAND SHALL DISPLAY IN GPM.

USAGE HISTORY:
THE DDC SYSTEM SHALL MONITOR AND RECORD METER READINGS TO PROVIDE A CONSUMPTION HISTORY. USAGE READINGS SHALL BE RECORDED ON A DAILY, MONTH-TO-DATE, AND YEAR-TO-DATE BASIS. WATER CONSUMPTION SHALL DISPLAY IN GALLONS.

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SYM	DESCRIPTION	DATE	APPR

SUBMITAL PHASE
FINAL DESIGN
SUBMITAL DATE: JUNE 29 2018
DES: KLEINOW DRW: KLEINOW CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
FACILITIES DESIGN & PROJECTS BRANCH
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19 IMPROVEMENTS
HVAC CONTROLS - SYSTEM ARCHITECTURE & EQUIPMENT SCHEDULES

SCALE: N.T.S.
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 57 OF 78
M-602

SEQUENCE OF OPERATION - INTERLOCKED SUPPLY FAN AND EXHAUST FAN

SF-01 & EF-01
TYPICAL FOR SF-02 THROUGH SF-06 AND EF-02 THROUGH EF-06.

INTERLOCKS
EF-01 SHALL BE INTERLOCKED WITH SF-01 (TYP).

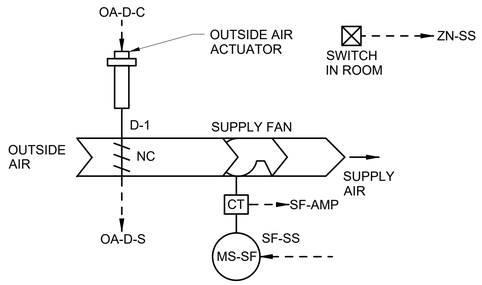
GENERAL:
SYSTEM SHALL BE TURNED ON AND OFF BY TWO SWITCHES LOCATED IN THE GYMNASIUM WITH EACH SWITCH CONTROLLING HALF THE FANS AS INDICATED ON FLOOR PLAN.

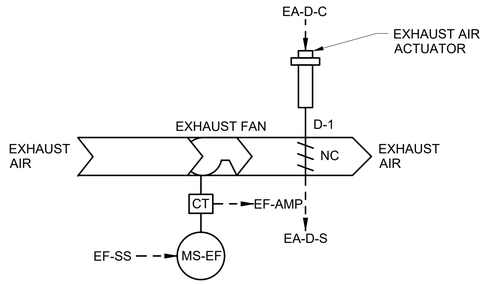
OFF:
THE SUPPLY FAN SHALL BE DE-ENERGIZED. OUTSIDE AIR DAMPER SHALL BE CLOSED.

THE EXHAUST FAN SHALL BE DE-ENERGIZED. EXHAUST AIR DAMPER SHALL BE CLOSED.

ON:
THE OUTSIDE AIR DAMPER SHALL OPEN AND UPON PROOF OF THE OUTSIDE AIR DAMPER BEING OPEN THE SUPPLY FAN SHALL BE ENERGIZED AND RUN AT A CONSTANT SPEED.

THE EXHAUST AIR DAMPER SHALL OPEN AND UPON PROOF OF THE EXHAUST AIR DAMPER BEING OPEN THE EXHAUST FAN SHALL BE ENERGIZED AND RUN AT A CONSTANT SPEED.





POINTS LIST SCHEDULE - TEMPERATURE CONTROLLED TWO SPEED EXHAUST FAN

FUNCTION	NAME	DESCRIPTION	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	LDP AND M&C DISPLAY: LDP VIEW REQ'D	M&C DISP REQ'D	M&C TREND REQ'D	OVERRIDES: LDP OVRD REQ'D	M&C OVRD REQ'D	ALARMS: ALARM CONDITION (SEE NOTES)	ALARM PRIORITY
PROOFS & SAFETIES	EF-AMP	EXHAUST FAN AMPERAGE	~	~	AI	X	X	X	~	~	EXHAUST FAN PROOF FAILED	INFO
	EA-D-S	EXHAUST AIR DAMPER STATUS	~	OPEN/CLOSED	BI	X	X	~	~	~	DAMPER COMMAND OPEN BUT STATUS CLOSED	INFO
START / STOP	SYS-ON	ON INPUT (FROM SYSTEM SCHEDULER)	~	<___>	NVI	X	X	~	SEE NOTES		~	~
ZONE TEMPERATURE CONTROL	ZN-T	ZONE TEMPERATURE **	~	<___>	AI	~	X	X	~	~	** ZN-T GREATER THAN 100 DEG F	INFO
	ZN-T-SP-LO	LOW ZONE TEMPERATURE SETPOINT	75 DEG F	~	~	~	X	~	X	X	~	~
	ZN-T-SP-HI	HIGH ZONE TEMPERATURE SETPOINT	85 DEG F	~	~	~	X	~	X	X	~	~
	EF-C-LO	EXHAUST FAN COMMAND LOW SPEED	~	~	BO	X	X	X	X	X	~	~
	EF-C-HI	EXHAUST FAN COMMAND HI SPEED	~	~	BO	X	X	X	X	X	~	~
	EA-D-C	EXHAUST AIR DAMPER COMMAND	~	OPEN/CLOSED	BO	X	X	~	X	X	~	~

Notes:
1) THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS SPECIFIED AND AS DESCRIBED IN THE GENERAL POINTS SCHEDULE NOTES ON THE CONTROLS LEGEND DRAWING.
2) UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3) ALARM CONDITIONS MARKED WITH AN ASTERISK (*) SHALL BE ACTIVE ONLY WHEN THE SYSTEM IS IN OCCUPIED MODE AND HAS BEEN IN OCCUPIED MODE FOR MORE THAN: * = 5 MINUTES ** = 30 MINUTES
4) SYS-ON: OVERRIDE OF SYS-ON IS ACCOMPLISHED THROUGH THE SYSTEM SCHEDULER.

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

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SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: J. KLEINOW DRW: J. KLEINOW CHK:

DEPARTMENT OF DEFENSE
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STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

HVAC CONTROLS - SCHEMATIC & POINTS LIST - 1

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 58 OF 78

M-603

SEQUENCE OF OPERATION - TEMPERATURE CONTROLLED TWO SPEED EXHAUST FAN

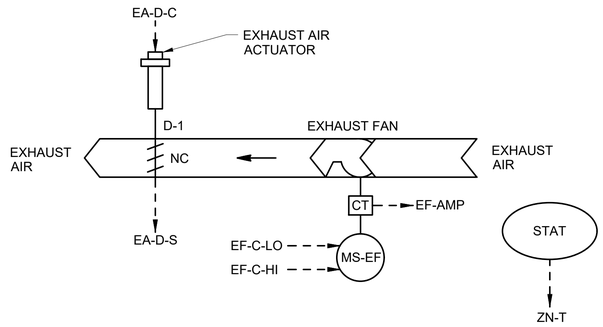
EF-07

GENERAL:
THE HVAC SYSTEM SHALL HAVE THE FOLLOWING MODES OF OPERATION: OFF AND ON.

OFF:
THE EXHAUST FAN SHALL BE DE-ENERGIZED. EXHAUST DAMPER SHALL BE CLOSED.

ON:
ON MODE SHALL BE INITIATED BY THE CONTROLS SYSTEM.

WHEN THE ZONE TEMPERATURE RISES ABOVE THE LOW ZONE TEMPERATURE SETPOINT THE EXHAUST AIR DAMPER SHALL OPEN AND UPON PROOF OF THE EXHAUST AIR DAMPER BEING OPEN THE EXHAUST FAN SHALL BE ENERGIZED AND RUN AT A LOW SPEED. UPON A FURTHER RISE IN ZONE TEMPERATURE ABOVE THE HIGH ZONE TEMPERATURE SETPOINT THE EXHAUST FAN SHALL RUN AT HIGH SPEED. WHEN THE ZONE TEMPERATURE IS BELOW THE LOW ZONE TEMPERATURE SETPOINT THE EXHAUST FAN SHALL BE DE-ENERGIZED AND THE EXHAUST DAMPER SHALL BE CLOSED.



POINTS LIST SCHEDULE - TEMPERATURE CONTROLLED TWO SPEED EXHAUST FAN

FUNCTION	NAME	DESCRIPTION	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	LDP AND M&C DISPLAY: LDP VIEW REQ'D	LDP AND M&C DISPLAY: M&C DISP REQ'D	LDP AND M&C DISPLAY: M&C TREND REQ'D	OVERRIDES: LDP OVRD REQ'D	OVERRIDES: M&C OVRD REQ'D	ALARMS: ALARM CONDITION (SEE NOTES)	ALARMS: ALARM PRIORITY
PROOFS & SAFETIES	EF-AMP	EXHAUST FAN AMPERAGE	~	~	AI	X	X	X	~	~	EXHAUST FAN PROOF FAILED	INFO
	EA-D-S	EXHAUST AIR DAMPER STATUS	~	OPEN/CLOSED	BI	X	X	~	~	~	DAMPER COMMAND OPEN BUT STATUS CLOSED	INFO
START / STOP	SYS-ON	ON INPUT (FROM SYSTEM SCHEDULER)	~	<___>	NVI	X	X	~	SEE NOTES		~	~
ZONE TEMPERATURE CONTROL	ZN-T	ZONE TEMPERATURE **	~	<___>	AI	~	X	X	~	~	** ZN-T GREATER THAN 100 DEG F	INFO
	ZN-T-SP-LO	LOW ZONE TEMPERATURE SETPOINT	75 DEG F	~	~	~	X	~	X	X	~	~
	ZN-T-SP-HI	HIGH ZONE TEMPERATURE SETPOINT	85 DEG F	~	~	~	X	~	X	X	~	~
	EF-C-LO	EXHAUST FAN COMMAND LOW SPEED	~	~	BO	X	X	X	X	X	~	~
	EF-C-HI	EXHAUST FAN COMMAND HI SPEED	~	~	BO	X	X	X	X	X	~	~
	EA-D-C	EXHAUST AIR DAMPER COMMAND	~	OPEN/CLOSED	BO	X	X	~	X	X	~	~

Notes:
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3) ALARM CONDITIONS MARKED WITH AN ASTERISK (*) SHALL BE ACTIVE ONLY WHEN THE SYSTEM IS IN OCCUPIED MODE AND HAS BEEN IN OCCUPIED MODE FOR MORE THAN: * = 5 MINUTES ** = 30 MINUTES
4) SYS-ON: OVERRIDE OF SYS-ON IS ACCOMPLISHED THROUGH THE SYSTEM SCHEDULER.

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No. 16352-M
EXP 4/30/20
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION SEAL

APPR	DATE	DESCRIPTION	SYM

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: J. KLEINKOPF DRW: J. KLEINKOPF CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

HVAC CONTROLS - SCHEMATIC & POINTS LIST - 2

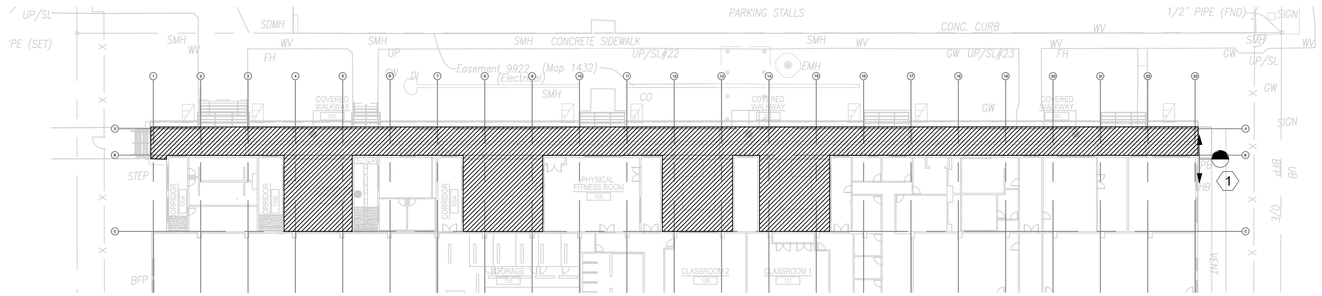
SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 59 OF 78

M-604



C1 PLUMBING DEMOLITION PLAN

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

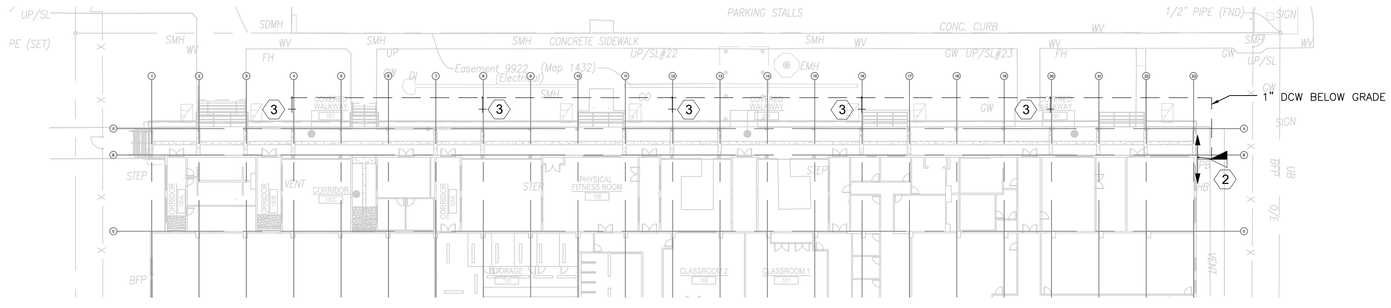
NORTH

GENERAL NOTES:

1. SEE SHEET M-001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

KEYED NOTES:

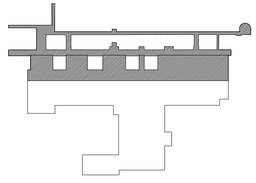
1. DEMOLISH ALL ABOVE GRADE DCW PIPING IN WALKWAY INCLUDING ALL TAPS AND ASSOCIATED HOSEBIBBS. DEMOLISH EXISTING VERTICAL MAIN BELOW GRADE AND PREPARE UNDERGROUND LINE FOR CONNECTION TO NEW UNDERGROUND EXTENSION.
2. EXTEND 1" DCW UNDERGROUND AS SHOWN TO OTHER SIDE OF WALKWAY. ROUTE ADJACENT TO WALKWAY.
3. INSTALL NEW 3/4" VERTICAL TAP FROM UNDERGROUND 1" DCW LINE TO 24" ABOVE GRADE. INSTALL NEW HOSE BIBB @ 24" ABOVE GRADE.



A1 PLUMBING NEW WORK PLAN

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

NORTH



BURNS McDONNELL

A/E INFO

BRIAN A. SEABAUGH
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No. 16352-M
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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: KLEINOWSKI DRW: KLEINOWSKI CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
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91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

PLUMBING PLANS

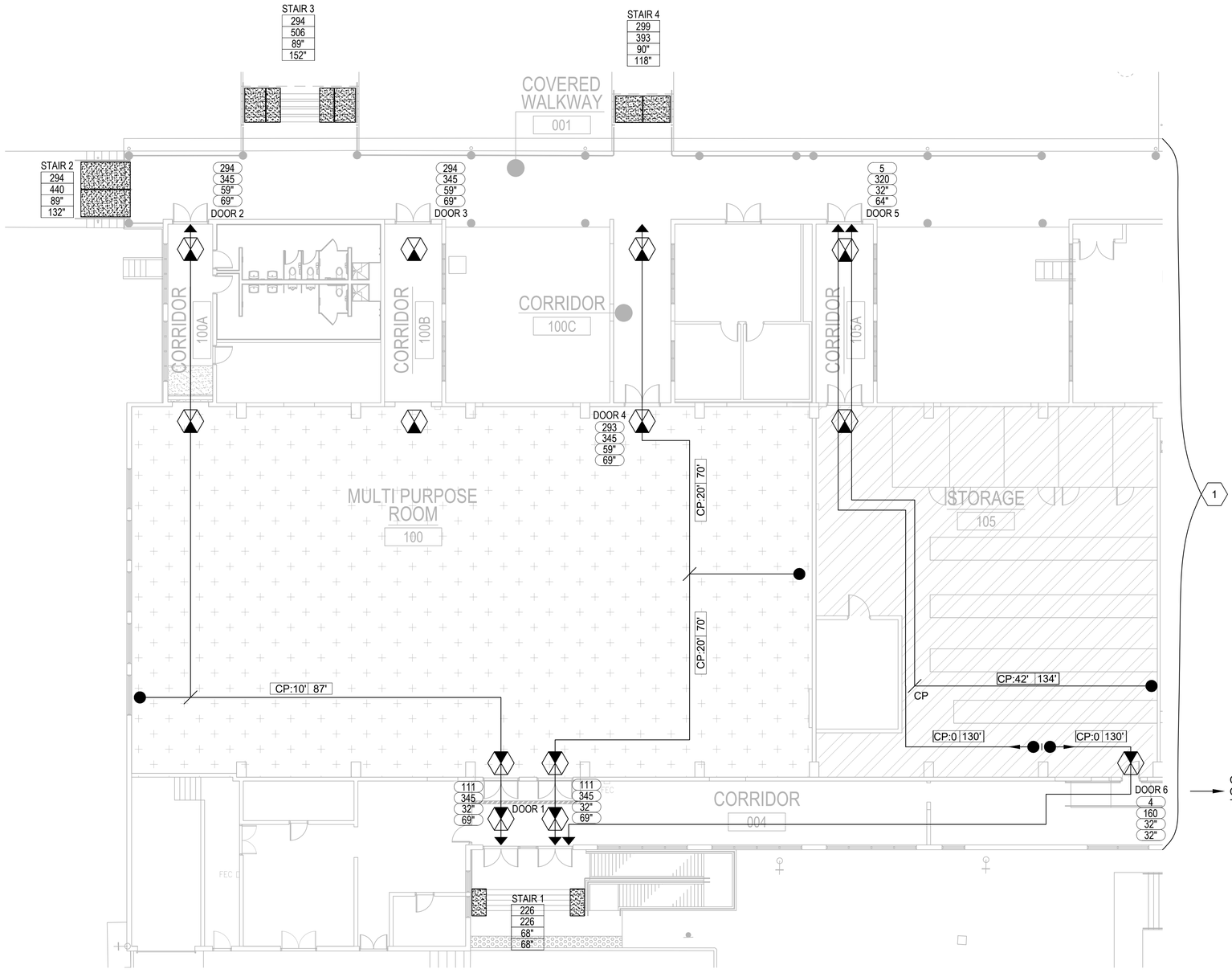
SCALE: 3/32" = 1'-0"

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 60 OF 78

P-101



CORRIDOR CONTINUES, CONNECTING TO STEPS TO GRADE.

A1 MULTI-PURPOSE ROOM AND STORAGE LOCKER - LIFE SAFETY PLAN

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

NORTH

GENERAL NOTES:

1. REFER TO LS102 FOR LIFE SAFETY NARRATIVE AND BUILDING CODE ANALYSIS.
2. SOME EXIT SIGNS EXIST. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS OF NEW EXIT SIGNS.

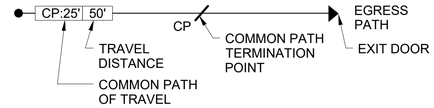
KEYED NOTES:

1. BUILDING CONTINUES TO THE NORTH EAST AND IS NOT SHOWN. REFER TO ARCHITECTURAL DRAWINGS FOR REMAINING BUILDING. THIS LIFE SAFETY ANALYSIS IS LIMITED TO THE ROOMS SHOWN.

OCCUPANT LOAD LEGEND

+ + + +	ASSEMBLY CONCENTRATED USE WITHOUT FIXED SEATS	1 PERSON / 7 SF NET
	ACCESSORY STORAGE AREAS	1 PERSON / 500 SF GROSS

EGRESS PATH



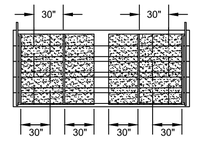
DOOR EGRESS TAG

78 — OCCUPANTS SERVED
180 — EXIT CAPACITY
32" — REQUIRED WIDTH
36" — PROVIDED WIDTH

STAIR EGRESS TAG

132
180
44"
54"

STAIR CAPACITY LEGEND



SHADING INDICATES 30" WIDTH FROM HANDRAILS FOR DETERMINING THE EXIT STAIR CAPACITY.

LEGEND

ILLUMINATED EXIT SIGN

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

STATE OF MISSISSIPPI JOHN F. HOFFMAN 20903 REGISTERED PROFESSIONAL ENGINEER

Jul 6 2018 8:11 AM

SEAL

STM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE: FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: J. HOFFMAN DRW: M. WALKER CHK: C. CAHILL

STATE OF HAWAII
FACILITY MANAGEMENT OFFICE

DEPARTMENT OF DEFENSE
FACILITIES DESIGN & PROJECTS BRANCH

HAWAII ARMY NATIONAL GUARD

91-1110 ENTERPRISE AVENUE

KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

MULTI-PURPOSE ROOM AND STORAGE LOCKER
LIFE SAFETY PLAN

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 61 OF 78

LS101

Egress Analysis (NFPA 101, 2012 edition)

The building is considered a mixed use Assembly/Storage/Business occupancy. Where issues conflict, the most restrictive comply for the common component. The building is a type 1B construction and is not sprinklered. This analysis is limited to the multi-purpose room(assembly) and adjacent locker area (storage).

Occupant Load Calculations (NFPA 101, Table 7.3.1.2)

Floor	Area	Function of Space	Area (sf)	Occupant Load Factor (sf / Person)	Occupants
Level 1	Multi-purpose Room	Assembly	7,716	7	1103
	Storage Area	Storage	4,139	500	9

Occupant Load Summary and Minimum Exits from Area (NFPA 101)

Area	Occupants	Required Exits	Provided Exits	Required Exit Separation
Multi-purpose Room	1103	4 (7.4.1.2)	4	1/2 Diagonal (7.5.1.3.2)
Storage Area	14	2 (7.4.1.1)	2	1/2 Diagonal (7.5.1.3.2)

Minimum Exits or Exit Accesses from a Space or Area (NFPA 101)

Occupancy	Condition Permitting One Exit	Condition Requiring Two Exits	NFPA 101 Section
Assembly	N/A	All conditions*	13.2.4.1
Storage	50' or less common path.	Greater than 50' common path.	42.2.4.1

* NFPA 101.7.4.1.2 requires four exits for occupant loads more than 1000. Four exits provided.

Common Path, Dead-End and Travel Distance Limits (NFPA 101 Table A.7.6)

Occupancy	Common Path (ft) Limit/Actual	Dead End (ft) Limit/Actual	Travel Distance (ft) Limit/Actual
Assembly	20/20*	20/NA	200/90
Storage Ordinary Hazard	50/42	50/32	200/134

* Common path of travel shall be limited to 20 ft. by authorities having jurisdiction for any use that employs furniture. With no furniture, the common path of travel is zero, with straight line access to any exit.

Minimum Egress Widths (NFPA 101)

Component	Requirement (in)	NFPA 101
Doors in Egress Access	Minimum 32 Clear	7.2.1.2.3.2
New Stair in Egress Access	Minimum 44 Clear	7.2.2.2.1.1
Existing Stair in Egress Access	Minimum 36 Clear	7.2.2.2.1.1
Corridor Serving 50 or More Occupants	Minimum 44 Clear	12.2.3.8
Level Components	0.2 per Person	Table 7.3.3.1
Stairs	0.3 per Person	Table 7.3.3.1

Assembly Occupancy Capacity Analysis (NFPA 101)

Exit Component	Capacity	Occupant Load	Required Width	Provided Width
Door 1	0.2" per person	222	45	138
Door 2	0.2" per person	294	59	69
Door 3	0.2" per person	294	59	69
Door 4	0.2" per person	294	59	69
Door 5	0.2" per person	5	32	64
Door 6	0.2" per person	4	32	32
	Total	**1113**	**286**	**441**
Stair 1	0.3" per person	226	68	68
Stair 2	0.3" per person	294	89	132
Stair 3	0.3" per person	294	89	152
Stair 4	0.3" per person	299	90	118
	Total	**1113**	**336**	**470**

Note: Stair widths are wider than recorded above but only the width within 30 inches of a handrail is included in capacity determination per NFPA 101, 7.2.2.4.1.2 .

Emergency Lighting and Exit Signs (NFPA 101)

Occupancy	Emergency Lighting	Exit Signage
Assembly	Required (NFPA 101 12.2.9.1)	Required (NFPA 101 12.2.10)
Storage	Required (NFPA 101 42.2.9.1)	Required (NFPA 101 42.2.10)

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

STATE OF MISSOURI
JOHN F. HOFFMAN
NUMBER
027951
PROFESSIONAL ENGINEER

Jul 6 2018 8:12 AM

SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: J. HOFFMAN DRW: M. WALKER CHK: C. CAHILL

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
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STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

EGRESS ANALYSIS

SCALE:

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 62 OF 78

LS102

SYMBOLS - POWER

RECEPTACLES

- 120V, NEMA 5-20R, UON

RECESSED DUPLEX

RECESSED QUAD

SPECIAL RECEPTACLE
(REFER TO DRAWINGS FOR NEMA CONFIGURATION)

SURFACE MOUNTED DUPLEX

SURFACE MOUNTED QUAD

EQUIPMENT CONNECTIONS

(M) MECHANICAL EQUIPMENT CONNECTION

(E) SINGLE POINT ELECTRICAL CONNECTION

SWITCHES

DISCONNECT SWITCH

COMBO MOTOR STARTER/DISCONNECT

VFD VARIABLE FREQUENCY DRIVE (VFD)

UPS REMOTE BATTERY DISCONNECT SWITCH

POWER DEVICES GENERAL INFORMATION

LP-X / GFI
- PANELBOARD - CIRCUIT
- SYMBOL MODIFIER(S)
- ANY RECEPTACLE LISTED ABOVE

EF-X / J / LP-X / GFI
- EQUIPMENT IDENTIFICATION
- PANELBOARD - CIRCUIT
- SYMBOL MODIFIER(S)
- ANY JUNCTION BOX LISTED ABOVE

EF-X / (M) HL-X / GFI
- EQUIPMENT IDENTIFICATION
- PANELBOARD - CIRCUIT
- SYMBOL MODIFIER(S)
- MECHANICAL EQUIPMENT CONNECTION
  - SEE MECHANICAL EQUIPMENT SCHEDULE FOR CONNECTION INFORMATION
- REMOTE DISCONNECT SWITCH
  - SEE MECHANICAL EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION

SYMBOLS - SPECIAL SYSTEMS

COMMUNICATIONS OUTLET BOX. NUMBER INDICATES OUTLET TYPE. MOUNT 18" AFF UON. SEE T-500 SERIES FOR DETAILS. REFER TO COLOR CLASSIFICATIONS ON THIS SHEET.

SINGLE-GANG OUTLET BOX FOR CATV. 3/4"C. TO NEAREST CABLE TRAY. PROVIDE FACEPLATE WITH SINGLE F-TYPE COAXIAL CONNECTOR.

COMM RACK

FIXED CAMERA

RTE / E7.01 DOOR SECURITY HARDWARE CALLOUT

RTE / E7.01
- DETAIL NUMBER
- ARROW INDICATES SECURE SIDE OF DOOR
- DOOR NUMBER

CR CARD READER WITH KEYPAD

SYMBOLS - POWER

EQUIPMENT

LP11 — EQUIPMENT IDENTIFIER

- ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO, TRANSFORMERS, SWITCHBOARDS AND PANELBOARDS ARE DRAWN TO SCALE IN THE PLANS AND ARE CALLED OUT WITH A UNIQUE IDENTIFIER.

SYMBOLS - GROUNDING / LIGHTNING PROTECTION

AIR TERMINAL

GROUND ROD

GROUND TEST WELL

LIGHTNING PROTECTION CONDUCTOR
- SURFACE MOUNTED
- COPPER, SIZE PER NFPA 780

GROUNDING COUNTERPOISE/CONDUCTOR
- BURIED, BARE CABLE (EXTERIOR)
- COPPER, #4/0 AWG MINIMUM, UON

TELECOMMUNICATIONS BONDING CONDUCTOR
- COPPER, #6 AWG MINIMUM, UON

GROUND BAR

BOLTED GROUND CONNECTION

EXOTHERMIC WELDED GROUND CONNECTION

DOWN CONDUCTOR

SYMBOL MODIFIERS

AC	ABOVE COUNTER MOUNTING
C	RECESSED IN CEILING
CB	COFFEE BREWER
CO	COPIER
CZ	COMM ZONE CABINET
EP OR EXP	EXPLOSION PROOF
F	RECESSED IN FLOOR
FPD	FLAT PANEL DISPLAY
GD	GARBAGE DISPOSAL
GFI	GROUND FAULT CIRCUIT INTERRUPTER
IG	ISOLATED GROUND
LS	LAB SINK PUMP
MW	MICROWAVE
NL	NIGHT LIGHT
P	PILOT LIGHT (INDICATING SWITCH IS ON)
PP#	FURNITURE POWER/DATA POLE CONNECTION (# INDICATES QUANTITY OF WORKSTATIONS SERVED BY CIRCUIT(S))
PR	PRINTER
PROJ	PROJECTOR
PW#	FURNITURE POWER/DATA WALL CONNECTION (# INDICATES QUANTITY OF WORKSTATIONS SERVED BY CIRCUIT(S))
REF	REFRIGERATOR
SB	SMART BOARD
SH	SHREDDER
SW: XX	CONTROLLED BY SWITCH LABELED "XX"
TV	TELEVISION
VM	VENDING MACHINE
WC	WALL-MOUNTED CLOCK
WF	WATER COOLER
WP	WEATHERPROOF, WITH GFI
WPIU	WEATHERPROOF IN USE, WITH GFI
XX" AFF	MOUNT XX" AFF

SYMBOLS - LIGHTING

LIGHTING FIXTURES

- REFER TO FIXTURE SCHEDULE FOR FIXTURE TYPE INFORMATION

FLUORESCENT 2'X4' FIXTURE, UON

FLUORESCENT 1'X4' FIXTURE, UON

FLUORESCENT 2'X2' FIXTURE, UON

EXTERIOR WALL-MOUNTED FIXTURE, UON

FLUORESCENT DOWNLIGHT, UON

EXIT SIGNS, CEILING: ARROW INDICATES EGRESS

EXIT SIGNS, WALL: ARROW INDICATES EGRESS

PC PHOTOCELL

FIXTURE GENERAL INFORMATION

F1E / LP-1 / 10' - 0" / CNTR: L-1 / a
- FIXTURE TYPE
- 'E' AND CROSS FILL DENOTES EMERG FIXT.
- PANELBOARD - CIRCUIT NUMBER
- FIXTURE MOUNTING HEIGHT (IF APPLICABLE)
- LIGHTING CONTACTOR (IF APPLICABLE)
- SWITCH 'LEG'
  - THE SWITCH WITH SAME LETTER OPERATES THIS FIXTURE
  - "NL" INDICATES UNSWITCHED (NIGHT LIGHT) FIXTURE. SEE GE514 FOR DETAILS

CONTROL DEVICES GENERAL INFORMATION

TOGGLE SWITCH — $ 3,a

DEMARCATION
3: 3-WAY
4: 4-WAY

SWITCH 'LEG' DESIGNATION

NOTE: NO DEMARCATION OR SWITCH 'LEG' INDICATES THAT THE SWITCH CONTROLS ALL OF THE FIXTURES WITHIN THE SAME ROOM

LIGHTING CONTROL GENERAL INFORMATION

CLASSROOM — ROOM / SPACE TAG

101

CTRL: OC — LIGHTING CONTROLS REQUIRED FOR A PARTICULAR SPACE. SEE SHEET EL601M FOR LIGHTING CONTROL ABBREVIATIONS FOR EACH SPACE

SYMBOLS - ONE-LINE DIAGRAM

CONNECTION

CONTINUATION

SEPARABLE CONNECTOR OR CONNECTION FOR DRAWOUT ASSEMBLIES

FUSED DISCONNECT SWITCH

TRANSFORMER

GROUND

Y DELTA - WYE TRANSFORMER CONNECTION

DM DIGITAL METER

SPD SURGE PROTECTION DEVICE

KWH KILOWATT HOUR METER

CIRCUIT BREAKER

SWITCH

DISCONNECT SWITCH

SPECIAL RECEPTACLE

M

LIGHTNING ARRESTOR

MFM MULTI-FUNCTION DIGITAL UTILITY METER

N / G NEUTRAL CONNECTION TO GROUND

M MOTOR

POWER TRANSFORMER

ABBREVIATIONS

A	AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AIC	AMPERES INTERRUPTING CAPACITY
AV	AUDIO/VIDEO
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BAS	BUILDING AUTOMATION SYSTEM
C	CONDUIT
CAT	CATEGORY
CATV	CABLE TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CL	CENTERLINE
COMM	COMMUNICATIONS
DC	DIRECT CURRENT
EGC	EQUIPMENT GROUNDING CONDUCTOR
EIA	ELECTRONICS INDUSTRIES ASSOCIATIONS
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
FO	FIBER OPTIC
FPD	FLAT PANEL DISPLAY
FT	FEET OR FOOT
GFI	GROUND FAULT INTERRUPTER
G OR GND	GROUND
GFR	GROUND FAULT RELAY
GFP	GROUND FAULT PROTECTION
GRS	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
HZ	HERTZ
IG	ISOLATED GROUND
ITM	INSTANT TICKET MACHINE
K	KILO
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT AMPERES
KWH	KILOWATT HOURS
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MH	MANHOLE
MLO	MAIN LUGS ONLY
MM	MULTIMODE
MN/PA	MASS NOTIFICATION/PUBLIC ADDRESS
N	NEUTRAL CONDUCTOR
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
RMC	RIGID METAL CONDUIT
SCCR	SHORT CIRCUIT CURRENT RATING
SM	SINGLE-MODE
SPD	SURGE PROTECTION DEVICE
SPECS	CONTRACT SPECIFICATIONS
SPST	SINGLE POLE SINGLE THROW
TB	TELEPHONE BACKBOARD
TR	TELECOMMUNICATIONS ROOM
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERES
W	WIRE OR WATT
WP	WEATHERPROOF
XFMR	TRANSFORMER
Z	IMPEDANCE

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION — SEAL

NO	DESCRIPTION	DATE	APPR
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FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: M.M. DRW: A.Q. CHK:

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STATE OF HAWAII
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91-1110 ENTERPRISE AVENUE

BUILDING 19
IMPROVEMENTS

ELECTRICAL LEGEND & ABBREVIATIONS

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 63 OF 78

E001

EXISTING CONDITIONS

1. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
2. UNLESS INDICATED AS EXISTING, ALL MATERIALS AND LABOR SHALL BE CONSIDERED NEW.
3. ALL EXISTING EQUIPMENT AND DEVICES TO REMAIN SHALL STAY IN-TACT AND OPERATIONAL DURING THE CONSTRUCTION PROCESS. IF A DEVICE REQUIRING POWER IS DISTURBED OR INTERRUPTED, RESTORE THE DEVICE TO IT'S ORIGINAL OPERATIONAL STATE. ANY DEMOLITION WORK REQUIRING MODIFICATION OF EXISTING ELECTRICAL SYSTEMS SHALL NOT COMPROMISE THE SYSTEMS TO REMAIN. INSTALL NEW CONDUIT AND WIRING WHERE NECESSARY TO RESTORE POWER PER NEC REQUIREMENTS.
4. ALL ELECTRICAL EQUIMENT AND DEVICES TO BE REMOVED: COMPLETELY REMOVE ALL CONDUCTORS AND CONDUIT TO THE DEVICE. WHERE CONDUIT REMOVAL IS NOT POSSIBLE, CAP CONDUIT AND MAKE SAFE. WHERE BACKBOXES CAN NOT BE REMOVED, PROVIDE A BLANK COVERPLATE. ALL REMOVED CONDUIT, OLD BOXES, WIRING AND MISCELLANEOUS ELECTRICAL SCRAP SHALL BE REMOVED FROM THE JOB SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL INTERIOR/EXTERIOR WALLS, CEILINGS, FLOORS, AND CONCRETE WORK REQUIRING PATCHING, PLASTERING, PAINTING AND ANY OTHER REPAIRS DUE TO ELECTRICAL WORK TO RESTORE THE ORIGINAL FINISH AND APPEARANCE.

LEGEND NOTES

1. EQUIPMENT IDENTIFIERS, MATCHING THOSE IN EQUIPMENT SCHEDULES, ARE DISPLAYED INSIDE OF BRACKETS [ ].
2. SYMBOLS ORIENTATION DOES NOT IMPLY DEVICE OR EQUIPMENT ORIENTATION. UNLESS NOTED AS SUCH. SEE REFLECTED CEILING PLANS FOR LIGHT FIXTURE POSITIONS AND ORIENTATIONS.
3. SYMBOL SIZE DOES NOT IMPLY EQUIPMENT SIZE, UON.
4. MOUNTING HEIGHT INDICATED IN LEGEND AND ON THE DRAWINGS SHALL BE THE DISTANCE MEASURED FROM THE CENTER OF THE DEVICE TO THE FINISHED FLOOR.
5. NOT ALL SYMBOLS ARE USED.
6. SEE ELECTRICAL & COMMUNICATIONS SITE PLAN DRAWINGS FOR COMMUNICATIONS SITE WORK.
7. REFER TO TYPICAL DETAILS ON T-500 SERIES DRAWINGS.

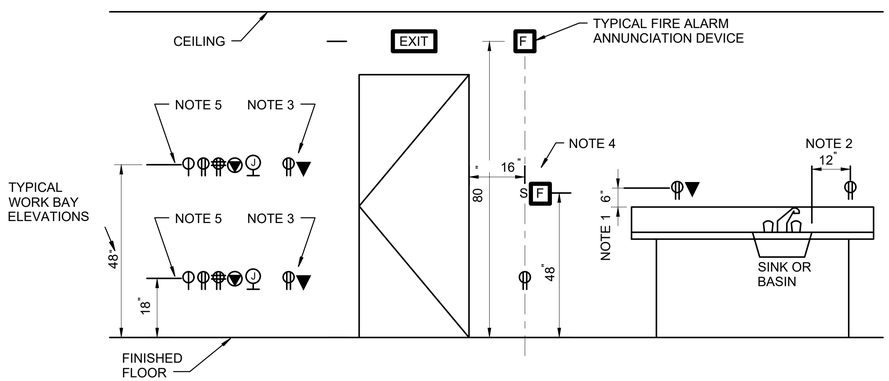
GENERAL NOTES

1. ALL CONDUCTORS SHALL BE RUN IN CONDUIT, AND ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
2. ALL EXISTING AND NEW SWITCHBOARDS AND PANELBOARDS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARD IN ACCORDANCE WITH NFPA 70 AND 70E.
3. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR REGARDING ELECTRICAL REQUIREMENTS OF ACTUAL EQUIPMENT PROVIDED.
4. MOUNTING HEIGHT FOR LIGHT FIXTURES SHALL BE FROM THE BOTTOM OF FIXTURES TO THE FINISHED FLOOR.
5. ALL SYSTEMS THAT REQUIRE COORDINATION BETWEEN TRADES SHALL BE TO THE SATISFACTION OF THE CONTRACTING OFFICER. ANY DEFICIENCIES, INCONSISTENCIES, OR POORLY COORDINATED INSTALLATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXTRA COST TO THE GOVERNMENT.
6. ALL ELECTRICAL WORK SHALL COMPLY WITH NEC (NFPA 70), NFPA 72, NFPA 101, AND APPLICABLE MILITARY CODES OR TECHNICAL LETTERS, IN ADDITION TO LOCAL CODES AND ORDINANCES. ALL GROUNDING SHALL COMPLY WITH NFPA 70, ART. 250 AND AFI 32-1065.
7. PROVIDE A GREEN CONTINUOUS INSULATED EQUIPMENT GROUNDING CONDUCTOR TO ALL ELECTRICAL, TELECOMMUNICATIONS AND SECURITY EQUIPMENT SIZED PER NEC 250.122
8. PROVIDE MOUNTING ON ALL OVERHEAD UTILITIES AND OTHER FIXTURES WEIGHING 31LBS OR MORE TO MINIMIZE THE LIKELYHOOD THAT THEY WILL FALL. DESIGN ALL EQUIPMENT TO RESIST FORCES OF .5 TIMES THE EQUIPMENT WEIGHT IN ANY DIRECTION AND 1.5 TIMES THE EQUIPMENT WEIGHT IN THE DOWNWARD DIRECTION.

DEMOLITION NOTES

1. THE ELECTRICAL DEMOLITION SHEETS SHOW EXISTING CONDITIONS THAT HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND ORIGINAL DRAWINGS. ADDITIONAL COMPONENTS AND CONDITIONS THAT ARE NOT SHOWN ON THE DRAWINGS MAY EXIST AND MAY REQUIRE CERTAIN REMODELING OR ADJUSTMENTS THAT ARE NOT NOTED ON THE DRAWINGS. FIELD VERIFY THE LOCATIONS OF ALL EXISTING EQUIPMENT AND DEVICES SHOWN ON THE DRAWINGS PRIOR TO BIDDING.
2. ALL ELECTRICAL DEVICES, CONDUIT, FIXTURES, PANELBOARDS FROM THE EXISTING FACILITY SHALL BE REMOVED AS INDICATED UNLESS OTHERWISE NOTED AND PROPERLY DISPOSED OF. COORDINATE WITH ARCHITECTURAL PLANS.
3. OBTAIN WRITTEN PERMISSION FROM THE CONTRACTING OFFICER PRIOR TO SHUTTING OFF SERVICES OR SYSTEMS WHICH MAY AFFECT OTHER AREAS BEYOND THE LIMITS OF THE DEMOLITION AREA.
4. NOT ALL EXISTING UTILITIES AND OR ELECTRICAL SYSTEMS ARE SHOWN ON PLANS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. COORDINATE WITH THE CONTRACTING OFFICER PRIOR TO COMMENCING WORK.

TYPICAL DEVICE MOUNTING DETAIL



PROJECT OUTSIDE FACILITY GENERAL NOTES:

1. THE UNDERGROUND WORK FOR THIS PROJECT REQUIRES CLOSE COORDINATION WITH EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL NEW WORK WITH ALL EXISTING UTILITIES, EXISTING EQUIPMENT, AND EXISTING CONDITIONS.
2. PRIOR TO DIGGING, THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE DIGGING PERMITS. ALL UNDERGROUND UTILITIES IN THE WORK AREA MUST BE POSITIVELY IDENTIFIED BY A PRIVATE UTILITY LOCATING SERVICE IN ADDITION TO APPLICABLE BASE LOCATING SERVICE AND COORDINATED WITH THE BASE UTILITY DEPARTMENT. ALL MARKINGS MADE DURING THE UTILITY INVESTIGATION MUST BE MAINTAINED THROUGHOUT THE CONTRACT.
3. THE CONTRACTOR SHALL PHYSICALLY VERIFY UNDERGROUND UTILITY LOCATIONS BY HAND DIGGING AND/OR POT-HOLING USING WOOD OR FIBERGLASS HANDLED TOOLS WHEN ANY ADJACENT CONSTRUCTION WORK IS EXPECTED TO COME WITHIN THREE FEET OF THE UNDERGROUND SYSTEM. DIGGING WITHIN 2 FEET OF A KNOWN UTILITY SHALL NOT BE PERFORMED BY MEANS OF MECHANICAL EQUIPMENT; HAND DIGGING SHALL BE USED. IF CONSTRUCTION IS PARALLEL TO AN EXISTING UTILITY EXPOSE THE UTILITY BY HAND DIGGING EVERY 100 FEET IF PARALLEL WITHIN 5 FEET OF THE EXCAVATION.
4. CONTRACTOR SHALL COORDINATE ACCESS TO MANHOLES, HANDHOLES, AND BUILDINGS WITH COR.
5. IN MANHOLES/HANDHOLES WHERE FIBER OR COPPER CABLES ARE TO BE SPLICED, PROVIDE MINIMUM 25' OF SLACK ON EITHER SIDE OF SPLICE CLOSURE FOR EACH FIBER AND COPPER CABLE. WHERE NEW FIBER OR COPPER CABLES ARE TO BE SPLICED WITH EXISTING FIBER OR COPPER CABLES, LEAVE MINIMUM 25' OF EXISTING FIBER AND COPPER CABLES.
6. IN MANHOLES/HANDHOLES WHERE CABLES ARE TO BE ROUTED THROUGH BUT NOT SPLICED, PROVIDE A MINIMUM OF 50' OF SLACK FOR EACH FIBER AND COPPER CABLE.
7. FIBER AND COPPER CABLES SHALL BE INSTALLED IN NEW AND EXISTING MANHOLES/HANDHOLES USING CABLE RACKS AND RACK HOOKS.
8. FIBER AND COPPER SPLICE CLOSURES SHALL BE SECURELY FASTENED TO MANHOLE/HANDHOLE CABLE RACKS AND RACKS HOOKS USING ADJUSTABLE STAINLESS STEEL STRAPS.
9. FIBER AND COPPER SPLICES ARE ONLY ALLOWED WHERE INDICATED. ADDITIONAL SPLICES ARE NOT ALLOWED WITHOUT WRITTEN DIRECTION FROM COR.
10. PROVIDE PULL STRINGS IN ALL NEW AND EXISTING CONDUITS, INCLUDING CONDUITS WHERE MULTICELL INNERDUCTS ARE TO BE INSTALLED.
11. MULTICELL INNERDUCTS SHALL BE INSTALLED IN CONDUITS WHERE INDICATED AND TERMINATED IN MANHOLES/HANDHOLES PER MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS.
12. CONTRACTOR SHALL PROVIDE THREE 3" 3-CELL INNERDUCTS IN ALL NEW 4" CONDUITS. IN ADDITION, CONTRACTOR SHALL INSTALL INNERDUCTS IN EXISTING CONDUITS WHERE INDICATED.

PROJECT INSIDE FACILITY GENERAL NOTES:

1. HORIZONTAL CABLING SERVING WALL MOUNTED COMMUNICATIONS OUTLETS SHALL BE ROUTED FROM COMMUNICATIONS OUTLET IN MINIMUM 1" CONDUIT FROM EACH COMMUNICATIONS OUTLET TO AREA CABLE TRAY, AND IN AREA CABLE TRAY TO DESIGNATED COMMUNICATION ROOM. ROUTE CONDUITS IN FINISHED AREAS CONCEALED IN WALL. WHERE COMMUNICATION OUTLETS ARE INSTALLED IN EXPOSED UNFINISHED ROOMS, CONDUITS MAY BE SURFACE MOUNTED. CONDUITS ROUTED EXPOSED SHALL BE PAINTED TO MATCH ADJACENT SURFACES.

DEVICE MOUNTING NOTES:

1. COORDINATE ABOVE COUNTER DEVICES AND RECEPTACLES WITH CASEWORK OR COUNTERS SUCH THAT THE DEVICES AND RECEPTACLES ARE LOCATED AT +42" AFF OR 6" ABOVE THE COUNTERTOP OR BACKSPLASH, WHICHEVER IS HIGHER
2. ALL RECEPTACLES INSTALLED WITHIN 6'-0" OF ANY SINK OF BASIN SHALL HAVE GFI PROTECTION. DO NOT INSTALL RECEPTACLES WITHIN 12" OF THE EDGE OF A SINK OR BASIN
3. COORDINATE WITH THE COMMUNICATIONS DRAWINGS TO ENSURE THAT A DUPLEX RECEPTACLE IS INSTALLED WITHIN 18" HORIZONTAL TO ALL SIGNAL AND DATA DEVICE LOCATIONS.
4. SWITCHES AND OTHER FLUSH WALL-MOUNTED DEVICES SHALL BE MOUNTED WITHIN 16" OF DOORFRAME. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR DOORS WITH ADJACENT SIDELIGHTS. WHERE DEVICES ARE SHOWN ADJACENT TO THE DOOR ON THE HINGE-SIDE OF THE DOOR, AND THE DOOR SWINGS IN A MANNER THAT SHALL BLOCK THE DEVICE, MOUNT THE DEVICE 12" BEYOND THE DOOR SWING. COORDINATE ROUGH-IN LOCATIONS WITH DIV. 27 AND 28 DEVICES AS WELL. COORDINATE MOUNTING LOCATION WITH OTHER TRADES TO ENSURE A UNIFORM MOUNTING AND AESTHETICALLY-PLEASING APPEARANCE.
5. MOUNTING HEIGHT INDICATED IN LEGEND AND ON THE DRAWINGS SHALL BE THE DISTANCE MEASURED FROM THE CENTER OF THE DEVICE TO THE FINISHED FLOOR.
6. PROVIDE MOUNTING ON ALL OVERHEAD UTILITIES AND OTHER FIXTURES WEIGHING 31 POUNDS OR MORE TO MINIMIZE THE LIKELIHOOD THAT THEY WILL FALL. DESIGN ALL EQUIPMENT TO RESIST FORCES OF 0.5 TIMES THE EQUIPMENT WEIGHT IN THE DOWNWARD DIRECTION.

TYPICAL DEVICE MOUNTING HEIGHTS:

REF	REFRIGERATOR, +48" AFF
VM	VENDING MACHINE, +24" AFF
CO	COPIER, +18" AFF
AC	ABOVE COUNTER, SEE "DEVICE MOUNTING NOTES", NOTE 1 ABOVE

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
LICENSED PROFESSIONAL ENGINEER
No. 17970-E
OF HAWAII
10/31/19

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WAS MI UNDER MY OBSERVATION
SEAL

NO	DESCRIPTION	STM	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: M.M. DRW: A.Q. CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

BUILDING 19 IMPROVEMENTS

ELECTRICAL LEGEND

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 64 OF 78

E002

KEYED NOTES:

1. EXISTING SCOREBOARD SHALL BE DISMOUNTED AND TESTED. PROVIDE TEST RESULTS TO CONTRACTING OFFICER FOR FURTHER INSTRUCTION.
2. REMOVE EXTERIOR WALL LIGHT FIXTURE.

LEGEND:

REMOVE LIGHT FIXTURES: ELECTRICAL CONDUITS, OUTLETS, SWITCHES, POWER LINES, PANELS & ASSOCIATED ELECTRICAL ELEMENTS. NOTE: ALL ASSOCIATED FIRE ALARM SYSTEMS ELEMENTS IS TO REMAIN & NOT INCLUDED INTO THIS WORK.

1 PANELBOARD "G"

2

0 10' 20' 40'
SCALE IN FEET

1 ED101 ELECTRICAL DEMOLITION PLAN
SCALE: 1"=20'-0"

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
LICENSED PROFESSIONAL ENGINEER
No. 17107-E
DATE 6/30/18
HAWAII, U.S.A.

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STM	DESCRIPTION	DATE	APPR

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BUILDING 19
IMPROVEMENTS

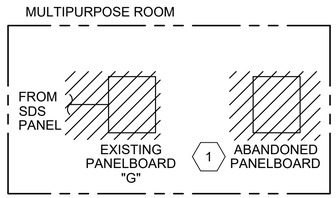
ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 20'-0"
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 65 OF 78

ED101

KEYED NOTES:

1. PANELBOARD SHALL BE TESTED PRIOR TO REMOVAL. COORDINATE WITH ARCHITECTURAL SHEETS FOR WALL PATCHING.



1 / ED601 ELECTRICAL DEMO ONE LINE DIAGRAM

SCALE: N.T.S.

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

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CIVIL
9/30/19

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HAWAII ARMY NATIONAL GUARD
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BUILDING 19 IMPROVEMENTS

ELECTRICAL DEMO ONE LINE DIAGRAM

SCALE: N.T.S.

STATE JOB NO. CA-1514-C

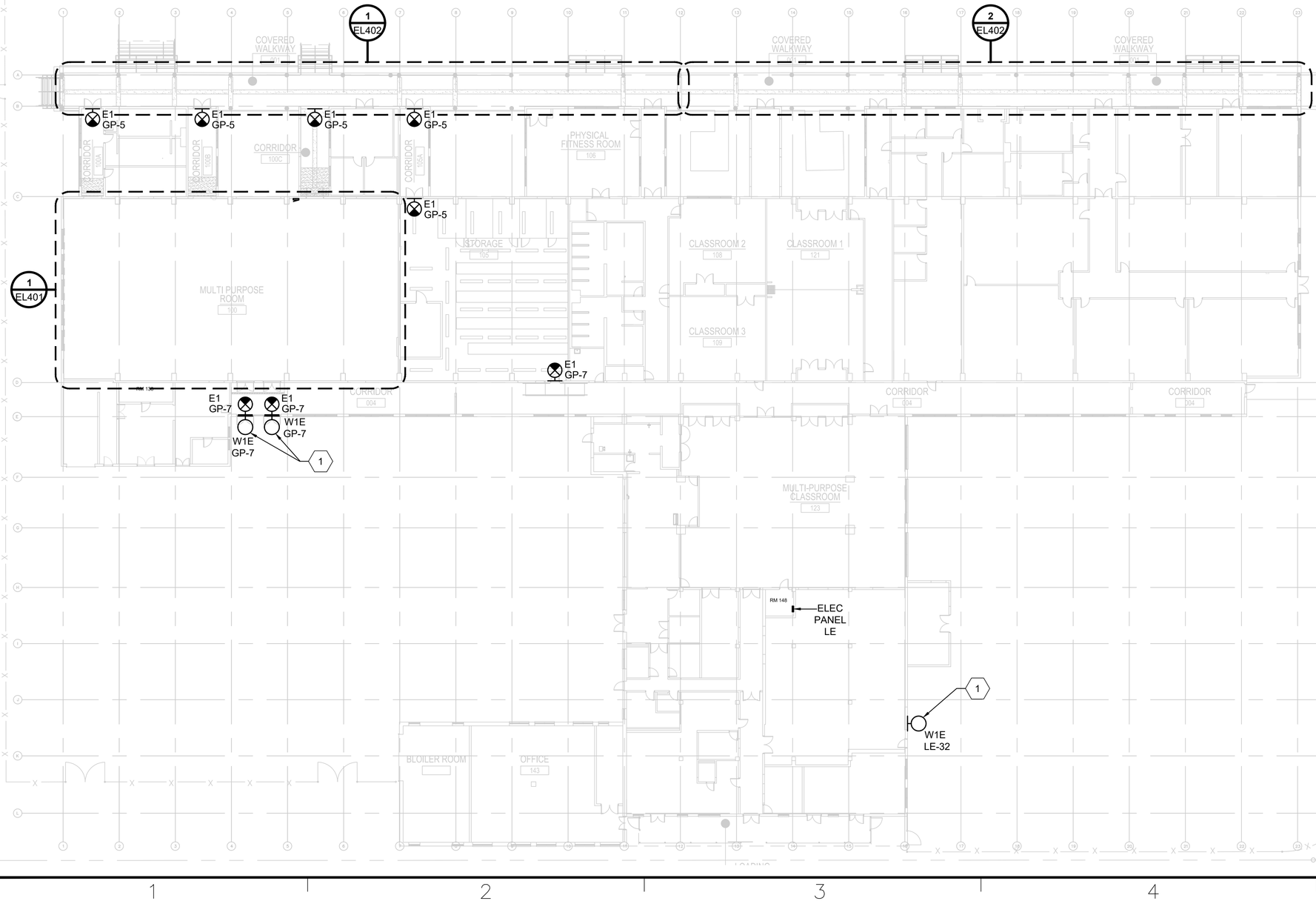
FEDERAL PROJECT NO. PN15130011

SHEET 66 OF 78

ED601

GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR LIGHT FIXTURE SCHEDULE.
3. CONTRACTOR SHALL PREPARE SHOP DRAWINGS INDICATING LOCATION OF OCCUPANCY SENSORS PER MANUFACTURER'S RECOMMENDATION FOR THE SPACE BEING CONTROLLED.
4. SHOP DRAWINGS SHALL INCLUDE SCHEMATIC OF THE PROPOSED LIGHTING CONTROLS FOR EACH TYPE OF CONTROL SCHEME. SCHEMATICS SHALL INCLUDE WIRING DIAGRAMS AND COMPONENT PART NUMBERS.
5. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF UFC-1-200-02, ASHRAE 90.1-2007 AND ASHRAE 189.1-2011.



1 EL101 ELECTRICAL LIGHTING PLAN
SCALE: 1"=20'-0"

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
LICENSED PROFESSIONAL ENGINEER
No. 17970-E
STATE OF HAWAII

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HAWAII ARMY NATIONAL GUARD
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91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

ELECTRICAL LIGHTING PLAN

SCALE: 1" = 20'-0"
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 67 OF 78

EL101

GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR LIGHT FIXTURE SCHEDULE.
3. CONTRACTOR SHALL PREPARE SHOP DRAWINGS INDICATING LOCATION OF OCCUPANCY SENSORS PER MANUFACTURER'S RECOMMENDATION FOR THE SPACE BEING CONTROLLED.
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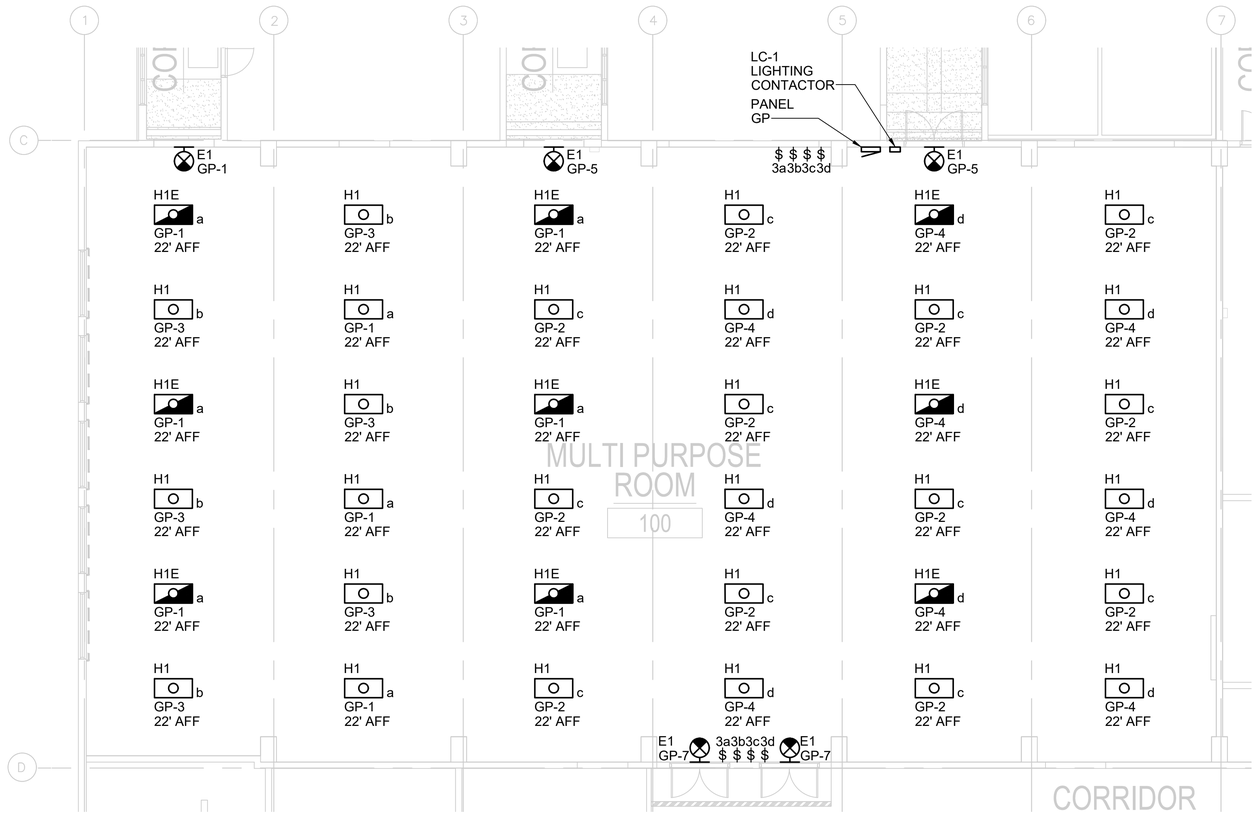
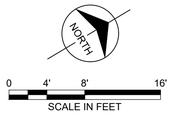


1 EL401 ENLARGED LIGHTING PLAN
SCALE: 1/8"=1'-0"



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BURNS McDONNELL

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DES: M.M. DRW: A.Q. CHK:

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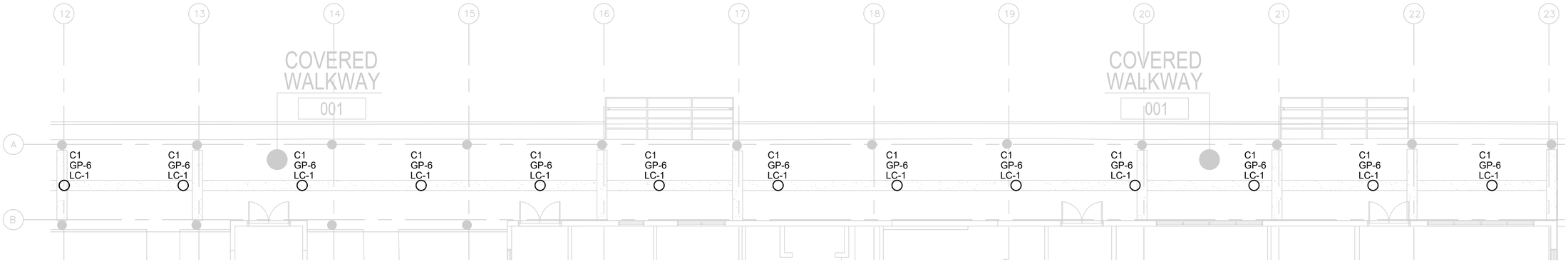
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

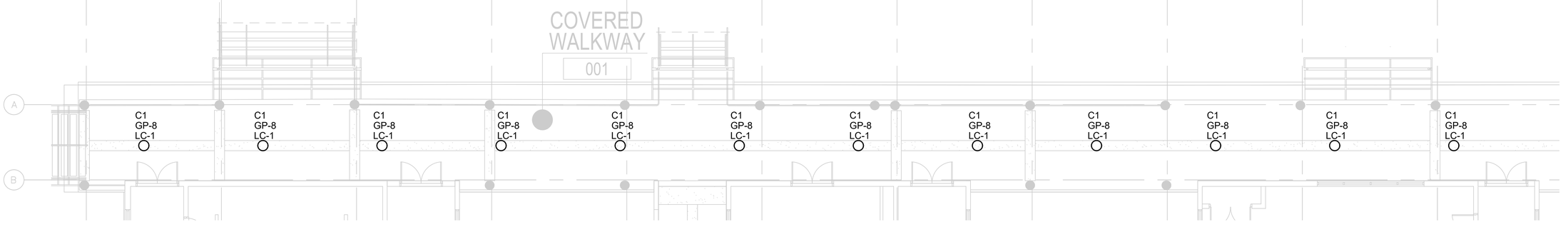
BUILDING 19
IMPROVEMENTS

ENLARGED LIGHTING PLAN

SCALE: 1/8" = 1'-0"
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 68 OF 78
EL401



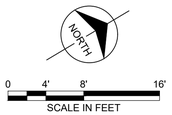
2 EL402 **ENLARGED LIGHTING PLAN**
SCALE: 1/8"=1'-0"



1 EL402 **ENLARGED LIGHTING PLAN**
SCALE: 1/8"=1'-0"

GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR LIGHT FIXTURE SCHEDULE.
3. SHOP DRAWINGS SHALL INCLUDE SCHEMATIC OF THE PROPOSED LIGHTING CONTROLS FOR EACH TYPE OF CONTROL SCHEME. SCHEMATICS SHALL INCLUDE WIRING DIAGRAMS AND COMPONENT PART NUMBERS.



HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
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No. 17970-E
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APPR	DATE	DESCRIPTION	SYM

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: M.M. DRW: A.Q. CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

ENLARGED LIGHTING PLAN

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

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 69 OF 78

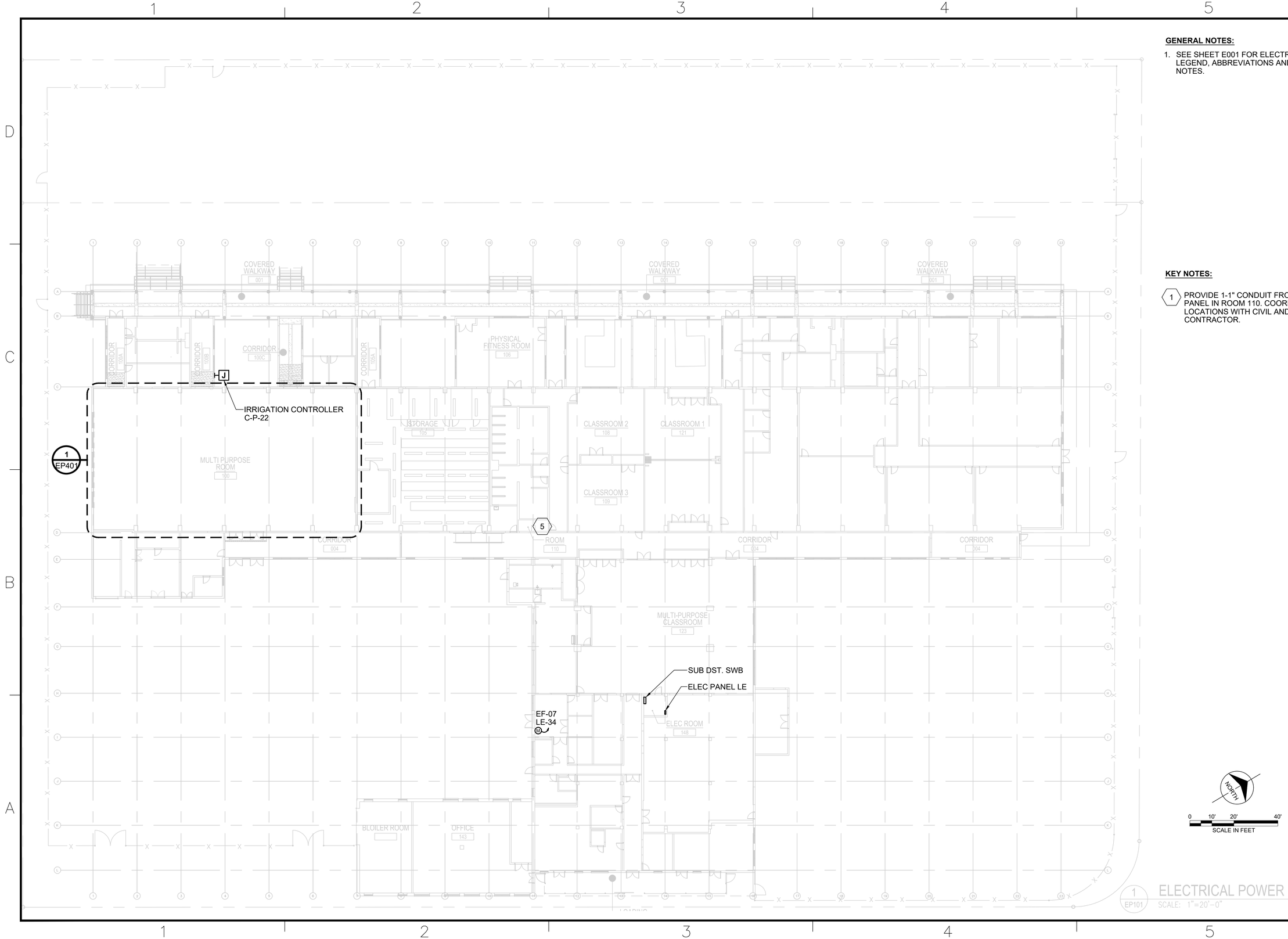
EL402

GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.

KEY NOTES:

(1) PROVIDE 1-1" CONDUIT FROM DDC PANEL IN ROOM 110. COORDINATE LOCATIONS WITH CIVIL AND CONTROLS CONTRACTOR.



1 EP101 ELECTRICAL POWER PLAN
SCALE: 1"=20'-0"

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
LICENSED PROFESSIONAL ENGINEER
No. 17970-E
STATE OF HAWAII

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APPR	DATE	DESCRIPTION	SYM

SUBMITTAL PHASE
FINAL DESIGN

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DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19 IMPROVEMENTS
ELECTRICAL POWER PLAN
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE

SCALE: 1" = 20'-0"

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 70 OF 78

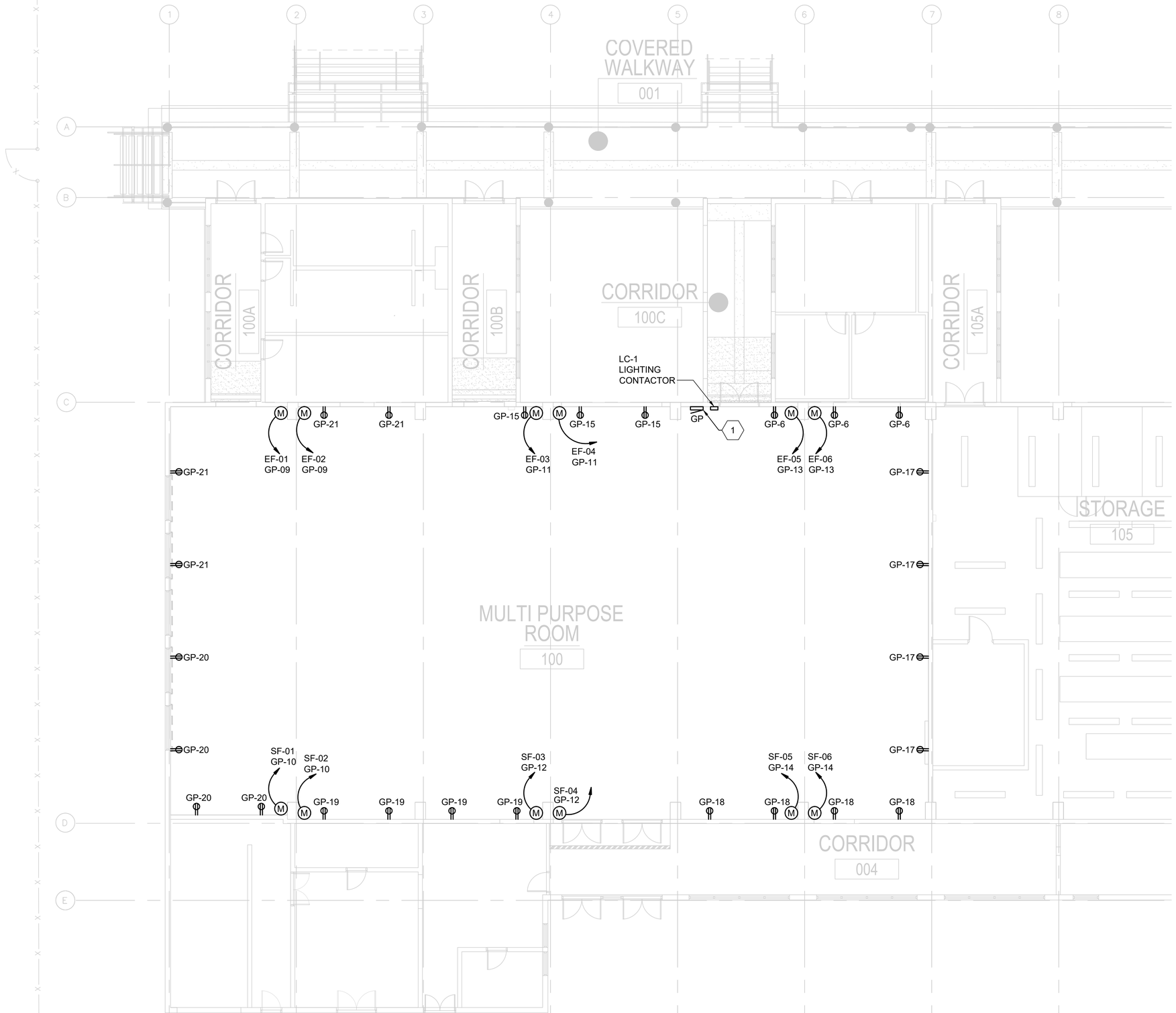
EP101

GENERAL NOTES:

1. SEE SHEET E001 AND E002 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR ELECTRICAL ONE LINE AND PANELBOARD SCHEDULES.
3. REFER TO MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT MOUNTING AND LOCATIONS.

KEY NOTES:

(1) PROVIDE A NEW PANELBOARD "GP" AS SHOWN ON ONE LINE ON SHEET E601.



1 EP101 ELECTRICAL POWER PLAN
SCALE: 1/8"=1'-0"

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA
LICENSED PROFESSIONAL ENGINEER
No. 17970-E
RYAN B. WUBBENA
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION
SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: M.M. DRW: A.Q. CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII
BUILDING 19
IMPROVEMENTS
ELECTRICAL POWER PLAN

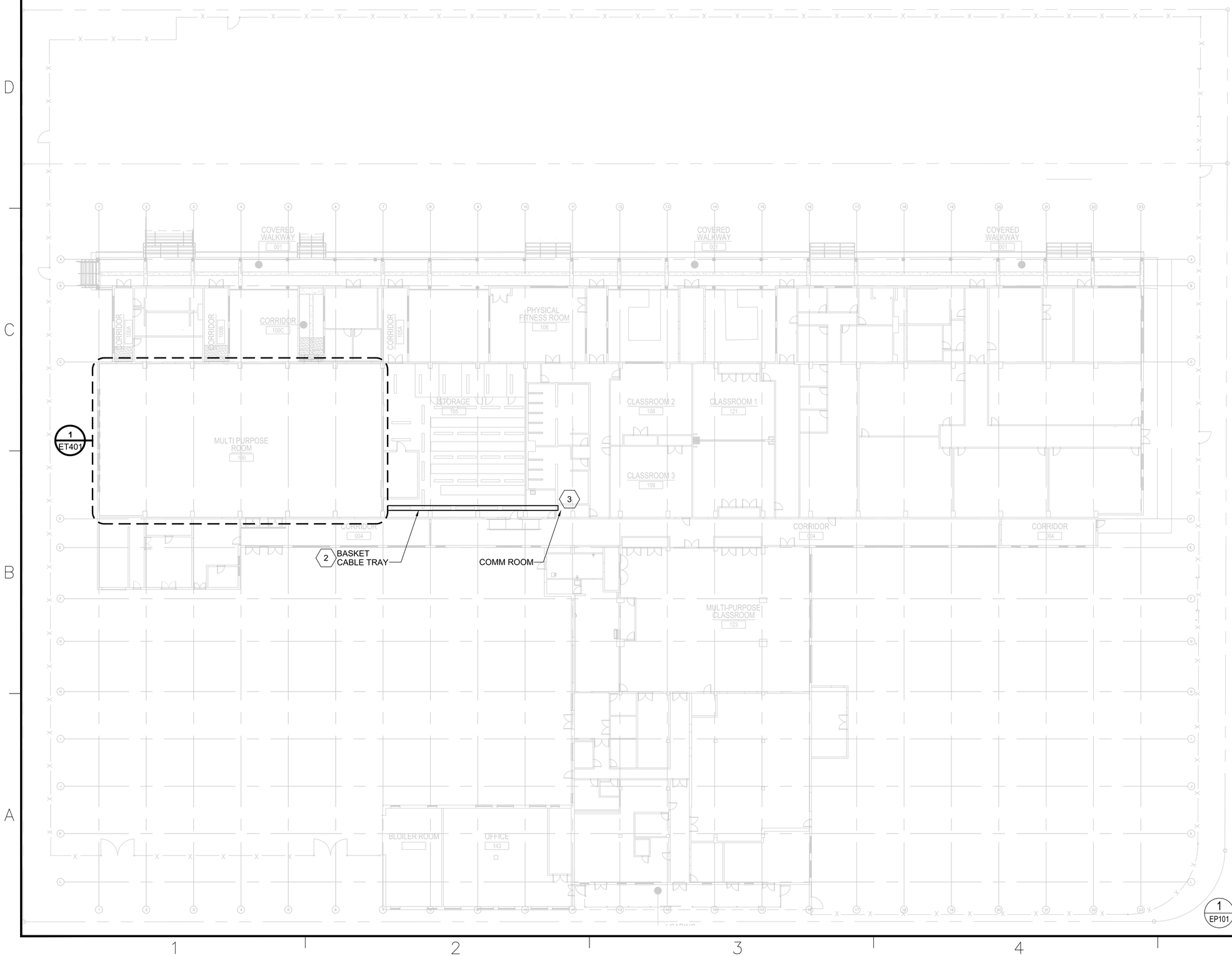
SCALE: 1/8" = 1'-0"
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 71 OF 78
EP401

GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR LIGHT FIXTURE SCHEDULE.
3. CONTRACTOR SHALL PREPARE SHOP DRAWINGS INDICATING LOCATION OF OCCUPANCY SENSORS PER MANUFACTURER'S RECOMMENDATION FOR THE SPACE BEING CONTROLLED.
4. SHOP DRAWINGS SHALL INCLUDE SCHEMATIC OF THE PROPOSED LIGHTING CONTROLS FOR EACH TYPE OF CONTROL SCHEME. SCHEMATICS SHALL INCLUDE WIRING DIAGRAMS AND COMPONENT PART NUMBERS.
5. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF UFC-1-200-02, ASHRAE 90.1-2007 AND ASHRAE 189.1-2011.

KEY NOTES:

1. ROUTE TO NEAREST EXISTING 208Y/120V PANELBOARD. PROVIDE NEW 20A MOLDED CAGE CIRCUIT BREAKER TO MATCH EXISTING PANEL.
2. TYPICAL BASKET TRAY INSTALLATION DETAIL 1 ON E501. MINIMUM 2"x12" TRAY.
3. PROVIDE 3 NEW 48 PORT PATCH PANELS ON RAC IN COMM ROOM. SEE DETAIL 2 ON E501.



1 EP101 ELECTRICAL TELECOM PLAN
SCALE: 1"=20'-0"

BURNS McDONNELL

A/E INFO

RYAN B. WUBBENA LICENSED PROFESSIONAL ENGINEER No. 17970-E exp 4/30/19 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WAS MI UNDER MY OBSERVATION SEAL

BY	DESCRIPTION	DATE	APPR
MJS			

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018

DES: M.M. DRW: A.Q. CHK:

DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19 IMPROVEMENTS

ELECTRICAL TELECOM PLAN

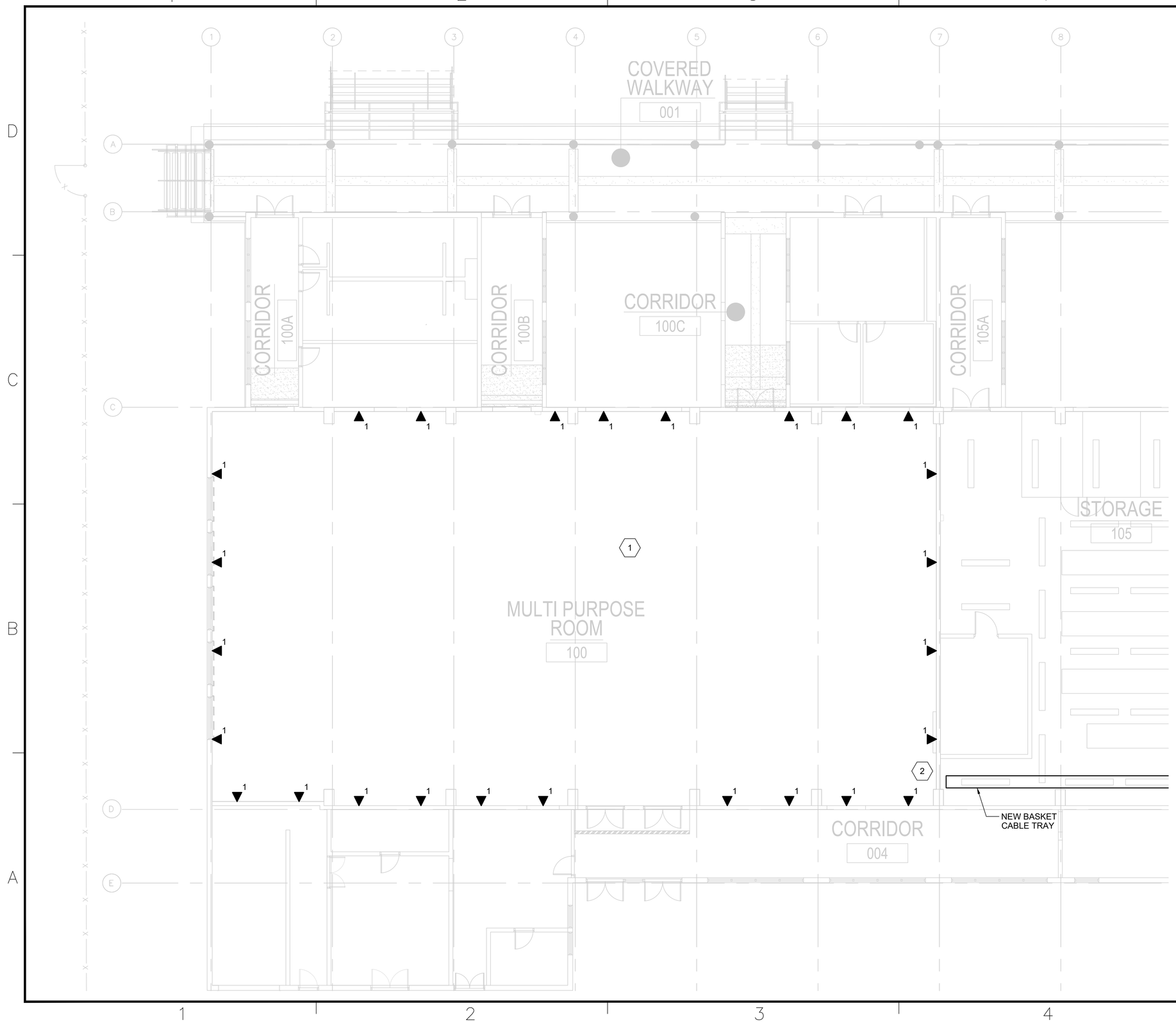
SCALE: 1" = 20'-0"

STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 72 OF 78

ET101



GENERAL NOTES:

1. SEE SHEET E001 FOR ELECTRICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SEE SHEET E601 FOR ELECTRICAL ONE LINE AND PANELBOARD SCHEDULES.
3. REFER TO MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT MOUNTING AND LOCATIONS.

KEY NOTES:

1. ALL CABLING SHALL BE ROUTED TO THE EXISTING COM RACK IN THE COM ROOM AS INDICATED ON ET101. CABLES SHALL BE TERMINATED ON THE NEW PATCH PANELS INSTALLED ON RACK.
2. PROVIDE NEW TYPE 1 LAY-IN WIREWAY ROUTED AROUND MULTI-PURPOSE ROOM FOR ALL COMMUNICATION CABLING. SIZE WIREWAY AS REQUIRED. INSTALL AT MINIMUM 12' AFF. PAINTED TO MATCH WALL COLOR.

1 ET101 ELECTRICAL TELECOM PLAN
SCALE: 1/8"=1'-0"

HAWAII ARMY NATIONAL GUARD

BURNS McDONNELL

A/E INFO

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LICENSED PROFESSIONAL ENGINEER
No. 17970-E
STATE OF HAWAII

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WAS ME UNDER MY OBSERVATION SEAL

SYM	DESCRIPTION	DATE	APPR

SUBMITTAL PHASE
FINAL DESIGN

SUBMITTAL DATE: JUNE 29 2018
DES: M.M. DRW: A.Q. CHK:

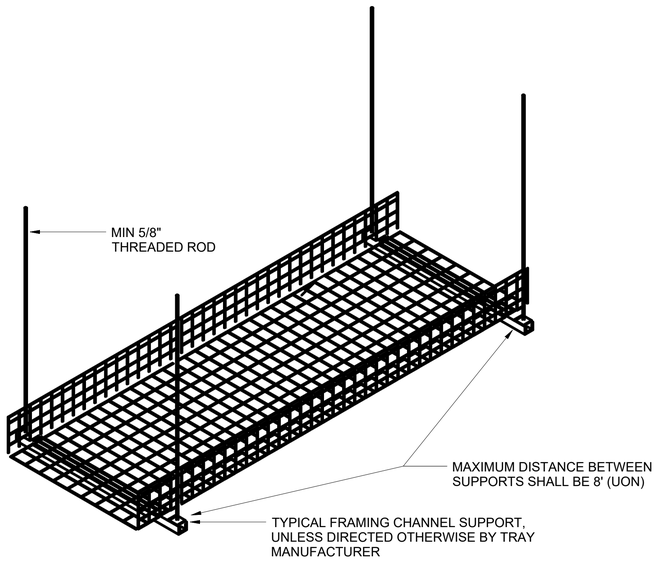
DEPARTMENT OF DEFENSE
HAWAII ARMY NATIONAL GUARD
FACILITIES DESIGN & PROJECTS BRANCH
STATE OF HAWAII
FACILITY MANAGEMENT OFFICE
91-1110 ENTERPRISE AVENUE
KALAELOA, KAPOLEI, OAHU, HAWAII

BUILDING 19
IMPROVEMENTS

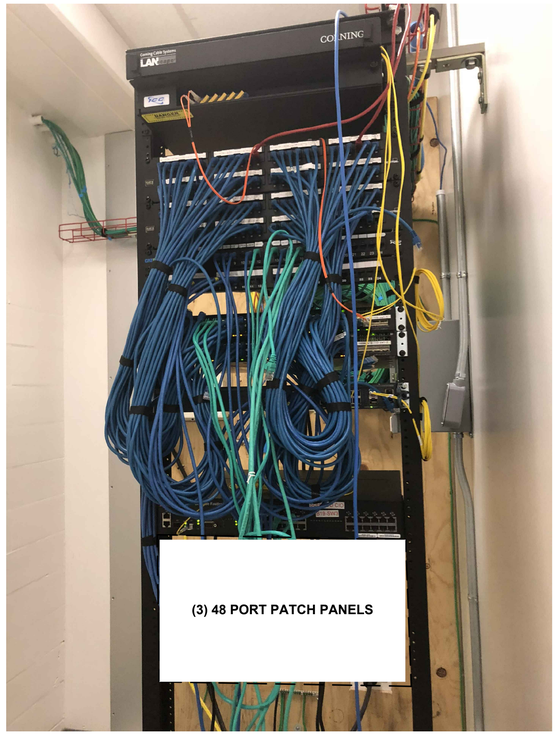
ELECTRICAL TELECOM PLAN

SCALE: 1/8" = 1'-0"
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 73 OF 78

ET401



1 E501 TYPICAL BASKET CABLE TRAY DETAIL
SCALE: N.T.S.



2 E501 COM RACK PATCH PANEL LOCATION
SCALE: N.T.S.

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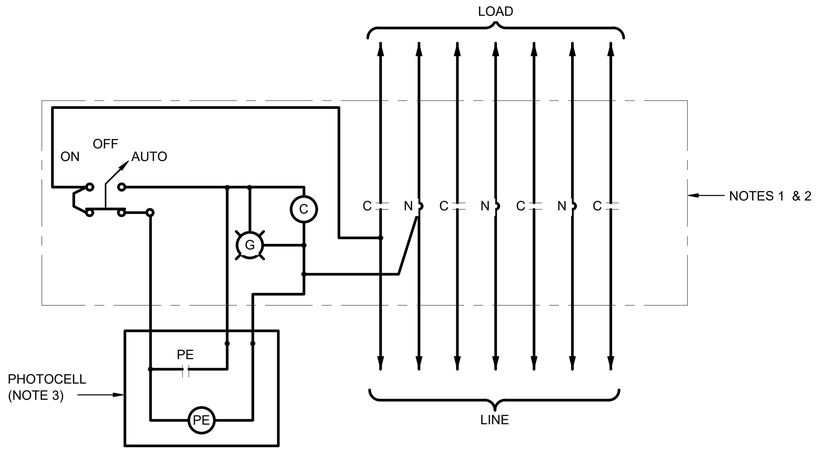
ELECTRICAL DETAILS

SCALE: N.T.S.
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 74 OF 78
E501



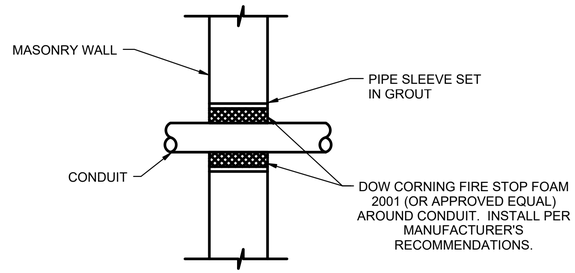
NOTES:

1. 120 VOLT, 30 AMP, 60HZ, ELECTRICALLY HELD LIGHTING CONTACTOR, POLES AS REQUIRED.
2. LIGHTING CONTACTOR SHALL BE MOUNTED IN A NEMA 1 ENCLOSURE WITH HINGED COVER. ON-OFF-AUTO SELECTOR SWITCH TO BE MOUNTED ON DOOR OF ENCLOSURE. CLEARLY LABEL ENCLOSURE TO INDICATE LIGHTS BEING CONTROLLED.
3. 1000W, 120V RATED PHOTOCELL. PHOTOCELL SHALL HAVE BUILT IN TIME DELAY TO PREVENT FALSE SWITCHING. PROVIDE 3-#14 AWG IN 1/2 " C, FROM PHOTOCELL TO LIGHTING CONTACTOR. MOUNT PHOTOCELL ON ROOF FACING NORTH SKY PER MANUFACTURERS RECOMMENDATIONS. VERIFY MOUNTING LOCATION WITH OWNER PRIOR TO INSTALLATION.

EXTERIOR LIGHTING CONTROL WIRING SCHEMATIC

1 / E502 TYPICAL 120V LIGHTING CONTACTOR

SCALE: N.T.S.



2 / E502 TYPICAL CONDUIT PENETRATION THROUGH INTERIOR MASONRY WALL

SCALE: N.T.S.

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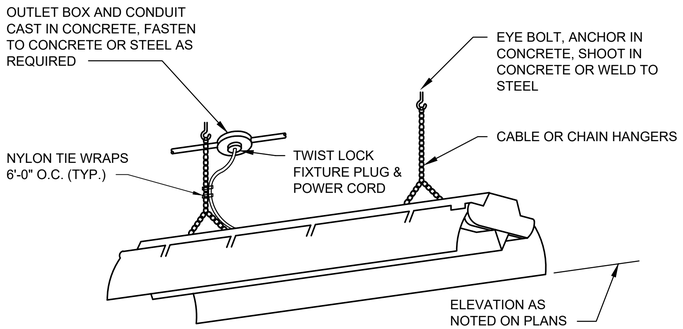
SCALE: N.T.S.

STATE JOB NO. CA-1514-C

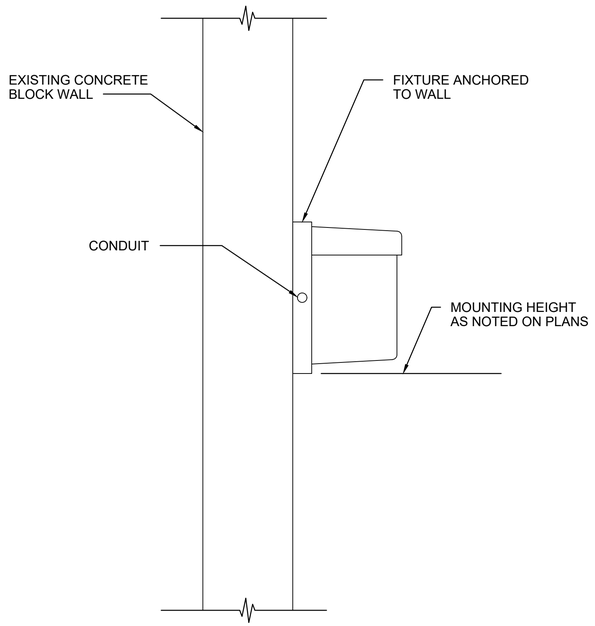
FEDERAL PROJECT NO. PN15130011

SHEET 75 OF 78

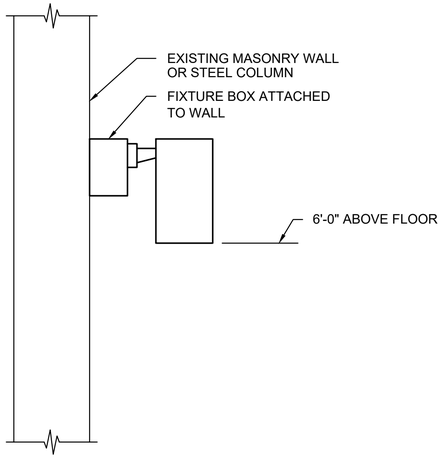
E502



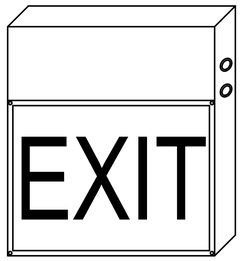
1 E503 CHAIN/CABLE HUNG FIXTURE TYPE H1
SCALE: N.T.S.



2 E503 MOUNTING DETAIL LIGHT FIXTURE TO CONCRETE WALL TYPE W1
SCALE: N.T.S.



3 E503 MOUNTING DETAIL EXIT LIGHT TYPE E1
SCALE: N.T.S.



1. CORROSION RESISTANT DIE CAST ALUMINUM WITH BRUSHED ALUMINUM FINISH.
2. DIE CAST ALUMINUM STENCIL FACE WITH UNBREAKABLE FIBERGLASS INNER PANEL.
3. MINIMUM 152mm HIGH LETTERS WITH 19mm STROKE
4. PLASTIC PRISMATIC LENS IN BOTTOM OF DOWNLIGHT.
5. FIXTURE SHALL BE COMPLETE WITH LED. SELF-CONTAINED, 10 YEAR
6. WARRANTY BATTERY, SOLID STATE CHARGER, TRANSFER AND LOW VOLTAGE DISCONNECT SWITCH. SIGNAL LIGHT AND TEST SWITCH. 7.
7. SUITABLE FOR WET LOCATIONS.

4 E503 TYPE E
SCALE: N.T.S.

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SEAL

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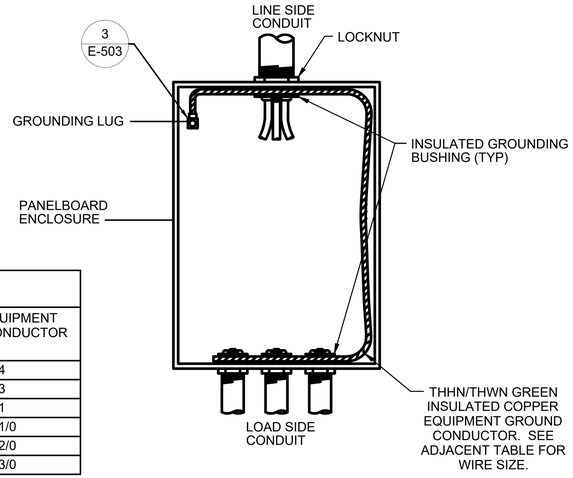
BUILDING 19 IMPROVEMENTS

ELECTRICAL DETAILS

SCALE: N.T.S.
STATE JOB NO. CA-1514-C
FEDERAL PROJECT NO. PN15130011
SHEET 76 OF 78
E503

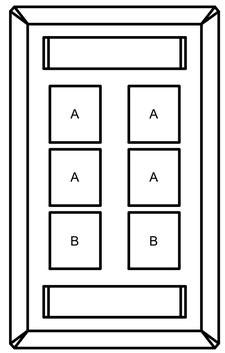
EQUIPMENT GROUND CONDUCTOR SIZE	
PANELBOARD BUS AMPERE RATING	COPPER EQUIPMENT GROUND CONDUCTOR SIZE (AWG)
225A	#4
400A	#3
600A	#1
800A	#1/0
1000A	#2/0
1200A	#3/0



TYPICAL PANELBOARD CONDUIT GROUNDING DETAIL

1 / E504 SCALE: N.T.S.

MODULAR JACK AND CABLING SCHEDULE					
APPEARANCE	DESIGNATOR	MODULAR JACK	COLOR	CABLING	COLOR
	A	CAT 6 RJ-45 NON-KEYED DATA/VOIP	IVORY	4-PAIR CATEGORY 6 UTP	GREEN
	B	BLANK INSERT	IVORY	NOT APPLICABLE	N/A

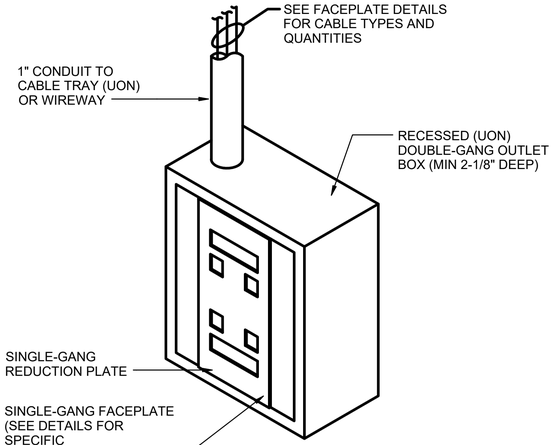


▼1 COMMUNICATIONS WALL FACEPLATE

▮1 FLOORBOX WITH COMMUNICATIONS FACEPLATE

COMM OUTLET TYPE 1

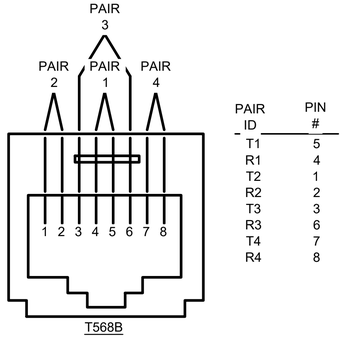
2 / E504 SCALE: N.T.S.



NOTES:
MOUNT OUTLET BOX AT 18" AFF (UON).

TYPICAL COMMUNICATIONS BACKBOX

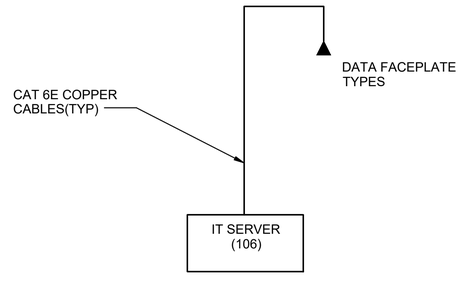
3 / E504 SCALE: N.T.S.



PAIR ID	PIN #
T1	5
R1	4
T2	1
R2	2
T3	3
R3	6
T4	7
R4	8

TYPICAL MODULAR PLUG PIN OUT, T568B

4 / E504 SCALE: N.T.S.



NOTE:

1. ALL COMMUNICATIONS (CAT 6E) HORIZONTAL CABLING IN FACILITY TO BE TERMINATED IN IT SERVER ROOM 106.
2. SEE COMMUNICATION PLANS AND FACEPLATE DETAILS FOR CABLE COUNTS.

COMMUNICATIONS RISER DIAGRAM

5 / E504 SCALE: N.T.S.

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STATE JOB NO. CA-1514-C

FEDERAL PROJECT NO. PN15130011

SHEET 77 OF 78

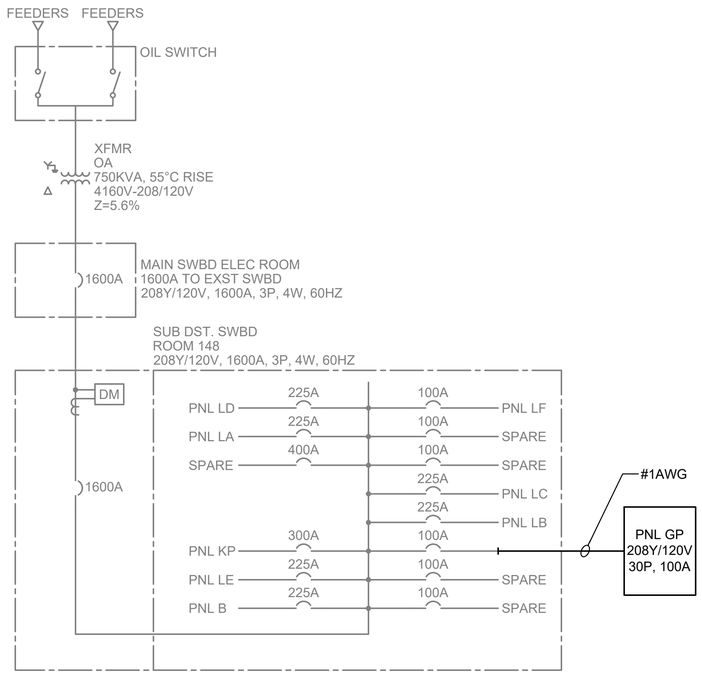
E504

LIGHT FIXTURE SCHEDULE

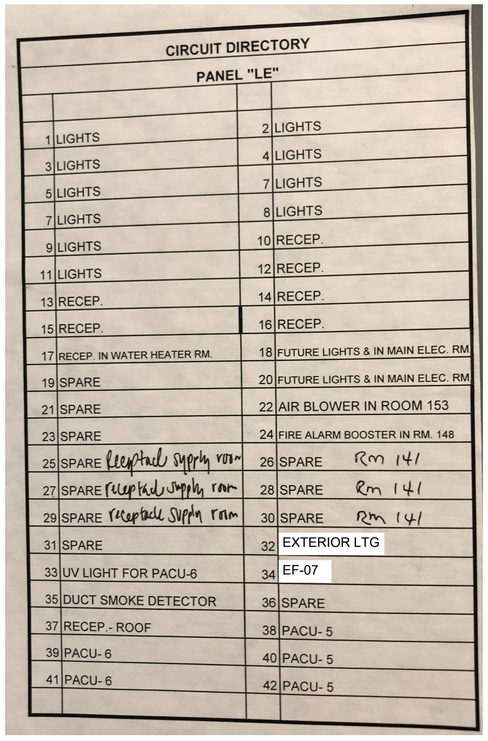
FIXTURE		LAMP INFORMATION				FIXTURE INFORMATION						
TYPE	MODIFIER	QTY	WATTAGE	TYPE	COLOR TEMP	FIXTURE LUMENS	VOLTAGE	WATTAGE	LOAD	DESCRIPTION	MOUNTING	MANUFACTURER
C1	-	1	14	LED	4000K	1202 lm	120V	14W	14 VA	6" RECESSED LED CAN LIGHT, SPECULAR REFLECTOR, WHITE MATTE TRIM RING, WET LOCATION GASKET	CEILING RECESSED	LITHONIA, COOPER
E1	-	1	5	LED	4000K	1380 lm	120V	5W	5 VA	LED EXIT SIGN, ALUMINUM HOUSING, 90 MIN BATTERY BACKUP, RED LETTERS.	CEILING SURFACE, WALL	LITHONIA, LIGHTING LE
H1	-	1	112	LED	4000K	12,000 lm	120V	125W	125 VA	LED UNLENSED HIGH BAY WITH WIRE GUARD. CABLE MOUNTED ALUMINUM HOUSING. L70@100K HRS.	PENDANT	LITHONIA, COOPER
W1	E	1	47	LED	4000K	3095 lm	120V	47W	47 VA	EXTERIOR WALLPACK, TYP 4 DISTRIBUTION, WET LOCATION, MOTION DETECTOR AND 50% LUMEN REDUCTION WITH 90 MINUTE EMERGENCY BATTERY BACKUP	SURFACE WALL	LITHONIA

PANELBOARD NAME: GP — 42,000 RMS SYMMETRICAL A.I.C.
PANELBOARD TYPE: MAIN CIRCUIT BREAKER — S MOUNTED, NEMA 1 ENCLOSURE — 100 AMP TRIP MAIN BREAKER
PANEL LOCATION: MULTIPURPOSE ROOM — 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz — 100 AMP MAINS
SUPPLIED FROM: SDS

CKT NO.	TRIP AMPS	NO. POLES	WIRE/GND/COND	LOAD SERVED	LOAD VA	ø	LOAD VA	LOAD SERVED	WIRE/GND/COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	1	2#12, #12 GND, 3/4"C	ROOM LTG WEST 1	-	A	-	ROOM LTG EAST 1	2#12, #12 GND, 3/4"C	1	20	2
3	20	1	2#12, #12 GND, 3/4"C	ROOM LTG WEST 2	-	B	-	ROOM LTG EAST 2	2#12, #12 GND, 3/4"C	1	20	4
5	20	1	2#12, #12 GND, 3/4"C	EXIT LTG 1	-	C	-	LC-1/CORRIDOR LTG 1	2#12, #12 GND, 3/4"C	1	20	6
7	20	1	2#12, #12 GND, 3/4"C	EXIT LTG 2	-	A	-	LC-1/CORRIDOR LTG 2	2#12, #12 GND, 3/4"C	1	20	8
9	20	1	2#12, #12 GND, 3/4"C	EF-01/02	-	B	-	SF-01/02	2#12, #12 GND, 3/4"C	1	20	10
11	20	1	2#12, #12 GND, 3/4"C	EF-03/04	-	C	-	SF-03/04	2#12, #12 GND, 3/4"C	1	20	12
13	20	1	2#12, #12 GND, 3/4"C	EF-05/06	-	A	-	SF-05/06	2#12, #12 GND, 3/4"C	1	20	14
15	20	1	2#12, #12 GND, 3/4"C	RECEPTACLES	-	B	-	RECEPTACLES	2#12, #12 GND, 3/4"C	1	20	16
17	20	1	2#12, #12 GND, 3/4"C	RECEPTACLES	-	C	-	RECEPTACLES	2#12, #12 GND, 3/4"C	1	20	18
19	20	1	2#12, #12 GND, 3/4"C	RECEPTACLES	-	A	-	RECEPTACLES	2#12, #12 GND, 3/4"C	1	20	20
21	20	1	2#12, #12 GND, 3/4"C	RECEPTACLES	-	B	-	IRRIGATION CONTROLLER	2#12, #12 GND, 3/4"C	1	20	22
23	20	1	2#12, #12 GND, 3/4"C	SPARE	-	C	-	SPARE	2#12, #12 GND, 3/4"C	1	20	24
25				SPARE	-	A	-	SPARE				26
27				SPARE	-	B	-	SPARE				28
29				SPARE	-	C	-	SPARE				30



1 E601 ELECTRICAL ONE LINE DIAGRAM
SCALE: N.T.S.


CIRCUIT DIRECTORY
PANEL "LE"

1	LIGHTS	2	LIGHTS
3	LIGHTS	4	LIGHTS
5	LIGHTS	7	LIGHTS
7	LIGHTS	8	LIGHTS
9	LIGHTS	10	RECEP.
11	LIGHTS	12	RECEP.
13	RECEP.	14	RECEP.
15	RECEP.	16	RECEP.
17	RECEP. IN WATER HEATER RM.	18	FUTURE LIGHTS & IN MAIN ELEC. RM
19	SPARE	20	FUTURE LIGHTS & IN MAIN ELEC. RM
21	SPARE	22	AIR BLOWER IN ROOM 153
23	SPARE	24	FIRE ALARM BOOSTER IN RM. 148
25	SPARE receptacle supply room	26	SPARE Rm 141
27	SPARE receptacle supply rom	28	SPARE Rm 141
29	SPARE receptacle supply rom	30	SPARE Rm 141
31	SPARE	32	EXTERIOR LTG
33	UV LIGHT FOR PACU-6	34	EF-07
35	DUCT SMOKE DETECTOR	36	SPARE
37	RECEP.- ROOF	38	PACU- 5
39	PACU- 6	40	PACU- 5
41	PACU- 6	42	PACU- 5

2 E601 PANEL LE PANEL SCHEDULE
SCALE: N.T.S.

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SHEET 78 OF 78
E601