

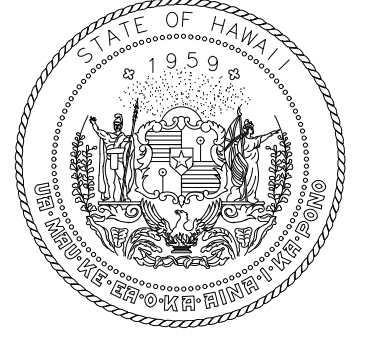
**GENERAL NOTES**

1. CONTRACTOR SHALL FURNISH AND INSTALL A FULLY FUNCTIONAL, OPERATIONAL, AND COMMISSIONED LIGHTNING DETECTION OR PREDICTION AND WARNING SYSTEM.
2. ALL SYSTEM AND SUBSYSTEM COMPONENTS SHALL BE INSTALLED PER MANUFACTURES INSTRUCTIONS, INCLUDING SYSTEM START-UP, TESTING AND COMMISSIONING TO BE CONDUCTED BY QUALIFIED MANUFACTURE-APPROVED PERSONNEL.
3. RESOLVE ALL DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK.
4. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE RECORD DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, SUBMIT DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE CONTRACTING OFFICER. DO NOT PROCEED UNTIL APPROVAL IS OBTAINED FROM THE CONTRACTING OFFICER.
5. THE SYSTEM, AT A MINIMUM, SHALL CONSIST OF A LIGHTING DETECTION AND/OR PREDICTION SYSTEM (LDS) AND SUFFICIENT QUANTITY OF LIGHTING WARNING SYSTEMS (LWS) AS TO PROVIDE ADEQUATE AUDIBILITY AND VISIBILITY OF LWS ALERTS BY GROUND CREW PERSONNEL WORKING WITHIN THE AIRPORT APRON AREAS DESIGNATED IN THE DESIGN AND SPECIFICATIONS.
6. THE SYSTEM SHALL INCLUDE DATA MANAGEMENT AND GRAPHICAL USER INTERFACES TO CONFIGURE, MANAGE, AND CONTROL THE SYSTEM AND MONITOR SYSTEM DATA, INCLUDING BUT NOT LIMITED TO, APPROACHING WEATHER AND APPROACHING LIGHTNING STORMS, LIGHTING STRIKES (CLOUD-TO-CLOUD OR CLOUD-TO-GROUND) OR PREDICTED LIGHTNING STRIKES.
7. THE SYSTEM SHALL INCLUDE A DEDICATED TERMINAL OR HUMAN MACHINE INTERFACE (HMI) TO BE LOCATED AT THE DKIIA RAMP CONTROL OFFICE, LOCATED ON THE 10<sup>TH</sup> FLOOR OF THE ADMIN TOWER BUILDING. PROVIDE POWER AND TELECOM CONNECTIONS TO THE DKIIA'S EXISTING LAN SYSTEM AND UP TO TWO COMPUTERS, IDENTIFIED BY THE STATE, AS REQUIRED. CONTRACTOR TO COORDINATE NETWORK ACCESS AND CONNECTIVITY WITH DKIIA'S I.T. DEPARTMENT REQUIREMENTS AND PERSONNEL.
8. THE LDS SHALL PROVIDE TWO MODES OF ACTIVATING OR DE-ACTIVATING ALL LWS SIMULTANEOUSLY:
  - MODE 1: MANUAL OPERATION – PROVIDE THE MEANS TO ALLOW RAMP CONTROL TO MANUALLY ACTIVE OR DE-ACTIVATE THE LWS.
  - MODE 2: AUTOMATED OPERATION – PROVIDE THE MEANS TO ALLOW THE LWS' TO BE AUTOMATICALLY ACTIVATED OR DE-ACTIVATED BASED ON ALERTS FROM THE LDS.
  - ENABLE EITHER OF THE ABOVE MENTIONED MODES AT THE DIRECTION OF THE STATE.
9. THE LDS SHALL PROVIDE, AT A MINIMUM, REAL-TIME WEB-BASED COLOR WEATHER MAP THAT INDICATES APPROACHING STORMS' SIZE, DIRECTION, AND SPEED. THE LDS SHALL PROVIDE WARNINGS (AUDIBLE, VISUAL, TEXT MESSAGE, EMAIL, ETC.) OF APPROACHING LIGHTNING STORMS WHEN THE STORM APPROACHES A PREDETERMINED DISTANCE FROM THE DKIIA, AS DETERMINED BY THE AIRPORT. THE PREDETERMINED DISTANCE SHALL BE PROGRAMMABLE/ADJUSTABLE FROM A RANGE OF 10 MILES TO 4 MILES FROM THE DKIIA.
10. ALL COMMUNICATION BETWEEN THE LDS AND VARIOUS LWS SHALL BE WIRELESS THROUGH EITHER DEDICATED CELLULAR OR RADIO COMMUNICATION BETWEEN THE MAIN LDS AND LWS' INSTALLED. CONTRACTOR SHALL CONDUCT RF TESTING OR OTHER APPROPRIATE COMMUNICATION FIELD TESTS PRIOR TO INSTALLATION TO DEMONSTRATE AND CONFIRM APPROPRIATE SIGNAL STRENGTH BETWEEN THE LDS AND LWS AND WITH NON-INTERFERENCE WITH OTHER DKIIA COMMUNICATION SIGNALS. TEST RESULTS SHALL BE SUBMITTED TO THE STATE.
11. BASED ON THE AUDIBLE AND VISUAL OUTPUTS OF THE LWS, THE CONTRACTOR TO INSTALL MULTIPLE LWS' AS NECESSARY TO PROVIDE SUFFICIENT AUDIBLE AND VISUAL COVERAGE OF ALL GROUND APRON, MAINTENANCE, AND SERVICE AREAS DESIGNATED IN THE DESIGN PLANS AND SPECIFICATIONS.
12. THE LWS' SHALL CONSIST, AT A MINIMUM, THE FOLLOWING:
  - CONTROL UNIT.
  - HIGH OUTPUT HORN.
  - HIGH INTENSITY BLUE STROBE LIGHT.
  - RADIO OR CELLULAR COMMUNICATION SYSTEM.
  - PHOTOVOLTAIC SYSTEM WITH BATTERY STORAGE.
  - FRAMING/SUPPORTS AS NECESSARY.
  - MOUNTING HARDWARE.
  - BALLASTS (WHERE NECESSARY).
  - SIGNAGE.
13. ALL LWS COMPONENTS SHALL BE RATED FOR EXTERIOR USE AND HIGHLY CORROSION RESISTANT (316 STAINLESS STEEL OR AIRCRAFT ALUMINUM WHENEVER POSSIBLE), UV STABILIZED, AND WEATHERPROOF.
14. ALL LWS' SHALL BE STAND-ALONE SELF-POWERED UNIT INCLUDING SOLAR PV PANEL AND BATTERY STORAGE SYSTEM CAPABLE OF POWERING THE LWS ON BATTERY POWER ONLY (ASSUMING BATTERY AT 80% STATE OF CHARGE WITH NO ADDITIONAL SOLAR PV CHARGING AVAILABLE) FOR THE FOLLOWING MINIMUM DURATIONS:
  - WARNING: HORN AND STROBE (4 MINUTES)
  - CONTINUED WARNING: STROBE ONLY (60 MINUTES)
  - AND ALL CLEAR: HORN ONLY (4 MINUTES)
15. THE LWS HORN'S DECIBEL LEVEL SHALL PROVIDE A MINIMUM OF +3 DECIBELS ABOVE THE AIRPORT APRON AMBIENT SOUND LEVEL OF 72 DB FOR THE APRON AREAS DESIGNATED IN THE DRAWINGS AND SPECIFICATIONS.
16. THE LWS STROBE LIGHT(S) SHALL BE VISIBLE FROM SURROUNDING AND ADJACENT GROUND CREWS AND PERSONNEL WITH CLEAR LINES OF SIGHT TO THE STROBE LIGHT(S).
17. NO GROUND PENETRATIONS SHALL BE ALLOWED AT ANY LWS INSTALLATION LOCATION.

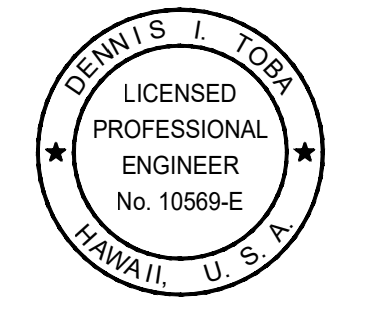
18. FOR ANY LWS GROUND BALLASTED AND NON-PENETRATING INSTALLATION, HIGHWAY RATED ORANGE PORTABLE WATER FILLED BARRIERS (WFB) SHALL BE INSTALLED ON ALL SIDES OF LWS THAT MAY BE EXPOSED TO VEHICULAR TRAFFIC OR AS MAY BE NECESSARY TO SAFELY PROTECT PERSONNEL AND THE LWS FROM ACCIDENTS, COLLISION OR DAMAGE.
19. CONTRACTOR SHALL PROVIDE UP TO 2-DAYS OF IN-PERSON TRAINING TO DESIGNATED DKIIA PERSONNEL BY MANUFACTURE-APPROVED AND QUALIFIED PERSONNEL ON LDS AND LWS USE, CONFIGURATION, OPERATIONS, AND MAINTENANCE. TRAINING SHALL INCLUDE VIDEO AND TRAINING MANUALS FOR END-USE OPERATOR ON BASIC SYSTEM CONFIGURATION, SET-UP, AND OPERATOR USE OF THE VARIOUS SYSTEM FUNCTIONALITIES.
20. 5 YEAR WARRANTY AND OPERATIONS AND MAINTENANCE SERVICE TO BE PROVIDED TO INCLUDE, AT A MINIMUM, SYSTEM SOFTWARE SUPPORT AND UPGRADES AS MAY BE REQUIRED TO MAINTAIN SYSTEM, CUSTOMER SERVICE SUPPORT, 24-HR EMERGENCY CONTACT NUMBER. MATERIALS AND WORKMANSHIP DEVELOPING DEFECTS AND MALFUNCTIONS SHALL BE REPAIRED AND/OR REPLACED, TO CONFORM WITH INTENT OF THE SPECIFICATION AND DRAWINGS, AT NO ADDITIONAL COST TO THE STATE.
21. ALL LDS OR LWS MOUNTED SYSTEMS SHALL SUBMIT STAMPED SHOP DRAWING SUBMITTALS FOR STATE REVIEW/APPROVAL DETAILING STRUCTURAL MOUNTING DETAILS AND STAMPED BY A LICENSED STRUCTURAL ENGINEER QUALIFIED IN THE STATE OF HAWAII PRIOR TO INSTALLATION.
22. CONTRACTOR TO PROVIDE HAZARDOUS MATERIALS ABATEMENT AS DETAILED IN THE DRAWINGS OR SPECIFICATIONS FOR ALL AREAS THE LDS OR LWS MAY BE INSTALLED. CONTRACTOR RESPONSIBLE FOR MEANS AND METHODS TO SAFELY AND PROPERLY CONDUCT ANY HAZARDOUS REMEDIATION WORK INVOLVED.

AIRFIELD LIGHTNING DETECTION AND WARNING SYSTEM	
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T-2	GENERAL NOTES & DRAWING SHEET INDEX
E-1	ELECTRICAL NOTES, LEGENDS & SYMBOLS
E-2	OVERALL SITE PLAN
E-3	MAIN TERMINAL SITE PLAN
E-4	SOUTH RAMP SITE PLAN
E-5	MAUKA EXPANSION TERMINAL ISOMETRIC VIEW - 1
E-6	INTER ISLAND TERMINAL ISOMETRIC VIEW - 1
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S-001	STRUCTURAL NOTES
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**LIGHTNING DETECTION AND WARNING SYSTEM GENERAL NOTES AND DRAWING SHEET INDEX**



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



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RONALD N.S. HO & ASSOCIATES, INC.  
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MC	CAD	KC	DT

**KEY PLAN:**

NO.	DATE	REVISIONS
△	05/31/23	ADDENDUM NO. 2
△	05/17/23	ADDENDUM NO. 1

**PROJECT TITLE :**

**LIGHTNING WARNING SYSTEM**

AT DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

**PROJECT NO.:**

STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

**SHEET TITLE:**

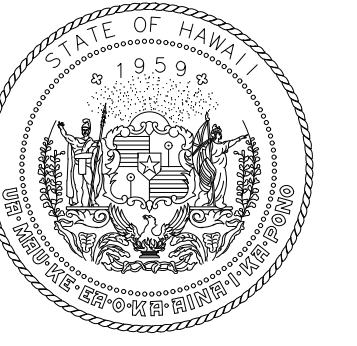
LIGHTNING DETECTION AND WARNING SYSTEM GENERAL NOTES AND DRAWING SHEET INDEX

DATE:	MAY 2023	SHEET NO.:	T-2
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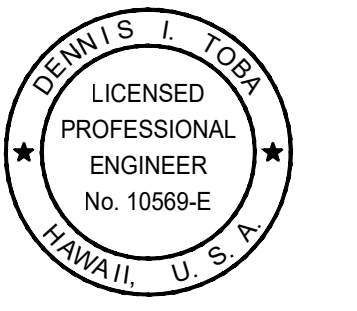


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**SOUTH RAMP SITE PLAN**  
NOT TO SCALE



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DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



*Daniel K. Inouye* 2023.05.30  
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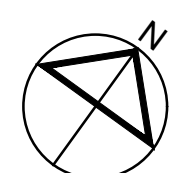
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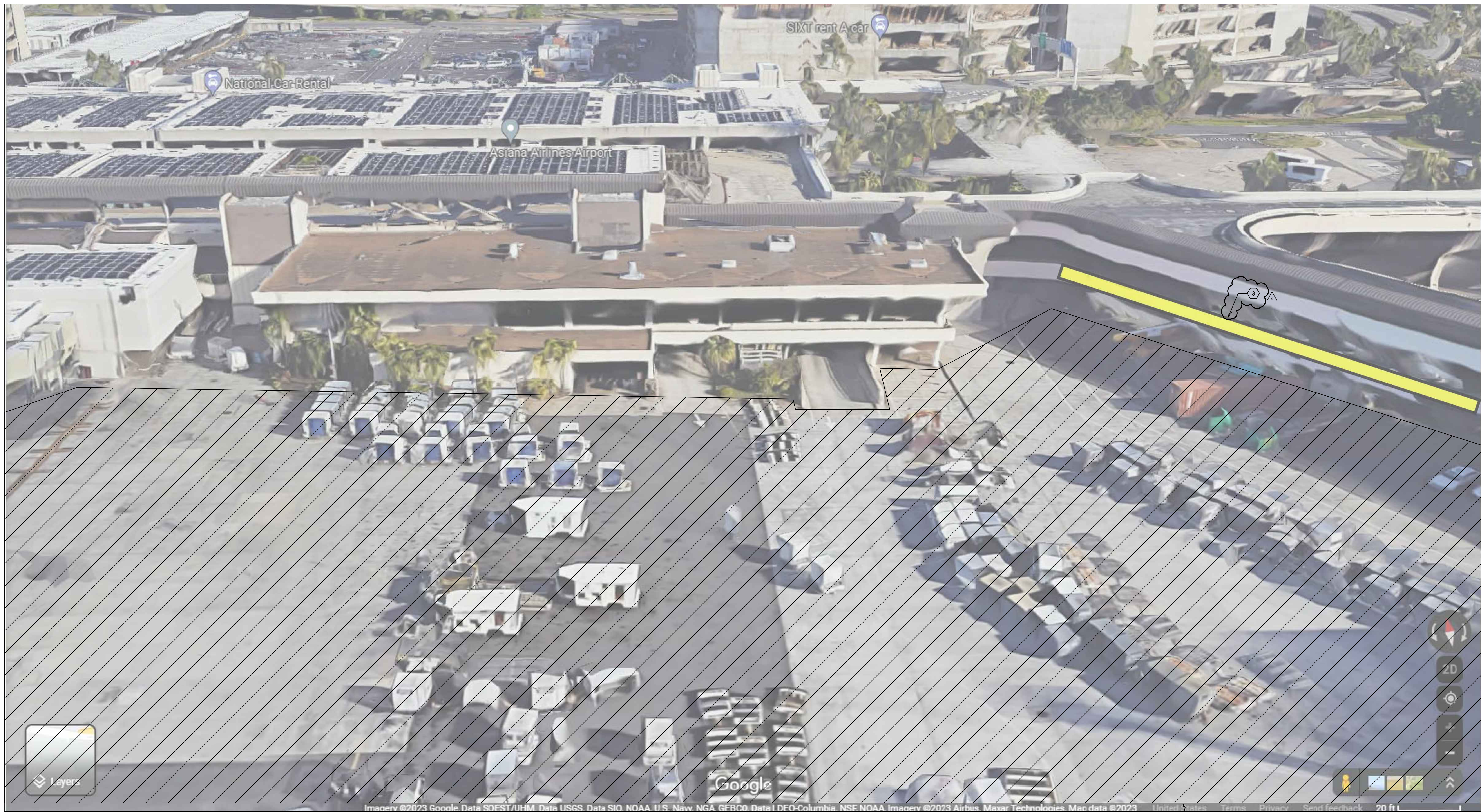
SOUTH RAMP SITE PLAN

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△ **E-4**





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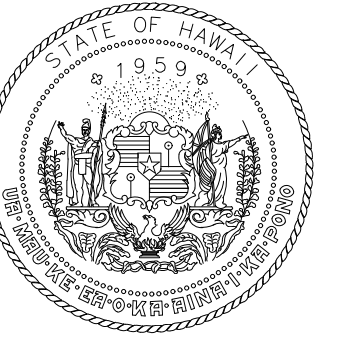
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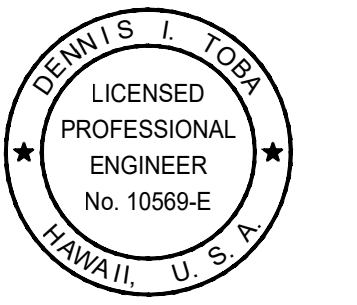
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**Y CONCOURSE ISOMETRIC VIEW - 9**  
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Airports Division  
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Daniel K. Inouye, 2023.05.30  
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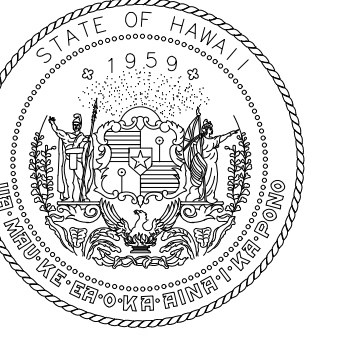
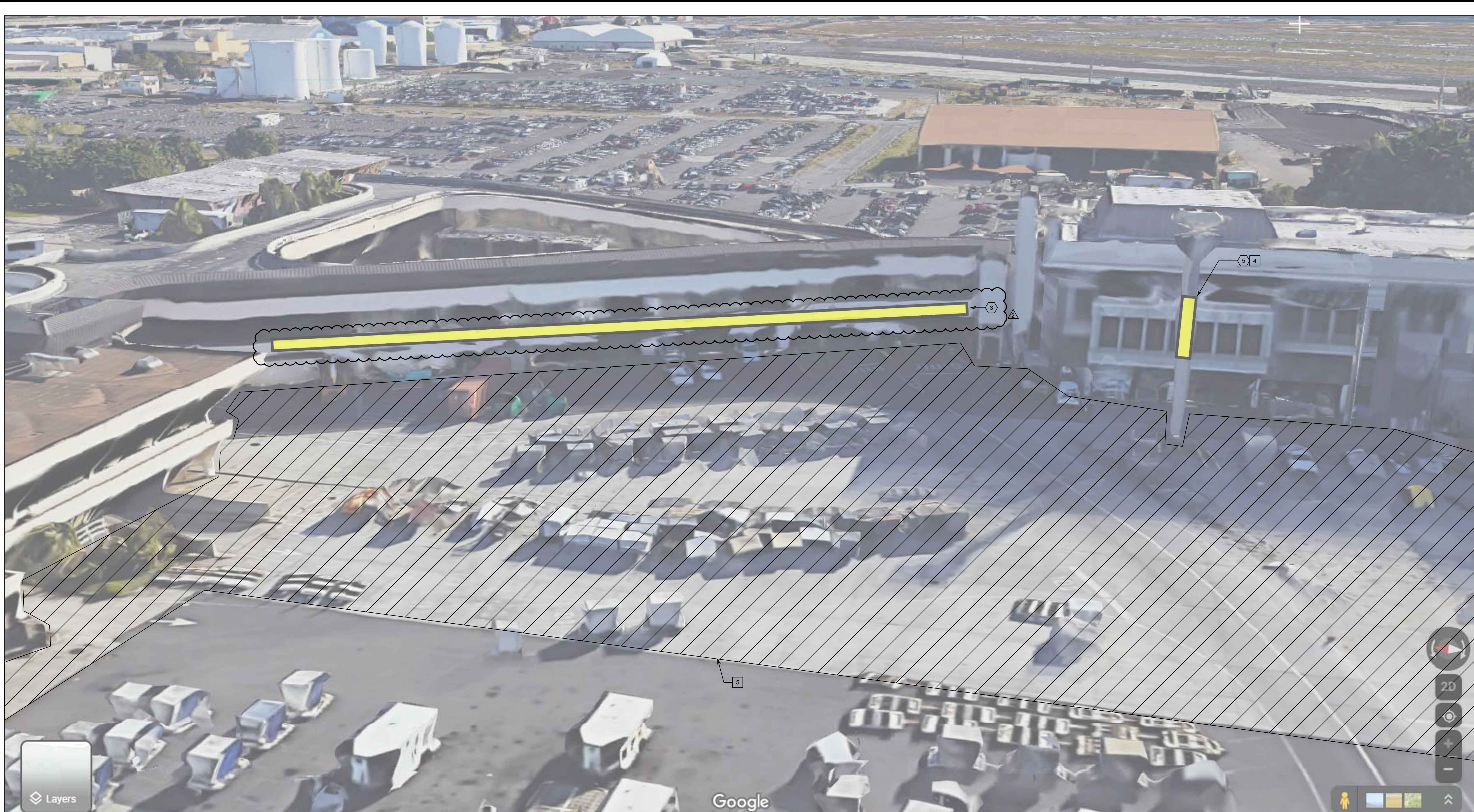
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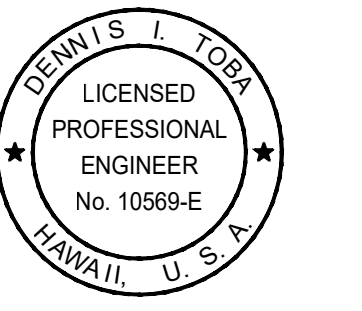
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**E-22**



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SHEET TITLE:

DIAMOND HEAD CONCOURSE  
ISOMETRIC VIEW - 1

DATE :  
MAY 2023  
DWG NO. :  
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SHEET NO. :  
**E-23**

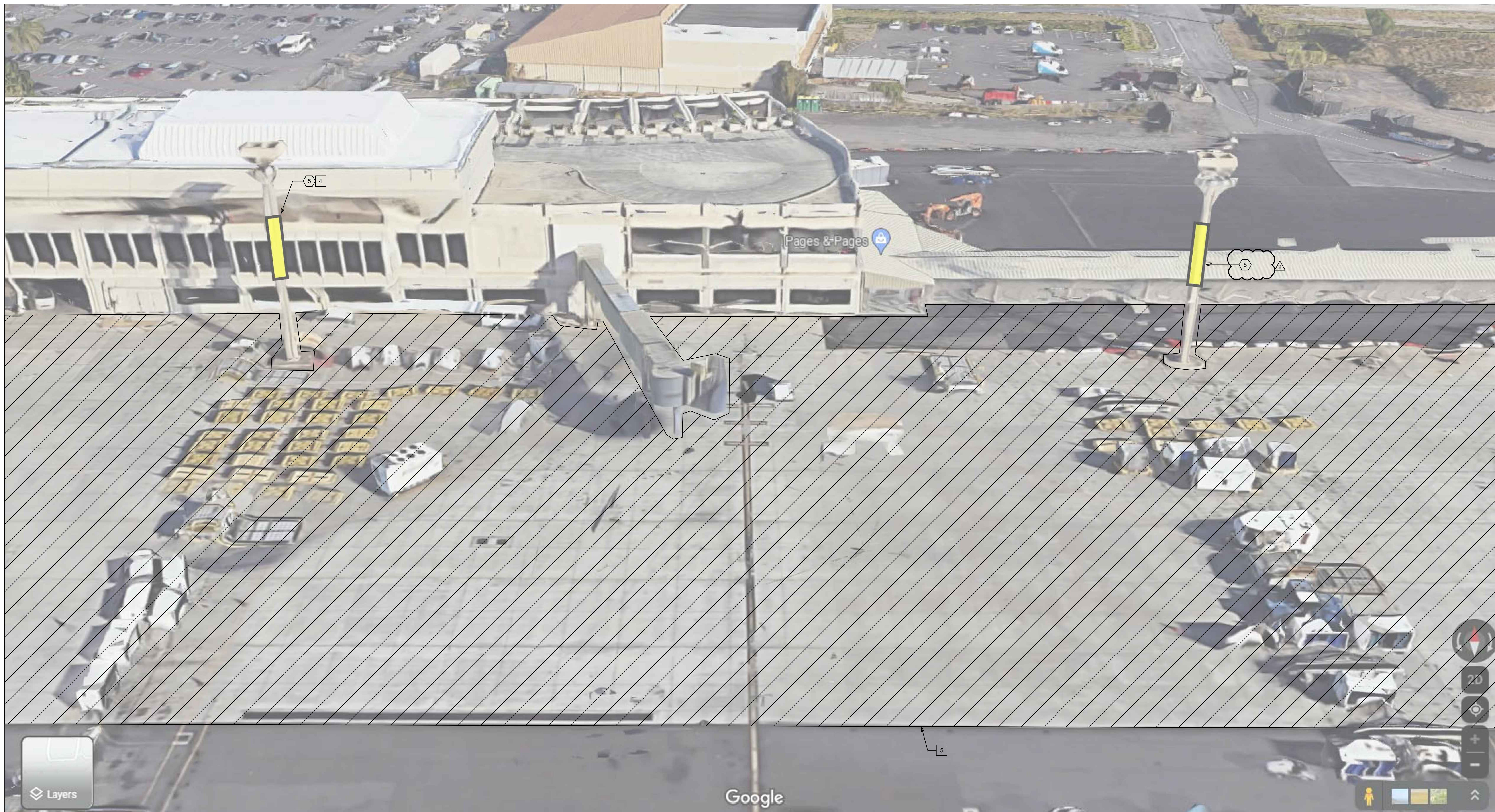
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- ④ FASTENED STEEL LIGHT POLE MOUNT
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**DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 1**  
NOT TO SCALE



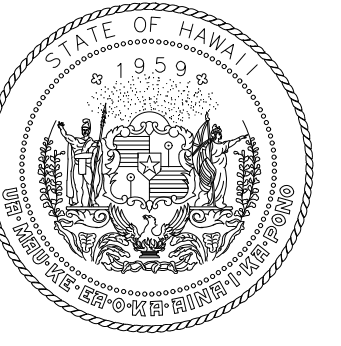
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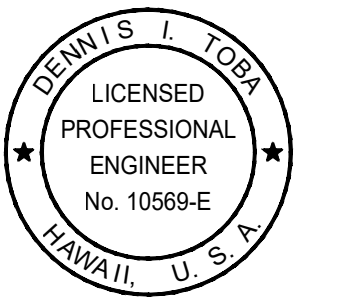
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**DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 5**  
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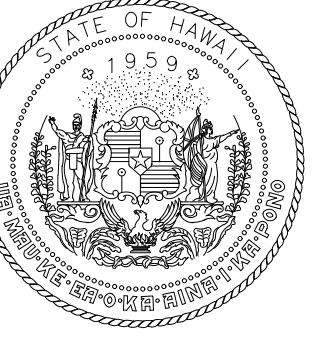
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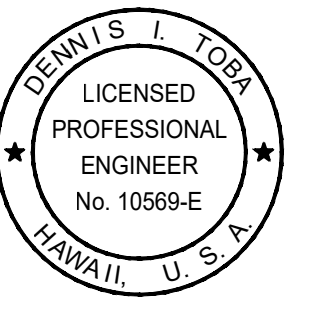
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**E-27**

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SHEET TITLE:

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 6

DATE :	SHEET NO. :
MAY 2023	E-28
DWG NO. :	
30 OF 49	

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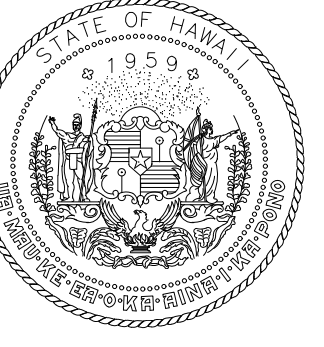
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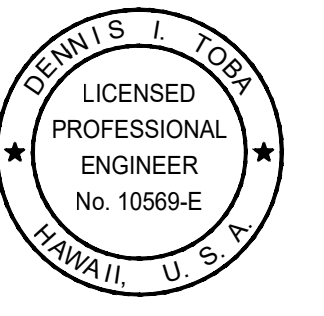
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- ⑥ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

**DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 6**  
NOT TO SCALE

Z:\VACAD\PROJECTS\219051\1\02B DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 6 5/30/2023 8:09PM.Txd



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



Daniel K. Inouye 2023.05.30  
RONALD N.S. HO & ASSOCIATES, INC.  
LICENSE EXPIRATION DATE: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
MC	CAD	KC	DT

KEY PLAN:

NO.	DATE	REVISIONS
1	05/31/23	ADDENDUM NO. 2
2	05/17/23	ADDENDUM NO. 1

PROJECT TITLE :

**LIGHTNING  
WARNING SYSTEM**

AT  
DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

SHEET TITLE:

HAWAIIAN AIRLINES CARGO  
ISOMETRIC VIEW - 1

DATE :	SHEET NO. :
MAY 2023	E-32
DWG NO. :	
34 OF 49	

MOUNTING LEGEND NOTES:

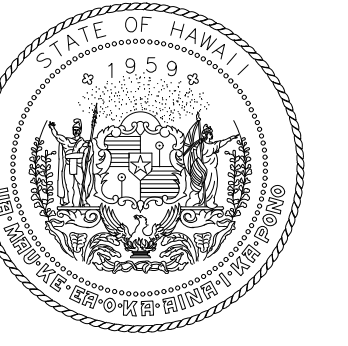
- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

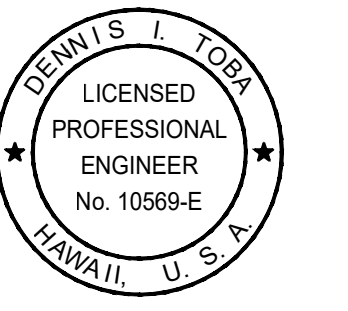
1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
4. LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

**HAWAIIAN AIRLINES CARGO ISOMETRIC VIEW - 1**  
NOT TO SCALE

Z:\A\A\PROJECTS\219051\1\0022\_HAWAIIAN\_AIRLINES\_CARGO\_ISOMETRIC\_VIEW - 1\_5/20/2023\_8:09PM\_T04



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



*Daniel K. Inouye* 2023.05.30  
RONALD N.S. HO & ASSOCIATES, INC.  
LICENSE EXPIRATION DATE: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
MC	CAD	KC	DT

KEY PLAN:

NO.	DATE	REVISIONS
1	05/31/23	ADDENDUM NO. 2
2	05/17/23	ADDENDUM NO. 1

PROJECT TITLE :

**LIGHTNING WARNING SYSTEM**

AT  
DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP  
ISOMETRIC VIEW - 1

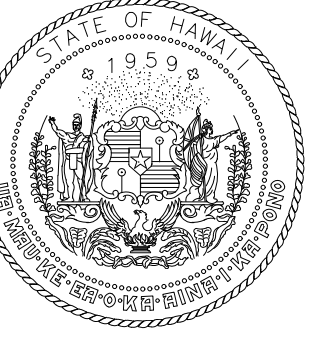
DATE :	SHEET NO. :
MAY 2023	E-35
DWG NO. :	
37 OF 49	

- MOUNTING LEGEND NOTES:**
- ① NON-PENETRATING BALLASTED ROOF MOUNT
  - ② NON-PENETRATING BALLASTED GROUND MOUNT
  - ③ ANCHORED WALL MOUNT
  - ④ FASTENED STEEL LIGHT POLE MOUNT
  - ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

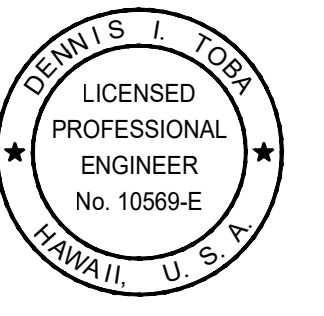
- SHEET NOTES:**
1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
  2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
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  5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

**SOUTH RAMP ISOMETRIC VIEW - 1**  
NOT TO SCALE

Z:\AIAO\PROJECTS\219051\1\0305 SOUTH RAMP ISOMETRIC VIEW - 1\_5/30/2023 8:10PM.Txd



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



Daniel K. Inouye 2023.05.30  
RONALD N.S. HO & ASSOCIATES, INC.  
LICENSE EXPIRATION DATE: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
MC	CAD	KC	DT

KEY PLAN:

NO.	DATE	REVISIONS
1	05/31/23	ADDENDUM NO. 2
2	05/17/23	ADDENDUM NO. 1

PROJECT TITLE :

**LIGHTNING WARNING SYSTEM**

AT DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP  
ISOMETRIC VIEW - 9

DATE :	SHEET NO. :
MAY 2023	E-43
DWG NO. :	
45 OF 49	

- MOUNTING LEGEND NOTES:**
- ① NON-PENETRATING BALLASTED ROOF MOUNT
  - ② NON-PENETRATING BALLASTED GROUND MOUNT
  - ③ ANCHORED WALL MOUNT
  - ④ FASTENED STEEL LIGHT POLE MOUNT
  - ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

- SHEET NOTES:**
1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
  2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
  3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
  4. LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
  5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

**SOUTH RAMP ISOMETRIC VIEW - 9**  
NOT TO SCALE

Z:\A\A\PROJECTS\219051\1\0403\_SOUTH\_RAMP\_ISOMETRIC VIEW - 9\_5/30/2023 8:11PM Top



**MOUNTING LEGEND NOTES:**

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

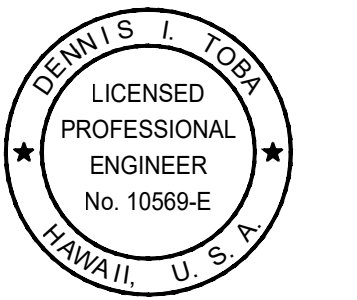
**SHEET NOTES:**

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2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
4. LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

**SOUTH RAMP ISOMETRIC VIEW - 10**  
NOT TO SCALE



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



*Daniel K. Inouye* 2023.05.30  
RONALD N.S. HO & ASSOCIATES, INC.  
LICENSE EXPIRATION DATE: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
MC	CAD	KC	DT

**KEY PLAN:**

NO.	DATE	REVISIONS
△	05/31/23	ADDENDUM NO. 2
△	05/17/23	ADDENDUM NO. 1

**PROJECT TITLE :**

**LIGHTNING WARNING SYSTEM**

AT  
DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

**PROJECT NO.:**

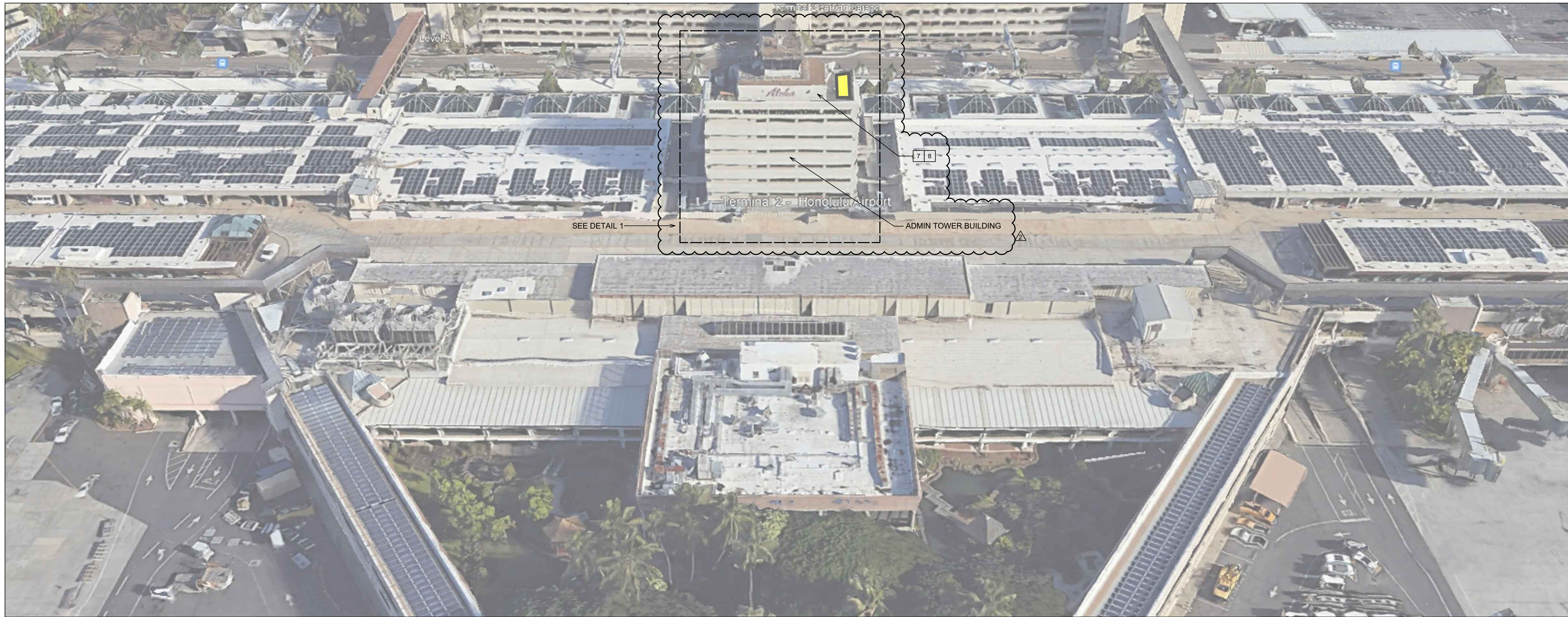
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AIP PROJECT NO:

**SHEET TITLE:**

SOUTH RAMP  
ISOMETRIC VIEW - 10

DATE :  
MAY 2023  
DWG NO. :  
46 OF 49

SHEET NO. :  
**E-44**



DETAIL 1

**MOUNTING LEGEND NOTES:**

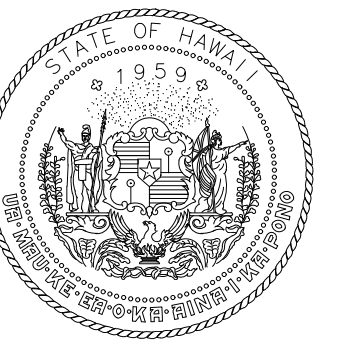
- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

**SHEET NOTES:**

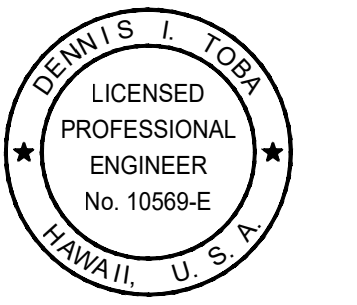
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- 2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
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- 5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.
- 6. NOT AVAILABLE MOUNTING LOCATION.
- 7. RAMP CONTROL OFFICE IS ON THE 10TH FLOOR OF THE ADMIN TOWER BUILDING. THE LIGHTNING SYSTEM'S MAIN CONTROL TERMINAL OR HUMAN MACHINE INTERFACE (HMI) SHALL BE LOCATED IN THE RAMP CONTROL OFFICE. THE RAMP CONTROL OPERATOR SHALL HAVE CONTROL ACCESS TO MANUALLY ACTIVATE OR DEACTIVATE THE LIGHTNING DETECTION AND WARNING SYSTEM INCLUDING ANY ALERTS, NOTIFICATIONS, OR ALL CLEAR SIGNALS. THE RAMP CONTROL OFFICE SHALL ALSO HAVE AN ALERT OR NOTIFICATION AT THIS LOCATION.
- 8. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH THE STATE'S IT STAFF TO PROVIDE A SPARE NETWORK PORT TO BE USED FOR THE MAIN LIGHTNING SYSTEM INTERFACE.

**MAIN LIGHTNING SYSTEM INTERFACE & RAMP CONTROL OFFICE DETAILS**

NOT TO SCALE



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



Daniel I. Ho, 2023.06.31  
RONALD N.S. HO & ASSOCIATES, INC.  
LICENSE EXPIRATION DATE: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
MC	CAD	KC	DT

**KEY PLAN:**

NO.	DATE	REVISIONS
△	05/31/23	ADDENDUM NO. 2
△	05/17/23	ADDENDUM NO. 1

**PROJECT TITLE :**

**LIGHTNING WARNING SYSTEM**

AT  
DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

**PROJECT NO.:**

STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

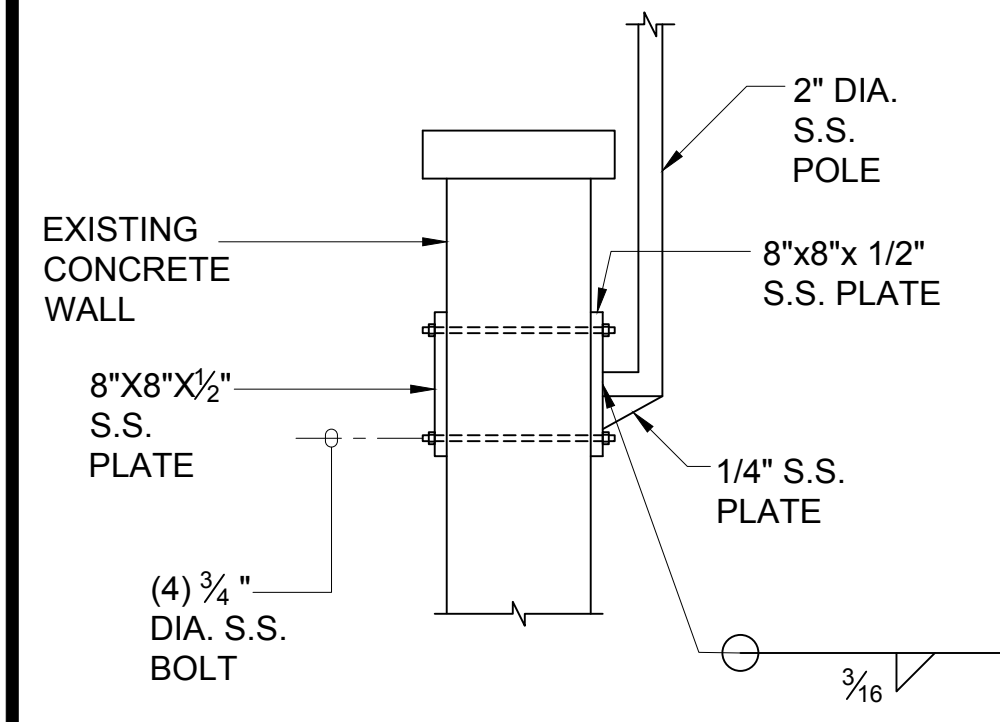
**SHEET TITLE:**

MAIN LIGHTNING SYSTEM  
INTERFACE & RAMP CONTROL  
OFFICE DETAILS

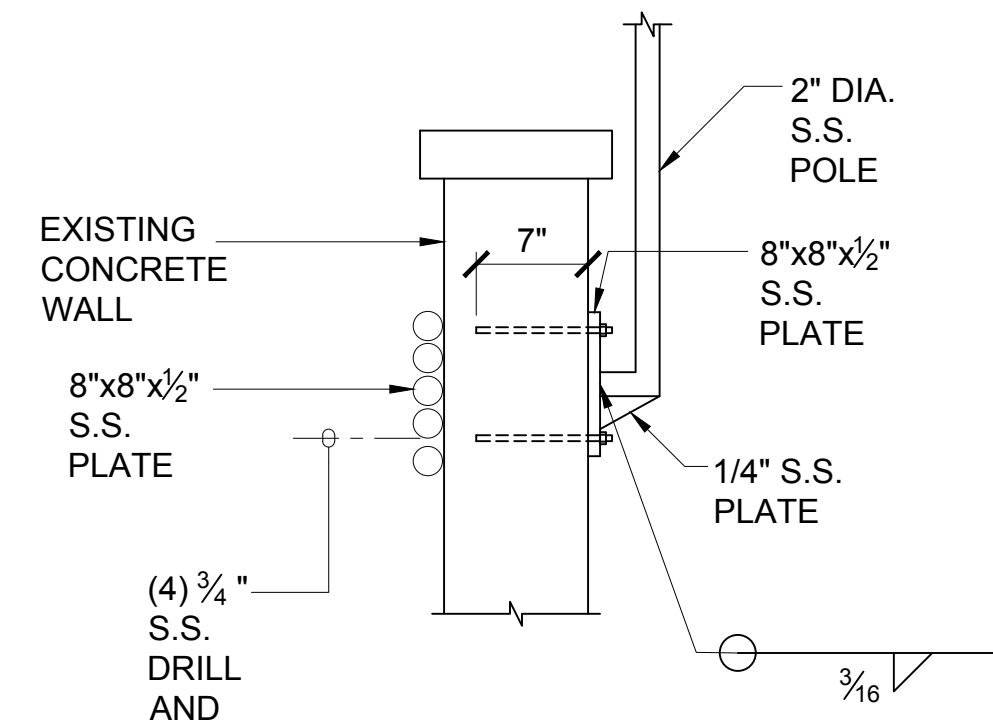
DATE :  
MAY 2023  
DWG NO. :  
47 OF 49

SHEET NO. :  
E-45

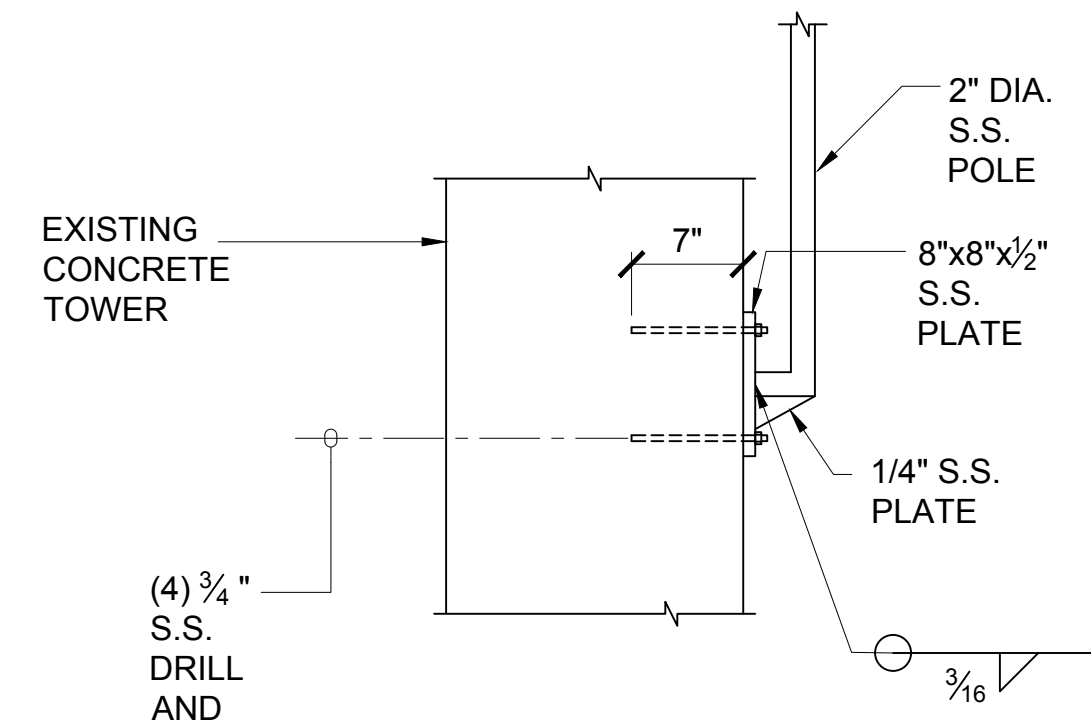




AT PARAPET WALL

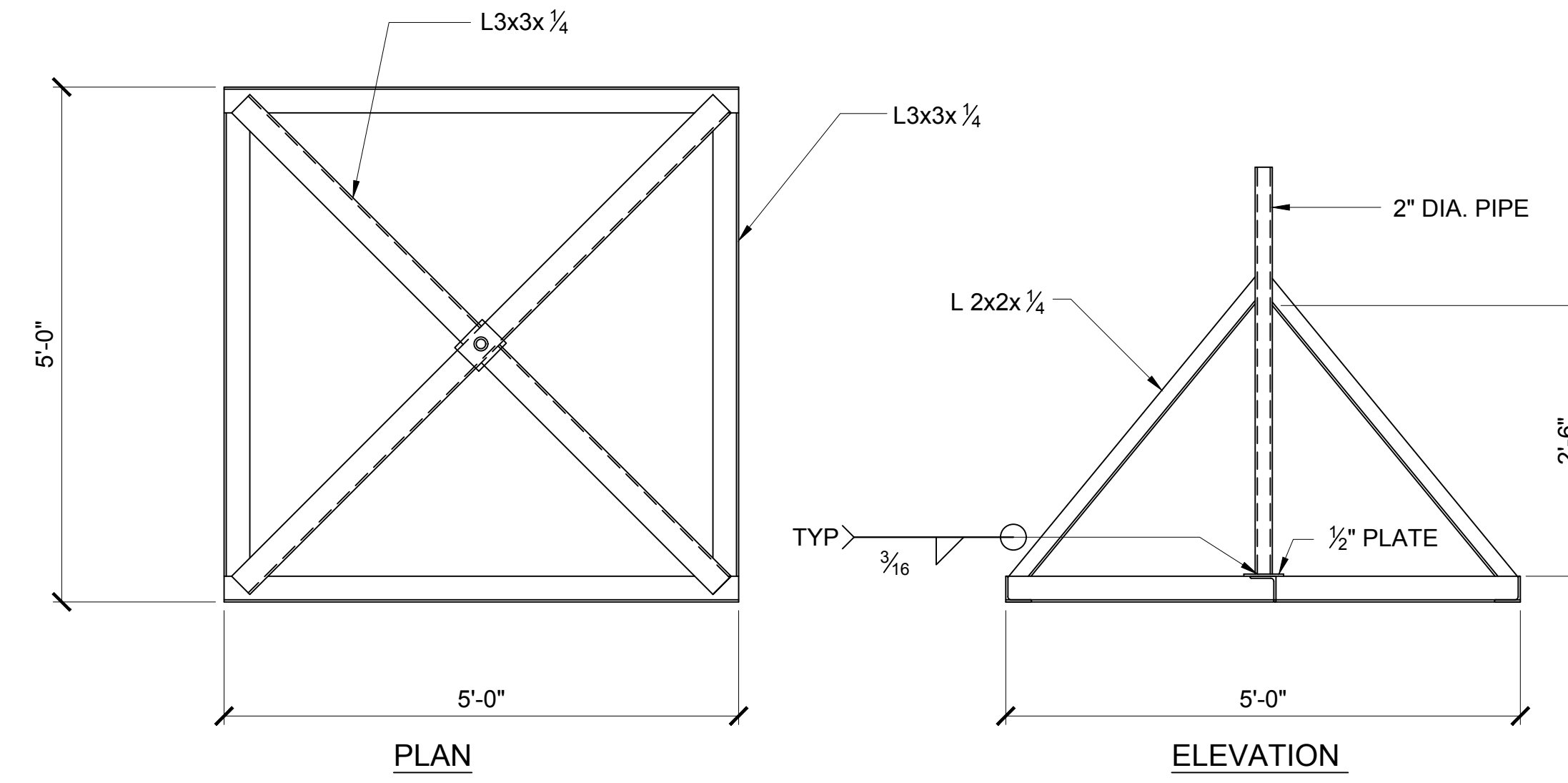


AT PARAPET WALL



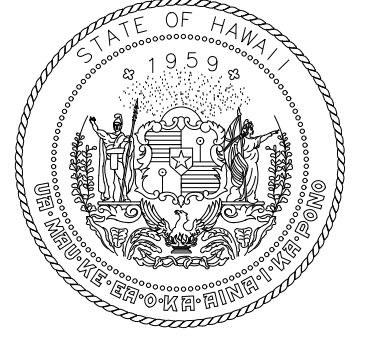
AT CONCRETE TOWER

**1**  
FACE MOUNTED SUPPORT DETAILS  
NOT TO SCALE

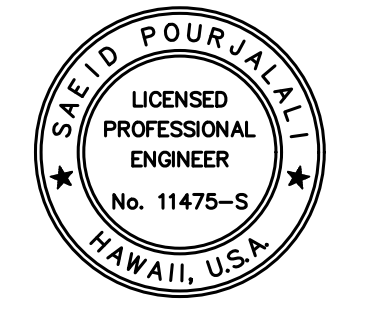


**2**  
BALLAST MOUNT FRAME DETAIL  
NOT TO SCALE

**NOTE:**  
CONTRACTOR IS RESPONSIBLE FOR DESIGN OF THE SUPPORT SYSTEMS FOR ALL WARNING SYSTEMS.  
THE SUPPORT SYSTEM SHALL BE SELECTED BASED ON THE LOCATION OF WARNING SYSTEM AS SHOWN HERE.  
THE SUPPORT SYSTEM SHALL BE DESIGN BY A STRUCTURE ENGINEER LICENSED IN STATE OF HAWAII AND SHALL BE APPROVED BY DOT-A PRIOR TO FABRICATION.  
THE SUPPORT SYSTEMS SHOULD BE DESIGNED BY DESIGN CRITERIA AS SHOWN IN THE STRUCTURAL NOTES.  
THE LOCATION OF THE SUPPORT SYSTEM IN SHOWN IN THE ELECTRICAL DRAWINGS.



Airports Division  
DEPARTMENT OF TRANSPORTATION  
STATE OF HAWAII



*Saad Pourjaleel*  
EXPIRATION DATE OF THE SEAL: 4/30/2024  
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

DSGN.	DRWN.	CHKD.	APPD.

KEY PLAN:

NO.	DATE	REVISIONS
△	05/31/23	ADDENDUM NO. 2
△	05/17/23	ADDENDUM NO. 1

PROJECT TITLE :  
**LIGHTNING WARNING SYSTEM**

AT  
DANIEL K. INOUE INTERNATIONAL AIRPORT  
HONOLULU, OAHU, HAWAII

PROJECT NO.:  
STATE PROJECT NO: CO1335-53  
AIP PROJECT NO:

SHEET TITLE:  
TYPICAL DETAILS

DATE :  
MAY 2023  
DWG NO. :  
49 OF 49

SHEET NO. :  
**S-100**

P:\6201-6250\6241 DOT AIRPORTS - HONOLULU INTERNATIONAL AIRPORT - LIGHTNING WARNING SYSTEM\050 DRAWINGS\STRUCTURAL\AUTOCAD\_FORMAT\2023-05-31\0-04 S-100 TYPICAL DETAILS.dwg 5/31/2023 10:16AM Tamaraha

P:\6201-6250\6241 DOT AIRPORTS - Honolulu International Airport - Lightning Warning System\050 Drawings\Structural\Autocad\_Format\2023-05-31\0-04 S-100 Typical Details.dwg 5/31/2023 10:16:56 AM Tamaraha