### **GENERAL NOTES:**

- 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. STATE OF HAWAII: AMENDED IBC, 2018
- B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO DOT-A 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 DOT-A 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. CONSTRUCTION LOADING SHALL NOT EXCEED DESIGN LIVE LOAD UNLESS SPECIAL SHORING IS PROVIDED. ALLOWABLE LOADS SHALL BE REDUCED IN AREAS WHERE THE STRUCTURE HAS NOT ATTAINED FULL DESIGN STRENGTH.
- G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES DURING THE CONSTRUCTION PERIOD.
- H. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED
- I. CONTRACTOR SHALL ENSURE CONSTRUCTION MATERIALS, EQUIPMENT, AND VEHICLES ARE STORED IN THE DESIGNATED STORAGE AREAS APPROVED BY DOT-A PRIOR TO CONSTRUCTION. MATERIALS SHALL BE SECURED SUCH THAT NO DUST OR DEBRIS CAN BE BLOWN INTO THE AIRPORT APRON OR NEIGHBORING FACILITIES.

### **DESIGN CRITERIA**

### A. FLOOR LIVE LOADS

- 1. EWA AND DH 2ND LEVEL ROADWAYS: AASHTO HS-20
- 2. EWA THIRD FLOOR ROADWAYS: 125 PSF OR 2000 LBF CONCENTRATED LOAD
- B. CONSTRUCTION LOAD LIMITS
  - 1. EWA AND DH 2ND LEVEL ROADWAYS INCLUDING TURN AROUND AREAS: 5,400 LBS. AXLE.
  - 2. EWA CONCOURSE 3RD LEVEL: 19,000 G.W.V.

# **DEMOLITION AND REMOVAL WORK:**

- A. THE CONSTRUCTION DRAWINGS INDICATE THE GENERAL EXTENT OF REQUIRED DEMOLITION AND REMOVAL WORK. SEE STRUCTURAL DRAWINGS FOR DEMOLITION DRAWINGS.
- B. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS (PRIOR TO BID) TO DETERMINE THE EXTENT OF ALL REQUIRED DEMOLITION WORK. THE REMOVAL OR DEMOLITION OF MATERIALS, ACCESSORIES, FIXTURES, ETC., SHALL BE COMPLETE AND INCLUDE ALL RELATED ITEMS TO THE EXTENT THAT FUTURE CONSTRUCTION CAN BE PERFORMED AND COMPLETED WITHOUT ADDITIONAL COST TO DOT-A.
- C. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO INSURE AGAINST DAMAGE TO EXISTING ITEMS AND FEATURES REMAINING IN PLACE.
  - 1. CONTRACTOR SHALL NOT DAMAGE, CUT OR DRILL THROUGH EXISTING REINFORCING THAT IS TO REMAIN AND AS NOTED ON PLANS. IF REINFORCING IS DAMAGED, THE CONTRACTOR SHALL INFORM DOT-A IMMEDIATELY AND SHALL BE RESPONSIBLE FOR REPAIRING THE DAMAGE AT CONTRACTOR'S SOLE EXPENSE AND TO THE SATISFACTION OF DOT-A.
- 2. CONTRACTOR SHALL NOT DAMAGE, CUT OR DRILL THROUGH EXISTING PRECAST CONCRETE DOUBLE-TEES, OR CONCRETE CURB WHEN REMOVING THE ROADWAY PAVEMENT SLAB EXCEPT WHERE INDICATED ON THE PLANS OR IF PRIOR APPROVAL WAS GIVEN BY DOT-A. ANY DAMAGE TO THE STRUCTURAL CONCRETE SLAB OR CONCRETE CURB NOT INDICATED ON THE DRAWINGS NOR PREVIOUSLY APPROVED BY DOT-A SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE AND TO THE SATISFACTION OF DOT-A
- D. THE CONTRACTOR SHALL REMOVE EXISTING ITEMS AS DEEMED NECESSARY SO THAT FUTURE WORK CAN BE PERFORMED AND ALSO, SO THAT ANY EXISTING ITEM IS NOT DAMAGED WHEN FUTURE WORK IS PERFORMED. THE CONTRACTOR SHALL ALSO INSTALL ANY OR ALL OF THE ITEMS, PATCH AND RESTORE SURROUNDING SURFACES AS REQUIRED AS PART OF THE WORK ACCEPTABLE TO DOT-A.

- E. LOCATION OF CAST-IN-PLACE UTILITIES AND PIPES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF THE EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THEM. ANY PORTION OF THE EXISTING UTILITIES THAT MUST BE REMOVED OR OTHERWISE DISTURBED TO ACCOMPLISH THIS WORK CALLED FOR ON THE PLANS SHALL BE RECONSTRUCTED, REPLACED OR RESTORED TO THE ORIGINAL CONDITION AT THE CONTRACTOR'S OWN EXPENSE.
- F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EFFECTIVE CONTROL MEASURES ARE PROVIDED TO MINIMIZE OR PREVENT ANY VISIBLE DUST EMISSION CAUSED BY THE DEMOLITION AND CONSTRUCTION WORK FROM IMPACTING THE SURROUNDING AREAS INCLUDING THE OFF-SITE ROADWAYS USED TO ENTER/EXIT THE PROJECT AND OCCUPIED SPACES. THESE MEASURES INCLUDED BUT ARE NOT LIMITED TO, DUST CONTROL TENTS WITH APPROPRIATE FILTRATION SYSTEM TO CONTAIN DUST DURING DEMOLITION, AND PROTECTIVE COVERS TO CONTAIN DUST IN COMPLETED DEMOLISHED AREAS AS NEEDED. SEE ENVIRONMENTAL NOTES ON SHEET C-001 AND SHEET S-600 TO S-603 FOR DUST CONTAINMENT DETAILS.
- G. VEHICULAR TRAFFIC SHALL NOT BE ALLOWED ON ANY LOCATION OF THE ROADWAY WHERE THE PAVEMENT SLAB HAS BEEN DEMOLISHED AND THE STRUCTURAL SLAB IS EXPOSED. ENSURE NEW PAVEMENT SLAB CONCRETE HAS CURED TO SPECIFIED TIMEFRAME FOR VEHICULAR USE BEFORE ALLOWING TRAFFIC TO RESUME OVER REPAIRED ROADWAY LOCATIONS.
- H. USAGE OF JACKHAMMERS AND OTHER HIGH NOISE EQUIPMENT TO REMOVE CONCRETE PAVEMENT IS PROHIBITED DURING NORMAL WORK HOURS AND PEAK AIRLINE PASSENGER TRANSIT TIMES.

#### 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 STATE PROJECT MANAGER AND DOTA 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 1705 TABLES, AS AMENDED BY DOTA. THE CONTRACTOR SHALL CORRECT DEFECTIVE WORK AT NO ADDITIONAL COST TO DOTA 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 CONSTRUCTION MANAGER WHO IN TURN SHALL SUBMIT A WRITTEN STATEMENT TO DOTA 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 1705, AS AMENDED BY THE STATE, REQUIRES SPECIAL INSPECTION:
  - 1. CONCRETE CONSTRUCTION
  - a. PLACEMENT OF CONCRETE REINFORCING
  - b. PLACEMENT OF STRUCTURAL CONCRETE
  - c. PLACEMENT OF FAST-SETTING CONCRETE
  - d. POST INSTALLED CONCRETE BOLTS

# LEVELING CONCRETE:

- A. LEVELING CONCRETE BENEATH THE SECOND FLOOR DIAMOND HEAD AND EWA CONCOURSE SHALL MEET THE FOLLOWING:
  - 1. THE LEVELING CONCRETE SHALL BE A BLEND OF SELECTED PORTLAND CEMENTS, SPECIALLY GRADED AGGREGATES, ADMIXTURES, FOR CONTROLLING SETTING TIME, AND WATER REDUCERS FOR WORKABILITY AND AN ORGANIC ACCELERATOR.
- 2. THE MATERIALS SHALL BE NON-COMBUSTIBLE BEFORE AND AFTER CURE.
- 3. THE MATERIALS SHALL BE SUPPLIED AS A FACTORY-BLENDED UNIT
- 4. THE PORTLAND CEMENT MORTAR SHALL BE PLACEABLE FROM 1/4" TO 1" IN DEPTH PER LIFT FOR HORIZONTAL APPLICATIONS.

# REINFORCING STEEL:

- A. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A1035/A1035M GRAE100.
- B. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE 2" UNLESS OTHERWISE NOTED.
- 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.

### CONCRETE:

- A. CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE ACI 318
- B. CONCRETE SHALL BE REGULAR WEIGHT HARD ROCK CONCRETE AND SHALL HAVE 5000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH.
- 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. FREQUENCY OF CONDUCTING STRENGTH TESTS SHALL BE AS FOLLOWS:
- 1. SAMPLES FOR STRENGTH OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS.
- 2. IF THE TOTAL VOLUME OF CONCRETE IS SUCH THAT THE FREQUENCY OF TESTING WOULD PROVIDE LESS THAN FIVE STRENGTH TESTS FOR A GIVEN CLASS OF CONCRETE, TESTS SHALL BE MADE FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE BATCHES ARE USED.
- F. 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.
- G. REINFORCING BARS, ANCHOR BOLTS, INSERTS, AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE.
- H. CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB OR FOOTING AND NOT CONFORMING TO TYPICAL DETAILS SHALL BE LOCATED AND SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL.
- I. CONDUITS AND PIPES, WITH THEIR FITTINGS, EMBEDDED WITHIN A COLUMN SHALL NOT DISPLACE MORE THAN 4 PERCENT OF THE AREA OF CROSS SECTION ON WHICH STRENGTH IS CALCULATED OR WHICH IS REQUIRED FOR FIRE PROTECTION.
- J. THE CONTRACTOR SHALL LOCATE CONSTRUCTION JOINTS SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE AND TO MINIMIZE SHRINKAGE STRESSES. SUBMIT LOCATION OF CONSTRUCTION JOINTS TO THE CONTRACTING OFFICER FOR APPROVAL, UNLESS OTHERWISE NOTED.
- K. LEAVE FORMWORK FOR SOFFITS, SLABS, AND OTHER STRUCTURAL ELEMENTS THAT SUPPORT WEIGHT OF CONCRETE IN PLACE UNTIL CONCRETE HAS ACHIEVED ITS 28 DAY DESIGN COMPRESSIVE STRENGTH.
- L. CONCRETE SHALL BE PUMPED FROM THE FIRST FLOOR OF THE EWA AND DH CONCOURSE. NO CONCRETE TRUCK SHALL BE ALLOWED ON THE 2ND FLOOR ROADWAYS.

# MACRO-SYNTHETIC FIBERS

- A. CONCRETE FOR ROADWAY SLAB SHALL CONTAIN MACRO-SYNTHETIC FIBERS. MACRO-SYNTHEIC FIBERS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
  - 1. MACRO-SYNTHETIC FIBERS SHALL BE MANUFACTURED FROM VIRGIN POLYOLEFINS (POLYPROPYLENE AND POLYETHYLENE) AND COMPLY WITH ASTM C 1116-4-1-3.
  - 2. FIBERS SHALL BE ½ TO 1 ½ INCH LONG.
- 3. THE QUANTITY OF FIBERS USED AND THEIR POINT OF INTRODUCTION INTO THE MIX SHALL BE CONFIRM TO THE FIBER MANUFACTURER'S RECOMMENDATION AND TESTED PER ASTM C
- 4. CONTRACTOR TO ASSURE THE FIBERS ARE WELL DISPERSED AND PREVENT FIBER BALLING DURING PRODUCTION.

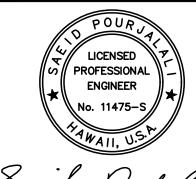
### **FAST-SETTING CONCRETE**

- A. TO PREPARE A FAST-SETTING PORTLAND CEMENT CONCRETE: AGGREGATE SHALL CONFORM TO ASTM C-33. THE MATERIAL SHALL BE EXTENDED WITH 30-LB OF A 3/8" (NO. 8 DISTRIBUTION PER ASTM C-33, TABLE II) CLEAN, WELL-GRADED, SATURATED SURFACE DRY AGGREGATE, HAVING LOW ABSORPTION, HIGH DENSITY AND NON-REACTIVE (REFERENCE ASTM C-1260, C-227, C-289). AGGREGATE MUST BE APPROVED FOR USE BY DOT-A.
- B. REQUIRED MECHANICAL PROPERTIES:
  - COMPRESSIVE STRENGTH (ASTM C-109) 3 HOURS (3,000 PSI)
  - 2. 1 DAY 4,000 PSI
  - 3. 7 DAYS 5,000 PSI
  - 4. 28 DAYS 7,000 PSI
  - 5. FLEXURAL STRENGTH (ASTM C-293) 28 DAY 1,000 PSI6. SPLITTING TENSILE STRENGTH (ASTM C-496) 28 DAYS 500 PSI
  - 7. SLANT SHEAR (ASTM C-882 MODIFIED) 28 DAYS 2,500 PSI (17.2 MPA)
  - 8. PERMEABILITY (ASTM C-1202) 28 DAYS < 1,000 C
  - 9. SHRINKAGE (157 MODIFIED PER ASTM C-928) 28 DAYS 0.06%
  - 10. MODULUS OF ELASTICITY (ASTM C-469) 28 DAYS 4.6 X 106



Airports Division

DEPARTMENT OF TRANSPORTATION STATE OF HAWAII



04/30/2024

This work was prepared by me or under my supervision

DSGN. DRWN. CHKD. APPD.

MG MG SP

Licensed Expiration Date

KEY PLAN / NOTES:

10/20/22 ADDENDUM 1

NO. DATE REVISIONS

# CONSTRUCTION DOCUMENTS

SEPTEMBER, 2022

PROJECT TITLE:

# EWA AND DH CONCOURSE ROADWAY IMPROVEMENTS PHASE 1

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

PROJECT NO.:

AO1043-32

SHEET TITLE:

STRUCTURAL NOTES

DATE: SEPTEMBER, 2022

SHEET

S-001

DWG. NO.

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#### **CONCRETE ANCHOR ADHESIVE:**

- A. CARBON STEEL THREADED RODS SHALL CONFORM TO ASTM A36/307 GRADE C AND BE FURNISHED WITH A MINIMUM 0.0002 INCH THICK ZINC ELECTROPLATED COATING COMPLYING WITH ASTM B633, SC1, OR A MINIUMUM0.0021 INCH THICK MECHANICALLY DEPOSITED ZINC COATING COMPLYING WITH ASTM B695, CLASS 65, OR STAINLESS STEEL THREADED RODS, TYPE 316 COMPLYING WITH ASTM F593. STEEL GRADES AND MATERIAL TYPES OF THE WASHERS AND NUTS SHALL BE MATCHED TO THE THREADED ROD.
- B. INSTALL ONLY WHERE INDICATED ON DRAWINGS. SUBSTITUTION FOR EMBEDDED ANCHORS IS ALLOWED ONLY WHERE INDICATED OR WHEN APPROVED BY THE STATE PROJECT MANAGER.
- C. LOCATE ANY EXISTING REINFORCING STEEL PRIOR TO DRILLING HOLES AND RELOCATE HOLE SLIGHTLY AS REQUIRED.
- D. INSTALL IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.
- E. SPECIAL INSPECTION SHALL BE PROVIDED.

### CONCRETE REPAIR:

- A. PUBLIC HEALTH AND CONVENIENCE:
- 1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF THE PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- 2. CONTRACTOR, AT HIS/HER OWN EXPENSE, SHALL KEEP THE PROJECT SITE 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. DOTA MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE JOB IN A NEAT AND SAFE CONDITION. ALL WORK SHALL BE PERFORMED WITHIN THE LIMITS OF WORK AREAS AND SHALL BE COORDINATED WITH THE STATE PROJECT MANAGER. DELIVERY OF MATERIALS SHALL BE COORDINATED TO MINIMIZE DISRUPTION OF EXISTING OPERATION. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF NOISE, DEBRIS AND AIRBORNE DUST, AND TO PREVENT DISRUPTION OF EXISTING OPERATIONS. CONTRACTOR TO PROVIDE BARRIERS TO PREVENT PUBLIC ENTRY, AND TO PROTECT THE WORK AND EXISTING FACILITIES FROM CONSTRUCTION OPERATIONS. REMOVE WHEN NO LONGER REQUIRED, OR AT THE COMPLETION OF WORK
- B. SURFACE PREPARATION NOTES FOR SPALL REPAIRS:
  - 1. DETERIORATED CONCRETE SHALL BE REMOVED DOWN TO SOUND SUBSTRATE, OR TO THE SPECIFIED DEPTH AS NOTED IN THE SPALL REPAIR DETAILS. SAWCUT ALL EDGES MINIMUM OF 3/4" DEEP, NO FEATHERING OF PATCHING MATERIAL IS ALLOWED. AVOID CUTTING ANY REINFORCING STEEL WHEN SAWCUTTING. THE EXPOSED CONCRETE SHALL BE ROUGHENED TO A 1/8" AMPLITUDE AND SHALL BE CLEANED AND FREE OF LAITANCE, DUST AND OTHER BOND INHIBITING MATERIALS.
  - 2. ALL REINFORCING STEEL DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE AND TO THE SATISFACTION OF DOT-A.
  - 3. ALL LOOSE, SOFT, HONEY-COMBED, DISINTEGRATED CONCRETE, PLUS 3/4 INCH MINIMUM DEPTH OF CONCRETE BEYOND THE BACK FACE OF THE REBAR WITHIN THE SPALL AREA SHALL BE REMOVED.
  - 4. AFTER COMPLETION OF THE REMOVAL OPERATION, DOT-A WILL RESOUND THE AREAS TO ENSURE THAT ONLY SOUND CONCRETE REMAINS.
  - 5. CLEANING SHALL PRECEDE APPLICATION OF THE PATCHING MATERIAL BY NOT MORE THAN 24 HOURS.
- C. BONDING AGENT AND REINFORCING ANTI-CORROSION COATING
  - 1. REINFORCING ANTI-CORROSION COATING SHALL BE EPOXY-MODIFIED, CEMENTITIOUS MATERIAL THAT SERVES AS AN ANTI-CORROSION COATING FOR REINFORCING.
  - 2. THE REINFORCING STEEL SHALL RECEIVE TWO (2) COATS AT THE THICKNESS RECOMMENDED BY THE MANUFACTURER.
  - USE BONDING AGENT IF RECOMMENDED BY THE MANUFACTURER. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR RECOMMENDED TIME BETWEEN APPLICATION OF BONDING AGENT AND PATCHING MORTAR.

### D. REPAIR MORTAR:

- 1. REPAIR MORTAR SHALL BE POLYMER-MODIFIED CEMENT MORTAR, HAVE A HIGH ABRASION RESISTANCE AND SHALL BE SUITABLE FOR HORIZONTAL, VERTICAL AND OVERHEAD SURFACES.
- 2. THE MINIMUM BOND STRENGTH PROVIDED BY THE PATCHING MORTAR SHALL BE 2,200 PSI AFTER 28 DAYS (ASTM C882).
- 3. REFER TO MANUFACTURER'S SPECIFICATIONS FOR PREPARATION AND APPLICATION GUIDANCE.
- 4. REPAIR MORTAR AND BONDING AGENT/REINFORCEMENT PROTECTIONS SHALL BE SUPPLIED BY THE SAME MANUFACTURER AND SHALL BE FULLY COMPATIBLE WITH EACH OTHER.

### E. MULTIPLE LIFTS:

- 1. FOLLOW THE MANUFACTURER'S LIMITATIONS FOR MAXIMUM THICKNESS FOR APPLICATION OF PATCHING MORTAR. IF THE REQUIRED THICKNESS OF A REPAIR IS GREATER THAN THE SINGLE APPLICATION LIMIT, MULTIPLE LIFTS ARE REQUIRED. LARGE, UNCONFINED OR OVERHEAD REPAIRS MAY ALSO REQUIRE MULTIPLE LIFTS. IF SUCCESSIVE LIFTS ARE TO BE APPLIED, ROUGHEN THE SURFACE OF THE PREVIOUS LIFT AND APPLY SUBSEQUENT LIFTS WITHIN THE TIME PERIOD, BOTH AS RECOMMENDED BY THE MANUFACTURER.
- F. LOCATIONS AND QUANTITIES OF CONCRETE DEFICIENCIES ARE SHOWN TO PROVIDE A ROUGH ESTIMATE OF THE EXTENT AND TYPE OF REPAIR THAT EXISTS. THE CONTRACTOR SHALL DO A VISUAL INSPECTION AND SOUNDING OF ALL CONCRETE. SURFACES AND NOTIFY DOT-A OF ANY ADDITIONAL DEFICIENCIES, SUCH AS CRACKS AND SPALLS, NOT SHOWN. SUCH DEFICIENCIES SHALL BE REPAIRED AS APPROVED BY DOT-A.
- G. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE REPAIR WORK.
- H. ALL REPAIR WORK SHALL MATCH ADJACENT SURFACES IN COLOR, TEXTURE AND ARCHITECTURAL DESIGN.

### ABBREVIATIONS

AC ASPHALT CONCRETE

BLDG BUILDING

CJ CONSTRUCTION JOINT
CLR CLEAR
CMU CONCRETE MASONRY UNIT

CONC CONCRETE

CONT CONTINUOUS
CSP CONCRETE SURFACE PROFILE

DIA DIAMETER

E.W. EACH WAY
ELEC ELECTRICAL
ELEV ELEVATION
EQ EQUAL
(E) EXISTING
EXP EXPANSION

GA GAUGE GALV GALVANIZED

G.W.V. GROSS WEIGHT VEHICLE

HORIZ HORIZONTAL

MANUF MANUFACTURER
MAX MAXIMUM
MIN MINIMUM

O.C. ON CENTER OD OUTSIDE DIAMETER

REINF REINFORCEMENT

SIM SIMILAR
SS STAINLESS STEEL
STD STANDARD

TYP TYPICAL

W/ WITH

VERT VERTICAL

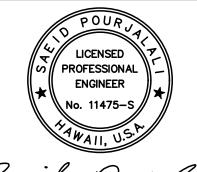
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Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



04/30/2024

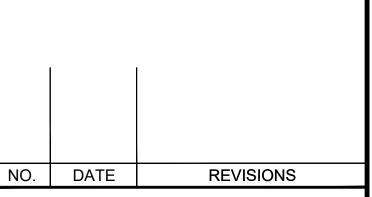
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DSGN. DRWN. CHKD. APPD.

MG MG SP

KEY PLAN / NOTES:



# CONSTRUCTION DOCUMENTS

SEPTEMBER, 2022

PROJECT TITLE:

# EWA AND DH CONCOURSE ROADWAY IMPROVEMENTS PHASE 1

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

PROJECT NO.:

AO1043-32

SHEET TITLE:

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DATE :
SEPTEMBER, 2022
SHEET :

S-002

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